

**American Psychiatric Association
Board of Trustees
December 12-13, 2015**

Materials included in this document

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- 2. A Actions for Consideration with Consent Calendar
- 3. B Executive Committee Report
- 4. A CEO and MDO Report
- 5. A Draft October Board Minutes & Summary of Actions
- 6. A Report of the Treasurer
 - 6. B Status of the Board Contingency Fund
 - 6. C Presidents' New Initiative Funds
 - 6. D Assembly New Initiative Fund
- 7. A Report of the Joint Reference Committee
- 8. A Report of the Finance and Budget Committee
- 8. B Report of the Investment Oversight Committee
- 8. C Report of the Membership Committee
- 8. D Report of the Nominating Committee
- 8. E Report of the APA/AMA Delegation
- 8. F Update from the Elections Committee
- 9. A Report of the Speaker
- 10. A Report of the American Psychiatric Association Foundation
- 11. A Medical Registries – Report and Presentation **[This report will be sent under separate cover.]**
- 11. B Report of the Ad Hoc Work Group on Revising the Ethics Annotation
- 11. C Distinguished Services Award Work Group

BOARD OF TRUSTEES
December 2015 MEETING

DRAFT

ALL ACTIONS BEING PRESENTED FOR CONSIDERATION

Consent Calendar Items Notated by "cc"

4. **Report of the CEO and Medical Director – Saul Levin, MD, MPA**

A. **CEO and MDO Presentation**

ACTION:

Will the Board of Trustees approve transitioning the oversight of the APA Retirement Savings Plan from the Investment Oversight Committee to a Committee of employees, consistent with current standards and best practices?

5. **Report of the Secretary – Altha J. Stewart, MD**

A. **Minutes of the October 11-12, 2015 Board of Trustees Meeting**

cc **ACTION:**

Will the Board of Trustees approve the minutes of its October 11-12, 2015 Meeting?

6. **Report of the Treasurer – Frank Brown, MD**

B. **Status of the Board Contingency Fund**

cc **ACTION:**

Will the Board of Trustees vote to accept the report of the status of the Board Contingency Fund?

C. **Presidents' New Initiative Funds**

cc **ACTION:**

Will the Board of Trustees vote to accept the report of the status of the Presidents' New Initiative Funds for Dr. Summergrad, Dr. Binder, and Dr. Oquendo?

D. Assembly New Initiative Fund

cc

ACTION:

Will the Board of Trustees vote to accept the report of the status for the Assembly's New Initiative Fund?

7. Report of the Joint Reference Committee and President-Elect – Maria Oquendo, MD

A. Joint Reference Committee Recommendations

ACTION 1:

Will the Board of Trustees establish a Caucus of Korean American Psychiatrists under the Council on Minority Mental Health and Health Disparities? (Please see attachment #1)

cc

ACTION 2:

Will the Board of Trustees approve the 2016 George Tarjan Award nominee, Emmanuel Cassimatis, MD? (Please see attachment #2)

cc

ACTION 3:

Will the Board of Trustees approve the 2016 Jack Weinberg Award nominee, Constantine G Lyketsos, MD MHS, DFAPA, FAPM, FACNP? (Please see attachment #3)

cc

ACTION 4:

Will the Board of Trustees approve the 2015 Psychiatric Services Achievement Award nominees as detailed in attachment #4?

cc

ACTION 5:

Will the Board of Trustees approve the 2016 Bruno Lima Award nominee, Kathleen Clegg, MD? (Please see attachment #5)

ACTION 6:

Will the Board of Trustees approve that the chairperson of the APAPAC be appointed, ex-officio, as a corresponding member to the Council on Advocacy and Government Relations?

This would occur with the understanding that the APAPAC will include the chairperson of the Council on Advocacy and Government Relations as an ex-officio corresponding member to the APAPAC Board of Directors.

ACTION 7:

Will the Board of Trustees establish a Caucus on Infancy and Early Childhood under the Council on Children, Adolescents and Their Families? (Please see attachment #7)

cc

ACTION 8:

Will the Board of Trustees approve the 2016 Human Rights Award nominee, Dr. David Satcher? (Please see attachment #8)

cc

ACTION 9:

Will the Board of Trustees approve the revised charge to the APA/Minority Fellowship Selection and Advisory Committee? (Please see attachment #9)

cc

ACTION 10:

Will the Board of Trustees approve the revised charge to the APA Public Psychiatry Fellowship Selection and Advisory Committee? (Please see attachment #10)

cc

ACTION 11:

Will the Board of Trustees approve the revised charge to the American Psychiatric Leadership Fellowship Selection Committee? (Please see attachment #11)

ACTION 12:

Will the Board of Trustees approve that additional unnecessary interventions in psychiatry be determined under the premise that a new ABIM Foundation Choosing Wisely list will be developed? (Please see attachment #12.A and #12.B)

ACTION 13:

Will the Board of Trustees consider releasing the authors of the resource document *Dissemination of Integrated Care within Adult Primary Care Settings: the Collaborative Care Model*, to publish/submit the document for peer review? (Please see attachment #13)

8. Reports from Standing Committees and Councils

A. Finance and Budget Committee Report – Alan F. Schatzberg, MD, Chair

ACTION 1:

APA Operating Budget: Will the Board of Trustees approve the 2016 Operating budget as proposed?

ACTION 2:

Foundation Operating Budget: Will the Board of Trustees approve the 2016 Foundation Operating Budget as proposed?

ACTION 3:

APA Capital Budget: Will the Board of Trustees approve the 2016 APA Capital Budget as proposed?

ACTION 4:

International RFM's: Will the Board of Trustees approve the proposed dues structure for International RFM's?

ACTION 5:

Education Joint Sponsorship Expansion: Will the APA Board of Trustees approve the expansion of the CME joint sponsorship programs to include allied groups?

C. Report from the Membership Committee – Rahn K. Bailey, MD, Chair

ACTION 1:

Will the Board of Trustees approve the recommendation of the Membership Committee that the \$30,000 for the DB/SA Competitive Grant funds be awarded as listed on page 4 of the committee's report?

ACTION 2:

Will the Board of Trustees vote to approve the recommendation of the Membership Committee to partner with Credible, an affinity program that serves as an independent marketplace for student loans?

ACTION 3:

Will the Board of Trustees vote to approve the recommendation of the Membership Committee to revise the Guidelines for Election to Distinguished Fellowship as shown in Attachment F?

cc

ACTION 4:

Will the Board of Trustees vote that the Members listed in Attachment G be approved for Fellowship and Life Fellowship?

cc

ACTION 5:

Will the Board of Trustees vote that the Members listed in Attachment H be approved for International Fellowship?

- cc **ACTION 6:**
Will the Board of Trustees vote that the Members listed in Attachment I be advanced to Distinguished Fellow or Distinguished Life Fellow?

- cc **ACTION 7:**
Will the Board of Trustees vote to approve the nominations listed in Attachment L for International Distinguished Fellow of the APA?

- cc **ACTION 8:**
Will the Board of Trustees authorize dropping from APA membership the Members listed in Attachment O for failure to meet the requirements of membership?

- cc **ACTION 9:**
Will the Board of Trustees vote to approve the applicants listed in Attachment P for International Membership?

- cc **ACTION 10:**
Will the Board of Trustees vote to approve the Membership Committee's recommendations on the due relief requests as listed in Attachment Q?

D. **Report from the Nominating Committee** – Paul Summergrad, MD, Chair

ACTION:
Will the Board of Trustees vote to accept the report of the Nominating Committee as presented?

9. **Report of the Speaker** – Glenn Martin, MD

A. **Executive Summary**

cc **ACTION 1:**
Will the Board of Trustees vote to approve the retention of the 2012 Position Statement: *Recognition and Management of Substance Use Disorders and other Mental Illnesses Comorbid with HIV?*

cc **ACTION 2:**
Will the Board of Trustees vote to approve the retention the 2008 Position Statement: *Ensuring Access to, and Appropriate Utilization of, Psychiatric Services for the Elderly?*

- cc **ACTION 3:**
Will the Board of Trustees vote to approve the Proposed Position Statement: Opioid Overdose Education and Naloxone Distribution- Joint Position Statement of the APA/AAAP?
- cc **ACTION 4:**
Will the Board of Trustees approve the Proposed Position Statement: *Substance Abuse Disorders in Older Adults?*
- cc **ACTION 5:**
Will the Board of Trustees approve the revised Position Statement: *Bias-Related Incidents?*
- cc **ACTION 6:**
Will the Board of Trustees approve the retirement of the Position Statement: *The Right to Privacy?*
- cc **ACTION 7:**
Will the Board of Trustees approve the retirement of the Position Statement: *Interference with Scientific Research and Medical Care?*
- cc **ACTION 8:**
Will the Board of Trustees approve the revised Position Statement: *Hypnosis?*
- cc **ACTION 9:**
Will the Board of Trustees approve the retention of the 2010 Position Statement on Posttraumatic Stress Disorder and Traumatic Brain Injury?
- cc **ACTION 10:**
Will the Board of Trustees approve the retention of the 2010 Position Statement on *High Volume Psychiatric Practice and Quality of Patient Care?*
- cc **ACTION 11:**
Will the Board of Trustees approve the Proposed Position Statement on Tobacco Use Disorder?
- cc **ACTION 12:**
Will the Board of Trustees approve the retention of the Position Statement: *Psychotherapy as an Essential Skill of Psychiatrists?*
- cc **ACTION 13:**
Will the Board of Trustees approve the Proposed Position Statement on *Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment?*

cc

ACTION 14:

Will the Board of Trustees approve the Revised Position Statement on *Telemedicine in Psychiatry*?

ACTION 15:

Will the Board of Trustees approve the APA Practice Guideline: Use of Antipsychotics to Treat Agitation or Psychosis in Patients with Dementia?

11. Work Group and Task Force Reports

B. Ad Hoc Work Group on Revising the Ethics Annotations

Rebecca W. Brendel, MD, JD, Chair

ACTION:

Will the Board of Trustees adopt the document as a resource to assist psychiatrists in understanding and applying the *Principles of Medical Ethics with Annotations Especially Applicable to Psychiatry* to their practice? (Attachment 1)

C. Distinguished Service Award Work Group – Renée Binder, MD, Chair

ACTION 1:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Distinguished Service Award to Donna Norris, MD?

ACTION 2:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Distinguished Service Award to Steven Sharfstein, MD?

ACTION 3:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Distinguished Service Award to Daniel Winstead, MD?

ACTION 4:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Organization Distinguished Service Award to American Academy of Psychiatry and the Law (AAPL)?

Executive Committee
EXPEDITED ACTIONS BY VOTE
October 15, 2015

Executive Committee:

Chair: Renée Binder, MD; Members: Frank Brown, MD; Saul M. Levin, MD, MPA; Glenn Martin, MD; Maria Oquendo, MD; Altha Stewart, MD; Paul Summergrad, MD;

Administration:

Colleen Coyle; Rodger Currie; Yoshie Davison; Margaret Dewar; David Keen; Kristin Kroeger; Ardell Lockerman; Shaun Snyder; Jason Young;

The Executive Committee approved the following actions:

Background on lease agreement:

We received the attached letter from representatives of The Wharf. As you may recall, our lease agreement provides the APA with a one-time right of first refusal to lease the 8th floor of the building in the event the landlord receives a bona fide written proposal to lease all or a portion of the floor from a third party. The landlord has informed us that they have received such a lease offer. Now that we have been notified, we have 15 business days (by November 2nd) to consider the offer.

By way of background, each floor of the building is approximately 21,000 square feet. The lease agreement that we recently signed provides us with floors 9, 10, and 11 with a total square footage of 63,000 square feet plus access and use of the rooftop terrace. The build out cost is \$4.5m with a cost of \$43m for the life of the lease, which runs for 11 years. The Administration worked with our architects to ensure that the square footage of floors 9-11 will adequately meet the needs of our workforce. Based on the information from the landlord, adding the 8th floor to our lease would add approximately \$16m total to the build-out and lease costs over 11 years.

Based on our space needs and finances, the Administration recommended against leasing the 8th floor.

The Executive Committee agreed and voted unanimously to not exercise the option to lease the 8th floor.

Report of the
CEO and Medical Director
to the
APA Board of Trustees

December 12-13, 2015

Westin Arlington Gateway
Arlington, VA

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EXECUTIVE SUMMARY

As we near the end of the fourth quarter, the APA Administration continues its work in implementing the following strategic initiative objectives of the Board into the organization's core areas:

- Advancing the integration of psychiatry in the evolving health care delivery system through advocacy and education.
- Supporting research to advance treatment and the best possible clinical care, as well as to inform credible quality standards; advocating for increased research funding.
- Educating members, patients, families, the public, and other practitioners about mental disorders and evidence-based treatment options.
- Supporting and increasing diversity within the APA; serving the needs of evolving, diverse, underrepresented and underserved patient populations; and working to end disparities in mental health care.

The following individuals have joined APA in recent weeks and will play key roles at the state advocacy level. The four state government affairs Regional Directors will provide a one-stop shop for state government affairs support for District Branches/State Associations (DBSAs), which includes coordinating help from the APA's policy, communications, partnership, and lobbying teams back in Washington, D.C.

Angela "Angie" Gochenaur – Regional Director (Region 1)

Angela (agochenaur@psych.org) joined APA on November 30th from the Hospital and Healthsystems Association in Pennsylvania where she served as Director of State Legislation and was responsible for lobbying, coalition building, and grassroots activities for the association. She brings over a decade of lobbying and government affairs experience to the APA working both in state government and for one of the preeminent lobbying groups – Greenlee Partners. Angela holds a M.A. in Public Administration from Pennsylvania State University and a B.A. in Psychology from Capital University. She will be based in Harrisburg, PA.

Amanda Chesley – Regional Director (Region 2)

Amanda (achesley@psych.org) joined APA on November 9th from the association management firm W.J. Weiser and Associates where she served as Executive Director of the Council on State Rheumatology Organizations (CSRO). She was responsible for lobbying, coalition building, and grassroots activities for the association. She brings over a decade of lobbying and government affairs experience to the APA working both in state government and as an attorney representing medical coalitions like CSRO. Amanda holds a J.D. from DePaul University and a B.S. in Political Science from Southern Illinois University. She will be based in Chicago, IL.

Marsi Thrash – Regional Director (Region 3)

Marsi (mthrash@psych.org) joined APA on November 9th from the American Heart Association (AHA) where she served as Director of Government Relations and Advocacy. She was responsible for lobbying, coalition building, and grassroots activities for the AHA in Georgia. She brings over a decade

of lobbying and government affairs experience to the APA working both in the patient group setting and for TAP Pharmaceuticals. Marsi holds a M.B.A. from the University of Pittsburgh and a B.A. in English from La Roche College. She will be based in Atlanta, GA.

Tim Miller – Regional Director (Region 4)

Tim (tmiller@psych.org) joined APA on November 9th from the American Academy of Neurology where he served as Senior Program Manager for State Affairs and Grassroots. He was responsible for state lobbying, coalition building, and grassroots activities for the association. Tim brings experience in the provider group setting focusing on lobbying and government affairs to the APA. Tim holds a B.A. from Winona State University. He will be based in Denver, CO.

Nina Taylor – Deputy Director of Education

Nina Taylor (ntaylor@psych.org) joined APA on November 2nd as Deputy Director of Education. Nina comes to APA from Clinical Care Options, where she served as the Senior CME and Education Partnership Manager. In that role, she designed and implemented educational programs in the fields of oncology, virology, and rheumatology. She also facilitated CME/CE provider review and accreditation and managed program workflow. In addition, she has experience in gap analyses, adult learning theory, implementing technology in innovative educational designs, and has secured funding for education programs through grant support. Previously, she also served as the Education Manger for the American Gastroenterological Section Council Chairs where she oversaw the planning and implementation of their annual meeting. Nina received a master's degree in Human Resource Development from Bowie State University and a bachelor's degree in Psychology and Sociology from La Roche College in Pennsylvania.

Reorganization of Healthcare Systems and Financing (HSF) and Quality Improvement and Psychiatric Services (QIPS): Psychiatry is ever changing in the new delivery system and our new strategic initiatives and the recommendations from the Board Healthcare Reform report highlighted the need for APA to advance our initiatives in new delivery models, reimbursement, and ensuring parity and equity in the delivery of mental health services. As a result, in order to meet our strategic recommendations we have internally reorganized both Healthcare Systems and Financing (HSF) and Quality Improvement and Psychiatric Services (QIPS), by creating three coordinated areas: 1) Reimbursement Policy, 2) Practice Management and Systems Delivery Policy, and 3) Mental Health Parity Enforcement and Implementation Policy.

Advancing the Integration of Psychiatry and Supporting Education

Support Alignment Network (SAN) Grant: In late September, APA received one of the Support Alignment Network (SAN) Grants from CMS' *Transforming Clinical Practice Initiative*. APA's overall goal for the grant is to train 3,500 consulting psychiatrists in collaborative care. We have partnered with the AIMS Center at the University of Washington to conduct the trainings, which will take place in person and online. We plan to launch the online modules in January and conduct in person training at the Annual and IPS meetings. We have reached out to DB executive directors regarding recruitment of

members to participate in this effort. In addition, we have also heard from many individual members as well as those from large healthcare systems who are interested in this opportunity and we continue to share information about this grant program.

Payment for Psychiatrists in New Delivery Models: Ensuring members get paid in new delivery models is a priority for APA. As a result of the request for information in the physician fee schedule, the APA Administration has been working closely with the Centers for Medicare and Medicaid Services (CMS) on payment for collaborative care. We have also submitted to the AMA CPT process an application for a new code for delivering care in this model.

Debut of New App, New Publication at IPS: The Mental Health Services Conference: IPS registration was one of the highest in recent years in part to APA's new marketing strategy. We also launched a new APA Meetings app (point your mobile phone browser to www.psychiatry.org/app). Nearly 700 users downloaded the app and from meeting evaluations members found that information is easier to find, search, and share. The app now covers the entirety of our meeting, not just the scientific program, but also course, Component meeting, and allied meeting information. Social media is integrated. We are no longer reliant on an outside vendor for updates and edits, which, in the past, could take up to two weeks. The app will be taken to scale at the Annual Meeting. At IPS, we also debuted the first issue of "APA Daily," our new in-house version of our meeting newspaper.

Partnership Update: The APA Administration continues outreach, where appropriate, with other organizations that focus on mental health services and delivery. We recently met with the International Association for Chiefs of Police and the American Psychiatric Nurses Association (APNA) to discuss opportunities of potential collaboration on mutual areas of interest. Our recent collaboration with the American Association of Physicians' Assistants led to the coordination of a program at IPS that was well attended and evaluated highly by participants.

Advocacy

State Advocacy Leadership Conference: After a 15-year hiatus, the APA held the State Advocacy Leadership Conference on October 23-25 in Hollywood, Florida. Forty-four DB/SAs participated in a robust discussion that featured panels of physicians and DB Executives sharing best practices regarding parity implementation and scope of practice advocacy. The conference also included a review of the new Scope of Practice toolkit (contains new talking points, fact sheets, infographics, media templates, and historical information) followed by a discussion about the resources available as part of AMA's Scope of Practice Partnership (SOPP). The keynote dinner speaker included Paul Gionfriddo of Mental Health America, and Andrew Sperling of NAMI was the opening session speaker the following day. In addition, conference participants were introduced to APA's four new State Regional Directors who will provide advocacy support to DB/SAs as requested.

Major Health Insurance Mergers: As you know, APA communicated concerns regarding major health insurance mergers to the Department of Justice (DoJ) as well as at the Federal Trade Commission in September. APA warned antitrust regulators that blockbuster mergers would have a negative impact

on physician practice and access to psychiatric care for our patients. For example, our letter detailed the likelihood of the harmful effects that these mergers would hold for network adequacy, pricing power, mental health parity compliance, and criteria for treatment coverage. It was well received and led to a November follow up APA meeting with the DoJ Antitrust Division to brief them fully and discuss implications of the proposed mergers. In a parallel effort on the Hill, APA has been lobbying on our concerns and coordinating with AMA as both the House and Senate Judiciary Committees studying healthcare mergers and consolidation. Congressional interest and activity will go on as DoJ's review of the proposed mergers continues into 2016.

MACRA Implementation: In April of 2015, the flawed Medicare sustainable growth rate (SGR) formula was repealed and replaced with the Medicare Access and CHIP Reauthorization Act (MACRA). MACRA merges current incentive and penalty programs under Medicare into one "Merit-based Incentive Payment System" (MIPS) and encourages physician participation in alternative payment models. The law takes effect in 2019 but is based in many ways on 2017 physician performance. MACRA defers to the HHS Secretary in many key technical areas, thereby giving the Secretary significant discretion in implementing the law. AMA has convened a select group of specialties and state associations to tackle implementation where collaboration is possible, with APA participating at both the CEO and payment subject matter expert levels. APA has also submitted comments in response to a recent CMS Request for Information (RFI) on MACRA implementation. APA's comments focused on the critical need for measurement as part of any reimbursement framework to be based on solely psychiatry-relevant metrics. Advocating for relevant measurement within the opportunity presented by MACRA implementation is critical to addressing current and future challenges, including financial penalties, posed by multifold programs (e.g., the HIT meaningful use program, the Physician Quality Reporting System, etc.) that present challenges to the field of psychiatry due to lack of applicable measures and low EHR adoption in the field, among other reasons.

Comprehensive Mental Health Reform: On November 4th, the Energy and Commerce Committee, Subcommittee on Health, reported out H.R. 2646, the Helping Families in Mental Health Crisis Act, largely along party lines. All Republican subcommittee members voted in favor of the bill; all Democratic subcommittee members with the exception of Kurt Schrader (D-OR) voted against the bill. During a 12-hour markup session, Representative Tim Murphy (R-PA) and several subcommittee members on both sides of the aisle verbally committed to continue negotiations on several of the bill's most contested provisions, including the establishment of an Assistant Secretary of Mental Health and Substance Use Disorders, federal support for the development of state laws governing the use of Assisted Outpatient Treatment, and the expansion of privacy exemptions under HIPAA for certain individuals with serious mental illness. Energy and Commerce Committee Chairman Fred Upton (R-MI) has indicated some compromises will have to be reached between Representative Murphy and his colleagues before the bill is marked up by the full Energy and Commerce Committee. APA currently anticipates a full committee markup early next year.

Despite the opposition of Democratic members on the Health Subcommittee, H.R. 2646 continues to build wide bipartisan support in the House, with 117 Republican and 46 Democratic cosponsors. The bill also has the support of major mental health stakeholder organizations, including the American

Psychiatric Association, the American Psychological Association, the National Alliance on Mental Illness, and Mental Health America.

The APA Administration remains deeply involved with key Congressional offices. Administration staff are actively engaged in multiple efforts designed to advance the comprehensive mental health reform process forward.

On the Senate side, a similar bipartisan comprehensive reform bill to H.R. 2646, introduced by Senators Bill Cassidy (R-LA) and Chris Murphy (D-CT) now has 11 cosponsors. A markup of S. 1945, the Mental Health Reform Act, is expected early next year. It is possible that the Senate may merge several mental health bills into a larger package once they pass out of committee.

Opioid Use: Both Congress and the Administration are actively debating policies to combat the rise in opioid use across the country. The APA Administration is actively engaged in ensuring that clinicians have ready access to several evidence-based interventions designed to treat addiction. Administration staff are also spearheading a number of policy initiatives designed to reduce opioid use and encourage more physicians to treat addiction disorders. These initiatives include proposed revisions to current buprenorphine prescribing caps, the promotion of Medicated Assisted Treatment, workforce incentives, and nationwide studies on opioid use, buprenorphine diversion, and barriers that discourage physicians from treating addiction disorders. APA anticipates this engagement with key Congressional offices and Federal agencies (e.g., White House Office of National Drug Control Policy, Substance Abuse and Mental Health Services Administration) will continue into next year.

Other Updates:

Substance Abuse and Mental Health Services Administration (SAMHSA): SAMHSA is recruiting for the position of chief medical officer in its Office of Policy, Planning, and Innovation in Rockville, Maryland. Among the position's major responsibilities are advising SAMHSA's Advisory Committee on a range of medical and scientific policy questions, providing expert advice on medical considerations and related matters that impact on program plans and/or goals, and participating in national meetings and symposia involving experts and leaders in behavioral health. Click [HERE](#) for more details and application information.

I look forward to our continued discussions during the December Board of Trustees meeting.

Advancing Advocacy and Policymaker Education

Item: Fall/Winter 2015 Congressional Briefings

Chief: Rodger Currie, JD, Chief of Government Affairs

Division/Offices Involved: Department of Government Relations (DGR)

Front-Burner Background: Expert briefings on Capitol Hill provide a unique platform for influencing federal policymaking and providing education regarding top APA policy priorities. These events generally attract a diverse set of Congressional staff, media, and third party stakeholder representatives. They provide an opportunity to showcase member expertise and publicize APA's leadership as a convening organization on important and relevant subject matter.

Staff Action/Response: On October 29th, APA organized a Congressional briefing reflecting interest and continued lobbying activity in addressing the pervasive criminalization of individuals suffering from mental illness. *Moving Mental Health Care from the Jails to the Community: Decriminalizing People with Mental Illness* was co-sponsored by partners including the Council on State Governments, NAMI, the National Association of Counties, and the Major County Sheriffs' Association. APA President Renée Binder and correctional psychiatry expert Robert Trestman participated in the panel among other distinguished experts and individuals with salient personal experiences. The event was widely attended and praised for its focus and multidimensional representation of the issue.

Another Congressional briefing on the topic of psychiatric bed access is currently being organized by DGR for late December.

Recommendations for Major Policy Issues for Action or Discussion: This item is for information only.

OCTOBER

MINUTES OF A MEETING
OF THE
APA BOARD OF TRUSTEES

OCTOBER 11-12, 2015

Draft Minutes of October 11-12, 2015 Board Meeting

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SECTION 1. CALL TO ORDER

Dr. Renée Binder, APA President, called the October meeting of the Board of Trustees to order at 9:00 a.m., Sunday, October 11, 2015 at the Sheraton NY Times Square Hotel in New York. Dr. Binder welcomed Board members, guests, and the administration to the meeting.

A. Introductions and Verbal Conflict of Interest Disclosures

Board of Trustees

Dr. Binder asked each Board member to state his or her name and then disclose their source(s) of income as well as any potential conflicts of interest.

Renée Binder, MD, President— receives income from the University of California; Professor of Psychiatry at the University of California San Francisco; receives an APA stipend as President.

Maria A. Oquendo, MD, President-Elect – receives income from New York State Psychiatric Institute and Columbia University; receives income from private practice; receives royalties for the commercial use of the Columbia Suicide Severity Rating Scale; receives unrestricted educational grants for training; husband is an employee of Bristol-Myers-Squibb; receives an APA stipend as President-Elect.

Altha J. Stewart, MD, Secretary – receives income from Shelby County Government and University of Tennessee Health Science Center

Frank Brown, MD, Treasurer – receives income from the Emory Clinic in Atlanta, Georgia; serves as Vice President of the American College of Psychiatrists.

Glenn A. Martin, MD, Speaker— receives income from the Icahn School of Medicine at Mt. Sinai; receives income from private practice; receives an APA stipend as Speaker; Medical Director of Information Exchange in Queens.

Daniel Anzia, MD, Speaker-Elect – receives income from Advocate Lutheran General Hospital, Advocate Health Care, Chicago, IL; receives an APA stipend as Speaker-Elect.

Paul Summergrad, MD, Trustee – receives income from Tufts University School of Medicine through Tufts Medical Center Physicians Organization; Past President of the American Association of Chairs of Departments of Psychiatry; receives modest stipend for forensic work.

Jeffrey A. Lieberman, MD, Trustee— receives income from Columbia University and New York State Psychiatric Institute; receives royalties from various publishing companies for academic publications including APPI; member of American College of Neuropsychopharmacology, Biological Psychiatry, and Institute of Medicine.

Dilip Jeste, MD, Trustee— receives income as full time faculty at University of California San Diego; receives honorarium as Editor of *American Journal of Geriatric Psychiatry*; royalties from book titled "Positive Psychiatry"; Board of Regents of the American College of Psychiatrists.

Jeffrey L. Geller, MD, MPH, Area 1 Trustee – receives income from the University of Massachusetts Medical School; receives income from the Carson Community Mental Health Center; receives income from some forensic work.

Vivian B. Pender, MD, Area 2 Trustee – receives income from private practice; consulting for the United Nations; on the voluntary faculty at Cornell.

Brian Crowley, MD, Area 3 Trustee – receives income from private practice.

Ronald Burd, MD, Area 4 Trustee – receives income from Sanford Medical Center.
R. Scott Benson, MD, Area 5 Trustee – receives income from private practice in child and adolescent psychiatry; forensic psychiatry in Pensacola, Florida.
Melinda Young, MD, Area 6 Trustee – receives income from private practice.
Jeffrey Akaka, MD, Area 7 Trustee – receives 80% of income from Diamond Head Community Mental Health Center in Hawaii; 20% of income from disability reviews from Social Security; serves on APAPAC Board; chair of the Hawaii Psychiatric Association PAC; co-chair of the Hawaii Medical Association PAC.
Lama Bazzi, MD, ECP Trustee-at-Large – receives income from Stony Brook Medicine University Physicians and Forensic Practice.
Gail E. Robinson, MD, M/UR Trustee – receives income from the University of Toronto, Professor of Psychiatry, single payer health system, and some expert witness work.
Ravi N. Shah, MD, Resident-Fellow Member Trustee– receives income from New York Presbyterian Columbia, New York State Psychiatric Institute.
Stella Cai, MD, Resident-Fellow Member Trustee-Elect – receives income from Los Angeles County and University of Southern California Medical Center.
Raj Loungani, MD, APA/Public Psychiatry Fellow– receives income from State University of New York, Downstate Medical Center, Brooklyn, NY.
Misty C. Richards, MD, APA/Leadership Fellow – receives income from UCLA Medical Group, Los Angeles, CA
Uchenna Achebe, MD, APA/SAMHSA/Diversity Leadership Fellow – receives income from Tulane University, School of Medicine.
John McIntyre, MD, APA Past President– receives income from private practice; Medical Director, HCR Healthcare Agency

Parliamentarian:

Herbert Pardes, MD, Parliamentarian and APA Past-President

Administration:

Saul Levin, MD, MPA, APA CEO and Medical Director – receives income from the APA

SECTION 2. CONSENT CALENDAR

A. Requests to Remove Items from the Consent Calendar

Item 7.A.1 was removed from the Consent Calendar.

B. Approval of Items on the Consent Calendar

Dr. Binder presented the Consent Calendar to the Board.

The Board of Trustees voted to approve the Consent Calendar as amended.

SECTION 3. REPORT OF THE PRESIDENT

Renée Binder, MD

A. Updates

Dr. Binder asked Jason Young and Paul Burke to give a brief update on the American Psychiatric Excellence Awards (APEX). Mr. Burke said the American Psychiatric Association Foundation and APA working together with the Council of State Governments' Justice Center and the National Association of Counties have developed a national initiative to address the criminalization of the mentally ill in Jails and prisons. A summit composed of counties' teams, state and federal officials, and representatives of national organizations and companies has been planned in Washington, DC at the Mayflower Hotel, April 17-19, 2016. On April 18, there will be an APEX Awards dinner where a variety of awards will be presented. Mr. Young said plans are currently underway to ask Porter Novelli to assist with the lion's share of celebrity outreach and event development work for a very significant in-kind contribution to the success of these awards.

B. Executive Committee Report

This report was presented for Board review and appropriate action.

EXECUTIVE COMMITTEE
Expedited Actions by Vote
September 25, 2015

Executive Committee:

Chair: Renée Binder, MD; Members: Frank Brown, MD; Saul M. Levin, MD, MPA; Glenn Martin, MD; Maria Oquendo, MD; Altha Stewart, MD; Paul Summergrad, MD;

Administration:

Colleen Coyle; Rodger Currie; Yoshie Davison; Margaret Dewar; David Keen; Kristin Kroeger; Ardell Lockerman; Shaun Snyder; Jason Young;

The Executive Committee approved the following actions:

Background on the CALF request for the Idaho Psychiatric Association

In the 2015 Idaho legislative season, the psychologists put forth a bill seeking prescriptive authority. The bill was introduced in the Senate, passed quickly by the Health and Welfare Committee and then passed on the Senate floor by a vote of 26-8-0. IPA and the Idaho Medical Association worked together to stop this bill in the House Health and Welfare Committee where the chairman (a physician) refused to hear the bill and it died in Committee at the end of session. Given the partial success of the psychologists, their advance organization and the interest by the legislators in expanding access to behavioral health, Idaho Psychiatric Association is requesting these resources in order to be prepared and proactive on any upcoming scope of practice and access issues brought before the state legislature.

ACTION:

The Executive Committee approved a grant requested by the Idaho Psychiatric Association as recommended by the Committee on Advocacy and Litigation Funding and the Council on Advocacy and Government Relations.

Background for the document on Physician Use of Naloxone

Administration from the Division of Government Relations brought this action forward to the Executive Committee before the Board of Trustees meeting because they had been asked to make a decision about signing on to an AMA document by Noon on Monday, September 28. The AMA Task Force to Reduce Opioid Abuse, of which APA is a member, is asking for member organizations to sign on to the attached one-pager physician advocacy/communications document on physician use of naloxone. The document has been reviewed and supported by the Council on Addiction Psychiatry. The Council is also working in conjunction with AAAP to develop a position statement (attached for information only) on opioid overdose education and naloxone distribution that aligns with this advocacy document. The draft position statement has been reviewed by the JRC and is on the Assembly agenda in October/November.

ACTION:

The Executive Committee supported the AMA's advocacy document on physician use of naloxone.

EXECUTIVE COMMITTEE

Conference Call Report

August 4, 2015

Executive Committee:

Chair: Renée Binder, MD; Members: Frank Brown, MD; Saul M. Levin, MD, MPA; Glenn Martin, MD; Maria Oquendo, MD; Altha Stewart, MD; Paul Summergrad, MD

The Administration:

Colleen Coyle, JD; Rodger Currie, JD; Yoshie Davison; Margaret Dewar; Jon Fanning; Kristin Kroeger; Ardell Lockerman; Shaun Snyder, JD; Steve Wolk; Jason Young

During the Executive Committee Conference Call, the following actions were approved.

Background:

The Canadian Psychiatric Association has been apprised of two situations where Canadian citizens have been denied entrance into the U.S. due to mental health information provided to border security.

The United States Customs and Border Patrol has access to information about Canadian citizens who have attempted suicide through the Canadian Police Information Centre (CPIC) -- a database maintained by the Royal Canadian Mounted Police. Personal information collected by the police as a result of interactions with persons who have attempted suicide is entered into this database and made available

to the United States Department of Homeland Security. The manner in which the information is collected and reported is not consistent and leaves a great deal to the individual discretion of the police officer.

ACTION:

The Executive Committee voted to approve an APA/CPA Joint Statement about Canadian Border Entry.

Background:

The Washington State Psychiatric Association (WSPA) has requested APA financial support for a brief to be filed in *Volks v. DeMeerleer*, a case that raises the issue of expanding Tarasoff-type responsibilities for psychiatrists to all potentially dangerous persons, even if the identity of the victim is not foreseeable. The purpose of the brief would be to educate the Court on the limits of violence prediction and the difficulty of warning or protecting potential targets of a patient's violence in the absence of specific threats toward that person.

ACTION:

The Executive Committee voted to approve the recommendation of the Committee on Judicial Action for support of the Washington State Psychiatric Association's brief in *Volks v. DeMeerleer* in the amount of \$7,500 to \$10,000.

EXECUTIVE COMMITTEE

Expedited Action By Vote

July 17, 2015

Executive Committee:

Chair: Renée Binder, MD; Members: Frank Brown, MD; Saul M. Levin, MD, MPA; Glenn Martin, MD; Maria Oquendo, MD; Altha Stewart, MD; Paul Summergrad, MD

Administration:

Colleen Coyle; Margaret Dewar; Shaun Snyder

Background: The Letter of Intent (LOI) for the Wharf required the Wharf to exclude Scientology, the other APA and Social Workers from our building. The Landlord agreed to that. However, upon reflection, some believe that excluding the Social Workers like this may not be in APA's best interest.

ACTION:

The Executive Committee voted to approve deleting Social Workers from the group of prohibited tenants in the Wharf building APA will lease.

C. Executive Session Actions

1. The Board voted to approve the appointment of Felton Earls, MD, to *The American Journal of Psychiatry* Editorial Board to a four-year term to begin January 1, 2016, and expire December 31, 2019.
2. The Board voted to approve the appointment of Roy Perlis, MD, to *The American Journal of Psychiatry* Editorial Board to a four-year term to begin January 1, 2016, and expire December 31, 2019.
3. The Board of Trustees voted to approve signing the amicus brief of the Maryland Psychiatric Society in *Allmond v. Department of Health and Mental Hygiene*.
4. The Board of Trustees voted to approve signing the amicus brief of the Washington State Psychiatric Association in *Volks v. DeMeerleer*.

SECTION 4. REPORT OF THE CEO AND MEDICAL DIRECTOR

Saul Levin, MD, MPA

A. Presentation by the CEO and Medical Director

Dr. Levin said the Medical Director's office is now fully staffed. It consists of the Medical Director and three psychiatrists hired by the APA, which includes Dr. Tristian Gorrindo, Director of Education, Dr. Ranna Parekh, Director of Diversity and Health Equity, and Dr. Phillip Wang, Director of Research. He told the Board that he has appreciated the ability to sit with them and discuss psychiatric and clinical issues and how psychiatrists see things. APA will be updating its organizational chart to reflect the reporting structure of the MDO Office as separate from the CEO Office.

Dr. Levin provided the Board with an update on the lease at the Wharf property. The lease was signed on August 27th with this Board's approval. APA will take occupancy on January 1st, 2018. APA will lease for two years and at the end of the second year, the current Board will decide either to continue leasing at a price currently set in this point of time, or have the option to purchase the property at a set price we select now. He said the next steps will be to begin the schematic designs for a base building change request to the landlord for physical and IT changes. APA has hired a professional project manager to ensure that we monitor the developer very closely as to what they are doing and the quality of the work being done.

Dr. Levin said that total APA membership is up 0.9% compared to the same time last year. He noted due to the movement that occurs in the summer, the RFM and ECP categories are difficult to measure but they look stable. The double digit increase in the value of the dollar has made the price of APA membership correspondingly more expensive and the international membership segment is currently down 7.5% compared to a 21% gain the prior year.

B. Report of DGR and Mental Health Bills

Rodger Currie, JD

Mr. Currie told the Board that following their December 2014 review of the original Murphy-Johnson House bill, the Board said they would like to see work force provisions added. He stated that all the provisions that were drafted and reviewed by the Board made it into the House bill and into the Senate bill. One of the new provisions added to the revised bill is that psychiatric workforce provisions must prioritize workforce development and create a nationwide strategy to increase the psychiatric workforce and recruit medical professionals for the treatment of individuals with serious mental illness. Another added provision is the mental health parity enforcement provision, which explicitly tasks the proposed Assistant Secretary with coordinating parity implementation activities, require annual reports to Congress on parity compliance from relevant agencies, and have the Government Accountability Office investigate compliance of the parity law by health plans.

SECTION 5. REPORT OF THE SECRETARY

Altha J. Stewart, MD

A. Minutes of the July 11-12, 2015 Board of Trustees Meeting

The following action was approved on the Consent Calendar.

The Board of Trustees voted to approve the minutes of its July 11-12, 2015 meeting.

SECTION 6. REPORT OF THE TREASURER

Frank Brown, MD

A. Treasurer's Report

Dr. Brown provided the Treasurer's Report to the Board of Trustees.

B. Status of the Board of Trustees Contingency Fund

A written status report of the Board Contingency Fund was approved on the Consent Calendar.

The Board of Trustees voted to accept the report of the status of the Board of Trustees Contingency Fund.

C. Status of the Presidential New Initiative Funds

A written status report of the Presidential New Initiative Funds was approved on the Consent Calendar.

The Board of Trustees voted to accept the report of the status of the Presidential New Initiative Funds for Dr. Paul Summergrad, Dr. Renée Binder, and Dr. Maria Oquendo.

D. Status of the Assembly New Initiative Fund

A written status report of the Assembly New Initiative Fund was approved on the Consent Calendar.

The Board of Trustees voted to accept the report of the status of the Assembly's New Initiative Fund.

SECTION 7. REPORT OF THE JOINT REFERENCE COMMITTEE AND PRESIDENT-ELECT

Marie A. Oquendo, MD, Chair

A. Joint Reference Committee Recommendation

Dr. Oquendo said that the JRC sent the position statement to the Assembly where they voted to retain it. The JRC agreed with this recommendation and referred this action to the Board.

The Board of Trustees voted to retain the position statement *Active Treatment*, and refer it to the Council on Healthcare Systems and Financing for appropriate review.

SECTION 8. REPORTS FROM STANDING COMMITTEES AND COUNCILS

A. Report from the Investment Oversight Committee

David Fassler, MD, Chair (Speakerphone)

Dr. Fassler referred the Board to his written report about the 2nd quarter investment performance for 2015. He said that, in light of the recent market volatility, the report shows APA is within all of its policy parameters in terms of its asset allocations and that the overall portfolio was down less than 1 percent.

B. Report from the Bylaws Committee

Rebecca W. Brendel, MD, Chair (Speakerphone)

Dr. Brendel stated that during the July Board of Trustees Meeting, the Bylaws Committee was asked to propose a Bylaws modification to create a category of international resident fellow members. The committee drafted the language to parallel the language from other resident fellow members as well as international members and asked the Board to approve the proposed language to the Bylaws for the International Resident Fellow Member category.

Proposed Language:

International Resident-Fellow Members shall be physicians enrolled in a psychiatry residency training program or fellowship in a psychiatry subspecialty outside of the U.S. and Canada who obtain written verification from the training program director.

International Resident-Fellow Member status shall not exceed ten years or the duration of residency and fellowship training in psychiatry, whichever is shorter.

The Board of Trustees voted to approve the proposed language to incorporate the International Resident-Fellow Member category as approved by the Board of Trustees at their July 2015 meeting.

C. Report from the Membership Committee

The Board of Trustees received a report from the Membership Committee and the following actions were approved on the Consent Calendar.

1. **Dropping of Members- Membership Terminated by APA (off cycle)**
The Board of Trustees authorized dropping from APA membership the Members listed in Attachment D for failure to meet the requirements of membership.
2. **International Membership**
The Board of Trustees voted to approve the applicants listed in Attachment E for International Membership.
3. **Dues Relief Requests**
The Board of Trustees voted to approve the Membership Committee's recommendations on the due relief requests as listed in Attachment F.

D. Report from the Assisted Outpatient Treatment

Marvin Swartz, MD and Steven K. Hoge, MD

Dr. Hoge said the Council on Psychiatry and Law has produced documents going back to the 1980s on mandatory outpatient treatment, outpatient civil commitment, and assisted outpatient treatment. Recently, the Council reviewed the resource document on Assisted Outpatient Treatment, outpatient commitment, and agreed it was in need of an update and also that it was time for the APA to take a position in favor of outpatient commitment.

Dr. Swartz discussed the studies that he and his chief collaborator, Jeffrey Swanson, Ph.D., at Duke University School of Medicine had done on outpatient commitment since the mid-1990s. He told the Board that there are three types of involuntary outpatient commitment historically. One type is conditional release, which 40 states participate in and occurs when a patient has been involuntarily committed and is leaving the hospital under essentially an outpatient commitment. The second type is an alternative to hospitalization for patients meeting inpatient commitment criteria and then they are placed on an outpatient status. There are 33 states that have this provision as an alternative to hospitalization. The third type is preventive outpatient commitment, which is available in 10 states. This is a court-ordered outpatient treatment authorized at a lower threshold than inpatient commitment criteria with the purpose of preventing further deterioration of the patient.

E. Maintenance of Certification (MOC) Discussion – Request from ABPN

Should maintenance of general psychiatry training be a prerequisite for MOC in

subspecialties?

The Board of Trustees voted to approve relaying the following feedback to the ABPN:

1. The APA does not agree that there should be an exam every ten years for MOC.
2. Certification of lifelong learning should be an integrated ongoing process relevant to actual practice.
3. APA will work with ABPN to improve the certification of lifelong learning process—APA will recommend members for a committee to do this.
4. Should there be an exam at any point; most questions should be related to the psychiatrist's subspecialty with inclusion of some relevant general psychiatry questions.
5. No psychiatrist should be forced to maintain her/his underlying general and subspecialty certification through more than one certification process. [**unanimous vote**]

F. Report from the Ethics Committee

Colleen Coyle, JD, APA Counsel

The Board of Trustees received a report from the Ethics Committee and the following actions were approved.

1. **The Board of Trustees voted to approve the broadening of the Carol Davis Ethics Award criteria to include any APA member who has authored an outstanding publication on ethics in psychiatry.**
2. **The Board of Trustees voted to approve changing the Carol Davis Ethics Award frequency from annually to periodic (given at the discretion of the Ethics Committee, but no more than once a year).**
3. **The Board of Trustees voted to approve revision of the Carol Davis Ethics Award description in the APA Operations Manual to reflect the aforementioned proposed changes.**
4. **The Board of Trustees voted to approve the revision of the Carol Davis Ethics Award description on the APA public website to reflect the aforementioned proposed changes.**

SECTION 9. REPORT OF THE SPEAKER

Glenn Martin, MD

Dr. Martin said the Assembly Executive Committee met in Montréal, Canada on July 24-26. One significant action approved at the meeting was the Council on Advocacy and Government Relations (CAGR) motion to prioritize the assessment of the implications on the growing trend of industry consolidation among the large, national health insurers. The AEC voted

unanimously to support the motion on instructing APA to prioritize an expeditious assessment of the implications these consolidations may have on the practice of psychiatry and psychiatric patients, and in the cases of consolidations with clear negative implications, advocate against them by utilizing internal resources as well as by participating in coalitions with other professional and consumer advocacy groups.

SECTION 10. APA c/3 SUBSIDIARY

A. Report of the American Psychiatric Association Foundation

Saul Levin, MD, MPA, Chair and Paul Burke, Executive Director

Dr. Levin said the Foundation needs to look at opportunities it will face in the future in terms of increasing finances, achieving a balanced budget, sooner than the five years that was originally approved by the APAF Board and the APA Board, and continuing to raise more money from a diverse set of funders including individuals. He said the APA has 36,000 members and currently, about 800 members donate to the Foundation.

Mr. Burke said this is a very busy time for the Foundation. Over the next three months, the Foundation will meet with 25 different companies to negotiate support for next year. Since 2011, he said, there have been no Product Theaters sold for the IPS Meeting. This year, the Foundation brought in \$20,000 worth of revenue for the APA due to the sale of a Product Theater, which occurred October 9th at the IPS. In 2016, the Foundation is looking to expand its current goal of 9 Product Theaters to 12 Product Theaters. At \$65,000 a piece, the sale of 12 would net the APA \$780,000. In addition, the Foundation is aggressively seeking sponsors and financial support for the APEX awards scheduled for April 2016.

Dr. Levin said the Foundation has always sponsored a big fundraising event at the annual meeting. He then extended an invitation to the Board to attend next years' fundraising event at the annual meeting in Atlanta. This event will be held at the Georgia Aquarium on Saturday, May 14th from 7:00 to 10:00 p.m. in the Ocean Ballroom which boasts a huge private viewing of the beluga whale exhibit.

SECTION 11. WORK GROUP AND TASK FORCE REPORTS

A. Report of the Ad hoc Work Group on Involvement with 'Social' Issues

Glenn Martin, MD, Chair

Dr. Martin said the charge of the Ad Hoc Work Group on Involvement with 'Social' Issues was to develop a list of principles and criteria to guide the APA's decision making process when considering whether or not APA should take a formal position on social issues of national interest. Before addressing specific criteria to guide the adoption of positions on social issues of national interest, the work group focused on defining "social issues" and the advantages of having special criteria for that subset of concerns. The work group unanimously concluded that the APA should not address "social" issues any differently than any other issues, and the criteria for the APA adopting any position statement should be the same.

The Board of Trustees voted to approve the four criteria proposed by the Ad Hoc Work Group on Social Issues.

1. The APA should have substantial expertise or perspective to offer.
2. Positions should be relevant to access of care or the prevention, diagnosis, or treatment of psychiatric disorders.
3. The issue being considered should be significant for psychiatrists and their patients.
4. The APA should develop positions on issues where the APA may have a meaningful impact and positively shape public opinion.

B. Report of the Ad hoc Work Group on Revising the Ethics Annotations

A written report was submitted to the Board for information only.

C. Report of the Ad Hoc Work Group on Health Care Reform

Anita Everett, MD, Chair

Dr. Everett said the work group was formed with the intention of continuing some of the work from the two previous work groups on health care and assuring the activities selected by these work groups were disseminated and seated within the operations of the APA through the councils in particular. The work group's membership was comprised principally of council chairs but also several other notable, nationally recognized individuals including Dr. Herbert Pardes who was sort of the caliber of the work group. The work group identified six priorities carried forward from the previous work groups, which are quality and initiatives, financing, integrated care, research, workforce and education, and health information technology. She presented the Board with a project management grid to serve as a way to carry forward and capture accountability on this variety of activities.

The Board of Trustees voted to request that the Ad Hoc Work Group on Health Care Reform provide a progress report back to the Board of Trustees at its March, 2016 meeting.

D. Report of the Ad hoc Work Group on Telepsychiatry

James H. Shore, MD, Chair (Speakerphone)

Dr. Shore presented the Ad Hoc Work Group on Telepsychiatry to the Board. He said the work group has begun to identify a series of policy issues relevant to telepsychiatry that APA should address through a variety of modalities, including the development of potential policy/position statements. After putting forth an initial draft and then further revising it based on input from APA councils during the components meetings, the work group recommended the APA adoption of the proposed policy statement on telepsychiatry.

The proposed policy reads:

Telepsychiatry, using videoconferencing, is a validated and effective practice of medicine that increases access to care. There are differences between care delivered via telepsychiatry and care delivered in person, both of which are advantageous in different care circumstances. The APA supports the involvement of a patient in the determination of how they access care. Whether in-person or via telepsychiatry, the optimal delivery of psychiatric care involves psychiatrists providing care within accepted standards of practice.

The Board of Trustees voted to refer this proposed policy statement to the Joint Reference Committee.

SECTION 12. INFORMATIONAL ITEMS

There were no informational items discussed.

SECTION 13. UNFINISHED BUSINESS

A. Position Statement: Support for Four Years of Generalist Training in Adult Psychiatry Residency

Richard F. Summers, MD, Chair, Council on Medical Education and Lifelong Learning

Dr. Summers presented to the Board a revised Proposed Position Statement: *Support for Generalist Training in Adult Psychiatry Residency*. He noted the specific change in the wording of the original document "four years" was taken out and replaced with "psychiatry training should be of enough duration in order to provide sufficient time" and deleted from the original document was a comment about child and adolescent psychiatry having an historic exception to the four year requirement.

The Board of Trustees did not approve the Proposed Position Statement: Support for Generalist Training in Adult Psychiatry Residency.

SECTION 14. NEW BUSINESS

A. Conflict of Interest Committee

Altha J. Stewart, MD

After review and consideration of the disclosures and curriculum vitae of the nominees for the DSM Steering Committee, the Conflict of Interest Committee brought the following actions to the Board of Trustees, which were passed on the Consent Calendar.

The Board of Trustees voted to approve the appointment of Paul Summergrad, M.D., to the DSM Steering Committee.

The Board of Trustees voted to approve the appointment of Sarah Morris, M.D., to the DSM Steering Committee.

SECTION 15. ADJOURNMENT

Dr. Binder thanked the Board and the Administration for their excellent work. Dr. Binder adjourned the meeting of the Board of Trustees at 10:30 pm, Monday, October 12, 2015. The next Board of Trustees meeting will be December 12-13, 2015 at the Westin Arlington Gateway Hotel in Arlington, VA.

**AMERICAN PSYCHIATRIC ASSOCIATION
BOARD OF TRUSTEES**

DRAFT SUMMARY OF ACTIONS

October 11-12, 2015

<u>Agenda Item #</u>	<u>Title/Action</u> <u>Consent Calendar Items Notated by [CC]</u>	<u>Responsible</u> <u>Office/Component</u>
2.A	<u>Requests to Remove Items from the Consent Calendar</u> (item 7.A.1 was removed)	Chief Operating Officer <ul style="list-style-type: none"> • Association Governance
2.B	<u>Approval of Items on the Consent Calendar</u> The Board of Trustees voted to approve the Consent Calendar.	Chief Operating Officer <ul style="list-style-type: none"> • Association Governance
5.A	<u>Minutes of the July 11-12, 2015 Board of Trustees Meeting</u> The Board of Trustees voted to approve the minutes of its July 11-12, 2015 Meeting. [CC]	Chief Operating Officer <ul style="list-style-type: none"> • Association Governance
6.B	<u>Status of the Board Contingency Fund</u> The Board of Trustees voted to accept the report of the status of the Board Contingency Fund. [CC]	Chief Financial Officer <ul style="list-style-type: none"> • Finance & Business Operations Chief Operating Officer <ul style="list-style-type: none"> • Association Governance
6.C	<u>Presidential New Initiative Fund</u> The Board of Trustees voted to accept the report of the status of the President's New Initiative Funds for Dr. Summergrad, Dr. Binder, and Dr. Oquendo. [CC]	Chief Financial Officer <ul style="list-style-type: none"> • Finance & Business Operations Chief Operating Officer <ul style="list-style-type: none"> • Association Governance
6.D	<u>Assembly New Initiative Fund</u> The Board of Trustees voted to accept the status report of the Assembly's New Initiative Fund. [CC]	Chief Financial Officer <ul style="list-style-type: none"> • Finance & Business Operations Chief Operating Officer <ul style="list-style-type: none"> • Association Governance

<u>Agenda Item #</u>	<u>Title/Action</u> <u>Consent Calendar Items Notated by [CC]</u>	<u>Responsible</u> <u>Office/Component</u>
7.A.1	<p><u>Joint Reference Committee Report</u></p> <p>The Board of Trustees voted to retain the position statement <i>Active Treatment</i>, and refer it to the Council on Healthcare Systems and Financing for appropriate review.</p>	<p>Council on Healthcare Systems and Financing</p> <p>Chief of Policy, Programs and Partnerships</p> <ul style="list-style-type: none"> • Healthcare Systems & Financing <p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance • Joint Reference Committee (For Information)
8.B	<p><u>Bylaws Committee Report</u></p> <p>The Board of Trustees voted to approve the proposed language to incorporate the International Resident-Fellow Member category as approved by the Board of Trustees at their July 2015 meeting.</p>	<p>Chief Membership & RFM-ECP Officer</p> <ul style="list-style-type: none"> • Membership <p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance
8.C.1	<p><u>Membership Committee Report</u></p> <p>The Board of Trustees authorized dropping from APA membership the Members listed in Attachment D for failure to meet the requirements of membership. [CC]</p>	<p>Chief of Membership & RFM-ECP Officer</p> <ul style="list-style-type: none"> • Membership
8.C.2	<p><u>Membership Committee Report</u></p> <p>The Board of Trustees voted to approve the applicants listed in Attachment E for International Membership. [CC]</p>	<p>Chief of Membership & RFM-ECP Officer</p> <ul style="list-style-type: none"> • Membership
8.C.3	<p><u>Membership Committee Report</u></p> <p>The Board of Trustees voted to approve the Membership Committee's recommendations on the due relief requests as listed in Attachment F. [CC]</p>	<p>Chief of Membership & RFM-ECP Officer</p> <ul style="list-style-type: none"> • Membership

<u>Agenda Item #</u>	<u>Title/Action</u> <u>Consent Calendar Items Notated by [CC]</u>	<u>Responsible</u> <u>Office/Component</u>
8.E	<p><u>MOC Discussion- Request from ABPN</u></p> <p>The Board of Trustees voted to approve relaying the following feedback to the ABPN:</p> <ol style="list-style-type: none"> 1. The APA does not agree that there should be an exam every ten years for MOC. 2. Certification of lifelong learning should be an integrated ongoing process relevant to actual practice. 3. APA will work with ABPN to improve the certification of lifelong learning process—APA will recommend members for a committee to do this. 4. Should there be an exam at any point; most questions should be related to the psychiatrist's subspecialty with inclusion of some relevant general psychiatry questions. 5. No psychiatrist should be forced to maintain her/his underlying general and subspecialty certification through more than one certification process. [unanimous vote] 	<p>Chief Executive Officer</p> <p>Chief of Policy, Programs & Partnerships</p> <ul style="list-style-type: none"> • Director of Education
8.F.1	<p><u>Ethics Committee Report</u></p> <p>The Board of Trustees voted to approve the broadening of the Carol Davis Ethics Award criteria to include any APA member who has authored an outstanding publication on ethics in psychiatry.</p>	<p>General Counsel</p> <p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance
8.F.2	<p><u>Ethics Committee Report</u></p> <p>The Board of Trustees voted to approve changing the Carol Davis Ethics Award frequency from annually to periodic (given at the discretion of the Ethics Committee, but no more than once a year).</p>	<p>General Counsel</p> <p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance

<u>Agenda Item #</u>	<u>Title/Action</u> <u>Consent Calendar Items Notated by [CC]</u>	<u>Responsible</u> <u>Office/Component</u>
8.F.3	<p><u>Ethics Committee Report</u></p> <p>The Board of Trustees voted to approve revision of the Carol Davis Ethics Award description in the APA Operations Manual to reflect the aforementioned proposed changes. (attachment 1)</p>	<p>General Counsel</p> <p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance
8.F.4	<p><u>Ethics Committee Report</u></p> <p>The Board of Trustees voted to approve the revision of the Carol Davis Ethics Award description on the APA public website to reflect the aforementioned proposed changes. (attachment 2 and action 8.F.1 and 8.F.2)</p>	<p>General Counsel</p> <p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance
11.A	<p><u>Ad Hoc Work Group on Involvement with 'Social' Issues</u></p> <p>The Board of Trustees voted to approve the four criteria proposed by the Ad Hoc Work Group on Social Issues.</p> <ul style="list-style-type: none"> • The APA should have substantial expertise or perspective to offer • Positions should be relevant to access of care or the prevention, diagnosis, or treatment of psychiatric disorders. • The issue being considered should be significant for psychiatrists and their patients. • The APA should develop positions on issues where the APA may have a meaningful impact and positively shape public opinion. 	<p>CEO and Medical Director</p> <p>Chief Communications Officer</p> <p>Joint Reference Committee (for information to all councils)</p>
11.C	<p><u>Ad Hoc Work Group on Healthcare Reform</u></p> <p>The Board of Trustees voted to request that the Ad Hoc Work Group on Health Care Reform provide a progress report back to the Board of Trustees at its March, 2016 meeting.</p>	<p>Chief of Policy, Programs & Partnerships</p> <ul style="list-style-type: none"> • Healthcare Systems & Financing <p>Ad Hoc Work Group on Health Care Reform – Progress Report- March 2016 BOT</p>

<u>Agenda Item #</u>	<u>Title/Action</u> <u>Consent Calendar Items Notated by [CC]</u>	<u>Responsible</u> <u>Office/Component</u>
11.D	<p><u>Ad Hoc Work Group on Telepsychiatry Report</u></p> <p>The Board of Trustees <u>voted to refer</u> the proposed policy from the Ad Hoc Work Group on Telepsychiatry <u>to the Joint Reference Committee.</u></p>	<p>Joint Reference Committee</p> <p>Chief of Policy Programs & Partnerships</p> <ul style="list-style-type: none"> • Quality Improvement
13.A	<p><u>Proposed Position Statement: Support For Generalist Training in Adult Psychiatry Residency</u></p> <p>The Board of Trustees did not approve the Proposed Position Statement: Support for Generalist Training in Adult Psychiatry Residency.</p>	<p>Chief of Policy, Programs & Partnerships</p> <ul style="list-style-type: none"> • Education (for information)
14.A.1	<p><u>New Business:</u></p> <p>The Board of Trustees voted to approve the appointment of Paul Summergrad, M.D., to the DSM Steering Committee. [CC]</p>	<p>Chief of Policy, Programs & Partnerships</p> <ul style="list-style-type: none"> • Research
14.A.2	<p><u>New Business:</u></p> <p>The Board of Trustees voted to approve the appointment of Sarah Morris, M.D., to the DSM Steering Committee. [CC]</p>	<p>Chief of Policy Programs & Partnerships</p> <ul style="list-style-type: none"> • Research <p>DSM Steering Committee</p>
EX.1.1	<p><u>The American Journal of Psychiatry Editorial Board Appointments</u></p> <p>The Board voted to approve the appointment of Felton Earls, MD, to <i>The American Journal of Psychiatry</i> Editorial Board to a four-year term to begin January 1, 2016, and expire December 31, 2019.</p>	<p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance • Publishing <ul style="list-style-type: none"> ○ APP Journals
EX.1.2	<p><u>The American Journal of Psychiatry Editorial Board Appointments</u></p> <p>The Board voted to approve the appointment of Roy Perlis, MD, to <i>The American Journal of Psychiatry</i> Editorial Board to a four-year term to begin January 1, 2016, and expire December 31, 2019.</p>	<p>Chief Operating Officer</p> <ul style="list-style-type: none"> • Association Governance • Publishing <ul style="list-style-type: none"> ○ APP Journals

<u>Agenda Item #</u>	<u>Title/Action</u> <u>Consent Calendar Items Notated by [CC]</u>	<u>Responsible</u> <u>Office/Component</u>
EX.2	<p><u>Request to sign Maryland Psychiatric Society Amicus Brief</u></p> <p>The Board of Trustees voted to approve signing the amicus brief of the Maryland Psychiatric Society in <i>Allmond v. Department of Health and Mental Hygiene</i>.</p>	<p>Chief of Government Affairs</p> <p>Council on Psychiatry & Law</p> <p>Committee on Judicial Action</p>
EX.3	<p><u>Request to sign Washington State Psychiatric Association's Amicus Brief</u></p> <p>The Board of Trustees voted to approve signing the amicus brief of the Washington State Psychiatric Association in <i>Volks v. DeMeerleer</i></p>	<p>Chief of Government Affairs</p> <p>Council on Psychiatry & Law</p> <p>Committee on Judicial Action</p>

American Psychiatric Association
Treasurer's Report
For the Ten Months Ended
October 31, 2015

The financial summary that follows is for the ten months ended October 31, 2015. After ten months, net income is \$5.9 million, compared to an annual budget of negative \$4.5 million. At the same time last year, the net income was \$12.6 million. The decline in net income is attributable to the expected declines in DSM sales and lower attendance at the Annual Meeting, both of which were anticipated in the 2015 budget.

The income statement format has been changed in order to focus on net income expense. The statement is broken down into three main categories: Revenue Generating Activities, Programs and Services, and Governance and Operations. These categories total to net operating income, from which we then add investment income, subtract any expenditure from Board Designated Funds and the net activity from temporarily restricted funds to come up with the true net income.

In order to gauge how the association is doing against the budget there are two numbers that tell the story: 1) Net operating income under the projection vs budget column, where the \$2,594 indicates that APA is projected to end the year \$2.6 million ahead of budget; and 2) Scheduled transfer of Board reserves under the projection vs. budget column, where the \$2,253 indicates that APA will use \$2.3 million less in reserves than was anticipated in the budget.

The better than expected financial results is attributable to budget savings from vacant positions. Revenue generating activities were in line with budget expectations; however, it is worth noting that net publishing revenue was lower than expected due to a lower volume of books sales. In addition, APA filed amended tax returns for 2011 – 2013 and received a \$200K tax refund.

The balance sheet remains strong with net assets of \$85.5 million, cash of \$10.8 million and investments of \$73.9 million. Cash includes \$9.0 million in deferred revenue, meaning money received for things like dues and journal subscriptions that is attributable to future accounting periods.

American Psychiatric Association
Statements of Financial Position

	<u>10/31/14</u>	<u>12/31/14</u>	<u>10/31/15</u>
ASSETS			
Current Assets:			
Cash and Cash Equivalents	\$5,715	\$6,598	\$10,761
Accounts Receivable, Net	5,040	6,016	2,957
Grant Receivable, Net			6
Advances to Affiliates	487	1,637	1,477
Publications Inventory, Net	1,362	1,661	1,618
Prepaid Expenses and Other Current Assets	<u>821</u>	<u>847</u>	<u>1,178</u>
Total Current Assets	13,425	16,759	17,997
Investments in Marketable Securities	71,630	72,942	73,934
Property and Equipment, Net	2,122	2,209	1,957
Intangible	3,705	2,600	2,405
Development Costs	<u>9,430</u>	<u>9,206</u>	<u>8,294</u>
TOTAL ASSETS	<u>100,312</u>	<u>103,716</u>	<u>104,587</u>
LIABILITIES			
Current Liabilities:			
Accounts Payable and Accrued Expenses	5,609	10,074	7,874
Dues Payable (DB & Other)	1,172	1,183	1,231
Deferred Revenue:			
Membership Dues	2,142	4,777	1,992
Grants and Contracts			
Other	<u>4,272</u>	<u>7,358</u>	<u>7,043</u>
Total Current Liabilities	13,195	23,392	18,140
Deferred Rent Liability	<u>1,233</u>	<u>1,174</u>	<u>926</u>
TOTAL LIABILITIES	<u>14,428</u>	<u>24,566</u>	<u>19,066</u>
NET ASSETS			
Unrestricted, Undesignated	35,942	24,856	31,282
Unrestricted, Designated	49,184	53,525	53,500
Temporarily Restricted	<u>758</u>	<u>769</u>	<u>739</u>
ENDING BALANCE, NET ASSETS	85,884	79,150	85,521
TOTAL LIABILITIES AND NET ASSETS	<u>\$100,312</u>	<u>\$103,716</u>	<u>\$104,587</u>

American Psychiatric Association
Statement of Activities and Budget Performance - Summary
For the Ten Months Ending October 31, 2015
(\$ in thousands)

	2014 Year- End Actual	October 2014 Actual	October 2015 Actual	2015 Budget*	2015 Annual Projection	Projection vs. Budget
Revenue Generating Activities						
Membership dues and programs	9,612	9,548	9,533	9,177	9,426	249
Publishing	3,938	3,976	3,359	4,577	4,126	(451)
DSM	9,524	8,476	6,378	7,194	7,229	35
CME and meetings	5,848	6,463	5,505	3,686	3,892	206
Miscellaneous	8	5	214	5	214	209
	<u>28,930</u>	<u>28,468</u>	<u>24,989</u>	<u>24,639</u>	<u>24,887</u>	<u>248</u>
Programs and Services						
Policy, Programs & Partnerships	(4,454)	(3,638)	(3,512)	(5,818)	(4,812)	1,006
Advocacy	(1,891)	(1,509)	(2,327)	(3,251)	(2,885)	366
Communications	(1,384)	(1,121)	(1,419)	(1,940)	(1,826)	114
Foundation operations	(457)	(362)	(368)	(419)	(433)	(14)
	<u>(8,186)</u>	<u>(6,630)</u>	<u>(7,626)</u>	<u>(11,428)</u>	<u>(9,956)</u>	<u>1,472</u>
Governance and Operations						
Operations	(13,790)	(10,107)	(10,451)	(13,494)	(12,851)	643
Governance	(5,476)	(1,990)	(1,822)	(2,858)	(2,627)	231
	<u>(19,266)</u>	<u>(12,097)</u>	<u>(12,273)</u>	<u>(16,352)</u>	<u>(15,478)</u>	<u>874</u>
Net Operating Income	1,478	9,741	5,090	(3,141)	(547)	2,594
Investment income, net of contributions	4,282	3,080	1,336	-	-	-
Board Designated Fund Activities	(104)	(110)	(452)	(1,355)	(598)	757
Change in temporarily restricted funds	(102)	(93)	(30)	-	-	-
Net Income	<u>5,554</u>	<u>12,618</u>	<u>5,944</u>	<u>(4,496)</u>	<u>(1,145)</u>	<u>3,351</u>
Reconciliation of Net Income to Budget Performance						
Net Income	5,554	12,618	5,944	(4,496)	(1,145)	3,351
Scheduled transfer of Reserve funds			-	2,800	547	(2,253)
Board-designated funds						
Membership	104	110	7	-	7	7
Government Relations			315	1,355	461	(894)
Legal - Anthem			7		7	7
Legal - Health Parity			123		123	123
NET BUDGET PERFORMANCE	<u>5,658</u>	<u>12,728</u>	<u>6,396</u>	<u>(341)</u>	<u>-</u>	<u>341</u>

*Budget was amended by the Board of Trustees in March 2015 to add Board Designated funding for state advocacy.

Status of the Board Contingency Fund

ACTION:

Will the Board of Trustees vote to accept the report of the status for the Board Contingency Fund?

Status of Board of Trustee's Contingency Fund as of October 31, 2015

2015 Approved Budget	\$	25,000
Less: Expenses paid as of October 31, 2015	\$	(1,491)
Unspent Budget as of October 31, 2015	\$	<u>23,509</u>

Status of the President's New Initiative Funds

\$25,000. This amount is available for a three year period starting with the term as President-Elect and ending with the completion of the term as Immediate Past President. Any spending requires the approval of the Executive Committee of the Board.

ACTION:

Will the Board of Trustees vote to accept the report of the status for the President's New Initiative Funds for Dr. Summergrad, Dr. Binder, and Dr. Oquendo?

Status of the President's New Initiative for Dr. Summergrad's Fund

as of October 31, 2015

Approved Budget	\$	25,000
Less: Expenses paid as of October 31, 2015		-
Unspent Budget as of October 31, 2015	<u>\$</u>	<u>25,000</u>

Status of the President's New Initiative for Dr. Binder's Fund

as of October 31, 2015

Approved Budget	\$	25,000
Less: Expenses paid as of October 31, 2015		(25,000)
Unspent Budget as of October 31, 2015	<u>\$</u>	<u>-</u>

Status of the President's New Initiative for Dr. Oquendo's Fund

as of October 31, 2015

Approved Budget	\$	25,000
Less: Expenses paid as of October 31, 2015		-
Unspent Budget as of October 31, 2015	<u>\$</u>	<u>25,000</u>

Status of the Assembly's New Initiative Fund

The Assembly's New Initiative Fund is established with no carry over of unspent amounts. Any spending requires the approval of the Assembly.

ACTION:

Will the Board of Trustees vote to accept the report of the status for the Assembly's New Initiative Fund?

Status of the Assembly's New Initiative Fund as of October 31, 2015

2015 Approved Budget	\$25,000
Less: Expenses paid as of October 31, 2015	-
Unspent Budget as of October 31, 2015	<u><u>\$25,000</u></u>

Report of the Joint Reference Committee to the Board of Trustees

The Joint Reference Committee (JRC) forwards the following actions to the Board of Trustees for consideration. The draft summary of actions from the JRC meeting held in October may be found as attachment #15.

ACTION ITEMS

- Item 7.A.1 Caucus: Korean American Psychiatrists [JRCOCT154.A]
Will the Board of Trustees establish a Caucus of Korean American Psychiatrists under the Council on Minority Mental Health and Health Disparities?
(Please see attachment #1)
- Item 7.A.2 2016 George Tarjan Award [JRCOCT155.B]
Will the Board of Trustees approve the 2016 George Tarjan Award nominee, Emmanuel Cassimatis, MD?
(Please see attachment #2)
- Item 7.A.3 2016 Jack Weinberg Award [JRCOCT155.C]
Will the Board of Trustees approve the 2016 Jack Weinberg Award nominee, Constantine G Lyketsos, MD MHS, DFAPA, FAPM, FACNP?
(Please see attachment #3)
- Item 7.A.4 2015 Psychiatric Services Achievement Award [JRCOCT155.D]
Will the Board of Trustees approve the 2015 Psychiatric Services Achievement Award nominees as detailed in attachment #4?
(Please see attachment #4)
- Item 7.A.5 2016 Bruno Lima Award [JRCOCT155.E]
Will the Board of Trustees approve the 2016 Bruno Lima Award nominee, Kathleen Clegg, MD?
(Please see attachment #5)
- Item 7.A.6 Revision to Composition: Council on Advocacy and Government Relations
[JRCOCT158.A]
Will the Board of Trustees approve that the chairperson of the APAPAC be appointed, ex-officio, as a corresponding member to the Council on Advocacy and Government Relations? This would occur with the understanding that the APAPAC will include the chairperson of the Council on Advocacy and Government Relations as an ex-officio corresponding member to the APAPAC Board of Directors.

- Item 7.A.7 Request for Caucus: Infancy and Early Childhood [JRCOCT158.C.1]
Will the Board of Trustees establish a Caucus on Infancy and Early Childhood under the Council on Children, Adolescents and Their Families?
(Please see attachment #7)
- Item 7.A.8 2016 Human Rights Award [JRCOCT158.F.1]
Will the Board of Trustees approve the 2016 Human Rights Award nominee, Dr. David Satcher?
(Please see attachment #8)
- Item 7.A.9 Revision of Charge: APA/Minority Fellowship Selection and Advisory Committee [JRCOCT158.H.2]
Will the Board of Trustees approve the revised charge to the APA/Minority Fellowship Selection and Advisory Committee?
Language has been added to expand the charge to include the assignment of mentors to the fellowship recipients.
(Please see attachment #9)
- Item 7.A.10 Revision of Charge: APA Public Psychiatry Fellowship Selection and Advisory Committee [JRCOCT158.H.3]
Will the Board of Trustees approve the revised charge to the APA Public Psychiatry Fellowship Selection and Advisory Committee?
Language has been added to expand the charge to include the assignment of mentors to the fellowship recipients.
(Please see attachment #10)
- Item 7.A.11 Revision of Charge: American Psychiatric Leadership Fellowship Selection Committee [JRCOCT158.H.4]
Will the Board of Trustees approve the revised charge to the American Psychiatric Leadership Fellowship Selection Committee?
Language has been added to expand the charge to include the assignment of mentors to the fellowship recipients.
(Please see attachment #11)
- Item 7.A.12 Unnecessary Interventions in Psychiatry [JRCOCT158.L.1]
Will the Board of Trustees approve that additional unnecessary interventions in psychiatry be determined under the premise that a new ABIM Foundation Choosing Wisely list will be developed?
(Please see attachment [#12.A](#) and [#12.B](#))
- Item 7.A.13 Release of Authors: Dissemination of Integrated Care within Adult Primary Care Settings: the Collaborative Care Model [JRCOCT158.K.1]
Will the Board of Trustees consider releasing the authors of the resource document *Dissemination of Integrated Care within Adult Primary Care Settings: the Collaborative Care Model*, to publish/submit the document for peer review? Please note that the authors intend to submit the document to the *American Journal of Psychiatry*. (Please see attachment #13)

INFORMATION ITEMS

Item 7.A.14 Resource Document: Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment [JRCOCT158.J.1]
(Please see attachment #14)

The Joint Reference Committee approved the resource document *Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment* as developed by the Council on Psychiatry and Law.



DEPARTMENT OF PSYCHIATRY & BEHAVIORAL SCIENCES
2230 STOCKTON BOULEVARD
SACRAMENTO, CA 95817

UNIVERSITY OF CALIFORNIA DAVIS
MEDICAL CENTER, SACRAMENTO
2315 STOCKTON BOULEVARD
SACRAMENTO, CALIFORNIA 95817

October 5, 2015

Dear APA committee:

We are writing this letter in support for the formation of a Korean American Psychiatrists Caucus in time for APA 2016 in Atlanta. Korean Americans have made up a relatively small proportion of psychiatrists in the United States in part because of the cultural bias against the concept of mental illness in Korean culture. In more recent years, more Korean Americans entering medical school are considering Psychiatry as a career.

A Korean American Psychiatrists Caucus would:

- 1) Allow a forum for members to discuss how our cultural identity can influence how we treat our patients from various backgrounds.
- 2) Provide a forum to network with other Korean American psychiatrists.
- 3) Disseminate ideas on encouraging Korean American medical students in considering psychiatry as a career choice.
- 4) Provide a forum for the first generation of Korean American psychiatrists to engage with and mentor the new generation of Korean American psychiatrists. As current and active members of the APA we plan to actively participate in the Korean American Psychiatrists Caucus.

Sincerely,

Jaesu Han	84798
Jason Yebin Cho	1117233
Chris Shim	45329
Steve Koh	1013428
Austina Cho	86796
Dongchan Park	1114705
Dr. Tai P. Yoo	30853
Raymond Chong	310655
Jonathan Kistler	1159790
Sue Kim	61446

AMERICAN PSYCHIATRIC ASSOCIATION

AWARD REVIEW FORM

Please complete this form in its entirety and forward the form to the Council to which the award administrative component reports along with the nomination of the award recipient. The Council will then forward this documentation on to the Joint Reference Committee.

AWARD NAME: GEORGE TARJAN

NAME OF AWARD ADMINISTRATIVE COMPONENT: Council on Minority Mental Health and Health Disparities

CHAIRPERSON: Christina Mangurian, MD

STAFF LIAISON: ALISON BONDURANT

.....
[Please note if any of the information listed below revises what is currently listed in the APA Operations Manual or if this award needs to be added to the Operations Manual.]

Description of Eligibility for Award:

RECOGNIZES AN INDIVIDUAL WHO HAS MADE SIGNIFICANT CONTRIBUTIONS TO THE ENHANCEMENT OF THE INTEGRATION OF INTERNATIONAL MEDICAL GRADUATES INTO AMERICAN PSYCHIATRY.

Description of Selection Criteria for Award:

SEE ABOVE

Award Funding Information: [Please complete the following if applicable]

Cost for Plaque: <\$300

Cost of Cash Award: \$500

Cost of Lectureship:

Other (please list): *Travel expenses for non-APA member awardee: @ \$1,500 if applicable*

Travel expenses for APA member awardee: \$0

Award Account Balance: **\$102,114**

Date Balance Determined: **10/1/15**

Award Nominee(s): Emmanuel Cassimatis, MD

(Please attach a biosketch and any letters of nomination or support for this individual)

Other individuals considered for the award:

Description of the Committee's Selection Process:

Selection is made by a work group specially tasked by the Council on Minority Mental Health & Health Disparities. The work group is composed of council members and other IMG APA members and representatives from the APA IMG Caucus. The work group evaluates nominations and selects a finalist via email or conference call. Nomination sources are work group members, APA members, and the general psychiatric public.

Dr. Emmanuel G. Cassimatis

Emmanuel Cassimatis is President and Chief Executive Officer of the Educational Commission for Foreign Medical Graduates (ECFMG) and Chair of the Foundation for Advancement of International Medical Education and Research (FAIMER), ECFMG's non-profit foundation. He was formerly Vice President for Affiliations and International Affairs at the Uniformed Services University of the Health Sciences (USUHS), Associate Dean for Clinical Affairs and Professor of Psychiatry at the University's F. Edward Hébert School of Medicine. A graduate of the University of Chicago, Harvard Medical School, and the Washington Psychoanalytic Institute, he served on active duty with the U.S. Army for more than 25 years.

In addition to his duties at ECFMG, Dr. Cassimatis continues to serve as Professor of Psychiatry at USUHS; and is a member of the Executive Council of the World Federation for Medical Education (WFME) and the Composite Committee of the U.S. Medical Licensing Examination (USMLE). He is a past Chair of the Accreditation Council for Graduate Medical Education (ACGME) and of the American Medical Association (AMA) Council on Medical Education. Dr. Cassimatis is a member of the Academy of Medicine of Washington, DC, a Life Fellow of the Association of Military Surgeons of the US, a Psychoanalytic Fellow of the American Academy of Psychoanalysis and Dynamic Psychiatry, and a Distinguished Life Fellow of the American Psychiatric Association.

AWARD REVIEW FORM

APA Board instructions:

Please complete this form in its entirety and forward the form to the Council to which the award administrative component reports along with the nomination of the award recipient. The Council will then forward this documentation to the Joint Reference Committee (lmqueen@psych.org)

APA Foundation instructions:

If the award will be approved by the American Psychiatric Association Foundation Board, please return this form to Lindsey Fox (lfox@psych.org).

AWARD NAME: Jack Weinberg Award in Geriatric Psychiatry

**NAME OF AWARD ADMINISTRATIVE COMPONENT:
Council on Geriatric Psychiatry**

CHAIRPERSON: ___ Robert Paul Roca, MD

STAFF LIAISON: _Sejal Patel

.....
[Please note if any of the information listed below revises what is currently listed in the APA Operations Manual or if this award needs to be added to the Operations Manual.]

Description of Eligibility for Award:

A psychiatrist who over the course of his or her career has demonstrated special leadership or has done outstanding work in clinical practice, training, or research into geriatric psychiatry.

Description of Selection Criteria for Award:

- Clinical Practice
- Training
- Research

Award Funding Information: [Please complete the following if applicable]

- Cost for Plaque: \$150
- Cost of Cash Award: \$500
- Cost of Lectureship: No lecture
- Other (please list): NA

Award Account Balance: \$2,386 (as reported by APA Online Financials)
Date Balance Determined: ___ October 2, 2015

Award Nominee(s): Constantine G. Lyketsos, M.D., M.H.S.,
DFAPA, FAPM, FACNP

(Please attach a biosketch and up to three letters of nomination/support for this individual)

Description of the Committee’s Selection Process:

The selection committee reviewed the applications and rated those using following criteria: clinical skills, leadership, involvement in community work and academic accomplishments (research and publication). Later, the committee members discussed the nominations in a conference call to decide on the nominee. The selected name was presented to the other council members in the Fall Component Meeting. It was unanimously approved by the Council.



DEPARTMENT OF VETERANS AFFAIRS
Veterans Health Administration
Washington DC 20420

July 31, 2015

American Psychiatric Association
c/o Sejal Patel
1000 Wilson Boulevard, #1825
Arlington, VA 22209

Re: Nomination of Constantine G. Lyketsos, M.D., M.H.S.,
DFAPA, FAPM, FACNP, for the Jack Weinberg Memorial
Award for Geriatric Psychiatry

Dear Colleagues:

I am writing to nominate Dr. Constantine Lyketsos for the 2015 APA Jack Weinberg Memorial Award for Geriatric Psychiatry. My nomination documents Dr. Lyketsos' outstanding academic career, his landmark scientific research contributions, his innovative clinical program leadership, his exemplary record of mentoring investigators who are future leaders in the field of Geriatric Psychiatry, and his creative, energetic and ongoing advocacy for our field. In addition, from my perspective at the Department of Veterans Affairs, Dr. Lyketsos' research and his efforts to improve the care and quality of life of persons with dementia provide a clear and compelling roadmap for the optimal care of aging Veterans.

Training and Career Development: Dr. Lyketsos was educated at Northwestern University (B.A. 1984) and went on to receive his medical degree from Washington University in St. Louis (1988). He completed his internship at Francis Scott Key Medical Center (now Johns Hopkins Bayview) and residency in Psychiatry at the Johns Hopkins Hospital, followed by research fellowships in psychiatric epidemiology and neuropsychiatry at Johns Hopkins. After completing his fellowships, Dr. Lyketsos joined the Johns Hopkins faculty in 1993 as an Assistant Professor of Psychiatry, with a joint appointment in the School of Public Health Departments of Epidemiology and Mental Health.

Dr. Lyketsos' academic progress was impressively rapid and sustained allowing him to attain the level of Professor in short order. He now occupies The Elizabeth Plank Althouse Professorship and is Chair of Psychiatry at Johns Hopkins Bayview. His strengths in Psychiatry, Epidemiology, Neuropsychiatry, and Geriatrics as well as his clinical leadership have been recognized by Johns Hopkins in several additional ways by electing him to the Chair of Johns Hopkins Bayview Medical Board and elevating him to Vice-Chair of the Department of Psychiatry in 2006.

Scientific Contributions: Dr. Lyketsos' pioneering contributions in late life memory disorders have altered how the field understands and treats Alzheimer's disease. Since 1983, he has published over 350 peer reviewed articles in leading national and international journals including *JAMA*, *NEJM*, *Lancet*, *JAMA Psychiatry (Archives of General Psychiatry)*, *American Journal of Psychiatry*, *Neurology*, *American Journal of Medicine*, *American Journal of Epidemiology*, *Journal of Affective Disorders*, and the *European Journal of Psychiatry*. He has had ongoing funding from the NIH since 1997 having been the principal investigator of several independent investigator (R01/U01) grants, including the seminal Cache County Dementia Progression Study (DPS), as well as a number of multi-center clinical trials. In addition, he has been a co-principal investigator for multiple other NIH research funded projects involving tens of millions of dollars. While Dr. Lyketsos' contributions are comprehensively outlined in his attached curriculum vitae, I summarize a few of the most impressive examples here.

In the DPS, Dr. Lyketsos' team conducted one of the most thorough population-based studies on the naturalistic course of dementia. The team studied an incident population of individuals who were well-characterized before the onset of dementia, followed into the onset of dementia, and then characterized in an ongoing fashion for a number of years until death, with very little loss to follow-up. Findings from this study have demonstrated the great variability in the progression of dementia at the population with as many as 40% of people with Alzheimer's disease having a very slow progression level and often not seeking services. Additionally, the DPS has defined a number of modifiable factors that may slow progression including early delivery of therapeutic activities, closeness between patient and caregiver, early management of neuropsychiatric symptoms, systematic management of medical comorbidities among others. The

identification of these modifiable factors has greatly contributed to the development of the Johns Hopkins Maintaining Independence at Home (MIND) intervention for people with dementia (more fully discussed later in this letter) which is emerging as one of the premier approaches to effectively and successfully managing dementia in home environments.

Dr. Lyketsos' most seminal research contributions have involved work on the neuropsychiatric disturbances of dementia (NPS). Along with other collaborators, Dr. Lyketsos' team has been central in the successful effort to characterize the epidemiology of NPS and confirm the universal presence of NPS during the course of dementia. These findings have led to a recharacterization of how the field thinks about dementia - from a simple disorder of memory to one of a complex cognitive disorder with prominent psychiatric disturbances. Through his research, Dr. Lyketsos has also demonstrated the critical role that these disturbances play in the course of dementia, including quality-of-life, functional impairment, caregiver burden, aggressive behaviors and institutionalization. Further, he has conducted critical nosologic work demonstrating that NPS clusters into predictable syndromes (depression, agitation, psychosis, apathy) and has collaborated with investigators from all over the world to develop syndrome-specific treatments. He was a key contributor to the NIH funded CATIE-AD study and principal investigator of the multicenter DIADS-2 and CitAD studies. These studies have shown the limited efficacy of available psychotropic medications for these disturbances (e.g., limited utility of SSRI antidepressants for depression). At the same time, in the CitAD study which he led, his team has shown the potential value for citalopram in the management of agitation in a subgroup of people with dementia.

The Alzheimer's Association recognized Dr. Lyketsos' work in the NPS field when he was asked to lead a Research Roundtable in 2009 with international participation aimed at redefining the treatment development agenda for neuropsychiatric disturbances. The results of this Roundtable have been impressive. It has led to the development of the NPS-Professional Interest Area (PIA) of the International Society to Advance Alzheimer's Research and Treatment which he chairs and which now has almost 500 members. This organization continues to draw scientists from all over the world interested in NPS and has recently published consensus criteria for "Mild Behavioral Impairment" a non-cognitive prodromal syndrome to dementia. The PIA has played a central role in

reinvigorating the interest of pharmaceutical companies in developing treatments for agitation and other NPS in dementia. Where several years ago there was little treatment development for NPS, as many as six major pharmaceutical companies are actively developing novel therapies for NPS associated with Alzheimer's disease in most case applying study designs and intervention approaches developed by Dr. Lyketsos and his team.

Dr. Lyketsos and his team are now moving forward to better characterize the neurobiology of NPS, especially therapeutically relevant subgroups, by utilizing a variety of brain imaging techniques. In addition, given the demonstration from his team that NPS occurs frequently in cognitively normal older individuals or individuals with mild cognitive impairment and are major predictors of the onset of dementia, Dr. Lyketsos is leading efforts to determine how best to treat these disturbances in early Alzheimer's disease in the hope of providing an avenue for the prevention of the devastation brought about by dementia.

In more recent years, in his role as Clinical Core Director of the NIH-funded Johns Hopkins Alzheimer's Disease Research Center, Dr. Lyketsos has assembled an impressive interdisciplinary team at Johns Hopkins to develop biomarkers that can accelerate the development of new treatments for Alzheimer's. This group's research includes studies using diffusion tensor imaging, PET imaging with combinations of novel ligands, as well as blood and CSF lipidomics.

This team has played a critical role in the development of blood biomarkers. For example, they were the first to define the utility of blood lipids as predictors of the incidence of Alzheimer's dementia and of the progression of mild cognitive impairment or dementia after onset, and they showed how specific (ceramide) lipid levels in the blood can predict hippocampal deterioration on brain MRI in patients with mild cognitive impairment. Aspects of this work have been replicated by investigators at Georgetown University and elsewhere. Development of blood biomarkers with therapeutic utility in Alzheimer's disease remains a focus of Dr. Lyketsos' group and has expanded further to the study of changes in blood amyloid levels in response to oral glucose loading.

In the area of brain imaging, using brain MRI, his team has shown the early deterioration of fornix in the course of Alzheimer's disease. This has led to the potential for a highly novel therapy, specifically deep brain stimulation targeting the fornix. Applying a technique developed by neurosurgeons at the University of Toronto, Dr. Lyketsos is leading an NIH-funded multicenter clinical trial evaluating the efficacy of deep brain stimulation targeting the fornix for the treatment of very early Alzheimer's dementia. The study recently reported promising results especially for individuals over age 65. If successful in the long term, DBS has great potential as a novel mechanism for the treatment of Alzheimer's disease.

Of enormous importance is Dr. Lyketsos' work on translation of evidence-based treatment advances for persons with dementia into practice. The NIMH-funded Maryland Assisted Living Study (MD-AL), of which he has been the principal investigator, has changed how dementia is treated in that setting. MD-AL characterized the high prevalence and significant impact of dementing disorders on quality of life and the ability to age in place in assisted living environments. This work has led to major changes in how assisted living is regulated and how assisted-living staff is educated in Maryland and nationwide.

Dr. Lyketsos' team has also focused its attention to the delivery of dementia-related services at home. Building upon the work of the Johns Hopkins Memory Center and the work of the DPS, he developed the previously mentioned Maintaining Independence at Home (MIND), a novel needs-based care coordination intervention intended to improve the ability of elders with dementia to age in place. Supported by an impressive grass-roots philanthropic effort, raising \$2.25 million, his team recently reported the efficacy of MIND in a randomized clinical trial. Specifically, the study demonstrated an impressive 9 month delay in transition from home into a nursing home, with improved quality of life, as well as with reductions of caregiver objective and subjective burden. Further development and dissemination of MIND is now moving to its next stage with support from NIH (\$5.8 million), the Center for Medicare and Medicaid Services (\$6.8 million), and the private sector (in development) to target dual Medicare-Medicaid eligibles, retirement community residents, and individuals in urban home environments.

Clinical Care: In addition to his pioneering research scholarship, Dr. Lyketsos has remained a clinician par excellence drawing praise from patient, families and colleagues alike. He has led the Johns Hopkins

clinical care memory programs for almost 2 decades assuming the mantle of Marshall Folstein who departed Hopkins in the early 1990s. Over time Dr. Lyketsos has expanded the programs into what is now the Johns Hopkins Memory and Alzheimer's Treatment Center (MATC), a collaboration between psychiatry, neurology, and geriatric medicine at Johns Hopkins. The Center provides state-of-the-art diagnosis and comprehensive ongoing care for individuals with memory disorders in any setting, especially at home. At present, the Johns Hopkins MATC evaluates approximately 1000 new memory disorder patients annually and supports a team of 12 specialized psychiatrists, neurologists and geriatricians. Dr. Lyketsos himself is a highly sought after clinician with individuals seeking his care and expertise from all over the world. Impressively, has been cited by Castle Connolly as a *Top Doctor in America* for almost a decade and a half.

Over his many years of clinical experience Dr. Lyketsos has had the opportunity to refine his approaches to patient evaluation, care, and treatment- these are summarized in the landmark book, *Practical Dementia Care* (with co-authors Dr. Peter Rabins and Cynthia Steele, R.N.), now in its upcoming 3rd Edition, which has been praised as a leading resource and practical manual for clinicians working with patients who have dementia.

Mentoring and Teaching: Dr. Lyketsos mentorship has led to the development of an impressively accomplished and promising group of funded independent researchers. These include Paul Rosenberg (Associate Professor of Psychiatry at Johns Hopkins, Beeson Award, several R01s, PET amyloid imaging, microglia markers in Alzheimer's); Michelle Mielke (Associate Professor of Psychiatry at Mayo Clinic, several R01s, diffusion tensor imaging, blood biomarkers studies); Quincy Samus (Associate Professor of Psychiatry at Johns Hopkins, K Award, R01, MIND at HOME project); Ben Lee (Associate Professor of Psychiatry at Yale, K Award, R01, depression-dementia relationship); Vani Rao (Associate Professor of Psychiatry at Johns Hopkins, K Award, R01-equivalent from DoD, depression after traumatic brain injury); Adam Rosenblatt (Professor and Director of Geriatric Psychiatry at VCU, R01, assisted living studies). Additionally, a number of emerging leaders in geriatric psychiatry and geriatric medicine are under his current mentorship (Esther Oh, Jeannie Leoutsakos, Christopher Marano, Jin Joo, Milap Nowrangi).

In his role as Professor of Psychiatry at Johns Hopkins, Dr. Lyketsos is one of the main teachers of Geriatric Psychiatry for

medical students, residents, fellows, faculty and allied health professionals. One of his enduring accomplishments in this area is his creation of a course in Research Methods in Psychiatry for Residents and Fellows. His mentees report that he challenges and supports them simultaneously and encourages them to push the academic boundaries of the established current body of knowledge. Dr. Lyketsos was the founder and had been the course director of the widely acclaimed Johns Hopkins annual CME course on dementia care for 20 years, an educational program that attracts approximately 200 attendees. Additionally, he was for over a decade the Academic Director of the Copper Ridge Institute (an affiliate of Johns Hopkins at the time) where he developed a research and teaching program to help providers learn to diagnose and treat patients with complex dementia and behavior problems. Finally, he has overseen the growth and development of one of the premier fellowships in geriatric psychiatry (now directed by his mentee Dr. Marano) funded by a collaborative grant from HRSA.

Dr. Lyketsos is an exceptionally talented educator committed to teaching Geriatric Psychiatry at a national and international level. He is widely sought out by many academic and research institutions worldwide. He has given over 150 invited presentations, including grand rounds at university centers, keynote lectures at conferences, named lectureships, and award lectures throughout the United States and in Europe, South America, Asia, and Australia.

Leadership in Geriatric Psychiatry: Dr. Lyketsos has been an exceptional leader and advocate for geriatric psychiatry over many years and on many levels. He is a previous Board member of the American Association for Geriatric Psychiatry (AAGP) and currently serves on the Board of the International Psychogeriatric Association where he has recently been elected Treasurer and serves as Deputy Editor for North America for the society's journal, *International Psychogeriatrics*. Dr. Lyketsos is a past Editor-in-Chief of the *International Review of Psychiatry* and currently serves on the Editorial Boards of the *American Journal of Psychiatry* and *Alzheimer's and Dementia* (the preeminent journal in his field). In addition, he has been invited to edit/co-edit several journal special issues on topics in geriatric psychiatry. In past years, he has been a member (and frequently a chair) of multiple American Psychiatric Association (APA) Committees where he has recognized for his organizational talents and expertise in geriatric psychiatry. On the local level, he has been active in the Maryland Psychiatric Society CME Committee and previously served as the MPS Chair of the Committee on Residents/Fellows and the

Committee on Public Psychiatry. He has been and continues to be highly valued by the MPS for his expertise and willingness to consult on issues relating to geriatric psychiatry.

The quality and enduring impact of Dr. Lyketsos' work is demonstrated by the numerous honors and awards he has received. Two such awards in the field of geriatric psychiatry are particularly noteworthy. He received the 2006 *William S. Proxmire Award* for "extraordinary leadership in the fight against Alzheimers" and in 2012 he was honored by the AAGP with its highest honor, the *Distinguished Scientist Award*. Other important recognitions of his contributions include his selection as a Distinguished Fellow of the APA, Fellow of the American College of Neuropsychopharmacology, and Member of the American College of Psychiatrists.

In summary, Dr. Lyketsos is an international leader in Geriatric Psychiatry with an unsurpassed record of academic achievement, landmark scientific contributions in the field of dementia, innovative clinical program design benefiting elders with psychiatric morbidities (as well as their families and communities), outstanding mentorship to a new generation of geriatric psychiatrists, and sustained leadership in the field of geriatric psychiatry. He is internationally recognized as a member of the very top tier of clinician-researcher-educators and as an inspirational force for promoting a better quality of life for the elderly. I believe Dr. Lyketsos to be supremely qualified for, and richly deserving of, the Weinberg Memorial Award and it is my deepest privilege to nominate him.

Respectfully,



Marsden McGuire, M.D., M.B.A., DFAPA
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Office of Patient Care Services
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University of Maryland School of Medicine

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Johns Hopkins University School of Medicine

CURRICULUM VITAE
CONSTANTINE G. LYKETSOS, MD, MHS, DFAPA, FAPM, FACNP¹

(Signature) 

VERSION DATE: 28 June 2015

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

Johns Hopkins University, Baltimore, Maryland

- The Elizabeth Plank Althouse Professor in Alzheimer's Disease Research, 2007-
- Chair, Department of Psychiatry, Johns Hopkins Bayview Medical Center, 2006-
- Vice-Chair, Department of Psychiatry, Johns Hopkins Medicine, 2006-
- Professor of Psychiatry and Behavioral Sciences (tenured), School of Medicine, 2000-
- Joint Appointment, Department of Mental Health, Bloomberg School of Public Health, 1994-

Johns Hopkins Medicine, Baltimore, Maryland

- Chair, Medical Board, Johns Hopkins Bayview Medical Center, 2013-
- Director, Johns Hopkins Memory and Alzheimer's Treatment Center, 2007-
- Attending Physician, Full-time Medical Staff, The Johns Hopkins Hospital, 1993-
- Attending Physician, Full-time Medical Staff, Johns Hopkins Bayview Medical Center, 2006-

Education and Training (reverse chronological order)

- Johns Hopkins Leadership Development Program, 2006
- Certificate (Business of Medicine), Carey Business School, Johns Hopkins University, 1995
- Master of Health Science (MHS), Epi/Clinical Epi, Johns Hopkins School of Public Health, 1994
- Fellow (Psychiatric Epidemiology), Johns Hopkins Bloomberg School of Public Health, 1992-4
- Senior Clinical Fellow, School of Medicine, Johns Hopkins University, 1992-3,
- Chief Resident in Psychiatry, Johns Hopkins Hospital, Baltimore, Maryland, 1991-92
- Resident in Psychiatry, Johns Hopkins Hospital, Baltimore, Maryland, 1989-91
- Intern in Psychiatry/Medicine, Francis Scott Key Medical Center, Baltimore, Maryland, 1988-89
- Doctor of Medicine (MD), Washington University, School of Medicine, St. Louis, Missouri, 1988
- Bachelor of Arts with Distinction (BA), Northwestern University, Evanston, Illinois 1984
- Apolytirion (High School Diploma), Athens College, Athens, Greece

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Professional Experience (reverse chronological order)

Johns Hopkins University and/or Johns Hopkins Medicine

- Academic Director, Copper Ridge Institute (*affiliated with Johns Hopkins Medicine*), 1999-2008
- CoDirector, Division of Geriatric Psychiatry and Neuropsychiatry, 2002-06
- Founding Director, Neuropsychiatry Service, 1995-2006
- Associate Professor of Psychiatry and Behavioral Sciences, School of Medicine, 1996-0
- Assistant Professor of Psychiatry and Behavioral Sciences, School of Medicine, 1993-6

RESEARCH ACTIVITIES

Publications: Peer-reviewed Original Science Research

1. Lyketsos GC, Mouyas AA, **Lyketsos CG**. Changements de l'attitude du public face aux malades mentaux en Grece. *Psychologie Medicale* 1983;15(14):2351
2. Lyketsos GC, Paterakis P, Beis A, **Lyketsos CG**. Eating disorders in schizophrenia. Proceedings of the Vth Southeastern European Neuropsychiatric Congress , p.849, Graz, Austria, September 1983
3. Lyketsos GC, Karabetsos A, Iordanoglou J, Liokis T, Armagianidis A, **Lyketsos CG**. Personality characteristics and dysthymic states in bronchial asthma. *Psychotherapy and Psychosomatics* 1984;41:177
4. Lyketsos GC, Mouyas AA, **Lyketsos CG**. Psychological characteristics and laboratory correlates in some psychosomatic illnesses. Proceedings of the Regional South East European Conference for Neurology and Psychiatry, p. 81, Varna, Bulgaria, October 1984
5. Lyketsos GC and **Lyketsos CG**. A comparison of personality characteristics and dysthymic states between some psychosomatic disorders (in Greek). *Hippocrates (Athens University Press)* 1984;3(3):105
6. **Lyketsos CG**, Lyketsos GC, Richardson SC, Beis A. Depression and depressive syndromes in schizophrenia. Proceedings of the VIth Southeastern European Neuropsychiatric Congress, p.440, Thessaloniki, Greece, October 1985
7. Lyketsos GC, Paterakis P, Beis A, **Lyketsos CG**. Eating disorders in schizophrenia. *Br J Psychiatry* 1985;146:225
8. Lyketsos GC, Mouyas AA, Malliori M, **Lyketsos CG**. Opinions of public and patients about mental illness and psychiatric care in Greece. *British J Clin & Soc Psychiatry* 1985;3(3):59
9. Lyketsos GC, Stratigos J, Tawil G, Psaras M, **Lyketsos CG**. Hostile personality characteristics, dysthymic states, and neurotic symptoms in urticaria, psoriasis, and alopecia. *Psychotherapy Psychosomatics* 1985;44:199

10. Lyketsos GC and **Lyketsos CG**. Personality characteristics in psychosomatic illness. Proceedings of the 16th European Conference on Psychosomatic Research, p. 71, Athens, Greece, September 1986
11. **Lyketsos CG**, Lyketsos GC, Richardson SC, Beis A. Dysthymic states and depressive syndromes in physical conditions of presumably psychogenic origin. *Acta Psychiatrica Scandinavica* 1987;76:529
12. Arapakis G, **Lyketsos CG**, Gerolymatos C, Richardson SC, and Lyketsos GC. Low dominance and high intropunitiveness in ulcerative colitis and irritable bowel syndrome. *Psychotherapy Psychosomatics* 1987;46:196
13. Aritzi S, Richardson SC, **Lyketsos CG**, Lyketsos GC. Opinions concerning mental illness and psychiatric care in a remote rural area in Greece. *British J Clin & Soc Psychiatry* 1987;5(1):19
14. Lyketsos GC, Aritzi S, Richardson SC, **Lyketsos CG**. Prospects of rehabilitation for elderly schizophrenics. *Br J Psychiatry* 1989;155:451
15. **Lyketsos CG**, Aritzi SA, Gerontas A, Lyketsos GC. Composite International Diagnostic Interview: Greek Application (in Greek). *Encephalos (Journal of the Hellenic Neurologic and Psychiatric Society)* October 1989:3-9
16. **Lyketsos CG**, Lyketsos GC, Gerontas A, Aritzi SA. Translation of the CIDI and its testing in Greece. *Psychiatriki* 1990;1(3):237
17. **Lyketsos CG**, Lyketsos GC, Aritzi S, Gerontas A. Athens Center 06. A chapter in the World Health Organization / Alcohol, Drug Abuse and Mental Health Administration field trials of the Composite International Diagnostic Interview. *Psychiatriki* 1991:Supplement 1 (devoted to this monograph)
18. Hanson A, Chisolm M, McGuire M, Ranen N, Stoline A, **Lyketsos CG**. Tracking the clinical psychiatric literature: What is out there? *Academic Psychiatry* 1991;15(1):33
19. **Lyketsos CG**, Lyketsos GC, Fishman M, Treisman GJ. Dementia and secondary mood disorders in AIDS. *Psychiatriki* 1992; 3: 118-124
20. **Lyketsos CG**, Stoline A, Ranen N, Longstreet P, Lesser R, Fisher R, Folstein MF. Mania in temporal lobe epilepsy. *Neuropsychiatry, Neuropsychology and Behavioral Neurology*, 1993;6(1):19-25
21. **Lyketsos CG**, Hanson AL, Fishman M, Rosenblatt A, McHugh PR, Treisman GJ. Mania early and late in the course of Human Immunodeficiency Virus (HIV) Infection. *The American Journal of Psychiatry*, 1993;150(2):326-327
22. **Lyketsos CG**, Storch DD, Lann HD, Finn R, Haber R, Meng R. HIV Infection in public psychiatric facilities in Maryland: Results and discussion of an informal survey. *Maryland Medical Journal*, 1993;42(6):571-573

23. **Lyketsos CG**, Hoover DR, Guccione M, Senterfitt W, Dew MA, Wesch MA, Van Raden M, Treisman GJ, Morgenstern H. Depressive symptoms as predictors of medical outcomes in HIV infection. *JAMA* 1993; 270:2563-2567.
24. **Lyketsos CG**, Hanson AL, Fishman M, McHugh PR, Treisman GJ. Screening for psychiatric disorders in an HIV medical clinic: the importance of a psychiatric presence. *Int J Psychiatry Medicine* 1994; 24(2): 103-113.
25. **Lyketsos CG**, Hoover DR, Guccione M. Depression and CD4 decline [Reply Letter]. *JAMA* 1994; 271: 1743-1744.
26. **Lyketsos CG**, Nestadt G, Cwi J, Heithoff K, Eaton WW. The Life Chart Interview: a life calendar interview method to describe the course of psychopathology. *International Journal of Methods in Psychiatric Research* 1994; 4:143-155.
27. **Lyketsos CG**, Lyketsos GC, Aritzi S. Effectiveness of office based psychiatric practice using a structured diagnostic interview to guide treatment. *J Nerv Ment Disease* 1994; 182(12):720-723.
28. **Lyketsos CG**, Corazzini K, Steele C. Mania in Alzheimer's Disease. *J Neuropsychiatry Clin Neurosciences* 1995; 7:350-352.
29. Penkower L, Kingsley L, Zhou S, **Lyketsos CG**, Dew MA. Alcohol consumption as a co-factor in the progression of HIV infection and AIDS. *Alcohol* 1995; 12(5):547-552
30. Hillis AE, Benzing L, Epstein C, **Lyketsos CG**. Cognitive gains and losses in patients with Alzheimer's Disease during frequent practice, *American Journal of Speech and Language Pathology* 1995; 4(4):150-156
31. **Lyketsos CG**, Corazzini K, Steele L, Kraus M. Guidelines for the use of tacrine in Alzheimer's Disease: Clinical application and effectiveness. *J Neuropsychiatry Clin Neurosciences* 1996; 8:67-73
32. **Lyketsos CG**, Hoover DR, Guccione M. Depression and survival among HIV-infected persons [letter]. *JAMA* 1996; 275:35-36
33. **Lyketsos CG**, Hoover DR, Guccione M, Dew MA, Wesch J, Bing EG, Treisman GJ. Depression over the course of HIV infection before AIDS. *Social Psychiatry and Psychiatric Epidemiology* 1996; 31:212-219
34. **Lyketsos CG**, Tune LE, Pearlson G, Steele C. Major depression in Alzheimer's disease: an interaction between gender and family history. *Psychosomatics* 1996; 37:380-389
35. Rasmusson DX, Dal Forno G, Brandt J, Warren AC, Troncoso J, **Lyketsos, CG**. Apolipoprotein-E genotype and verbal deficits in Alzheimer's disease. *J Neuropsychiatry Clin Neurosciences* 1996; 8:335-337

36. **Lyketsos CG**, Hutton H, Fishman M, Schwartz J, Treisman GJ. Psychiatric morbidity on entry to an HIV primary care clinic. *AIDS* 1996; 10:1033-1039
37. Roberts L, McCarty T, **Lyketsos CG**, et al. What and how psychiatric residents wish to learn about ethics. *Academic Psychiatry*, 1996 20(3):131-144
38. **Lyketsos CG**, Hoover DR, Guccione M, Dew MA, Wesch J, Bing EG, Treisman GJ. Changes in depressive symptoms as AIDS develops. *Am J Psychiatry* 1996 153:1430-7
39. Davidson SE, Aylward EH, McArthur JC, Selnes O, **Lyketsos CG**, Barta PE, Pearlson G. A quantitative MRI study of the basal ganglia in depression in HIV seropositive men. *Journal of Neuro-AIDS* 1996 1(3):29-41
40. Lyketsos CG, Baker L, Warren A, Steele C, Brandt J, Steinberg M, Kopunek S, Baker A. Depression, delusions, and hallucinations in Alzheimer's Disease: no relationship to apolipoprotein E genotype. *J Neuropsychiatry Clin Neurosciences* 1997; 9: 64-67
41. **Lyketsos CG**, Schwartz J, Fishman M, Treisman G. AIDS mania. *J Neuropsychiatry Clin Neurosciences* 1997; 9: 277-279.
42. Taragano FE, **Lyketsos CG**, Mangone CA, Allegri RF, Comesaña-Diaz E. Double-Blind, Randomized, Fixed Dose Trial Of Fluoxetine Versus Amitriptyline In The Treatment Of Major Depression Complicating Alzheimer's Disease. *Psychosomatics*, 1997; 38:246-252.
43. **Lyketsos CG**, Baker L, Warren A, Steele C, Brandt J, Steinberg M, Kopunek S, Baker A. Major and minor depression in Alzheimer's disease: Prevalence and impact. *J Neuropsychiatry Clin Neurosciences* 1997; 9:556-561
44. Gallo JJ, Rabins PV, **Lyketsos CG**, Tien AY, Anthony J. Depression without sadness: functional outcomes of non-dysphoric depression in later life. *JAGS* 1997; 45(5): 570-578
45. **Lyketsos CG**, Fishman M, Hutton H, Cox T, Hobbs S, Spoeler C, Hunt W, Driscoll J, Treisman G. The effectiveness of psychiatric treatment for HIV-infected patients, *Psychosomatics* 1997; 38: 423-432
46. Eaton WW, Anthony JC, Gallo J, Cai G, Tien A, Romanoski A. **Lyketsos CG**, Chen LS. Natural history of Diagnostic Interview Schedule DSM-IV major depression. *Arch Gen Psychiatry* 1997; 54: 993-999
47. Hooten WM, **Lyketsos CG**. Differentiating Alzheimer's disease and Frontotemporal dementia: Receiver Operator Characteristic curve analysis of four rating scales. *Dementia* 1998; 9:164-174
48. Steinberg M, **Lyketsos CG**, Brandt J, Steele C, Baker A. Falls in institutionalized elderly with dementia: A pilot study. *Nursing Home Medicine* 1998; 6:153-162

49. Brandt J, Campodonico J, Rich JB, Baker L, Steele C, Ruff T, Baker A, **Lyketsos CG**. Adjustment to residential placement in Alzheimer disease patients: does premorbid personality matter? *Int J Geriatr Psychiatry* 1998; 13: 509-515
50. Hooten WM, **Lyketsos CG**, Mollenhauer M. Use of the BPRS as a predictor of psychiatric admission in non-suicidal patients. *Int J Psychiatry Med* 1998; 28(2): 215-220
51. Payne JL, **Lyketsos CG**, Baker L, Warren A, Steele C, Brandt J, Steinberg M, Kopunek S, Baker A. The relationship of cognitive and functional impairment to depressive features in Alzheimer's disease and other dementias. *J Neuropsychiatry Clin Neurosciences* 1998;10:440-447
52. **Lyketsos CG**, Chen LS, Anthony W. Cognitive decline in adulthood: an 11.5 year follow-up of the Baltimore Epidemiologic Catchment Area Study. *Am J Psychiatry* 1999; 156:58-65
53. **Lyketsos CG**, Steele C, Galik E, Rosenblatt A, Steinberg M, Warren A, Sheppard JM. Physical aggression in dementia patients and its relationship to depression. *Am J Psychiatry* 1999; 156:66-71
54. **Lyketsos CG**, Taragano F, Treisman GJ, Paz J. Major depression and its response to Sertraline in primary care compared to psychiatric office practice in Argentina: Results of an open label trial. *Psychosomatics* 1999; 40:70-75
55. Katz IR, Jeste DV, Mintzer JE, Clyde C, Napolitano J, Brecher M, and the Risperidone Study Group (**Lyketsos CG**). Comparison of risperidone and placebo for psychosis and behavioral disturbances associated with dementia: a randomized, double-blind trial. *J Clin Psychiatry* 1999; 60:107-115
56. Vedhara K, Schifitto G, McDermott M and the Dana Consortium on Therapy for HIV dementia and related cognitive disorders (**Lyketsos CG**). Disease progression in HIV-positive women with moderate to severe immunosuppression: the role of depression. *Behavioral Medicine* 1999; 25: 43-47
57. **Lyketsos CG**, Garrett E, Liang KY, Anthony J. Cannabis use and cognitive decline in persons under 65. *Am J Epidemiology* 1999; 149:794-800
58. Klein DA, Steinberg M, Galik E, Steele C, Sheppard JMES, Warren A, Rosenblatt A, **Lyketsos CG**. Wandering behavior in Community-Residing Persons with Dementia. *Int J Ger Psychiatry* 1999; 14:272-279
59. **Lyketsos CG**, Galik E, Steele C, Steinberg M, Rosenblatt A, Warren A, Sheppard JME, Baker AS, Brandt J. The "General Medical Health Rating" (GMHR): A bedside global rating of medical co-morbidity in patients with dementia. *JAGS* 1999; 47:487-491
60. Taragano F, **Lyketsos CG**, M, Paz J, Schapira M, Comesaña-Díaz E, Klimovsky S. An open label trial of sertraline for the treatment major depression in primary care. *Annals Clin Psychiatry* 1999; 11(2):67-71

61. **Lyketsos CG**, Veiel LL, Sheppard JME, Baker A, Steele CS. A randomized, controlled trial of bright light therapy for agitated behaviors in dementia patients residing in long-term care. *Int J Ger Psychiatry* 1999; 14(7): 520-525
62. Gonzales-Salvador T, Aragano C, **Lyketsos CG**, Barba AC. The stress and psychological morbidity of the Alzheimer patient caregiver. *Int J Ger Psychiatry* 1999; 14:701-710
63. Mijch AM, Judd FK, **Lyketsos CG**, Ellen S, Cockram A. Secondary mania in patients with HIV infection; are antiretrovirals protective? *J Neuropsych Clin Neurosciences* 1999; 11(4):475-480
64. Bassiony MM, Steinberg M, Warren A, Rosenblatt A, Baker AS, **Lyketsos CG**. Delusions & Hallucinations in Alzheimer's Disease: Prevalence and Clinical Correlates. *Int J Ger Psychiatry* 2000; 15:99-107
65. Gonzales-Salvador T, **Lyketsos CG**, Baker AS, Roques C, Hovanek L, Steele CD, Brandt J. Quality of life of patients with dementia in long-term care. *Int J Ger Psychiatry* 2000; 15:181-189
66. Roberts LW, Warner T, Frank E, Ganzini E, Carter DD, **Lyketsos CG**. Caring for Medical Students as Patients: Health Concerns, Access to Services, and Care-Seeking Practices of 1027 Students at Nine Medical Schools. *Academic Medicine*. 2000; 75:272-277
67. **Lyketsos CG**, Sheppard JME, Rabins PV. Dementia in elderly persons in the general hospital. *Am J Psychiatry* 2000; 157:704-707
68. **Lyketsos CG**, Steinberg M, Tschantz J, Norton M, Steffens D, Breitner JCS. Mental and behavioral disturbances in dementia: Findings from the Cache County Study On Memory In Aging. *Am J Psychiatry* 2000; 157: 708-714
69. Raskind MA, Peskind ER, Wessel T, Yuan W, and the Galantamine-USA-1 Study Group (**Lyketsos CG**). Galantamine in AD: A 6-month, placebo controlled trial with a placebo extension. *Neurology* 2000; 54: 2261-2268
70. Tariot PN, Solomon PR, Morris JC, Kershaw P, Lilienfeld S, Ding C, and the Galantamine-USA-10 Study Group (**Lyketsos CG**). A 5-month, randomized, placebo controlled trial of galantamine in AD. *Neurology* 2000; 54:2269-2276
71. Kopetz ES, Steele CD, Brandt J, Baker AS, Kronberg M, Galik E, Steinberg M, Warren A, **Lyketsos CG**. Characteristics and Outcomes of Dementia Residents in an Assisted Living Facility. *Int J Ger Psychiatry* 2000; 15:586-593
72. Groves WC, Brandt J, Steinberg M, Warren A, Rosenblatt A, Baker AS, **Lyketsos CG**. Vascular dementia and Alzheimer's disease: Is there a difference? A comparison of symptoms by disease duration. *J Neuropsychiatry Clin Neurosciences* 2000; 12:305-315

73. Rao V. **Lyketsos CG**. The benefits and risks of ECT for patients with degenerative dementia who also suffer from depression. *Int J Ger Psychiatry* 2000; 15: 729-735
74. McLay RC, **Lyketsos CG**. Veterans have less age related cognitive decline. *Military Medicine* 2000; 165(8):622-625
75. **Lyketsos CG**, Sheppard JME, Steele CS, Kopunek S, Steinberg M, Baker AS, Brandt J, Rabins PV. A Randomized, Placebo-Controlled, Double-Blind, Clinical Trial of Sertraline in the Treatment of Depression Complicating Alzheimer Disease: Initial Results from the Depression in Alzheimer Disease Study (DIADS). *Am J Psychiatry* 2000; 157:1686-1689
76. Street JS, Clark WS, Gannon KS, Cummings JL, Bymatser FP, Tamura RN, Mitan SJ, Kadam DL, Sanger TM, Feldman PD, Tollefson GD, Breier A for the HGEU Study Group (**Lyketsos CG**). Olanzapine in the treatment of psychotic and behavioral symptoms in patients with Alzheimer's disease in nursing care facilities. *Arch Gen Psychiatry* 2000; 57:968-976
77. **Lyketsos CG**, Treisman GJ. Mood disorders in HIV infection. *Psych Annals* 2001; 31:45-9
78. Roberts LW, Warner T, **Lyketsos CG**, Frank E, Ganzini E, Carter DD, et al. Perceptions of Academic Vulnerability Associated with Personal Illness: A Study of 1027 Students at Nine Medical Schools. *Comprehensive Psychiatry* 2001; 42: 1-15
79. Hutton HE, Treisman GJ, Hunt WR, Fishman M, Kendig N, Swetz A, **Lyketsos CG**. HIV risk behaviors and their relationship to PTSD among women prisoners. *Psych Services* 2001; 52(4):508-513
80. Taragano FE, Allegri R, Vicario A, Bagnatti P, Lyketsos CG. A double-blind, randomized clinical trial assessing the efficacy and safety of augmenting standard antidepressant therapy with nimodipine in the treatment of 'vascular depression'. *Int J Ger Psychiatry* 2001; 16: 254-260
81. Carlson MC, Brandt J, Steele C, Baker A, Stern Y, Lyketsos CG. Predictor Index of Mortality in Dementia Patients Upon Entry Into Long-term Care. *J Gerontol A Biol Sci Med Sci* 2001 56: M567-M570.
82. Schneider LS, Tariot PN, **Lyketsos CG**, Dagerman KS, Davis KL, Davis S, Hsiao JK, Jeste DV, Katz IR, Olin JT, Pollock BG, Rabins PV, Small GW, Lebowitz BD, Leiber JA. NIMH-CATIE: Alzheimer's disease clinical trial methodology. *Am J Ger Psychiatry* 2001; 9:346-360
83. **Lyketsos CG**, Steinberg M, Tschantz J, Norton M, Steffens D, Breitner JCS. Neuropsychiatric disturbance in Alzheimer's disease clusters into three groups. The Cache County Study On Memory in Aging. *Int J Ger Psychiatry* 2001; 16(11):1043-1053
84. Marsh L, **Lyketsos CG**, Reich SG. Olanzapine for the treatment of psychosis in patients with Parkinson's disease and dementia. *Psychosomatics* 2001; 42(6)477-481

85. **Lyketsos CG**, Dunn G, Kaminsky MJ, Breakey WR. Medical co-morbidity in psychiatric inpatients: relationship to clinical outcomes and hospital length of stay. *Psychosomatics* 2002; 43:24-30
86. Podewils L, **Lyketsos CG**. Tricyclic antidepressants and cognitive decline. *Psychosomatics* 2002; 43:31-35
87. Payne JL, Sheppard JE, Steinberg M, Warren A, Baker A, Steele C, Brandt J, **Lyketsos, CG**. Incidence, prevalence, and outcomes of depression in residents of a long-term care facility with dementia. *Int J Geriatric Psychiatry* 2002;17: 247-253
88. Bassiony M, Warren A, Rosenblatt AR, Baker AS, Steinberg M, Steele CD, **Lyketsos CG**. Isolated hallucinosis in Alzheimer's disease is associated with African-American race. *Int J Ger Psychiatry* 2002; 17:205-210
89. Roberts LW, Warner TD, Brody JL, Roberts B, Lauriello J, **Lyketsos CG**. Patient and psychiatrist ratings of hypothetical schizophrenia research protocols: assessment of harm potential and factors influencing participation decisions. *Am J Psychiatry* 2002; 159:573-584
90. Bassiony MM, Warren A, Rosenblatt A, Baker AS, Steinberg MS, Steele CD, Sheppard JME, **Lyketsos CG**. The relationship between delusions and depression in Alzheimer's disease. *Int J Ger Psychiatry* 2002; 17: 549-556
91. Leroi I, O'Hearn E, Marsh L, **Lyketsos CG**, Rosenblatt A, Ross CA, Brandt J, Margolis RL. Psychopathology in degenerative cerebellar diseases: A comparison to Huntington's disease. *Am J Psychiatry*, 2002; 159:1306-1314
92. **Lyketsos CG**, Lopez O, Jones B, Fitzpatrick AL, Breitner J, DeKosky. Prevalence of neuropsychiatric symptoms in dementia and mild cognitive impairment. *JAMA* 2002; 288 (12):1475-1483
93. Borowicz L, McKhann G, Grega M, Selnes O, Royall R, Quaskey S, **Lyketsos CG**. Depression and cardiac morbidity after coronary artery bypass surgery. *Psychosomatics* 2002; 43:464-471
94. Leroi I, Sheppard JMES, **Lyketsos CG**. Cognitive Function after 11.5 Years of Alcohol Use: Relationship to Alcohol Use. *Am J Epidemiology* 2002; 156:747-752
95. Miech RA, Breitner JCS, Zandi PP, Khachaturian AS, Anthony JC, Mayer L for the Cache County Study Group (**Lyketsos CG**). Incidence of AD May Decline in the Early 90's for Men, Later for Women. The Cache County Study. *Neurology* 2002; 58(2):209-18.
96. Wei-Qin Zhao WQ, Ravindranath L, Mohamed AS, Zohar O, Chen GH, **Lyketsos CG**, Etcheberrigaray R, Alkon DL. Map kinase signaling cascade dysfunction specific to Alzheimer's disease in fibroblasts. *Neurobiology of Disease* 2002; 11:166-183

97. Leroi I, Voulgari A, Breitner JCS, **Lyketsos CG**. The epidemiology of psychosis in dementia. *Am J Geriatr Psychiatry* 2003; 11:83-91
98. Lopez OL, Becker JT, Jagust WJ, Dulber C, Kuler LH, Carlson M, DeKosky ST, Fitzpatrick A, Breiner J, **Lyketsos C**, Kawas C, Jones B. Neuropsychological characteristics of mild cognitive impairment subtypes. *Neurology* 2003 (Suppl. 1); 60: A243
99. **Lyketsos CG**, Gonzales-Salvador T, Chin JJ, Baker A, Black B, Rabins PV. A follow-up study of change in quality of life among persons with dementia residing in a long-term care facility. *Int J Ger Psychiatry* 2003; 18:275-281
100. McLay R, Maki P, **Lyketsos CG**. Nulliparity and late Menopause are associated with decreased cognitive decline. *J Neuropsychiatry Clin Neurosci* 2003; 15:161-167
101. Black BS, Kasper J, Brandt J, Shore AD, German P, Burton L, Gallo JJ, **Lyketsos C**, Rabins PV. Identifying dementia in high-risk community samples: the memory and medical care study. *Alzheimer Dis Assoc Disord.* 2003 Jan-Mar;17(1):9-18
102. **Lyketsos CG**, DelCampo L, Steinberg M, Miles-Samus Q, Steele CD, Munro C, Baker AS, Sheppard JME, Frangakis C, Brandt J, Rabins PV. Treating depression in Alzheimer's disease: Efficacy and safety of sertraline, and the benefits of depression reduction: The DIADS Study. *Arch Gen Psychiatry* 2003;60:737-746
103. Lopez O, Jagust W, Dekosky S, Becker JT, Fitzpatrick A, Dahlberg C, Breitner JCS, **Lyketsos CG**, Jones B, Kawas C, Carlson M, Kuller L. Prevalence and classification of Mild Cognitive Impairment in the Cardiovascular Health Study Cognition Study: Part 1. *Arch Neurol* 2003; 60:1385-1389
104. Lopez O, Jagust W, Dekosky S, Becker JT, Fitzpatrick A, Dahlberg C, Breitner JCS, **Lyketsos CG**, Jones B, Kawas C, Carlson M, Kuller L. Risk factors for Mild Cognitive Impairment in the Cardiovascular Health Study Cognition Study: Part 2. *Arch Neurol* 2003; 60:1394-1399
105. Steinberg M, Sheppard JME, Tschanz J, Norton M, Steffens D, Breitner JCS, **Lyketsos CG**. The incidence of mental and behavioral disturbances in dementia: The Cache County study. *J Neuropsychiatry Clin Neurosci* 2003;15(3):340-5.
106. Podewils LJ, McLay RN, Rebok GW, **Lyketsos CG**. Relationship of self-perceptions of memory and worry to objective measures of memory and cognition in a general population. *Psychosomatics* 2003; 44:461-470
107. Rosenblatt A, Mehta KM, Romanoski A, Eaton W, **Lyketsos C**. Major depression and cognitive decline after 11.5 years: findings from the ECA study. *J Nerv Ment Dis* 2003;191(12):827-30
108. Steinberg M, Tschanz J, Corcoran C, Steffens D, Norton M, **Lyketsos CG**, Breitner JCS. The persistence of neuropsychiatric symptoms in dementia: The Cache County study. *Int J Geriatr Psychiatry* 2004;19:19-26

109. Leroi I, Brandt J, Reich SG, **Lyketsos CG**, Grill S, Thompson R, Marsh L. Randomized placebo-controlled trial of donepezil in cognitive impairment in Parkinson's disease. *Int J Geriatr Psychiatry* 2004; 19(1): 1-8
110. Fitzpatrick AL, Kuller LH, Ives DG, Lopez OL, Jagust W, Breitner JC, Jones B, **Lyketsos C**, Dulberg C. Incidence and prevalence of dementia in the Cardiovascular Health Study. *J Am Geriatr Soc* 2004;52(2):195-204
111. Steinberg M, Munro CA, Rabins PV, Brandt J, **Lyketsos CG**. Patient predictors of response to treatment of depression in Alzheimer's disease: The DIADS study. *Int J Geriatr Psychiatry* 2004; 19:144-150.
112. Hutton HE, **Lyketsos CG**, Zenilman JM, Thompson RE, Erbeiding EJ. Depression and HIV risk behaviors among patients in a sexually transmitted disease clinic. *Am J Psychiatry* 2004; 161(5):912-4.
113. Drayton SJ, Davies K, Steinberg M, Leroi I, Rosenblatt AR, **Lyketsos CG**. Amantadine for Executive Dysfunction Syndrome in Patients with Dementia. *Psychosomatics* 2004; 45:205-209
114. Politis AM, Mayer LS, Passa M, Maillis A, **Lyketsos CG**. Validity and reliability of the newly translated Hellenic Neuropsychiatry Inventory (H-NPI) applied to Greek outpatients with Alzheimer's disease: A study of disturbing behaviors among referrals to a memory clinic. *Int J Ger Psychiatry* 2004;19(3):203-8
115. Onyike CU, Crum CM, Lee HB, **Lyketsos CG**, Eaton WW. Is Obesity associated with Major Depression? Results from the third National Health and Nutrition Examination Survey (NHANES-III). *Am J Epidemiology* 2004; 158(12):1139-1147
116. **Lyketsos CG**, Reichman WE, Kershaw P, Zhu Y. Long-term outcomes of galantamine treatment in patients with Alzheimer disease. *Am J Ger Psychiatry* 2004; 12:473-482
117. Munro CA, Brandt J, Sheppard JME, Steele CD, Samus QM, Steinberg M, Rabins PV, **Lyketsos CG**. Cognitive response to pharmacological treatment for depression in Alzheimer disease: secondary outcomes from DIADS. *Am J Ger Psychiatry* 2004; 12: 491-498
118. Bassiony MM, Rosenblatt AR, Baker AS, Steinberg M, Steele CD, Sheppard JMES, **Lyketsos CG**. Falls and age in patients with Alzheimer disease. *Journal of Nervous and Mental Disease* 2004; 192 (8): 570-572
119. Rosenblatt A, Samus Q, Steele C, Baker A, Harper M, Brandt J, Rabins P, **Lyketsos CG**. The Maryland Assisted Living Study: Prevalence, Recognition and Treatment of Dementia and Other Psychiatric Disorders in the Assisted Living Population of Central Maryland. *J Am Geriatr Soc* 2004; 52: 1618-1625

120. Politis AM, Vozzella S, Mayer LS, Onyike CU, Baker AS, **Lyketsos CG**. A randomized, controlled, clinical trial of activity therapy for apathy in patients with dementia residing in long-term care. *Int J Ger Psychiatry* 2004; 19: 1087-1094
121. Erbeling EJ, Hutton HE, Zenilman JM, Hunt WP, **Lyketsos CG**. The prevalence of psychiatric disorders in sexually transmitted disease clinic patients and their association with sexually transmitted disease risk. *Sex Transm Dis* 2004;31(1):8-12
122. Rosenberg PB, Onyike CU, Katz IR, Porsteinsson AP, Mintzer JE, Schneider LS, Rabins PV, Meinert CL, Martin BK, **Lyketsos CG** for the Depression in Alzheimer Disease Study-2: Clinical application of operationalized criteria for "Depression of Alzheimer Disease." *Int J Geriatric Psychiatry* 2005; 20:1-9
123. Podewils L, Guallar E, **Lyketsos CG**. Physical Activity, APOE genotype, and Dementia Risk: Findings from the CHS Cognition Study. *Am J Epidemiology* 2005; 16(7):639-651
124. Papadopoulos FC, Petridou E, Argyropoulou S, Kontaxakis V, Dessypris N, Anastasiou A, Katsiardiani KP, Trichopoulos D, **Lyketsos C**. Prevalence and correlates of depression in late life: a population based study from a rural Greek town. *Int J Ger Psych* 2005;20:350-357
125. Burdick DJ, Rosenblatt A, Samus Q, Steele C, Baker A, Harper M, Mayer L, Brandt J, Rabins P, **Lyketsos CG**. Predictors of Functional Impairment in Residents of Assisted Living Facilities: The Maryland Assisted Living Study (MD-AL). *J Gerontol A Biol Sci Med Sci*. 2005;60(2):258-64.
126. Lopez O, Kuller LH, Becker JT, Jagust WJ, DeKosky, SD, Fitzpatrick A, Breitner JCS, **Lyketsos CG**, Kawas C, Carlson M. Classification of vascular dementia in the Cardiovascular Health Study Cognition Study. *Neurology* 2005;64:1539–1547
127. Kuller LH, Lopez OL, Jagust WJ, Becker JT, DeKosky SD, **Lyketsos CG**, Kawas C, Breitner JCS, Fitzpatrick A, Dulberg C. Determinants of vascular dementia in the Cardiovascular Health Cognition Study. *Neurology* 2005; 64:1548–1552
128. **Lyketsos CG**, Toone L, Tschanz JT, Steinberg MS, Rabins PV, Onyike C, Norton M, Zandi P, Welsh-Bohmer K, Breitner JCSB. A population-based study of medical co-morbidity in early dementia and cognitive impairment no dementia (CIND): association with functional and cognitive impairment. The Cache County Study. *Am J Ger Psych* 2005;13(8):656-64
129. Hayden KM, Zandi PP, **Lyketsos CG**, Tschanz JT, Norton MC, Khachaturian AS, Pieper CF, Welsh-Bohmer KA, Breitner JC; Cache County Investigators. Apolipoprotein E genotype and mortality: findings from the Cache County study. *J Am Geriatr Soc* 2005;53(6):935-42
130. Rea TD, Breitner JC, Psaty BM, Fitzpatrick AL, Lopez OL, Newman AB, Hazzard WR, Zandi PP, Burke GL, **Lyketsos CG**, Bernick C, Kuller LH. Statin use and the risk of incident dementia: the Cardiovascular Health Study. *Arch Neurol* 2005;62(7):1047-51.

131. Lopez OL, Becker JT, Jagust W, Fitzpatrick A, Carlson M, T DU, Breitner J, **Lyketsos C**, Jones B, Kawas C, Kuller LH. Neuropsychological characteristics of mild cognitive impairment subgroups. *J Neurol Neurosurg Psychiatry* 2006;77:159–165
132. Newman AB, Fitzpatrick AL, Lopez O, Jackson S, **Lyketsos CG**, Jagust W, Ives D, DeKosky ST, Kuller LH. Dementia and Alzheimer's Disease Incidence in Relationship to Cardiovascular Disease in the Cardiovascular Health Study Cohort. *J Am Geriatr Soc* 2005;53(7):1101-7
133. Rosenberg PB, Mielke MM, **Lyketsos CG**. Caregiver assessment of patients' depression in Alzheimer disease: longitudinal analysis in a drug treatment study. *Am J Geriatr Psychiatry* 2005;13(9):822-6
134. Samus QM, Rosenblatt A, Steele CD, Baker A, Harper M, Brandt J, Mayer L, Rabins PV, **Lyketsos CG**. The association of neuropsychiatric symptoms and environment with quality of life in assisted living residents with dementia. *Gerontologist*. 2005;45 Suppl 1:19-26.
135. Rao V, Spiro JR, Samus QM, Rosenblatt A, Steele C, Baker A, Harper M, Brandt J, Mayer L, Rabins PV, **Lyketsos CG**. Sleep disturbances in the elderly residing in assisted living: findings from the Maryland Assisted Living Study. *Int J Geriatr Psychiatry* 2005; 20(10):956-66
136. Tschanz JT, Treiber K, Norton MC, Welch-Bohmer K, Toone L, Zandi P, Szekeley CA, **Lyketsos CG**, Breitner, JCS. A population study of Alzheimer disease: Findings from the Cache County Study on Memory Health and Aging. *Care Management Journals* 2005; 6(2):107-114
137. Khachaturian AS, Zandi PP, **Lyketsos CG**, Hayden KM, Skoog I, Norton MC, Tschanz JT, Mayer LS, Welsh-Bohmer KA, Breitner JCS for the Cache County Investigators. Anti-Hypertensive Medication Use and Incident Alzheimer's Disease. The Cache County Study. *Arch Neurology Arch Neurol*. 2006 Mar 13; [Epub ahead of print]
138. Rosenberg PB, Mielke, MM, Samus QM, Rosenblatt A, Baker A, Brandt J, Rabins PV, **Lyketsos CG**. Transition to nursing home from assisted living is not associated with dementia or dementia-related problem behaviors. *J Am Med Dir Assoc* 2006;7(2):73-8
139. **Lyketsos CG**, Toone L, Tschanz J, Corcoran C, Norton M, Zandi P, Munger R, Breitner JCS, Welsh-Bohmer K' and the Cache County Study Group. A population-based study of the association between coronary artery bypass graft surgery (CABG) and cognitive decline. *Int J Geriatr Psychiatry* 2006;21: 509-518
140. Rao V, Spiro JR, Rosenberg PB, Lee HB, Rosenblatt A, **Lyketsos CG**. An open-label study of escitalopram (Lexapro) for the treatment of 'Depression of Alzheimer's disease' (dAD). *Int J Geriatr Psychiatry* 2006;21(3):273-4
141. Hayden KM, Zandi PP, **Lyketsos CG**, Khachaturian AS, Bastian LA, Charoonruk G, Tschanz JT, Norton MC, Pieper CF, Munger RG, Breitner JCS, Welsh-Bohmer KA. Vascular Risk Factors for Incident Alzheimer's Disease and Vascular Dementia. *The Cache County Study Alzheimer Dis Assoc Disord* 2006; 20(2):93-100

142. Maust DT, Onyike CU, Sheppard JM, Mayer LS, Samus QM, Brandt J, Rabins PV, **Lyketsos CG**, Rosenblatt A. Predictors of Caregiver Unawareness and Nontreatment of Dementia Among Residents of Assisted Living Facilities: The Maryland Assisted Living Study. *Am J Geriatr Psychiatry* 2006;14(8):668-67
143. Tschanz JT, Welsh-Bohmer KA, **Lyketsos CG**, Corcoran C, Green RC, Hayden K, Norton MC, Zandi PP, Toone L, West NA, Breitner JC; Cache County Investigators. Conversion to dementia from mild cognitive disorder: the Cache County Study. *Neurology* 2006;67(2):229-34
144. Steinberg M, Corcoran C, Tschanz JT, Huber C, Welsh-Bohmer K, Norton MC, Zandi P, Breitner JC, Steffens DC, **Lyketsos CG**. Risk factors for neuropsychiatric symptoms in dementia: The Cache County Study. *Int J Geriatr Psychiatry* 2006 Sep;21(9):824-830
145. Martin BK, Frangakis CE, Rosenberg PB, Mintzer JE, Katz IR, Porsteinsson AP, Schneider LS, Rabin PV, Munro CA, Meinert CL, Niederehe G, **Lyketsos CG**, for the DIADS-2 Research Group. Design of Depression in Alzheimer's Disease Study-2. *Am J Geriatr Psychiatry* 2006;14(11):920-930
146. Watson LC, Lehmann S, Samus Q, Baker A, Harper M, Brandt J, Steele C, Rabins P, Rosenblatt A, **Lyketsos CG**. Depression in Assisted Living is Common and Related to Physical Burden. *Am J Geriatr Psychiatry* 2006;14(10):876-83
147. Mayer LS, Bay C, Politis A, Steinberg M, Steele CD, Baker AS, Rabins PV, **Lyketsos CG**. Comparison of Three Rating Scales as Outcome Measures for Treatment Trials of Depression in Alzheimer Disease: Findings from DIADS. *Int J Geriatr Psychiatry* 2006;21(10):930-6
148. Lee HB, Hening WA, Allen RP, Earley CJ, Eaton WW, **Lyketsos CG**. Race and Restless Legs Syndrome Symptoms in Adult Community Sample in East Baltimore. *Sleep Med* 2006; 7:642-645
149. Schneider LS, Tariot PN, Dagerman KS, Davis SM, Hsiao JK, Ismail MS, Lebowitz BD, **Lyketsos CG**, Ryan JM, Stroup TS, Sultzer DL, Weintraub D, Lieberman JA, for the Clinical Antipsychotic Trials of Intervention Effectiveness – Alzheimer's Disease (CATIE-AD) investigators. Effectiveness of Atypical Antipsychotic Drugs for Patients with Alzheimer's Disease. *N Engl J Med* 2006 Oct 12;355(15):1525-38
150. Leroi I, Samus QM, Rosenblatt A, Onyike CU, Brandt J, Baker AS, Rabins P, **Lyketsos CG**. A comparison of small and large assisted living facilities for the diagnosis and care of dementia: the Maryland Assisted Living Study. *Int J Geriatr Psychiatry* 2006 Oct 17; [Epub ahead of print]
151. Martin BK, Breitner JCS, Evans DE, **Lyketsos CG**, Meinert C for the ADAPT Research Group. Cardiovascular and cerebrovascular events in the randomized, controlled Alzheimer's Disease Anti-inflammatory Prevention Trial (ADAPT). *PLoS Clin Trials* November 2006; 1(7): e33. doi:10.1371/journal.pctr.0010033
152. Hayden KM, Welsh-Bohmer KA, Wengreen HJ, Zandi PP, **Lyketsos CG**, Breitner JCS. Risk of

- mortality with vitamin E supplements. The Cache County Study. *Am J Med* 2007; 120(2):180-4
153. Podewils LJ, Guallar E, Beauchamp N, **Lyketsos CG**, Kuller LH, Scheltens P. Physical activity and white matter lesion progression: assessment using MRI. *Neurology* 2007; 68:1223-1226
154. Kalaydjian A, Zandi PP, Swartz KL, Eaton WW, **Lyketsos C**. How Migraines Impact Cognitive Function: Findings from the Baltimore ECA. *Neurology* 2007;68(17):1417-24
155. Onyike CU, Sheppard JM, Tschanz JT, Norton MC, Green RC, Steinberg M, Welsh-Bohmer KA, Breitner JC, **Lyketsos CG**. Epidemiology of Apathy in Older Adults: The Cache County Study. *Am J Geriatr Psychiatry* 2007;15(5):365-375
156. **Lyketsos CG**, Breitner JCS, Green RC, Evans DE, Martin BK, Meinert C, Piantadosi S, Sabbah M for the ADAPT Research Group. Naproxen and celecoxib do not prevent AD in early results from a randomized controlled trial. *Neurology* 2007; 68(21):1800-8
157. **Lyketsos CG**, Samus QM, MS, Baker A, McNabney M, Onyike CU, Mayer LS, Brandt J, Rabins P, Rosenblatt A. Effect of Dementia and Treatment of Dementia on Time to Discharge from Assisted Living Facilities: The Maryland Assisted Living Study. *JAGS* 2007; 55: 1031–1037 [PMCID 79469]
158. Rao V, Spiro J, Samus QM, Steele C, Baker A, Brandt J, Mayer L, **Lyketsos CG**, Rosenblatt A. Insomnia and daytime sleepiness in people with dementia residing in assisted living: findings from the Maryland Assisted Living Study. *Int J Geriatr Psychiatry*. 2007 Jul 10; [Epub ahead of print]
159. Hayden KM, Zandi PP, Khachaturian AS, Szekely CA, Fotuhi M, Norton MC, Tschanz JT, Pieper CF, Corcoran C, **Lyketsos CG**, Breitner JC, Welsh-Bohmer KA; Cache County Investigators. Does NSAID use modify cognitive trajectories in the elderly? The Cache County study. *Neurology* 2007;69(3):275-82
160. Golden SH, Lee HB, Schreiner PJ, Roux AD, Fitzpatrick AL, Szklo M, **Lyketsos CG**. Depression and type 2 diabetes mellitus: the multiethnic study of atherosclerosis. *Psychosom Med* 2007;69(6):529-36 [NIHMS 2648841]
161. Rosenblatt A, Samus QM, Onyike CU, Baker AS, McNabney M, Mayer LS, Brandt J, **Lyketsos CG**. Acetylcholinesterase inhibitors in assisted living: patterns of use and association with retention. *Int J Geriatr Psychiatry* 2007 Aug 6; [Epub ahead of print]
162. Kozauer NA, Mielke MM, Chuen Chan GK, Rebok GW, **Lyketsos CG**. Apolipoprotein E genotype and lifetime cognitive decline. *Int Psychogeriatr* 2007:1-15 [Epub ahead of print]
163. Morgan MD, Mielke MM, O'brien R, Troncoso JC, Zonderman AB, **Lyketsos CG**. Rates of depression in individuals with pathologic but not clinical Alzheimer disease are lower than those in individuals without the disease: Findings from the Baltimore Longitudinal Study on Aging (BLSA). *Alzheimer Dis Assoc Disord* 2007;21(3):199-204 [NIHMS79466]

164. Zhang L, Baldwin K, Munoz B, Munro C, Turano K, Hassan S, **Lyketsos C**, Bandeen-Roche K, West SK. Visual and cognitive predictors of performance on brake reaction test: Salisbury Eye Evaluation Driving Study. *Ophthalmic Epidemiol* 2007;14(4):216-22
165. Steinberg M, Shao H, Zandi P, **Lyketsos CG**, Welsh-Bohmer KA, Norton MC, Breitner JC, Steffens DC, Tschanz JT; Cache County Investigators. Point and 5-year period prevalence of neuropsychiatric symptoms in dementia: the Cache County Study. *Int J Geriatr Psychiatry* 2007 Jul 3; [Epub ahead of print]
166. Tighe SK, Leoutsakos JS, Carlson M, Onyike CU, Samus Q, Baker A, Brandt J, Rabins PV, Mayer L, Rosenblatt A, Lyketsos CG. The association between activity participation and time to discharge in the assisted living setting. *Int J Geriatr Psychiatry*, 2007 Nov 29; [Epub ahead of print] [NIHMS79469]
167. Mielke MM, Rosenberg PB, Tschanz J, Cook L, Corcoran C, Hayden KM, Norton M, Rabins PV, Green RC, Welsh-Bohmer KA, Breitner JC, Munger R, **Lyketsos CG**. Vascular factors predict rate of progression in Alzheimer disease. *Neurology*. 2007 Nov 6;69(19):1850-8
168. Karlawish JHT, Bonnie R, Appelbaum PS, **Lyketsos C**, Karlan P, James BD, Sabatino C, Lawrence T, Knopman D, Kane RM. Identifying the barriers and challenges to voting by residents of nursing homes and assisted living settings: A study of the 2003 Philadelphia mayor's race. *J Aging and Soc Policy* 2008; 20(1): 65-80
169. Black BS, Brandt J, Rabins PV, Samus QM, Steele CD, **Lyketsos CG**, Rosenblatt A. Predictors of Providing Informed Consent or Assent for Research Participation in Assisted Living Residents. *Am J Geriatr Psychiatry* 2008 Jan;16(1):83-91 [NIHMS111363]
170. Welsh-Bohmer KA, Breitner JCS, Hayden KM, **Lyketsos C**, Zandi PP, Tschanz JT, Norton MC, Munger R. Modifying dementia risk and trajectories of cognitive decline in aging: The Cache County Memory Study. *Alzheimer's & Dementia* 2008;2:257-260
171. Treiber KA, **Lyketsos CG**, Corcoran C, Steinberg MD, Norton M, Green RC, Rabins P, Stein DM, Welsh-Bohmer KA, Breitner JCS, Tschanz JT. Vascular factors and risk for neuropsychiatric symptoms in Alzheimer's disease: The Cache County Study. *Int Psychogeriatr* 2008; 20(3):538-53 [NIHMS103485]
172. Lee HB, Hening WA, Allen RP, Kalaydjian AE, Earley CJ, Eaton WW, **Lyketsos CG**. Restless legs syndrome is associated with DSM-IV major depressive disorder and panic disorder in the community. *J Neuropsychiatry Clin Neurosci* 2008;20(1):101-5
173. Green AF, Rebok G, **Lyketsos CG**. Influence of social network characteristics on cognition and functional status with aging. *Int J Geriatr Psychiatry* 2008 May 1 [Epub ahead of print] [NIHMS79470; PMC2650477]
174. Mielke MM, Bandaru VV, Haughey NJ, Rabins PV, **Lyketsos CG**, Carlson MC. Serum sphingomyelins and ceramides are early predictors of memory impairment. *Neurobiol Aging*

2008 May 1 [Epub ahead of print], [MSID 77994]

175. Fotuhi M, Zandi PP, Hayden KM, Khachaturian AS, Szekely CA, Wengreen H, Munger RG, Norton MC, Tschanz JT, **Lyketsos CG**, Breitner JCS, Welsh-Bohmer KA. Better Cognitive Performance in Elderly Taking Antioxidant Vitamins E and C Supplements in Combination with NSAIDs: The Cache County Study. *Alzheimer's & Dementia* 2008;4(3):223-227 [NIHMSID: 103465]
176. Sultzer DL, Davis SM, Tariot PN, Dagerman KS, Lebowitz BD, **Lyketsos CG**, Rosenheck RA, Hsiao JK, Lieberman JA, Schneider LS; CATIE-AD Study Group. Clinical symptom responses to atypical antipsychotic medications in Alzheimer's disease: phase 1 outcomes from the CATIE-AD effectiveness trial. *Am J Psychiatry*. 2008 Jul;165(7):844-54. Epub 2008 Jun 2 [NIHMSID 102344]
177. Samus QM, Mayer L, Baker A, McNabney M, Brandt J, Onyike CU, Rabins PV, **Lyketsos CG**, Rosenblatt A. Characteristics and outcomes for assisted living residents with dementia: Comparing dementia-specific care units with non-dementia-specific care units. *J Am Geriatr Soc* 2008;56(7):1361-3 [NIHMSID 101959]
178. Golden SH, Lazo M, Carnethon M, Bertoni AG, Schreiner PJ, Roux AV, Lee HB, **Lyketsos C**. Examining a bidirectional association between depressive symptoms and diabetes. *JAMA*. 2008;299(23):2751-9 [NIHMSID 2648841]
179. Rosenberg PB, Mielke MM, Tschanz J, Rabins P, Green RC, Norton M, Corcoran C, Welsh-Bohmer KA, Breitner JCS, Munger R, **Lyketsos CG**. Effects of beta-blockers and lipid-lowering agents on rate of functional decline in Alzheimer's Disease. *Am J Geriatr Psychiatry* 2008; 16(11):883-92 [NIHMSID 102061]
180. McNabney MK, Samus QM, Lyketsos CG, Brandt J, Onyike CU, Baker A, Rosenblatt A. The spectrum of medical illness and medication use among residents of assisted living facilities in central Maryland. *J Am Med Dir Assoc* 2008 Oct;9(8):558-64
181. Kaplin A, Carroll KA, Cheng J, Allie R, Lyketsos CG, Calabresi P, **Rosenberg PB**. IL-6 release by LPS-stimulated peripheral blood mononuclear cells as a potential biomarker in Alzheimer's disease. *Int Psychogeriatr*. 2008 Dec 1:1-2. [Epub ahead of print] [NIHMS: MS 102061]
182. Steinberg M, Leoutsakos JM, Podewils LJ, **Lyketsos CG**. Evaluation of a home-based exercise program in the treatment of Alzheimer's disease: The Maximizing Independence in Dementia (MIND) study. *Int J Geriatr Psychiatry*. 2008 Dec 16 [Epub ahead of print]
183. Taragano FE, Allegri RF, Krupitzki H, Sarasola D, Serrano CM, Loñ L, **Lyketsos CG**. Mild behavioral impairment and risk of dementia. *J Clinical Psychiatry J Clin Psychiatry* 2009 Apr;70(4):584-92. [NIHMS117195]
184. Ceritoglu C, Oishi K, Li X, Chou MC, Younes L, Albert M, **Lyketsos C**, van Zijl PC, Miller MI, Mori S. Multi-contrast large deformation diffeomorphic metric mapping for diffusion tensor

imaging. Neuroimage 2009 May 3. [Epub ahead of print]

185. Oishi K, Faria A, Jiang H, Li X, Akhter K, Zhang J, Hsu JT, Miller MI, van Zijl PC, Albert M, **Lyketsos CG**, Woods R, Toga AW, Pike GB, Rosa-Neto P, Evans A, Mazziotta J, Mori S. Atlas-based whole brain white matter analysis using large deformation diffeomorphic metric mapping: application to normal elderly and Alzheimer's disease participants. Neuroimage 2009 Jun;46(2):486-99.
186. Zheng L, Mack WJ, Dagerman KS, Hsiao JK, Lebowitz BD, **Lyketsos CG**, Stroup TS, Sultzer DL, Tariot PN, Vigen C, Schneider LS. Metabolic changes associated with second-generation antipsychotic use in Alzheimer's disease patients: the CATIE-AD study. Am J Psychiatry 2009;166(5):583-90.
187. Oishi K, Faria A, Jiang H, Li X, Akhter K, Zhang J, Hsu JT, Miller MI, van Zijl PC, Albert M, **Lyketsos CG**, Woods R, Toga AW, Pike GB, Rosa-Neto P, Evans A, Mazziotta J, Mori S. Atlas-based whole brain white matter analysis using Large Deformation Diffeomorphic Metric Mapping: Application to normal elderly and Alzheimer's disease participants. Neuroimage 2009 Jan 19. [Epub ahead of print]
188. Mielke MM, Kozauer NA, Chan KC, George M, Toroney J, Zerrate M, Bandeen-Roche K, Wang MC, Vanzijl P, Pekar JJ, Mori S, **Lyketsos CG**, Albert M. Regionally-specific diffusion tensor imaging in mild cognitive impairment and Alzheimer's disease. Neuroimage 2009 15;46(1):47-55. Epub 2009 Feb 5.
189. Samus QM, Mayer L, Onyike CU, Brandt J, Baker A, McNabney M, Rabins PV, **Lyketsos CG**, and Rosenblatt A. Correlates of functional dependence among recently-admitted assisted living residents with and without dementia. J Am Med Dir Assoc 2009 Jun;10(5):323-9
190. Norton MC, Piercy KW, Rabins PV, Green RC, Breitner JC, Ostbye T, Corcoran C, Welsh-Bohmer KA, **Lyketsos CG***, Tschanz JT*. Caregiver-Recipient Closeness and Symptom Progression in Alzheimer Disease. The Cache County Dementia Progression Study. J Gerontol B Psychol Sci Soc Sci 2009 Jun 29. [Epub ahead of print] (*co-equal last authors)
191. Rosenberg PB, Drye LT, Martin BK, Frangakis C, Mintzer JE, Weintraub, Porsteinsson AP, Schneider LS, Rabins PV, Munro CA, Meinert CL, **Lyketsos, CG**, for the Research Group. Sertraline for the treatment of depression in Alzheimer's disease. Am J Geriatric Psychiatry 2010;18:136-145 (NIHMS166961)
192. Bicket MC, Samus QM, McNabney M, Onyike CU, Mayer LS, Brandt J, Rabins P, **Lyketsos C**, Rosenblatt A. The physical environment influences neuropsychiatric symptoms and other outcomes in assisted living residents. Int J Geriatr Psychiatry 2010 Jan 14 [Epub ahead of print]
193. Weintraub D, Rosenberg PB, Drye LT, Martin BK, Frangakis C, Mintzer JE, Porsteinsson AP, Schneider LS, Rabins PV, Munro CA, Meinert CL, **Lyketsos CG**, for the DIADS-2 Research Group. Sertraline for the treatment of depression in Alzheimer's disease: Week-24 outcomes. Am J Geriatr Psychiatry 2010 Feb 2. [Epub ahead of print] (NIHMSID 181111)

194. Leoutsakos JM, Zandi PP, Bandeen-Roche K, **Lyketsos CG**. Searching for valid psychiatric phenotypes: discrete latent variable models. *Int J Methods Psychiatr Res* 2010 Feb 24. [Epub ahead of print]
195. Qiu A, Oishi K, Miller MI, **Lyketsos CG**, Mori S, Albert M. Surface-based analysis on shape and fractional anisotropy of white matter tracts in Alzheimer's disease. *PLoS One* 2010 Mar 22;5(3):e9811
196. Munro CA, Jefferys J, Gower E, Munoz B, **Lyketsos CG**, Keay L, Turano KA, Bandeen-Roche K, West SK. Predictors of Lane Change Errors Among Elderly Drivers. *J Am Geriatr Soc* 2010 Mar;58(3):457-64
197. Rao V, Rosenberg P, Miles QS, Patadia D, Treiber K, Bertrand M, Norton M, Steinberg M, Tschanz J, **Lyketsos C**. Neuropsychiatric symptoms in dementia patients with and without a history of traumatic brain injury. *J Neuropsychiatry Clin Neurosci* 2010 Spring;22(2):166-72
198. Clarke DE, Ko JY, **Lyketsos C**, Rebok GW, Eaton WW. Apathy and cognitive and functional decline in community-dwelling older adults: Results from the Baltimore ECA longitudinal study. *International Psychogeriatrics* 2010 May; 18:1-11. [Epub ahead of print]
199. Wong DF, Rosenberg PB, Zhou Y, Kumar A, Raymond V, Ravert HT, Dannals RF, Nandi A, Brasić JR, Ye W, Hilton J, **Lyketsos C**, Kung HF, Joshi AD, Skovronsky DM, Pontecorvo MJ. In vivo imaging of amyloid deposition in Alzheimer disease using the radioligand 18F-AV-45 (flobetapir F 18). *Nucl Med* 2010 Jun;51(6):913-20 (NIHMS 260423)
200. de Medeiros K, Robert P, Gauthier S, Stella F, Politis A, Leoutsakos, J, Taragano F, Kremer J, Brugnolo A, Porsteinsson A, Geda Y, Brodaty H, Gazdag G, Cummings J, **Lyketsos C**. The neuropsychiatric inventory-clinician rating scale (NPI-C): Reliability and validity of a revised assessment of neuropsychiatric symptoms in dementia. *Int Psychogeriatr* 2010; 22(6): 984-994
201. Mohamed S, Rosenheck R, **Lyketsos C**, Schneider LS. Caregiver Burden in Alzheimer Disease: Cross-Sectional and Longitudinal Patient Correlates. *Am J Geriatr Psychiatry* 2010 Jun 7 [Epub ahead of print]
202. McNabney M, Samus Q, Onyike C, Brandt J, Baker A, **Lyketsos C**, Rosenblatt A. Evaluation of care requirements among assisted living residents with specific chronic diseases. *J Am Geriatr Soc* 2010; 58; (Suppl. 1); 113-113
203. Johnston DJ, Samus QM, Morrison A, Leoutsakos JS, Hicks K, Handel S, Rye R, Robbins B, Rabins PV, **Lyketsos CG**, Black BS. Identification of community-residing individuals with dementia and their unmet needs for care. *Int J Geriatr Psychiatry* 2010 Jul 23. [Epub ahead of print]
204. Oh ES, Mielke MM, Rosenberg PB, Jain A, Fedarko N, **Lyketsos CG**, Mehta P. Comparison of conventional ELISA with electrochemiluminescence technology for detection of amyloid-

beta (A β) in plasma. *J Alzheimers Dis* 2010 Jul 15. [Epub ahead of print]

205. Drye L, Martin B, Frangakis C, Meinert C, Mintzer J, Munro C, Porsteinsson A, Rabins P, Rosenberg P, Schneider L, Weintraub D, **Lyketsos C**, for the DIADS-2 Research Group. Do treatment effects vary among differing baseline depression criteria in Depression in Alzheimer's Disease Study - 2 (DIADS-2)? *Int J Geriatr Psychiatry*. 2010 Jul 28. [Epub ahead of print]
206. Mougias AA, Politis A, **Lyketsos CG**, Mavreas VG. Quality of life in dementia patients in Athens, Greece: predictive factors and the role of caregiver-related factors. *Int Psychogeriatr* 2010 Aug; 12:1-9. [Epub ahead of print]
207. Mielke MM, Haughey N, Bandaru VVR, Schech S, Carrick R, Carlson MC, Mori S, Miller MI, Ceritoglu C, Brown T, Albert M, **Lyketsos CG**. Plasma ceramides are altered in MCI and predict cognitive decline and hippocampal volume loss. *Alzheimer's & Dementia* 2010 Sep;6(5):378-85
208. Fillit H, Hofbauer RK, Setyawan J, Tourkodimitris S, Fridman M, Pejović V, Miller ML, Erder MH, **Lyketsos C**. Memantine Discontinuation and the Health Status of Nursing Home Residents With Alzheimer's Disease. *J Am Med Directors Association*, October 2010, 11 (8): pp. 606-614
209. Rosenberg PB, Mielke MM, Appleby B, Oh E, Leoutsakos J-M, **Lyketsos CG**. Neuropsychiatric symptoms in MCI subtypes: the importance of executive dysfunction. *Int J Geriatric Psychiatry* 2010 Sep 15 [Epub ahead of print]
210. **Lyketsos CG**, Weiller E, Katona C, Gorwood P. Are old-old patients with major depression more likely to relapse than young-old patients during continuation treatment with escitalopram? *BMC Geriatrics* 2011 Jan 14;11:2
211. Marquardt G, Johnston D, Black B, Morrison A, Rosenblatt A, **Lyketsos, C**, Samus QM. Association of the spatial layout of the home and ADL abilities among older adults with dementia. *Am J Alzheimers Dis Other Demen* 2011 Feb;26(1):51-7
212. Treiber K, Carlson M, Corcoran C, Norton MC, Piercy K, MS Deberard, Stein D, Foley B, Welsh-Bohmer KA, Breitner JCS, **Lyketsos CG***, Tschanz JT*. Cognitive Stimulation and Cognitive and Functional Decline in Alzheimer's Disease: The Cache County Dementia Progression Study. *J Gerontol B Psychol Sci Soc Sci* 2011 Mar 25. [Epub ahead of print]
213. Leoutsakos JS, Muthen BO, Breitner JCS, **Lyketsos CG**. Effects of NSAID treatments on cognitive decline vary by phase of pre-clinical Alzheimer disease: Findings from the randomized controlled ADAPT trial. *Int J Geriatr Psychiatry* 2011 May 10. doi: 10.1002/gps.2723. [Epub ahead of print]
214. Vigen CL, Mack WJ, Keefe RS, Sano M, Sultzer DL, Stroup TS, Dagerman KS, Hsiao JK, Lebowitz BD, **Lyketsos CG**, Tariot PN, Zheng L, Schneider LS. Cognitive Effects of Atypical Antipsychotic Medications in Patients With Alzheimer's Disease: Outcomes From CATIE-AD.

215. Marquardt G, Johnston D, Black B, Morrison A, Rosenblatt A, **Lyketsos C**, Samus QM (2011). A descriptive study of Home Modifications for People with Dementia and barriers to implementation. *Journal of Housing for the Elderly* 2011; 25(3), 258-273
216. Mielke MM, Leoutsakos JM, Tschanz JT, Green RC, Tripodis Y, Corcoran CD, Norton MC, **Lyketsos CG**. Interaction Between Vascular Factors and the APOE E4 Allele in Predicting Rate of Progression in Alzheimer's Disease. *J Alzheimers Dis*. 2011 May 18. [Epub ahead of print]
217. Tschanz JT, Corcoran CD, Schwartz S, Treiber K, Green RC, Norton MC, Mielke MM, Piercy K, Steinberg M, Rabins PV, Leoutsakos JM, Welsh-Bohmer KA, Breitner JCS, **Lyketsos CG**. Progression of cognitive, functional and neuropsychiatric symptom domains in a population cohort with Alzheimer's dementia. *Am J Geriatr Psychiatry*. 2011 Jun;19(6):532-542
218. Gracia-Garcia P, Rao V, Haughey NJ, Bandaru VVR, Smith G, Rosenberg PB, Lobo A, **Lyketsos CG**, Mielke MM. Plasma ceramides are elevated in depression. *J Neuropsychiatry Clin Neurosci* 2011;23(2):215-8
219. Breitner JCS, Baker LD, Montine TG, Meinert CL, **Lyketsos CG**, Ashe KH, Brandt J, Craft S, Evans DE, Green RC, Ismail MS, Martin BK, Mullan MJ, Sabbagh M, Tariot P, for the ADAPT Research Group. Extended results of the Alzheimer disease anti-inflammatory prevention trial (ADAPT). *Alzheimers Dement* 2011 Jul;7(4):402-11
220. Shinohara RT, Frangakis CE, **Lyketsos CG**. A broad symmetry criterion for nonparametric validity of parametrically based tests in randomized trials. *Biometrics* 2011 Jul 15. doi: 10.1111/j.1541-0420.2011.01642.x. [Epub ahead of print]
221. Fields C, Vaidya VJ, Drye L, **Lyketsos CG**. Celecoxib or naproxen treatment does not benefit depressive symptoms in persons aged 70 and over: findings from a randomized controlled trial. *Am J Geriatr Psychiatry* 2011 Jul 19. [Epub ahead of print] NIHMS310381
222. Mielke MM, Haughey NJ, Bandaru VVR, Weinberg DD, Darby E, Zaidi N, Pavlik V, Doody RS, **Lyketsos, CG**. Plasma sphingomyelins are associated with cognitive progression in Alzheimer's Disease. *J Alzheimers Dis* 2011 Aug 12. [Epub ahead of print]
223. Oishi K, Mielke MM, Albert M, **Lyketsos CG**, Mori S. The Fornix Sign: A Potential Sign for Alzheimer's Disease Based on Diffusion Tensor Imaging. *J Neuroimaging* 2011 Aug 17. doi: 10.1111/j.1552-6569.2011.00633.x. [Epub ahead of print]
224. Oishi K, Akhter K, Mielke M, Ceritoglu C, Zhang J, Jiang H, Li X, Younes L, Miller MI, van Zijl P, Albert M, **Lyketsos C**, Mori S. Multi-modal MRI analysis with disease-specific spatial filtering: initial testing to predict mild cognitive impairment patients who convert to Alzheimer's disease. *Front Neurol* 2011;2:54. Epub 2011 Aug 24 [Epub ahead of print]
225. Duff, K, **Lyketsos CG**, Beglinger LJ, Chelune G, Moser DJ, Arndt S, Schultz SK. Practice effects predict cognitive outcome in amnesic mild cognitive impairment *Am J Geriatr*

226. Mohamed S, Rosenheck R, **Lyketsos CG**, Kaczynski R, Sultzer DL, Schneider LS. Effect of second-generation antipsychotics on caregiver burden in Alzheimer's disease. *J Clin Psychiatry* 2011 Sep 6. [Epub ahead of print]
227. Black BS, Johnston D, Morrison A, Rabins PV, **Lyketsos CG**, Samus QM. Quality of life of community-residing persons with dementia based on self-rated and caregiver-rated measures. *Qual Life Res* 2011 Oct 26 [Epub ahead of print]
228. Drye LT, Ismail Z, Porsteinsson AP, Rosenberg PB, Weintraub D, Marano C, Pelton G, Frangakis C, Rabins PV, Munro CA, Meinert CL, Devanand DP, Yesavage G, Mintzer JE, Schneider LS, Pollock BG, **Lyketsos CG**, for the CitAD Research Group. Citalopram for agitation in Alzheimer's disease (CitAD): design and methods. *Alzheimer's & Dementia*, doi:10.1016/j.jalz.2011.01.007 [Epub ahead of print]
229. Mielke MM, Leoutsakos J-M, Corcoran CD, Green RC, Norton MC, Welsh-Bohmer KA, Tschanz JT, **Lyketsos CG**. Effects of Food and Drug Administration approved medications for Alzheimer's disease on clinical progression. *Alzheimers Dement*. 2012 Feb 1. [Epub ahead of print]
230. Peters ME, Vaidya V, Drye LT, Rosenberg PB, Martin BK, Porsteinsson AP, Frangakis CE, Mintzer J, Weintraub D, Schneider LS, Rabins PV, Munro CA, Meinert CL, **Lyketsos CG**, Avramopoulos D; DIADS-2 Research Group. Sertraline for the treatment of depression in Alzheimer disease: genetic influences. *J Geriatr Psychiatry Neurol*. 2011 Dec;24(4):222-8. doi: 10.1177/0891988711422527.
231. Lee CT, Leoutsakos JM, **Lyketsos CG**, Steffens DC, Breitner JC, Norton MC. Latent class-derived subgroups of depressive symptoms in a community sample of older adults: the Cache County Study. *Int J Geriatr Psychiatry*. 2011 Dec 2. doi: 10.1002/gps.2824. [Epub ahead of print]
232. Rosenberg PB, Mielke MME, Han D, Leoutsakos JS, **Lyketsos CG**, Rabins PV, Zandi PP, Breitner JCS, Norton MC, Welsh-Bohmer KA, Zuckerman IH, Rattinger GB, Green RC, Corcoran D, Tschanz JT. The association of psychotropic medication use with the cognitive, functional and neuropsychiatric trajectory of Alzheimer's disease. *Int J Geriatr Psychiatry*. 2012 Feb 29. doi: 10.1002/gps.3769. [Epub ahead of print]
233. Mielke MM, Okonkwo OC, Oishi K, Mori S, Tighe S, Miller MI, Ceritoglu C, Brown T, Albert M, **Lyketsos CG**. Fornix integrity and hippocampal volume predict memory decline and progression to AD. *Alzheimers Dement* 2012 Mar;8(2):105-13
234. Buckley T, Fauth EB, Morrison A, Tschanz J, Rabins PV, Piercy KW, Norton M, **Lyketsos C**. Predictors of Quality of Life Ratings for Persons with Dementia Simultaneously Reported by Patients and their Caregivers: The Cache County (Utah) Study. *Int Psychogeriatr* 2012 Mar 14:1-9. [Epub ahead of print]

235. Rosenberg PB, Mielke MM, Appleby BS, Oh ES, Geda YE, **Lyketsos CG**. The association of neuropsychiatric symptoms in MCI with incident dementia and Alzheimer's Disease. *Am J Geriatr Psychiatry* 2012 Apr 27. [Epub ahead of print]
236. Parker DC, Mielke MM, Yu Q, Rosenberg PB, Jain A, **Lyketsos CG**, Fedarko NS, Oh ES. Plasma neopterin level as a marker of peripheral cellular immune activation in amnesic mild cognitive impairment (aMCI) and Alzheimer's disease. *Int J Geriatr Psychiatry* 2012 Apr 27. doi: 10.1002/gps.3802. [Epub ahead of print]
237. Fauth E, Hess K, Piercy K, Norton M, Corcoran C, Rabins P, **Lyketsos C**, & Tschanz J. Caregivers' relationship closeness with the person with dementia predicts both positive and negative outcomes for caregivers' physical health and psychological well-being. *Aging Ment Health* 2012 May 1. [Epub ahead of print]
238. Peters ME, Rosenberg PB, Steinberg M, Tschanz JT, Norton MC, Welsh-Bohmer KA, Hayden KM, Breitner JC, **Lyketsos CG**; the Cache County Investigators. Prevalence of Neuropsychiatric Symptoms in CIND and Its Subtypes: The Cache County Study. *Am J Geriatr Psychiatry* 2012 May;20(5):416-424.
239. Li CH, Pollock BG, **Lyketsos CG**, Vaidya V, Drye LT, Kirshner M, Sorisio D, Bies RR; for the DIADS-2 Research Group. Population Pharmacokinetic Modeling of Sertraline Treatment in Patients With Alzheimer Disease: The DIADS-2 Study. *J Clin Pharmacol.* 2012 May 22. [Epub ahead of print]
240. Leoutsakos JM, Han D, Mielke MM, Forrester SN, Tschanz JT, Corcoran CD, Green RC, Norton MC, Welsh-Bohmer KA, **Lyketsos CG**. Effects of general medical health on Alzheimer's progression: the Cache County Dementia Progression Study. *Int Psychogeriatr.* 2012 Jun 12:1-10. [Epub ahead of print]
241. Tschanz JT, Piercy K, Corcoran CD, Fauth E, Norton MC, Rabins PV, Tschanz BT, Deberard MS, Snyder C, Smith C, Lee L, **Lyketsos CG**. Caregiver coping strategies predict cognitive and functional decline in dementia: The Cache County Dementia Progression Study. *Am J Geriatr Psychiatry.* 2012 Aug 14. [Epub ahead of print]
242. Mielke MM, Bandaru VV, Haughey NJ, Xia J, Fried LP, Yasar S, Albert M, Varma V, Harris G, Schneider EB, Rabins PV, Bandeen-Roche K, **Lyketsos CG**, Carlson MC. Serum ceramides increase the risk of Alzheimer disease: The Women's Health and Aging Study II. *Neurology.* 2012 Aug 14;79(7):633-41. Epub 2012 Jul 18.
243. Rabins PV, Schwartz S, Black BS, Corcoran C, Fauth Elizabeth, Mielke M, Christensen J, **Lyketsos C***, Tschanz *J. Predictors of progression to severe Alzheimer Disease in an incidence sample. *Alzheimer's and Dementia*, <http://dx.doi.org/10.1016/j.jalz.2012.01.003>. (*co-equal senior authors)
244. Munro CA, Longmire CF, Drye LT, Martin BK, Frangakis CE, Meinert CL, MintzerJE, Porsteinsson AP, Rabins PV, Rosenberg PB, Schneider LZ, Weintraub D, **Lyketsos CG**, for the DIADS-2 Research Group. Cognitive outcomes after sertraline treatment in patients with

- depression of Alzheimer's disease. *Am J Geriatr Psychiatry*. 2012 Oct 1; 20:1036-1044.
245. Whitcomb DC, ..., **Lyketsos CG**, ... Devlin B. Common genetic variants in the CLDN2 and PRSS1-PRSS2 loci alter risk for alcohol-related and sporadic pancreatitis. *Nat Genet*. 2012 Nov 11. doi: 10.1038/ng.2466. [Epub ahead of print]
246. Nowrangi MA, Lyketsos CG, Leoutsakos JMS, Oishi K, Albert M, Mori S, Mielke MM. Longitudinal, region-specific course of diffusion tensor imaging measures in mild cognitive impairment and Alzheimer's disease. [dx.doi.org/10.1016/j.jalz.2012.05.2186](https://doi.org/10.1016/j.jalz.2012.05.2186)
247. Piercy KW, Fauth EB, Norton MC, Pfister R, Corcoran CD, Rabins PV, **Lyketsos C**, Tschanz JT. Predictors of dementia caregiver depressive symptoms in a population: The Cache County Dementia Progression Study. *J Gerontol B Psychol Sci Soc Sci*. 2012 Dec 14. [Epub ahead of print]
248. Tighe SK, Oishi K, Mori S, Smith GS, Albert M, **Lyketsos CG**, Mielke MM. Diffusion tensor imaging of neuropsychiatric symptoms in mild cognitive impairment and Alzheimer's dementia. *J Neuropsychiatry Clin Neurosci*. 2012 Sep 1;24(4):484-8. doi: 10.1176/appi.neuropsych.11120375.
249. Trzepacz PT, Cummings J, Konechnik T, Forrester TD, Chang C, Dennehy EB, Willis BA, Shuler C, Tabas LB, **Lyketsos C**. Mibampator (LY451395) randomized clinical trial for agitation/aggression in Alzheimer's disease. *Int Psychogeriatr*. 2012 Dec 21:1-13. [Epub ahead of print]
250. Samus QM, Onyike CU, Johnston D, Mayer L, McNabney M, Baker A, Brandt J, Rabins PV, **Lyketsos CG**, Rosenblatt A. 12-month Incidence, Prevalence, Persistence and Treatment of Mental Disorders among Individuals Recently Admitted to Assisted Living Facilities in Maryland. *International Psychogeriatrics, Int Psychogeriatr*. 2013 Jan 7:1-11. [Epub ahead of print]
251. Tschanz JT, Piercy K, Corcoran CD, Fauth E, Norton MC, Rabins PV, Tschanz BT, Deberard MS, Snyder C, Smith C, Lee L, **Lyketsos CG**. Caregiver coping strategies predict cognitive and functional decline in dementia: the cache county dementia progression study. *Am J Geriatr Psychiatry*. 2013 Jan;21(1):57-66. doi: 10.1016/j.jagp.2012.10.005. Epub 2013 Jan 2.
252. Li CH, Pollock BG, **Lyketsos CG**, Vaidya V, Drye LT, Kirshner M, Sorisio D, Bies RR. Population Pharmacokinetic Modeling of Sertraline Treatment in Patients With Alzheimer Disease: The DIADS-2 Study. *J Clin Pharmacol*. 2013 Feb;53(2):234-9. doi: 10.1177/0091270012445793. Epub 2013 Jan 24.
253. de Medeiros K, Rubinstein RL Onyike CU, Johnston DM, Baker A. McNabney M, **Lyketsos CG**, Rosenblatt A, Samus QM. Childless elders in assisted living: Findings from the MD-AL Study. *Journal of Housing for the Elderly*, 27:1-2, 206-220
254. Peters ME, Rosenberg PB, Steinberg M, Norton MC, Welsh-Bohmer KA, Hayden KM, Breitner J, Tschanz JT, **Lyketsos CG**; Cache County Investigators. Neuropsychiatric Symptoms

- as Risk Factors for Progression From CIND to Dementia: The Cache County Study. *Am J Geriatr Psychiatry*. 2013 Feb 6. doi:pii: S1064-7481(13)00054-7. 10.1016/j.jagp.2013.01.049. [Epub ahead of print]
255. Rosenberg PB, Mielke MM, Appleby BS, Oh ES, Geda YE, **Lyketsos CG**. The Association of Neuropsychiatric Symptoms in MCI With Incident Dementia and Alzheimer Disease. *Am J Geriatr Psychiatry*. 2013 Feb 6. doi:pii: S1064-7481(13)00011-0. 10.1016/j.jagp.2013.01.006. [Epub ahead of print]
256. Rosenberg PB, Wong DF, Edell S, Ross JS, Joshi AD, Brašić JR, Zhou Y, Raymont V, Kumar A, Ravert HT, Dannals RF, Pontecorvo MJ, Skovronsky DM, **Lyketsos CG**. Cognition and amyloid load in Alzheimer's imaged with florbetapir F 18 (AV-45) PET. *Am J Geriatr Psychiatry*. 2013 Mar;21(3):272-8. doi: 10.1016/j.jagp.2012.11.016.
257. ADAPT-FS Research Group. Results of a follow-up study to the randomized Alzheimer's Disease Anti-inflammatory Prevention Trial (ADAPT-FS). *Alzheimers Dement*. 2013 Nov;9(6):714-23. doi: 10.1016/j.jalz.2012.11.012. Epub 2013 Apr 3.
258. Steinberg M, Hess K, Corcoran C, Mielke MM, Norton M, Breitner J, Green R, Leoutsakos J, Welsh-Bohmer K, **Lyketsos C**, Tschanz J. Vascular risk factors and neuropsychiatric symptoms in Alzheimer's disease: the Cache County Study. *Int J Geriatr Psychiatry*. 2013 May 17. doi: 10.1002/gps.3980. [Epub ahead of print]
259. Gracia-Garcia P, de-la-Cámara C, Santabárbara J, Lopez-Anton R, Quintanilla MA, Ventura T, Marcos G, Campayo A, Saz P, **Lyketsos C**, Lobo A. Depression and incident Alzheimer's Disease: the impact of depression severity. *Am J Geriatr Psychiatry*. 2013 Jun 20. doi:pii: S1064-7481(13)00158-9. 10.1016/j.jagp.2013.02.011. [Epub ahead of print]
260. Stella F, Forlenza OV, Laks J, de Andrade LP, Avendaño MA, Sé EV, Cação JD, **Lyketsos CG**, de Medeiros K. The Brazilian version of the Neuropsychiatric Inventory-Clinician rating scale (NPI-C): reliability and validity in dementia. *Int Psychogeriatr*. 2013 Jun 14:1-9. [Epub ahead of print]
261. Norton MC, Clark C, Fauth EB, Piercy KW, Pfister R, Green RC, Corcoran CD, Rabins PV, **Lyketsos CG**, Tschanz JT. Caregiver personality predicts rate of cognitive decline in a community sample of persons with Alzheimer's disease. The Cache County Dementia Progression Study. *Int Psychogeriatr*. 2013 Jul 5:1-9. [Epub ahead of print]
262. Peterson D, Munger C, Crowley J, Corcoran C, Cruchaga C, Goate AM, Norton MC, Green RC, Munger RG, Breitner JC, Welsh-Bohmer KA, **Lyketsos C**, Tschanz J, Kauwe JS; Alzheimer's Disease Neuroimaging Initiative. Variants in PPP3R1 and MAPT are associated with more rapid functional decline in Alzheimer's disease: The Cache County Dementia Progression Study. *Alzheimers Dement*. 2013 May 30. doi:pii: S1552-5260(13)00086-1. 10.1016/j.jalz.2013.02.010. [Epub ahead of print]
263. ADAPT-FS Research Group. Follow-up evaluation of cognitive function in the randomized Alzheimer's Disease Anti-inflammatory Prevention Trial and its Follow-up Study. *Alzheimers*

Dement. 2014 Jul 8. pii: S1552-5260(14)00115-0. doi: 10.1016/j.jalz.2014.03.009. [Epub ahead of print]

264. Leoutsakos JM, Bartlett AL, Forrester SN, **Lyketsos CG**. Simulating effects of biomarker enrichment on Alzheimer's prevention trials: Conceptual framework and example. *Alzheimers Dement*. 2013 Aug 14. doi:pii: S1552-5260(13)02472-2. 10.1016/j.jalz.2013.05.1776. [Epub ahead of print]
265. Qin YY, Hsu JT, Yoshida S, Faria AV, Oishi K, Unschuld PG, Redgrave GW, Ying SH, Ross CA, van Zijl PC, Hillis AE, Albert MS, **Lyketsos CG**, Miller MI, Mori S, Oishi K. Gross feature recognition of Anatomical Images based on Atlas grid (GAIA): Incorporating the local discrepancy between an atlas and a target image to capture the features of anatomic brain MRI. *Neuroimage Clin*. 2013 Aug 14;3:202-11. doi: 10.1016/j.nicl.2013.08.006.
266. McNabney MK, Onyike C, Johnston D, Mayer L, **Lyketsos C**, Brandt J, Rosenblatt A, Samus Q. The impact of complex chronic diseases on care utilization among assisted living residents. *Geriatr Nurs*. 2013 Oct 16. doi:pii: S0197-4572(13)00290-5. 10.1016/j.gerinurse.2013.09.003. [Epub ahead of print]
267. Qin YY, Hsu JT, Yoshida S, Faria AV, Oishi K, Unschuld PG, Redgrave GW, Ying SH, Ross CA, van Zijl Black BS, Johnston D, Rabins PV, Morrison A, **Lyketsos C**, Samus QM. Unmet needs of community-residing persons with dementia and their informal caregivers: findings from the maximizing independence at home study. *J Am Geriatr Soc*. 2013 Dec;61(12):2087-95.
268. European Alzheimer's Disease Initiative (EADI); Genetic and Environmental Risk in Alzheimer's Disease; Alzheimer's Disease Genetic Consortium; Cohorts for Heart and Aging Research in Genomic Epidemiology, ... **Lyketsos CG**, ...Pickering-Brown S. Meta-analysis of 74,046 individuals identifies 11 new susceptibility loci for Alzheimer's disease. *Nat Genet*. 2013 Dec;45(12):1452-8. doi: 10.1038/ng.2802. Epub 2013 Oct 27.
269. Black BS, Johnston D, Rabins PV, Morrison A, **Lyketsos C**, Samus QM. Unmet needs of community-residing persons with dementia and their informal caregivers: findings from the maximizing independence at home study. *J Am Geriatr Soc*. 2013 Dec;61(12):2087-95.
270. Flynn Longmire CV, Drye LT, Frangakis CE, Martin BK, Meinert CL, Mintzer JE, Munro CA, Porsteinsson AP, Rabins PV, Rosenberg PB, Schneider LS, Weintraub D, **Lyketsos CG**; DIADS-2 Research Group. Is sertraline treatment or depression remission in depressed Alzheimer patients associated with improved caregiver well being? Depression in Alzheimer's disease study 2. *Am J Geriatr Psychiatry*. 2014 Jan;22(1):14-24. doi: 10.1016/j.jagp.2013.02.014.
271. Porsteinsson AP, Drye LT, Pollock BG, Devanand DP, Frangakis C, Ismail Z, Marano C, Meinert CL, Mintzer JE, Munro CA, Pelton G, Rabins PV, Rosenberg PB, Schneider LS, Shade DM, Weintraub D, Yesavage J, **Lyketsos CG**; CitAD Research Group. Effect of citalopram on agitation in Alzheimer disease: the CitAD randomized clinical trial. *JAMA*. 2014 Feb 19;311(7):682-91. doi: 10.1001/jama.2014.93
272. Samus QM, Johnston D, Black BS, Hess E, Lyman C, Vavilikolanu A, Pollutra J, Leoutsakos J-

- M, Gitlin LN, Rabins PV, **Lyketsos CG**. A multidimensional home-based care coordination intervention for elders with memory disorders: the Maximizing Independence at Home (MIND) Pilot Randomized Trial. *Am J Geriatr Psychiatry*. 2014 Apr;22(4):398-414. doi: 10.1016/j.jagp.2013.12.175.
273. Nowrangi MA, **Lyketsos C**, Rao V, Munro CA. Systematic review of neuroimaging correlates of executive functioning: converging evidence from different clinical populations. *J Neuropsychiatry Clin Neurosci*. 2014 Apr 1;26(2):114-25. doi: 10.1176/appi.neuropsych.12070176.
274. Gilbert M, Snyder C, Corcoran C, Norton MC, **Lyketsos CG**, Tschanz JT. The association of traumatic brain injury with rate of progression of cognitive and functional impairment in a population-based cohort of Alzheimer's disease: the Cache County Dementia Progression Study. *Int Psychogeriatr*. 2014 May 15:1-9. [Epub ahead of print]
275. Drye LT, Spragg D, Devanand DP, Frangakis C, Marano C, Meinert CL, Mintzer JE, Munro CA, Pelton G, Pollock BG, Porsteinsson AP, Rabins PV, Rosenberg PB, Schneider LS, Shade DM, Weintraub D, Yesavage J, **Lykesos CG**, for the CitAD Research Group. Changes in QTc interval in the Citalopram for Agitation in Alzheimer's Disease (CitAD) randomized trial. *PLoS ONE* 9(6): e98426. doi:10.1371/journal.pone.0098426.
276. Djamanakova A, Tang X, Li X, Faria AV, Ceritoglu C, Oishi K, Hillis AE, Albert M, **Lyketsos C**, Miller MI, Mori S. Tools for multiple granularity analysis of brain MRI data for individualized image analysis. *Neuroimage*. 2014 Jun 27. pii: S1053-8119(14)00523-0. doi: 10.1016/j.neuroimage.2014.06.046.
277. Snyder CM, Fauth E, Wanzek J, Piercy KW, Norton MC, Corcoran C, Rabins PV, **Lyketsos CG**, Tschanz JT. Dementia caregivers' coping strategies and their relationship to health and well-being: the Cache County Study. *Aging Ment Health*. 2014 Aug 5:1-10. [Epub ahead of print]
278. Tanner J, Black B, Johnston D, Hess E, Leoutsakos J, Gitlin L, Rabins P, **Lyketsos C**, Samus Q. A randomized controlled trial of a community-based dementia care coordination intervention: effects of MIND at Home on caregiver outcomes. *Am J Geriatr Psychiatry*. 2014 Aug 13. pii: S1064-7481(14)00227-9. doi: 10.1016/j.jagp.2014.08.002. [Epub ahead of print]
279. Hughes TB, Black BS, Albert M, Gitlin LN, Johnson DM, **Lyketsos CG**, Samus QM. Correlates of objective and subjective measures of caregiver burden among dementia caregivers: influence of unmet patient and caregiver dementia-related care needs. *Int Psychogeriatr*. 2014 Nov;26(11):1875-83. doi: 10.1017/S1041610214001240. Epub 2014 Aug 8.
280. Nowrangi MA, Okonkwo O, **Lyketsos C**, Oishi K, Mori S, Albert M, Mielke MM. Atlas-Based Diffusion Tensor Imaging Correlates of Executive Function. *J Alzheimers Dis*. 2014 Oct 15. [Epub ahead of print]
281. Leoutsakos JM, Forrester SN, Corcoran CD, Norton MC, Rabins PV, Steinberg MI, Tschanz

- JT, **Lyketsos CG**. Latent classes of course in Alzheimer's disease and predictors: the Cache County Dementia Progression Study. *Int J Geriatr Psychiatry*. 2014 Nov 3. doi: 10.1002/gps.4221. [Epub ahead of print]
282. Coughlin JM, Wang Y, Munro CA, Ma S, Yue C, Chen S, Airan R, Kim PK, Adams AV, Garcia C, Higgs C, Sair HI, Sawa A, Smith G, **Lyketsos CG**, Caffo B, Kassiou M, Guilarte TR, Pomper MG. Neuroinflammation and brain atrophy in former NFL players: An in vivo multimodal imaging pilot study. *Neurobiol Dis*. 2014 Nov 7;74C:58-65. doi: 10.1016/j.nbd.2014.10.019. [Epub ahead of print]
283. Oh E, Li M, Fafowora T, Inouye S, Chen C, Rosman L, **Lyketsos C**, Sieber F, Puhon M. Preoperative risk factors for postoperative delirium following hip fracture repair: A systematic review, *Int J Geriatric Psychiatry*, *Int J Geriatr Psychiatry*. 2014 Dec 11. doi: 10.1002/gps.4233. [Epub ahead of print]
284. Peters ME, Schwartz S, Han D, Rabins PV, Steinberg M, Tschanz JT, **Lyketsos CG**. Neuropsychiatric Symptoms as Predictors of Progression to Severe Alzheimer's Dementia and Death: The Cache County Dementia Progression Study. *Am J Psychiatry*. 2015 Jan 13:appiajp201414040480. [Epub ahead of print]
285. Samus QM, Amjad H, Johnston D, Black BS, Bartels SJ, **Lyketsos CG**. [A Multipronged, Adaptive Approach for the Recruitment of Diverse Community-Residing Elders with Memory Impairment: The MIND at Home Experience](#). *Am J Geriatr Psychiatry*. 2015 Jan 31. pii: S1064-7481(15)00071-8. doi: 10.1016/j.jagp.2015.01.005. [Epub ahead of print]
286. Rattinger GB, Schwartz S, Mullins CD, Corcoran C, Zuckerman IH, Sanders C, Norton MC, Fauth EB, Leoutsakos JS, **Lyketsos CG**, Tschanz JT. Dementia severity and the longitudinal costs of informal care in the Cache County Population. *Alzheimers Dement* 2015 Jan 19. pii: S1552-5260(14)02892-1. doi: 10.1016/j.jalz.2014.11.004. [Epub ahead of print]
287. Fitzpatrick AL, Rapp SR, Luchsinger J, Hill-Briggs F, Alonso A, Gottesman R, Lee H, Carnethon M, Liu K, Williams K, Sharrett AR, Frazier-Wood A, **Lyketsos C**, Seeman T. Sociodemographic Correlates of Cognition in the Multi-Ethnic Study of Atherosclerosis (MESA). *Am J Geriatr Psychiatry*. 2015 Jan 20. pii: S1064-7481(15)00057-3. doi: 10.1016/j.jagp.2015.01.003. [Epub ahead of print]
288. Cooper C, Sommerlad A, **Lyketsos C**, Livingston G. Modifiable predictors of dementia in Mild Cognitive Impairment: a systematic review and meta-analysis. *Am J Psychiatry*. 2015 Feb 20:appiajp201414070878. [Epub ahead of print]
289. Stella F, Forlenza OV, Laks J, de Andrade LP, de Castilho Cação J, Govone JS, de Medeiros K, **Lyketsos CG**. [Caregiver report versus clinician impression: disagreements in rating neuropsychiatric symptoms in Alzheimer's disease patients](#). *Int J Geriatr Psychiatry*. 2015 Mar 9. doi: 10.1002/gps.4278. [Epub ahead of print]
290. Samus QM, Vavilikolanu A, Mayer L, McNabney M, Brandt J, **Lyketsos CG**, Rosenblatt A. Cohort differences in dementia recognition and treatment indicators among assisted living

residents in Maryland: Did a change in the resident assessment tool make a difference?
International Psychogeriatrics, in press.

291. Snyder CM, Fauth E, Wanzek J, Piercy KW, Norton MC, Corcoran C, Rabins PV, **Lyketsos CG**, Tschanz JT. Dementia caregivers' coping strategies and their relationship to health and well-being: The Cache County Study. *Aging & Mental Health*, in press
292. Oh ES, Marano CM, Leoutsakos JM, Lee RW, Rissman RA, Smith GS, Craft S, Lyketsos CG, Oral glucose tolerance testing to modulate plasma amyloid levels: A novel biomarker. *Alzheimer's and Dementia: Diagnosis, Assessment & Disease Monitoring*, in press
293. Rosenberg PB, Drye LT, Porsteinsson AP, Pollock BG, Devanand DP, Frangakis C, Ismail Z, Marano C, Meinert CL, Mintzer JE, Munro CA, Pelton G, Rabins PV, Schneider LS, Shade DM, Weintraub D, Newell J, Yesavage J, **Lyketsos CG**, for the CitAD Research Group. Change in agitation in Alzheimer's disease in the placebo arm of a 9-week controlled trial. *International Psychogeriatrics*, in press

CURRENT EXTRAMURAL FUNDING

R01AG042165 (Lyketsos) 09/30/12-05/31/17 0.96 calendar NIA
\$395,981

Deep Brain Stimulation for Alzheimer's Disease

The project is a phase 2b study of deep brain stimulation of the fornix in early Alzheimer's disease patients, based on promising data from a pilot phase 1 trial. The study focuses on safety, preliminary estimation of efficacy, and response predictors, using clinical and neuroimaging (MR, PET) outcomes.

P50AG005146 (Albert) 04/01/10-03/31/15 1.08 calendar NIA
\$1,133,337

Johns Hopkins Alzheimer's Disease Research Center (Albert)

Core B (Lyketsos); Core E (Albert)

The major goal of Clinical Core B is to recruit and follow a diverse group of research subjects to support research projects associated with the ADRC. Core B will accomplish this overarching goal by working closely with ADRC leadership and with the other Cores and Projects. The subjects in the Core include: (1) cognitively normal controls, (2) subjects meeting criteria for Mild Cognitive Impairment (MCI), (3) patients with Alzheimer's disease (AD), and (4) patients with other related dementias. The major goals of Education Core E are to train medical professionals in clinical and basic research in age-related neurodegenerative disorders, to communicate progress in clinical and basic science about AD to patients, families and other lay persons, to direct focused outreach efforts to the minority community about age-related health problems, in general, and clinical care and research in AD, in particular, and to augment mechanisms for recruiting and retaining subjects in clinical research in the ADRC.

R01AG038893 (Smith) 09/01/11-05/31/16 0.6 calendar NIA \$367,850

PET Studies of Serotonin and Amyloid in MCI and AD

The studies will use PET to evaluate the relationship between amyloid deposition and serotonin transporter availability in MCI.

R01AG041633 (G. Smith) 09/30/11-05/31/16 0.6 calendar NIA \$369,437

Longitudinal imaging of neuropsychiatric symptoms in mild cognitive impairment

Longitudinal molecular imaging methods will be used to study the neurobiology of neuropsychiatric symptoms and the relationship to the dementia transition in mild cognitive impairment.

R01AG039384 (Rosenberg) 09/30/11-08/31/16 0.72 calendar NIA \$322,719

DIADS-3: An RCT of venlafaxine for depression in AD

Depression in Alzheimer's Disease-3 (DIADS-3) is a proof of concept (Phase II) single-site, double-blind, placebo-controlled RCT of venlafaxine for dAD with a target dose (225 mg/day) sufficient to achieve SNRI effect, and duration (12 weeks) sufficient to detect sustained improvement in mood outcomes. If the efficacy of venlafaxine for dAD is supported in DIADS-3, we will propose a definitive (Phase III), multi-center hypothesis-testing RCT with the group of investigators that successfully carried out DIADS-2. Demonstrating the efficacy of venlafaxine for dAD will have substantial impact on the care of AD patients.

Lyketsos 02/15/12 – 12/31/15 0.12 calendar Functional Neuromodulation, Inc.
\$76,061

Deep Brain Stimulation for Alzheimer's Disease

This is a prospective, multi-center, double-blind randomized feasibility trial designed to estimate the potential clinical benefit, and associated risks, of deep brain stimulation of the fornix (DBS-f) in patients with mild Alzheimer's disease. The primary objective of this feasibility study is to precisely estimate the treatment effect size in the outcomes of interest at 12 months post-randomization.

Lyketsos 12/01/11-11/30/15 0.12 calendar Avanir Pharmaceuticals \$5,882

AVP-923 for Agitation in Alzheimer's Disease

Provide expert consultation and advisory services for the AVP-923 clinical development program.

Gitlin 09/27/12-12/31/15 0.36 calendar NINR/Univ. of Michigan NCE

An Innovative Caregiver Tool to Assess and Manage Behavioral Symptoms of Dementia

This study is designed to develop and evaluate an electronic web-based tool to assist families in identifying nonpharmacologic strategies to address problematic behaviors.

R01AG041781 (Gitlin) 09/15/12-05/31/18 0.36 calendar NIA \$379,729

Reducing Agitation in Dementia Patients at Home: The Customized Activity Trial

The major goal of this randomized trial is to test the efficacy of an in-home activity program for families caring for patients who have dementia and agitation-type behavioral symptoms.

Samus 09/01/2013-08/31/2018 1.2 calendar NIA \$477,040

MIND: An RCT of care coordination for community-living persons with dementia

This Phase III definitive efficacy study is an 18-month single blind randomized control trial that will test a multidimensional, home-based, care coordination model for community residing people with dementia. The primary outcome is delaying transition out of the home.

Samus 04/01/2014-03/31/20170 0.6 calendar Centers Medicare & Medicaid
\$1,918,157

Comprehensive home-based dementia care coordination for Medicare-Medicaid Dual Eligibles in MD

We seek to restructure how dementia care is delivered by equipping community-based health organizations with the workforce and skills necessary to deliver comprehensive AD coordination and by supporting primary care, which faces significant time and resource challenges. We link existing community, medical, and family resources; provide care access to a disadvantaged population; and deploy an interdisciplinary workforce to address dementia care needs.

PREVIOUS EXTRAMURAL FUNDING

Principal Investigator	Citalopram for Agitation in Alzheimer Dementia (CitAD)	NIA R01AG031348	2008-2015
Principal Investigator	Depression in Alzheimer's Disease Study-2 (DIADS-2)	NIMH U01 MH066133	2003-2010
Principal Investigator	Dementia and Psychiatric Disorders in Assisted Living	NIMH R01 MH60626	2003-2009
M-Principal Investigator	Progression of dementia: a Population-based study	NIA MPI: Tschanz	2002-2012
CoPI and Site Director	Alzheimer's Disease Anti-inflammatory Prevention Trial	NIA PI: Breitner	2000-2008
Principal Investigator	A clinical trial of Donepezil in Parkinson's disease	Pfizer-Eisai	2000-2002
Principal Investigator	Validation of the Alkon Test as a Diagnostic Test for Alzheimer	NeuroLogic	2000-2001
Investigator	The Cardiovascular Health Study Cognition Study	NIA/NHLBI PI: Kuller	1998-2001
Investigator	Center for the Study of the Seriously Mentally Ill	NIMH PI: Steinwachs	1998-1999
Investigator	The Evolution of Psychopathology in the Population	NIMH PI: Eaton	1997-2008
Principal Investigator	Treating Depression in Alzheimer's Disease (DIADS)	NIMH R01 MH56511	1997-2003
Investigator	Dementia in the Community: Assessment, Outcomes, Costs	NIMH PI: Rabins	1997-2002
Investigator	Cache County Study of Memory and Aging	NIA PI: Breitner	1994-2007
Principal Investigator	Dementia in the General Hospital	Alzheimer's Association	1998
Principal Investigator	Bright Light Therapy in the Nursing Home Dementia Patient	Helen Bader Foundation	1996-1998
Principal Investigator	Outreach for Baltimore residents with dementia	Cover-White Foundation	1996-1997
Principal Investigator	Depression as AIDS develops	NIMH R03 MH52507	1995

Investigator	Collaborative Atypical Trial of Intervention Effectiveness (CATIE-AD)	NIMH PI: Schneider	1994-2002
Project Director	Development of Research Infrastructure at Copper Ridge	Copper Ridge Inc.	1994-1998
Principal Investigator	Psychiatric Disorders in HIV+ Women Prisoners	Johns Hopkins CRC (NCRR)	1994-1996
Principal Investigator	Apolipoprotein E 4 & psychopathology in Alzheimer's	Johns Hopkins CRC (NCRR)	1994-1996
Investigator	Psychiatric Disorders in STD Clinics	NIMH PI: Erbeling	1992-2002
Investigator	Multicenter AIDS Cohort Study	NIAID PI: Saah	1992-1997
NRSA Trainee	Training in Psychiatric Epidemiology (5T32-14592)	NIMH PI: Eaton	1992-1994

EDUCATIONAL ACTIVITIES

Peer Reviewed Educational Publications

1. Lyketsos GC and **Lyketsos CG**. Transcultural Psychosomatics (in Greek). *Psychiatriki* (Journal of the Hellenic Psychiatric Society) 1990;1(3):224
2. **Lyketsos CG**, Lyketsos GC, Fishman M, Treisman GJ. Dementia and secondary mood disorders in AIDS. *Psychiatriki* 1992; 3: 118-124
3. Treisman GJ, **Lyketsos CG**, Fishman M, Hanson A, McHugh PR. Psychiatric care for patients with HIV infection: the varying perspectives. *Psychosomatics*, 1993;34(5):432-439.
4. Treisman GJ, **Lyketsos CG**, Fishman M. Mental Health Care of HIV Patients: Part I: Managing Psychiatric Disease. *AIDS Clinical Care* 1994; 6(8):63-66.
5. Treisman GJ, **Lyketsos CG**, Fishman M. Mental Health Care of HIV Patients: Part II: Temperament, Behavior and Life Story. *AIDS Clinical Care* 1994; 6(8):72-77.
6. Hooten RM, **Lyketsos CG**. Fronto-temporal Dementia: A clinicopathological review of four post-mortem studies. *J Neuropsychiatry Clin Neurosciences* 1996; 8:10-19
7. **Lyketsos CG**, Treisman GJ, Lipsey JR, Morris PLP, Robinson RG. Does stroke cause depression? *J Neuropsychiatry Clin Neurosciences* 1998; 10:103-107
8. Treisman G, Fishman M, Schwartz J, Hutton H, **Lyketsos CG**. Mood disorders in HIV infection. *Depression and Anxiety* 1998; 7:178-187
9. **Lyketsos CG**. Diagnosis, and management of delirium in the elderly. *J Clin Outcomes Management* 1998;5(4): 51-62

10. Rao V, **Lyketsos CG**. Delusions in Alzheimer's disease: A Review. *J Neuropsychiatry Clin Neurosciences* 1998;10:373-382
11. **Lyketsos CG**. The prion dementias. *Maryland Medical Journal* 1999; 48: 18-22
12. **Lyketsos CG**, Liang B. Diagnosis and management of delirium in the elderly. *Hospital Physician* 1999; 35(6):34-51
13. Taragano FE, **Lyketsos CG**. La depresion en pacientes de mas de 60 anos (in Spanish). *Gerontologia Mundial* 1998; 2(3): 64-76
14. Gonzales-Salvador T, Aragano C, **Lyketsos CG**, Barba AC. The stress and psychological morbidity of the Alzheimer patient caregiver. *Int J Ger Psychiatry* 1999; 14:701-710
15. **Lyketsos CG**, Treisman GJ. Mood disorders in HIV infection. *Psych Annals* 2001; 31:45-9
16. **Lyketsos CG**, Rabins PV, Breitner JCS. An evidence-based proposal for the classification of neuropsychiatric disturbance in Alzheimer's disease. *Int J Ger Psychiatry* 2001; 16(11):1037-1042
17. Blass DM, Steinberg MS, Leroi I, **Lyketsos CG**. Successful multi-modality treatment of severe behavioral disturbance in a patient with advanced Huntington's disease. *Am J Psychiatry* 2001; 158(12): 1966-1972
18. Lee HB, **Lyketsos CG**. Delayed Post-Hypoxic Leukoencephalopathy. *Psychosomatics* 2001; 42(6)530-533
19. Olin JT, Schneider LS, Katz IS, Meyers BS, Alexopoulos GS, Breitner JCS, Bruce ML, Caine ED, Cummings JL, Devanand DP, Jeste DV, **Lyketsos CG**, Lyness JM, Rabins PV, Reynolds III CF, Rovner BW, Steffens DS, Tariot PN, Lebowitz BD. National Institute of Mental Health - Provisional Diagnostic Criteria for Depression of Alzheimer Disease. *Am J Ger Psychiatry* 2002; 10: 125-128
20. **Lyketsos CG**, Olin JT. Depression in Alzheimer's disease: overview and treatment. *Biol Psychiatry* 2002; 52(3):243-252
21. Charney DS, Reynolds CF, Lewis L, Lebowitz BD, Sunderland T, Alexopoulos GS, Blazer DG, Katz IR, Meyers BS, Arean PA, Borson S, Brown C, Bruce ML, Callahan CL, Charlson ME, Conwell Y, Cuthbert BN, Devanand DP, Gibson MJ, Gottlieb GJ, Krishnan KR, Laden SK, **Lyketsos CG**, Mulsant BH, Niederehe G, Olin JT, Oslin DW, Pearson J, Persky T, Pollock BG, Raetzman S, Reynolds M, Salzman C, Schulz R, Schwenk TL, Scolnick E, Unützer J, Weissman MM, Young RC. Depression and Bipolar Support Alliance Consensus Statement on the Unmet Needs in Diagnosis and Treatment of Mood Disorders in Late Life. *Arch Gen Psychiatry* 2003;60:664-672
22. Lee HB, **Lyketsos CG**. Depression in Alzheimer's disease: heterogeneity and related issues. *Biol Psychiatry* 2003; 54: 353-36

23. Bassiony MM, **Lyketsos CG**. Delusions and hallucinations in Alzheimer's disease: review of the brain decade. *Psychosomatics* 2003; 44: 388-401
24. **Lyketsos CG**, Lee HB. Depression and treatment of depression in Alzheimer's disease: A practical update for the clinician. *Dementia and Geriatric Cognitive Disorders* 2004; 17:55-64
25. Onyike CU, **Lyketsos CG**, Treisman GJ. Mania after interferon treatment. *Am J Psychiatry* 2004; 161:429-435
26. **Lyketsos CG**, Rosenblatt AR, Rabins PV. Forgotten Frontal lobe Syndrome. Or, Executive Dysfunction Syndrome. *Psychosomatics* 2004; 45: 247-255
27. Gitlin DF, Levenson JL, **Lyketsos CG**. Psychosomatic Medicine: A New Psychiatric Subspecialty. *Academic Psychiatry* 2004; 28:4-11.
28. Alzheimer's Association (**CG Lyketsos, Workgroup Chair**). Consensus Recommendation: Research consent for cognitively impaired adults: Guidelines for Institutional Review Boards and Investigators. *Alzheimer Dis Assoc Disord* 2004; 18:171-175
29. Karlawish JH, Bonnie RJ, Appelbaum PS, **Lyketsos C**, James B, Knopman D, Patusky C, Kane RA, Karlan PS Addressing the ethical, legal, and social issues raised by voting by persons with dementia. *JAMA* 2004;292(11):1345-50
30. Evans DL, Charney DS, Lewis L, Golden RN, Gorman JM, Krishnan KR, Nemeroff CB, Bremner JD, Carney RM, Coyne JC, DeLong MR, Frasura-Smith N, Glassman AH, Gold PW, Grant I, Gwyther L, Ironson G, Johnson RL, Kanner AM, Katon WJ, Kaufmann PG, Keefe FJ, Ketter T, Laughren TP, Leserman J, **Lyketsos CG**, McDonald WM, McEwen BS, Miller AH, Musselman D, O'connor C, Petitto JM, Pollock BG, Robinson RG, Roose SP, Rowland J, Sheline Y, Sheps DS, Simon G, Spiegel D, Stunkard A, Sunderland T, Tibbits P Jr, Valvo WJ. Mood disorders in the medically ill: scientific review and recommendations. *Biol Psychiatry* 2005;58(3):175-89
31. Livingston G, Johnston K, Katona C, Paton J, **Lyketsos CG**. Systematic review of psychological approaches to the management of neuropsychiatric symptoms of dementia. *Am J Psychiatry* 2005; 162:1996-2021
32. Steffens DC, Otey E, Alexopoulos GS, Butters MA, Cuthbert B, Ganguli M, Geda Y, Hendrie HC, Krishnan RR, Kumar A, Lopez OL, **Lyketsos CG**, et al. Perspectives on Depression, Mild Cognitive Impairment, and Cognitive Decline. *Arch Gen Psychiatry* 2006; 63:130-138
33. Tschanz JT, Treiber K, Norton MC, Welch-Bohmer K, Toone L, Zandi P, Szekeley CA, **Lyketsos CG**, Breitner, JCS. A population study of Alzheimer disease: Findings from the Cache County Study on Memory Health and Aging. *Care Management Journals* 2005; 6(2):107-114
34. **Lyketsos CG**, Colenda C, Beck C, Blank K, Doriaswamy M, Kalunian D, Yaffe K. Position statement of the American Association for Geriatric Psychiatry regarding principles of care for patients with dementia due to Alzheimer's disease. *Am J Geriatr Psychiatry*

35. Mielke MM, **Lyketsos CG**. Lipids and the pathogenesis of Alzheimer's disease: is there a link? *Int Rev Psychiatry*. 2006 Apr;18(2):173-86
36. Rosenberg PR, Johnston D, **Lyketsos CG**. A Clinical Approach to Mild Cognitive Impairment (MCI). *Am J Psychiatry* 2006; 163(11): 1884-1890
37. **Lyketsos CG**. Lessons from Neuropsychiatry. *J Neuropsychiatry Clin Neurosci* 2006; 18(4): 445-449
38. **Lyketsos CG**, Huyse F, Gitlin D, Levenson J. "Psychosomatic Medicine:" A new psychiatric subspecialty in the U.S. Focused on the interface between psychiatry and medicine. *European J Psychiatry* 2006; 20(3):165-171
39. Selwood A, Johnston K, Katona C, **Lyketsos CG**, Livingston G. Systematic review of the effect of psychological interventions on family caregivers of people with dementia. *J Affect Disord* 2006; 101(1-3):75-89
40. Martin BK, Breitner JC, Evans D, **Lyketsos CG**, Meinert CL. The trialist, meta-analyst, and journal editor: lessons from ADAPT. *Am J Med* 2007; 120(3):192-3
41. **Lyketsos CG**, Szekely CA, Mielke MM, Rosenberg PB, Zandi PP. Developing new treatments for Alzheimer's disease: the who, what, when, and how of biomarker-guided therapies. *Int Psychogeriatr*. 2008 May 23:1-19. [Epub ahead of print] [NIHMS 79471]
42. Ballard CG, Gauthier S, Cummings JL, Brodaty H, Grossberg GT, Robert P, **Lyketsos CG**. Management of agitation and aggression associated with Alzheimer disease. *Nat Rev Neurol* 2009;5(5):245-55.
43. **Lyketsos CG**, Chisolm MS. The trap of meaning: a public health tragedy. *JAMA* Jul 2009 22;302(4):432-3
44. Vaishnavi S, Rosenblatt A, Rabins P, **Lyketsos C**, Rao V. Behavioral neurology and neuropsychiatry fellowship training: the Johns Hopkins model. *J Neuropsychiatry Clin Neurosci* 2009;21(3):335-41
45. Gauthier S, Cummings J, Ballard C, Brodaty H, Grossberg G, Robert P, **Lyketsos C**. Management of behavioral problems in Alzheimer's disease. *Int Psychogeriatr* 2010 Jan 25:1-27. [Epub ahead of print]
46. Mielke MM, **Lyketsos CG**. Alterations of the Sphingolipid Pathway in Alzheimer's Disease: New Biomarkers and Treatment Targets? *Neuromolecular Med* 2010 Jun 23. [Epub ahead of print]
47. Salami O, **Lyketsos C**, Rao V. Treatment of sleep disturbance in Alzheimer's dementia. *Int J Geriatr Psychiatry* 2010 Sep 24 [Epub ahead of print]

48. Appleby BS, **Lyketsos CG**. Rapidly progressive dementias and the treatment of human prion diseases. *Expert Opin Pharmacother* 2011 Jan;12(1):1-12. Epub 2010 Nov 23.
49. Cooper C, Katona C, **Lyketsos C**, Blazer D, Brodaty H, Rabins P, de Mendonça Lima C, Livingston G. A systematic review of treatments for refractory depression in older people. *Am J Psychiatry*. 2011 Mar 31 [Epub ahead of print]
50. Nowrangi MA, Rao V, **Lyketsos CG**. Epidemiology, assessment, and treatment of dementia. *Psychiatr Clin North Am*. 2011 Jun;34(2):275-94
51. Spencer L, **Lyketsos CG**, Samstad E, Dokey A, Rostov D, Chisolm MS. A suicidal adult in crisis: an unexpected diagnosis of autism spectrum disorder. *Am J Psychiatry*. 2011 Sep;168(9):890-2
52. **Lyketsos CG**, Carrillo MC, Ryan JM, Khachaturian AS, Trzepacz P, Amatniek J, Cedarbaum J, Brashear R, Miller DS. Neuropsychiatric symptoms in Alzheimer's disease. *Alzheimers Dement* 2011 Sep;7(5):532-9. doi: 10.1016/j.jalz.2011.05.2410
53. Oishi K, Mielke MM, Albert M, **Lyketsos CG**, Mori S. DTI analyses and clinical applications in Alzheimer's disease. *J Alzheimers Dis* 2011;26 Suppl 3:287-96.
54. Piven J, Rabins P, Berry-Kravis E, Bodfish J, Buckwalter K, Callahan C, Coyle J, Dawson G, Dilworth-Anderson P, Folstein S, Fombonne E, Heller T, Hyman SL, Lord C, **Lyketsos C**, Mandell D, Murphy D, Samstad E, Silverman W, Tyler C. Autism Spectrum Disorders in Older Adults: Toward Defining a Research Agenda. *J Am Geriatr Soc* 2011 Nov;59(11):2151-5. doi: 10.1111/j.1532-5415.2011.03632.x. Epub 2011 Nov 8. Review.
55. Cooper C, Mukadam N, Katona C, **Lyketsos CG**, Blazer D, Ames D, Rabins P, Brodaty H, de Mendonca Lima C, Livingston G. Systematic review of the effectiveness of pharmacological interventions to improve quality of life and wellbeing in people with dementia. *Am J Geriatr Psychiatry* 2012 Jan 12. [Epub ahead of print]
56. Cooper C, Mukadam N, Katona C, **Lyketsos CG**, Ames D, Rabins P, Engedal K, de Mendonca Lima C, Blazer D, Teri L, Brodaty H, Livingston G. Systematic review of the effectiveness of non-pharmacological interventions to improve quality of life and wellbeing in people with dementia. *Int Psychogeriatr* 2012 Jan 16:1-15. [Epub ahead of print]
57. Angelino A, **Lyketsos CG**. Training in psychosomatic medicine: a psychiatric subspecialty recognized in the United States by the American board of medical specialties. *J Psychosom Res* 2011 Dec; 71(6):431-2. Epub 2011 Sep 3
58. Peters ME, Taylor J, **Lyketsos CG**, Chisolm MS. Beyond the DSM: The Perspectives of Psychiatry Approach to Patients. *Prim Care Companion CNS Disord*. 2012;14(1). pii: PCC.11m01233. Epub 2012 Feb 23
59. Steinberg M, **Lyketsos CG**. Atypical antipsychotic use in patients with dementia: managing

- safety concerns. *Am J Psychiatry*. 2012 Sep 1;169(9):900-6.
60. Gitlin LN, Kales HC, **Lyketsos CG**. Nonpharmacologic management of behavioral symptoms in dementia. *JAMA*. 2012;308(19):2020-2029. doi:10.1001/jama.2012.36918.
 61. Cooper C, Mukadam N, Katona C, **Lyketsos CG**, Blazer D, Ames D, Rabins P, Brodaty H, de Mendonça Lima C, Livingston G. Systematic Review of the Effectiveness of Pharmacologic Interventions to Improve Quality of Life and Well-being in People With Dementia. *Am J Geriatr Psychiatry*. 2013 Feb;21(2):173-83. doi: 10.1016/j.jagp.2012.10.018. Epub 2013 Jan 22.
 62. **Lyketsos CG**, Targum SD, Pendergrass JC, Lozano AM. Deep Brain Stimulation: A Novel Strategy for Treating Alzheimer's Disease. *Innov Clin Neurosci*. 2012 Nov;9(11-12):10-17
 63. Geda YE, Schneider LS, Gitlin LN, Miller DS, Smith GS, Bell J, Evans J, Lee M, Porsteinsson A, Lanctôt KL, Rosenberg PB, Sultzer DL, Francis PT, Brodaty H, Padala PP, Onyike CU, Ortiz LA, Ancoli-Israel S, Bliwise DL, Martin JL, Vitiello MV, Yaffe K, Zee PC, Herrmann N, Sweet RA, Ballard C, Khin NA, Alfaró C, Murray PS, Schultz S, **Lyketsos CG**; Neuropsychiatric Syndromes Professional Interest Area of ISTAART. Neuropsychiatric symptoms in Alzheimer's disease: Past progress and anticipation of the future. *Alzheimers Dement*. 2013 Apr 3. doi:pil: S1552-5260(12)02570-8. 10.1016/j.jalz.2012.12.001.
 64. Pellegrino LD, Peters ME, **Lyketsos CG**, Marano CM. Depression in cognitive impairment. *Curr Psychiatry Rep*. 2013 Sep;15(9):384. doi: 10.1007/s11920-013-0384-1.
 65. Cooper C, Li R, **Lyketsos C**, Livingston G. A systematic review of treatment for Mild Cognitive Impairment. *British Journal of Psychiatry, The British Journal of Psychiatry*, 2013; 203: 255-264 doi:10.1192/bjp.bp.113.127811
 66. Theleritis C, Politis A, Siarkos K, **Lyketsos CG**. A review of neuroimaging findings of apathy in Alzheimer's disease. *Int Psychogeriatr*. 2013 Oct 18:1-13. [Epub ahead of print]
 67. Posporelis S, Sawa A, Smith GS, Stitzer ML, **Lyketsos CG**, Chisolm MS. Promoting Careers in Academic Research to Psychiatry Residents. *Acad Psychiatry*. 2014 Feb 5. [Epub ahead of print]
 68. Kales HC, Gitlin LN, **Lyketsos C** for the Detroit Expert Panel on the Assessment and Management of Neuropsychiatric Symptoms of Dementia. Management of neuropsychiatric symptoms of dementia in clinical settings: Recommendations from a multidisciplinary expert panel. *J Am Geriatr Soc*. 2014 Mar 17. doi: 10.1111/jgs.12730. [Epub ahead of print].
 69. Kirwin P, Conroy M, **Lyketsos C**, Greenwald B, Forester B, Devries C, Ahmed II, Wiechers I, Zdanys K, Steffens D, Reynolds CF 3rd. A Call to Restructure Psychiatry General and Subspecialty Training. *Acad Psychiatry*. 2014 May 9. [Epub ahead of print]
 70. Soto M, Andrieu S, Nourhashemi F, Ousset PJ, Ballard C, Robert P, Vellas B, **Lyketsos CG**, Rosenberg PB. Medication development for agitation and aggression in Alzheimer disease:

review and discussion of recent randomized clinical trial design. *Int Psychogeriatr*. 2014 Sep 16:1-17. [Epub ahead of print]

71. Cummings J, Mintzer J, Brodaty H, Sano M, Banerjee S, Devanand DP, Gauthier S, Howard R, Lanctôt K, **Lyketsos CG**, Peskind E, Porsteinsson AP, Reich E, Sampaio C, Steffens D, Wortmann M, Zhong K. Agitation in cognitive disorders: International Psychogeriatric Association provisional consensus clinical and research definition. *Int Psychogeriatr*. 2014 Oct 14:1-11. [Epub ahead of print]
72. Oishi K, **Lyketsos CG**. Alzheimer's disease and the fornix. *Front Aging Neurosci*. 2014 Sep 11;6:241. doi: 10.3389/fnagi.2014.00241
73. Everett AS, Reese J, Coughlin J, Finan P, Smith M, Fingerhood M, Berkowitz S, Young JH, Johnston D, Dunbar L, Zollinger R, Ju J, Reuland M, Strain EC, **Lyketsos C**. Behavioural health interventions in the Johns Hopkins Community Health Partnership: Integrated care as a component of health systems transformation. *Int Rev Psychiatry*. 2014 Dec;26(6):648-56. doi: 10.3109/09540261.2014.979777.
74. Kales HC, Gitlin LN, **Lyketsos CG**. Assessment and management of behavioral and psychological symptoms of dementia. *British Medical Journal* 2015 Mar 2;350:h369. doi: 10.1136/bmj.h369
75. Nowrangi M, **Lyketsos CG**, Rosenberg P. Principles and management of neuropsychiatric symptoms in Alzheimer's dementia. *Alzheimer's Research & Therapy* (2015) 7:12 DOI 10.1186/s13195-015-0096-3
76. Rosenberg PB, Nowrangi MA, Lyketsos CG. Neuropsychiatric symptoms in Alzheimer's disease: What might be associated brain circuits? *Mol Aspects Med*. 2015 Jun 3. pii: S0098-2997(15)00035-7. doi: 10.1016/j.mam.2015.05.005. [Epub ahead of print]
77. Ismail Z, Smith EE, Geda Y, Sultzer D, Brodaty H, Smith G, Agüera-Ortiz L, Sweet R, Miller D, Lyketsos CG; ISTAART Neuropsychiatric Symptoms Professional Interest Area. Neuropsychiatric symptoms as early manifestations of emergent dementia: Provisional diagnostic criteria for mild behavioral impairment. *Alzheimers Dement*. 2015 Jun 18. pii: S1552-5260(15)00215-0. doi: 10.1016/j.jalz.2015.05.017. [Epub ahead of print]

Invited Review Articles and Editorials

1. **Lyketsos CG**, Steele C. The care of patients with dementia. *Reviews in Clinical Gerontology* 1995; 5:189-207
2. **Lyketsos CG**, Treisman GJ. Epidemiology and drug treatment of psychiatric disorders in HIV-infected patients. *CNS Drugs* 1995, 4(3): 195-206
3. **Lyketsos CG**, Federman EB. Psychiatric disorders and HIV infection: impacting one another. *Epidemiologic Reviews* 1995; 17(1): 152-164

4. **Lyketsos CG**, Fishman M, Treisman GJ. Psychiatric issues and emergencies in HIV infection. *Emergency Medicine Clinics of North America* 1995; 13:163-177
5. **Lyketsos CG**, Steele C, Steinberg M. Behavioral Disturbances in Dementia. *Reichel's Care of the Elderly: Clinical Aspects of Aging, Fifth Edition*, Gallo JJ, Busby-Whitehead J, Rabins PV, Silliman R, Murphy J (Eds.), Baltimore, Williams & Wilkins, 1999, pp. 214-228
6. Leroi I, Steele C, **Lyketsos CG**. The care of patients with dementia. *Reviews in Clinical Gerontology* 1999; 9:235-255
7. **Lyketsos CG**. Aggression in patients with dementia. *Research and Practice in Alzheimer's disease (Volume 3)*, Serdi/Springer: Paris 2000, pp. 169-177
8. McDaniel JS, Chung JC, Brown L, Cournos F, Forstein M, Goodkin K, **Lyketsos CG**. Practice Guideline for the Treatment of Patients with HIV/AIDS. *Am J Psychiatry* 2000; 157 (11-Supplement):1-6
9. Klein DA, **Lyketsos CG**. Management of wandering behaviors in community residing persons with dementia. *Directions in Psychiatry* 2001; 21:89-98
10. **Lyketsos CG**. Research training during psychiatric residency: A personal reflection. *Academic Psychiatry* 2001; 25(1):31-33
11. **Lyketsos CG**, Breitner JCS. Mental and Behavioral Disturbances in Dementia: Findings from the Cache County Study of Memory in Aging. *Research and Practice in Alzheimer's disease (Volume 5)*, Serdi/Springer: Paris 2001, pp. 144-150
12. **Lyketsos CG** Roques C, Hovanec L, Jones B 3rd. Telemedicine use and the reduction of psychiatric admissions from a long-term care facility. *J Geriatr Psychiatry Neurol.* 2001 Summer;14(2):76-9.)
13. **Lyketsos CG**. Neuropsychiatric and behavioral disturbances in dementia (Chapter 18). *Geriatrics Review Syllabus (5th Edition)*, Blackwell Publishing, 2002, pp. 125-131
14. Rao V, **Lyketsos CG**. Psychiatric aspects of traumatic brain injury. In *Psychiatric Clinics of North America* (Levenson, Lyketsos, Trzepacz Editors), Saunders Publishing, 2002, pp.43-69
15. **Lyketsos CG**, Rabins PV. Sertraline for major depression in Alzheimer's disease: the DIADS study. *Research and Practice in Alzheimer's disease (Volume 6)*, Serdi/Springer: Paris 2002, pp. 223-231
16. **Lyketsos CG**. Should pregnant women eat fish? Lessons from the Seychelles. *The Lancet* 2003; Vol 361 (May 17): 1667-1668
17. Lee H, **Lyketsos CG**. Diagnosis and management of depression in mild cognitive impairment. *Psychiatric Annals* 2004; 34(4):273-280

18. **Lyketsos CG**, Lee H. Insulin resistance as a link between affective disorder and Alzheimer's disease: A hypothesis in need of further refinement. *J Gerontology: Medical Sciences* 2004; 59(2):185-187
19. Rabins PV, **Lyketsos CG**. Antipsychotic drugs in dementia: what should be made of the risks? *JAMA* 2005; 294:1963-1965
20. **Lyketsos CG**. Commentary on the NIH Cognitive and Emotional Health Project: Report of the Critical Evaluation Study Committee." What would be the effect of raising the retirement age by five years on the cognitive and emotional health of individuals age 65 and older? *Alzheimer's and Dementia: The Journal of the Alzheimer's Association* 2006; 2(2):86-88
21. **Lyketsos CG**, Alter C. Research in Psychosomatic Medicine: beginning to set the future agenda. *Psychiatric Times*, June 2006; pp, 68-73
22. Munro CA, **Lyketsos CG**. Cognitive response to sertraline treatment for depression in Alzheimer's disease: A possible sex effect. *Research and Practice in Alzheimer's Disease* 2006, 11, 361-365
23. Rabins PV, **Lyketsos CG**. Cholinesterase inhibitors and memantine have a role in the treatment of Alzheimer's disease. *Nat Clin Pract Neurol* 2006;2(11):578-9.
24. **Lyketsos CG**. Individualizing Alzheimer's disease therapy over the disease course. Academic Highlights: New paradigms in the treatment of Alzheimer's disease (with Tariot PN, Cummings JL, Ismail MS). *J Clin Psychiatry* 2006; 67(12):2009-2013
25. **Lyketsos CG**. Neuropsychiatric symptoms (behavioral and psychological symptoms of dementia) and the development of dementia treatments. *Int Psychogeriatr* 2007 Jun;19(3):409-20
26. **Lyketsos CG**, Kozauer N, Rabins PV. Psychiatric Manifestations of Neurologic Disease: Where are we headed? *Dialogues in Clinical Neuroscience* 2007; 9(2): 111-124 (NIHMS84634)
27. **Lyketsos CG**. Apathy and agitation: challenges and future directions (Guest Editor Editorial). *Am J Geriatr Psychiatry* 2007;15(5):361-4
28. Rabins PV, **Lyketsos CG**. The Pharmacotherapy of Neuropsychiatric Symptoms: Opportunities, Challenges, and Current Prospects. *Nat Clin Pract Neurol* 2007;3(5):239
29. **Lyketsos CG**. Antidepressants improve depression in people with Alzheimer's disease. *Evid Based Ment Health* 2007 Nov;10(4):115
30. Rosenberg PB, **Lyketsos C**. Mild cognitive impairment: searching for the prodrome of Alzheimer's disease. *World Psychiatry* 2008 Jun;7(2):72-8

31. **Lyketsos CG.** The interface between depression and dementia: where are we with this important frontier? *Am J Geriatr Psychiatry* 2010 Feb;18(2):95-7 (PMCID: PMC2813464 NIHMSID: NIHMS161457)
32. Lyketsos CG. Depression and diabetes: more on what the relationship might be. *Am J Psychiatry* 2010 May; 167(5):496-7
33. Rabins PV, **Lyketsos CG.** A Commentary on the Proposed DSM Revision Regarding the Classification of Cognitive Disorders. *Am J Geriatr Psychiatry* 2010; DOI: 10.1097/JGP.0b013e3182051ac7
34. **Lyketsos CG.** Commentary on "Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease." New criteria for a new era. *Alzheimers Dement.* 2011 May; 7(3):328-9
35. Rosenberg PB, **Lyketsos CG.** Treating agitation in dementia: a systematic pain management protocol may help. *BMJ* 2011; 343:d3913
36. **Lyketsos CG.** Prevention of unnecessary hospitalization for patients with dementia: the role of ambulatory care. *JAMA* 2012 Jan 11; 307(2):197-8
37. **Lyketsos CG,** Miller DS; Neuropsychiatric Syndromes Professional Interest Area of the International Society to Advance Alzheimer's Research and Treatment. Addressing the Alzheimer's disease crisis through better understanding, treatment, and eventual prevention of associated neuropsychiatric syndromes. *Alzheimers Dement* 2012 Jan;8(1):60-4.
38. Geda YE, Schneider LS, Gitlin LN, Miller DS, Smith GS, Bell J, Evans J, Lee M, Porsteinsson A, Lanctôt KL, Rosenberg PB, Sultzer DL, Francis PT, Brodaty H, Padala PP, Onyike CU, Ortiz LA, Ancoli-Israel S, Bliwise DL, Martin JL, Vitiello MV, Yaffe K, Zee PC, Herrmann N, Sweet RA, Ballard C, Kin NA, Alfaro C, Murray PS, Schultz S, **Lyketsos CG.** Neuropsychiatric Syndromes Professional Interest Area of ISTAART. Neuropsychiatric symptoms in Alzheimer's disease: Past progress and anticipation of the future. *Alzheimers Dement.* 2013 Apr 3. pii: S1552-5260(12)02570-8. doi: 10.1016/j.jalz.2012.12.001. [Epub ahead of print]
39. **Lyketsos CG.** Now Is the Time for True Reform of Mental Health Services. *JAMA Intern Med.* 2014 Nov 10. doi: 10.1001/jamainternmed.2014.6086. [Epub ahead of print]
40. Peters ME, **Lyketsos CG.** Beyond memory: a focus on the other neuropsychiatric symptoms of dementia. *Am J Geriatr Psychiatry.* 2015 Feb;23(2):115-8. doi: 10.1016/j.jagp.2014.11.002.
41. Rao V, Koliatsos V, Ahmed F, **Lyketsos C,** Kortte K. Neuropsychiatric disturbances associated with traumatic brain injury: a practical approach to evaluation and

management. *Semin Neurol.* 2015 Feb;35(1):64-82. doi: 10.1055/s-0035-1544241. Epub 2015 Feb 25.

42. Rosenberg PB, Nowrangi MA, **Lyketsos CG**. Neuropsychiatric symptoms in Alzheimer's disease: what might be associated brain circuits? *Mol Aspects Med.* 2015 Jun 3. pii: S0098-2997(15)00035-7. doi: 10.1016/j.mam.2015.05.005. [Epub ahead of print]

Case Reports

1. **Lyketsos CG**. Successful treatment of bowel obsessions with nortriptyline. *American Journal of Psychiatry,* 1992;149(4):573
2. Lee HB, Hanner JA, Yokley JL, Appleby B, Hurowitz L, **Lyketsos CG**. Clozapine for treatment-resistant agitation in dementia. *J Geriatr Psychiatry Neurol* 2007; 20(3):178-82
3. **Lyketsos CG**, Kraus M. The dementia of Gerstmann-Sträusler-Scheinker syndrome: clinical variability demonstrated by two case reports. *J Neuropsychiatry Clin Neurosciences* 1995; 7:239-242.
4. McMullen DP, Rosenberg P, Cheng J, Smith GS, **Lyketsos C**, Anderson WS. Bilateral Cortical Encephalomalacia in a Patient Implanted With Bilateral Deep Brain Stimulation for Alzheimer's Disease: Case Report. *Alzheimer Dis Assoc Disord.* 2015 Apr 3. [Epub ahead of print]

Letters, correspondence

1. Steinberg MS, **Lyketsos CG**. Pharmacological treatment of neuropsychiatric symptoms of dementia [letter]. *JAMA* 2005; 293(18): 2211-2212

Book Chapters, Monographs

1. Lyketsos GC and **Lyketsos CG**. Evolution des attitudes sociales a l'egard des maladies mentales. In: Chanoit PF and de Verbizier J (editors). *Recherches en Psychiatrie Sociale.* Paris:Eres, 1986
2. Lyketsos GC and **Lyketsos CG**. Personality characteristics in psychosomatic illness. In: Christodoulou GN (editor). *Psychosomatic Medicine: Past and Future.* New York:Plenum Press, 1986
3. Lyketsos GC and **Lyketsos CG**. Psychiatric Assessment and Phenomenology (in Greek). In: Arapakis G. *Textbook of Medical Phenomenology.* Athens:Athens University Press, 1991
4. Treisman GJ, Fishman M, **Lyketsos CG**, McHugh PR. Evaluation and treatment of psychiatric disorders associated with HIV infection. In Price RW, Perry SW (eds) *HIV, AIDS and the Brain,* ARNMD Volume 72, New York: Raven press, 1993, pp. 239-250.
5. **Lyketsos CG**, Fishman M, Treisman GJ. Patients with HIV infection (Chapter 29, pp. 404-418). In *Modern Community Psychiatry,* WR Breakey, Editor, New York: Oxford Press, 1996
6. Kraus MF, **Lyketsos CG**. Neuropsychiatric assessment after brain injury. In *Physical Medicine and Rehabilitation Secrets (BA O'Young, MA Young, and S Stiens, Editors),* Hanley and Belfus: Philadelphia, 1996 pp.111-116.

7. Treisman GJ, Fishman M, **Lyketsos CG**. Mental Health. in Medical Management of HIV Infection (Bartlett, J, Ed), Chicago: Physicians and Scientists Publishing Co., 1996, pp. 195-206. Second Edition, Port City Press: Baltimore, 1997, pp.205-215
8. **Lyketsos CG** and Lyketsos GC. Psychiatric Assessment and Phenomenology (in Greek). In: Arapakis G. Textbook of Medical Phenomenology. Athens:Athens University Press, 3rd Edition 1997
9. Fishman M, **Lyketsos CG**, Schwartz J, Treisman G. Psychiatric disorders in HIV infection. In The Neurology of AIDS. Gendelman, Lipton, Epstein, Swindels (Eds.). Chapman and Hall: New York, 1998
10. **Lyketsos CG**, Steele C, Steinberg M. Behavioral Disturbances in Dementia. Reichel's Care of the Elderly: Clinical Aspects of Aging, Fifth Edition, Gallo JJ, Busby-Whitehead J, Rabins PV, Silliman R, Murphy J (Eds.), Baltimore,Williams & Wilkins, 1999, pp. 214-228
11. **Lyketsos CG**. Desired Characteristics of Instruments to Measure Physical Capacity to Work— Discussion, Wunderlich G (ed), Measuring Functional Capacity to Work: Summary of a Workshop. Institute of Medicine, Washington DC: 1999, pp. 52-55
12. Treisman GJ, Fishman M, Schwartz J, **Lyketsos CG**. Treatment of psychiatric disorders in patients infected with HIV. Psychiatric Treatment of the Medically Ill, Robinson RG and Yates WR (Eds), Marcel and Dekker, 1999
13. **Lyketsos CG**. Aggression. Textbook of Geriatric Neuropsychiatry (Coffey and Cummings, Editors). American Psychiatric Press Inc.: Washington 2000, pp. 477-488
14. Rovner B, Katz I, **Lyketsos CG**. Neuropsychiatry in the Nursing Home. Textbook of Geriatric Neuropsychiatry (Coffey and Cummings, Editors). American Psychiatric Press Inc.: Washington 2000, pp. 891-903
15. **Lyketsos CG**, Steinberg M. Behavioral measures for cognitive disorders. Handbook of Psychiatric Measures. American Psychiatric Association: Washington 2000, pp.393-416
16. Taragano F, **Lyketsos C**. Trastornos de la conducta en la demencia. En Tratado de Neurología Clínica, Federico Michelli et al. Editorial Médica Panamericana, Buenos Aires, 2002. ISBN 950-06-1568-1, pág:753-762 www.medicapanamericana.com .
17. Onyike CU, **Lyketsos CG**. Aggression and violence. Textbook of Psychosomatic Medicine (Levenson et al, Editors). American Psychiatric Press Inc, Washington DC, 2004, pp. 171-191
18. Treisman GJ, Angelino AF, Hutton HE, Hsu J, **Lyketsos CG**. Neuropsychiatric aspects of HIV infection and AIDS. Comprehensive Textbook of Psychiatry 8th Edition, (Sadock and Sadock, Editors), Lippincott, Williams, and Wilkins, Philadelphia 2004, pp. 426-451

19. Leroi I, **Lyketsos CG**. Neuropsychiatric aspects of dementia. *Dementia* (Edited by Burns, O'Brien, and Ames) Cambridge Press, Cambridge 2005, Chapter 6, pp. 55-63
20. Rosenberg P, **Lyketsos CG**. Depression in Alzheimer's disease. *The Physician's Guide to Depression and Bipolar Disorders* (Edited by Evans, Charney, Lewis) McGraw Hill, Chapter 12, pp. 303-332
21. Rosenberg P, **Lyketsos CG**. Depression in Alzheimer's disease. *Depression and Brain Dysfunction* (Edited by Gilliam, Kanner, Sheline) Taylor and Francis, Chapter 10, pp. 239-262
22. Galik E, Rabins PV, **Lyketsos CG**. Dementia. *Psychosomatic Medicine* (Edited by Blumenfield and Strain) Lippincott, Williams and Wilkins, Chapter 29, pp. 513-535
23. Ferrando SJ, **Lyketsos CG**. Psychiatric Co-morbidities in Medically Ill Patients with HIV/AIDS. *Psychiatric Aspects of HIV/AIDS* (Edited by Fernandez and Ruiz), Lippincott, Williams and Wilkins, Chapter 19, pp. 198-211
24. Steinberg MS, **Lyketsos CG**. Psychiatric disorders in people with dementia. *Textbook of Alzheimer's Disease and Other Dementias* (Edited by Weiner and Lipton), APPI, 2009, Chapter 15, pp. 263-281
25. **Lyketsos CG**. Dementia and Milder Cognitive Syndromes. *Textbook of Geriatric Psychiatry* (Edited by Blazer and Steffens), APPI, 2009, Chapter 13, pp. 243-260
26. Leroi I, **Lyketsos CG**. Neuropsychiatric aspects of dementia. *Dementia* (Edited by Ames, Burns, and O'Brien) Hodder Arnold, London 2010, Chapter 8, pp. 70-74
27. Salami O, **Lyketsos CG**. Clinical features of Alzheimer's disease: cognitive and non-cognitive. *Principles and Practice of Geriatric Psychiatry 3rd Edition* (Edited by Abou Saleh, Katona, Kumar), Wiley-Blackwell, 2011, Chapter 41, pp. 226-231
28. Oh E, **Lyketsos CG**, Wong P. Mouse models of Alzheimer's disease. *Principles and Practice of Geriatric Psychiatry 3rd Edition* (Edited by Abou Saleh, Katona, Kumar), Wiley-Blackwell, 2011, Chapter 44, pp. 252-256
29. Steinberg M, **Lyketsos CG**. Pharmacologic therapies in Alzheimer's disease. *Principles and Practice of Geriatric Psychiatry 3rd Edition* (Edited by Abou Saleh, Katona, Kumar), Wiley-Blackwell, 2011, Chapter 52, pp. 304-311
30. Oishi K, Mielke MM, Albert M, **Lyketsos CG**, Mori S. DTI analyses and clinical applications in Alzheimer's Disease. *Handbook of Alzheimer's Disease* (Editors: M. Smith, G. Perry, J. W. Ashford, A. Rosen, M. Adamson, O. Sabri, S. Black, G. B. Frisoni, C. R. Jack and M. W. Weiner), Series: Imaging the Alzheimer's Disease Brain, Volume 2, Chapter 7, 2011.
31. Marano C, Rabins PV, **Lyketsos CG**. Neurocognitive disorder due to Alzheimer's disease. *Gabbard's Treatments of Psychiatric Disorders*, APPI Press, 2014, Chapter 64, pp. 957-966

Books, Textbooks, Journal Special Issues

1. **Lyketsos CG** (Guest Editor). The Psychiatry of HIV Infection. International Review of Psychiatry Volume 8 (2/3) 1996
2. Rabins PV, **Lyketsos CG**, Steele C. Practical Dementia Care, Oxford University Press Inc.: New York, 1999. Second edition, 2006.
3. **Lyketsos CG** (Guest Editor). Neuropsychiatry. Psychosomatics (special issue), American Psychiatric Press, Inc., January-February 2000
4. Levenson J, **Lyketsos CG**, Trzepacz PT (Editors). Psychiatry in the Medically Ill. Psychiatric Clinics of North America, Saunders, Philadelphia, March 2002, Volume 25:1
5. Panel to Review Risk and Prevalence of Elder Abuse and Neglect (Bonnie R, **Lyketsos CG** et al). Elder Mistreatment: Abuse, Neglect, and Exploitation in an Aging America. The National Academies Press: Washington DC, January 2003
6. Rao V, and **Lyketsos CG** (Guest Editors). Neuropsychiatric Aspects of Traumatic Brain Injury. International Review of Psychiatry Volume 15 (4) 2003
7. Levenson JL (Editor), (**Lyketsos CG**: Editorial Board). Textbook of Psychosomatic Medicine. American Psychiatric Press Inc, Washington DC, 2004
8. **Lyketsos CG**, Rabins PV, Lipsey J, Slavney PR (Editors). Psychiatric aspects of neurological diseases. Oxford University Press, New York, 2008
9. Ballenger JF, Whitehouse PJ, **Lyketsos CG**, Rabins PV, Karlawish JHT. Treating dementia: do we have a pill for it? Johns Hopkins University Press, Baltimore, 2009
10. Chisolm MC, **Lyketsos CG**. Systematic Psychiatric Evaluation. Johns Hopkins University Press, Baltimore, 2012
11. De Waal H, **Lyketsos C**, Ames D, O'Brien J. Designing and Delivering Dementia Services. Wiley Blackwell, London, 2013

Other media (films, videos, CD-ROMS, slide sets, etc)

1. Steele CD, Brandt J, Baker A, Vozella S, Hovanec L, **Lyketsos CG**. The Copper Ridge Institute Dementia Care Certification Course (electronic media). Lippincott Williams and Wilkins Press, Philadelphia, 2004

Teaching

Classroom Instruction

Johns Hopkins School of Medicine,

First and Second Year Psychiatry Instructor and Tutor, 1995-04

First Year Epidemiology Tutor, School of Medicine, 1994-7

First Year Neuroscience Tutor, School of Medicine, 1994-6

Bloomberg School of Public Health

Introduction to Mental Hygiene, 1996

Neuropsychiatry Conference (weekly), Course Director, 1994-99

Psychiatry Residency, Weekly Journal Club Faculty Advisor and Discussion Leader, 1997-2011

Clinical Investigation in Psychiatry: The ABCs for Residents, Fellows, and Junior Faculty (26 hours), 2000-6

Clinical Instruction

Psychiatry Clerkship Lecturer and Preceptor, 1994-06

Second Year Clinical Skills Tutor, 1994-7

Psychiatric Emergency Conference, 1991-2

HIV Neuropsychiatry Conference, Course Director, 1990-4

CME Instruction

Program Chair, 2002-2003: 50th Anniversary Meeting of the Academy of Psychosomatic Medicine: Celebrating the New Medical Subspecialty of Psychosomatic Medicine. San Diego, California, November 19th to 23rd, 2003 (International Conference, 381 attendees)

Johns Hopkins CME Instruction

Course Director, April 12, 2014	20 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (124 attendees)
Course Director, April 13, 2013	19 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (97 attendees)
Course Director, March 31, 2012	18 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (165 attendees)
Course Director, April 2, 2011	17 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (174 attendees)
Course Director, April 12 th , 2010	16 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (215 attendees)
Course Director, April 4 th , 2009	15 th Annual Update on Alzheimer's Disease and Other Dementias:	Regional Conference (182 attendees)
Course Director, April 12 th , 2008	14 th Annual Update on Alzheimer's Disease and Other Dementias:	Regional Conference (228 attendees)
Course Director, March 24 th , 2007	13 th Annual Update on Alzheimer's Disease and Other Dementias:	Regional Conference (275 attendees)
Course Director, March 25 th , 2006	12 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (267 attendees)
Course Director, March 26 th , 2005	11 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (246 attendees)

Course Director, March 19-20 th , 2004	10 th Annual Update on Alzheimer's Disease and Other Dementias ²	National Conference (185 attendees)
Course Director, March 22 nd , 2003	9 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (240 attendees)
Course Director, April 6 th , 2002	8 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (228 attendees)
Course Director, April 21 st , 2001	7 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (105 attendees)
Course Director, April 15 ^h , 2000	6 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (208 attendees)
Course Director, April 24 th , 1999	5 th Annual Update on Alzheimer's Disease and Other Dementias	Regional Conference (235 attendees)
Course Director, October 2-3 RD , 1998	Psychopharmacologic Treatments for mood disorders, dementia, and Alzheimer	Regional Conference (95 attendees)
Course Director, April 4th, 1998	Update on Alzheimer's Disease and Other Dementias	Regional Conference (228 attendees)
Course Director, October 20th, 1997	Care of the Aging Adult with Mental Retardation	Regional Conference (210 attendees)
Course Director, October 6-10, 1997	Basic Dementia Care (5-day Course)	Athens, Greece (100 attendees from Greece)
Course Director, April 12th, 1997	Update on Alzheimer's Disease and Other Dementias	Regional Conference (198 attendees)
Course Director, April 27th, 1996	The Practical Management of Alzheimer's Disease and Other Dementias	Regional Conference (210 attendees)
Course Director, April 1st, 1995	Update on Alzheimer's Disease and Other Dementias	Regional Conference (265 attendees)

Mentoring: Current mentees in primary or other central role

Christopher Marano, MD, Assistant Professor of Psychiatry at Johns Hopkins
K-23 Recipient (Sponsor: Lyketsos)

Matthew Peters, MD, Neuropsychiatry Fellow at Johns Hopkins
Formerly Goldman Family Summer Scholar 2008
Formerly Medical Student, Resident, and Chief resident in Psychiatry at Johns Hopkins

Milap Nowrangi, MD, Assistant Professor of Psychiatry at Johns Hopkins
Formerly postdoctoral Fellow in Neuropsychiatry at Johns Hopkins

Esther Oh, MD, Assistant Professor of Medicine at Johns Hopkins (Geriatric Medicine)
KL2 and then K23 Recipient (Sponsor: Lyketsos)

² Covered on front page of the New York Times

Paul Rosenberg, MD, Associate Professor of Psychiatry at Johns Hopkins
Paul B. Beeson Career Development Award in Aging (K23) recipient (Sponsor: Lyketsos)

Vani Rao, MBBS, Associate Professor of Psychiatry at Johns Hopkins
Previously K-23 Recipient (Sponsor: Lyketsos); Former Neuropsychiatry Fellow

Martin Steinberg, MD, Assistant Professor of Psychiatry at Johns Hopkins
Former Dementia Research Fellow

Quincy Miles-Samues, PhD, Associate Professor of Psychiatry at Johns Hopkins
Formerly K02 recipient (Sponsor: Rabins, Co-sponsor: Lyketsos)

Antonios Politis, MD, Assistant Professor in Psychiatry at Johns Hopkins (Part Time)
Assistant Professor of Psychiatry at the University of Athens, Greece

Mentoring: former junior faculty mentees, fellows, and pre-doctoral students in primary role

Sarah Tighe, MD, Assistant Professor of Psychiatry, Carver School of Medicine, Univ. of Iowa
Former Postdoctoral Fellow in Neuropsychiatry at Johns Hopkins
Formerly Medical Student Advisor, Resident Advisor, AFAR Summer Scholar 2004

Hochang (Ben) Lee, MD, Associate Professor of Psychiatry, Yale University
Formerly Assistant and then Associate Professor of Psychiatry at Johns Hopkins
Formerly K-23 Recipient (Sponsor: Lyketsos)
Former Fellow in Neuropsychiatry and Psychiatric Epidemiology

Michelle Mielke, MA, PhD, Associate Professor of Epidemiology, Mayo Medical School
Formerly Assistant Professor, Post-doctoral fellow, Dissertation Committee at Johns Hopkins

Oludamilola (Dami) Salami, MBBS, Director Neuropsychiatry, Medical College of Wisconsin
Formerly Postdoctoral Fellow in Geriatric Psychiatry/Neuropsychiatry

Cynthia Fields, MD, Attending Psychiatrist, Good Samaritan
Formerly Postdoctoral Fellow in Geriatric Psychiatry/Neuropsychiatry

Adam Rosenblatt, MD, Professor of Psychiatry, Virginia Commonwealth University
Formerly, Assistant and then Associate Professor of Psychiatry at Johns Hopkins

Adam Kaplin, MD, PhD, Assistant Professor of Psychiatry at Johns Hopkins
Formerly K-23 recipient (Sponsor: Rabins; Co-sponsor: Lyketsos)

Sherita Golden, MD, Professor of Medicine at Johns Hopkins
Formerly K-23 Recipient (Sponsor: Brancatti; Co-sponsor: Lyketsos)

Chiadikaobi Onyike, MD, Assistant Professor of Psychiatry at Johns Hopkins
Former Neuropsychiatry and Psychiatric Epidemiology Fellow

Elizabeth Galik, RN, MS, CRNP, PhD, Associate Professor of Nursing, University of Maryland
Formerly Hartford Foundation Scholar in Nursing (one of 10 nationally)

Ariel Green, BA, MA, MD, Instructor of Geriatric Medicine at Johns Hopkins
Formerly Capstone Fellow, Johns Hopkins Bloomberg School of Public Health

Kathleen Hayden, MA, PhD, Associate Professor, Wake Forest University
Formerly Doctoral Student in Mental Hygiene, Dissertation Committee

Ara Khatchaturian, BA, PhD, Managing Editor, Alzheimer's and Dementia
Formerly Doctoral Student in Mental Hygiene, Dissertation Committee and advisor

Laura Podewils, MSc, PhD, Assistant Professor of Epidemiology, University of Arizona
Formerly Doctoral Student in Epidemiology, Dissertation Committee Chair, advisor

William Groves, MD (deceased)
Formerly Dementia Research Fellow (T32)

Iracema Leroi, MBBS, Clinical Senior Lecturer in Old Age Psychiatry, University of Manchester, UK
Formerly Neuropsychiatry Fellow and then Assistant Professor of Psychiatry at Johns Hopkins
2001 Research Award Recipient by ANPA

Heidi Hutton, PhD, Associate Professor of Psychiatry, Johns Hopkins University
Research Study: "HIV Risk Behaviors in Women Prisoners," 1995-8

Joyce West, MPP, PhD, Staff Scientist, American Psychiatric Association
Dissertation Committee as Doctoral Candidate in the Johns Hopkins School of Public Health

Susan Patania, RN, MSW
Chair Dissertation Committee as Doctoral Candidate in the Johns Hopkins School of Public Health

Jennifer Payne, MD, Assistant Professor of Psychiatry Johns Hopkins
Chief Resident and Resident in Psychiatry and Johns Hopkins
Senior Medical Student at Washington University (Elective in Neuropsychiatry)

Other students/trainees

Mark Bickett, MD, AFAR Summer Scholar 2007 Johns Hopkins second year medical student	Theresa Salvador, MD, Visiting Scientist, 1998 Academic Psychiatrist from Pamplona Spain
Melissa Morgan, MD, Goldman Scholar 2005 Johns Hopkins rising second year medical student	E. Scott Kopetz, MD, AFAR Summer Scholar, 1998 Second Year Medical Student at JHU
Edmond Nelson, DO, AFAR Scholar, 2005 1 st Year South Alabama Osteopathic Student	Diane Klein, MD, Elective, 1998 Medical Student/Psychiatry Resident at JHU
Donovan Maust, MD, Goldman Scholar, 2004 Johns Hopkins \ second year medical student	Angela Kim, MD, Elective, 2000 Senior Resident in Psychiatry at JHH
Daniel Burdick, MD, AFAR Scholar, 2003 Johns Hopkins second year medical student	William Belfar, MD, Elective, 1997 Senior Resident in Psychiatry at JHH
Lourdes Del Campo, MD, Elective, 2001 Senior Resident in Psychiatry, Pamplona, Spain	Gregory Creager, MD, Elective, 1997 Senior Resident in Psychiatry
Pamella Rollings, MD, Elective, 2000 PGY-V Resident University of New Foundland Greece	Alexandra Soldatou, MB, BCh, Clerkship, 1997 Medical Student at the University of Athens
Eric Kagaruki, DO, AFAR Summer Scholar, 2000 1 st Year Student Ohio Osteopathic Medicine 1996-7	Susan Hobbs, MD, APA Minority Research, 1996-7 Senior Resident in Psychiatry
Argyro Voulgari, Dr. Md. Sci., 1999, Visiting Scientist Greek Center for Mental Health	Peter Steinmetz, MD, PhD, Elective, 1996 Senior Medical Student at JHU
Robert McLay, PhD, 1999 Senior Medical Student at Tulane University (Ch)	Tom Brashers-Krug, PhD, MD, Elective, 1995 Senior Medical Student from Loyola University
Medhat Bassiony, MBBS, Humphrey, 1998-9 Associate Professor at the Zagazig University, Egypt	Michael Hooten, MD, Elective, 1994-5 Resident in Psychiatry at JHH
Mark Broadhurst, Clerkship, 1995 Medical Student at University of Manchester	Argye Hillis, MD, Elective, AFAR Scholar, 1994 Senior Medical Student at JHU (now Professor of Neurology at Johns Hopkins)

NIH Training Grants Core Faculty

Age Related Neuropsychiatric Disorders (PI: Marilyn Albert, PhD; Co-PI: Lyketsos)
Psychiatric Epidemiology Training Grant (PI: Peter Zandi, PhD)

CLINICAL ACTIVITIES

Certification

National Board of Medical Examiners: Diplomate, 1989 (#352931)

State of Maryland: Physician and Surgeon, 1989 (#D38790); Psychiatrist, 1992

American Board of Psychiatry and Neurology:

Board Certified in Psychiatry, 1994 (Certificate #38903)

Additional Qualification in Geriatric Psychiatry, 1995-2004 (Certificate #1474)

Additional Qualification in Psychosomatic Medicine, 2005-2015 (Certificate #16)

Service Responsibilities

Chair, Department of Psychiatry, Johns Hopkins Bayview

Oversee the clinical, research and teaching activities of a hospital based academic department of psychiatry with internationally known academic programs in dementia, geriatric psychiatry, medical psychology, neuropsychiatry, chronic mental illness, and addictions (including addictions in pregnancy), c.60 full time faculty, 20 inpatient psychiatry beds, 28 chronic hospital beds (collaboration with geriatric medicine), 12 domiciliary beds, partial hospitalization, outreach, and over 210,000 outpatient visits per year. In FY 2015 Bayview Psychiatry was home to \$20+ M (\$17+ NIH) in research grants and a clinical operations budget of \$54+M.

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments at Johns Hopkins

Faculty Compensation Committee, Johns Hopkins School of Medicine, 2015-

Search Committee for Chair of Physical Medicine and Rehabilitation, 2015

Member, Advisory Board of the Medical Faculty, Johns Hopkins School of Medicine, 2013-

Chair and *ex officio* Trustee (elected), Medical Board, Johns Hopkins Bayview Medical Center, 2013-

Board of Governors (elected), Clinical Practice Association, 2009-2012

Search Committee for Chair of Geriatric Medicine, 2008-09

Search Committee for Chair of Neurology, 2006-07

Executive Committee, Department of Psychiatry and Behavioral Sciences, 2006-

Appointment/Promotions Committee, Department of Psychiatry and Behavioral Sciences, 2006-

E-Commerce Workgroup, 1999

Geriatrics Network Steering Committee, 1999-2002

Co-Chair, Meyer 5 Performance Improvement Team, Department of Psychiatry, 1998

The Paul R. McHugh Chair Committee, Department of Psychiatry, 1997-8

Member/CoChair, Joint Committee on Clinical Investigation/ IRB 3, 1996-2004

Physician Leader, Critical Path for Dementia, Department of Psychiatry, 1996 and 2000

Faculty Advisor, Hubert H. Humphrey Fellowship Program, 1996-1999

Member, Development Committee Department of Psychiatry, 1996-2001

Faculty, SCAN Training Center, WHO/Johns Hopkins Collaborative Center 1994-1999

Member, Protocol Review Sub-Committee, Outpatient General Clinical Research Center 1994-9

Editorial Activities

Editorial Advisory Board, Alzheimer's and Dementia: Journal of the Alzheimer's Association, 2014-

Associate Editor, American Journal of Psychiatry, 2013-2017

Deputy Editor, International Psychogeriatrics, 2011-

Associate Editor, Principles & Practice Geriatric Psychiatry 3rd Edition (Editors: Abu Saleh, Katona, Kumar)

Contributing Editor for *Section 2: Psychosomatic Medicine*, Comprehensive Textbook of Psychiatry 9th Edition (Editors: Kaplan, Sadock, Ruiz)

Joint Editor-in-Chief, International Review of Psychiatry, 2004-

Editorial Board, European Journal of Psychiatry, 2004-

Editorial Board, Alzheimer's Disease and Related Disorders, 2004-

Editorial Committee, Cuadernos de Medicina Psicosomática y Psiquitría de Enlace, 2000- (Quarterly of Psychosomatic Medicine and Liaison Psychiatry, published in Spain)

Editorial Board, Associate Editor for Reviews, Psychosomatics, 1999-

Reviewer (over the years)

Academic Psychiatry
AIDS Care

Alzheimer Disease and
Associated Disorders

American Journal of
Epidemiology

American Journal of
Geriatric Psychiatry
American Journal of
Psychiatry
Archives of General
Psychiatry
Archives of Internal
Medicine
Archives of Neurology
Biological Psychiatry
Bulletin of the World Health
Organization
Clinical Drug Investigation
International Journal of
Epidemiology
International Journal of
Geriatric Psychiatry
International Journal of
Methods in Psychiatric
Research
International Journal of
Psychiatry in Medicine
International
Psychogeriatrics
JAMA
Journal of General Internal
Medicine
Journal of Geriatric
Psychiatry and Neurology
Journal of Neuropsychiatry
and Clinical Neuroscience
Journal of Psychiatric
Research
Journal of the American
Geriatrics Society
Journal of the International
Neuropsychological
Society
Lancet
Lancet Neurology
Molecular Psychiatry
Neurology
Neuropsychopharmacology
Psychiatry Research
Psychosomatic Medicine
Psychosomatics

Schizophrenia Bulletin
Social Psychiatry and
Psychiatric Epidemiology

Professional Societies

International Society to Advance Alzheimer's Research and Treatment
Chair, Neuropsychiatric Syndromes Professional Interest Area, 2011-

International Psychogeriatric Association
Trustee (elected), 2012-2015

American College of Psychiatrists
Member, 2005-

American Board of Psychiatry and Neurology
Exam Writing Group for "Psychosomatic Medicine" 2003-9

American College of Neuropsychopharmacology (ACNP)
Fellow, 2012
Chair, Education Committee, 2009-11
Vice-Chair, Education Committee, 2006-2009
Member, 2003

American Association for Geriatric Psychiatry
Board of Directors, 2009-2012
Education Committee Member, 2004-6
Steering Committee for the Fall Clinician Institute, 2001-2

Hellenic American Psychiatric Association
President-Elect, 1999-02
President, 2002-04

American Psychiatric Association
Vice Chair, Council on Psychosomatic Medicine, 2006-07
Member, Council on Psychosomatic Medicine, 2004-07
Chair, Corresponding Committee on Research in Psychosomatic Medicine, 2004-07
Chair, Committee on Consultation-Liaison Psychiatry, 2002-05
Assembly Executive Committee, 1999-2001
Member, Committee on Consultation-Liaison Psychiatry, 1999-2002
Assembly Liaison, Council on Quality Improvement, 1999-2000
Assembly Representative (Member in Training), 1992-4
Steering Committee on Practice Guidelines, 1992-4
APA Research Network Liaison for Maryland, 1994-6
Chair, Assembly Committee of Allied Psychiatric Organization Liaisons, 1996-01
Member, Work Group on Governance, 1998
Member, Committee on Consultation-Liaison Psychiatry, 1999-2002

Academy of Psychosomatic Medicine

Past-President, 2008-2010
President, 2007-8
President Elect, 2006-7
Vice President, 2005-6
Secretary, 2003-05
Executive Council, 2000-10
Chair, Search Committee for the Editor of Psychosomatics, 2006
Chair, Subspecialty Task Force for "Psychosomatic Medicine", 1999-03
Membership Committee Chair, 1998-2000
Constitutional Committee, Member 1993-5, Chair 1995-6
Representative to American Psychiatric Association, 1994-2003

Maryland Psychiatric Society

Member, CME Committee 1992-4
Chairperson, Committee on Residents/Fellows, 1992-3
Member, Committee on Residents/Fellows, 1991-3
Member, Committee on Public Psychiatry, 1989-92

Advisory Committees and Review Groups

Reviewer, Wellcome Trust Grants Program, 2013

College of CSR Reviewers, Center for Scientific Review, National Institutes of Health, 2010-2012

Chair, Organizing Committee, Alzheimer's Association Research Roundtable: *Neuropsychiatric Symptoms in Alzheimer's Disease*, April 29-30, 2010, Washington DC

Scientific Board, 12th Annual Meeting of the European Association for Consultation Liaison Psychiatry and Psychosomatics (EACLPP), Noordwijkerhout, Holland, June 25-29, 2009

Advisor, Novartis RIV Patch meeting: Protocol Development, Washington DC, March 8th, 2008

Advisor, Management of Behavioral Symptoms in Alzheimer's Disease: Roundtable Meeting, Lundbeck-Merz-Forest, Hong Kong, February 27, 2008

Advisor, Global Neuroscience Steering Committee, Wyeth Research, Philadelphia, PA, October 29-30, 2007

Advisor, International Psychogeriatric Association Consensus Conference: "Defining and measuring treatment benefits in dementia," Canterbury, England, October 31-November 1, 2006

Advisor, National Institute on Aging "Conference of Alzheimer's Disease: Setting the Research Agenda a Century After Auguste D," Bethesda, Maryland, October 26-27, 2006

Member, National Institutes of Health, Center for Scientific Review, Neurological, Aging, and Musculoskeletal Epidemiology Study Section (NAME), 2005-2009

Advisor, National Institutes of Health, National Institute on Aging: "Leadership Summit on Alzheimer's disease research in the next decade," Bethesda, Maryland, December 1st, 2005

Member, Data Safety and Monitoring Board, "Geriatric Depression: Getting Better, Getting Well" (R01-MH 37869-22; C.F. Reynolds PI), 2005-2008

National Institutes of Health, Center for Scientific Review, Special Emphasis Panel (ZAG1 SRC[99]), July 8, 2005

American Association for Geriatric Psychiatry, Task Force Chair, Development of Position Statement on the "Standard of Care in the Treatment of Dementia," 2005

American Geriatrics Society, Panel to the review the implementation of Dementia Care Guidelines, Member, 2005

Medical Research Council of Great Britain, Ad Hoc Reviewer, 2004

National Institutes of Health, Center for Scientific Review, Special Emphasis Panel (ZRG1 SSS-S[11]), July 21, 2004

National Institute of Mental Health, Intervention Studies Review Panel (ITV), October 13-14, 2004

International Scientific Committee, 5th International Congress of Neuropsychiatry Joint with 1st Mediterranean Regional Congress of the World Federation of Societies for Biological Psychiatry, Athens, Greece, 14-18 October, 2004

Chair, Data Safety and Monitoring Board, "Treatment of Depression Associated with Parkinson's Disease with S-Adenosyl-Methionine" (NccAM-R01 At00941, PI: Di Rocco), 2003-2005

Speaker and participant, "Perspectives on Depression and Mild Cognitive Impairment," National Institute of Mental Health, Aging Research Consortium, Bethesda, Maryland, November 2-3, 2003

National Institute of Mental Health, Intervention Studies Review Panel (ITV), October 14-15, 2003

National Institutes of Health, Center for Scientific Review, Special Emphasis Panel (ZRG1 SSS-S[11]), July 7-8, 2003

National Institute on Mental Health, Special Emphasis Review Panel (ZMH1 NRB-G[12]), February 21, 2003

National DBSA Panel on Depression in Co-Morbid Medical Illness, November 12-13, 2002
Washington, DC

Chair, National Institute of Mental Health, Special Emphasis Review Panel (ZMH1 NRB-Q (CA)),
Bethesda, Maryland, August 16th, 2002

Co-Chair and Speaker, "Advancing mood disorders research in late life", National Institute of
Mental Health, Aging Research Consortium, Bethesda, Maryland, July 10-11, 2002

Participant and Speaker, "Proxy and surrogate consent in geriatric neuropsychiatric research:
advancing the debate," National Institute of Mental Health, Aging Research Consortium,
Bethesda, Maryland, July 1, 2002

National DMDA Panel on Late Life Depression, October 9-10, 2001
Washington, DC

National Institute on Aging Special Emphasis Review Panel (ZAG1 FAS-7), June 12, 2001

Panel on Risk and Prevalence of Elder Abuse and Neglect, National Research Council, The
National Academies, May 2001-April 2002

Advisory Committee, 6th Hellenic Biomedical Diaspora Congress, 1999-2000

Task Force Chair, Subspecialization Application, Academy of Psychosomatic Medicine, 1999-
2003

Bridge Day Program Committee for Alzheimer 2000 Conference, Alzheimer Association, 1999

Advisor, Workshop on Functional Capacity and Work Requirements, Committee to Review SSA's
Disability Decision Process Research, Institute of Medicine, Washington DC, June 4th, 1998

Work Group Member "Practice Guideline for Patients with HIV Infection and AIDS"
American Psychiatric Association, 1998-2000

Advisor, Social Security Administration, Employee Benefits Program, 1996

Editorial Review Panel, Educational Video Series on Alzheimer's Disease, Time-Life Medical,
Inc.1995-6

Alzheimer's Association, Central Maryland Chapter, Inc.

Board of Directors, 1995-9

Medical and Scientific Advisory Board, Member 1996-9, Chair 1999-

Committee Member, Maryland Attorney General's Research Working Group, 1995-9

Advisory Board, 3rd World Conference Hellenic Bio-Medical Diaspora, 1994

Greek Orthodox Counseling and Social Services of Baltimore, Inc.

Vice-President, 1991-1992

Board of Directors, 1989-1992

Consultantships

Consultant Orion Pharma, 2013-

Drug development in Alzheimer's disease

Consultant BMS, 2013-

Drug development in Alzheimer's disease

Consultant Avanir, 2011-

Drug development in Alzheimer's disease

Consultant Takeda/Zinfandel, 2011-12

Drug development in Alzheimer's disease

Member Mackey White TBI Committee, NFL Players Association, 2010-

Chair of Longterm Outcomes Subcommittee

Consultant, Pfizer, 2010-2011, 2012-

Drug development in Alzheimer's disease

DMSB Chair for a drug in development for Alzheimer's disease

Consultant, Elan, 2010-

Drug development in Alzheimer's disease

Consultant, 2009

Chicago Health and Aging Project (CHAP) (Denis Evans, PI)

Consultant, Eli Lilly, 2008-

Drug development in Alzheimer's disease

Consultant, Wyeth, 2007-8

Drug development in Alzheimer's disease

Consultant, Takeda, 2007

Treating sleep disorders in dementia

Advisor, Adlyfe Inc., 2007

Biomarker development in Alzheimer's disease

Advisor, Supernus, 2006
Treatment development for CNS drugs

Advisor, Glaxo Smith Kline, 2004-6
Treatment development for Alzheimer disease

Advisor, Novartis, 2004
Treatment development for Alzheimer disease

Consultant, Eisai Pharmaceuticals, 2003-4
Treatment development for Alzheimer disease

Consultant, Janssen Research Foundation, 2000
Risperidone and Galantamine Development Program

Consultant, 2000
Effects of novel HIV-antiretroviral therapies on mood
DuPont Pharmaceuticals

Consultant, 1998-9
TBIA v. Hogan Lawsuit
Connecticut Attorney General's Office

Consultant, Eli Lilly and Company, 1998
Olanzapine Development Program

Consultant, Task Force on Geriatric Psychiatry, Argentine Association of Psychiatrists (AAP),
1996

Consultant, 1995-7
Williams v. Wasserman Lawsuit
Maryland Attorney General's Office

Consultant, 1995
Vietnam Era Study 25 Year Follow-up (NIMH funded)
Washington University, St. Louis

RECOGNITION

Honors and Awards

Visiting Professor, University of Hawaii at Manoa, Honolulu, Hawaii, April 3-5, 2013

Visiting Professor, Brazilian Geropsychiatric Association, Sao Paulo, Brazil, March 23-24, 2012

Visiting Professor, Stetson University, DeLand Florida, February 22, 2012

Distinguished Scientist Award, American Association for Geriatric Psychiatry, 2012

Distinguished Physician, Hellenic Medical Society of New York, December 5, 2009

Guest Lecturer (national lecture tour), Alzheimer's Australia, September 14-24, 2009

Keynote speaker, Royal Australian and New Zealand College of Psychiatrists, Faculty of Psychiatry of Old Age, Annual Scientific Meeting, Adelaide, Australia, October 4-5 2007

Named one of America's Best Doctors in 2007, by Best Doctors, Inc

Named to "America's Top Doctors" by Castle Connolly Medical Ltd., 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015

William S. Proxmire Award "for extraordinary leadership in the fight against Alzheimer's disease," 2006

Included in "Guide to America's Top Psychiatrists" by the Consumers' Research Council of America, 2004

Member, American College of Psychiatrists, 2005

Distinguished Fellow, American Psychiatric Association, 2004

Visiting Professor, Creighton University/University of Nebraska, Omaha, Nebraska, April 21-22, 2004

Dorfman Journal Paper Award for best paper in Psychosomatics in 2003 (Borowicz L, Royall R, Grega M, Selnes O, Lyketsos CG, McKhann G. Depression and Cardiac Morbidity 5 years after Coronary Artery Bypass Surgery)

Member, American College of Neuropsychopharmacology, 2003

Research Award, Academy of Psychosomatic Medicine, 2002

Advising, Mentoring and Teaching Award, Johns Hopkins Bloomberg School of Public Health
2002

Bayer Education Fund Scholar, Wake-Forest University, Winston-Salem, May 17th-18th, 2001

Visiting Professor, The University of Iowa Medical Center, Iowa City, October 2-3, 2000

Chair, Medical and Scientific Advisory Board, Maryland Alzheimer Association, 1999-2004

Visiting Professor, National and Kapodistrian University of Athens, Academy of Psychosomatic
Medicine Visiting Professor Award, October 25-27, 1999

Fellow, Academy of Psychosomatic Medicine, 1996

Dlin/Fisher Award (Excellence in Clinical Research), Academy of Psychosomatic Medicine, 1995

William Sorum Award, American Psychiatric Association, 1993

Lilly Research Fellowship (Honorable Mention), American Psychiatric Association, 1992

Ginsburg Fellow, Group for the Advancement of Psychiatry, 1991-92

Outstanding Resident Award, National Institute of Mental Health, 1990

Washington University School of Medicine, 1988

Alpha Omega Alpha

Medical Fund Prize in Surgery

Merck Award

Northwestern University College of Arts and Sciences, 1984

Phi Beta Kappa

University Service Award

Departmental Honors in Psychology

Invited Talks and Panels

2. **Lyketsos CG**. Mood disorders in temporal lobe epilepsy (Plenary Presentation). 4th Annual
Conference of the American Neuropsychiatric Association, Washington D.C., May, 1992
3. **Lyketsos CG**, Lyketsos GC, Fishman M, Treisman GJ. Dementia and secondary mood
disorders in AIDS (Plenary Presentation). Xth Southeastern European Neuropsychiatric
Congress, Thessaloniki, Greece, September 1992.
4. **Lyketsos CG**. Depression does not affect medical outcomes in HIV infection. 5th B. Frank
Polk Symposium, Center for AIDS Research, Johns Hopkins School of Hygiene and Public
Health, Baltimore, Maryland, April, 1993

5. **Lyketsos CG**, Treisman GJ, Fishman M. The Impact of HIV Infection on Psychiatric Services. All day session at the 45th Institute on Hospital and Community Psychiatry, Baltimore, Maryland, October, 1993.
6. **Lyketsos CG**. HIV, AIDS and Mania. The AIDS Dementia Conference, Institute of Pennsylvania Hospital, Philadelphia, Pennsylvania, January 26th, 1994.
7. **Lyketsos CG**. Depression in HIV infection: recognition, assessment, and management. AIDS 94: Healthcare Professionals' Conference, Medical University of South Carolina, Charleston, South Carolina, February 4th, 1994.
8. **Lyketsos CG**. Depression in head trauma and dementia. Grand Rounds, Montebello Rehabilitation Hospital, Baltimore, Maryland, April 15th, 1994.
9. **Lyketsos CG**. Depression in HIV: recent research and future directions. Keynote address, American Society for Psychiatric Oncology and AIDS, Philadelphia, Pennsylvania, May 22nd, 1994.
10. **Lyketsos CG**. Dementia: evaluation and medication management. Conference on "Practical Interventions in Geriatric Mental Health", Baltimore, Maryland, June 10th, 1994.
11. **Lyketsos CG**. Dementia Research: on the Cutting Edge. Second Annual Alzheimer Association Conference, Western Maryland Chapter, Cumberland, Maryland, June 18th, 1994.
12. **Lyketsos CG**. Dementia: assessment and treatment. Grand Rounds, Springfield Hospital Center, Sykesville, Maryland, June 18th, 1994.
13. **Lyketsos CG**. Alzheimer's Research Update. Board of Directors, Central Maryland Chapter-Alzheimer's Association, September 27th, 1994.
14. **Lyketsos CG**. Pharmacologic management of behavioral problems in patients with Alzheimer's. Conference on "The Management of Behavioral Problems in Alzheimer's Patients", Sponsored by the Hagerstown Junior College, Hagerstown Maryland, November 11th, 1994.
15. **Lyketsos CG**. Depressive symptoms as predictors of medical outcomes in HIV infection. Invited lecture at the PsychoNeuroImmunology Research Society's Annual Meeting, Key Biscayne, Florida, November 18th, 1994.
16. **Lyketsos CG**. Depression after traumatic brain injury. Grand Rounds, Springfield Hospital Center, Sykesville, Maryland, December 16th, 1994.

17. **Lyketsos CG.** Pharmacologic treatment of Alzheimer's disease. Psychiatry Grand Rounds at The Johns Hopkins Hospital, March 20th, 1995.
18. **Lyketsos CG.** Alzheimer's Disease: Current Issues. Keynote lecture, Conference on Update on Alzheimer's Disease and Other Dementias, Baltimore, Maryland, April 1st, 1995.
19. **Lyketsos CG.** Dementia and HIV Infection. BETAK Conference on HIV and Dementia, Philadelphia, Pennsylvania, April 21st, 1995.
20. **Lyketsos CG.** When is a mental disorder due to a general medical condition? Psychiatry Grand Rounds at the University of New Mexico, Albuquerque, New Mexico, May 12th, 1995.
21. **Lyketsos CG.** The Life Chart Interview method: A standardized interview to describe the course of psychopathology in epidemiologic studies. Research methods and data analysis seminar, Psychiatric Epidemiology Training Program, the University of Pittsburgh, Pittsburgh, Pennsylvania, October 13th, 1995.
22. **Lyketsos CG.** Psychiatric disorders in old age. 9th English Memorial Lecture Series. Eastern Shore Hospital Center, Cambridge, Maryland, October 25th, 1995.
23. **Lyketsos CG.** Depression and dementia in old age. Annual Conference on the Interface of Psychiatry and Medicine. St. Joseph's Hospital Center, Baltimore, Maryland, November 4th, 1995.
24. **Lyketsos CG.** Changes in depression as AIDS develops. DLIN/FISHER Award Presentation. Annual Meeting of the Academy of Psychosomatic Medicine, Palm Springs, California, November 12th, 1995.
25. **Lyketsos CG.** Alzheimer's Disease: Current Issues. Keynote Address, Annual Caregiver Conference, Central Maryland Chapter of the Alzheimer's Association, Timonium, Maryland, November 18th, 1995.
26. **Lyketsos CG.** Psychiatric disorders in patients with substance use and HIV. Lecture at the 6th Annual Meeting of the American Academy of Psychiatrists in Alcoholism and the Addictions, Amelia Island, Florida, December 2nd, 1995.
27. **Lyketsos CG.** Depression in Alzheimer's disease. Grand Rounds at the Springfield Hospital Center, Sykesville, Maryland, February 16th, 1996.
28. **Lyketsos CG.** The treatment of depression in Alzheimer's disease. Grand Rounds at the Johns Hopkins Hospital, Baltimore, Maryland, April 22nd, 1996.
29. **Lyketsos CG.** The care of dementia outpatients. Conference on the Practical Management of Alzheimer's Disease and Other Dementias, Baltimore, Maryland, April 27th, 1996.

30. **Lyketsos CG.** New research on secondary mood disorders. Keynote Lecture: 10th Anniversary Meeting of APPAC, Athens Greece, May 13th, 1996.
31. **Lyketsos CG.** The pharmacologic treatment of the dementia patient. Lecture at "New Frontiers in the Management of Dementia", sponsored by the University of Maryland, Cumberland Maryland, June 19th, 1996.
32. **Lyketsos CG.** Depression in Alzheimer's disease. Grand Rounds, the Mogano Psychiatric Hospital, Buenos Aires, Argentina, September 5th, 1996.
33. **Lyketsos CG.** Depression in old age. Keynote Lecture: Argentine Academy of Medical Sciences, Buenos Aires, Argentina, September 6th, 1996.
34. **Lyketsos CG.** Alzheimer's disease: Assessment and treatment. Grand Rounds, Harford Memorial Hospital, Havre-de-Grace, Maryland, October 1st, 1996.
35. **Lyketsos CG.** Neuropsychiatry: Concepts and principles. Grand Rounds, Union Memorial Hospital Department of Psychiatry, Baltimore, Maryland, November 26th, 1996.
36. **Lyketsos CG.** Alzheimer's disease: Current Issues in Diagnosis and Treatment. Continuing Education Series Lecture, Maryland Association of Nurse Practitioners, Baltimore, Maryland, February 12th, 1997.
37. **Lyketsos CG.** Alzheimer's disease: Current Issues in Diagnosis and Treatment. Grand Rounds, Mercy Hospital Department of Internal Medicine, Baltimore, Maryland, March 12th, 1997
38. **Lyketsos CG.** The Prion Dementias. Grand Rounds, The Johns Hopkins Hospital Department of Psychiatry, Baltimore, Maryland, March 17th, 1997
39. **Lyketsos CG.** Alzheimer's disease: Current Issues in Diagnosis and Treatment. Grand Rounds, Springfield Hospital Center, Sykesville, Maryland, March 21st, 1997
40. **Lyketsos CG.** Alzheimer's disease: Current Issues in Diagnosis and Treatment. Grand Rounds, Nazareth Hospital, Philadelphia, Pennsylvania, March 26th, 1997
41. **Lyketsos CG.** Current Issues in Geriatric Care: Alzheimer's Disease and Depression. Continuing Education Series Lecture, Maryland Association of Consultant Pharmacists, Baltimore, Maryland, April 17th, 1997.
42. **Lyketsos CG.** Cognitive and behavioral problems in the developmentally disabled. Conference on New Pharmacological Options and Treatment Strategies for the Care of the Developmentally Disabled, Miami, Florida, June 1st, 1997

43. **Lyketsos CG.** Depression in Alzheimer's disease, Biennial Meeting of the Johns Hopkins Medical and Surgical Association, Baltimore, Maryland, June 6th, 1997
44. **Lyketsos CG.** What's new in Alzheimer's disease? Grand Rounds at Church Home and Hospital, Baltimore, Maryland, June 12th, 1997
45. **Lyketsos CG.** Current Issues in Alzheimer's Disease, NIA/RAND Summer Institute, Santa Monica, California, July 13th, 1997
46. **Lyketsos CG.** Aggression in Dementia, Annual Update in Neuroscience, Virginia Beach, Virginia, July 17th, 1997
47. **Lyketsos CG.** Depression in Alzheimer's disease, Weekly Conference on "Clinical, Social, and Scientific Foundations of Geriatric Medicine" sponsored by NIA/Johns Hopkins Division on Gerontology, Baltimore, Maryland, July 29th, 1997
48. **Lyketsos CG.** The Evaluation and Treatment of Psychiatric Disorders in Long Term Care Residents, Southeast Medicaid Commissioners Annual Pharmacy Meeting, Orange Beach, Alabama, August 2nd, 1997.
49. **Lyketsos CG.** Alzheimer's disease. Grand Rounds, Hannover Hospital, Hannover Pennsylvania, October 24th, 1997
50. **Lyketsos CG.** Dementia. Conference entitled: "Geriatric Psychiatry Update: New Knowledge, New Roles", Johns Hopkins Bayview Medical Center, March 27th, 1998
51. **Lyketsos CG.** Dementia Care at Copper Ridge. Psychiatry Grand Rounds at the Johns Hopkins Hospital, Baltimore, Maryland, March 30th, 1998
52. **Lyketsos CG.** New Medications for Alzheimer's disease: when and how to use them. Annual Update on Dementia and Alzheimer's Disease (Johns Hopkins University Conference), Baltimore, Maryland, April 4th, 1998
53. **Lyketsos CG.** New Options in Bipolar Disorders. Meeting on New Frontiers in Social Phobia and Bipolar Disorders, CME Inc., San Francisco, California, August 8th, 1998
54. **Lyketsos CG.** New Options in Bipolar Disorders. Meeting on New Frontiers in Social Phobia and Bipolar Disorders, CME Inc., San Diego, California, October 10th, 1998
55. **Lyketsos CG.** New Options in Bipolar Disorders. Meeting on New Frontiers in Social Phobia and Bipolar Disorders, CME Inc., Charlotte, N. Carolina, October 11th, 1998
56. **Lyketsos CG.** Depression in Alzheimer disease. Joint Psychiatry and Neurology Conference, University of Bern, Bern Switzerland, October 29th, 1998.

57. **Lyketsos CG.** Current Issues in Dementia and Alzheimer disease. Annual Meeting, Department of Psychiatry, Innova/Fairfax Hospital, November 11th, 1998
58. **Lyketsos CG (Program Director).** Detecting, evaluating, and managing memory impairment in primary care: The Primary Care Initiative, Copper Ridge Institute, Ellicott City, Maryland, November 17th, 1998
59. **Lyketsos CG.** Medication treatments in Alzheimer disease. Continuing Education Conference: "Forget Me Not: Caring for Patients with Dementia". Perry Point Veterans Administration Medical Center, November 20th, 1998
60. **Lyketsos CG.** Coping with AIDS dementia. Symposium of Coping with HIV and AIDS, Annual Meeting of the Academy of Psychosomatic Medicine, Orlando, Florida, November 21st, 1998
61. **Lyketsos CG.** Psychiatric disorders after traumatic brain injury. Psychiatry Grand Rounds at the Johns Hopkins Hospital, Baltimore, Maryland, November 30th, 1998
62. **Lyketsos CG.** Anticonvulsants in psychiatry: New Options and Therapeutic Directions. Psychiatry Grand Rounds at SUNY Buffalo, NY, December 11th, 1998
63. **Lyketsos CG (Program Director).** Detecting, evaluating, and managing memory impairment in primary care: The Primary Care Initiative, Copper Ridge Institute, Columbia, Maryland, February 23rd, 1999
64. **Lyketsos CG.** New Options in Bipolar Disorders. Meeting on New Frontiers in Social Phobia and Bipolar Disorders, CME Inc., Minneapolis, MN, March 7th, 1999
65. **Lyketsos CG.** New Options in Bipolar Disorders. Meeting on New Frontiers in Social Phobia and Bipolar Disorders, CME Inc., Long-Island, NY, April 17th, 1999
66. **Lyketsos CG.** Anticonvulsants in psychiatry: New Options and Therapeutic Directions. Psychiatry Grand Rounds at the University of Virginia, Charlottesville, VA, April 27th, 1999
67. **Lyketsos CG (Workshop Co-Chair).** Common Psychiatric disorders in the elderly. Workshop 313: Psychotropic Drug Use in Older Adults: Management Strategies, School of Social Work, The University of Maryland, Baltimore, Maryland, May 4th, 1999
68. **Lyketsos CG.** Update on the care of the patient with dementia (3 hour course). First Argentine Congress of Geriatric Neuropsychiatry. Buenos Aires, Argentina, June 17-19, 1999
69. **Lyketsos CG.** Memory and aging (1 hour lecture broadcast live on the Internet by Intellihealth). A Women's Journey (Johns Hopkins National Conference), Baltimore, Maryland, October 23rd, 1999

70. **Lyketsos CG.** Mood disorders in HIV infection. Psychiatry Grand Rounds at the University of Alabama-Birmingham, Birmingham, Alabama, November 30th, 1999
71. **Lyketsos CG.** Management of behavior disturbances in patients with dementia. Grand Rounds at Cooper Hospital (University of Medicine and Dentistry of New Jersey), Camden, New Jersey, March 7th, 2000
72. **Lyketsos CG,** Rabins PV, Breitner JCS. Behavioral disturbances in dementia. Invited presentation before the Food and Drug Administration Psychopharmacology Advisory Committee, Gaithersburg, Maryland, March 9th, 2000.
73. **Lyketsos CG.** Dementia Care 2000: A Comprehensive Approach. Keynote Address at the 7th Annual Celebration of Caregiving Conference, Friends of Alzheimer Caregivers, Long Beach, California, March 17th, 2000
74. **Lyketsos CG.** Management of depression in the nursing home resident. Symposium "Depression and Chronic Medical Illness in the Nursing Home: Recognition and Management", during the Annual Meeting of the American Medical Directors Association, San Francisco, California, March 18th, 2000.
75. **Lyketsos CG.** Evaluation and treatment of early signs of dementia in men. Men's Health 2000 (Johns Hopkins CME Course), Baltimore, Maryland, March 31st, 2000
76. **Lyketsos CG.** Telemedicine. Symposium on Technology and the Elderly. Maryland Association of Counties 50th Annual Summer Conference, Ocean City, Maryland, August 18th, 2000
77. **Lyketsos CG.** Advances in the Management of Alzheimer's disease (Keynote Lecture). CME Conference sponsored by UMDNJ and Genesis Eldercare, Morristown, NJ, September 19th, 2000.
78. **Lyketsos CG.** Cognitive Decline in the Population: Findings from the Baltimore ECA. Research Conference, Department of Psychiatry, University of Iowa, Iowa City, October 2nd, 2000
79. **Lyketsos CG.** Depression in Alzheimer's Disease: Epidemiology, Impact, Treatment. Grand Rounds, Department of Psychiatry, University of Iowa, Iowa City, October 3rd, 2000
80. **Lyketsos CG.** Psychotic and Mood disorders in Alzheimer's disease: epidemiology, classification, treatment. Presented as part of Symposium 26, 6th Hellenic Biomedical Diaspora Congress, Athens, Greece, October 13th, 2000
81. **Lyketsos CG.** Management of agitation in the elderly. 14th Annual Interface: Medicine-Psychiatry, St. Joseph's Medical Center, Baltimore, Maryland, November 4th, 2000.

82. **Lyketsos CG.** Management of depression and other psychiatric disorders in the medically ill. CME Course: Topics in Psychiatry, Johns Hopkins School of Medicine, Baltimore, Maryland, November 10th, 2000
83. **Lyketsos CG.** Memory and Aging. 7th Annual Johns Hopkins Woman's Journey Conference, Baltimore, Maryland, November 11th, 2000
84. **Lyketsos CG.** Dementia Care 2000: Emphasis on Alzheimer's Disease. Department of Medicine Grand Rounds at Sinai Hospital, Baltimore, Maryland, November 7th, 2000
85. **Lyketsos CG.** The Epidemiology of Psychosis and Agitation in Dementia. Presented as part of Symposium: The NIMH CATIE Program: Understanding psychosis and anti-psychotic effectiveness. 14th AAGP Annual Meeting, San Francisco, CA February 24th, 2001
86. **Lyketsos CG.** Mood disorders in HIV infection . Psychiatry Grand Rounds, University of Texas Health Science Center in San Antonio, San Antonio, Texas, March 20th, 2001
87. **Lyketsos CG.** Agitation in the elderly: Evaluation and management. Geriatric Medicine Grand Rounds. Medical College of Virginia-Hunter Holmes McGuire Veterans Affairs Medical Center, Richmond, Virginia, March 23rd, 2001
88. **Lyketsos CG.** Dementia Care 2001: Emphasis on Alzheimer's Disease. Psychiatry Grand Rounds, State University of New York at Stony Brook, Stony Brook, New York, April 24th, 2001
89. **Lyketsos CG.** Effects of other psychotherapeutic medications. Presented as part of Industry Sponsored Symposium "Psychosis in Alzheimer's disease" Ira Katz, MD (Chair). American Psychiatric Association, 154th Annual Meeting, New Orleans, LA, May 2001
90. **Lyketsos CG.** Depression in Alzheimer's disease: Epidemiology, impact, treatment. Psychiatry Grand Rounds, Wake Forrester University, Winston-Salem, North Carolina, May 18th, 2001
91. **Lyketsos CG.** Treatment of depression in dementia. Presentation at National DMDA Panel Meeting on Late Life Depression, Washington DC, October 9th, 2001
92. **Lyketsos CG.** Keynote Lecture: Management of Agitation in Dementia. Presentation at Annual Conference of the Italian Interdisciplinary Network on Alzheimer's Disease (ITINAD), Modena, Italy, October 20th, 2001.
93. **Lyketsos CG.** Keynote Lectures: Dementia in Old Age: Evaluation and Management. Presentation at the Annual Seminar on Dementia of the Hellenic Psychiatric Association and the Hellenic American Psychiatric Association, Athens, Greece, October 24th, 2001.

94. **Lyketsos CG.** Dementia in the Medically Ill. Review Course on Psychiatry of the Medically Ill, presented at the Annual Meeting of the Academy of Psychosomatic Medicine, San Antonio, Texas, November 16th, 2001
95. **Lyketsos CG.** Dementia. CME course: 12th Annual Neurology for the Primary Practitioner, Johns Hopkins School of Medicine, Baltimore, Maryland, December 8th, 2001
96. **Lyketsos CG.** Is the prevention of Alzheimer's disease possible? 2nd Panhellenic Interdisciplinary Conference on Alzheimer's Disease and Related Disorders. Thessaloniki, Greece, January 18th, 2002
97. **Lyketsos CG.** Epidemiology and classification of psychiatric disturbances in dementia. 2nd Panhellenic Interdisciplinary Conference on Alzheimer's Disease and Related Disorders. Thessaloniki, Greece, January 20th, 2002
98. **Lyketsos CG.** Treatment of depression in Alzheimer's disease. NIMH Symposium on the new criteria for "Depression of Alzheimer's disease" (**Error! Contact not defined.** and Jason Olin, CoChairs), 15th Annual Meeting of the American Association for Geriatric Psychiatry, Orlando, Florida, February 26th, 2002
99. **Lyketsos CG.** The American application for subspecialization in C-L psychiatry: Foundations, process, and present state. Special Address as part of a Symposium. 37st Annual Meeting of the Spanish Society of Psychosomatic Medicine. Madrid, Spain, April 12th, 2002
100. **Lyketsos CG.** Depression and dementia. The Master Class in Dementia. St. John's College, Cambridge, England, September 13-15, 2002
101. **Lyketsos CG.** Behavioral disturbances in dementia. Dementia Mini Fellowship, Iselin, NJ, October 11-12, 2002
102. **Lyketsos CG** (Meeting Chair and Keynote Speaker). Dementia Syndromes: Theory and Practice. 3rd Annual Meeting on the Dementias, Hellenic Psychiatric Association, National Research Institute, Athens, Greece, October 22-23, 2002.
103. **Lyketsos CG** Lief S (Symposium Chair). Evaluation and differential diagnosis of dementia. Symposium as part of "Clinician's Institute," American Association of Geriatric Psychiatry, Orlando, Florida, November 9th, 2002.
104. **Lyketsos CG.** Depression in Alzheimer's disease: Prevalence, impact, recognition, treatment. Presentation at National DBSA Panel Meeting on Depression in Co-Morbid Medical Illness, Washington DC, November 12^h, 2002
105. **Lyketsos CG.** Neuropsychiatric disturbance in Alzheimer's disease: where are we now and where are we headed? Psychiatry Grand Rounds, Westchester Division, Weill Cornell Medical College, White Plains, New York, January 7th, 2003

106. **Lyketsos CG.** Neuropsychiatric disturbance in Alzheimer's disease: where are we now and where are we headed? Psychiatry Grand Rounds, Payne Whitney Clinic, Weill Cornell Medical College, New York, New York, January 8th, 2003
107. **Lyketsos CG.** Cognitive Impairment, Dementia, and Parkinson's Disease. Industry Sponsored Symposium (M. Menza, Chair), 16th Annual Meeting of the American Association of Geriatric Psychiatry, Honolulu, Hawaii, March 2nd, 2003
108. **Lyketsos CG.** Aging and HIV Disease. Symposium (S. Schultz, Chair), 16th Annual Meeting of the American Association of Geriatric Psychiatry, Honolulu, Hawaii, March 2nd, 2003
109. **Lyketsos CG.** The impact of depression on Alzheimer patients and other medically ill populations: New challenges for the field of Psychosomatic Medicine. Keynote address during the Awarding of the 2003 Dutch "Lundbeck Pris," Amsterdam, Holland, April 1st, 2003
110. **Lyketsos CG.** Neuropsychiatric disturbance in Alzheimer's disease: where are we now and where are we headed? Neurology Seminar, Vrei Universiteit Medical Center, Amsterdam, Holland, April 2nd, 2003
111. **Lyketsos CG.** Psychosomatic Medicine: a new psychiatric subspecialty. Invited lecture during Symposium 19 of the Annual Meeting of the Dutch Psychiatric Association (NVVP), Amsterdam, Holland, April 4th, 2003
112. **Lyketsos CG.** Advances in Alzheimer's research. Research Update for the Clinician. 156th Annual Meeting of the American Psychiatric Association, San Francisco, California, May 19th, 2003
113. **Lyketsos CG.** Cognitive Impairment, Dementia, and Parkinson's Disease. Symposium (M. Menza, Chair), 156th Annual Meeting of the American Psychiatric Association, San Francisco, California, May 20th, 2003
114. **Lyketsos CG.** Treatment of depression and apathy in dementia. Course 91 (W. Reichman, Chair), 156th Annual Meeting of the American Psychiatric Association, San Francisco, California, May 21st, 2003
115. **Lyketsos CG.** Efforts toward the prevention of Alzheimer's disease (Plenary Presentation). 13th Alzheimer Europe Conference/ 3rd Hellenic National Alzheimer Disease and Related Disorders Conference, June 13th, Thessaloniki, Greece
116. **Lyketsos CG** (Speaker and Session Chair). Management of neuropsychiatric disturbances in dementia (Plenary Presentation). 13th Alzheimer Europe Conference/ 3rd Hellenic National Alzheimer Disease and Related Disorders Conference, June 14th, Thessaloniki, Greece

117. **Lyketsos CG** (Speaker and Session Chair). Models of dementia care in the USA (Seminar). 13th Alzheimer Europe Conference/ 3rd Hellenic National Alzheimer Disease and Related Disorders Conference, June 14th, Thessaloniki, Greece
118. **Lyketsos CG**. Evaluation and management of depression in dementia (Symposium). 13th Alzheimer Europe Conference/ 3rd Hellenic National Alzheimer Disease and Related Disorders Conference, June 15th, Thessaloniki, Greece
119. **Lyketsos CG**. Cognitive disorders and Mental Health. Plenary Address at the National Institutes of Health Conference on "Physical Disabilities through the Lifespan," Natcher Conference Center, National Institutes of Health, Washington DC, July 21st, 2003
120. **Lyketsos CG**. Depression associated with cognitive impairment. Plenary Presentation as part of a Satellite Symposium on "Management of depression in Late Life: Emerging Concepts," 11th Annual International Psychogeriatric Association Meeting, Chicago, Illinois, August 20th, 2003
121. **Lyketsos CG**. Evaluation and management of depression in Alzheimer's disease. Psychiatry Grand Rounds, Rush University, Chicago, Illinois, October 8th, 2003
122. **Lyketsos CG (Symposium Chair)**. Introduction to Dementia Care, Monotherapy Strategies. Presentations at "Emerging Management Strategies in Alzheimer's Disease: A CME Satellite Symposium" at Pri-Med East Conference & Exhibition, Boston, Massachusetts, November 6, 2003
123. **Lyketsos CG**. Case studies in Dementia Care. Workshop as part of 4th Annual Topics In Psychiatry, Johns Hopkins CME, Baltimore, Maryland, November 13th, 2003
124. **Lyketsos CG**. Cognitive Impairment, Dementia, and Parkinson's Disease. Industry Sponsored Symposium (M. Menza, Chair), 17th Annual Meeting of the American Association of Geriatric Psychiatry, Baltimore. Maryland, February 24th, 2004
125. **Lyketsos CG** (Symposium Chair). Aging, cognitive impairment, and coronary bypass surgery. 17th Annual Meeting of the American Association of Geriatric Psychiatry, Baltimore. Maryland, February 24th, 2004
126. **Lyketsos CG**. Depression in Alzheimer's disease: a practical update for the clinician. Grand Rounds, Logan Regional Hospital, Logan, Utah, March 2nd, 2004
127. **Lyketsos CG**. Executive Dysfunction in Clinical Practice. Grand Rounds, Creighton University School of Medicine, Omaha, Nebraska, April 21st, 2004
128. **Lyketsos CG**. Is Alzheimer's Disease Preventable? Alzheimer Disease and Related Disorders Educational Series, sponsored by University of Nebraska Medical Center,

Creighton University Medical Center, and the Alzheimer's Association. Omaha Nebraska, April 22, 2004

129. **Lyketsos CG.** Dementia in the Assisted Living Setting. Alzheimer Disease and Related Disorders Educational Series, sponsored by University of Nebraska Medical Center, Creighton University Medical Center, and the Alzheimer's Association. Omaha Nebraska, April 22, 2004
130. **Lyketsos CG.** Treatment of depressive disorders in dementia. Alzheimer Disease and Related Disorders Educational Series, sponsored by University of Nebraska Medical Center, Creighton University Medical Center, and the Alzheimer's Association. Omaha Nebraska, April 22, 2004
131. **Lyketsos CG (Discussion Group Leader).** Depression in Alzheimer's disease and other neurologic conditions: evaluation and treatment. Meet the Experts. American Psychiatric Association, 157th Annual Meeting, New York, New York, May 3rd, 2004
132. **Lyketsos CG.** The impact of psychiatric morbidity on medical illness: Challenges for the "new" field of psychosomatic medicine. Plenary address, Hellenic Psychiatric Association, 18th Annual Meeting, Kos, Greece, May 15th, 2004
133. **Lyketsos CG.** Is prevention of late life cognitive decline possible? Distinguished Lecture Series, Athenian Club, Athens, Greece, May 18th, 2004
134. **Lyketsos CG.** Depression in Alzheimer's disease: Brief update. Plenary lecture, PADRECC/MIRECC Symposium on Neurodegenerative Diseases: the Interface of Psychiatry and Neurology. University of Pennsylvania, Philadelphia, Pennsylvania, May 24th, 2004
135. **Lyketsos CG.** Neuropsychiatric symptoms of dementia: Nature and treatment. Plenary Lecture, 9th International Conference on Alzheimer's Disease and Related Disorders. Philadelphia Convention Center, Philadelphia, Pennsylvania, July 20th, 2004
136. **Lyketsos CG.** Depression in Alzheimer's disease: where are we now and where are we headed? Psychiatry Grand Rounds, Mayo Medical School and Clinic, Rochester, Minnesota, September 28th, 2004
137. **Lyketsos CG.** Etiology and epidemiology of dementia in the long-term care setting. Symposium lecture in "Optimizing Outcomes in Dementia: the increasing role of cholinesterase inhibitors" Satellite to Senior Care Pharmacy '04, ASCP 35th Annual Meeting, San Francisco, California, November 6th, 2004
138. **Lyketsos CG,** Lee HB, Golden, S, Szcklo M. Depression and cardiovascular disease: Research Advances. Advances in Psychiatry: Regional and Intersectional Congress, World Psychiatric Association, Athens, Greece, March 15th, 2005

139. **Lyketsos CG**, Lee HB, Golden, S, Szcklo M. Depression and cardiovascular disease: Research Advances. Invited Lecture as part of Advances in Psychiatry: Regional and Intersectional Congress, World Psychiatric Association, Athens, Greece, March 15th, 2005
140. **Lyketsos CG**. The future of psychiatry: strengthening our medical roots. Invited presentation, Symposium on the Future of Psychiatry, Advances in Psychiatry: Regional and Intersectional Congress, World Psychiatric Association, Athens, Greece, March 15th, 2005
141. **Lyketsos CG, Wong D**. Effective biomarker strategies in Alzheimer disease. BDNF Group, Novartis Pharmaceuticals, Basel, Switzerland, March 17th, 2005
142. **Lyketsos CG**. Depression in Alzheimer disease: Prevalence, diagnosis, treatment. Psychiatry Grand Rounds, University of Maryland Medical School and Hospital, Baltimore, Maryland, March 24th, 2005
143. **Lyketsos CG**. The impact of psychiatric morbidity on medical illness: challenges for the “new” psychiatric subspecialty of Psychosomatic Medicine. Psychiatry Grand Rounds, University of Michigan Medical School and Hospital, Ann Arbor, Michigan, April 6th, 2005
144. **Lyketsos CG**. Weighing the Evidence for the Treatment of Neuropsychiatric Symptoms of Mild-to-Moderate Dementia: What Do We Really Know? Symposium as part of the American Geriatrics Society Annual Meeting, Orlando, Florida, May 13th, 2005
145. **Lyketsos CG**. Recent advances in depression and cardiovascular disease research. Presidential Symposium 1: “Advances in Psychosomatic Medicine,” organized by the International College of Psychosomatic Medicine with the National Institute for Mental Health, 158th Annual Meeting of the American Psychiatric Association, Atlanta, Georgia, May 23rd, 2005
146. **Lyketsos CG**. Psychiatric aspects of dementia. Presidential Symposium 5: “The Interface of Psychiatry and Medicine: disorders of affect, behavior, and cognition,” organized by the Academy of Psychosomatic Medicine, 158th Annual Meeting of the American Psychiatric Association, Atlanta, Georgia, May 25th, 2005
147. **Lyketsos CG**. Developing new medications for Alzheimer’s disease. Departmental Academic Program. Biennial Meeting and Reunion Weekend, The Johns Hopkins Medical and Surgical Association, Baltimore, Maryland, June 3rd, 2005
148. **Lyketsos CG**. Treatment of depression in Alzheimer’s and Parkinson’s disease. Plenary lecture, PADRECC/MIRECC Symposium on Neurodegenerative Diseases: the Interface of Psychiatry and Neurology. University of Pennsylvania, Philadelphia, Pennsylvania, September 15th, 2005
149. **Lyketsos CG**. Developing new medication treatments for Alzheimer disease: What will it take? Plenary presentation during “Topics in Geropsychiatry,” a Conference of the

Psychogeriatric and Biological Psychiatry Branches of the Hellenic Psychiatric Association, Athens, Greece, September 30th, 2005

150. **Lyketsos CG.** Relationship of self reported high cholesterol, diabetes, and other cardiovascular diseases to incidence of Alzheimer dementia (DAT): Findings from the Cache County Study of Memory Health and Aging. Panel Presentation at 5th Annual Meeting of the International College of Geriatric Psychoneuropharmacology, Pittsburgh, November 4, 2005
151. **Lyketsos CG.** Detection of dementia in Assisted Living Facilities: the Maryland Assisted Living Study. Panel Presentation at 5th Annual Meeting of the International College of Geriatric Psychoneuropharmacology, Pittsburgh, November 4, 2005
152. **Lyketsos CG.** Best care practices for Alzheimer and dementia: What patients and families should know. Annual Educational Seminar hosted by Morningside House Assisted Living, Columbia, Maryland, November 9th, 2005
153. **Lyketsos CG.** Alzheimer and dementia: What can be done? A Women's Journey, Baltimore, Maryland, November 12th, 2005
154. **Lyketsos CG.** Best care practices for Alzheimer and dementia: What patients and families should know. Annual Educational Seminar hosted by Morningside House Assisted Living, Columbia, Maryland, February 8th, 2006
155. **Lyketsos CG.** Biomarker guided treatment trials in dementias: the who, what, when, where, and why of translational treatment studies. 96th Annual Meeting of the APPA, New York City, March 2, 2006
156. **Lyketsos CG.** The management of neuropsychiatric symptoms in dementia: how can the clinician succeed? Pre Conference Symposium "Psychiatry for the Internist" at the American College of Physicians Annual Meeting, Philadelphia, Pennsylvania, April 5, 2006
157. **Lyketsos CG.** Individualizing Alzheimer's disease therapy over the disease course. Industry Sponsored Symposium: "Alzheimer's disease: Challenging the Practice Paradigm" at the American Psychiatric Association 159th Annual Meeting, Toronto, Canada, May 21st, 2006
158. **Lyketsos CG.** Alzheimer and dementia: Where are we and where are we headed? Howard County Hospital Board of Trustee's, Annual Retreat, Columbia, Maryland, June 1st, 2006
159. **Lyketsos CG.** What the community know about memory loss. Community Health Forum, Heritage United Church of Christ, Baltimore, Maryland, June 10th, 2006
160. **Lyketsos CG.** The importance of neuropsychiatric symptoms (aka, BPSD) as outcomes. International Psychogeriatric Association Consensus Conference: "Defining and measuring treatment benefits in dementia," Canterbury, England, October 31st, 2006

161. **Lyketsos CG.** The New Landscape of Dementia Care: 2007. **The Beeson Lecture**, 34th Annual Current Topics in Geriatrics, Baltimore, Maryland, February 15th, 2007
162. **Lyketsos CG.** Depression in Alzheimer's disease: prevention, evaluation, and management. Industry Sponsored Symposium "Treating Depression and Comorbid Illness in Late Life" at the Annual Meeting of the American Association for Geriatric Psychiatry, New Orleans, Louisiana, March 2nd, 2007
163. **Lyketsos CG.** Treatment effects on daily function, quality of life, caregiver burden, and health services. Industry Sponsored Symposium "Results of the NIMH CATIE-AD Trial" at the Annual Meeting of the American Association for Geriatric Psychiatry, New Orleans, Louisiana, March 2nd, 2007
164. **Lyketsos CG.** Comprehensive multi-disciplinary care. Industry Sponsored Symposium "Expert Dialogue on Alzheimer's disease" at the Annual Meeting of the American Association for Geriatric Psychiatry, New Orleans, Louisiana, March 3rd, 2007
165. **Lyketsos CG.** Empirically based pharmacology for depression, psychosis, and agitation. 11th Annual Symposium "The Comprehensive Approach to Dementia: a Practical Update for Practitioners in Mental Health, Primary Care, and Longterm Care Settings," New York, New York, March 8th, 2007
166. **Lyketsos CG.** Alzheimer's disease: the who, what, when and how of biomarker guided treatment development. Food and Drug Administration, CDEAR Clinical Reviewers Education Program. White Oak CSU, Maryland, May 18th, 2007
167. **Lyketsos CG.** Care for patients with Alzheimer's disease and other dementias. Panel on Health and Services Linkages. The Maryland Summit on Health and Aging. Columbia Maryland, July 10th, 2007
168. **Lyketsos CG.** Cognitive impairment, dementia, and Alzheimer's disease AND Overview of dementia care and pharmacologic treatments AND Case Studies. CME Course on: Identifying, evaluating, and managing memory impairment in the primary care setting, sponsored by the Copper Ridge Institute. Easton, Maryland, July 24th, 2007
169. **Lyketsos CG.** Dementia Care 2007: A New Landscape, Royal Australian and New Zealand College of Psychiatrists, Faculty of Psychiatry of Old Age, Annual Scientific Meeting, Adelaide, Australia, October 4, 2007
170. **Lyketsos CG,** Steinberg MS, Norton M, Tschanz JT. The Natural history of Alzheimer's dementia: findings from the Cache County Dementia Progression Study, Royal Australian and New Zealand College of Psychiatrists, Faculty of Psychiatry of Old Age, Annual Scientific Meeting, Adelaide, Australia, October 5 2007

171. **Lyketsos CG.** Brain circuits and symptom development in Alzheimer's disease, Annual Caregivers Meeting of the Maryland Chapter of the Alzheimer's Association, December 6, 2007
172. **Lyketsos CG.** Management of neuropsychiatric symptoms (aka BPSD) in patients with dementia. Grand Rounds, Drexel Medical College—Friends Hospital, Philadelphia, Pennsylvania, March 22, 2008
173. **Lyketsos CG.** Alzheimer's disease Current Issues and Case Studies. Grand Rounds, Bon Secours Hospital, Baltimore, Maryland, April 10, 2008
174. **Lyketsos CG.** Developing new treatments for Alzheimer's disease: what needs to be done. Grand Rounds, Beth Israel Hospital, New York, New York, April 24, 2008
175. **Lyketsos CG.** Scales for the measurement of neuropsychiatric symptoms in dementia. Alzheimer's Research Roundtable, Alzheimer's Association, Washington DC, April 30, 2008
176. **Lyketsos CG.** Management of neuropsychiatric symptoms of dementia. Seminar, Delaware Department of Substance Abuse and Mental Health, Wilmington, Delaware, May 6, 2008
177. **Lyketsos CG.** Developing new treatments for Alzheimer's disease: what needs to be done. Dementia Care Grand Rounds, The Copper Ridge Institute, Sykesville, Maryland, May 7, 2008
178. **Lyketsos CG.** Biomarker guided treatment development for Alzheimer's disease. Mini-Course on Translational Treatment Development, American Academy of Neurology, Park City, Utah, August 7, 2008
179. **Lyketsos CG.** Biomarker guided treatment development for Alzheimer's disease. Keynote Lecture, Aeginition Hospital, University of Athens, Athens, Greece, October 13, 2008
180. **Lyketsos CG.** Dementia and Depression in the Elderly. Keynote Lecture, Baltimore County Office on Aging Annual Caregivers Conference, Towson, Maryland, November 8th, 2008
181. **Lyketsos CG.** Depression in dementia. Special Lecture, Glen Retirement Systems, Shreveport, Louisiana, November 10th, 2008
182. **Lyketsos CG.** Preserving your memory. Invited Lecture, A Woman's Journey, Baltimore, Maryland, November 15th, 2008
183. **Lyketsos CG.** Preserving your memory as you age. Invited Public Education Lecture. Goucher College, Towson, Maryland, March 18th, 2009

184. **Lyketsos CG.** Neuropsychiatric symptoms and the proposal for revision of the criteria for Alzheimer's disease. Alzheimer's Research Roundtable, Alzheimer's Association, Washington DC, April 1, 2009
185. **Lyketsos CG.** Developing new treatments for Alzheimer's disease: what needs to be done. Spring Meeting of the Hellenic Psychogeriatric Association, National Hellenic Research Foundation, Athens, Greece, April 11, 2009
186. **Lyketsos CG.** Management of neuropsychiatric symptoms in dementia. Grand Rounds, University of North Carolina, Chapel Hill, April 22, 2009
187. **Lyketsos CG.** Treatment of Alzheimer's and dementia in 2009. Hadassah of Greater Baltimore, Morton Reiser Center for the Performing Arts, Beth Tfiloh School, May 5, 2009
188. **Lyketsos CG.** Dementia Care guidelines in the USA. World Federation of Societies of Biological Psychiatry Guidelines Series-Psychogeriatrics (Session TG-01). 9th World Congress of Biological Psychiatry, Paris, June 28, 2009
189. **Lyketsos CG.** Neuropsychiatric symptoms in Alzheimer's disease: occurrence and treatment. The Kobe Conference of the International Neuropsychiatric Association, Kobe, Japan, September 12, 2009.
190. **Lyketsos CG.** Dementia Awareness Week: Facing the epidemic. Conference sponsored by Alzheimer's Australia (WA), Alexander Library, Perth, Australia, September 15, 2009.
191. **Lyketsos CG.** Dementia Awareness Week: Facing the epidemic. Conference sponsored by Alzheimer's Australia (SA), Alzheimer's SA, Adelaide, Australia, September 16, 2009.
192. **Lyketsos CG.** Dementia Awareness Week: Facing the epidemic. Conference sponsored by Alzheimer's Australia (VIC), Sunderland Theater, University of Melbourne, Melbourne, Australia, September 17, 2009.
193. **Lyketsos CG.** Dementia Awareness Week: Facing the epidemic. Conference sponsored by Alzheimer's Australia (TAS), Baha'i Center for Learning, Hobart, Australia, September 18, 2009.
194. **Lyketsos CG.** Dementia Awareness Week: Facing the epidemic. Conference sponsored by Alzheimer's Australia (QLD), State Library of Queensland, Brisbane, Australia, September 21, 2009.
195. **Lyketsos CG.** Dementia Awareness Week: Facing the epidemic. Conference sponsored by Alzheimer's Australia (NSW), Parliament House, Sydney, Australia, September 22, 2009.

196. **Lyketsos CG.** Dementia Awareness Week: Facing the epidemic (nationally televised live by the Australian Broadcast Company). Australian National Press Club, Canberra, Australia, September 23, 2009.
197. **Lyketsos CG.** Providing dementia care in the community an evidence-based approach. National Dementia Research Forum, Sydney, Australia, September 24, 2009.
198. **Lyketsos CG.** Treating depression in dementia. National Dementia Research Forum, Sydney, Australia, September 24, 2009
199. **Lyketsos CG.** Neuropsychiatric symptoms in dementia. Psychiatry Grand Rounds, Columbia University-Presbyterian Hospital, New York, New York, December 4, 2009
200. **Lyketsos CG.** Clinical Neuropsychiatry. Panel on Aging and Autism organized by University of North Carolina to set the national research agenda for the field, Chapel Hill, NC, March 18-19, 2010
201. **Lyketsos CG.** Risk reduction factors for Alzheimer's disease and cognitive decline in older adults: Depression and related neuropsychiatric disturbances. NIH State of the Science Conference: Preventing Alzheimer's disease and cognitive decline, National Institutes of Health, Natcher Conference Center, Washington DC, April 26-28, 2010
202. **Lyketsos CG.** Epidemiology of Neuropsychiatric Disorders in Dementia Keynote Presentation, Alzheimer's Association Research Roundtable: Neuropsychiatric Symptoms in Alzheimer's Disease, April 29-30, 2010, Washington DC
203. **Lyketsos CG.** Executive Dysfunction. Plenary Presentation, Alzheimer's Association Research Roundtable: Neuropsychiatric Symptoms in Alzheimer's Disease, April 29-30, 2010, Washington DC
204. **Lyketsos CG.** How to diagnose and treat "Mild Cognitive Impairment" AND "How to manage co-morbid depression in cognitively impaired patients" [In Greek]. Invited workshop: 10th Annual Meeting of the International College of Geriatric Psychoneuropharmacology, September 15, 2010, Athens, Greece
205. **Lyketsos CG.** Current issues in the diagnosis and treatment of dementia. Keynote Address: Caring for the patient with dementia through the health care continuum [Holy Cross Hospital], October 2 2010, Silver Spring, Maryland
206. **Lyketsos CG.** Providing dementia care in the community on a large scale. Invited lecture: Institute for Psychiatric Services-American Psychiatric Association, October 15 2010, Boston, Massachusetts

207. **Lyketsos CG.** Depression and psychosis in dementia: therapeutic perspectives. Invited lecture: 15th Annual Comprehensive Approach to Dementia, March 10 2011, New York, New York
208. **Lyketsos CG.** Neuropsychiatric Syndromes in Dementia and MCI: Where are we heading? Plenary Presentation: Alzheimer's Association International Conference (AAIC 2011), July 18 2011, Porte de Versailles, Paris, France
209. **Lyketsos CG.** Neuropsychiatric Syndromes in Dementia and MCI: Where are we heading? Invited Lecture, Douglas Research Institute, McGill University, Montreal, Canada, January 26 2012
210. **Lyketsos CG.** Managing the cure versus care conundrum in dementia. Distinguished Scientist Award Lecture, American Association for Geriatric Psychiatry, Washington, DC, March 18 2012
211. **Lyketsos CG.** Neuropsychiatric symptoms in dementia: where are we headed? Invited Plenary, 17th Annual Meeting, Brazilian Psychogeriatric Association, Sao Paulo, Brazil, March 23, 2012
212. **Lyketsos CG.** Using antipsychotics in patients with dementia. Invited Plenary, 17th Annual Meeting, Brazilian Psychogeriatric Association, Sao Paulo, Brazil, March 24, 2012
213. **Lyketsos CG.** Who are responders to treatment with ELND0005 treatment? Plenary Panel presentation, 12th International Stockholm/Springfield meeting, Stockholm, Sweden, May 12, 2012.
214. **Lyketsos CG.** Discussant: Session IV: Drug Repurposing and Combinatorial Therapy. Alzheimer's Disease Research Summit 2012: Path to Treatment and Prevention, Washington DC, May 15, 2012.
215. **Lyketsos CG.** Chair and Speaker: Tackling overlap of neuropsychiatric symptoms in Alzheimer's and other dementias: Toward a unified approach to evaluation and treatment. Alzheimer's Association International Conference, Vancouver, BC, Canada, July 15, 2012.
216. **Lyketsos CG.** Balancing care with cure in Alzheimer's disease. Plenary Symposium: Butler Conference of Leaders. Baltimore, Maryland, September 6, 2012.
217. **Lyketsos CG.** Care for People with Alzheimer's and Related Dementia and their Families: State of the Art 2012. Grand Rounds. Center for Medicare and Medicaid (CMS). Baltimore, Maryland, November 27, 2012.
218. **Lyketsos CG.** Care for People with Alzheimer's and Related Dementia and their Families: State of the Art 2013. Keynote Lecture: Leadership Summit, Survey and Certification Group, Center for Medicare and Medicaid. Annapolis, Maryland, April 9, 2013.

219. **Lyketsos CG.** Agitation definition in AD citalopram trials. 2013 International Psychogeriatric Association Agitation Definition Expert Consensus Meeting. Boston, Massachusetts, July 12, 2013
220. **Lyketsos CG.** Treatment development for Alzheimer's Disease: how are we doing? Special Lecture on the occasion of the presentation of the Greek translation of *Psychiatric Aspects of Neurological Diseases* (Lyketsos, Rabins, Lipsey, Slavney). Aiginion Hospital, University of Athens, Athens, Greece, October 8, 2013
221. **Lyketsos CG.** Neuropsychiatric Symptoms in Dementia: Where are we headed? Fall 2013 Lecture Series, Alzheimer's Disease Center, Boston University, Boston, Massachusetts, November 6, 2013
222. **Lyketsos CG.** Dementia Care at Home: State of the Art in 2013. 2013 Simons Lecture, Massachusetts and New Hampshire Alzheimer's Association, Boston, Waltham, November 6, 2013
223. **Lyketsos CG.** Agitation as a target for treatment development. Plenary Lecture as Part of Symposium 3, Clinical Trials in Alzheimer's Disease 2013, San Diego, California, November 15, 2013
224. **Lyketsos CG.** All things remembered. Plenary Lecture, A Woman's Journey, West Palm Beach, Florida, January 23, 2014
225. **Lyketsos CG.** Progress in treatment development for Alzheimer's disease: where are we in 2014? Plenary lecture, 3rd National Conference of the Hellenic Society for Clinical Psychopharmacology, Sani, Halkidiki, Greece, April 26, 2014
226. **Lyketsos CG.** Dementia Care: background, evidence, and practice. Keynote lecture, Semi-Annual joint meeting of Baltimore City and County Medical Associations, Towson, Maryland, May 14, 2014
227. **Lyketsos CG.** Overview and measurement of neuropsychiatric symptoms in Alzheimer's dementia. Plenary presentation for the E.U./U.S. Task Force on Alzheimer's Trials (pre-conference to the CTAD meeting), Philadelphia, Pennsylvania, November 19, 2014
228. **Lyketsos CG.** Dementia Care: State of the Art in 2015. Keynote presentation at the 4th Annual Alzheimer's Education Workshop, Leading the Way in Dementia Care: A Person-Centered Approach, James Madison University, Harrisonburg, Virginia, June 11, 2015
229. **Lyketsos CG.** Neuropsychiatric syndromes of later life: Implications for the study and treatment of major psychiatric diseases. Plenary presentation at the 12th World Congress of Biological Psychiatry, Athens, Greece, June 17, 2015



STANFORD UNIVERSITY SCHOOL OF MEDICINE
DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL SCIENCES

LAURA ROBERTS, M.D., M.A.
CHAIRMAN AND KATHARINE DEXTER MCCORMICK AND STANLEY MCCORMICK MEMORIAL
PROFESSOR

July 27, 2015

American Psychiatric Association
c/o Sejal Patel
1000 Wilson Boulevard, #1825
Arlington, VA 22209

Re: Endorsement of Constantine G. Lyketsos, M.D., M.H.S., DFAPA, FAPM, FACNP, for the Jack Weinberg Memorial Award for Geriatric Psychiatry

To Whom It May Concern:

It is with the great enthusiasm that I offer my endorsement of Constantine G. Lyketsos, M.D., M.H.S., DFAPA, FAPM, FACNP, for the Jack Weinberg Memorial Award for Geriatric Psychiatry. I know Dr. Lyketsos well from psychiatric leadership and education “circles”, and I have followed his stellar career with great interest since we were honored to serve GAP Fellows together many years ago. I am delighted to share my thoughts about his distinctive contributions to research, education, and clinical practice in the field of geriatric psychiatry. Dr. Lyketsos is, without a doubt, an eminent leader in his field who has substantially advanced our understanding of late-life mental disorders, their underlying neurobiology, and the treatment algorithms used in the care of elderly individuals.

Rather than duplicating any of Dr. McGuire’s discussion of Dr. Lyketsos’ tremendous career accomplishments as summarized in her primary letter of nomination, I would like to take this opportunity to highlight some of Dr. Lyketsos’ work that I have found most impressive.

First, I would like to underscore the impact that Dr. Lyketsos’ Maryland Assisted Living Study, funded by the National Institute of Mental Health, has had on the practice and regulation of assisted living facilities in the United States. This seminal investigation demonstrated the substantial under-recognition and under-treatment of dementia and other psychiatric disorders among elderly individuals in assisted living, finding that approximately half of affected residents were not being treated. The fact that dementia was being addressed in such a suboptimal fashion suggested that it likely contributed to morbidity and reduced overall quality of life. As a result of this investigation, and others that followed, the United States saw a significant revamping of assisted living facilities across the country, in conjunction with legislators, to create more dementia-friendly environments that incorporated processes and guidelines for dementia recognition and management that were embraced staff and clinicians. Many other important findings emerged from this study, such as the finding that caregivers were less aware of dementia in residents without severe cognitive impairment or obvious behavioral and functional problems, and that such unawareness predicted failure to treat dementia. In addition, Dr. Lyketsos and his team identified executive dysfunction as the strongest predictor of functional impairment within assisted living facilities, found that greater levels of activity participation appeared to delay functional decline, and demonstrated significant effects of agitation, depression, apathy and

irritability, but not facility size or homelike environment, on quality of life in residents. Taken together, this work helped to greatly advance the ability of assisted living facilities to address dementia and ensure that residents get the care that they need.

Further, I wish to note the extensive advancements in evidence-based treatments of Alzheimer's disease that Dr. Lyketsos has made while factoring in the critical importance of neuropsychiatric disturbances that may alter the course of dementia and/or affect response to treatment. For example, he and his colleagues have demonstrated that cholinesterase inhibitors and memantine slow the progression of cognitive decline in Alzheimer's disease, particularly among women and those with an APOE ϵ 4 allele. These data are important, given the low percentage of affected individuals who are being treated with these medications. Further investigations by Dr. Lyketsos and his team have demonstrated the relative ineffectiveness of many types of antidepressant medications for depression and other neuropsychiatric symptoms in Alzheimer's disease, findings that have had a direct impact on prescribing practices in geropsychiatry. A promising exception to this is the recent finding by Dr. Lyketsos and his team that citalopram may significantly reduce agitation and caregiver distress. Currently, he is investigating the use of deep brain stimulation as a novel strategy for the treatment of Alzheimer's dementia, specifically targeting the hippocampal fornix, in which Dr. Lyketsos and his colleagues have demonstrated early deterioration in the disease. Given the many failures of emergent medications for the treatment of Alzheimer's disease, this exciting work holds great promise for treatment of this debilitating illness.

Aside from his extensive scholarly contributions and clinical advancements, Dr. Lyketsos has proven himself to be an international leader in geriatric psychiatry and an invaluable teacher and mentor. His extensive service to his field has been recognized with numerous awards, including the Distinguished Scientist Award by the American Association for Geriatric Psychiatry, among many others. Dr. Lyketsos has also clearly shaped a new generation of clinician scientists, many of whom have developed their own highly successful independent research laboratories. His educational leadership at Johns Hopkins has been integral to its fantastic success in attracting the very best trainees and staking its claim as one of the premier educational institutes in geriatric psychiatry in the country, and the world.

In summary, Dr. Lyketsos is a truly inspirational scholar, clinician, teacher, and leader in the field of geriatric psychiatry who carries himself with an amazing sense of humanity, grace, and dedication. He has established an impeccable reputation of excellence at the international, national, and local levels. I believe that he is highly deserving of recognition with the Jack Weinberg Memorial Award for Geriatric Psychiatry. Please let me know if I can provide additional information or commentary.

Sincerely,



Laura Roberts, M.D., M.A.

Chairman and Katharine Dexter McCormick and Stanley McCormick Memorial Professor
Department of Psychiatry and Behavioral Sciences
Stanford University School of Medicine



UC San Diego

HEALTH SCIENCES

**Sam and Rose Stein Institute
for Research on Aging**

9500 Gilman Drive, La Jolla, CA 92093-0664
(858) 534-4020 phone
(858) 534-5475 fax

August 3, 2015

Dear Colleagues:

I am delighted to support the nomination of Constantine Lyketsos, MD, for the 2015 APA Jack Weinberg Award for Geriatric Psychiatry. He is The Elizabeth Plank Althouse Professor and Chair of Psychiatry at Johns Hopkins Bayview. He is also Vice-Chair of the Department of Psychiatry. I have had the pleasure of knowing and interacting with Dr. Lyketsos for two decades.

Dr. Lyketsos has been a major leader and advocate of Geriatric Psychiatry for years. He has been a Board member of the American Association for Geriatric Psychiatry (AAGP), and International Psychogeriatric Association. He has also served on several APA Committees. He is the Editor of International Review of Psychiatry. He received the AAGP Distinguished Scientist Award, as well as the William S. Proxmire Award for "extraordinary leadership in the fight against Alzheimers". He is a Distinguished Fellow of the APA, Fellow of the American College of Neuropsychopharmacology, and a member of the American College of Psychiatrists.

Dr. Lyketsos has published over 350 peer reviewed articles in leading national and international journals including JAMA, NEJM, Lancet, JAMA Psychiatry, American Journal of Psychiatry and American Journal of Geriatric Psychiatry. He is the principal investigator of several independent investigator (R01/U01) grants, including the Cache County Dementia Progression Study, as well as a number of multi-center clinical trials. His main area of work relates to neuropsychiatric disturbances in dementia. He was central to the NIH-funded CATIE-AD study, and principal investigator of the multi-center DIADS-2 and CitAD studies. Dr. Lyketsos is now focusing on better characterizing the neurobiology of Neuropsychiatric disturbances in dementia, especially therapeutically relevant subgroups, by introducing brain imaging in their studies. In more recent years, in his role as Clinical Core Director of the NIH-funded Johns Hopkins Alzheimer's Disease Research Center, Dr. Lyketsos has played a critical role in the development of blood biomarkers such as blood lipids and blood amyloid levels in response to oral glucose loading.

Of considerable importance is Dr. Lyketsos' work on translation of evidence-based treatment advances for persons with dementia into practice. He has characterized the high prevalence, and significant impact on aging in place and quality of life, of dementing disorders in assisted living environments. More recently, his team has shifted attention to the delivery of services at home.

Dr. Lyketsos has been cited by Castle Connolly as a Top Doctor in America for the past 14 years.

Dr. Lyketsos' mentorship has led to the development of a number of funded independent investigators. He is an outstanding educator committed to teaching Geriatric Psychiatry at a national and international level. He has had over 150 invited presentations, including grand rounds at university centers, keynote lectures at conferences, named lectureships, and award lectures throughout the world.

Dr. Lyketsos is one of the main teachers of Geriatric Psychiatry for medical students, residents, fellows, faculty and allied health professionals. He has also served as the Academic Director of the Copper Ridge Institute, responsible for teaching physicians and allied health professionals how to care for patients with memory disorders and dementia. Dr. Lyketsos has overseen the growth and development a premier fellowship in geriatric psychiatry funded by a collaborative grant from HRSA.

In summary, I strongly support the nomination of Dr. Lyketsos without any reservation for the 2015 APA Jack Weinberg Award for Geriatric Psychiatry. Please do not hesitate to contact me if you have any questions or desire further information.

Sincerely,



Dilip V. Jeste, M.D.
Senior Associate Dean for Healthy Aging and Senior Care
Estelle and Edgar Levi Chair in Aging
Distinguished Professor of Psychiatry and Neurosciences
Director, Sam and Rose Stein Institute for Research on Aging
University of California, San Diego

AMERICAN PSYCHIATRIC ASSOCIATION/FOUNDATION

AWARD REVIEW FORM

APA Board instructions:

Please complete this form in its entirety and forward the form to the Council to which the award administrative component reports along with the nomination of the award recipient. The Council will then forward this documentation to the Joint Reference Committee (lmqueen@psych.org) by COB September 24th.

Foundation instructions:

If the award will be approved by the Foundation Board, please return this form to Linda Bueno (lbueno@psych.org) by COB September 24th.

AWARD NAME: Psychiatric Services Achievement Awards

NAME OF AWARD ADMINISTRATIVE COMPONENT: Psychiatric Services Achievement Awards Selection Committee

CHAIRPERSON: Christina Arredondo, MD

STAFF LIAISON: Samantha Hawkins

.....
[Please note if any of the information listed below revises what is currently listed in the APA Operations Manual or if this award needs to be added to the Operations Manual.]

Description of Eligibility for Award:

Any hospital, clinic, school, or community program is eligible if it has been in full operation for at least two years.

Description of Selection Criteria for Award:

These awards recognize outstanding programs that deliver services to the mentally ill or disabled, have overcome obstacles, and can serve as models for other programs, from both academically or institutionally sponsored programs as well as community-based programs.

Award Funding Information: [Please complete the following if applicable]

Cost for 4 Plaques: \$1270.00

Cost of Cash Award: Total of 10,000 (3500 to each gold award; 2000 for silver; 1000 for bronze; no money is given if the committee chooses programs for a Certificate of Significant Achievement).

Cost of Lectureship: none

Other (please list): IPS expenses

Award Account Balance: _____ (as reported by APA Online Financials)

Date Balance Determined: _____

Award Nominee(s):

Gold award for academically- or institutionally affiliated programs

Sexual Behaviours Clinic, Integrated Forensic Program
Royal Ottawa Mental Health Centre, Canada

Gold award for community-based programs

Missouri Community Mental Health Center Health Home Program
Missouri Department of Mental Health and MO HealthNet,

Silver

Integrating School Based Outreach: Mental Health 101 & Typical or Troubled?® Programs

Mental Health Association of East Tennessee

Bronze

SUSTAIN (SUpporting Seniors receiving Treatment And INtervention)
Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania; Department of Aging, Commonwealth of Pennsylvania,

Certificate of significant achievement (2)

- Heartland Clinic/CHARG Resource Center, Denver, Colorado
- St Luke's Behavioral Health Clinic – Twin Falls Campus, part of St. Luke's Healthcare System, Boise, ID

(Please attach a biosketch and any letters of nomination or support for this individual)

The application packet and site review is attached for each of the programs.

Description of the Committee's Selection Process:

Online e-application form, program description, and supporting materials. The Committee reviews all applications, then ranks and selects semifinalist programs to receive site visits. Appropriate district branches are asked to help identify APA members to perform site visits to these semifinalist programs and to submit an evaluation to the Awards Committee, which aids in the Committee's selection of finalists. The Committee convenes by phone to review site evaluations and chooses awardees. The committee has no in person meetings over the course of the selection process.

AMERICAN PSYCHIATRIC ASSOCIATION/FOUNDATION

AWARD REVIEW FORM

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NAME OF AWARD ADMINISTRATIVE COMPONENT: Psychiatric Services Achievement Awards Selection Committee

CHAIRPERSON: Christina Arredondo, MD

STAFF LIAISON: Samantha Hawkins

.....
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Cost of Cash Award: Total of 10,000 (3500 to each gold award; 2000 for silver; 1000 for bronze; no money is given if the committee chooses programs for a Certificate of Significant Achievement).

Cost of Lectureship: none

Other (please list): IPS expenses

Award Account Balance: _____ (as reported by APA Online Financials)

Date Balance Determined: _____

Award Nominee(s):

Gold award for academically- or institutionally affiliated programs

Sexual Behaviours Clinic, Integrated Forensic Program
Royal Ottawa Mental Health Centre, Canada

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Silver

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Mental Health Association of East Tennessee

Bronze

SUSTAIN (SUpporting Seniors receiving Treatment And INtervention)
Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania; Department of Aging, Commonwealth of Pennsylvania,

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- Heartland Clinic/CHARG Resource Center, Denver, Colorado
- St Luke's Behavioral Health Clinic – Twin Falls Campus, part of St. Luke's Healthcare System, Boise, ID

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	Customer ID	Contact Name	Apply Program Name	Status
Select	152 000000071218	Erik J Roskes M.D.	Community Forensic Aftercare Program, Office of Forensic Services, Maryland Department of Health and Mental Hygiene	Completed
Select	162 000001011245	Robert J McHale, MD	Monarch's Open Access	Completed
Select	153 000001015897	Samuel J Pullen, DO	St Luke's Behavioral Health Clinic part of the St. Luke's Health System based out of Boise, Idaho.	Completed
Select	159 000000310351	Benjamin I Goldstein MD PhD	Centre for Youth Bipolar Disorder	Completed
Select	161 000000033666	Reid Finlayson, MD	Vanderbilt Comprehensive Assessment Program, for professionals	Completed
Select	163 000001341580	Kristin Spykerman, MSW	Cherry Health, Sage Behavioral Health Care Home at the Heart of the City location.	Completed
Select	164 000001339161	Paul Alexander Mabe III, PhD	Project GREAT (Georgia Recovery-Based Educational Approach to Treatment)	Completed
Select	167 000000311859	Tony W Thrasher, DO	The program that I am respectfully submitting is the: CRISIS SERVICES BRANCH (Milwaukee County Behavioral Health Division) The Crisis Services branch provides a myriad of intervention services for all adults and children in Milwaukee County experiencing a psychiatric emergency, either of voluntary or involuntary legal status. The eleven components of the Crisis Services branch are described in more detail throughout the application.	Completed
Select	173 000001341771	Benjamin T Harrington	Integrating School Based Outreach: Mental Health 101 & Typical or Troubled? Programs	Completed
Select	160 000001338272	Lisa Murphy, MA	Sexual Behaviours Clinic, Integrated Forensic Program, The Royal	Completed
Select	158 000001079910	David Dyer Burgess	Heartland Clinic	Completed
Select	165 000001342510	Erin O'Neill Zerth, PhD	U.S. Department of Veterans Affairs Edward Hines Jr. VA Hospital Primary Care Behavioral Health (PCBH) Program	Completed
Select	166 000001343238	Christian Shriqui, MD, MSc	CHU de Québec-IUSMQ Mieux-Être Wellness Program	Completed
Select	171 000000059342	Joseph John Parks, MD	Missouri Community Mental Health Center Health Home Program Missouri Department of Mental Health and MO HealthNet Division of Missouri Department of Social Services	Completed
Select	169 000001343737	Julie M. Shaw, LCSW	JeffCare, a program of Jefferson Parish Human Services Authority	Completed
Select	172 000001344433	Susan Callahan, MSW	Lowcountry Autism Foundation	Completed
Select	170 000000042919	Joel E Streim M.D.	SUpporting Seniors receiving Treatment And INtervention (SUSTAIN)	Completed
Select	174 000001344997	Abraham Goldring, MA	The program we would like to present to you for this respected award is called "Thinking for Living", also known as Cognitive Remediation Therapy	Completed
Select	175 000001345024	Michael Bloomquist, PhD	Evidence-based Intensive Outpatient Psychotherapeutic Programs for Youth with Behavior and Depression Disorders: The Behavior Development and Healthy Emotions Programs	Completed

Stay Connected:

AWARD REVIEW FORM

APA Board instructions:

Please complete this form in its entirety and forward the form to the Council to which the award administrative component reports along with the nomination of the award recipient. The Council will then forward this documentation to the Joint Reference Committee (lmqueen@psych.org)

APA Foundation instructions:

If the award will be approved by the American Psychiatric Association Foundation Board, please return this form to Lindsey Fox (lfox@psych.org).

AWARD NAME: Bruno Lima Award in Disaster Psychiatry

NAME OF AWARD ADMINISTRATIVE COMPONENT: Committee on Psychiatric Dimensions of Disaster

CHAIRPERSON: Robert Ursano, M.D.

STAFF LIAISON: Ricardo A. Juarez

.....
[Please note if any of the information listed below revises what is currently listed in the APA Operations Manual or if this award needs to be added to the Operations Manual.]

Description of Eligibility for Award:

APA Member in APA District Branch or State Association. The Bruno Lima Award in Disaster Psychiatry recognizes outstanding contributions of APA members in the care and understanding of the victims of disaster.

Description of Selection Criteria for Award:

A member of APA District Branches and State Associations who epitomizes the APA's highest ethical, clinical, and professional standards, while engaged in one or more of the following activities:

- Providing consultation, education, training and awareness on mental health and disaster issues
- Providing direct service delivery as part of a disaster response team
- Designing disaster response plans

Award Funding Information: [Please complete the following if applicable]

Cost for Plaque: None

Cost of Cash Award: None

Cost of Lectureship: None

Other (please list): None

Award Account Balance: _____ (as reported by APA Online Financials)

Date Balance Determined: _____

Award Nominee(s): Kathleen Clegg, M.D.

Dr. Clegg is the Associate Professor of Psychiatry at Case Western Reserve University, the Director of Public and Community Psychiatry at University Hospitals Case Medical Center, and the Medical Director at Recovery Resources, a community-based public mental health center. She is currently the co-chair of the Group for the Advancement of Psychiatry's Committee on Disasters and the World and is a former co-chair of OPPA's Disaster Committee.

Dr. Clegg has extensive local, national and international experience with teaching mental health disaster response and preparedness including providing training on disaster management in complex humanitarian emergencies, focusing on the mental health recovery of children and families. She has taught at international medical schools and medical societies in Thailand (2001), Nicaragua (2003), Haiti

(2011) and India (2012) on the topics of volunteer self-care, cross-cultural communication, compassion fatigue and vicarious trauma. From 2003 to 2007, Dr. Clegg participated in planning and teaching local disaster preparedness in Ohio with a focus on children and adolescents. In 2011, she participated in the training of primary care nurses in St. Vincent and the Grenadines through a global mental health collaboration with Mt. Sinai Medical School to strengthen their mental health systems in preparation for future disasters. In 2013, during continued earthquake recovery efforts in Peru, Dr. Clegg participated in a university outreach program by teaching topics on disaster and mental health to Peruvian medical students while providing psychiatric care to the community. Most recently, Dr. Clegg lectured on PTSD in children and adolescents at a national pediatric conference in Mexico.

Description of the Committee's Selection Process:

The Committee discussed several nominations during their annual in-person meeting at the 2015 APA Annual Meeting in Toronto. Staff coordinated follow up with the nominees' respective District Branches and State Association Presidents in order to solicit additional nominees and to receive support from the DB/SA President of the nominee. A review of the final letters of support from the DB/SA Presidents who responded finalized the individual to be awarded the 2016 Bruno Lima Award in Disaster Psychiatry.



OHIO
PSYCHIATRIC
PHYSICIANS
ASSOCIATION

A District Branch of the American Psychiatric Association

Dedicated to promoting the highest quality care for people with mental disorders and to serving the professional needs of Ohio's psychiatric physicians.

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Janet Shaw, MBA

Administrative Assistant
Michelle Mazza

October 2, 2015

Ricardo A. Juarez:
American Psychiatric Association
1000 Wilson Boulevard, Suite 1825
Arlington, Va. 22209-3901

Dear Mr. Juarez:

As president of the Ohio Psychiatric Physicians Association (OPPA), I am proud to be able to nominate one of our members, Dr. Kathleen Clegg, for the American Psychiatric Association's Bruno Lima Award in Disaster Psychiatry.

Dr. Clegg is an Associate Professor of Psychiatry at Case Western Reserve University, the Director of Public and Community Psychiatry at University Hospitals Case Medical Center, and the Medical Director at Recovery Resources, a community-based public mental health center. She is currently the co-chair of the Group for the Advancement of Psychiatry's Committee on Disasters and the World and is a former co-chair of OPPA's Disaster Committee.

Dr. Clegg's qualifications justifying receipt of this award are many. In fact, she has extensive local, national and international experience with teaching mental health disaster response and preparedness, providing training on disaster management in complex humanitarian emergencies, focusing on the mental health recovery of children and families, including the following:

- She has taught at international medical schools and medical societies in Thailand (2001), Nicaragua (2003), Haiti (2011) and India (2012) on the topics of volunteer self-care, cross-cultural communication, compassion fatigue and vicarious trauma.
- From 2003 to 2007, Dr. Clegg participated in planning and teaching local disaster preparedness in Ohio with a focus on children and adolescents.
- In 2011, she participated in the training of primary care nurses in St. Vincent and the Grenadines through a global mental health collaboration with Mt. Sinai Medical School to strengthen their mental health systems in preparation for future disasters.
- In 2013, during continued earthquake recovery efforts in Peru, Dr. Clegg participated in a university outreach program by teaching topics on disaster and mental health to Peruvian medical students while providing psychiatric care to the community.
- Most recently, Dr. Clegg lectured on PTSD in children and adolescents at a national pediatric conference in Mexico.

Given the above impressive credentials and qualifications, as well as my personal knowledge of Dr. Clegg's work in community psychiatry in Ohio, I am pleased to be able to offer her name in nomination for this prestigious and well-deserved award.

Sincerely,

Steve W. Jewell, MD
President

cc: Frederick Stoddard, MD

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Proposal to Establish a Caucus on Infancy and Early Childhood

Prepared by Jean Thomas, MD

Why the Caucus is needed:

The purpose of a Caucus on Infancy and Early Childhood is to promote communication and networking among APA members who share deep concern about the emotional and behavioral health of all children and recognize the need to identify and treat children as early as possible. Research demonstrates that the first year of life is the most influential in a child's development and children are most malleable to intervention in their earliest years. The goal in establishing the Caucus on Infancy and Early Childhood, within the Council on Children, Adolescents and Their Families is to support clinicians', parents', and policy makers' understanding of the urgency of earlier intervention and to trigger more research, collaboration and funding for the youngest children and their families.

Approximately 10% of 1-and 2-year-old children have behavioral and emotional difficulties as reported by parents and pediatricians. Similarly, approximately 10% to 15% of preschool children have behavioral/emotional difficulties. Longitudinal studies demonstrate that many early behavioral and emotional difficulties persist. Disruptive behavior disorders comprise a substantial majority of the behavioral and emotional disorders diagnosed in toddlers and preschool children. Furthermore, children with early disruptive disorders are at increased risk for continuing externalizing difficulties and also for internalizing and academic difficulties. Child externalizing and internalizing disorders, especially when combined, are predictive of later antisocial behavior. Of greatest concern, early onset aggression is a precursor of life-course persistent antisocial behavior.

The transactional model of development (Sameroff & Chandler, 1975) conceptualizes development as the unfolding of the biological potential within the ever evolving, specific context of the caregiving environment, including the child-parent relationship, community, and culture. Developmental changes are driven by the regulatory influence of the primary caregivers and environment-gene interaction.

Three domains, child, parent and parent-child relationships, all contribute well-known risk for psychopathology in early childhood. *Child characteristics*, including externalizing and internalizing difficulties, especially when combined, are predictive of later antisocial behavior. Neurodevelopmental vulnerabilities often found in children with disruptive disorders appear associated with difficulties in cognitive, autonomic, neuroendocrine, neurochemical, prenatal, and genetic factors. *Parent characteristics* (locus of control, anxiety, depression) associated with both parental psychopathology and adjustment problems, correlate with disruptive behavior in young children. Risk associated with the caregiving environment centers around parenting that is negative and inconsistent, and family social adversity. Parent mental illness is the most widely studied and best understood risk factor. *Parent-child relationship characteristics* (parent-child conflict, intrusiveness, and difficulties with reciprocity, non-compliance, and coping with non-compliance) are also associated with psychopathology in young children.

The young child must be understood and treated within the specific caregiving context, most importantly, within the primary caregiving relationships. Risk associated with the caregiving environment centers on critical and inconsistent parenting and family social adversity. The National Institute of Child Health and Human Development (NICHD) Child Care Research Network (2004) demonstrated in a large multi-site study the central role of parents and parent-child interactions in affect dysregulation and behavioral competence at 24 and 36 months. They also demonstrated the importance of affect regulation in later cognitive and social competence.

In summary, the goal in establishing the Caucus on Infancy and Early Childhood, within the Council on Children, Adolescents and their Families is to support clinicians', parents', and policy makers' understanding of the urgency of earlier intervention and to trigger more research, collaboration and funding for the youngest children and their families. Research demonstrates that the first year of life is the most influential and that early childhood is the most malleable time of a child's development. These years are also fraught with the normative behavioral transitions around age two years that trigger parent-child relational challenges. These behavioral challenges often signal parents to seek help, which is an opportunity to identify early neurodevelopmental differences and to intervene most effectively with parents and other caregivers. This is also a time when parental affective vulnerability exacerbates these challenges. Increased understanding of etiologic pathways that guide specific intervention, treatment and prevention strategies is required (American Academy of Child and Adolescent Psychiatry, 1997).

Goals of the Proposed Caucus on Infancy and Early Childhood:

Overarching goals of the proposed Caucus on Infancy and Early Childhood are grounded in burgeoning early childhood mental health research that documents the urgency of early intervention. The Caucus' overarching goal is to support: understanding, teaching, research and implementation of collaborative mental health guidelines and programs for infants and young children, within the APA and beyond.

Proposed Caucus Leadership:

Jean M. Thomas, M.D., the Chair of the APA Corresponding Committee for Infancy and Early Childhood brought forth the Committee's resolve to continue their critical work after the discontinuation of all Corresponding Committees. At that time it was well known that research documents the urgency of earlier intervention. In 2014, with the recommendation of Council Chair, Louis Kraus, M.D., the Council supported this goal and Dr. Thomas's leadership during the first year of the Caucus, until, by APA design, the Caucus elects new leadership. With Dr. Thomas's support, during the Council's September 2015 meeting, members volunteering for the Caucus initiated and are now submitting an abstract titled: Early Disruptive Behavior: What Does It Mean? Differential Diagnosis and Pharmacologic Approaches.

Proposed Year One Activities:

During the first year, the Caucus will meet at the APA's Annual Meeting and via listserv deliberations to more clearly define its goals and plans. In addition, it will select a topic for abstract submission to present at the next Annual Meeting. It will also create a plan to build Caucus membership and to ensure a minimum of 25 APA members. Initiatives will focus on increasing understanding of the urgency of earlier identification and intervention among: 1) Clinicians, 2) Parents, 3) Policy makers and 4) Researchers. Collaborations with the American Academy of Child and Adolescent Psychiatry's Infant and Preschool Committee and the American Academy of Pediatrics will be initiated.

Caucus Activities Year Two and Beyond:

In the second year, the Caucus membership will elect a new leader who will continue to ensure a minimum of 25 or more members. Work groups begun in the first year will report on their completed and ongoing work products and new ideas for the second year. The Caucus leader will also strongly support members initiating new work groups. During the year the Caucus will develop and submit an abstract to present at the APA's Annual Meeting. Ongoing initiatives will focus on increasing understanding of the urgency of earlier identification and intervention among: 1) Clinicians, 2) Parents, 3) Policy makers and 4) Researchers. Ongoing and new collaborations, including those with the American Academy of Child and Adolescent Psychiatry's Infant and Preschool Committee and the American Academy of Pediatrics will be actively explored.

Cost Estimate:

\$175 annually (\$75 for meeting room space at the Annual Meeting + \$100 for listserv costs).
Estimate is based on standard costs for component budgets.

Letters of Support for a Caucus on Infancy and Early Childhood

1. *Elias H. Sarkis, MD, DFAPA, DFAACAP*

I am submitting this letter in support of the caucus for Infancy and Early Childhood. Infant Psychiatry is a field that needs more attention. It is abundantly clear from recent research that genetics are impacted by early childhood environment and those two factors determine most of psychopathology. An emphasis on Infant Psychiatry is essential to our field.

2. *Caroline De Oleo Brozyna, MD*

I am writing to support the formation of a Caucus for Infancy and Early Childhood, which will be able to spearhead continued research in early childhood mental health, teach and implement collaborative mental health guidelines and programs for infants and young children. As a fellow in training in the field of Child and Adolescent Psychiatry, I am acutely aware of the challenges that this population face and believe the formation of a caucus would be beneficial given how underserved and at risk this phase of childhood is. I am interested in being a member of the caucus because in developing my career as a Child and Adolescent Psychiatrist, I have a particular interest in early developmental interventions and how these can positively impact outcomes. Please consider approving this caucus.

3. *Celeste Lopez, MD*

A Caucus on Infancy and Early Childhood is important because it recognizes that early life experience has an impact on human emotional development that is unique to any other period in our lives. Identifying this as a significant developmental phase for attachment and growth by designating a separate caucus will allow us to focus work in this area of trainee education and physician education.

I would like to be a member of this Caucus because this is an area that I have been personally involved with in my own training and that I am incorporating into my own private practice as an early career child psychiatrist. It is important to me to have a venue to learn from others as I develop my expertise in this age group and that I can contribute to the education of trainees.

4. *Penny Knapp, MD*

I support initiating an APA Caucus for Infancy and Early Childhood. Rapidly developing early childhood mental health research demonstrates the genesis of many mental health disorders in infant and preschool developmental processes. APA members should be cognizant of this research and aware of the urgency of early intervention for prevention of later psychopathology. I would be happy to support the Caucus to expand understanding, teaching and implementation of collaborative mental health guidelines and programs for infants and young children, within the APA and beyond.

5. *Anish Ranjan Dube, MD, M.P.H.*

I am writing to support the formation of a Caucus for Infancy and Early Childhood. While most of our treatments target psychopathology as they manifest, psychiatrists are not involved enough in primary prevention and public health efforts aimed at the prevention of pathophysiological processes from arising in the first place and addressing the social determinants of mental health. This Caucus could serve to further research in the Infancy and Early Childhood developmental periods and advocate for social/policy level changes. I am interested in becoming a member due to

my own interest in public systems, policy and population level interventions to address mental health and well-being.

6. Swathi Krishna MD

I would like to write to support the formation of a Caucus for Infancy and Early Childhood. This caucus would be an important addition to APA and its Components because of its ability to focus on the early diagnosis and treatment of early childhood mental health disorders. These disorders are still not understood as well as disorders in older children and adults and the caucus could lead current efforts for education and additional research regarding risk factors and treatments. I would be honored to be a member of the Caucus because, as a resident psychiatrist, I am interested in participating in the development of early childhood diagnostic and treatment directives that I may use in my practice as I move forward in my practice.

7. Ijeoma Ijeaku MD, MPH

I serve in my local branch of the APA council as a region councilor. I am a child and adolescent psychiatrist who works in an outpatient clinic in southern CA. I work with an underserved population. I am always impressed by the level of trauma this population has been exposed to. I am even more fascinated by the resilience and positive outcome that this population exhibits when there has been early detection of issues with use of early intervention techniques. I am particularly interested in early life issues. Of note is the overwhelming evidence gathered in studies looking at the outcomes of children whose mothers were supported during pregnancy and in infancy and early childhood. These studies have shown that when mothers are adequately supported, they are bound to be better caregivers to their infants and this interaction makes for a better attachment. Attachment is critical to resilience and ability to deal with stressors. An APA group addressing issues affecting infancy and early childhood is of immense value to the practice of Psychiatry in general and particularly to Child and Adolescent Psychiatry. This group will serve the very important role of advocating for strong family life, preventing or minimizing trauma to the unborn and very young, educating various parties about the importance of a solid beginning, providing adequate treatment for disorders that have their root in early life and encouraging research in this very dynamic and vibrant aspect of Psychiatry.

I would love to be part of the Infancy and Early Childhood caucus as soon as the APA allows it.

8. Desiree Shapiro, MD

I am interested in the development of an APA Caucus for Infancy and Early Childhood. I think it is very important to approve the formation of this caucus given the positive impact of early intervention and prevention efforts for young children with mental illness. This caucus would allow for a group of interested and passionate psychiatrists to join together to investigate and collaborate on improving the mental health treatment and delivery for those youth suffering in their early childhood. I also think it is important to collaborate with other organizations, such as AACAP, to promote greater awareness of early childhood mental health efforts.

9. Michael Houston, MD, DFAPA, DFAACAP

I am writing in support of the formation of a caucus on infant mental health within the APA. This is crucial for prevention and early intervention of the entire spectrum of mental disorders. While the majority of APA members treat adults-it is our work with parents and young children that will be most effective in addressing the environmental antecedents to psychiatric illness. I would be an

active member of an infant mental health caucus and would think such a group would interact cooperatively with a number of APA components.

10. ***Gabrielle Shapiro, MD***

I am writing to support the formation of a Caucus for Infancy and Early Childhood which will be able to spearhead continued research in early childhood mental health and teach and implement collaborative mental health guidelines and programs for infants and young children. Please consider approving this important caucus.

11. ***Irene Chatoor, MD***

As previous Chair of the Committee on Infancy and Early Childhood for the APA's Council on Children, Adolescents and Their Families, I am eager to support the Council's proposal for a Caucus on Infancy and Early Childhood. I have specialized in infant and early childhood feeding disorders for more than 30 years, published many research papers, and given many national and international talks in this area. I strongly support the establishment of this Caucus and would like to be one of the core members. A greater focus on infants, young children and their families will foster additional, greatly needed research and clinical expertise for this most vulnerable and promising age group.

12. ***Christopher J. Kratochvil, MD***

I am pleased to provide this statement of support for the formation of a Caucus for Infancy and Early Childhood. This critical topic is in need of additional attention from our professional organization in order to identify current and reliable resources/guidelines for our members, identify gaps, and provide guidance towards opportunities to improve care and outcomes for infants and young children. As a researcher with a history of clinical research with young children, I would be pleased to help support the initiation and operationalization of this caucus.

AWARD REVIEW FORM

APA Board instructions:

Please complete this form in its entirety and forward the form to the Council to which the award administrative component reports along with the nomination of the award recipient. The Council will then forward this documentation to the Joint Reference Committee (lmqueen@psych.org)

APA Foundation instructions:

If the award will be approved by the American Psychiatric Association Foundation Board, please return this form to Lindsey Fox (lfox@psych.org).

AWARD NAME: Human Rights Award

NAME OF AWARD ADMINISTRATIVE COMPONENT: Council on International Psychiatry

CHAIRPERSON: Michelle Riba, M.D.

STAFF LIAISON: Ricardo A. Juarez

.....
[Please note if any of the information listed below revises what is currently listed in the APA Operations Manual or if this award needs to be added to the Operations Manual.]

Description of Eligibility for Award:

Any individual or organization focused on promoting the human rights of populations with mental health needs. The Human Rights Award recognizes extraordinary efforts by individuals and organizations focused on promoting and supporting the human rights of populations with mental health needs, while maintaining the ethical standards of the APA.

Description of Selection Criteria for Award:

The Human Rights Award acknowledges and honors individuals and organizations whose efforts exemplify the capacity of human beings to act courageously and effectively to:

- prevent human rights violations
- protect others from human rights violations and the psychiatric consequences
- aid the recovery of victims of human rights violations
- promote the human rights of populations with mental health

Award Funding Information: [Please complete the following if applicable]

Cost for Plaque: N/A

Cost of Cash Award: None

Cost of Lectureship: None

Other (please list): None

Award Account Balance: _____ (as reported by APA Online Financials)

Date Balance Determined: _____

Award Nominee(s): David Satcher, M.D., Ph.D.

David Satcher, MD, PhD is director of The Satcher Health Leadership Institute, which was established in 2006 at the Morehouse School of Medicine in Atlanta, Georgia. The Institute's mission is to develop a diverse group of public health leaders, foster and support leadership strategies, and influence policies toward the reduction—and, ultimately, the elimination—of disparities in health. The Institute's programs reflect Dr. Satcher's demonstrated track record in improving public health policy and his commitment to eliminating health disparities for underserved groups, such as minorities and the poor, and shedding light on neglected issues, such as mental and sexual health. Dr. Satcher was sworn in as the 16th Surgeon General of the United States in 1998. He also served as Assistant Secretary for Health in the Department of Health and Human Services from February 1998 to January 2001, making him only the second person

in history to have held both positions simultaneously. His tenure of public service also includes serving as director of the Centers for Disease Control and Prevention (CDC) and administrator of the Toxic Substances and Disease Registry from 1993 to 1998. He is the first person to have served as director of the CDC and then surgeon general of the United States. In addition, Dr. Satcher has held top leadership positions at the Charles R. Drew University for Medicine and Science, Meharry Medical College, and the Morehouse School of Medicine. He has been a Macy Foundation fellow, Robert Wood Johnson Foundation clinical scholar, and a senior visiting fellow of the Kaiser Family Foundation. Having also held the position of director of the National Center for Primary Care (NCPC) at the Morehouse School of Medicine from 2002 to 2004, Dr. Satcher currently occupies the Poussaint-Satcher-Cosby chair in mental health at the Morehouse School of Medicine. This reflects his long commitment to removing the stigma attached to mental illness, as evidenced by *Mental Health: A Report of the Surgeon*, the first surgeon general's report on mental health released during his tenure as surgeon general. As surgeon general and assistant secretary for health, Dr. Satcher led the department's effort to eliminate racial and ethnic disparities in health, an initiative that was incorporated as one of the two major goals of Healthy People 2010. Dr. Satcher has received over 40 honorary degrees and numerous distinguished honors including top awards from the National Medical Association, the American Medical Association, and the American Academy of Family Physicians; he is also the recipient of the Symbol of H.O.P.E. Award for health promotion and disease prevention. In 2005, Dr. Satcher was appointed to serve on the World Health Organization Commission on Social Determinants of Health. Currently, Dr. Satcher serves on the Board of Directors of Johnson & Johnson, MetLife, and the CDC Foundation. He also serves locally on the board of United Way of Greater Atlanta and The Community Foundation for Greater Atlanta. Dr. Satcher graduated from Morehouse College in Atlanta, Georgia, in 1963 and is a member of Phi Beta Kappa. He holds MD and PhD degrees from Case Western Reserve University in Ohio. He is a member of Alpha Omega Alpha Honor Society and a fellow of the American Academy of Family Physicians, the American College of Preventive Medicine, and the American College of Physicians. He is a member of the Institute of Medicine, National Academy of Sciences, the 100 Black Men of Atlanta, and the American Academy of Arts and Sciences.

Description of the Committee's Selection Process:

The Council discussed several nomination recommendations over the course of two conference calls and finalized a slate for vote by all the Council members at their bi-annual in-person meeting during the September Components meeting. Since there were multiple nominations and options for the individual and organization award, a rank order ballot was disseminated electronically. The final tally of votes finalized the individual to receive the 2016 Human Rights Award.

APA/SAMHSA Minority Fellowship Selection and Advisory Committee

CHARGE:

The Selection and Advisory Committee is responsible for recommending policy, evaluating applications, and selecting fellows. The committee serves in an advisory capacity to the staff in monitoring and evaluating the program in terms of meeting objectives and the impact on training programs. The committee also serves in an advisory capacity to the fellows in establishing a relationship with a mentor.

Rationale for revision:

The proposed charge addition is the last sentence in italics. The Committee will be responsible for asking selected fellows if they wish a mentor, and if so, advise the fellow as to possible mentors. The committee can accomplish this responsibility as it chooses. One way would be to provide a list of mentors. Another way would be to match one mentor to the fellow taking into account their needs and preferences (i.e., goals of mentorship, areas of mutual interest, importance of geographic proximity, preferences about the cultural identity of the mentor, etc.). The Committee will contact possible mentors ahead of time to check on their actual availability and interest. The minimal expectation would be a one-hour discussion in person or on the phone on a quarterly frequency. Should the pairing not work out for either party, the fellow would contact the committee to solicit another mentor if desired. This entire process would occur on a voluntary, optional basis as requested by the fellow.

APA Public Psychiatry Fellowship Selection Committee

CHARGE:

The APA Public Psychiatry Fellowship Selection Committee is composed of five members appointed by the APA President for three-year terms. It has representation from the IPS Program Committee, APA Public Psychiatry alumni, and three members at large. The committee is not authorized to meet in person except at the APA Annual Meeting. The Selection and Advisory Committee is responsible for recommending policy, evaluating applications, and selecting fellows. The committee also serves in an advisory capacity to the fellows in establishing a relationship with a mentor.

Rationale:

The proposed charge is the addition of the last two sentences. The first sentence is the same one that exists in the current charge of the APA/SAMHSA Minority Fellowship Selection and Advisory Committee, which simply states the fundamental responsibility of the committee of "recommending policy, evaluating applications, and selecting fellows." In the second sentence, the Committee will be responsible for asking selected fellows if they wish a mentor, and if so, advise the fellow as to possible mentors. The committee can accomplish this responsibility as it chooses. One way would be to provide a list of mentors. Another way would be to match one mentor to the fellow taking into account their needs and preferences (i.e., goals of mentorship, areas of mutual interest, importance of geographic proximity, preferences about the cultural identity of the mentor, etc.). The Committee will contact possible mentors ahead of time to check on their actual availability and interest. The minimal expectation would be a one-hour discussion in person or on the phone on a quarterly frequency. Should the pairing not work out for either party, the fellow would contact the committee to solicit another mentor if desired. This entire process would occur on a voluntary, optional basis as requested by the fellow.

American Psychiatric Leadership Fellowship Selection Committee

Change to Name: American Psychiatric Leadership Fellowship Selection and Advisory Committee

CHARGE:

The Selection and Advisory Committee is responsible for recommending policy, evaluating applications, and selecting fellows. The committee also serves in an advisory capacity to the fellows in establishing a relationship with a mentor. The purposes of the APA Public Psychiatry Fellowship are (1) to heighten the awareness of psychiatric residents of the many activities of psychiatry in the public sector and of the career opportunities in this area and (2) to provide experiences that will contribute to the professional development of those residents who will play leadership roles within the public sector in future years. The APA Public Psychiatry Fellowship program provides support for outstanding residents in psychiatry to participate in APA components and attend the APA Institute on Psychiatric Services (IPS). Funds for travel, hotel, and out-of-pocket expenses are provided. During the IPS, special functions are held to recognize and honor current fellowship recipients, and activities are scheduled to augment and enrich the educational opportunities of this meeting. During the fellowship term, the Fellows are given the opportunity to plan and present a series of workshops to be presented at the next IPS. The fellowship encourages all fellows to attend the APA Annual Meeting; however, no fellowship funding is provided for this purpose.

Annotation:

The proposed additions to the charge are the last first two sentence in italics.

The first sentence is the same one that exists in the current charge of the APA/SAMHSA Minority Fellowship Selection and Advisory Committee, which simply states the fundamental responsibility of the committee of "recommending policy, evaluating applications, and selecting fellows." In the second sentence, the Committee will be responsible for asking selected fellows if they wish a mentor, and if so, advise the fellow as to possible mentors. The committee can accomplish this responsibility as it chooses. One way would be to provide a list of mentors. Another way would be to match one mentor to the fellow taking into account their needs and preferences (i.e., goals of mentorship, areas of mutual interest, importance of geographic proximity, preferences about the cultural identity of the mentor, etc.). The Committee will contact possible mentors ahead of time to check on their actual availability and interest. The minimal expectation would be a one-hour discussion in person or on the phone on a quarterly frequency. Should the pairing not work out for either party, the fellow would contact the committee to solicit another mentor if desired. This entire process would occur on a voluntary, optional basis as requested by the fellow.



REPORT | 2015

DISSEMINATION OF INTEGRATED CARE WITHIN ADULT PRIMARY CARE SETTINGS

THE COLLABORATIVE CARE MODEL

I. EXECUTIVE SUMMARY

The integration of behavioral health and general medical services has been the focus of intensive resources, planning, and education efforts for at least a decade. Significant, high-quality scientific health services research spanning three decades has identified one model in particular as being effective and efficient in delivering improved outcomes for a population of patients with behavioral health disorders seen in primary care settings, while also controlling costs and improving access and satisfaction with care. Known as the Collaborative Care Model, it separates itself from other attempts to integrate behavioral health services through its wide adaptation and steady reliance on consistent principles of chronic care delivery, as well as attention to accountability and quality improvement (QI).

Over time, through many large-scale adaptations encompassing thousands of patients, expert consensus has identified four essential elements of Collaborative Care. These include the provision of care that is 1) team-driven, 2) population-focused, 3) measurement-guided, and 4) evidence-based. A Collaborative Care team is multidisciplinary, shares roles and tasks, and together is responsible for the health outcomes of their patients. As a whole, the team is focused on the entirety of their patient population, regardless of the patient's current level of engagement in treatment. The team is equipped with tools to help manage their population of patients efficiently, often conceptualized as a disease registry. Together, this team utilizes measurement-guided patient-centered outcomes to guide the delivery of evidence-based care in order to achieve "treat-to-target" clinical goals for each patient. These core processes, in aggregate, allow each team to be held accountable to the care they provide and improve upon their processes of care to achieve better outcomes in cost savings, satisfaction, access to care, and health for the patients and systems they serve.

Each of these core elements can be adapted to a variety of community settings, and this report highlights the background, eligibility requirements, adaptation of the essential elements, accountability, and quality improvement efforts in five of the largest Collaborative Care implementations to date from the persons directly involved in their implementation. Lessons learned from these early adopter programs provide invaluable insights for systems seeking quality, evidence-based "integrated care" solutions.

The American Psychiatric Association (APA) and the Academy of Psychosomatic Medicine (APM), jointly represented in authorship of this report, are dedicated to advancing the scientific understanding of evidence-based integrated care by outlining the current state of knowledge in this complex field and advocating for productive dialogue surrounding these models through the publication of this report.

MEMBERSHIP, DISCLOSURES, & ACKNOWLEDGEMENTS

Workgroup Membership

Erik R. Vanderlip, M.D., M.P.H.

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James Rundell, M.D.

Workgroup Co-Chair
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John Fortney, Ph.D.

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Vice-Chair, APA Council on Healthcare Systems and Financing;
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James Rundell, M.D., is a paid consultant for Quartet, LLC, a company providing informatics services to health care plans to facilitate integrated care in their networks.

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This report is dedicated in loving memory to the spirit and passion of Dr. Wayne Katon, whose body of scientific evidence and character lives on.

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II. WORKGROUP BACKGROUND

A. Formation of Workgroup

At the APA September Components Meeting of 2014, several committees identified the need for APA policy and guidance for membership defining evidence-based standards of integrated care models and showcasing emblematic programs of robust Collaborative Care implementation. The Council of Psychosomatic Medicine (PSM), under the guidance of Dr. David Gitlin, and the APM, under the guidance of then-President Dr. Linda Worley, convened a workgroup chaired by Drs. Rundell and Vanderlip to examine existing models and assist interested organizations with defining evidence-based integrated care implementations. Both organizations were concerned that emerging policy documents and implementation recommendations were often not sufficiently evidence-driven. It is important to address the increasing national interest in integrated care model dissemination through the best available data and experience.

B. Membership of Workgroup

Following further discussions, the Workgroup membership was specifically selected to represent several large-scale integrated care implementations nationally. This included psychiatric and non-psychiatric leadership from the following:

- 1) The University of Washington Advancing Integrated Mental Health Solutions (AIMS) Center (Marc Avery, M.D., and John Fortney, Ph.D.)
- 2) The Veterans Health Affairs (VA) population (James Rundell, M.D. and John Fortney, Ph.D.)
- 3) Active military/Department of Defense (Charles Engel, M.D., M.P.H.)
- 4) The Minnesota DIAMOND (Depression Initiative Across Minnesota—Offering New Directions) project (Mark Williams, M.D.)
- 5) An academic/university-based health system – The University of California, Davis (David Liu, M.D.)

Carol Alter, M.D., provided additional representation from the APM and APA Council on Healthcare Systems and Financing. Consultants providing oversight and guidance also included APA administration from the Office of HIV Psychiatry (Ian Hedges) and the Office of the CEO and Medical Director (Kristin Kroeger), as well as Lori Raney, M.D., Chair of the APA Workgroup on Integrated Care. Drs. Gitlin and Crone were representatives from the APA PSM Council and the APM.

C. Charge of Workgroup

Beginning February 2015, the Workgroup convened a series of teleconferences. During the first teleconference, the group discussed the charge of the Workgroup and expected product and timeline of development. Issues discussed at length included the scope of the Workgroup report and how to conduct the review of evidence-based literature on integrated care models. At the conclusion of the first teleconference, there was considerable interest in producing a report that highlighted the importance of primary care integration through the Collaborative Care Model. Drs. Rundell and Vanderlip reformatted the Workgroup charge to be inclusive of a range of implementations while calling for consistency in definitions to be used in integrated care discussions and use of a common language when addressing essential components of Collaborative Care Models. At the conclusion of the second teleconference call, an outline for the report was developed based on Workgroup discussions and review of the literature. The Workgroup elected to keep this report focused on integrated care models for mental health and primary care, though it is important to acknowledge that there is impressive evidence for the effectiveness of integrating mental health services with specialty medical-surgical care (Sharpe et al. 2014) and integrating medical and preventive services into specialty care of the seriously mentally ill (Druss et al. 2000, 2002, 2010).

The Workgroup's final charge was to produce a working set of principles defining evidence-based integrated care implementation based on review of published literature and expert consensus when sufficient evidence could not drive a recommendation. Adaptations of these principles through in vivo implementations are highlighted. This product is intended to facilitate standardization of educational materials and messaging for APA and APM membership as well as policy-makers, external and allied organizations, health system partners, payers, and the general public.

III. SUMMARY OF EVIDENCE FOR INTEGRATED CARE

The notion of integrated care encompasses a broad spectrum of health services interventions intended to blend primary care services with traditional mental health services. Integrating mental health into primary care settings, as well as the blending of primary and preventive medicine into traditional mental health settings represents a more holistic approach to treatment than the traditional consultative and referral models. Bringing mental health services to primary care normalizes and de-stigmatizes treatment for behavioral health disorders, simultaneously increasing access for patients by making evidence-based mental health services available in their regular primary care clinics. The delivery of primary care services to mental health settings also can overcome barriers to receiving medical and preventive care, offering increased convenience and familiarity with services. Merging mental health services within primary care services is more studied than the reverse; the science around effective health services delivery is greater for these models.

For models integrating mental health into primary care, mental health providers can impact the care of more patients than in the specialty mental health referral sector. Integrated mental health providers take on more consultative and team-based roles and focus on helping primary care providers (PCPs) treat mental health disorders, leveraging their skills and expertise to reach more patients in need. In addition, integrated care encounters are typically briefer and more problem-focused than traditional specialty mental health encounters.

The terminology around integrated care models is somewhat inconsistent and confusing. The terms “integrated care” and “Collaborative Care” have often been used interchangeably, while at other times these terms reflect subtle but important differences in approach. For this report, we define Collaborative Care as the embodiment of the model originally developed by Katon and colleagues at the University of Washington, demonstrated to be clinically effective in randomized control trials (W. Katon et al. 1995; W. Katon et al. 1996). Collaborative Care is a specific type of integrated care that operationalizes the principles of the Chronic Care Model (E. Wagner 2001) to improve access to evidence based mental health treatments for primary care patients.

There is expert consensus that all effective Collaborative Care Models share four core elements: 1) team-driven, 2) population-focused, 3) measurement-guided, and 4) evidence-based. These four elements, when combined, can allow for a fifth guiding principal to emerge; accountability and quality improvement. Table 1 reviews the core elements of Collaborative Care implementation. Collaborative Care is *team-driven*, led by a PCP with support from a care manager (CM) and consultation from a psychiatrist who provides treatment recommendations for patients who are not achieving clinical goals. Other mental health professionals can contribute well to the Collaborative Care Model. Collaborative Care is *population-focused*, using a registry to monitor treatment engagement and response to care. Collaborative Care is *measurement-guided* with a consistent dedication to patient-reported outcomes and utilizes *evidence-based* approaches to achieve those outcomes. Additionally, Collaborative Care is

patient-centered with proactive outreach to engage, activate, promote self-management and treatment adherence, and coordinate services.

Table 1: Essential Elements of Collaborative Care

Element	Definition
Team-Driven	A multidisciplinary group of healthcare delivery professionals providing care in a coordinated fashion and empowered to work at the top of their professional training.
Population-Focused	The Collaborative Care team is responsible for the provision of care and health outcomes of a defined population of patients
Measurement-Guided	The team uses systematic, disease-specific, patient-reported outcome measures (e.g., symptom rating scales) to drive clinical decision-making.
Evidence-Based	The team adapts scientifically proven treatments within an individual clinical context to achieve improved health outcomes.

Because of these principles, Collaborative Care has demonstrated cost-effectiveness, significant improvements in clinical outcomes, and high levels of satisfaction in providers and patients in diverse community settings. It is *practice-tested* with sustained adoption in hundreds of clinics across the country. By aggregating patient-reported outcomes across providers and clinics, Collaborative Care also is *accountable* to payers and amenable to continuous *quality improvement*. Collaborative Care has consistently demonstrated the capacity to deliver improved clinical, cost, and quality outcomes, including better satisfaction and access to services than traditional models of care delivery.

The Cochrane Collaborative conducted a meta-analysis of 79 randomized controlled trials comparing Collaborative Care to usual care for primary care patients with depression and anxiety, finding small-to-medium effect sizes for short- and long-term clinical outcomes (Archer et al. 2012). The clinical improvement associated with Collaborative Care is meaningful to patients and providers. In randomized trials, compared to usual care, Collaborative Care doubles depression treatment response rates (Unutzer 2002). Quality improvement data from real world implementation of Collaborative Care programs suggests that similar outcomes can be achieved in a variety of settings (Rubenstein et al. 2010; Unützer et al. 2012; J. Fortney et al. 2012).

Because Collaborative Care is a multi-faceted intervention with core elements, there is not strong evidence about the relative contribution of each core element. However, because there has been variation in some intervention components across randomized controlled trials, it is possible to empirically examine the contribution of some components using meta-analysis techniques. Using data from multiple randomized controlled trials, one Collaborative Care intervention component stands out as being highly predictive of clinical outcomes. Having regularly scheduled CM supervision by a psychiatrist (i.e., conducting weekly patient caseload

reviews) was significantly correlated with improved outcomes (Bower et al. 2006; S Gilbody, Bower, and Fletcher 2006). Thus, having specialty mental health providers on the team most likely contributes to the clinical effectiveness of Collaborative Care. In addition, evidence from meta-analyses suggests that skill sets brought by nurse CMs in those settings studied, especially those with past mental health service delivery experience, generate better clinical outcomes than CMs from other disciplines (Bower et al. 2006; S Gilbody, Bower, and Fletcher 2006; Thota et al. 2012). Another meta-analysis examined whether it matters if the members of the Collaborative Care team are physically co-located with one another. The authors concluded that there is robust empirical evidence for the effectiveness of Collaborative Care regardless of the degree of physical co-location. In fact, several studies have shown that a centralized mental health team can effectively support multiple remote PCPs (G. E. Simon et al. 2004; G. E. Simon et al. 2011; J. C. Fortney et al. 2007; J. C. Fortney et al. 2013; Dietrich et al. 2004; J. C. Fortney et al. 2015).

This review synthesizes the core elements of the Collaborative Care Model through expert consensus based on lived experience with wide-scale implementations involving thousands of patients. The core elements of Collaborative Care were re-confirmed from the initial findings of an interdisciplinary national summit on integrated care in 2011 at the Advancing Integrated Mental Health Solutions (AIMS) Center at the University of Washington. As dissemination efforts grow around integrated care, it is hoped that this analysis brings attention to the Collaborative Care Model and highlights the effective implementation of quality integrated care through defining and rationalizing the essential components of Collaborative Care.

IV. ESSENTIAL ELEMENTS OF THE COLLABORATIVE CARE MODEL

A. Team-Driven Care

1. Definition:

A multidisciplinary group of healthcare delivery professionals providing care in a coordinated fashion and empowered to work at the top of their professional training.

Team-based Collaborative Care for mental disorders in primary care is operationalized within the Chronic Care Model framework articulated by Wagner and colleagues (E. H. Wagner, Austin, and Von Korff 1996). Team-based care is defined as a multidisciplinary group of care delivery professionals (e.g., office and support staff, nurses, care managers, PCPs, and appropriate specialists) providing and supporting care and implementing and revising the treatment plan. Broadly speaking, mental health practitioners potentially relevant to the Collaborative Care Model for mental health conditions in primary care may include a psychiatric nurse practitioner, social worker, licensed counselor or therapist, psychologist, or psychiatrist. This may be contrasted with medical model approaches involving varying degrees of “physician as treatment team.” In that model, the physician fulfills most health care delivery and patient treatment roles.

2. Components:

Collaborative Care uses behavioral or general medical CMs to track the well-being and care of a population and uses psychiatrists to provide consultation to CMs and PCPs and, in some settings, direct consultative care to patients (Unutzer 2002). Most studies of Collaborative Care management have relied on three main members of the health care team. These are: (a) the PCP; (b) a CM; and (c) a consulting psychiatrist (**Figure 1**). The PCP oversees the overall patient care plan and is the ultimate decision-maker for the clinical team.

Figure 1: Team Diagram of Collaborative Care Model (aims.uw.edu)

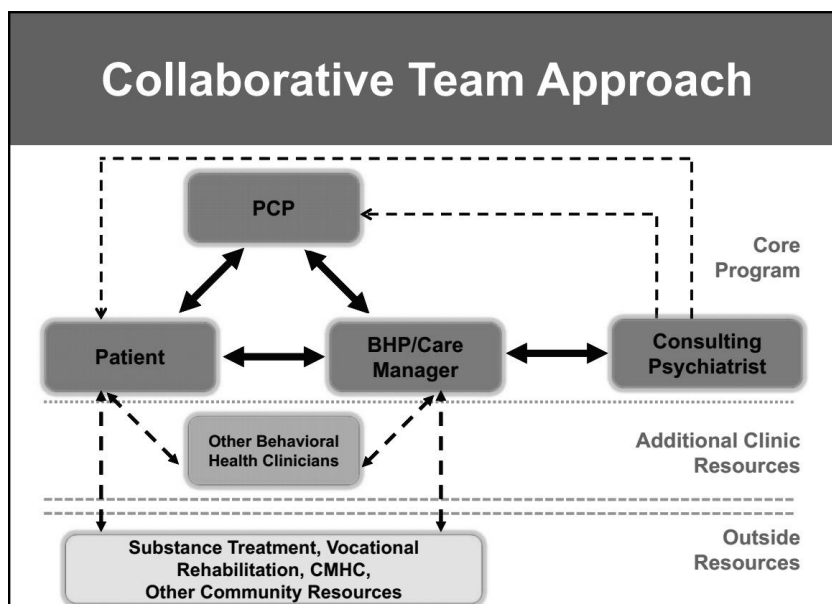


Figure 1: Dashed lines indicate less frequent methods of communication; bold lines indicate more frequent methods of communication.

The CM is the lynchpin member of the care team, linking the team to the patient and to each other. Accomplishing this often involves the use of telephone, measurement-based clinical outcome metrics (e.g., the nine-item Patient Health Questionnaire for depression [PHQ-9]) and health information/electronic medical record (EMR) technologies, such as registries, alerts, and reminders. Care managers also work to keep patients engaged in their care, assess treatment adherence, and explore treatment preferences. This information is then communicated to the team by available means (e.g., in-person, telephone, practice team meetings). The CM often prepares relevant clinical information to help ensure that periodic caseload review is accomplished efficiently when team members, including the psychiatric consultant, are present.

The consulting psychiatrist reviews the CM's caseload at routine intervals—a task often facilitated by using some or all of the health information technologies previously noted. Recommendations are formulated (e.g., medication or dosing changes, addition or discontinuation of psychosocial interventions, referral to alternative behavioral health services or assessments) for the treatment team, particularly the primary care clinician and the CM with regard to the need to change or maintain individual patient treatment plans. [Section VI](#) reviews the advantage of psychiatric consultation to the Collaborative Care team. The facilitated caseload review and consultative role of the psychiatrist allows for individualized case-by-case feedback to the PCP, a form of learning that most closely approximates adult learning styles and may be superior to didactic seminars or algorithmic flowcharts.

Other members of the Collaborative Care team may include a primary care-based psychologist or social worker for the purpose of patient assessment, enhancing access to evidence-based psychotherapies, and urgent assessment of a patient's potential to harm themselves or others. A nurse or mental health specialist may be appropriate in the CM role, and teams may employ other members to help patients implement their own self-management plan such as peers or community health workers. Often, CMs have training, skills, and experience in managing patients with other chronic illnesses (e.g., diabetes, cardiovascular disease) and permit simultaneous care management of patients with multiple comorbidities. Of note, meta-analyses of Collaborative Care studies for depression link characteristics of the CM to improved patient outcomes; specifically greater mental health expertise (S Gilbody, Bower, and Fletcher 2006; Bower et al. 2006) and nursing backgrounds (Thota et al. 2012).

3. Rationale:

The goal within Wagner and colleagues' notion of team-based care is “to promote a systematic, planned approach to care” for chronic health conditions (E. Wagner 2001). The advantage to this approach is its capacity for efficiency and effectiveness through: (a) productive and planned patient and provider interactions; (b) informed, activated patients and their partners; and (c) a prepared, proactive clinical team. More specifically, as the elements of team care have been employed within research trials, the rationale for team-driven care is to match the skills of team members to specific tasks designed to maximize quality of care and

produce timely and measureable patient status improvements. Many—perhaps most—patients with anxiety and depressive disorders do not improve in response to the first treatment, and a sizable proportion never adhere to the treatment plan long enough to lead to reasonable expectations of improvement. Regularly collecting valid status measurements facilitates proactive adjustment of the treatment plan when indicated, the provision of feasible self-management strategies for affected patients, and keeping patients fully engaged in their care over time. This requires diverse skill sets possessed by no single member of the treatment team. The team-driven approach also allows for internal accountability and follow-up, checks and balances, and may help protect members from burnout and turnover when managing challenging clinical scenarios (Helfrich et al. 2014).

4. Narrative Description/Case Study: *Introduction to “the team”*.

The following section serves to facilitate better understanding of the Collaborative Care team through a clinical example.

John J. is a 48-year-old white male visiting his PCP, Dr. Stevens, for a follow-up visit for managing hypertension. During the visit, John’s PHQ-9 score is taken and found to be 16, in the moderate range for major depression. John was treated by Dr. Stevens 12 months ago for depression and remains on fluoxetine 20 mg daily, to which he had a fair initial response. This is John’s first PHQ-9, part of the new Collaborative Care protocol instituted by Dr. Stevens’s clinic.

Dr. Stevens discusses the test results briefly with John during their clinic appointment and introduces him to Ms. Cook, a care manager/behavioral health specialist with the clinic’s Collaborative Care team. Ms. Cook is immediately available in the clinic to meet patients coming and going from appointments at the request of the PCP or other clinic staff. John agrees to speak with Ms. Cook after the appointment, and Ms. Cook runs through a few patient screens for behavioral health and substance use conditions that are often comorbid with major depressive disorder. John screens negatively for alcohol use or a history of mania. Ms. Cook discovers that John has recently moved out of his house, and he and his wife are separating. He is staying with a friend in town, and it has been hard for him to make it to work consistently. He often goes to bed late and sleeps in, missing his alarm in the morning, and eventually calls in sick. Ms. Cook shares some of this initial information with Dr. Stevens after their appointment, and Dr. Stevens increases John’s fluoxetine to 40 mg daily. She also engages him in a behavioral activation strategy to improve his mood that includes getting together with his friend Joe over the weekend.

Three days later, Ms. Cook has her weekly meeting with Dr. Brown, the consulting psychiatrist. They discuss John, the new addition to Ms. Cook’s caseload. Dr. Brown acknowledges the PHQ-9 score and the fluoxetine increase and reminds Ms. Cook of additional brief intervention techniques she has reviewed in the past with other patients. Five weeks later, during their caseload review, Dr. Brown notices John’s PHQ9

score is unchanged. Ms. Cook notes that he stopped taking the fluoxetine the week before because of some ongoing jitteriness. Dr. Brown recommends switching to sertraline instead, and Ms. Cook conveys the recommendation to Dr. Stevens by flagging him in the electronic health record. Dr. Stevens reviews John's other medications the following day and writes a prescription for sertraline after Ms. Cook has called John to discuss the recommendations of the consulting psychiatrist. John agrees to try the sertraline. Ms. Cook reviews the side effects with John and offers her contact information in addition to Dr. Stevens's office if he has any problems with the medication. Dr. Stevens phones Dr. Brown and asks about the titration schedule of sertraline and starting dosage to confirm his management is appropriate. They agree to continue with increases in this medication with a target PHQ-9 of less than 5 if possible.

By constant communication and sharing of tasks, the Collaborative Care team can work at their optimum level of efficiency and competence and share in the management of patients in a coordinated fashion.

B. Population-Focused Care

Healthcare costs as a percentage of the U.S. gross domestic product are unsustainable. Consequently, it is clear that models of reimbursement and care delivery designed around efficacy of service delivery need to be counterbalanced by attention to the population. Collaborative Care Models are a nexus for balancing population and individual health but must incorporate principles of population management to be successful.

1. Definition:

The Collaborative Care Team is responsible for the provision of care and health outcomes of a defined population of patients.

When implemented through the lens of Collaborative Care Models, three traditional components of population health (D. Kindig and Stoddart 2003; D. A. Kindig 2007) can be modified as follows:

- (a) *Health outcomes and distribution within a population* – By reviewing a registry list of patients each week in systematic case review, the Collaborative Care team can sort patients who need more attention regardless of their level of clinical engagement. Patients who have been receiving care coordination resources for some time without demonstrating interest in engaging also can be identified, allowing refocusing of health resources to other patients or intensification of outreach efforts.

- (b) *Patterns of determinants of these outcomes* – Individual clinicians are accustomed to treating patients one at a time. Aggregating data on larger groups of patients allows for identifying trends in delivery system gaps (e.g., lack of social services, addiction screening, presence of comorbid conditions such as chronic pain, financial limitations to medications), which make them easier to overcome.
- (c) *Relevant policies and interventions* – Aggregated data and population management facilitates the systematic advocacy for improved legislative policy and system-wide interventions that are an essential component of population health (e.g., the way opiates are managed in a practice or the lack of alternatives for mentally ill patients in emergency settings needing housing or inpatient beds).

2. Components:

(a) Monitoring population outcomes

Population-based care requires effective data collection and outcome monitoring. These data typically include symptom measures (e.g., PHQ-9), process measures (e.g., access), satisfaction measures, and cost measures (e.g., emergency department utilization). A first step in population management is generally to try to reach consensus on measures that are relevant for a given practice. Standardizing the measures used and setting up a way to compare practices or sites on population outcomes is an important first step. When possible, screening tools generally also can be used to monitor outcomes. A second step in population management is to block time in the schedule to consult with those most able to react to the data with resources and authority to address systemic barriers that are discovered. When data reveal that non-evidence-based practice is occurring, a population management approach offers a way to provide information to a provider to show how he/she is not conforming to standard practice and offer support or training. Variation in outcomes should lead to exploration of important differences between treatment locations or patient populations and to teach those implementing changes about ways to adjust the approach to improve outcomes. Those involved in working with population health data need to be both at the administrative level and practice levels.

One example of a practice-based data review is in the systematic caseload review in Collaborative Care. The caseload review process requires real-time input from the consultative team of, at minimum, the psychiatrist and the CM, and population review time is protected at consistent intervals (e.g., once weekly). The psychiatrist is usually providing advice and guidance to the CM regarding the caseload of patients. This periodic “check in” allows the team the capacity to review a list of patients’ health data and sort by severity to see which patients are in need of more attention or by length of treatment to see who may have reached maximum benefit. It also allows for the identification of patients lost to follow-up and in need of more proactive management.

(b) Patient-centered services

In the management of a population, it becomes more important to address problems effectively and early than to wait for them to declare themselves in an office. In the Improving Mood Promoting Access to Collaborative Care (Unutzer 2002) model of Collaborative Care, for example, a CM continues to gather information on patients utilizing whatever means are necessary (e.g., home visits, phone calls, emails, text messages, or spontaneous clinical encounters), allowing the psychiatrist to provide input to that patient’s treatment team when the patient is not improving as expected and is not engaging in traditional means. There is a higher threshold for discharging the patient from care in this model, partly because there are more options available, and partly as this is an essential element of population-focused care. A patient who “no-shows” for an appointment represents an opportunity to explore more creative avenues of engagement to prevent further worsening of chronic illnesses. In addition, by being imbedded in primary care, the care coordinator has additional opportunities to connect with patients when they arrive for immunizations, refills of hypertensive medication, or the like, allowing care to be tailored to the individual in the settings most convenient to them and their lives.

(c) Raising the capacity of specialty and primary care through stepped care

A goal of population-based care within the Collaborative Care Model is to raise the capacity of the primary care system to manage behavioral health conditions. A significant portion of the work of the psychiatrist in integrated care settings is indirect, involving curbside consultations with primary care colleagues, teaching nurse care coordinators about mental health issues, and providing suggestions in the patient’s record to the PCP based on the latest evidence, with enough background to do case-based teaching (Raney 2015a). Rather than requiring a patient to attend specialty behavioral health appointments and perpetual co-management, the goal is to make sure the patient gets what he/she needs regardless of which healthcare door he/she enters and to titrate the intensity of services to the degree of patient complexity and response to treatment. Patients with less complex disorders are managed peripherally as outcomes improve. The specialist eventually intensifies treatment for complex or treatment resistant cases via more direct consultation and management. Known as “stepped care”, this is an essential component of population-based care and ensures that limited specialty resources are applied judiciously to the portions of the population most in need. Utilizing this tactic opens more face-to-face time in the specialist provider schedule for more complex and difficult-to-treat patients, improving access to specialty care.

(d) Attending to social and environmental issues

Any effort to manage populations of patients and improve their outcomes will eventually run into social and environmental contributors to behavioral health disorders – homelessness, poverty, lack of insurance, crime, lack of safety in the home, obesity, lack of exercise, and more. Any of these can make a significant impact on the potential for patients to develop, maintain, and recover from mental disorders. A psychiatrist working within a Collaborative Care Model managing the population of the care team can more easily identify systematic barriers to care, advocate for social work resources in primary care clinics,

encourage wellness programs to include those with mental health issues, and link the primary care system with community supports and resources.

3. Rationale

Collaborative Care Models offer unique opportunities for psychiatrists to impact populations and use skills critical to population management. Projected psychiatric workforce shortages are already significant and will continue to grow, demanding judicious use of scarce specialist resources (P. Wang et al. 2005; Swartz 2011; Thomas et al. 2009). Given that there will continue to be ongoing shortages in access to specialty mental healthcare, systems that proactively identify populations at risk and track their outcomes across time will allow for more rapid triage of clinical presentations to appropriate levels of consultation and preservation of limited resources.

Adherence to follow-up and medication therapy for behavioral health conditions is notoriously poor (P. S. Wang et al. 2005; Bogner 2013; Velligan et al. 2010). Through the use of population-based registries to track outcomes and make follow-up recommendations to modify treatment plans, persons failing to remain engaged with care or adherent to therapies can be more easily identified, and strategies to engage them can be employed with increasing levels of creativity and intensity (stepped care). Consequently, population-focused management is an essential feature of Collaborative Care Models and may contribute largely to their efficacy in treatment adherence (Lin et al. 2004; Lin et al. 2012). An important aspect of population-focused management is the ability to apply evidence-based recommendations with sometimes relatively limited clinical information. This is made possible by systematic management by a trusted team of colleagues performing longitudinal evaluation (Cerimele et al. 2014). The failure to implement a quality population-based registry of cases severely weakens the capacity for this vital systematic follow-up. Population management thus offers a way to spread limited psychiatric resources over a larger population, to implement and monitor evidence-based strategies more broadly, to engage patients who are inefficiently using the healthcare system, and to learn from outcomes of groups of patients at multiple sites to inform better care delivery and advocate for improved care models within the greater community.

4. Case Study

The following section serves to illustrate population-based care through the ongoing Collaborative Care team clinical example.

Five weeks after his last appointment, John remains depressed. He did not return Dr. Stevens's last call regarding some recent lab results, and he no-showed one appointment. During their weekly caseload review, John is eighth on Ms. Cook's list of 58 patients when sorted by PHQ-9 score severity which leads to a case review. Their registry of patients also has flagged John's PHQ-9 as overdue and above their target. As she and Dr. Brown are reviewing all the patients, they review John's score and with the information in the registry are able to quickly recall his latest treatment plan, including the sertraline recommendations. Dr. Stevens did write the prescription, but Ms. Cook is

unsure what happened after that. She attempted to call John about 1 week after the sertraline was prescribed and left him a message that wasn't returned. Ms. Cook and Dr. Brown agree that John needs increased outreach given his recent depression and lack of engagement, and Ms. Cook takes on this task over the next week. They then move on to Sue after spending about 5 minutes discussing John.

Through the course of an hour, Dr. Brown and Ms. Cook review all of the patients in the caseload who are still not at target (on this particular day this was 22 of the 58 patients in the registry), rapidly triaging clinical scenarios with Dr. Brown and offering treatment suggestions or follow-up suggestions for those with unmet clinical needs. They allocate time and effort through an agreed-upon order: 1) new patients, 2) follow-up patients not yet at target or not improving, 3) patients not engaging in care, and 4) patients in remission, saving two or three complex patients for consistent check-in as time allows every week. Sometimes they do not discuss patients in remission unless certain problems arise. They review patients for possible discharge from the program who have met their clinical goals for 3 months with minimal care management (their program's discharge criteria) so as to open up more slots on Ms. Cook's caseload for new referrals, since 60 is her maximum. In this particular caseload review session, they identify two patients with more complicated personality traits and comorbid substance use disorders for referral to the local Community Mental Health Center (CMHC) for more intensive treatment. They identify one patient in need of housing and benefits assistance from the clinic social worker. The two referral patients will remain on Ms. Cook's caseload under consultation from Dr. Brown and management by Dr. Stevens until they make their first CMHC appointments. Dr. Brown makes a note to call the CMHC administrator to work out an easier referral process from their clinic.

The following day, Ms. Cook writes a letter from the clinic to John offering assistance and begins to call more frequently. Three days later, John calls back, and he discloses that he never picked up the sertraline and was not sure he was worth the attention of the team. He reports that he didn't want to feel like a failure again or let anyone down. John's PHQ-9 score over the phone is 18, and Ms. Cook screens John for suicidal ideation, which is negative. She provides some education around depressive symptoms, the role of the team, and their desire to help him feel better. John agrees to pick up the sertraline from the pharmacy and check-in with Ms. Cook before the weekend to report on how he's tolerating it.

Population-based care allows the Collaborative Care team to focus efforts on persons not improving or engaging well with care and rapidly link patients to other clinical or community-based resources as necessary.

C. Measurement-Guided Care

One of the core elements of Collaborative Care is measurement-guided or measurement-based care (MBC). This is also known as “treat-to-target” care. Because the proactive longitudinal follow-up of patients by the CM involves repeated assessments of symptom severity, the Collaborative Care team can use this information to determine whether patients have experienced a treatment response. Because MBC facilitates the recognition of patients who are deteriorating or not improving as expected, it prompts the care team to adjust the treatment plan, thereby reducing clinical inertia – the failure to modify treatment regimens when outcomes are not met. Clinical inertia has been identified as a significant barrier to receipt of optimal treatment and chronic disease outcomes (Schmittdiel et al. 2008). In the Collaborative Care Model, these patient-reported outcomes and MBC are critical to the weekly case reviews conducted by the CM and consulting psychiatrist.

1. Definitions

The team uses systematic, disease-specific, patient-reported outcome measures (e.g., symptom rating scales) to drive clinical decision-making.

Measurement-based care has been defined as the “enhanced precision and consistency in disease assessment, tracking, and treatment to achieve optimal outcomes” (Harding et al. 2011). Measurement-based care involves the systematic use of disease-specific, patient-reported outcome measures (i.e., symptom rating scales) to drive clinical decision-making. Symptom rating scales, such as the nine-item PHQ-9 for depression (Arroll and Goodyear-Smith 2010) are brief structured instruments that patients use to report their perceptions about the frequency and/or severity of the psychiatric symptoms they are experiencing. Measurement-based care seeks to optimize the accuracy and efficiency of symptom assessment in order to facilitate the recognition of patients who are not responding to treatment. Measurement-based care also facilitates the use of treatment guidelines and algorithms which specify clinical decision nodes based on whether the patient is experiencing a full, partial, or no response to treatment (Unützer and Park 2012). As such, it is a key component to evidence-based care. In addition, patients who regularly complete self-reported rating scales are likely to become more knowledgeable about their disorders, attuned to their symptoms, and cognizant of the warning signs of relapse or reoccurrence, thus enabling them to better self-manage their illness (Valenstein et al. 2009).

2. Components

Not all approaches to MBC are effective. A Cochrane review of depression screening (i.e., annual assessment of symptoms) found that patients with depression randomized to depression screening do not have better outcomes than patients randomized to no depression screening (Simon Gilbody, Sheldon, and House 2008). In addition, *patient-reported* outcome measures should be used for MBC rather than *clinicians’ ratings* of their patients’ symptoms, which are often biased and fail to detect deterioration (Hatfield et al. 2009). For MBC to be effective there is also good evidence that the patient-reported outcomes must be collected frequently and incorporated into multiple clinical encounters over time, including caseload reviews (Schmidt et al. 2006; Slade et al. 2006; Fihn et al. 2004).

For the patient-reported outcome measures to be clinically actionable (i.e., able to inform clinical decision-making), the symptom rating scale data must be current, interpretable, and easily available during the clinical encounter. If the symptom severity data are outdated or presented to the provider outside the context of the clinical encounter, this is not actionable and is not considered to be MBC. In addition to being current, interpretable, available, and usable by the provider during the clinical encounter, the instruments used to measure symptom severity must be reliable (i.e., consistent across repeated measurements when there is no change in symptom severity) and sensitive to change (i.e., able to detect clinically meaningful changes in severity) (Smith et al. 1997; Kerr et al. 2001). **Table 2** outlines the key principles of MBC.

Table 2: Key Principles of Measurement-Based Care

Six Components of Effective Measurement

- 1. Measurement alone is not enough; outcomes must be incorporated into the clinical encounter.**
 - 2. Patient-reported outcomes are more accurate than clinician-reported outcomes.**
 - 3. Measures must be collected frequently to accurately assess the most recent clinical state.**
 - 4. Measures must be tightly correlated to the illness state and are typically diagnosis-specific.**
 - 5. Instruments must be reliable and sensitive to change.**
 - 6. Methods must be relatively simple to implement and low cost.**
-

3. Rationale

While the relative contribution of MBC to the overall effectiveness of Collaborative Care has not been established empirically, MBC on its own is one of the most widely studied elements of Collaborative Care. Virtually all randomized controlled trials with frequent and timely feedback of patient-reported symptoms to the provider during clinical encounters have found that it significantly improves outcomes (Harmon et al. 2007; Hawkins et al. 2006; Murphy, Rashleigh, and Timulak 2012; Reese, Norsworthy, and Rowlands 2009; Reese et al. 2010; W. Simon et al. 2012; Slade et al. 2006; Whipple et al. 2003; Lambert et al. 2002; Bickman et al. 2011; Brodey et al. 2005; Knaup et al. 2009; Krägeloh et al. 2015). A meta-analysis of nearly 300 therapists and 6,000 patients found that only 22% of patients randomized to usual

care experienced symptom improvement compared to 38% of patients randomized to a MBC group (Shimokawa, Lambert, and Smart 2010). Based on these findings, it is highly likely that MBC contributes to the overall effectiveness of Collaborative Care. Moreover, in an implementation study of MBC with over 3,000 patients, 100% of psychiatrists rated the symptom rating scales as helpful for monitoring response to treatment (Sachs et al. 2003).

Measurement-based care also can facilitate communication across providers working within the context of Collaborative Care. For example, the patient-reported symptom severity scores collected by CMs are shared with the PCP and consulting psychiatrist to focus the team based care on treat-to-target goals (Unützer et al. 2012). In addition, patients have positive perceptions of symptom rating scales and reported that they helped them increase their understanding of their illness and better express themselves to their provider (Dowrick et al. 2009). Finally, MBC will soon be required by health plans and accreditation agencies. For example, the National Committee for Quality Assurance (NCQA) has proposed depression symptom monitoring with the PHQ-9 and response/remission rates as health plan performance measures for the 2016 Healthcare Effectiveness Data and Information Set (“National Committee for Quality Assurance: Healthcare Effectiveness Data and Information Set (HEDIS)” 2013).

4. Case Study

The following section serves to illustrate MBC through the ongoing Collaborative Care team clinical example.

John, the patient, calls Ms. Cook, the CM, on Friday and reports that he picked up the sertraline and is taking it without side effects but doesn't feel much different after 2 days. Ms. Cook reassures John that this is not unusual, and that he needs to stick with the medication for 4-6 weeks at the right dose sometimes before his mood may change. They make a plan to check in once a week.

In 4 weeks, John's PHQ-9 score has gone from an 18 to a 15, and he is tolerating the sertraline without any problems. Dr. Brown, the consulting psychiatrist, recommends they titrate the dose to a higher level and continue to monitor John's response. Dr. Stevens, the PCP, writes a new prescription for John; Ms. Cook confirms that he picks it up at the pharmacy and takes it; and after another 4 weeks, his PHQ-9 is 13. John reports that he is feeling better and has applied for a new job. He and his wife are fighting less, and they are talking about having him move back in. In spite of these gains, however, Ms. Cook discusses John's remaining symptoms of prominent guilt and negative self-worth and poor quality sleep, energy, and concentration coupled to overeating—all of which contribute to his current score. They formulate a plan to begin more regular exercise. Because his PHQ-9 is still above 5, Dr. Brown's advice is to continue to titrate the sertraline to the maximum daily dosage, noting his steady improvements.

Four weeks later, John’s PHQ-9 score is 5. He reports that he feels like his old self again, has moved back in with his wife, is exercising more regularly now, and starting to lose some excess weight.

The use of patient-reported outcomes and standardized measures can provide for valuable patient education experiences, attention to ongoing symptomatology in the context of sub-threshold clinical improvement, and facilitate more robust treatment response.

D. Evidence-Based Care

Evidence-based care utilizes principles of decision support connected to measurement-based outcomes to help facilitate the efficiency of the Collaborative Care team in population management.

1. Definition

The team adapts scientifically proven treatments within an individual clinical context to achieve improved health outcomes.

Evidence-based care refers to the application of proven treatments within an individual clinical context to achieve MBC outcomes. Evidence-based care is defined by Sackett and colleagues as the “conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients” (Sackett et al. 1996). Evidence-based care incorporates data from systematic research into the clinical decision-making process while tailoring general disease management strategies to the individual.

2. Components

Several components of evidence-based care emerge within the context of Collaborative Care.

Identification of modifiable Measurement-Based Care outcomes is possible.

There must be a clinical scenario that is definable which allows for the application of existing systematic research data. This clinical scenario must have measurable outcomes that, when achieved, directly result in improved quality of life and individual functioning. While this may seem obvious, many clinical implementations of integrated care choose to focus on outcome measures for which there are no definable evidence-based treatments available. Abstract clinical measures such as quality of life, inpatient hospitalization, or generalized risk scores are enticing to include but often offer little guidance to healthcare personnel lacking a proven evidence-base for treating complexity. Such scores often represent down-stream end-points that encompass a more complex mix of biological, sociological, and psychological risk. This is in contrast to successful Collaborative Care interventions that select clinically definable and measurable outcomes such as the PHQ-9 or hemoglobin A1c values that are directly related to clinical illness severity.

Evidence-Based treatments exist.

Evidence-based care presupposes that treatments exist for the clinical scenario in question and that the treatments are efficacious, reliable, and proven to improve outcomes and quality of life. Ideally, these treatments are relatively inexpensive and well-tolerated. Furthermore, the treatments should be as “tightly linked” to the outcome measured as possible so that treatment intensification efforts are accurately reflected in outcomes and severity of illness is quantified (Kerr et al. 2001; Selby 2009).

Collaborative Care teams must have confidence in the dose of treatments offered so that failure to achieve a clinical outcome after the application of treatment is more easily dichotomized to poor treatment adherence/delivery or failure of response. This confidence is offered through the reliance on existing clinical evidence, allowing for some increased degree of predictability in response. An example is treatment for major depressive disorder. Through a robust evidence base, clinicians can be relatively confident that evidence-based treatment with pharmacotherapy and/or psychotherapy is effective in achieving remission of depressive symptoms for approximately 60-70% of patients. Psychotherapeutic interventions employed for depression care in the IMPACT model include Problem Solving Therapy and Behavioral Activation – two evidence-based approaches to depression management in primary care (Linde et al. 2015). Given this evidence-based expectation, Collaborative Care teams can more readily identify underlying causes for lack of clinical improvement. Evidence-based care allows clinical teams to be confident in their treatment efforts while also providing for judicious use of limited resources to maximize efficacy.

Standardized, stepped care algorithms can be employed.

Evidence-based care is most effective when treatment algorithms are standardized and levels of treatment intensification are commonly accepted among practitioners as a standard of care. This “stepped care” approach allows for a more rapid application of a treatment intensity framework for individual patients and facilitates the caseload review process and population management. Whenever possible, this should be driven by evidence and is often assimilated in guidelines for clinical management. One essential element of the Collaborative Care Model is the presence of treatment guidelines; education materials for patients, clinicians, and CMs; and ongoing trainings offered to ensure that the treatment team is delivering the most up-to-date therapies. One advantage of the Collaborative Care Model is the ability to disseminate evidence-based treatments rapidly through a population-based approach and systematic quality improvement.

Diabetes is an excellent example of this approach. The hemoglobin A1c value and the current therapies identify the level of treatment intensification necessary and are amenable to well-standardized algorithmic approaches. For example, an individual naïve to treatment with a hemoglobin A1c of 10.1% with type 2 diabetes should receive both metformin and insulin therapy from the beginning of treatment to achieve the total reduction in A1c necessary – metformin alone will likely be insufficient (“7. Approaches to Glycemic Treatment” 2014). This

knowledge is culled from the accumulated evidence-base in diabetes and is reflected in current diabetes guidelines.

3. Rationale

While the practice of evidence-based care extends back several decades, the application of this within Collaborative Care stems from the original Chronic Care Model which was formulated originally around diabetes care (E. H. Wagner, Austin, and Von Korff 1996). An essential element of any chronic illness management is the use of clinical decision supports to guide treatment intensification and improve outcomes. Clinical decision supports are simply the application of systematic research evidence to individual cases when possible and aid clinicians in rapidly assessing a clinical scenario and applying treatments with predictable chances of success. Population-based care, rapid assessment, and treatment intensification are not possible for clinical scenarios for which there is no commonly accepted evidence-base for treatment. Having standard guidelines also allows for shared agreement and buy-in amongst consultants and primary practitioners in chronic illness management. The Collaborative Care team can provide the algorithmic, population-focused management advice which can be counterbalanced by the PCP and CM's patient-level experience and input, overcoming barriers in clinical inertia and failure of treatment intensification commonly encountered in chronic illness management (Lin et al. 2012; Schmittdiel et al. 2008).

4. Narrative Description/Case Study:

The following section serves to illustrate evidence-based care through the ongoing Collaborative Care team clinical example.

Two months after John achieved early remission from his depression, Ms. Cook calls him for a routine check-in. He notes that he stopped taking the sertraline for a couple of weeks right after their last conversation and had a relapse of some of his symptoms. His PHQ-9 score has jumped from 5 to 13, and John is feeling embarrassed and shameful. He resumed his sertraline at 200 mg about a month ago but still struggles with energy and has stopped his workout routine. Dr. Brown suggests that they augment the sertraline with bupropion, and Dr. Stevens writes the prescription for John.

One month later, John's PHQ-9 score is 10, and Ms. Cook engages him with Behavioral Activation focused on his exercise regimen again. They discuss the cycle of inaction, guilt, and depression, and John agrees to experiment with a different workout regimen and assess his mood. Dr. Stevens automatically adjusts his bupropion to a higher level since he is tolerating it well, and 1 month later John's PHQ-9 score is 4.

This clinical scenario depicts the use of treatment algorithms for depression care. After a relapse and partial response to sertraline at maximum dosage, Dr. Brown employed evidence from the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) study (Rush et al. 2006) to augment with bupropion, and Dr. Stevens recognized the algorithmic step and ensured

that John was prescribed an appropriate dosage. Additionally, Ms. Cook employed a psychotherapy technique proven to be effective in the management of depression in primary care, Behavioral Activation Therapy (Linde et al. 2015). Through consistent application of evidence-based care, John was able to achieve remission of his depressive symptoms after his relapse.

V. ACCOUNTABILITY, QUALITY IMPROVEMENT AND MEASUREMENT

Successful implementation and ongoing maintenance of a Collaborative Care program requires many new system processes to achieve each of the four essential elements. Often, these processes are complex and include different clinical roles, workflows, and team makeup. There may also be increased demands on the system; including new or different training, communications, information technology, facility needs, and others. A systematic, quality improvement framework is thus required in order to assure that all of these processes are coordinated and effective.

A. Definitions

Two aspects of accountability and quality improvement surface repeatedly in Collaborative Care implementations, and include:

(a) Performance Measurement: The process of evaluating how well organizations are managed and the value they deliver for customers and other stakeholders (Moullin 2002).

(b) Pay-for-Performance / Value Based Purchasing: The process of paying providers to meet quality goals (Rosenthal et al. 2004; Rosenthal et al. 2005).

B. Rationale and Key Elements

The improvement seen in clinical outcomes derived from Collaborative Care is thought to be achieved via the four core structural elements of the model: care that is (a) team-driven, (b) population-focused, (c) measurement-guided, and (d) evidence-based. As important as these elements are to achieving better clinical outcomes, they also in sum create a framework for transparent accountability at multiple levels and with various participants – including the patient and clinical providers. Patient-Reported Outcomes Measures (PROMs) – structured self-report patient outcome measures – are being increasingly utilized by payers and accreditors to hold provider entities accountable for the health outcomes of populations served. For example, the National Council of Quality Assurance (<http://www.ncqa.org>) has included screening (and soon to include remission rate measurement) for depression as measured by the PHQ-9 as one of the measures for comparing health care plan performance levels in their 2015/2016 HEDIS measures for comparing health plan performance.

The use of PROMs creates new opportunities to demonstrate the value of Collaborative Care Models to patients and provider teams themselves. Through the use of self-reported measures individual patients can, together with their clinician, review data and determine whether clinical goals are met or whether care plans need to be adjusted. The clinician and patient together can use clinical outcomes data to help discern which clinical modalities and methods are most effective. This empowers the patient towards the maximal amount of self-management in his or her own care. Clinicians, in turn, are able to periodically review their caseloads in order to assess which patients are not improving as expected, or whether a change

in care or treatment strategy is indicated. This is important, because clinicians often are unable to make this determination using clinical judgment alone (Hatfield et al. 2009). In effect, patients and their clinicians become “agents of quality assurance” for their own care and practices (respectively). The same process can occur at the clinical team level, clinical program level, agency level, and the like. Data can be “rolled up” to display caseload, practice, or population summary reports for the purposes of practice monitoring, professional development, and program improvement.

Clinical outcomes measures like the PHQ-9 may serve as the primary clinical outcome measure for a program. However, for ongoing program success, programs should consider secondary process measures as well. Though one might think that the process of care is not relevant as long as the expected outcomes are achieved, expert consensus is that the means of achieving clinical goals are important. This is partially because the use of patient outcomes measures alone has not been associated with improved outcomes (Simon Gilbody, Sheldon, and House 2008). However, it also appears that use of process measures are important to help guide clinicians and leaders in assuring the necessary steps that are required for programmatic success, such as screening rates, access rates, financial stewardship, and service timeliness. Without attention to the processes, there can be an erosion of fidelity to the core processes required to achieve clinical outcomes, and ultimately an erosion of the expected outcomes themselves. Thus, a mixture of process and clinical-outcome measurements is required.

By utilizing this data in the context of caseload consultation, the Collaborative Care psychiatric consultant is in an optimal position for assuring fidelity with the Collaborative Care core processes. Throughout his/her medical school and residency training, the psychiatrist is trained to evaluate using a differential diagnosis, oversee, and suggest changes to patient care plans. The psychiatric consultant draws on this expertise in order to give education, guidance, and care recommendations for individual patients. Collaborative Care experts believe that the benefits of the model arise not only from WHAT services are offered but also HOW that care is coordinated and WHEN the services are given. Thus, the psychiatric consultant is often called upon to provide team leadership around the roles, functions, workflows, and other processes in the delivery of Collaborative Care.

Evidence-based, accountable care occurs only with intention. In a constantly changing environment of care, a structured and continuous quality improvement strategy is critical for initial and ongoing success. Programs that fail to create a system for ongoing process improvement are especially vulnerable to drifting back into non-collaborative and non-evidence-based patterns of care. From the outset, programs should have a plan for periodically monitoring their success in achieving the target population’s intended clinical outcomes as well as monitoring fidelity to the clinical model. These reassessments allow teams and leaders to make necessary changes to the vision and action plan and to review the process of bringing on new staff. These also make for a great opportunity to celebrate clinical successes and re-energize teams (UW AIMS Center 2015). This ongoing quality improvement process touches all levels and functions of an organization. Fortunately, a number of practice change models and

methods exist, such as the Institute for Healthcare Improvement Collaborative Model (IHI 2003).

C. Narrative Description/Case Study: Measures for Quality Improvement

The following section serves to illustrate accountability and quality improvement through the ongoing Collaborative Care team clinical example.

Ms. Cook, the CM, checks in with the clinic supervisor for the Collaborative Care program who helps to oversee the performance of all the CMs in the program. At Ms. Cook's last check-in about 3 months ago, her rates of depression remission or response as measured by a PHQ-9 of less than 5 or greater than 50% reduction from original PHQ-9 score, respectively, for patients enrolled at least 6 months in the program were on par with her colleagues at the same clinic – around 45%. However, this quarter her rates have dropped to about 30%. The clinical supervisor and she review her caseload turnover, which is also about the same as the other CMs, as is the severity of her patients based on her average initial PHQ-9 score. One notable exception is the number of patients discussed during the weekly caseload review process with Dr. Brown, which has dropped considerably. Ms. Cook notes that they rarely get through all the caseload now, as opposed to the beginning of their work together, sometimes discussing only 4 or 5 patients in an hour, leaving little time to consider others who still have uncontrolled symptoms but don't seem as complicated. She considers one case recently, John, who suffered a relapse in his depression after she hadn't made contact in about 5 weeks.

Ms. Cook talked with another CM in her clinic who managed to maintain his response rate consistently around 55% and discovered that the other CM made it a point to check in with everyone in some capacity (e.g., phone, in-person, email) at least once every 2 weeks until their remission had lasted 3 months. She sets up a rotating schedule to call all her patients over the course of 2 weeks at a minimum regardless of their status (though sometimes more). She also will share the process and outcome results with Dr. Brown to help focus their caseload review process, ensuring that all of the caseload is considered at standard intervals.

Paying attention to both process and outcome measures can help to ensure that vital elements of Collaborative Care implementation, including population-based care (as shown above), are thoroughly implemented and ongoing monitoring is available to protect against programmatic drift.

VI. UNIQUE ATTRIBUTES OF PSYCHIATRISTS IN THE COLLABORATIVE CARE MODEL

Psychiatrists have integral roles on several levels to ensure success in Collaborative Care Models (Raney 2015a). Psychiatrists provide an effective combination of knowledge and skills for the Collaborative Care environment, given their background in medical and behavioral health fields as well as scientific and clinical authority to provide definitive recommendations in complex diagnoses and treatment regimens that involve both psychopharmacology and psychotherapy. Psychiatrists also offer leadership and accountability in caseload consultation, population management, medico-legal liability, and triage of potential clinical crises.

1. Training in both Medicine and Behavioral Health

The most common reasons for psychiatric consultation in Collaborative Care are diagnostic clarification and psychopharmacologic recommendations (Norfleet, Ratzliff, and Chan 2015; Raney 2015a). The psychiatrist on the team has the breadth and depth to clarify how psychiatric symptoms present within the primary care setting and the medical conditions that may mimic them. This background in psychiatric care of medically ill persons is gained during residency training rotations, followed by clinical experience or further training related to psychiatry in medical settings. Psychiatrists in Collaborative Care settings bring knowledge of latest evidence based pharmacological and non-pharmacological treatments, comfort in managing patients with medical illnesses, understand principles of handling drug-drug interactions, and skills in working with multi-disciplinary medical care teams.

Psychiatric diagnoses most commonly encountered in Collaborative Care programs include depressive disorders, anxiety disorders, bipolar disorder, personality disorders, substance use disorders, and somatic symptom disorders (Norfleet, Ratzliff, and Chan 2015). Although the most robust evidence base for Collaborative Care Models are in depression and anxiety, patients within primary care clinics present with a variety of primary conditions or comorbid behavioral health concerns, many of which can also be managed in the Collaborative Care framework. Furthermore, psychiatrists maintain proficiency in medical communication that may otherwise limit the adoption of some treatment recommendations by a PCP. Such experience and training may overcome barriers to implementation such as PCP engagement. Similar to primary care physicians, consultant psychiatrists within Collaborative Care should be “generalists” – willing to adapt practice styles and scope, as able, to the demands of the clinical situation and needs of their colleagues (Raney 2015a).

2. Educating others in applying evidence-based practice

Medication recommendations are a frequent request for Collaborative Care psychiatrists; discussing the rationale for a particular recommended treatment is often helpful for ensuring implementation, adherence, and education of the patient and team members. For example, a written recommendation for a specific antidepressant may include an explanation of why that particular one was chosen. These collegial and informative communications are

invaluable in gaining “buy-in” from PCPs, which often helps to shore up institutional support through positive PCP feedback. Furthermore, psychiatrists have the skill set necessary to evaluate the evidence-base across all treatment paradigms and operationalize evidence-based care within given clinical contexts. Through repeated consultation around specific patient scenarios, the psychiatric consultant is able to build the capacity of the PCP to confidently and competently treat a variety of psychiatric disorders.

3. Collaboration, Consultation, and Partnership with Primary Care

Working with PCPs in a Collaborative Care Model requires they understand the psychiatric consultant’s role in assisting and supporting their management of psychiatric illness they may consider to be beyond their scope of expertise. Working as a team targeting outcomes, while having the patients remain under the PCP’s care, requires significant trust from the PCP that you are available and employed in their best interest. Although this type of support from psychiatry will likely be seen as new (and unexpected) to most PCPs, an emphasis on trust-building is essential for a successful partnership. This process may begin with a face-to-face meeting, perhaps during downtime at the primary care clinic, where introductions are made and the Collaborative Care Model described. These opportunities may be reinforced with future meetings during which the psychiatrist provides the PCP with algorithms for diagnosis and treatment of common mental illnesses, such as depression and anxiety. Additionally, these meetings provide an opportunity to elicit feedback from the PCPs, which enhances the perception that this is indeed collaboration. It is important for the PCP to have access to the psychiatrist for questions, which may be informal “curbsides” or even urgent questions. Skills in providing informal consultation are crucial to the relationship and require some time to master (Raney 2015a). Contact by HIPAA-compliant electronic messages, cell phone calls, and pages are often encouraged as opportunities to communicate and obtain consultation.

Indeed, one advantage of psychiatrist participation in Collaborative Care Models is more ready access to emergent or urgent consultation and advice for urgent or life-threatening clinical situations which otherwise would not have been available. With the longitudinal nature of the consultant team’s relationship, patterns in behavior that may differ and point to alternative diagnoses allow for novel clinical evaluation methods that also were not previously available, and more rapid triage of more complex situations to an appropriate level of care (i.e., an initial presentation of bipolar disorder as depression with no known history of mania converts to hypomania which may have previously been lost to follow-up).

4. Team Leadership, Vision, and Accountability

By virtue of their extended training and expertise in managing complex situations, psychiatrists are often called upon to provide guidance, leadership, and accountability to the Collaborative Care team, though it should be noted that each member of the team is treated with equal respect and mutual admiration. The cultures of primary care and behavioral health differ in many ways and the psychiatrist, trained in both worlds of general medicine and psychiatry, can help mitigate problems that may occur as these cultures come together in the Collaborative Care Model.

Psychiatrists possessing skills in population management who review all patients in a particular caseload in accordance with clinical severity are ensuring the team is held responsible to the provision of evidence-based care across the population. Their consultant relationship helps to guarantee that they remain appropriately distant from clinical situations allowing for objectivity, creativity, and momentum to overcome clinical inertia. This distance is in contrast to the expected closeness of the CM and the PCP, and provides an essential checks and balances system when implemented correctly.

5. Medico-Legal Liability

When participating as a member of a Collaborative Care team, care is taken to clarify malpractice liability risks. Current literature and case law suggest the relative risk of curbside consultation is minimal, and that the medico-legal risk to a psychiatrist for providing organized advice on a patient not physically seen (indirect consultation, the most frequent role in this model) is less than for providing direct care; the patient is under the principal care of another provider (Olick and Bergus). During systematic caseload review, it is helpful to record team discussions to help track treatment history and follow-up, with the added statement in the team note explaining that the patient was not directly seen. Furthermore, as the expectation remains that the patient continues under the direct care of the PCP, who may or may not choose to take the recommendation offered, the clarification that “treatment plan recommendations provided in the course of this consultation should not supplant clinical judgment and are offered through data derived from the CM without direct patient consultation” could be included in all communications. Ready access to a specialist with expertise in both diagnosis and management helps to alleviate medico-legal concerns that inevitably arise when managing behavioral health disorders in the community.

VII. IN-VIVO IMPLEMENTATIONS OF COLLABORATIVE CARE MODELS

Introduction

Implementation of Collaborative Care requires extensive systematic change on multiple levels that span from the provider workflows and task shifting traditional roles, to payment and reimbursement reform. As such, bringing the Collaborative Care Model to scale is difficult. This section attempts to provide practices, health systems, and policy makers with actual implementation examples, highlighting each program's history, methods of implementation of the four essential elements, attention to accountability, funding mechanism(s), and lessons learned. Attempts were made to draw broadly across services and payer types.

A. Washington State Mental Health Integration Program (MHIP)

1. Background & History

The Washington State Mental Health Integration Program (MHIP) was created in 2007 in partnership between the Community Health Plan of Washington (CHPW, a not-for-profit health plan), Seattle-King County Department of Public Health, and the AIMS Center at the University of Washington. The program was initially piloted in two of Washington State's most populous counties. Program data from the first years of 2008 and 2009 showed that, compared to counties without MHIP, the target population in MHIP counties had 17% fewer inpatient medical admissions and smaller increases in inpatient psychiatric costs (21% vs. 167%) over the review period. Compared to those that did not receive services, health plan enrollees who received MHIP services had a larger decrease in number of arrests (24% decline in MHIP clients), a smaller increase in those living in homeless shelters or outdoors (50% vs. 100%), and a smaller increase in days spent in state hospitals (33% vs. 500%) (Joesch 2011). Partially because of these positive results, the MHIP program was expanded statewide in 2009. During the first 14 months of statewide implementation, the state saved an estimated \$11.2 million in hospital costs alone (*Community Health Centers: Behavioral Health Integration* 2013). The program has now been in continuous operation for over 8 years and has served over 45,000 patients in more than 150 community health centers.

2. Program Description

The program was initially patterned after the IMPACT program developed by the University of Washington (Unutzer 2002). Like the IMPACT model, the MHIP program incorporates core components of team-based care, use of a clinical behavioral health (BH) CM, and use of a psychiatric caseload consultant. In addition to the PHQ-9, patients also were screened for anxiety and substance use conditions. Over time, additional screening tools have been incorporated into the care model, including symptom rating scales, functional rating scales, and important medical markers, such as glycosylated hemoglobin (hemoglobin A1c, HbA1c) and LDL cholesterol.

Appropriate and eligible patients are identified via standardized screening (such as the PHQ-9) or via referral by the PCP. Whenever possible, "warm handoff" referrals are utilized, connecting the BH CM immediately to the patient. The BH CM also has a primary role of coordination of referrals and care transitions – including referral to specialty mental health when indicated, once patients are enrolled in the MHIP program.

3. Adaptation of Essential Collaborative Care Elements

(a) Team-Driven and Evidence-Based Care

The MHIP program emphasizes a team-based care model, as depicted in **Figure 1**. In this model, the patient and primary care provider are joined by the BH CM and the psychiatric consultant in the care of the MHIP patient. In many clinics, BH CMs work alongside the primary

care team, whereas in smaller clinics a BH CM may work at another location but serve clients at the smaller clinic.

The BH CM serves a central role in MHIP care team – coordinating care, managing referrals and transitions, and assisting in medication reconciliation. The BH CM also plays the important role of providing brief, evidence based treatments. BH CMs receive ongoing training in these practices via live trainings and recorded webinars.

The psychiatric consultant provides regular (usually weekly) caseload reviews with the CM for the purpose of ensuring population review for the assigned caseload. During the consultations, the psychiatrist assists with diagnosis and formulation and makes recommendations regarding medications, psychotherapy, and patient management. Recommendations are documented in a caseload review note that is forwarded to the PCP. The consultant remains available throughout the week by telephone to assist the care team in the event of additional questions. The psychiatric consultants are often available either in person or by telepsychiatry for direct patient care consultations for more complex clinical questions or concerns.

(b) Population-Focused Care and Measurement-Guided Care

A web-based tracking system, described by the AIMS Center (Unützer et al. 2002) is utilized to help support systematic outcome tracking and quality improvement. The MHIP registry captures clinical diagnoses assigned by clinicians working with patients and clinical outcomes using validated clinical rating scales, such as the PHQ-9 for depression (Arroll and Goodyear-Smith 2010). This information is gathered for all participants at an initial assessment and at each subsequent contact with a BH CM. The care registry displays individual and caseload summary data to the BH CM, who in turn utilizes this information to make care decisions. A key emphasis is review of patients who are not improving, with an aim of adjusting the care plan as needed.

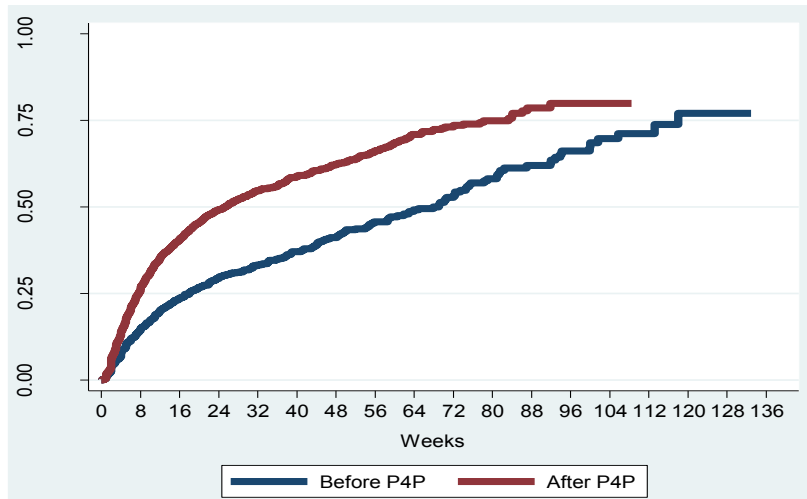
4. Quality Improvement and Accountability

Initial experience with this program showed high levels of variation between programs as measured by PHQ-9 and Generalized Anxiety Disorders-7 (GAD-7) population-level outcomes. To help address this variation, real-time clinical reports were created and embedded into the care registry tool. These reports contained several key clinical indicators, including timely follow-up of patients, tracking medication lists, and the provision of psychiatric consultation for patients who were not improving. The CMs and consulting psychiatrists were trained in how to utilize this data when making care plans and prioritizing services. For instance, the timely follow-up measure often was utilized to determine whether a patient might benefit from an outreach call.

These measures were further reinforced financially – approximately 5% of their annual reimbursement per measure was tied to achieving each one of these quality measures, a procedure known as “pay-for-performance.” As shown in **Figure 2**, the implementation of these quality measures successfully improved overall care by demonstrating a 50% shorter time to

achieve a 50% reduction PHQ-9 score (or achieving a score less than 10). Though this study was not able to separate the effects of providing the real time feedback from pay-for-performance stimulus, but it is likely that both were factors in improving outcomes (Unützer et al. 2012).

FIGURE 2: Pay-for-performance-based quality improvement dramatically reduces median time to depression improvement in a state-wide Collaborative Care program.



5. Funding

The program was initially funded by the state legislature and administered by the not-for-profit CHPW for the General Assistance Unemployable (GAU) recipients in two of Washington State’s most populous counties. Shortly thereafter, the program received additional funding for veterans and their families, underinsured persons, older adults, and pregnant women and new mothers under voter-approved levy funds and administered by the Seattle-King County Department of Public Health. The program was further expanded to statewide in 2009 under similar funding arrangements based on the demonstrated early success mentioned above. In 2014, the Medicaid expansion resulted in termination of the GAU program as these recipients became eligible for Medicaid. The program was continued as a treatment option for patients who selected CHPW as their Medicaid insurance carrier.

6. Lessons Learned

a. Primary care-centered Collaborative Care is possible in a high-needs safety net population.

Prior to the initiation of this program, there was little recorded experience on the effectiveness of providing primary care integration services to safety net populations. The Joesch et al. report (Joesch 2011) showed early evidence that Collaborative Care can demonstrate quick and demonstrable population improvements and system cost savings. This

encouraging data suggested that Collaborative Care programs can be effective in safety net populations in both bending the cost curve AND improving clinical outcomes.

b. Systematic uses of process and outcomes measures that are built into clinician workflows are important for program success.

As reported in the accountability section above, the incorporation of a combination of both real-time process and clinical outcome measures that are built into the BH CMs' workflows had a dramatic impact on clinical outcomes, reducing the time to depression remission for half of the overall patient population by as much as 50% (Unützer et al. 2012).

c. Ongoing workforce development, training, and support are critical for program success.

For such a large program, it was a challenge to find and train a clinical workforce of over 100 BH CMs and approximately 20 part-time psychiatric consultants. Once the initial roll-out process was complete, the challenge of program sustainability became apparent. Use of recorded web-based training helped, but training needs remains an ongoing challenge. Furthermore, as the program expands, it continues to draw clinicians from an already strained mental health clinician resource pool. Training efforts for current and new clinicians are ongoing, but more needs to be done to consider the "pipeline" for new clinicians (BH CMs and consulting psychiatrists) who are considering a career in Collaborative Care. A discussion of workforce training is offered in the new directions section.

B. Depression Initiative Across Minnesota, Offering a New Direction (DIAMOND)

1. Background and History

The Depression Initiative Across Minnesota, Offering a New Direction (DIAMOND) project was initially conceived in 2006 at the Institute for Clinical Systems Improvement (ICSI), a non-profit quality improvement organization representing more than 60 hospitals, medical groups, and health plans primarily in Minnesota. As a neutral convening group, ICSI was able to pull together a steering committee that involved not only care providers, but also insurance representatives, patients, employers, and regulatory groups for the state to look for common ground on the gulf between what was available in the literature regarding the treatment of depression and what was happening in the state.

At the time, a meta-analysis (S Gilbody, Bower, and Fletcher 2006) of 37 randomized controlled trials supported care coordination for depression as being superior to practice as usual. The Institute for Clinical Systems Improvement contacted Jürgen Unützer, M.D., one of the architects of the IMPACT model for the management of depression as an expert consultant and then reached out to member organizations in the state to seek interest and capacity for changes in their delivery system. The participation of insurance groups in the design of DIAMOND allowed the opportunity to link practice change with payment redesign, and practices across the state were offered the chance to have expert help in system redesign along with the promise of a new source of reimbursement for care coordination of depression in adult patients.

Interested medical groups were screened for readiness for change, and those deemed capable were assigned a place in a staggered implementation plan of five ‘waves’ in which a group of primary care clinics worked on learning and implementing over 6 months. Those participants in earlier segments were then part of the training group for the next wave, with over 80 primary care clinics receiving training by the end of implementation. Each participating clinic was required to submit data on response (50% improvement) and remission (subthreshold clinical score) based on the PHQ-9 through an online registry, and ICSI returned data to each clinic to show them how they were doing compared to other sites transparently, allowing clinics to contact each other to find out what was working best or to overcome common barriers. As a quality improvement project, there was no overall grant funding for DIAMOND; however, the HealthPartners Research Foundation received funding to follow and study the implementation using a stepped wedge study design with repeated cross-sections of patients across clinic settings (Crain et al. 2013).

2. Program Description

Eligible patients were 18 years or older. They had to be in a PCP’s panel, with a PHQ-9 of 10 or more, and they could not have an entry diagnosis of bipolar disorder. These patients were identified by the involved clinics through electronic means or upon the patient’s arrival into the

clinic to see their PCP. Once identified, the PCP was asked to decide if the patient was likely to have major depression or dysthymia, with PCPs having received prior training on diagnosis. Each clinic found it had to be proactive to ensure the easy availability of the primary measure (PHQ-9) in both case identification and monitoring of outcomes.

The way in which patients entered the care coordination program evolved over time as word of the availability of this option spread and early success was noted. Initially, the majority of patients came directly from the PCP to the CM via a “warm handoff”, found to be far more successful than contacting patients by phone for screening. Over time, as popularity grew, entry into DIAMOND became independent of a specific PCP needing to authorize the referral, allowing any PCP to refer another provider’s patients when cross-covering. In addition, patients would contact the clinic asking for the program after hearing about it from a family member or neighbor, and referrals became more common from psychiatric clinics, hospitals, and emergency departments. Those referrals from outside the primary care clinic required to be reviewed to make sure each patient indeed had a PCP, as this was an integral part of the model.

3. Adaptation of Collaborative Care Essential Elements

(a) Team-Driven Care

The team involved in this model included the patient, his/her PCP, a CM/care coordinator, and a consulting psychiatrist. Clinics were required to identify and block off time in the schedule of a CM/care coordinator who was trained in the DIAMOND model by ICSI and charged with management of their whole population of depressed patients. The depression CM role was often a new one to primary care clinics at the time, and efforts were made to defend that role as unique to avoid a CM being pulled into multiple other tasks. The CM was most often a registered nurse (RN), but licensed practical nurses and social workers also were employed and could also be effective CMs. Behavioral activation and motivational interviewing were identified as important skills in this role, and a caseload of up to 100 patients per full-time CM was possible although it was common to see caseloads of 50-80 patients.

The DIAMOND program required psychiatrists to work in their capacity within the Collaborative Care Model – a role unfamiliar to many. Data on each patient, presented during the caseload review, was collected by the care coordinator to enrich the process and increase the chances of the psychiatrist making meaningful recommendations without directly seeing patients. In addition, any patient not improving would be reviewed, and with the aid of the registry, the psychiatrist could focus on those patients most in need of attention versus just those who the CM remembered at the meeting. Availability outside this care review meeting was also important for an occasional call by the CM or by the PCP. The PCP wrote all prescriptions.

(b) Population-Focused Care

The program utilized a registry to manage the population of patients enrolled. Registry functionality was employed to attend to an entire list of patients in weekly systematic case reviews where a psychiatrist could sort all the data on patients by severity of symptoms or length of stay and thus make sure patients with the most needs were not forgotten and patients not improving were not approached repeatedly in the same way. It also included the ability to generate reports on the population of affected patients to review with various audiences – for example, reviewing with a PCP of his/her patients, or generating reports on patients' progress for the director of a clinic or for those responsible for a group of clinics.

The Institute for Clinical Systems Improvement offered any participating group access to a registry specifically tailored for DIAMOND that was housed at the University of Washington. Some clinics used that registry, while others were given specifications based on that registry to develop their own registry. Included in those specifications was a list of consistent measures that needed to be sent to ICSI on a regular basis for quality comparisons. The registry offered a place to enter clinical data if it was not already a part of the EMR. In addition, CMs could track which patients needed a follow-up call, where to reach a patient on a given day, and how many times they might have reached out to a given patient and left a message. Finally, the registry offered real time access to administrative data to compare how CMs were doing at several clinics and to track useful data such as admission by PCP or by response rates by clinic.

Institute for Clinical Systems Improvement designers felt that relapse prevention was critical to the success of DIAMOND. A number of important activities related to relapse prevention were integrated into the DIAMOND model: meeting with a patient after he or she has gone into remission, reminding the patient that depression is a recurring illness, reviewing the earliest signs of an impending depressive episode, reviewing behavioral activation activities, providing education on the importance of adherence to medications, documenting which therapy approaches were most helpful for that individual, and creating an action plan for relapse. The expectation within DIAMOND was that patients would be enrolled until reaching remission (defined as two PHQ-9 results under 5 separated by at least 6 weeks). At that point, they were discharged. If the patient was not in remission by 12 months of participation, the expectation was that they would be discharged unless there was an obvious reason why more time in care management might be productive (e.g., a patient who just left an abusive partner towards the end of the year). The overall goal of the DIAMOND program was to get as many patients into remission as possible.

(c) Measurement-Guided Care

A screening and monitoring instrument allows case finding and treat-to-target planning and discussions to occur. Significant work was then required by each clinic to elaborate a method to distribute, collect, and record the PHQ-9 in a way that allowed for both patient care and outcome monitoring for the clinic. The PHQ-9 was chosen as the common tool, and the success of DIAMOND led to the larger adoption of this tool by Minnesota Community Measurement – a nonprofit organization charged with monitoring health outcomes for primary care across the state. Depression was the first mental health

condition included in mandatory outcomes for primary care (and outpatient psychiatric specialty care) clinics for transparent comparison of outcomes on the Internet (<http://www.mnhealthscores.org/>).

In addition to the PHQ-9, each new patient entering DIAMOND was screened for anxiety (often using the GAD-7 (Spitzer et al. 2006), alcohol misuse (often using the Alcohol Use Disorders Identification Test (Frank et al. 2008; Gual et al. 2002))), and for bipolar history (often using the Mood Disorders Questionnaire (Hirschfeld 2000))). While the PHQ-9 was required to do the model, the tools for these other comorbidities were offered as recommendations, allowing a clinic to pick a similar tool if preferred. Clinics could also add extra screening tools and questions for the CM to ask before each intake to enhance the psychiatrist's ability to make a meaningful initial suggestion to the PCP of a new patient.

(d) Evidence-Based Care

The model being implemented in DIAMOND was based on IMPACT and was chosen because of the amount of evidence in published literature supporting both efficacy and effectiveness. In addition, by having a psychiatrist review panels of patients and provide feedback on approaches to groups of PCPs, there was an opportunity to encourage the use of evidence-based approaches to depression. Each note to a PCP was a potential teaching opportunity. A guideline built for primary care from ICSI for depression was a reference source as it was adapted for this setting and updated each year. Care managers were each provided with access to this guideline and were encouraged to use it as a reference point in answering questions from patients or providers when appropriate.

4. Quality Improvement and Accountability

The implementation strategy for DIAMOND was that used in the Breakthrough series model of practice change (Institute for Healthcare Improvement, 2013). As described in the background above, practices were screened for readiness to implement this model. Those ready tended to have the capacity to implement both the PHQ-9 and use of a consulting psychiatrist, as well as the resources to hire a CM/care coordinator. They also needed buy-in from both those in the clinic and from leadership. Finally, they needed a champion at the intervention site and information technology support.

Practices selected for the study sent a team to be trained by ICSI. The team included the CM/coordinator, a primary care champion, a psychiatry consulting provider, and desk and nursing staff from the participating clinic. Information technology support also was encouraged to attend these meetings as needed. Plan-Do-Study-Act cycles were used to adapt aspects of the model to a given setting, and outcomes were tracked at each site and compared in a transparent way with all participating clinics, both within and outside a given medical group. A healthy competition ensued and was encouraged.

After introducing this model to many clinics, those trained in an earlier wave of training were recruited to teach their colleagues in a later wave. Nuances about how to implement aspects of the model often were uncovered through the use of those actually doing the work as trainers. The Institute for Clinical Systems Improvement provided feedback to all the clinics and to leadership at all the sites on progress in recruitment, panel sizes, response rates, and remission rates.

5. Funding

The steering committee for DIAMOND included both providers of care and insurance representatives as members. It was clear from the start that both groups felt there was significant room to improve processes and outcomes in the state for adult patients with depression. Healthcare providers were willing to make significant changes but felt that they needed reassurance that this new model brought with it a new source of financing for non-direct care activities. Six large insurance groups within the state agreed to work with their organizations to create a new payment model to help sustain the changes.

In order to clarify a target amount for payment, ICSI was able to survey participating DIAMOND sites about the time involved in creating DIAMOND (e.g., committee meetings, the CM's schedule, time blocked in the psychiatrist's schedule) and time spent in caseload review and supervision. By pooling and de-identifying this data, a range of costs per month was available to participating medical groups in their negotiating with the insurance groups. The payers offered a monthly bundled reimbursement meant to cover both the work of the CM and the non-direct patient care activities of the consulting psychiatrist. Primary care providers involved in the care of these patients continued to bill as they had previously. Anti-trust laws prevented direct conversations about how much a given medical group was planning to bill, and this was left as a negotiation. All insurance groups involved agreed upon a single billing code initiated by ICSI-participating clinics representing a standard set of bundled services. Insurance groups agreed that 1 year was reasonable as a period of payment for an enrollee. After that, a practice needed to appeal to continue billing for DIAMOND services for a given patient.

6. Lessons Learned

(a) Care coordination for depression can be successfully implemented in a wide variety of settings for improving depression outcomes; cost reduction may or may not follow.

The DIAMOND sites consistently outperformed other primary care sites on 6- and 12-month response and remission rates as measured by the PHQ-9 and reported on Minnesota Healthscores during the implementation process. Pre-post comparisons done at given sites (Williams et al. 2011) also showed significant improvement in clinical outcomes. Neither of these comparisons was as rigorous as one would find in a randomized trial however, and during implementation it was clear that there was wide variability in outcomes by site, even within a medical group. It was also common to see a given clinic reach a certain level of outcome and remain there.

Finally, DIAMOND was not designed to reduce utilization in emergency departments and hospitals. Improving depression, it was argued, should naturally lead to reduced utilization of acute services, and most certainly it did in some patients; however, limited data exists from DIAMOND about cost reductions. Cost reduction (i.e., changes in utilization) in few patients is difficult to generalize when some depressed patients are not using many services at all. In addition, those patients using the emergency department or hospital may need a different type of intervention involving social services or home visits if that is the primary outcome needed to support continuation of care coordination.

(b) Implementation science approaches are critical to successfully starting, improving upon, and sustaining care coordination models.

Care coordination models are disruptive in that they require changes in all aspects of a primary care clinic—the checking in and rooming of patients, management of phone calls and triage, changes in nursing roles, building the way in which a specialist (psychiatrist) integrates into the primary care workflow, and evolving the approach by the PCP to patients with depression. Simply providing such a model to a clinic without helping that clinic through the changes is like providing a chronic smoker with a pamphlet on the dangers of smoking and expecting that to be enough. Successful implementation has been studied, and organizations making such changes can benefit from attention to implementation science (Whitebird et al. 2014).

The implementation teams had data comparing outcomes between sites within and outside of their own medical groups. This comparison data was very helpful in creating some healthy competition to recruit more patients and to be better at capturing follow-up data. However, reasons for variation remained elusive. Practice sites had varying success at making collection and submission of their outcome data a priority within their institution to allow for analysis of site differences, and once a program was implemented and early results were in, it was easy to focus on the next site for implementation. In starting an implementation of Collaborative Care, the team should expect and plan for variation in outcomes. In a large health care system, a central team that is able to do small tests of changes that could impact outcomes at a few sites may help all the teams in knowing where to focus their efforts.

(c) Aligning incentives: pay attention to start-up costs and payer mix.

The bundled payment offered to clinics implementing DIAMOND was very helpful in both getting medical groups to participate (psychiatric time was covered as was the cost of the care coordinators salary) and in sustaining the model once it started. In addition, having a financial part of the model led to more structure in the length of treatment and definitions around discharge, as these were tied to payment. There was significant cost to each organization to start-up DIAMOND (i.e., the cost of hiring a care coordinator, creating an electronic registry, including the PHQ-9 in the workflow, and meetings with involved clinics to explore and plan). The organizational cost of implementing a change was never covered by the

new reimbursement for DIAMOND. This cost is not a minor issue in a time when primary care practices were struggling to break even financially. In addition, the variety of sources of payment for services delivered to patients coming into primary care made it less likely that clinics could continue a model reimbursing for only a part of their eligible population. The bundled payment system worked fairly well in clinics where the majority of patients were covered by one or a few plans, but in DIAMOND clinics with a large percentage of government payers, the program had trouble being sustained.

(d) Care managers need support and ongoing training.

A clear preference for RNs in the role of CM was present from the start. However, sites using individuals from other backgrounds such as licensed practical nurses and social workers had comparable outcomes. Sites using non-nurse CMs were able to save on costs but had to find ways to back up these CMs with nursing support. It was widely noted by those involved in the project that the personal qualities and the institutional support of the CM may have made more of a difference in outcomes than professional degree. Sites with dedicated CMs did better than sites in which a CM was asked to take on several roles. Training of CMs is important, but it is also clear that the role involves ongoing skill development in motivational interviewing. Weekly visits with psychiatrists have educational value as well.

(e) Psychiatrists need to learn new skills to do this model effectively.

Psychiatrists were not all comfortable with this new role; structured training and peer support/mentoring were helpful. Psychiatrists need to be comfortable trusting their colleagues in primary care. Fears about lawsuits were addressed, and this model was compared to any curbside support given in electronic consults where the primary responsibility remained with the PCP. Primary care practices often had trouble finding psychiatric support, especially in rural areas, and access to psychiatric services was noted to be an overall stressor for primary care. A general rule-of-thumb suggestion born of experience with the model over time was to contract with a psychiatrist for 2 hours per week per full-time CM for caseload supervision. When a primary care site had two CMs, this was more efficient for the psychiatrist who might then be able to block off a half-day and reduce travel time. Psychiatrists with some responsibility for the overall outcomes and processes in the primary care clinics where they were consulting tended to enjoy the role and contributed more to improved outcomes than when simply contracting for the time.

C. Re-Engineering Systems of Primary Care Treatment of PTSD and Depression in the Military (RESPECT-MIL)

1. Background and History

The RESPECT-Mil program (Re-Engineering Systems of Primary Care Treatment of PTSD and Depression in the Military) is an Army-wide, Collaborative Care initiative aimed at improving the primary care system's capacity to identify and effectively treat service members with depression and posttraumatic stress disorder (PTSD) within the military health system (MHS) (Wong et al. 2015). The MHS, with an annual budget over \$55 billion, is responsible for the provision of health care to roughly 10 million beneficiaries who receive care in over 300 military treatment facilities worldwide, making it among the largest and most diverse health systems in existence (CBO: Congressional Budget Office 2014).

The initiation of RESPECT-Mil in January 2007 was in response to a clearly demonstrated MHS need: during many years of armed conflict in Iraq and Afghanistan deploying some 2.6 million men and women in uniform, data emerged regarding high rates of PTSD, depression, and other mental health conditions as well as low rates of specialty mental health service use among those affected (Hoge et al. 2004; Tanielian et al. 2008). Indeed, of the nearly 20% of service members returning from deployment with PTSD or depression, fewer than one-fourth received mental health care from a specialist, in part due to stigma and the potential for occupational repercussions when these problems come to light (Hoge et al. 2004; Tanielian and Jaycox 2008).

Collaborative Care is an evidence-based approach to these challenges. The RESPECT-Mil program adapted a Collaborative Care Model previously tested for depression by adding PTSD (Dietrich et al. 2004; Oxman et al. 2002). With the assistance of an original team of MacArthur Foundation funded investigators, a 2005-2006 demonstration project with feasibility assessment was completed at a busy primary care clinic serving the medical needs of the 82nd Airborne Division. The study found high PCP satisfaction with and acceptance of the RESPECT-Mil approach, and two-thirds to three-fourths of service members reported clinically significant improvements in their psychiatric status (C. C. Engel et al. 2008). The success of this demonstration led to large-scale implementation at the direction of the US Army Surgeon General (Surgeon General 2013).

The RESPECT-Mil program has served as the precursor to the currently existing Collaborative Care Patient-Centered Medical Home (PCMH) model now implemented for all beneficiaries across Army, Navy, and Air Force primary care clinics. Before transitioning to the second-generation MHS PCMH approach, RESPECT-Mil was implemented for over 3.5 million visits in 94 primary care clinics located at 39 installations and eight time zones worldwide. In addition, RESPECT-Mil led to the first large multisite randomized controlled trial of a health care delivery intervention in the MHS, the STEPS-UP Trial (STepped Enhancement of PTSD Services Using Primary Care), a trial evaluating Collaborative Care implementation approaches for PTSD

and depression (C. C. Engel et al. 2014; C. Engel et al. 2015). This trial is nearing completion at this time.

2. Program Description

All service member visits to participating primary care clinics are routinely screened for PTSD using the four-item Primary Care PTSD screen (Prins et al. 2004) and for depression using a yes/no two-item PHQ-2 (Kurt Kroenke, Spitzer, and Williams 2003). Patients screening positive (PC-PTSD ≥ 2 or PHQ-2 ≥ 1) are given the PTSD Checklist (PCL(Blanchard et al. 1996), PHQ-9, and single item PHQ question assessing symptom-related functional status difficulties (K Kroenke, Spitzer, and Williams 2001). Primary care clinicians were trained in these measures, given guidance on how to use them, and afforded ultimate discretion as to what constitutes a positive diagnosis. All usual patient referral options were available (e.g., watchful waiting, routine primary care treatment and follow-up, emergency department referral, specialty care referrals, inpatient hospitalization). Clinicians had the additional option of enlisting the help of a RESPECT-Mil “care facilitator”, an RN who kept patients fully engaged in care, tracked treatment adherence, assessed symptom status at a minimum of every 2 weeks and every 4 weeks thereafter, and entered relevant data into a decision support system for tracking of symptom improvement.

3. Essential Elements of Collaborative Care

(a) Team-Driven Care

The MHS used an approach to team care that involves primary care clinic office support staff, primary care nurses, the primary care clinician, a nurse trained in care management of depression and PTSD, and a consulting psychiatrist. Clinic support staff was trained to initiate a waiting room screen for depression and PTSD. Clinic nurses reviewed the initial screening with the patient at the time of assessing vital signs (actual clinic flow was adapted with different clinics in consultation with a health system implementation team). If the initial screen was positive, patients were asked to complete a validated hard copy “diagnostic aid,” and the clinician reviewed the result briefly with the patient. The clinician asked any necessary follow-up questions. Based on patient responses, referral to specialty care or to the clinic-based collaborative CM was made. If the referral was to the CM, he or she followed up with the patient, usually by phone but sometimes in person, at regular intervals to assess patient symptom severity using the same measures used at the index primary care visit. In addition, assessments of treatment side effects and adherence were assessed and captured in a health information technology platform that created registries. The consulting psychiatrist met with nurse CMs weekly to review patients’ status, discuss treatment plans, and recommend any treatment plan changes to the primary care clinician as appropriate using the electronic health record.

(b) Population-Focused Care

A web-based PTSD and depression decision support tool was used to generate real-time symptom registries at the care facilitator level for measurement-based treatment planning. Care facilitators assessed patient symptoms at regular intervals (within 2 weeks after the index visit and at least every 4 weeks thereafter). Registries were used to identify patients whose symptoms were not improving so that their treatment plan could be intensified or otherwise modified. The registry also identified patients by level of treatment engagement; efforts were made to ensure that patients at risk of falling out of treatment or who had already fallen out of treatment were identified and efforts were made to better engage or reengage them. Efforts to adjust treatment plans and improve engagement were reviewed by the psychiatrist with the care facilitators using the real-time electronic registry.

(c) Measurement-Guided Care

The RN care facilitators tracked symptoms in the patients they were monitoring, assessing them using validated symptom and functional status assessment tools and entering results into the online decision support tool. Resulting registries were generated and used to inform weekly reviews of care facilitator caseloads by the installation's RESPECT-Mil psychiatrist.

Improvement of 5 points on either the PCL or PHQ-9 was considered minimally significant clinical improvement. Less than a 5-point improvement more than 8 weeks after the most recent treatment change prompted an automated flag and triggered reassessment of that patient's treatment regimen. Changes in regimen included the addition of a new medication or discontinuation of existing therapies, changes in medication dosing, addition of psychotherapy or changes in psychotherapy frequency, modality, or provider.

(d) Evidence-based Care

All RESPECT-Mil program practices were codified in manuals (<http://www.pdhealth.mil/respect-mil.asp>). Screens and ongoing patient status indicators were published standardized measures (e.g., PHQ-2/9, PC-PTSD, PCL). Manuals for PCPs, behavioral health specialists, and care facilitators provided guidance with regard to stepped psychopharmacologic treatment. In the second generation RESPECT-Mil approach assessed in the STEPS-UP Trial, stepped psychosocial interventions were added. These included care facilitator engagement strategies, nurse-assisted online Cognitive Behavioral Therapy (CBT) self-management, telephone CBT with a clinical psychologist, primary care clinic-based therapy with a social worker or psychologist, and specialty clinic-based psychotherapy services (see Engel et al. 2014 for more detailed summary of the evidence-base for these modalities).

4. Quality Improvement

The RESPECT-Mil program quality improvement efforts were driven and sustained based on a carefully crafted worldwide structure and accountability (Belsher et al. 2014). Each implementing installation (i.e., a single Army Post, on average covering about three primary care clinics each, up to 7-8 clinics) assigned both a primary care and behavioral health

champion. The latter was a psychiatrist that provided weekly caseload supervision for all care facilitators. The former was a PCP responsible for monitoring and overseeing that installation's RESPECT-Mil quality metrics.

Overall RESPECT-Mil quality improvement assessment, reporting, and metrics were driven by the "R-MIT" (RESPECT-Mil Implementation Team). The R-MIT was a multidisciplinary group (psychiatrist, psychologist, social worker, nurse, statistician, database manager/programmer, health informatics specialist, administrative support, and expert part-time consultants) located in Silver Spring, MD. All R-MIT staff (a) completed 2-day trainings for new champions; (b) performed at least monthly 30-minute telephone consultations with each RESPECT-Mil installation team (champions, care facilitators, and administrative assistants) to strategize around implementation challenges; (c) executed one site visit per year for each implementing installation with in- and out-briefs for facility commanders and delivery of a written installation visit report; and (d) distributed RESPECT-Mil semi-annual installation report cards summarizing key clinical metrics and comparing them to grand mean program performance and providing site performance rankings. Data for these reports were gleaned from installation data reports, aggregate electronic health record reports, and outcomes data from the online clinical decision support tool used by care facilitators and their psychiatrist supervisors.

5. Funding

Program personnel (one General Schedule (GS)-10 equivalent RN care facilitator and one GS-5 administrative assistant equivalent per 10,000 military personnel in participating clinic catchment area; 5,000 minimum for funding of one of each) were funded through Army Medical Command Behavioral Health funding under Medical Command Operations Order. With the transition to the PCMH, program resourcing was driven in part by a Department of Defense instruction and budgeting guidance and each military service's derivative policies.

6. Lessons Learned

The lessons learned implementing RESPECT-Mil have been broad and myriad. Only a few are summarized briefly here.

(a) Collaborative Care is feasible to successfully implement and maintain quality control of in a worldwide context.

The RESPECT-Mil program was a major operation by any standard.

(b) Central assistance aids high fidelity implementation.

There were many examples in which installations, clinics, and individual care facilitators identified, corrected, and conquered complex local challenges with the assistance of the R-MIT. By training, talking with, visiting, and inspecting data from implementing installations, the R-MIT became the historical repository for lessons addressing specific challenges that arose again

and again. Central assistance is also important for supplementing the scarce mental health resources in many rural settings through the use of web-based self-management, phone-based CBT, and remote care facilitation services.

(c) The use of an electronic decision support system facilitated timely changes in the treatment plans of patients for whom treatment is likely to have otherwise remained unchanged and ineffective.

The process and outcomes data from this system, populated with data collected by care facilitators during phone follow-up contacts, also was readily used in aggregate to monitor installation, clinic, and care facilitator performance.

(d) Routine actionable performance reports with high installation/organizational visibility resulted in observable responses, particularly from under-performing installation programs.

In most cases, installation efforts to avoid poor performance (more than efforts to be viewed as a high performing installation) drove program performance in the direction of greater overall fidelity with time. This fostered and sustained a culture of performance improvement.

(e) Installation site visits were essential for insuring that high-level policies achieved intended objectives and for identifying unintended effects early and correcting them.

They also insured that RESPECT-Mil implementers considered the first hand views of the entire health care team (e.g., unit clerks, medics, nurses, administrators, records personnel, primary care physicians and mid-level providers, mental health specialists from all disciplines). These views were always informative.

(f) The use of the macro-level central assistance program organizational model not only facilitated program implementation and quality improvement efforts; it led to the recent successful completion of a large multisite randomized effectiveness trial of a second-generation Collaborative Care method (C. Engel et al. 2015).

D. Veterans Health Administration

1. Background and History

As the American health care system moves toward integrated and Collaborative Care, PCMH, outcome-based models of healthcare funding, and accountable care organizations, the experience of the nation's most extensive Collaborative Care implementation, the Veterans Health Administration's (VHA) Patient Aligned Care Team (PACT) model is relevant and important. The VHA is in the process of implementing Primary Care-Mental Health Integration (PC-MHI) in over 7,000 primary care clinics (Reid and Wagner 2014).

The VHA cares for over 5.3 million primary care patients; more than half of that care is provided in Community-Cased Outpatient Clinics (CBOCs) (Schechtman and Stark 2014). There is a single patient electronic record system used organization-wide. Twenty percent of VHA patients receive mental health services (Post and Van Stone 2008). In 2010, the VHA began to augment primary care teams to ensure at least four full-time health care professionals per panel of primary care patients, including mental health professionals, nutritionists, and clinical pharmacy specialists. Organization-wide metrics provide accountability and visibility for opportunities to standardize and improve access and care.

Primary care-mental health integration in the VHA blends two models of integrated care: 1) the Collaborative Care Model (referred to as care management) and 2) the Behavioral Health Consultant Model (referred to as co-located care) (Dundon and Dollar 2011). All VA Medical Centers and CBOCs with more than 5,000 patients are required to implement both models. The requirement for a blended model is based on the evidence base of the Collaborative Care, and the need for co-located mental health specialists to provide immediate access for patients. Collaborative Care is designed to support PCPs prescribing of psychotropic medications and includes proactive longitudinal follow-up and brief behavioral health interventions. Collaborative Care services are usually provided over the telephone, often by staff who are not independently licensed but who are supervised by a psychiatrist or psychiatric advance practice nurse. Co-located behavioral health consultants conduct curbside consultations with PCPs and participate in interdisciplinary team huddles.

2. Program Description

Most patients in the VHA with depression are treated in primary care; therefore, collaboration between primary care and mental health care providers is essential for optimizing treatment (VHA: Veterans Health Administration 2008). Most patients are introduced to the behavioral health consultant via a "warm handoff" from the PCP to the PC-MHI provider operating an open access clinic (i.e., no appointment necessary). In some programs, referrals are made using the VHA's computerized patient record system (CPRS) electronic consultation function (VHA: Veterans Health Administration 2008). The decision to make an electronic referral or warm handoff is based on the clinical experience and level of concern of the referring PCP. No specific referral criteria have been operationalized. Licensed independent

mental health providers conduct focused assessments and deliver brief interventions, usually face-to-face in the primary care clinic. Some PC-MHI encounters are scheduled solely for the purpose of delivering mental health treatment while others are conducted as part of the primary care encounter.

3. Adaptation of Collaborative Care Essential Elements

(a) Team-Driven Care

The Department of Veterans Affairs has a detailed staffing formula that prescribes full time equivalent assignments of behavioral health providers (BHPs) to primary care clinics, based on enrollment population. Case identification, triage, evaluation/consultation, follow-up, case management, psycho-education, medication management, and coordination of patients needing longer-term or more intensive mental health specialty services are targeted to all primary care panels across the national VHA health system.

Veterans Health Administration PC-MHI program staffing varies among facilities, and facilities vary in size, but a 2010 PC-MHI evaluation survey (Wray et al. 2012) and a VHA operations manual (Dundon and Dollar 2011) reported the following system-wide average full-time equivalent employees by provider type per facility, revealing of relative provider mix for a clinic accommodating approximately 3,000 to 4,000 veterans:

Table 3: Characteristics of Full-Time Equivalent (FTE) Staff per Clinic in VHA Integrated Care Implementations

Staff Title	FTE
Psychiatrists	0.54
PhD level psychologists	1.11
Mental health nurses	0.69
Masters of social work	0.62
Prescribing mid-level providers	0.40
Mental health administrative support	0.31
Mental health technicians	0.23
Doctoral level pharmacists	0.11
Masters level counselors/therapists	0.04
Primary care physician	3.00

(b) Population-Focused Care

Implementation of the PACT model is monitored through standard metrics that are shared nationwide. Data can be viewed for the entire health system, for regions, for facilities, for panels, and for individual providers. Standard metrics are related to panel management, patient engagement, patient satisfaction, access, continuity, staff satisfaction, care coordination, and clinical improvement (Schectman and Stark 2014). Clinics vary in their commitment to dedicated time for teams to participate in team population health activities

through registry review and team discussion. Partial determinants of degree of implementation of the PACT/Collaborative Care Model in the VHA include physical presence of mental health professionals in the primary care clinic, availability of space in the primary care clinic, and availability of financial resources (Chang et al. 2013).

The information technology support needs for the optimal practice of population health are substantial (VHA: Veterans Health Administration 2008). The information technology system should ideally facilitate the ability to track a panel of patients, identify next steps in clinical care, provide decision support at point-of-care for medication dosing and other clinical treatment decisions, enable patients to enter patient-reported symptoms, provide secure messaging for team members, and provide outcome feedback to care providers and teams.

The VA utilizes a current software platform to accomplish many of these needs. The Behavioral Health Lab (BHL) software package is an informatics tool to facilitate the delivery of measurement-based behavioral health care. The software provides a mechanism for collecting patient reported outcome data, tracking patients over time, monitoring patients' symptoms, and generating patient and program level outcome data. The program level data include predefined reports, but data is also easily exportable for use locally. The software program has the capacity to provide decision support for initial or baseline interviews. The software creates patient focused reports for any visit that tracks treatment progress and progress notes for clinical records. The BHL interfaces with the VHA's electronic health record and could be used with other health systems. The interface capacity enhances the user experience by populating BHL with patient demographic information and pushing patient reports from BHL into the existing VHA EMR system. Additionally, BHL-structured assessment data are pushed to the Mental Health Assistant software which populates the data in the National Data Warehouse.

(c) Measurement-Guided Care

Because the VHA is a large system of care, the preponderance of research has focused on implementation success of PC-MHI and access-relevant metrics such as wait-time for behavioral health services (Hankin et al. 1999). There is a relative paucity of data at this time related to outcomes attributable to measurement-based treatment to target and clinical outcomes.

The most robust outcome data to date within VHA come from a depression treatment initiative, Translating Initiatives for Depression into Effective Solutions (TIDES) Project (VHA: Veterans Health Administration 2008). The TIDES project has been implemented in several VHA regions and aims to improve care for depressed veterans by implementing depression Collaborative Care Models through evidence-based care guidelines. Support for treating to 50% response and full remission was provided in implementation expectations for the sites participating in the model. Initial data from the TIDES program from 1,000 patients enrolled in the program revealed that the model resulted in very high levels of medication adherence (85%) and follow-up visits (95%). Remission rates at 6 months were 62% among primary care

patients and 40% among the more severely ill veterans referred to mental health specialty treatment (Rubenstein et al. 2010).

(d) Evidence-Based Care

The VHA maintains an extensive set of evidence-based practice guidelines, regularly updated by expert panels, in collaboration with the Department of Defense. Adherence to practice guidelines is part of VHA providers' quality and performance improvement program, both as individuals and as groups. In many facilities performance pay (bonuses) are partly determined by review of adherence to aspects of evidence-based practice guidelines. The guidelines are readily available in the CPRS system. Critical reminders from evidence-based guidelines are incorporated into "push" clinical reminders upon opening of patient records. For example, if metabolic monitoring for antipsychotic medication is due, a "reminder due" message is evident on the front page of the EMR.

Psychotherapists in the VHA PC-MHI program receive training in brief evidence-based psychotherapies, including Problem Solving Therapy, and adaptations of CBT-based therapies. Designated evidence-based therapy coordinators ensure fidelity to the manualized conduct of psychotherapy via periodic review of case records.

4. Accountability and Quality Improvement

National VHA evaluation and local program data have demonstrated that PC-MHI has increased the likelihood of receiving care defined by evidence-based practice guidelines, and enhanced treatment engagement for patients referred on to VHA specialty mental health services (Pomerantz et al. 2014). The increase in access to care resulting from the widespread implementation of PC-MHI has led to significant and substantial increases in the rates of detection, diagnosis, and treatment of depression, anxiety, PTSD, and substance use disorders (VHA: Veterans Health Administration 2008; Zivin et al. 2010). The VHA has nationally standardized staff training and patient educational materials, created centrally using evidence-based methods and materials curated by content experts. With almost 5 million PC-MHI encounters to date, VHA's experience is that Collaborative Care can be successfully implemented at scale.

The VHA Primary Care Research in Substance Abuse and Mental Health for Elderly (PRISM-E) randomized controlled trial demonstrated that VHA patients were significantly more likely to engage in mental health services that were integrated with primary care than to follow through on traditional referrals to specialty services. For example, depressed patients in integrated care had 2.86 higher odds of having at least one contact with a mental health specialist than those in referral care (Bartels et al. 2004).

5. Funding

Veterans Health Administration funding mechanisms facilitated relatively easy realignment of resources and population-wide implementation of PC-MHI. Workload tracking is

based largely on patient resource utilization and BHP workload documentation. Behavioral health provider workload is captured using Current Procedural Terminology codes for PC-MHI-relevant encounter types (Dundon and Dollar 2011):

- a) Initial consult visit
- b) Follow-up visit
- c) Treatment adherence enhancement visit
- d) Relapse prevention visit
- e) Behavioral medicine visit
- f) Psycho-educational group visit
- g) Conjoint (BHP and PCP joint visit) consultation
- h) Telephone consultation
- i) Unscheduled staff- or patient-initiated contact for immediate problem-focused intervention

Several clinical services are not provided or staffed for in PC-MHI, including:

- a) Outpatient psychotherapy requiring more than six visits
- b) Intensive outpatient services
- c) Psychological or neuropsychological testing
- d) Patients already in treatment with a specialty mental health provider, service, or program

6. Lessons Learned

(a) Depression is not the only condition.

Nationally, the most frequent PC-MHI diagnoses are, in order of frequency, major depressive disorder, other depression, PTSD, anxiety disorder, alcohol use disorder, substance use disorder, bipolar disorder, schizophrenia, and personality disorders (Wray et al. 2012). While over 95% of PC-MHI programs addressed depression and anxiety disorders in 2012, 83% addressed PTSD, 55% alcohol dependence, 53% bipolar disorder, and 46% schizophrenia (Wray et al. 2012).

(b) Transformation to population health is evolutionary.

Clinical care teams can preserve clinician-patient relationships and therapeutic alliances when they are high-functioning teams emphasizing good communication and shared decision-making (Reid and Wagner 2014). In the evolution of PC-MHI toward true team care and population management, a challenging stage is when there is co-location but not totally integrative team care. Veterans Health Administration PACTs are in various stages of transformation; effective leadership and organizational commitment are necessary for evolution to true integrated team care and population health. The degree of evolution toward a pure Collaborative Care or population health model also has been shown to be dependent on the presence of psychiatrists or psychologists in the primary care clinic, greater financial

sufficiency, and greater space availability (Chang et al. 2013). To date, there is insufficient data to conclude whether or not VHA efforts to promote self-management, robust care coordination, and healthy behavior change have resulted in population health improvements (Reid and Wagner 2014).

(c) System engagement is related to ease and degree of Collaborative Care implementation.

Reid and Wagner (Reid and Wagner 2014) identified eight large-scale changes that must be implemented and sustained to achieve PC-MHI in a population health program like the VHA:

1. Engaging leadership in meaningful change
2. Deploying evidence-based quality improvement and change strategies
3. Empaneling patients to establish care accountabilities
4. Shifting to team-based rather than clinician-directed care
5. Promoting patient-centered care interactions
6. Deploying strategies to enhance chronic, preventive, and acute care
7. Ensuring access of patients to their care teams
8. Establishing effective care coordination strategies

(d) Leadership provides a critical fuel for Collaborative Care implementation.

The differences between PC-MHI programs and traditional mental health in the VHA are dramatic and require a culture shift for all stakeholders, from PCPs to BHPs, and leadership at all levels. Research from the VHA has shown that if leaders do not allocate resources, support providers, identify clinical change champions, or define job duties, implementation of Collaborative Care, or even co-located care, is likely to be hindered (Guerrero et al. 2015; Chang et al. 2013). National VHA leadership has implemented organization-wide training and emphasis on new skills that must be learned to effectively implement PC-MHI, including cultural competency, motivational interviewing, communication skills such as active listening, and use of telehealth and home-based telehealth technology.

E. University of California Davis Health System

1. Background and History

The University of California-Davis Health System (UCDHS)'s Depression Care Management pilot projects (2011 and 2012), through a pay-for-performance initiative, led to the development of the Care Coordination Program (CCP) in 2013 that utilizes the Collaborative Care Model for behavioral health and disease management. The goal of the CCP is to improve interdisciplinary collaboration within the UC Davis Primary Care Network (PCN), as many patients have limited access to in-person psychiatry consultations when PCPs request specialty mental health care. Primary care providers now refer patients to the CCP to target mental health outcomes through care management, PCP education initiatives, and electronic consultations with psychiatrists. The education initiatives within the CCP have contributed to the program's popularity and buy-in from PCPs and health system administration.

2. Program Description

The UCDHS CCP targets mental health outcomes within each PCN through care management, PCP education initiatives, and electronic consultation using referrals to CMs (licensed clinical social workers [LCSWs] and nurses). The most common referrals are for depression, diabetes, obesity and smoking cessation. There are an increasing number of referrals for patients with behavioral health resources to support patients with comorbid psychiatric and medical disorders. The PCP places these referrals through an order-set within the EMR, briefly detailing the consultation question(s), with the only exclusion criteria at this moment being child and adolescent patients. The CMs receive the referrals and then work closely with the patients, PCPs, and psychiatrists to improve medical and psychiatric outcomes.

3. Adaptation of Collaborative Care Essential Elements

(a) Team-Driven Care

The care coordination team consists of a psychiatrist, CMs (LCSW and nurse) and a clinical pharmacist. Upon receiving a referral, the CM contacts the patient by telephone to assess for specific needs. The assessments include inquiry into medication adherence, clinical outcomes data (e.g. PHQ-9 or GAD-7), side effects, risk assessment, and resources available. The Care Coordination team meets weekly to "round" on active patients. Each member of the team fully engaged to influence and guides the treatment approach. The psychiatrist leads the team in data review, diagnostic clarification, and opportunities to improve outcomes through treatment adjustment or resource referrals.

The assessments and recommendations from the team meetings are recorded into the EMR and, to ensure continuity of care between the Care Coordination team and the PCP, the psychiatrists often follow-up with a communication through the EMR to the PCP, particularly if there are recommendations for medication adjustment. These communications allow an

opportunity for teaching, which may include the rationale for a particular diagnosis and explanation of the treatment recommendations. In addition to weekly care coordination team meetings, PCPs frequently contact the psychiatrists for brief communications and “curbside” consultations. Case managers have access to psychiatrists’ pagers and mobile numbers to ensure real-time assistance with urgent questions. These personal communications add to PCP satisfaction, making it easier to garner PCP and administrative support for the Collaborative Care Model. Psychiatry involvement within the CCP has been rated very highly by both PCPs and CMs.

(b) Population-Focused Care

Each CM has a caseload of approximately 100 patients, while weekly team meetings normally cover 10-14 patients over a 2-hour session. Case managers guide the weekly team meetings through presentation of patients in whom the CM identifies a question regarding mental health. Practically, this means new referrals from PCPs or follow-ups from discussions during a previous team meeting. As such, there is no registry component consistently utilized to guide care.

(c) Measurement-Guided Care

Both PHQ-9 and GAD-7 assessments are easily accessible within the EMR as a drop-down menu, and PCPs are strongly encouraged to assess for depression and anxiety using these brief assessment tools for each patient they refer for mental health care. The CM incorporates the PHQ-9 and GAD-7 into the patient presentation during the CCP meetings. Measurement-based care, including a “treat-to-target” philosophy, is frequently used in CCP team meetings.

(d) Evidence-Based Care

Initial telephone encounters from CMs include motivational interviewing, Brief Supportive Therapy, and elements of CBT, including behavioral activation. Manuals for care management to standardize some evidence-based practices are currently under development, and monthly in-services delivered by the psychiatric consultants with care management staff are provided on behavioral health topics such as depression and anxiety disorders in the medically ill, personality disorders, eating disorders, and others.

4. Accountability and Quality Improvement

Initial quality improvement analyses have demonstrated reductions in healthcare utilization for patients enrolled in CCP along with cost reductions as well (unpublished work, UCDHS Care Coordination Value Analysis, November 2014). As the CCP evolves and is refined, ongoing quality improvement will be crucial in determining the optimal patient population to target (choosing the “right” type of patients), metrics for evaluating treatment teams, and outcomes of physician education.

5. Funding

The University of California-Davis Health System has significantly invested in the Collaborative Care Model. Beginning in 2010, the successful UCDHS Depression Care Management project through two consecutive pay-for-performance pilot grants brought a psychiatrist into a select number of UC Davis PCN clinics for Lunch & Learn sessions. In 2013, the continuing positive feedback motivated the UCDHS to fund the CCP within all 17 of the PCNs. The services of this program were funded through the Department of Health Management and Education who support the salaries of the CM (initially four LCSWs and five nurses) in addition to 0.1 FTE of two psychiatrists supported by the UCD Department of Psychiatry and Behavioral Sciences. Additionally, a Psychosomatic Medicine Fellow maintained their own treatment team for the 2014-2015 academic year in periodic meetings with protected time.

Because of the acceptance and success of the CCP, UCDHS has recently been awarded separate grants to be conducted within the CCP framework. One award is to evaluate asynchronous and synchronous telepsychiatry (a Agency for Healthcare Research & Quality-funded RO1 study) consultations at two PCNs, and the other is to evaluate asynchronous telepsychiatry (internal Practice Management Board Innovations Grant) consultations for Medicare patients within two PCNs.

6. Lessons Learned

(a) Importance of care managers

The importance of CMs cannot be overstated, as they engage in a continuous process of refining their skills of bridging information between the PCP, patient, and psychiatrist. A good fit for the CM role is one who possesses skills in rapid diagnostic assessment, efficient presentations, excellent communication skills (particularly when shifting between patients, PCPs, psychiatrists, and team meetings), and the ability to deliver evidence-based brief interventions. They also have extensive knowledge of local resources, particularly important because of the high percentage of referred patients covered through Medicare and Medicaid programs, which offer limited options for access to mental health services.

(b) Local champions and attention to stakeholders

Primary care and other local champions for integrated care exhibit a sincerely held belief in integration and have an ability to tactfully engage and navigate the varying partners important to integration success, including human resources staff, physicians, nursing leadership, mental health leadership, social work leadership, and system administrators and information technology experts. These champions explore innovative ways for systems improvement such as creative funding sources for innovations including telepsychiatry for under-served areas. Because of strong across-the-board buy in, the CCP teams were able to offset the large behavioral health needs encountered by PCP turnover, at times, through shared coordination and communication, improved access to consultations and support, and expert evaluation and triage services that would have otherwise been lacking. As a result of obtaining

crucial administrative support and meeting the stakeholders' needs first, the CCP program has achieved greater success.

VIII. TABLE 4. IN-VIVO COLLABORATIVE CARE MODEL IMPLEMENTATION CHARACTERISTICS

	Population	Eligibility	Referral Mechanism	Funding	
				Initial	Sustained
MHIP	Initial: Uninsured in 2 WA state counties; Current: Contracted Behavioral Health Benefit of a non-profit Medicaid Vendor	Adults with behavioral health needs receiving benefits from designated Medicaid vendor	Uniform screening in Primary Care; Primary Care referral for Behavioral Health; Warm Handoffs	State Legislative Action; Levy Funds; Defined proportion of CM revenue tied to performance	Non-profit Medicaid Vendor Benefit
DIAMOND	Adults with eligible private health insurance plans	Adults with PHQ-9 score ≥ 10 ; Negative Bipolar Screen; Benefits through 1 of 6 private insurers	Primary Care Screening for Those eligible; Warm Handoffs; Specialty Referrals Required Assignment of PCP	Multi-payer (N=6), private; Pooled-data allowed for range of PMPM available to clinical systems on an individually negotiated rate; individuals are eligible for 12 mos of PMPM	Not applicable
RESPECT-Mil	Active-duty military	Adults with Positive Screen on either 4-Item PTSD Screener in Primary care (Prins 2003; PC-PTSD ≥ 2) or PHQ-2 (≥ 1); followed by Positive PCL and PHQ-9	PCP option for referral to Care Manager with RESPECT-Mil or traditional care mechanisms	Salaried; 1 equivalent RN care facilitator and 1 administrative assistant equivalent per 10,000 military personnel in participating clinic catchment area; 5,000	Transitioned to PCMH funding at discretion of DoD, folded into PCMH payment methodologies

				minimum for funding of one of each	
Veterans Health Administration PACT	Adult Veterans	Behavioral health disorder; at discretion of primary care physician (their comfort level, access)	Warm-handoff to Care Manager in primary care setting primarily, EMR order referral secondarily	Salaried; CPT codes generated for BH services to track process outcomes and volume of services provided	Not applicable
UC Davis Coordinated Care Teams	Adult persons with Primary Care within UC Davis Primary Care Network (PCN)	Behavioral health disorder; at discretion of primary care physician (their comfort level, access)	Electronic order entry in EMR	Grant-supported “pay for performance” pilot Lunch and Learns with psychiatrists in primary care	California Department of Health Education and Management (salaried Care Managers), UCDHS Department of Psychiatry FTE Psychiatric Faculty, Psychosomatic Medicine Fellow; Two new grants, an R01 and internal funding for ongoing telepsychiatry efforts

IX. TABLE 5. IN-VIVO COLLABORATIVE CARE MODEL ADAPTATION OF ESSENTIAL ELEMENTS

	Team	Population Health			Measurement Based Care Outcomes	Evidence Based Care	
		Caseload	Registry	Caseload,		Training	Algorithms

				Supervision			
MHIP	PCP, Care Manager/Behavioral Health Specialist, Psychiatrist Consultant	40-100 per Care Manager	Real-time MHITS, Web-Based Registry, separate from EMR; tracks clinical outcomes and lapses in care	Protected time, typically weekly, for Consulting Psychiatrist and Care Manager	PHQ-9, GAD-7, AUDIT, MDQ, DAST ¹	Systematic and ongoing training support for Care Managers and Psychiatric Consultants	System-wide, published algorithms; common medications used and educational materials for PCPs
DIAMOND	PCP, Care Manager/Behavioral Health Specialist, Psychiatrist Consultant	100 per Care Manager, 50-80 common	Real-time Web-Based Registry, Managed by 3 rd Party Implementation Support	Weekly as allowed with Care Manager, Psychiatrist	PHQ-9, GAD-7, AUDIT, MDQ	Ongoing modeling, backup of non-nursing trained Care Managers by nurses was helpful	None
RESPECT-Mil	PCP, PCP clinic nurses, PCP office staff, PCP Depression and PTSD Nurse, Consulting Psychiatrist	50-80 per Care Manager	Real-time web-based PTSD and Depression registry; Capacity to target persons lapsing in care; triage worsening clinical outcomes	Protected with PTSD/Depression NCM and consulting psychiatrist weekly	PHQ-9, PCL	RESPECT-Mil Implementation Team; Onboarding orientations, monthly support calls and once-yearly on-site visitations with report cards	Standardized algorithms were in place for PTSD/Depression and distributed to all team-based participants

Veterans Health Administration PACT	At least one co-located Behavioral Health Clinician with each Primary Care clinic; PACT staffing averages 0.5 FTE Psychiatrist per primary care clinic, 1.11 FTE psychologist, and 0.69 mental health nursing equivalent (Care Management)	Not defined.	Behavioral Health Lab (BHL) Software System allows for patient-level behavioral health tracking and monitoring, clinical decision support and program-level performance monitoring.	Variable across clinic implementation site; dependent upon physical co-location, space and funding availability	No consistent program-wide clinical outcomes; Depression outcomes measured for TIDES program	Nationally curated trainings and patient-education materials for various behavioral health conditions	Centrally supported algorithms available through on-line resources for review
UC Davis Coordinated Care Teams	Psychiatrist, Care Manager (LCSW and a Nurse), Pharmacist	100 per care manager	None consistently utilized	Weekly; physically-present team-members discuss 12-14 patients selected for review by CM	PHQ-9, GAD-7 embedded within EMR system for easy review during caseload supervision	Nurses and LCSW trained on EB Psychosocial Interventions	Psychiatrist s “curbside” with PCPs regarding stepwise approach to management of common disorders

¹PHQ-9: Patient Health Questionnaire 9-Item (K Kroenke, Spitzer, and Williams 2001), GAD-7: Generalized Anxiety Disorder 7-Item (Spitzer et al. 2006), AUDIT: Alcohol Use Disorders Identification Test (Frank et al. 2008), MDQ: Mood Disorders Questionnaire (Hirschfeld 2000), DAST: Drug Abuse Screening Test (Skinner 1982).

X. FUTURE DIRECTIONS

Collaborative Care Models represent a compelling solution for multiple challenges faced by healthcare systems seeking to integrate behavioral health with primary care services. Robust implementations have consistently demonstrated the capacity to achieve the “triple aim” of systematic reform efforts (W. J. Katon and Unützer 2013)-- improving the experience of care, improving the health of populations, and reducing per capita costs of healthcare. While much has been achieved, further efforts are necessary to realize the promise of behavioral health integration. The following recommendations highlight areas in need of additional research and development. **Table 6** lists the summary recommendations as noted in **bold** in the text.

A. Use of consistent language and terminology when referring to integrated care implementations

At present, there is marked variability in regards to the terminology of “integrated care”. Terms like “Collaborative Care”, “coordinated care”, and “co-located care” are often used interchangeably, leading to challenges in defining a common core standard of integrated care models and comparison of implementations. The skillsets and training backgrounds of personnel involved in “integrated care” also vary highly, yet many persons with widely varying backgrounds may be referred to as the “mental health specialist”, “behavioral health practitioner” or “care manager” – in addition to a number of other terms.

To be sure, the Collaborative Care Model requires a multidisciplinary team for implementation and is adaptable in a variety of settings with different degrees of workforce resources. Utilizing more standardized terms can help systems to advance their “integrated care” programs toward more evidence-based approaches through clearer understanding of the meaning of “Collaborative Care”.

Recommendations:

Develop a standardized glossary of evidence-based “integrated care” terminology in partnership with other essential allied organizations.

B. Ongoing emphasis on psychiatric physician workforce training and development

The American Psychiatric Association has enumerated several core competencies needed by psychiatrists who participate in integrated care models (Summers et al. 2014):

1. Familiarity with models of healthcare payment
2. Knowledge of EMRs and registries
3. Operational familiarity with quality and performance metrics

4. Ability to participate in team-based approaches to care under physician oversight
5. Skill in providing caseload supervision and decision support to CMs or ongoing evaluation and follow-up visits with a psychiatrist
6. Knowledge of principles of population management
7. Ability to communicate with professionals in a variety of medical, social services, and administrative disciplines

Integrated behavioral health is growing rapidly, and there are limited training resources on this topic. The University of Washington's AIMS Center (<http://aims.uw.edu/resource-library/psychiatry-resident-training-collaborative-care>, 2015a) has developed a clinical rotation curriculum for psychiatry residents that introduces a senior resident to the role of the psychiatric consultant in a Collaborative Care team. Fellowship opportunities and post-graduate training experiences are now also offered for psychiatrists interested in furthering their skillset in Collaborative Care at the AIMS Center as well. The Collaborative Care faculty psychiatrist provides weekly caseload supervision and individual case reviews of four to six patients weekly. Residents participate in interdisciplinary care team meetings. Content of the teaching includes introduction to the theory and practice of Collaborative Care teams, case finding, differential diagnosis, case formulation, treating to target, team building, workflows, and quality improvement. A recently released report from the APA Council on Medical Education and Lifelong Learning details training requirements and current experiences linked to Accreditation Council for Graduate Medical Education milestones competencies for Collaborative Care Models (Summers et al. 2014).

There are also effective modules for training psychiatrists transitioning into integrated behavioral care roles in the principles and practice of Collaborative Care. For example, the AIMS Center (UW AIMS Center 2015) and the Center for Integrated Health Solutions, supported by the Substance Abuse and Mental Health Services Administration (SAMHSA), have structured training programs psychiatrists can take advantage of to prepare for work in Collaborative Care. The AIMS Center/SAMHSA's program (Ratzliff et al. 2012) has modules that include building an integrated care team, principles of psychiatric consulting in primary care, behavioral interventions and referrals in primary care, medical patients with psychiatric illness, the evidence base for Collaborative Care, roles for a psychiatrist in team-based care, and making the case for integrated behavioral health in primary care. The APA offers courses in Collaborative Care at annual scientific meetings coupled with in-depth reading materials (Raney 2015b). In addition, the APA will soon have available online training modules available for Continuing Medical Education (CME) credit.

Recommendations

Further expand training opportunities within graduate medical education on evidence-based models of integrated care in collaboration with the American Board of Psychiatry and Neurology (ABPN).

Expand CME opportunities for physicians, especially online courses paired with CME credit.

Incentivize ongoing training and standardization through a professional certification program.

C. System-wide implementation support with focus on accountability, QI, and the use of information technology

Review of existing large-scale Collaborative Care demonstrations reveals several consistent types of resources necessary for quality implementations. These include the need for ongoing training of healthcare team members to provide evidence-based care (EBC); consistent use of disease registries to allow for population-focused team efforts, individual team-member accountability and patient-level follow-up; and standardized treatment manuals to facilitate stepped-care and EBC. Furthermore, whole-team accountability and QI can be operationalized on the frame of these core components, which guards against inevitable programmatic drift without a structured measurement system.

Measurement of individual patient health outcomes via a registry is an essential tool to achieve successful outcomes and is often one of the last components to be implemented within “integrated care” models, if it is included at all. Because healthcare information technology is still relatively nascent, current registries often exist in parallel to EMR systems, creating cumbersome duplicative workflows and reporting mechanisms for CMs, physicians, and other team members. Consequently, this is a rate-limiting step to full-scale evidence-based Collaborative Care implementation.

Once registry functionality is firmly embedded, Collaborative Care teams can more accurately measure their outcomes, clinical implementations can be seen in aggregate, and effective performance measures can be established which drive improvements in patient health and program efficiency.

Recommendations

Develop standard minimum functional criteria for disease registries and information technology in Collaborative Care.

Advocate for the inclusion of these minimal criteria in existing EMR platforms or at the level of health information exchanges.

Develop common team-based performance benchmarks for use in Collaborative Care implementation.

Design a “road-map” to Collaborative Care implementation to assist systems invested in evidence-based integrated care delivery.

D. Standardized and coordinated training for all healthcare personnel involved in Collaborative Care Model implementation, including primary care and care management associations

In-vivo implementations of Collaborative Care require steadfast attention to workforce training for all team-based personnel. Because there is considerable regional diversity in background and qualifications for Collaborative Care healthcare providers and CMs, a clear training curriculum that expands upon the roles of the primary care physician as well as the CM is necessary and should align with existing training programs available to integrated care psychiatrists.

Recommendations

Partner with allied behavioral health organizations (e.g., psychology, social work, advance practice nursing, professional counselors), care management, and primary care (e.g., American Association of Family Practitioners, American College of Physicians, American Academy of Pediatrics) to develop interdisciplinary training programs focusing on the respective roles within the Collaborative Care Model.

Partner with allied organizations responsible for the training of future behavioral health, care management, and primary care practitioners to develop opportunities to formally incorporate Collaborative Care earlier in the professional curriculum.

E. Development of standardized measures to assess process outcomes related to essential core elements of Collaborative Care

A core feature of accountability and QI is the capacity to measure processes of care. When clinical outcomes are sub-par, this allows for identification and correction of possible sources of under-implementation. Given the definable essential elements of Collaborative Care, process measures may be derived that approximate these elements and guide more robust implementation.

Recommendations

Support the development of process measures that align with the four essential elements of Collaborative Care.

Coordinate with national and regional entities, including payer and provider stakeholders, to disseminate a common set of process measures for Collaborative Care.

F. Support for testing and refining definitions and implementations of essential core elements through ongoing process improvement

The essential elements of Collaborative Care require ongoing testing, validation and refinement. Additionally, they should be associated with individual clinical outcomes and system-wide outcomes, costs of care, and satisfaction in care delivery. It may be arbitrary to segregate each of the elements, but attention to them as independent entities may lead to increased awareness and fidelity to research-level implementations and outcomes.

Recommendations

The APA and APM should work in a coordinated fashion to support ongoing scientific research into the effectiveness of each of the essential elements of Collaborative Care in aggregate and individually, exploring opportunities to add or subtract essential elements as necessary to streamline implementation, effectiveness, and efficiency of Collaborative Care Models.

The APA and APM should support further implementation research that runs in parallel to the effectiveness of the core elements.

G. Advocacy for payment mechanisms that align with the essential elements of effective integrated care and are tied to performance-based incentives

Payment reform has proven to be a significant barrier to wider implementation of Collaborative Care Models. Significant task-shifting and time commitments are required for team-members, all of which require practitioners to work outside of their typical reimbursable scope of duties. As such, healthcare providers are at risk for engaging in Collaborative Care Models unless reimbursement strategies are in place. In-vivo demonstrations in this report illustrate the breadth of payer systems willing to invest in the Collaborative Care Model provided the implementation is true to the essential core elements of Collaborative Care.

Systems working within full-scale Collaborative Care offer a realistic option to operationalize clinical pay-for-performance incentives for healthcare providers that have been proven to improve efficiency in care. Consequently, Collaborative Care is an enticing platform of services delivery for “integrated care” models from the payer perspective, but the myriad of terms and non-evidence-based implementations serves to confuse payer stakeholders and threatens to halt momentum for integration of behavioral health and primary care.

Recommendations

The APA and APM should create opportunities to educate public and private payer stakeholders on the essential elements of Collaborative Care Models.

The APA and APM should develop resources for members to educate local and state payers of health services on essential elements of Collaborative Care Models.

The APA and APM should support efforts to continue to research the cost-savings and added value of Collaborative Care Model implementation in real-world settings.

H. Advocacy for state and federal-level policy favoring implementation of evidence-based integrated care

A significant portion of mental health services are provided through state-level Medicaid programs which have yet to consistently recognize or implement through payment mechanisms the substantial evidence-base for Collaborative Care programs. State innovation is often driven by federal incentive programs that offset the financial risk for program start-up, workforce training and investment in overhead such as information technology supports. Public and private payer entities rarely are recognized or rewarded for their contributions to innovation in payment.

Recommendation

Develop advocacy platforms directed at state and federal agencies that foster the incorporation of Collaborative Care Models into the existing menu of reimbursable services.

Partner with allied medical and non-medical stakeholders in advocacy measures calling on funders to recognize, through adoption of alternative payment mechanisms, the potential value of Collaborative Care Models in healthcare reform efforts.

Develop recognition programs for stakeholders investing in Collaborative Care Models to foster competition and positively reward innovation.

I. Partnering with medical groups and organizations to increase healthcare providers' awareness of Collaborative Care.

Medical groups representing primary and specialty care are logical partners in educating healthcare providers about the evidence base that supports the advantages of Collaborative Care. Penetration and acceptance of Collaborative Care can be facilitated by awareness of the triple-aim benefits of Collaborative Care and advantages for improving access and outcomes among medical-surgical populations that can benefit from the model. Residency training programs across a spectrum of physician and other provider specialties could benefit from exposure to Collaborative Care Models during required psychiatry or mental health rotations or content.

Recommendation

Partner with allied medical stakeholders in increasing healthcare provider awareness of Collaborative Care Models and the evidence that supports their outcomes.

Consult with medical and other healthcare professional organizations regarding inclusion of Collaborative Care training during required psychiatry or other mental health rotations or content.

J. Leveraging of technology to improve Collaborative Care outcomes.

One of the challenges of dissemination of Collaborative Care is that many geographic areas and many smaller primary care clinics do not have or do not have access to local mental health providers who can be on-site, even part time. Telemedicine-based Collaborative Care virtually co-locates and integrates mental health providers into primary care settings. Virtual care offers the possibility of relieving mismatches in mental health care needs and available resources. There have been few comparisons of outcomes of patients assigned to practice-based and telemedicine-based Collaborative Care, but early evidence is that outcomes are as good or better (J. C. Fortney et al. 2013; Hilty et al. 2015). A significant barrier remains securing a payment model in the fee-for-service environment that facilitates the non-patient contact elements of Collaborative Care, such as registry management and case supervision.

Recommendation

Advocate for outcomes research related to elements predictive of optimal implementation of telemedicine-based Collaborative Care.

Include virtual clinical models when advocating for payment models that align with the core elements of Collaborative Care.

Table 6: List of Workgroup Recommendations, Future Directions

Education and Training

Develop a standardized glossary of evidence-based “integrated care” terminology in partnership with other essential allied organizations.

Further expand training opportunities within graduate medical education on evidence-based models of integrated care in collaboration with the ABPN.

Expand CME opportunities for physicians, especially online courses paired with CME credit.

Partner with allied behavioral health organizations (e.g., psychology, social work, advance practice nursing, professional counselors), care management, and primary care (e.g., American Association of Family Practitioners, American College of Physicians, American Academy of Pediatrics) to develop within-field continuing education training programs focusing on the respective roles within the

Collaborative Care Model.

Partner with allied organizations responsible for the training of future behavioral health, care management, and primary care practitioners to develop opportunities to formally incorporate Collaborative Care earlier in the professional curriculum.

Partner with allied medical stakeholders in increasing healthcare provider awareness of Collaborative Care models and the evidence that supports their outcomes.

Incentivize ongoing training and standardization through a professional certification program.

Implementation Support

Develop standard minimum functional criteria for disease registries and information technology in Collaborative Care.

Advocate for the inclusion of these minimal criteria in existing EMR platforms or at the level of health information exchanges.

Develop common team-based performance benchmarks for use in Collaborative Care implementation. Design a “road-map” to Collaborative Care implementation to assist systems invested in evidence-based integrated care delivery.

Support the development of process measures that align with the four essential elements of Collaborative Care.

Coordinate with national and regional entities, including payer and provider stakeholders, to disseminate a common set of process measures for Collaborative Care.

Advocate for outcomes research related to elements predictive of optimal implementation of telemedicine-based Collaborative Care.

The APA and APM should support for further implementation research that runs in parallel to the effectiveness of the core elements.

The APA and APM should work in a coordinated fashion to support ongoing scientific research into the effectiveness of each of the essential elements of Collaborative Care in aggregate and individually, exploring opportunities to add, subtract, or redefine the essential elements as necessary to streamline implementation, effectiveness, and efficiency of Collaborative Care Models.

Payment Reform

The APA and APM should create opportunities to educate public and private payer stakeholders on the essential elements of Collaborative Care Models.

The APA and APM should develop resources for members to educate local and state payers of health services on essential elements of Collaborative Care Models.

The APA and APM should support efforts to continue to research the cost-savings and added value of Collaborative Care Model implementation in real-world settings.

Develop advocacy platforms directed at state and federal agencies that foster the incorporation of Collaborative Care Models into the existing menu of reimbursable services.

Partner with allied medical and non-medical stakeholders in advocacy measures calling on funders to recognize, through adoption of alternative payment mechanisms, the potential value of Collaborative Care Models in healthcare reform efforts.

Develop recognition programs for payers investing in Collaborative Care Models to foster competition and positively reward innovation.

Include virtual clinical models when advocating for payment models that align with the core elements of Collaborative Care.

*The above recommendations are divided into three categories: **education and training, implementation support,** and **payment reform.**

XI. REFERENCES

- "7. Approaches to Glycemic Treatment." 2014. *Diabetes Care* 38 (Supplement_1): S41–48. doi:10.2337/dc15-S010.
- Archer, J, P Bower, S Gilbody, K Lovell, D Richards, L Gask, C Dickens, and P Coventry. 2012. "Collaborative Care for Depression and Anxiety Problems (Review)." *Cochrane Database Syst Rev*, no. 10.
- Arroll, Bruce, and F Goodyear-Smith. 2010. "Validation of PHQ-2 and PHQ-9 to Screen for Major Depression in the Primary Care Population." *The Annals of ...*, 348–53. doi:10.1370/afm.1139.INTRODUCTION.
- Bartels, Stephen J, Eugenie H Coakley, Cynthia Zubritsky, James H Ware, Keith M Miles, Patricia A Areán, Hongtu Chen, et al. 2004. "Improving Access to Geriatric Mental Health Services: A Randomized Trial Comparing Treatment Engagement with Integrated versus Enhanced Referral Care for Depression, Anxiety, and at-Risk Alcohol Use." *The American Journal of Psychiatry* 161 (8): 1455–62. doi:10.1176/appi.ajp.161.8.1455.
- Belsher, Bradley E., Justin Curry, Phoebe McCutchan, Thomas Oxman, Kent A. Corso, Kelly Williams, and Charles C. Engel. 2014. "Implementation of a Collaborative Care Initiative for PTSD and Depression in the Army Primary Care System." *Social Work in Mental Health*, October. Routledge. <http://www.tandfonline.com/doi/abs/10.1080/15332985.2014.897673#.Vb9bmHjs5VI>.
- Bickman, Leonard, Susan Douglas Kelley, Carolyn Breda, Ana Regina de Andrade, and Manuel Riemer. 2011. "Effects of Routine Feedback to Clinicians on Mental Health Outcomes of Youths: Results of a Randomized Trial." *Psychiatric Services (Washington, D.C.)* 62 (12): 1423–29. doi:10.1176/appi.ps.002052011.
- Blanchard, E B, J Jones-Alexander, T C Buckley, and C A Forneris. 1996. "Psychometric Properties of the PTSD Checklist (PCL)." *Behaviour Research and Therapy* 34 (8): 669–73. <http://www.ncbi.nlm.nih.gov/pubmed/8870294>.
- Bogner, Hillary. 2013. "Measuring Concurrent Oral Hypoglycemic and Antidepressant Adherence and Clinical Outcomes." *Am J Manag Care* 19 (3). <http://www.ajmc.com/publications/issue/2013/2013-1-vol19-n3/Measuring-Concurrent-Oral-Hypoglycemic-and-Antidepressant-Adherence-and-Clinical-Outcomes>.
- Bower, Peter, Simon Gilbody, David Richards, Janine Fletcher, and Alex Sutton. 2006. "Collaborative Care for Depression in Primary Care - Making Sense of a Complex Intervention: Systematic Review and Meta-Regression." *British Journal of Psychiatry* 189: 484–93. doi:10.1192/bjp.bp.106.023655.

- Brodey, Benjamin B, Brian Cuffel, Joyce McCulloch, Shanna Tani, Mark Maruish, Inger Brodey, and Jürgen Unützer. 2005. "The Acceptability and Effectiveness of Patient-Reported Assessments and Feedback in a Managed Behavioral Healthcare Setting." *The American Journal of Managed Care* 11 (12): 774–80.
<http://www.ncbi.nlm.nih.gov/pubmed/16336061>.
- CBO: Congressional Budget Office. 2014. *Approaches to Reducing Federal Spending on Military Health Care - CBO*. <http://www.cbo.gov/publication/44993>.
- Cerimele, Joseph M., A Halperin, C Spigner, A Ratzliff, and Wayne J Katon. 2014. "Collaborative Care Psychiatrists' Views on Treating Bipolar Disorder in Primary Care: A Qualitative Study." *General Hospital Psychiatry* 36 (6): 575–80.
- Chang, Evelyn T, Danielle E Rose, Elizabeth M Yano, Kenneth B Wells, Maureen E Metzger, Edward P Post, Martin L Lee, and Lisa V Rubenstein. 2013. "Determinants of Readiness for Primary Care-Mental Health Integration (PC-MHI) in the VA Health Care System." *Journal of General Internal Medicine* 28 (3): 353–62. doi:10.1007/s11606-012-2217-z.
- Community Health Plan of Washington: "*Community Health Centers: Behavioral Health Integration*." 2013. https://chpw.org/BriefingPaper_-_Behavioral_Health_Integration.pdf.
- Crain, A Lauren, Leif I Solberg, Jürgen Unützer, Kris A Ohnsorg, Michael V Maciosek, Robin R Whitebird, Arne Beck, and Beth A Molitor. 2013. "Designing and Implementing Research on a Statewide Quality Improvement Initiative: The DIAMOND Study and Initiative." *Medical Care* 51 (9): e58–66. doi:10.1097/MLR.0b013e318249d8a4.
- Dietrich, Allen J, Thomas E Oxman, John W Williams, Herbert C Schulberg, Martha L Bruce, Pamela W Lee, Sheila Barry, et al. 2004. "Re-Engineering Systems for the Treatment of Depression in Primary Care: Cluster Randomised Controlled Trial." *BMJ (Clinical Research Ed.)* 329 (7466): 602. doi:10.1136/bmj.38219.481250.55.
- Dowrick, Christopher, Geraldine M Leydon, Anita McBride, Amanda Howe, Hana Burgess, Pamela Clarke, Sue Maisey, and Tony Kendrick. 2009. "Patients' and Doctors' Views on Depression Severity Questionnaires Incentivised in UK Quality and Outcomes Framework: Qualitative Study." *BMJ (Clinical Research Ed.)* 338 (January): b663.
<http://www.ncbi.nlm.nih.gov/pubmed/19299474>.
- Dundon, Margaret, and Katherine Dollar. 2011. *Primary Care-Mental Health Integration Co-Located, Collaborative Care: An Operations Manual*.
- Engel, CC, LH Jaycox, MC Freed, RM Bray, D Brambilla, D Zatzick, B Litz, et al. 2015. "Centrally Assisted Collaborative Telecare for Posttraumatic Stress Disorder and Depression among Military Personnel Attending Primary Care: A Randomized Controlled Trial." *Under Review*.

- Engel, Charles C, Robert M Bray, Lisa H Jaycox, Michael C Freed, Doug Zatzick, Marian E Lane, Donald Brambilla, et al. 2014. "Implementing Collaborative Primary Care for Depression and Posttraumatic Stress Disorder: Design and Sample for a Randomized Trial in the U.S. Military Health System." *Contemporary Clinical Trials* 39 (2): 310–19. doi:10.1016/j.cct.2014.10.002.
- Engel, Charles C, Thomas Oxman, Christopher Yamamoto, Darin Gould, Sheila Barry, Patrice Stewart, Kurt Kroenke, John W Williams, and Allen J Dietrich. 2008. "RESPECT-Mil: Feasibility of a Systems-Level Collaborative Care Approach to Depression and Post-Traumatic Stress Disorder in Military Primary Care." *Military Medicine* 173 (10): 935–40. <http://www.ncbi.nlm.nih.gov/pubmed/19160608>.
- Fihn, Stephan D, Mary B McDonell, Paula Diehr, Stephen M Anderson, Katharine A Bradley, David H Au, John A Spertus, et al. 2004. "Effects of Sustained Audit/feedback on Self-Reported Health Status of Primary Care Patients." *The American Journal of Medicine* 116 (4): 241–48. doi:10.1016/j.amjmed.2003.10.026.
- Fortney, John C, Jeffrey M Pyne, Mark J Edlund, David K Williams, Dean E Robinson, Dinesh Mittal, and Kathy L Henderson. 2007. "A Randomized Trial of Telemedicine-Based Collaborative Care for Depression." *Journal of General Internal Medicine* 22 (8): 1086–93. doi:10.1007/s11606-007-0201-9.
- Fortney, John C, Jeffrey M Pyne, Timothy A Kimbrell, Teresa J Hudson, Dean E Robinson, Ronald Schneider, William M Moore, Paul J Custer, Kathleen M Grubbs, and Paula P Schnurr. 2015. "Telemedicine-Based Collaborative Care for Posttraumatic Stress Disorder: A Randomized Clinical Trial." *JAMA Psychiatry* 72 (1): 58–67. doi:10.1001/jamapsychiatry.2014.1575.
- Fortney, John C, Jeffrey M Pyne, Sip B Mouden, Dinesh Mittal, Teresa J Hudson, Gary W Schroeder, David K Williams, Carol A Bynum, Rhonda Mattox, and Kathryn M Rost. 2013. "Practice-Based versus Telemedicine-Based Collaborative Care for Depression in Rural Federally Qualified Health Centers: A Pragmatic Randomized Comparative Effectiveness Trial." *The American Journal of Psychiatry* 170 (4): 414–25. doi:10.1176/appi.ajp.2012.12050696.
- Fortney, John, Mark Enderle, Skye McDougall, Jeff Clothier, Jay Otero, Lisa Altman, and Geoff Curran. 2012. "Implementation Outcomes of Evidence-Based Quality Improvement for Depression in VA Community Based Outpatient Clinics." *Implementation Science : IS* 7 (January): 30. doi:10.1186/1748-5908-7-30.
- Frank, Danielle, Anna F DeBenedetti, Robert J Volk, Emily C Williams, Daniel R Kivlahan, and Katharine a Bradley. 2008. "Effectiveness of the AUDIT-C as a Screening Test for Alcohol Misuse in Three Race/ethnic Groups." *Journal of General Internal Medicine* 23 (6): 781–87. doi:10.1007/s11606-008-0594-0.

- Gilbody, S, P Bower, and J Fletcher. 2006. "Collaborative Care for Depression: A Cumulative Meta-Analysis and Review of Longer-Term Outcomes." *Archives of Internal ...*
<http://archinte.ama-assn.org/cgi/reprint/166/21/2314.pdf>.
- Gilbody, Simon, Trevor Sheldon, and Allan House. 2008. "Screening and Case-Finding Instruments for Depression: A Meta-Analysis." *CMAJ : Canadian Medical Association Journal = Journal de l'Association Medicale Canadienne* 178 (8): 997–1003.
 doi:10.1503/cmaj.070281.
- Gual, Antoni, Lidia Segura, Montserrat Contel, Nick Heather, and Joan Colom. 2002. "Audit-3 and Audit-4: Effectiveness of Two Short Forms of the Alcohol Use Disorders Identification Test." *Alcohol and Alcoholism (Oxford, Oxfordshire)* 37 (6): 591–96.
<http://www.ncbi.nlm.nih.gov/pubmed/12414553>.
- Guerrero, Erick G, Kevin C Heslin, Evelyn Chang, Karissa Fenwick, and Elizabeth Yano. 2015. "Organizational Correlates of Implementation of Colocation of Mental Health and Primary Care in the Veterans Health Administration." *Administration and Policy in Mental Health* 42 (4): 420–28. doi:10.1007/s10488-014-0582-0.
- Hankin, C S, A Spiro, D R Miller, and L Kazis. 1999. "Mental Disorders and Mental Health Treatment among U.S. Department of Veterans Affairs Outpatients: The Veterans Health Study." *The American Journal of Psychiatry* 156 (12): 1924–30.
 doi:10.1176/ajp.156.12.1924.
- Harding, Kelli Jane K, A John Rush, Melissa Arbuckle, Madhukar H Trivedi, and Harold Alan Pincus. 2011. "Measurement-Based Care in Psychiatric Practice: A Policy Framework for Implementation." *The Journal of Clinical Psychiatry* 72 (8): 1136–43.
 doi:10.4088/JCP.10r06282whi.
- Harmon, S. Cory, Michael J. Lambert, David M. Smart, Eric Hawkins, Stevan L. Nielsen, Karstin Slade, and Wolfgang Lutz. 2007. "Enhancing Outcome for Potential Treatment Failures: Therapist–client Feedback and Clinical Support Tools." *Psychotherapy Research* 17 (4). Taylor & Francis Group: 379–92. doi:10.1080/10503300600702331.
- Hatfield, Derek, Lynn McCullough, Shelby H B Frantz, and Kenin Krieger. 2009. "Do We Know When Our Clients Get Worse? An Investigation of Therapists' Ability to Detect Negative Client Change." *Clinical Psychology & Psychotherapy* 17 (1): n/a – n/a.
 doi:10.1002/cpp.656.
- Hawkins, Eric J., Michael J. Lambert, Dave A. Vermeersch, Kärstin L. Slade, and Kenneth C. Tuttle. 2006. "The Therapeutic Effects of Providing Patient Progress Information to Therapists and Patients." *Psychotherapy Research*, August. Oxford University Press.
<http://www.tandfonline.com/doi/abs/10.1093/ptr/kph027#.Vbz-SHjs5VI>.

- Helfrich, Christian D., Emily D. Dolan, Joseph Simonetti, Robert J. Reid, Sandra Joos, Bonnie J. Wakefield, Gordon Schectman, et al. 2014. "Elements of Team-Based Care in a Patient-Centered Medical Home Are Associated with Lower Burnout among VA Primary Care Employees." *Journal of General Internal Medicine* 29 (SUPPL. 2): 659–66. doi:10.1007/s11606-013-2702-z.
- Hilty, Donald, Peter M. Yellowlees, Michelle B. Parrish, and Steven Chan. 2015. "Telepsychiatry: Effective, Evidence-Based, and at a Tipping Point in Health Care Delivery?" *Psychiatric Clinics of North America* 38: 559–92. doi:10.1016/j.psc.2015.05.006.
- Hirschfeld, R. M.a. 2000. "Development and Validation of a Screening Instrument for Bipolar Spectrum Disorder: The Mood Disorder Questionnaire." *American Journal of Psychiatry* 157 (11): 1873–75. doi:10.1176/appi.ajp.157.11.1873.
- Hoge, Charles W, Carl A Castro, Stephen C Messer, Dennis McGurk, Dave I Cotting, and Robert L Koffman. 2004. "Combat Duty in Iraq and Afghanistan, Mental Health Problems, and Barriers to Care." *The New England Journal of Medicine* 351 (1): 13–22. doi:10.1056/NEJMoa040603.
- Institute for Healthcare Improvement. 2003. *The Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement*.
- Joesch, J. 2011. *Evaluation of the General Assistance Managed Care Pilot in King and Pierce Counties for the Period of January 2008 through September 2009: Brief Report*. http://www.chammp.org/LinkClick.aspx?fileticket=lkv-_J3e-YY=&tabid=197.
- Katon, W, P Robinson, M Von Korff, E Lin, T Bush, E Ludman, G Simon, and E Walker. 1996. "A Multifaceted Intervention to Improve Treatment of Depression in Primary Care." *Archives of General Psychiatry* 53 (10): 924–32. <http://www.ncbi.nlm.nih.gov/pubmed/8857869>.
- Katon, W, M Von Korff, E Lin, G Simon, E Walker, T Bush, and E Ludman. 1995. "Collaborative Management to Achieve Depression Treatment Guidelines." *JAMA : The Journal of the American Medical Association* 273 (13): 1026–31.
- Katon, Wayne J, and Jürgen Unützer. 2013. "Health Reform and the Affordable Care Act: The Importance of Mental Health Treatment to Achieving the Triple Aim." *Journal of Psychosomatic Research* 74 (6): 533–37. doi:10.1016/j.jpsychores.2013.04.005.
- Kerr, E. a., S. L. Krein, S. Vijan, T. P. Hofer, and R. a. Hayward. 2001. "Avoiding Pitfalls in Chronic Disease Quality Measurement: A Case for the next Generation of Technical Quality Measures." *American Journal of Managed Care* 7 (11): 1033–43. doi:402 [pii].
- Kindig, David A. 2007. "Understanding Population Health Terminology." *The Milbank Quarterly* 85 (1): 139–61. doi:10.1111/j.1468-0009.2007.00479.x.

- Kindig, David, and Greg Stoddart. 2003. "What Is Population Health?" *American Journal of Public Health* 93 (3): 380–83. doi:10.2105/AJPH.93.3.380.
- Knaup, Carina, Markus Koesters, Dorothea Schoefer, Thomas Becker, and Bernd Puschner. 2009. "Effect of Feedback of Treatment Outcome in Specialist Mental Healthcare: Meta-Analysis." *The British Journal of Psychiatry : The Journal of Mental Science* 195 (1): 15–22. doi:10.1192/bjp.bp.108.053967.
- Krägeloh, Christian U, Karol J Czuba, D Rex Billington, Paula Kersten, and Richard J Siegert. 2015. "Using Feedback from Patient-Reported Outcome Measures in Mental Health Services: A Scoping Study and Typology." *Psychiatric Services (Washington, D.C.)* 66 (3): 224–41. doi:10.1176/appi.ps.201400141.
- Kroenke, K, R L Spitzer, and J B Williams. 2001. "The PHQ-9: Validity of a Brief Depression Severity Measure." *Journal of General Internal Medicine* 16 (9): 606–13. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1495268&tool=pmcentrez&endertype=abstract>.
- Kroenke, Kurt, Robert L Spitzer, and Janet B W Williams. 2003. "The Patient Health Questionnaire-2: Validity of a Two-Item Depression Screener." *Medical Care* 41 (11): 1284–92. doi:10.1097/01.MLR.0000093487.78664.3C.
- Lambert, Michael J., Jason L. Whipple, David a. Vermeersch, David W. Smart, Eric J. Hawkins, Steven Lars Nielsan, and Melissa Goates. 2002. "Enhancing Psychotherapy Outcomes via Providing Feedback on Client Progress: A Replication." *Clinical Psychology and Psychotherapy* 9 (2): 91–103. doi:10.1002/cpp.324.
- Lin, Elizabeth H B, Wayne Katon, Michael Von Korff, Carolyn Rutter, Greg E Simon, Malia Oliver, Paul Ciechanowski, Evette J Ludman, Terry Bush, and Bessie Young. 2004. "Relationship of Depression and Diabetes Self-Care, Medication Adherence, and Preventive Care." *Diabetes Care* 27 (9): 2154–60. doi:10.2337/diacare.27.9.2154.
- Lin, Elizabeth H B, Michael Von Korff, Paul Ciechanowski, Carolyn M Rutter, Malia Oliver, Bessie a Young, Jochen Gensichen, et al. 2012. "Treatment Adjustment and Medication." *Annals of Family Medicine* 10: 6–14. doi:10.1370/afm.1343.INTRODUCTION.
- Linde, K, K Sigterman, L Kriston, G Rucker, S Jamil, K Meissner, and A Schneider. 2015. "Effectiveness of Psychological Treatments for Depressive Disorders in Primary Care: Systematic Review and Meta-Analysis." *Annals of Family Medicine* 13 (1): 56–68. doi:10.1370/afm.1719.INTRODUCTION.
- Moullin, Max. 2002. *Delivering Excellence In Health and Social Care: Quality, Excellence and Performance Measurement*. 1.0 ed. Open University Press.

- Murphy, Kevin P., Charles M. Rashleigh, and Ladislav Timulak. 2012. "The Relationship between Progress Feedback and Therapeutic Outcome in Student Counselling: A Randomised Control Trial." *Counselling Psychology Quarterly* 25 (1). Routledge: 1–18. doi:10.1080/09515070.2012.662349.
- "National Committee for Quality Assurance: Healthcare Effectiveness Data and Information Set (HEDIS)." 2013. <http://www.ncqa.org/HEDISQualityMeasurement.aspx>.
- Norfleet, K, A Ratzliff, and Ya-Fen Chan. 2015. "The Role of the Integrated Care Psychiatrist in Community Settings: A Survey of Psychiatrists' Perspectives." *Psychiatric Services* (in press).
- Olick, Robert S, and George R Bergus. "Malpractice Liability for Informal Consultations." *Family Medicine* 35 (7): 476–81. <http://www.ncbi.nlm.nih.gov/pubmed/12861458>.
- Oxman, Thomas E, Allen J Dietrich, John W Williams, and Kurt Kroenke. 2002. "A Three-Component Model for Reengineering Systems for the Treatment of Depression in Primary Care." *Psychosomatics* 43 (6): 441–50. <http://www.ncbi.nlm.nih.gov/pubmed/12444226>.
- Pomerantz, Andrew S, Lisa K Kearney, Laura O Wray, Edward P Post, and John F McCarthy. 2014. "Mental Health Services in the Medical Home in the Department of Veterans Affairs: Factors for Successful Integration." *Psychological Services* 11 (3): 243–53. doi:10.1037/a0036638.
- Post, Edward P, and William W Van Stone. 2008. "Veterans Health Administration Primary Care-Mental Health Integration Initiative." *North Carolina Medical Journal* 69 (1): 49–52. <http://www.ncbi.nlm.nih.gov/pubmed/18429567>.
- Prins, Annabel, Paige Ouimette, Rachel Kimerling, Rebecca P. Camerond, Daniela S. Hugelshofer, Jennifer Shaw-Hegwer, Ann Thrailkill, Fred D. Gusman, and Javid I. Sheikh. 2004. "The Primary Care PTSD Screen (PC-PTSD): Development and Operating Characteristics." *Primary Care Psychiatry* 9 (1): 9–14. doi:10.1185/135525703125002360.
- Raney, Lori E. 2015a. "Integrating Primary Care and Behavioral Health: The Role of the Psychiatrist in the Collaborative Care Model." *American Journal of Psychiatry*, no. August: 721–28.
- . , ed. 2015b. *Integrated Care: Working at the Interface of Primary Care and Behavioral Health*. 1.0 ed. Arlington, VA: American Psychiatric Publishing.
- Ratzliff, Anna, Wayne Katon, Lori Raney, and John Kern. 2012. *Psychiatric Consulting in Primary Care : An Introduction to Practice in an Integrated Care Team With Contributions from : Supported by Funding from the Center for Integrated Health Solutions*.

- Reese, Robert J, Larry A Norsworthy, and Steve R Rowlands. 2009. "Does a Continuous Feedback System Improve Psychotherapy Outcome?" *Psychotherapy (Chicago, Ill.)* 46 (4): 418–31. doi:10.1037/a0017901.
- Reese, Robert J, Michael D Toland, Norah C Slone, and Larry A Norsworthy. 2010. "Effect of Client Feedback on Couple Psychotherapy Outcomes." *Psychotherapy (Chicago, Ill.)* 47 (4): 616–30. doi:10.1037/a0021182.
- Reid, Robert J, and Edward H Wagner. 2014. "The Veterans Health Administration Patient Aligned Care Teams: Lessons in Primary Care Transformation." *Journal of General Internal Medicine* 29 Suppl 2 (July): S552–54. doi:10.1007/s11606-014-2827-8.
- Rosenthal, Meredith B, Rushika Fernandopulle, HyunSook Ryu Song, and Bruce Landon. 2004. "Paying for Quality: Providers' Incentives for Quality Improvement." *Health Affairs (Project Hope)* 23 (2): 127–41. <http://www.ncbi.nlm.nih.gov/pubmed/15046137>.
- Rosenthal, Meredith B, Richard G Frank, Zhonghe Li, and Arnold M Epstein. 2005. "Early Experience with Pay-for-Performance: From Concept to Practice." *JAMA* 294 (14): 1788–93. doi:10.1001/jama.294.14.1788.
- Rubenstein, Lisa V, Edmund F Chaney, Scott Ober, Bradford Felker, Scott E Sherman, Andy Lanto, and Susan Vivell. 2010. "Using Evidence-Based Quality Improvement Methods for Translating Depression Collaborative Care Research into Practice." *Families, Systems & Health : The Journal of Collaborative Family Healthcare* 28 (2): 91–113. doi:10.1037/a0020302.
- Rush, a John, Madhukar H Trivedi, Stephen Wisniewski, J Stewart, A Nierenberg, M Thase, L Ritz, et al. 2006. "Bupropion-SR, Sertraline, or Venlafaxine-XR after Failure of SSRIs for Depression." *New England Journal of Medicine* 354 (12): 1231–42. doi:10.1056/NEJMoa1404304.
- Sachs, Gary S, Michael E Thase, Michael W Otto, Mark Bauer, David Miklowitz, Stephen R Wisniewski, Philip Lavori, et al. 2003. "Rationale, Design, and Methods of the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD)." *Biological Psychiatry* 53 (11): 1028–42. <http://www.ncbi.nlm.nih.gov/pubmed/12788248>.
- Sackett, David L, William M C Rosenberg, J a Muir Gray, R Brian Haynes, and W Scott Richardson. 1996. "Evidence Based Medicine: What It Is and What It Isn't." *British Medical Journal* 312 (7023): 71–72. doi:10.1136/bmj.312.7023.71.
- Schectman, Gordon, and Richard Stark. 2014. "Orchestrating Large Organizational Change in Primary Care: The Veterans' Health Administration Experience Implementing a Patient-Centered Medical Home." *Journal of General Internal Medicine* 29 Suppl 2 (July): S550–51. doi:10.1007/s11606-014-2828-7.

- Schmidt, Ulrike, Sabine Landau, Maria Guadalupe Pombo-Carril, Nuria Bara-Carril, Yael Reid, Kathryn Murray, Janet Treasure, and Melanie Katzman. 2006. "Does Personalized Feedback Improve the Outcome of Cognitive-Behavioural Guided Self-Care in Bulimia Nervosa? A Preliminary Randomized Controlled Trial." *The British Journal of Clinical Psychology / the British Psychological Society* 45 (Pt 1): 111–21. doi:10.1348/014466505X29143.
- Schmittziel, Julie a., Connie S. Uratsu, Andrew J. Karter, Michele Heisler, Usha Subramanian, Carol M. Mangione, and Joe V. Selby. 2008. "Why Don't Diabetes Patients Achieve Recommended Risk Factor Targets? Poor Adherence versus Lack of Treatment Intensification." *Journal of General Internal Medicine* 23 (5): 588–94. doi:10.1007/s11606-008-0554-8.
- Selby, Joe V. 2009. "Treatment Intensification and Risk Factor Control: A Quality Improvement Perspective." *Medical Care* 47 (4): 395–402. doi:10.2190/OM.58.2.b.Six-Year.
- Shimokawa, Kenichi, Michael J Lambert, and David W Smart. 2010. "Enhancing Treatment Outcome of Patients at Risk of Treatment Failure: Meta-Analytic and Mega-Analytic Review of a Psychotherapy Quality Assurance System." *Journal of Consulting and Clinical Psychology* 78 (3): 298–311. doi:10.1037/a0019247.
- Simon, Gregory E, Evette J Ludman, Steve Tutty, Belinda Operskalski, and Michael Von Korff. 2004. "Telephone Psychotherapy and Telephone Care Management for Primary Care Patients Starting Antidepressant Treatment: A Randomized Controlled Trial." *JAMA* 292 (8): 935–42. doi:10.1001/jama.292.8.935.
- Simon, Gregory E, James D Ralston, James Savarino, Chester Pabiniak, Christine Wentzel, and Belinda H Operskalski. 2011. "Randomized Trial of Depression Follow-up Care by Online Messaging." *Journal of General Internal Medicine* 26 (7): 698–704. doi:10.1007/s11606-011-1679-8.
- Simon, Witold, Michael J Lambert, Mitchell W Harris, Gregory Busath, and Aaron Vazquez. 2012. "Providing Patient Progress Information and Clinical Support Tools to Therapists: Effects on Patients at Risk of Treatment Failure." *Psychotherapy Research : Journal of the Society for Psychotherapy Research* 22 (6): 638–47. doi:10.1080/10503307.2012.698918.
- Skinner, H A. 1982. "The Drug Abuse Screening Test." *Addictive Behaviors* 7 (4): 363–71. <http://www.ncbi.nlm.nih.gov/pubmed/7183189>.
- Slade, Karstin, Michael J Lambert, S Cory Harmon, David W Smart, and Russ Bailey. 2006. "Improving Psychotherapy Outcome: The Use of Immediate Electronic Feedback and Revised Clinical Support Tools." *Clinical Psychology & Psychotherapy* 15 (5): 287–303. doi:10.1002/cpp.594.

- Smith, G R, K M Rost, E P Fischer, M A Burnam, and B J Burns. 1997. "Assessing the Effectiveness of Mental Health Care in Routine Clinical Practice. Characteristics, Development, and Uses of Patient Outcomes Modules." *Evaluation & the Health Professions* 20 (1): 65–80. <http://www.ncbi.nlm.nih.gov/pubmed/10183313>.
- Spitzer, Robert L, Kurt Kroenke, Janet B W Williams, and Bernd Löwe. 2006. "A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7." *Archives of Internal Medicine* 166 (10): 1092–97. doi:10.1001/archinte.166.10.1092.
- Summers, Richard F, Mark H Rapaport, Justin Bailey Hunt, Steven Fischel, Sarah Johnson, Edward Silberman, Lisa Mellman, et al. 2014. *Training Psychiatrists for Integrated Behavioral Health Care*.
- Surgeon General. 2013. "United States Army Operations Orders, MEDCOM OPORDs 07-34 and 10-25: Integration of Behavioral Health Personnel (BHP) Services Into Patient-Centered Medical Home (PCMH) Primary Care and Other Primary Care Service Settings." http://www.pdhealth.mil/respect-mil_impl.asp#pad.
- Swartz, Marvin S. 2011. "Storm Clouds over the Public Mental Health Safety Net." *Psychiatric Services* 62 (8): 821. <http://webproxy.ouhsc.edu/login?url=http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=psyc8&AN=2011-24795-001>.
- Tanielian, T, and L Jaycox. 2008. *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. *Psychiatric Services*. Vol. 60. doi:10.1176/appi.ps.60.2.273.
- Thomas, Kathleen C, Alan R Ellis, Thomas R Konrad, Charles E Holzer, and Joseph P Morrissey. 2009. "County-Level Estimates of Mental Health Professional Shortage in the United States." *Psychiatric Services (Washington, D.C.)* 60 (10): 1323–28. doi:10.1176/appi.ps.60.10.1323.
- Thota, Anilkrishna B, Theresa Ann Sipe, Guthrie J Byard, Carlos S Zometa, Robert A Hahn, Lela R McKnight-Eily, Daniel P Chapman, et al. 2012. "Collaborative Care to Improve the Management of Depressive Disorders: A Community Guide Systematic Review and Meta-Analysis." *American Journal of Preventive Medicine* 42 (5): 525–38. doi:10.1016/j.amepre.2012.01.019.
- Unutzer, J. 2002. "Collaborative Care Management of Late-Life Depression in the Primary Care Setting: A Randomized Controlled Trial." *JAMA: The Journal of the American Medical Association* 288 (22): 2836–45. doi:10.1001/jama.288.22.2836.
- Unützer, Jürgen, Ya-Fen Chan, Erin Hafer, Jessica Knaster, Anne Shields, Diane Powers, and Richard C Veith. 2012. "Quality Improvement with Pay-for-Performance Incentives in

- Integrated Behavioral Health Care.” *American Journal of Public Health* 102 (6): e41–45. doi:10.2105/AJPH.2011.300555.
- Unützer, Jürgen, Youlim Choi, Ian A Cook, and Sabine Oishi. 2002. “A Web-Based Data Management System to Improve Care for Depression in a Multicenter Clinical Trial.” *Psychiatric Services (Washington, D.C.)* 53 (6): 671–73, 678. <http://www.ncbi.nlm.nih.gov/pubmed/12045303>.
- Unützer, Jürgen, and Mijung Park. 2012. “Strategies to Improve the Management of Depression in Primary Care.” *Primary Care* 39 (2): 415–31. doi:10.1016/j.pop.2012.03.010.
- UW AIMS Center. 2015. *Collaborative Care Implementation Guide*. Seattle, Washington. <https://aims.uw.edu/resource-library/collaborative-care-implementation-guide>.
- Valenstein, Marcia, David A Adler, Jeffrey Berlant, Lisa B Dixon, Rebecca A Dulit, Beth Goldman, Ann Hackman, David W Oslin, Samuel G Siris, and William A Sonis. 2009. “Implementing Standardized Assessments in Clinical Care: Now’s the Time.” *Psychiatric Services (Washington, D.C.)* 60 (10): 1372–75. doi:10.1176/appi.ps.60.10.1372.
- Velligan, D I, P J Weiden, M Sajatovic, J Scott, D Carpenter, R Ross, and J P Docherty. 2010. “Strategies for Addressing Adherence Problems in Patients with Serious and Persistent Mental Illness: Recommendations from the Expert Consensus Guidelines.” *J Psychiatr Pract* 16 (5): 306–24. doi:10.1097/01.pra.0000388626.98662.a0.
- VHA: Veterans Health Administration. 2008. *Collaborative Care for Depression in the Primary Care Setting: A Primer on VA’s Translating Initiatives for Depression into Effective Solutions (TIDES) Project. Development*. http://www.hsrd.research.va.gov/publications/internal/depression_primer.pdf.
- Wagner, E H, B T Austin, and M Von Korff. 1996. “Organizing Care for Patients with Chronic Illness.” *The Milbank Quarterly* 74 (4): 511–44. <http://www.ncbi.nlm.nih.gov/pubmed/8941260>.
- Wagner, EH. 2001. “Meeting the Needs of Chronically Ill People.” *BMJ* 323 (October 2001): 945–46. <http://www.bmj.com/content/323/7319/945.extract>.
- Wang, Philip S, Patricia Berglund, Mark Olfson, Harold a Pincus, Kenneth B Wells, and Ronald C Kessler. 2005. “Failure and Delay in Initial Treatment Contact after First Onset of Mental Disorders in the National Comorbidity Survey Replication.” *Archives of General Psychiatry* 62 (6): 603–13. doi:10.1001/archpsyc.62.6.603.
- Wang, Ps, M Lane, M Olfson, Ha Pincus, Kb Wells, and Rc Kessler. 2005. “Twelve Month Use of Mental Health Services in the United States.” *Archives of General Psychiatry* 6 (2): 629–40.

- Whipple, Jason L., Michael J. Lambert, David a. Vermeersch, David W. Smart, Stevan L. Nielsen, and Eric J. Hawkins. 2003. "Improving the Effects of Psychotherapy: The Use of Early Identification of Treatment and Problem-Solving Strategies in Routine Practice." *Journal of Counseling Psychology* 50 (1): 59–68. doi:10.1037/0022-0167.50.1.59.
- Whitebird, Robin R, Leif I Solberg, Nancy A Jaeckels, Pamela B Pietruszewski, Senka Hadzic, Jürgen Unützer, Kris A Ohnsorg, et al. 2014. "Effective Implementation of Collaborative Care: What Is Needed?" *American Journal of Managed Care* 20 (9): 699–707.
- Williams, Mark, Kurt Angstman, Isaac Johnson, and David Katzelnick. 2011. "Implementation of a Care Management Model for Depression at Two Primary Care Clinics." *The Journal of Ambulatory Care Management* 34 (2): 163–73. doi:10.1097/JAC.0b013e31820f63cb.
- Wong, Eunice C, Lisa H Jaycox, Lynsay Ayer, Caroline Epley, Racine Harris, Scott Naftel, and Susan M Paddock. 2015. *Evaluating the Implementation of the Re-Engineering Systems of Primary Care Treatment in the Military (RESPECT-Mil)*. RAND Corporation.
- Wray, Laura O, Benjamin R Szymanski, Lisa K Kearney, and John F McCarthy. 2012. "Implementation of Primary Care-Mental Health Integration Services in the Veterans Health Administration: Program Activity and Associations with Engagement in Specialty Mental Health Services." *Journal of Clinical Psychology in Medical Settings* 19 (1): 105–16. doi:10.1007/s10880-011-9285-9.
- Zivin, Kara, Paul N Pfeiffer, Benjamin R Szymanski, Marcia Valenstein, Edward P Post, Erin M Miller, and John F McCarthy. 2010. "Initiation of Primary Care-Mental Health Integration Programs in the VA Health System: Associations with Psychiatric Diagnoses in Primary Care." *Medical Care* 48 (9): 843–51. doi:10.1097/MLR.0b013e3181e5792b.

RESOURCE DOCUMENT ON INVOLUNTARY OUTPATIENT COMMITMENT AND RELATED PROGRAMS OF ASSISTED OUTPATIENT TREATMENT ¹

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Involuntary outpatient commitment is a form of court-ordered outpatient treatment for patients who suffer from severe mental illness and who are unlikely to adhere to treatment without such a program. It can be used as a transition from involuntary hospitalization, an alternative to involuntary hospitalization or as a preventive treatment for those who do not currently meet criteria for involuntary hospitalization. It should be used in each of these instances for patients who need treatment to prevent relapse or behaviors that are dangerous to self or others.

Executive Summary, Conclusions and Recommendations

In 1987, the American Psychiatric Association's Task Force Report on Involuntary Outpatient Commitment endorsed its use under certain circumstances (1) and reiterated its endorsement in the 1999 Resource Document on Mandated Outpatient Treatment (2). During the decades since publication of the 1987 Task Force Report, outpatient commitment has received a great deal of

¹ Outpatient court-ordered treatment may be referred to as 'assisted outpatient treatment', 'involuntary outpatient commitment', 'mandated community treatment', or 'community treatment orders'. Some regard the term 'assisted outpatient treatment' as a euphemistic term for treatment under coercion.

In this document the term 'involuntary outpatient commitment' is used to refer to these programs. The current document is adapted from: Gerbasi JB, Bonnie RJ, Binder RL: Resource document on mandatory outpatient treatment. *Journal of the American Academy of Psychiatry and the Law* 2000; Vol 28(2): 127-144

attention by advocacy groups, researchers and legislatures (3-14). Additionally, the nation has continued to struggle with the effects of the declining supply of psychiatric beds, community treatment capacity and public and private funding for psychiatric care (15). Involuntary outpatient commitment is getting more public exposure as pressure mounts to minimize treatment non-adherence, and to find effective treatment that reduces hospitalization and is cost-effective while still respectful of individual rights (13-14). As of 2015, 45 states and the District of Columbia have commitment statutes permitting involuntary outpatient commitment -- although many of these states do not consistently implement, provide treatment resources or evaluate their involuntary outpatient commitment programs (6,9).

This Resource Document supports the view that involuntary outpatient commitment can be a useful intervention for a subset of patients with severe mental illness who 'revolve' in and out of psychiatric hospitals or the criminal justice system. These individuals often improve when hospitalized and treated, but frequently do not adhere to treatment after release, leading to a cycle of decompensation, re-hospitalization and, in many cases, arrest (3). Although important studies of involuntary outpatient commitment have been conducted within the past decade, there is no broad consensus about its effectiveness across jurisdictions (4, 6-12, 16-20). However because it is a complex community-based intervention, implemented in diverse local communities, its effectiveness would logically be expected to vary (9). Research in this field also faces substantial methodological problems (9, 21). It is difficult to separate the effects of the court order and the legal authority of the court from the effect of improved access to appropriate services. In fact, some advocates and persons with mental illness argue that both improved services and better access to services without a court order could yield comparable outcomes to those obtained by successful involuntary outpatient commitment programs.

As discussed in this Resource Document involuntary outpatient commitment programs have demonstrated improved patient outcomes when *systematically implemented, linked to intensive outpatient services and prescribed for extended periods of time* (9). Based on empirical findings and on accumulating clinical experience, it appears that involuntary outpatient commitment can be a useful tool in the effort to assist patients with severe mental illness with documented histories of relapse and re-hospitalization. It is important to emphasize, however, that all programs of involuntary outpatient commitment must include these elements of well-planned and executed implementation, intensive, individualized services and sustained periods of outpatient commitment to be effective (9). There is also clear evidence that involuntary outpatient commitment programs help focus the attention and effort of the providers on the treatment needs of the patients subject to involuntary outpatient commitment.

Involuntary outpatient treatment raises an ethical tension between the principles of autonomy and beneficence. Therefore states should make every effort to dedicate resources to voluntary outpatient treatment and only if such treatment fails resort to involuntary treatment. Psychiatrists must be aware of the conflict between the patient's interest in self-determination and promotion of the patient's medical best interest. In any system of treatment, including involuntary outpatient treatment, principles of non-maleficence—doing no harm—and justice

must be considered. Involuntary treatment, like any intervention, must not be discriminatory, and must be fairly applied and respectful of all persons.

The purpose of this Resource Document is to provide information to federal and state policymakers, APA District Branches and state psychiatric societies who are working on drafting or implementing legislation related to involuntary outpatient commitment. The Resource Document begins with a statement of key conclusions and recommendations based on a review of recent empirical findings and legislative developments. The body of the document contains a more detailed discussion of each issue.

Conclusions and Recommendations

1. Involuntary outpatient commitment, if systematically implemented and resourced, can be a useful tool to promote recovery through a program of intensive outpatient services designed to improve treatment adherence, reduce relapse and re-hospitalization, and decrease the likelihood of dangerous behavior or severe deterioration among a sub-population of patients with severe mental illness.
2. The goal of involuntary outpatient commitment is to mobilize appropriate treatment resources, enhance their effectiveness and improve an individual's adherence to the treatment plan. Involuntary outpatient commitment should not be considered as a primary tool to prevent acts of violence.
3. Involuntary outpatient commitment should be available in a preventive form and should not be exclusively reserved for patients who meet the criteria for involuntary hospitalization. The preventive form should be available to help prevent relapse or deterioration for patients who currently may not be dangerous to themselves or others (and therefore are not committable to inpatient treatment) but whose relapse would likely lead to severe deterioration and/or dangerousness.
4. Assessment of the likelihood of relapse, deterioration, and/or future dangerousness to self or others should be based on a clearly delineated clinical history of such episodes in the past several years based on available clinical information.
5. Involuntary outpatient commitment should be available to assist patients who, as a result of their mental illness, are unlikely to seek or voluntarily adhere to needed treatment.
6. Studies have shown that involuntary outpatient commitment is most effective when it includes a range of medication management and psychosocial services equivalent in intensity to those provided in assertive community treatment or intensive case management programs. States adopting involuntary outpatient commitment statutes should assure that adequate resources are available to provide such intensive treatment to those under commitment.
7. States authorizing involuntary outpatient commitment should provide due process protections equivalent to those afforded patients subject to involuntary hospitalization.
8. Data have shown that involuntary outpatient commitment is likely to be most successful when it is provided for a sustained period of time. Statutes authorizing involuntary outpatient commitment should consider authorizing initial commitment periods of 180 days, permitting extensions of the commitment period based on specified criteria to be demonstrated at regularly scheduled hearings. Based on clinical judgment, such orders may be terminated prior to the end

of a commitment period as deemed appropriate.

9. A thorough psychiatric and physical examination should be a required component of involuntary outpatient commitment, because many patients needing mandated psychiatric treatment also suffer from other medical illnesses and substance use disorders that may be causally related to their symptoms and may impede recovery. Clinical judgment should be employed in determining when, where and how these examinations are carried out.

10. Clinicians who are expected to provide the court-ordered treatment must be involved in decision-making processes to assure that they are able and willing to execute the proposed treatment plan. Before treatment is ordered, the court should be satisfied that the recommended course of treatment is available through the proposed providers.

11. Efforts to engage patients and, where appropriate, their families in treatment should be a cornerstone of treatment, even though court-ordered. Patients and their families should be consulted about their treatment preferences and should be provided with a copy of the involuntary outpatient commitment plan, so that they will be aware of the conditions to which the patient will be expected to adhere.

12. Involuntary outpatient commitment statutes should contain specific procedures to be followed in the event of patient non-adherence and should ensure maximum efforts to engage patients in adhering to treatment plans. In the event of treatment non-adherence, provisions to assist with adherence may include empowering law enforcement officers to assume custody of non-adherent patients to bring them to the treatment facility for evaluation. In all cases there should be specific provisions for a court hearing when providers recommend involuntary hospitalization or a substantial change in the court order.

13. Psychotropic medication is an essential part of treatment for most patients under involuntary outpatient commitment. The expectation that a patient take such medication should be clearly stated in the patient's treatment plan when medication is indicated. However, involuntary administration of medication should not be authorized as part of the involuntary commitment order without separate review and approval consistent with the state's process for authorizing involuntary administration of medication on an outpatient basis.

14. Implementation of a program of involuntary outpatient commitment requires critical clinical and administrative resources and accountability. These include administrative oversight of and accountability for involuntary outpatient commitment program operations, the ability to monitor patient and provider adherence with treatment plans, the ability to track involuntary outpatient commitment orders and to report program outcomes.

15. There is limited research to evaluate the possible disproportionate use of involuntary outpatient commitment among minority and disenfranchised groups. As a result, independent evaluation of involuntary outpatient commitment programs should be conducted at regular intervals and reported for public comment and legislative review, especially in view of concerns about its appropriate use. Among several outcomes that should be assessed is any evidence of disproportionate use of involuntary outpatient commitment among minority groups and disenfranchised groups, inadequate due process protections and the diversion of clinical resources from patients seeking treatment voluntarily. Any indications of findings in these areas should be followed by program improvement plans and corrective action.

Background

Throughout the U.S., there is a substantial population of persons with severe mental illness whose complex treatment and human service needs have not been met by community mental health programs. For many, their course is frequently complicated by non-adherence with treatment and as a result, they frequently relapse, are hospitalized or incarcerated (15). They also interact with a variety of human service agencies— substance use disorder treatment programs, civil and criminal courts, police, jails and prisons, emergency medical facilities, social welfare agencies, and public housing authorities. The pressing need to improve treatment adherence and community outcomes, has led policymakers to focus on a range of legal mechanisms to improve treatment adherence, including court-ordered treatment or involuntary outpatient commitment (3). As a result many states have focused on involuntary outpatient commitment as one of several tools to address high rates of treatment non-adherence.

Involuntary outpatient commitment is a civil court procedure wherein a judge orders a person with severe mental illness to adhere to an outpatient treatment plan designed to prevent relapse and dangerous deterioration (2-4). Persons appropriate for this intervention are those who need ongoing psychiatric care owing to severe mental illness but who are unable or unwilling to engage in ongoing, voluntary, outpatient care. It should be distinguished from 'conditional release,' a form of treatment wherein a patient committed to an inpatient hospital is released to the community but remains under the ongoing supervision of the hospital -- if the patient's condition deteriorates he or she can be returned to the hospital (see Figure 1.). Additionally, there are three types of involuntary outpatient commitment: 1) the most common type is outpatient commitment as part of a discharge plan from an involuntary hospitalization; 2) an alternative to hospitalization for patients who otherwise meet the criteria for involuntary hospitalization; and 3) a 'preventive' treatment for those patients who do not presently meet criteria for inpatient hospitalization, but who are in need of treatment to prevent such decompensation. Orders initiated as a 'stepdown' from involuntary inpatient commitment (Type 1) are often later renewed as a method to prevent relapse (Type 3).

Figure 1. General types of involuntary outpatient commitment

Type 1	Post-discharge involuntary outpatient commitment plan unattached to hospital supervision
Type 2	Alternative to hospitalization for those meeting civil commitment criteria but for whom outpatient commitment is sufficient
Type 3	Preventive treatment for individuals who do not meet criteria for inpatient hospitalization but are in need of treatment to prevent decompensation

Although recently enacted statutes use the term 'assisted outpatient treatment', other phrases, such as 'mandatory outpatient treatment', 'community treatment orders' or 'involuntary outpatient commitment,' are also in use. The phrase "involuntary outpatient commitment"

implies a more coercive approach than is envisioned by proponents of judicial treatment orders, however the term 'assisted outpatient treatment' is sometimes criticized as euphemistic. In practice, these legal devices are intended to reinforce the patient's own resolve to adhere to a treatment plan while marshalling the resources of local mental health authorities to more effectively serve the patient. In this Resource Document, the phrase 'involuntary outpatient commitment' will be used. In addition with a few exceptions the Document will focus on U.S. experience with outpatient commitment.

Studies on the Effectiveness of Involuntary Outpatient Commitment

The empirical data on outpatient commitment in the U.S. broadly consists of two groups of studies (2, 4). The 'first-generation' studies, conducted prior to the mid-1990s, are largely observational or quasi-experimental in nature. They have been critiqued on a variety of methodological grounds, including the comparability of committed and non-committed observed groups, the comparability of treatment received, the variability of outcome measures across studies, the limited use of statistical controls and potential selection bias inherent in naturalistic studies selecting for candidates thought likely to succeed under involuntary outpatient commitment (21). Nevertheless, these studies, taken as a whole, suggest that outpatient commitment can be effective in reducing re-hospitalizations and improving other outcomes when effectively implemented, adequate services are provided and the programs have the support of the treatment providers (9).

Since the mid-1990s, several 'second-generation' studies of outpatient commitment have been conducted (4, 12-14, 16-20). These studies attempted to control for potentially confounding factors such as selection bias, varying intensity of treatment across patients and various sources of coercion designed to enhance treatment adherence. Most importantly, these studies sought to determine whether the court order itself was necessary, that is, whether the court order itself improves treatment outcomes over and above the effect of the provision of a well-designed and coordinated treatment plan.

The Duke Mental Health Study in North Carolina was the first randomized controlled trial of outpatient commitment (13, 16, 22). Under the study design, consenting hospitalized patients with severe mental illness who were being discharged from the hospital under a previously authorized outpatient commitment order were randomly assigned to remain on the outpatient commitment order while provided case management ('OPC' group) or be released from the order and receive case management services alone (the 'control' group). An additional group of patients with a recent history of serious violence also leaving the hospital on outpatient commitment were placed in a nonrandomized comparison group while staying on outpatient commitment (owing to ethical considerations that precluded them from being assigned to the control group). Involuntary medication is not authorized for patients under outpatient commitment in North Carolina. The outpatient commitment group was significantly less likely than the control group to be re-hospitalized in the 12-month follow-up period in repeated measures analyses examining the likelihood of re-hospitalization each month. In addition patients who underwent sustained periods of outpatient commitment for 180 days or more had

57% fewer admissions and 20 fewer hospital days over the study period compared to controls (16). Moreover, sustained outpatient commitment was shown to be particularly effective for patients suffering from non-affective psychotic disorders (72% decrease in readmissions and 28 fewer hospital days) (16). In further analyses they reported that sustained outpatient commitment was most effective when combined with frequent outpatient services (a median of three or more services per month), thus emphasizing the need to combine the court order with frequent outpatient services (16).

The outpatient commitment group also had lower rates of violent behavior (22). During a one-year follow-up period patients who underwent sustained periods of outpatient commitment had significantly fewer violent incidents in the community as compared to patients who were released from outpatient (control group) and to patients who underwent shorter periods of commitment (23% versus 37% and 40% rates of violence, respectively) (22). The authors also found that patients who underwent sustained outpatient commitment and frequent outpatient services and who additionally abstained from substance use and were adherent with medications, had the lowest likelihood of any violence (13% predicted probability versus 53% predicted probability for patients who did not undergo regular, sustained outpatient commitment, misused substances and were medication non-adherent) (22). The authors also reported that patients who received sustained outpatient commitment had significantly lower total treatment and criminal justice costs (13).

Another randomized controlled trial of mandatory outpatient commitment was conducted in New York City (17). In 1994, the New York State legislature passed a bill providing for a three-year pilot project of involuntary outpatient commitment at Bellevue Hospital in New York City for a target population of patients with severe mental illness and contracted with Policy Research Associates, Inc. to evaluate the pilot program. Substantively, the program provided for a range of intensive outpatient treatment, including assertive community treatment or intensive case management. During the 11-month follow up period, inpatients at Bellevue Hospital who were deemed appropriate for outpatient commitment were randomized to receive intensive community treatment with a court order ("outpatient commitment") or intensive community treatment alone ("control"). The investigators found no statistically significant differences between the outpatient commitment and control groups in re-hospitalization or number of hospital days during the study period (17). However, both groups experienced a significantly fewer re-hospitalizations during the study period than during the year preceding the target admission (17). The authors of the study concluded that, although the court order itself did not seem to produce better patient outcomes, "the service coordination/resource mobilization function of the program seemed to make a substantial positive difference in the [patients'] experiences" (17). Observers of this study noted that, under the pilot program, no enforcement of the orders for non-adherence was available in NYC and that the study sample was likely too small to have detected meaningful difference between study groups. Another study reported that many participants in the control group receiving intensive service but no court order thought they were under a court order as well (23).

In August, 1999 the New York State legislature enacted a statewide outpatient commitment

statute that required reauthorization in five years. It termed the program as 'assisted outpatient treatment' rather than 'involuntary outpatient commitment' and differs from the pilot program in that treatment can be court-ordered in a preventive form without a current hospitalization, and prohibited forced medication for non-adherent patients (18).

Several subsequent evaluations of New York's Assisted Outpatient Treatment program have been conducted since the statewide AOT statute went into effect. An evaluation of the program was conducted by the New York State Office of Mental Health in 2005 (18) and found an 89% increase in use of case management services among AOT recipients, and substantial increases in the use of substance use disorder treatment and housing support services. They also reported significant improvements in self-care and community functioning and a 44% decline in the incidence of harmful behaviors (e.g., suicide threats, self-harm, and harm to others). They also reported that rates for hospitalizations, homelessness, arrests, and incarcerations declined significantly (18).

A subsequent independent evaluation of the program ordered by the state was conducted by Duke University, Policy Research Associates, Inc. and the MacArthur Research Network on Mandated Community Treatment (14, 19, 24). Several sources of administrative data were linked to examine whether recipients under Assisted Outpatient Treatment experienced reduced rates of hospitalization, reduced length of stay and other related outcomes (24). Multivariable analyses controlling for relevant covariates were used to examine the likelihood that assisted outpatient treatment produced these effects. The investigators reported that the likelihood of psychiatric hospital admission was significantly reduced by approximately 25% during the initial 6 month court order and by over one-third (during a subsequent 6 month renewal period compared to hospitalization records before initiation of the court order) (19,24). Similar significant reductions in days of hospitalization were evident in initial and subsequent renewals of court orders. Improvements were also evident in receipt of psychotropic medications and intensive case management services. The study concluded that assisted outpatient treatment recipients appeared to experience a number of improved outcomes: reduced hospitalization and length of stay, increased receipt of psychotropic medication and intensive case management services, and greater engagement in outpatient services. The study reported: "On the whole, AOT recipients and non-AOT recipients have remarkably similar attitudes and treatment experiences. That is, despite being under a court order to participate in treatment, current AOT recipients feel neither more positive nor more negative about their mental health treatment experiences than comparable individuals who are not under AOT. This suggests that positive and negative attitudes about treatment during AOT are more strongly influenced by other experiences with mental illness and treatment than by recent experiences with AOT itself (24)." The report also evaluated reports of racial bias in selection of patients for assisted outpatient treatment. Since 1999 about 34% of AOT recipients have been African-Americans who make up only 17% of the state's population. However, the vast majority of AOT cases are clustered in New York City where 25% of the population is African American. The report documents that individuals eligible for AOT are largely drawn from a population where blacks are overrepresented: psychiatric patients who have had multiple hospitalizations in public facilities. Among those *eligible* for AOT by dint of

this hospitalization history, African Americans are represented roughly on par with the demographic profile of those other demographic groups who are eligible. That is, racial differences in receipt of assisted outpatient treatment reflect the demographics of persons who are eligible for assisted outpatient treatment (24). Other reports from this and other evaluations found reduced arrests for AOT participants and sustained improvements in reduced hospitalization after recipients left the AOT program (25).

Critics of this study argue that only randomized controlled studies and control of selection bias offer definitive evidence of the effectiveness of outpatient commitment and that the 'before-after' nature of these studies are subject to 'regression to the mean', whereby patients identified in their relapsed states might naturally return to their baselines, seemingly improved by the intervention. The investigators countered that this effectiveness study evaluated a 'real-world' program, employed rigorous quasi-experimental methods, including propensity score adjustments, to evaluate the experience of several thousand persons—far more than a randomized trial might reasonably recruit (9).

A follow-up cost analysis of the program using administrative, budgetary, and service claims data was conducted for 36 months of observational data from assisted outpatient treatment and voluntary recipients of intensive community-based treatment in New York City and 5 counties elsewhere in New York State (14). Using multivariable time-series regression analysis, controlling for relevant covariates, the investigators reported that in the New York City assisted outpatient treatment group, net costs declined 43% in the first year after assisted outpatient treatment began and an additional 13% in the second year. In the 5-county assisted outpatient treatment group, costs declined 49% in the first year and an additional 27% in the second year (14). Regression analyses showed significant declines in cost associated with both assisted outpatient treatment and voluntary participation in intensive services, though the assisted outpatient treatment-related cost declines were about twice as large as those seen for voluntary services. They concluded that AOT requires a substantial investment of state resources, but can reduce overall service costs for individuals with serious mental illness.

The Oxford Community Treatment Order Evaluation Trial (OCTET) conducted in the United Kingdom, was the third randomized trial of outpatient commitment's effectiveness (20). In OCTET, individuals who were involuntarily hospitalized were randomly assigned to be released in one of two study conditions. The experimental condition consisted of a community treatment order, the U.K. equivalent of assisted outpatient treatment authorized under the 2007 Mental Health Act. The control condition consisted of an authorized 'leave of absence from hospital,' a form of conditional release authorized under Section 17 of the U.K.'s 1983 Mental Health Act. The primary outcome for the OCTET trial was whether or not the person was readmitted to the hospital during the 12 month follow-up period. Secondary outcomes included length of time to the first readmission, number of readmissions, total amount of time spent in hospital, clinical functioning, and social functioning. No significant differences were found across any of the outcomes at the 12 month follow-up (20). While this trial seemed to provide evidence of the lack of benefit of outpatient, commitment critics of this study suggest that it was not a clear

replication of the previously conducted RCTs in the U.S. because OCTET lacked a true 'voluntary' treatment arm (26-29).

After several generations of studies, evaluations, legislative and systematic reviews of the evidence for involuntary outpatient commitment, there is no clear consensus about its effectiveness across different jurisdictions, including a recent Cochrane review (9, 12, 30). The evidence on the effectiveness is mixed, with effectiveness largely a function of systematic and effective implementation, the availability of intensive community-based services and the duration of the court order. However, rather than framing the question as to whether outpatient commitment orders 'are effective' –as if comparing Drug A to Drug B--it appears to be more appropriate to ask, "under what conditions, and for whom, *can* involuntary outpatient commitment orders be effective?" This Resource Document identifies the elements that can optimize its effectiveness.

Criteria for Involuntary Outpatient Commitment

Because of the liberty interests at stake under any scheme of involuntary outpatient commitment, it should be ordered by a court only after a hearing at which the judge finds, on the basis of clear and convincing evidence, that the patient meets the statutorily-prescribed criteria for involuntary outpatient commitment. Based on a review of the literature and statutes, this Resource Document proposes the following criteria as necessary and appropriate to limit the use of involuntary outpatient commitment to individuals who have demonstrated a strong probability of relapse and deterioration by their behavior and clinical histories. The criteria are listed below, followed by commentary on several of the key elements.

A person would be eligible for involuntary outpatient commitment if:

1. The person is suffering from a severe mental disorder [e.g., an illness, disease, or other condition that (a) substantially impairs the person's thought, perception of reality, emotional process, or judgment, or (b) substantially impairs behavior as manifested by recent disturbed behavior]; and
2. In view of the person's treatment history, the person now needs treatment in order to prevent a relapse or severe deterioration that would predictably result in the person becoming a danger to himself or others or becoming substantially unable to care for him or herself in the foreseeable future and/or meeting the state's inpatient commitment criteria in the foreseeable future; and
3. As a result of the person's mental disorder, he or she is unlikely to seek or voluntarily adhere to needed treatment; and
4. The person has been hospitalized or admitted to a crisis facility for treatment of a severe mental disorder within the previous two years and has failed to adhere on more than one occasion to the prescribed course of treatment after discharge; and
5. An acceptable treatment plan has been prepared which includes specific conditions with which the patient is expected to adhere, together with a detailed plan for reviewing the patient's medical status and for monitoring his or her adherence with the required conditions of treatment; and

6. There is a reasonable prospect that the patient's disorder will respond to the treatment proposed in the treatment plan if the patient adheres to the treatment requirements specified in the court's order; and
7. The physician or treatment facility which is to be responsible for the patient's treatment under the commitment order has agreed to accept the patient and has endorsed the treatment plan.

The major purpose of involuntary outpatient commitment is to facilitate effective treatment of persons with mentally illness before their conditions deteriorate to the point where they relapse and are unable to live safely in the community. This goal is best served by substantive standards for involuntary outpatient commitment based chiefly on the need for and the availability of appropriate treatment to prevent substantial mental or emotional deterioration. Several statutes permit outpatient commitment of patients who currently may not be dangerous to themselves or others (and are not therefore committable to inpatient treatment), but whose predictable deterioration would lead to such dangerousness. For example, the New York statute criterion is: "In view of the patient's treatment history and current behavior, the patient is in need of involuntary outpatient commitment in order to prevent a relapse or deterioration which would be likely to result in serious harm to the patient or others (24)."

Several states like New York require that predictions of a "likely deterioration leading to dangerousness" be based on past treatment records. This approach has the virtue of providing specific evidence of past behavior, however the burden of obtaining certified treatment records – as is the case in New York - creates unnecessary procedural barriers to effective use of involuntary outpatient commitment. Attestation by the examining physician or psychologist to the requisite clinical history of hospitalization or dangerousness is preferable for documentation of the treatment history.

The suggested criteria also require development of a treatment plan that includes specific conditions with which the patient will be expected to adhere. The treatment plan should specify components of the patient's care, including classes of medications and other aspects of the treatment. It should also specify which substantive changes in treatment require court review in order to afford flexibility in treatment approaches and to avoid unnecessary hearings on adjustments to the treatment plan that are not substantive, in nature. Additionally, since a number of studies have shown that a large proportion of patients brought for psychiatric treatment also suffer from significant medical illness (31) - some of which are causally related to their psychiatric symptoms - a thorough medical examination should be a required component of outpatient commitment to psychiatric treatment. Clinical judgment should be employed in determining when, where, and how such examination is carried out.

The criteria require that the proposed treatment plan include services adequate to successfully treat the patient. Several authors have pointed out that effective outpatient treatment, whether voluntary or involuntary, presupposes the availability of the resources necessary to implement community-based treatment under involuntary conditions that may not be forthcoming. Many observers fear that involuntary outpatient commitment might authorize increased control by the

mental health system, without the benefits of treatment to justify the intrusion (3, 8). These arguments are well-grounded in the history of involuntary commitment in general, and any system of involuntary outpatient commitment must provide both increased protections for those at risk, and increased resources to guarantee that effective treatment can be provided.

Clinicians who are expected to provide the involuntary outpatient commitment plan and court testimony must be directly involved in the decision-making process and the development of the treatment plan. Before involuntary outpatient commitment is ordered, the judge should be satisfied that the recommended course of treatment is available through the proposed providers and has a high likelihood of being effective. These requirements, if taken seriously, would prevent the arbitrary use of commitment as a form of social control, a use of commitment laws that arouses opposition to the expanded use of involuntary outpatient commitment. Such requirements also would involve the outpatient providers directly in the planning of the treatment. Some of the most vocal critics of involuntary outpatient commitment have been clinicians at outpatient facilities who have feared they would be inundated with uncooperative patients who would not benefit from any treatment available at the facility, but for whom the facility would be held responsible.

By requiring that a treatment plan be presented to the hearing officer before outpatient commitment may be ordered, judges would be able to make better informed decisions and outpatient clinicians would be able to exercise appropriate control over which patients are committed to them and under what treatment conditions. The patient should also be provided with a copy of the treatment plan so that he/she will be aware of the conditions with which he/she will be expected to comply. A plan for involuntary outpatient commitment should also take into consideration any reasonably possible alternative treatments preferred by the person, as potentially expressed in an advance directive. For example, New York's Assisted Outpatient Treatment law specifies: "If the subject of the petition has executed a health care proxy, the appointed physician shall consider any directions included in such proxy in developing the written treatment plan (24)."

If outpatient treatment is to be ordered on release from inpatient treatment, information sharing between inpatient and outpatient treatment staffs should be authorized and not be prohibited by any regulations governing confidentiality.

Length of Treatment

Since the patients for whom involuntary outpatient commitment is most effective generally suffer from chronic or recurring disorders, it is important that the statutes allow for continued extensions of commitment, based on specified grounds to be demonstrated at regularly scheduled hearings. Brief, time-limited periods of involuntary outpatient commitment are unlikely to be effective with these patients; the conditions which required the initial commitment order are quite likely to continue for significant periods of time. As noted above, the North Carolina and New York experiences indicates that benefits of mandatory outpatient treatment are realized when patients participate in the program for an extended period of time (180 days)

(16, 24). During all hearings on extensions of commitment, the court must find, on the basis of clear and convincing evidence, that the patient continues to meet all criteria for involuntary outpatient commitment; otherwise, the patient must be released from the court order.

Response to Non-adherence

Formulating reasonable procedures for enforcing adherence to an involuntary outpatient commitment plan is a challenging task. The treating clinician should attempt to obtain the patient's voluntary adherence with the treatment plan. After reasonable effort is exerted, however, if the patient remains substantially non-adherent, the statute must contain a mechanism for some intervention to promote adherence. One option is to include in the commitment order an explicit authorization for law enforcement officers to transport a non-adherent patient for further evaluation upon receiving notice from the responsible clinician. The patient would be transported to the outpatient facility for a short period of time for evaluation, where it can be hoped that the patient will be persuaded to accept the prescribed treatment without requiring another hearing. This is the statutory scheme in several jurisdictions, including the District of Columbia and Utah. Alternatively, the law could provide that police custody may be asserted only on the authorization of a judicial officer, upon a reliable and adequate showing of non-adherence by the responsible clinician. This is the strategy employed by Georgia and North Carolina, where the treating clinician can petition the court for an order authorizing a peace officer to take the patient to the treating facility or the nearest emergency room for evaluation. In New York City, a Citywide Assistance Team (CAT) is deployed to transport the patient to a hospital emergency room for evaluation.

In sum, it is important for involuntary outpatient commitment statutes to ensure that the treatment orders empower and mandate a crisis team such as a CAT or law enforcement officers to transport non-adherent persons for evaluation upon notification from the treatment providers. In addition, law enforcement officers should be carefully educated about the need for an expedient response to non-adherence in order to forestall their resistance to involvement. Law enforcement acting on these court orders may benefit from training on trauma-informed approaches as well as strategies for intervention and de-escalation of individuals with mental illness.

Beyond whether this function of law enforcement transport is provided for by statute, however, the statute must also authorize treatment providers to petition the court for a supplemental commitment hearing in the event of substantial non-adherence. At that hearing, the court should have three options: it could continue the involuntary outpatient commitment if the patient continues to meet all the statutory criteria and the court finds that it remains appropriate (with any modifications necessary to the treatment plan, as discussed and developed by the patient and his treatment team); it could order involuntary admission to the hospital if the patient meets inpatient commitment criteria; or it could discharge the patient from involuntary outpatient commitment.

The statute should also specify what liability protections are afforded clinicians involved either in

seeking an order or treating a patient under involuntary outpatient commitment. Outpatient clinicians should not be subject to greater liability for treating patients under involuntary outpatient commitment. Fears of increased liability could generate inappropriate pressures and further discourage clinicians from agreeing to accept patients under judicial mandates.

If involuntary outpatient commitment is to be ordered, solutions to administrative problems -- including political, financial and legal barriers to the transfer of and accountability for patients between facilities and providers, and the continuity of their care -- must be explicitly provided in any enabling legislation or regulations. Such provisions may be necessary because different facilities and providers may be funded and/or operated by different state, county or private entities. In addition, the spread of public and private managed care plans may provide unique financial barriers to implementation of involuntary outpatient commitment. For example, payment for an involuntary outpatient commitment plan might not be fully authorized under managed care utilization review that requires medical necessity criteria are met and under some privatization schemes where the authority and responsibility for involuntary outpatient commitment may be unclear and should be addressed in any enabling legislation or regulations. Separate from the financial considerations the capacity to transfer information between facilities and providers should be unimpeded. Statutory changes may be required to overcome existing regulations designed to protect patient privacy by preventing disclosures of information without explicit voluntary consent.

The Issue of Involuntary Medication

Since involuntary outpatient commitment often works most effectively with patients who do well on psychotropic medications but repeatedly are non-adherent, the initial hearing should determine the role of medications as part of the treatment plan. Successful involuntary outpatient commitment programs need some legal authority to promote treatment adherence. Statutes generally do not authorize forced medication without a separate legal determination of involuntary medication. All techniques short of force should be used to promote adherence. For example, the judge or hearing officer should make it clear that (if it is so decided) taking medications will be expected of the patient, and the taking of prescribed medication should be specified as one of the patient's obligations in the court order. If the patient does not adhere to court-ordered medication, that fact should be sufficient evidence of lack of adherence with the treatment plan for the patient to be taken to the outpatient treatment facility for re-evaluation. Once at the facility, the medication could again be offered to the patient, even if it would not be involuntarily administered if refused. It is likely that the prospect of repeated involuntary visits to the treatment facility would result in medication adherence for many patients. Moreover, a study in North Carolina indicates that, in spite of the fact that the statute does not authorize the involuntary administration of medication, most patients do believe that mandatory outpatient treatment requires medication adherence (32).

In summary, psychotropic medication is an essential part of treatment for most patients who are appropriate for involuntary outpatient commitment. The expectation that a patient take such medication should be clearly stated in the patient's treatment plan, and proactive measures

should be taken to promote adherence. However, the involuntary administration of medication should not be authorized as a consequence of refusal to take medication as prescribed without subsequent review consistent with the state's process for authorizing involuntary administration of medication.

The Issue of Potential Racial Disparities

Several advocacy organizations, including the New York Lawyers for the Public Interest, have raised concerns that African Americans and other minorities are over-represented in programs such as NYS's AOT program (33). Whether this potential over-representation is unfair and represents racial discrimination rests, in part, on whether AOT is regarded as beneficial or detrimental to persons under court order. The concern over any potential over-representation of minorities in the program raises over-arching policy questions of whether AOT is regarded as a positive mechanism to improve access to services, outcomes for an under-served population and as a less restrictive alternative to involuntary hospitalization, or as a program without benefit that subjects minorities to a further loss of civil liberties. As discussed previously rates of AOT by race shows about 34% of AOT recipients have been African-Americans who make up only 17% of the state's population. However, racial differences in rates of AOT largely mirror the rates of eligibility for AOT among different minority groups. The New York AOT evaluation report concluded: "We find no evidence that the AOT Program is disproportionately selecting African Americans for court orders, nor is there evidence of a disproportionate effect on other minority populations (24, 34)." The research on this issue is limited to a single jurisdiction. As a result, independent evaluation of involuntary outpatient commitment programs should be conducted at regular intervals and reported for public comment and legislative review, especially in view of concerns about its appropriate use. Among several outcomes that should be assessed is any evidence of disproportionate use of involuntary outpatient commitment among minority groups and disenfranchised groups, inadequate due process protections and the diversion of clinical resources from patients seeking treatment voluntarily. Any indications of findings in these areas should be followed by program improvement plans and corrective action.

Conclusions

Involuntary outpatient commitment has received increasing public attention, owing in large part to occasional, highly publicized incidents of violence by persons with severe mental disorders who are non-adherent with treatment, and to other difficulties posed by the 'revolving-door' patients who suffer from severe mental illnesses and who are difficult to engage in ongoing treatment. Over the past twenty plus years, as discussed in this Resource Document, the body of scientific literature on the effects of involuntary outpatient commitment has grown considerably, and many jurisdictions have enacted or are considering enacting outpatient commitment statutes.

This Resource Document supports the view that involuntary outpatient commitment can be effective when systematically and effectively implemented, linked to intensive outpatient services and prescribed for extended periods of time. Clinical experience in a number of

jurisdictions provides further support for these conclusions. Second, there is no evidence that a judicial order reduces or undermines the positive effects of enhanced treatment; the only question is whether it has additive effect - and the existing studies suggests that it does. Third, there is clear evidence that enacting and implementing involuntary outpatient commitment concentrates the attention and effort of the providers; that is, the judicial order may help to enhance the services by 'committing' providers to the patients' care. Finally, enacting involuntary outpatient commitment may also help to 'commit' legislatures to provide the funding needed to provide enhanced community services for all patients, whether or not they are subject to a commitment order. In a political context, involuntary outpatient commitment may provide the leverage for increased funding for community mental health services, and particularly for persons with severe mental illnesses.

SELECTED REFERENCES

1. Starrett D, Miller RD, Bloom J, Weitzel WD, Luskin RD: Involuntary commitment to outpatient treatment: Report of the task force on involuntary outpatient commitment. Washington, D.C.: American Psychiatric Association 1987
2. Gerbasi JB, Bonnie RJ, Binder RL: Resource document on mandatory outpatient treatment. *Journal of the American Academy of Psychiatry and the Law* 2000; Vol 28(2): 127-144
3. Monahan J, Swartz M, Bonnie R: Mandated treatment in the community for people with mental disorders. *Health Affairs* 2003; 22(5):28-38
4. Swartz MS, Swanson, JW: Involuntary outpatient commitment in the United States: Practice and Controversy, in A. Buchanan (ed), *Care of the Mentally Ill Disordered Offender in the Community*. Oxford University Press 1999a
5. Torrey EE, Kaplan RJ: A national survey of the use of outpatient commitment. *Psychiatric Services* 46: 778-784, 1995
6. Morrissey JP, Desmarais SL, Domino ME: Outpatient Commitment and Its Alternatives: Questions Yet to Be Answered *Psychiatric Services* 2014; 65(6): 812-815
7. Moloy ISA: Analysis: Critiquing the empirical evidence: Does involuntary outpatient commitment work? *Mental Health Policy Resource Center, Washington, D.C.* 1992
8. Mulvey EP, Geller JL, Roth LH: The promise and peril of involuntary outpatient commitment. *Am Psycho* 1987; 42(6): 571-584
9. Swanson JW, Swartz MS: Why the Evidence for Outpatient Commitment Is Good Enough. *Psychiatric Services* 2014; 65 (6): 808-11. doi: 10.1176/appi.ps.201300424
10. Geller JL: The evolution of outpatient commitment in the USA: from conundrum to quagmire. *Int J Law Psychiatry* 2006; 29: 234-48
11. Petrila J, Ridgely S, Borum R: Debating outpatient commitment: Controversy, trends, and empirical data. *Crime & Delinquency* 2003; 49: 157-172
12. Kisely SR, Campbell LA: Compulsory community and involuntary outpatient treatment for people with severe mental disorders. *Cochrane Database Syst Rev.* 2014;12:CD004408. doi: 10.1002/14651858.CD004408.pub4
13. Swartz MS, Swanson JW: Can States Implement Involuntary Outpatient Commitment Within Existing State Budgets? *Psychiatric Services* 2013; 64 (1): 7-9
14. Swanson JW, Van Dorn RA, Swartz MS, Robbins PC, Steadman HJ, McGuire TG, Monahan J: The Cost of Assisted Outpatient Treatment: Can it save states money? *American Journal of Psychiatry* 2013 Jul 30; doi: 10.1176/appi.ajp.2013.12091152
15. Sisti DA, Segal AG, Emanuel EJ: Improving Long-term Psychiatric Care: Bring Back the Asylum. *JAMA* 2015;313(3):243-244. doi:10.1001/jama.2014.16088
16. Swartz MS, Swanson JW, Wagner HR, Burns BJ, Hiday VA, Borum R: Can involuntary outpatient commitment reduce hospital recidivism? Findings from a randomized trial with severely mentally ill individuals. *American Journal of Psychiatry* 1999; 156:1968-1975
17. Steadman HJ, Gounis K, Dennis D, Hopper K, Roche B, Swartz M, Robbins PC: Assessing the New York City outpatient commitment pilot program. *Psychiatric Serv* 2001; 52:330-336
18. NYS OMH: Final Report on the Status of Assisted Outpatient Treatment accessed at <http://bi.omh.ny.gov/aot/about?p=kl-fr-menu>

19. Swartz M, Wilder C, Swanson J, Van Dorn R, Robbins P, Steadman H, et al: Assessing outcomes for consumers in New York's assisted outpatient treatment program. *Psychiatric Serv* 2010; 61: 976-81
20. Burns T, Rugkåsa J, Molodynksi A, Dawson J, Yeeles K, Vazquez-Montes M, et al: Community Treatment Orders for patients with psychosis: a randomized controlled trial (OCTET). *The Lancet* 2013; 381: 1627-33
21. Hiday VA: "Outpatient commitment: Official coercion in the community," in *Coercion and Aggressive Community Treatment: A New Frontier in Mental Health Law* 38 (D. Dennis & J. Monahan, eds.) 1996
22. Swanson JW, Swartz MS, et al: Can involuntary outpatient commitment reduce violent behavior in persons with severe mental illness. *British Journal of Psychiatry* 2000; 176: 324-31
23. Telson H, Glickstein R, Trujillo M: Report of the Bellevue Hospital Center Outpatient Commitment Pilot Program 1999
24. New York State Assisted Outpatient Treatment Evaluation 2009. Accessed at http://www.omh.ny.gov/omhweb/resources/publications/aot_program_evaluation/
25. Link BG, Epperson MW, Perron BE, Castille DM, Yang LH: Arrest Outcomes Associated With Outpatient Commitment in New York State. *Psychiatric Serv* 2011; 62:504–508
26. Nakhost A, Perry JC, Simpson AI: Comment on: Community treatment orders for patients with psychosis. *The Lancet* 2013; 382:501
27. McCutcheon R: Comment on: Community treatment orders for patients with psychosis. *The Lancet* 2013; 382:501
28. Naudet F, El Sanharawi M: Comment on: Community treatment orders for patients with psychosis. *The Lancet* 2013; 382:501
29. Geller J: Comment on: Community treatment orders for patients with psychosis. *The Lancet* 2013; 382:502
30. Legislated Review of Community Treatment Orders, Ministry of Health and Long-Term Care, Ontario Canada. May 23, 2012. Accessed at: http://www.health.gov.on.ca/en/public/programs/hepatitis/docs/cto_review_report.pdf
31. De Hert M, Correll CU, Bobes J et al: Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. *World Psychiatry* 2011; 10: 52-77
32. Borum R, Swartz M, Riley S, Swanson J, Hiday VA, Wagner R: Consumer perceptions of involuntary outpatient commitment. *Psychiatric Serv* 1999; 50(11): 1489-1491
33. Cooper M, Racial Disproportion Seen in Applying 'Kendra's Law', *New York Times*, April 7, 2005. Accessed at: http://www.nytimes.com/2005/04/07/nyregion/07kendra.html?_r=0
34. Swanson J, Swartz M, Van Dorn R, Monahan J, McGuire TG, Steadman HJ, Robbins PC. Racial disparities in involuntary outpatient commitment: Are they real? *Health Affairs* 2009; 28(3):816-826.

Joint Reference Committee
October 17, 2015
Arlington, VA
DRAFT SUMMARY OF ACTIONS
11-16-2015

N.B: When a **LEAD** Component is designated in a referral, all other entities to which that item is referred report to the **LEAD** component. The **LEAD** component then submits its report as requested by the JRC.

JRC Members Present:

Maria Oquendo, MD: JRC Chairperson; APA President-Elect (stipend); Salaried at Columbia and NYSPI; royalties from suicide severity rating scale; NIMH Council; Council for the American College of Neuropsychopharmacology; Vice President of the Board of the American Foundation for Suicide Prevention;
Daniel Anzia, MD: JRC Vice Chairperson; APA Speaker-Elect (stipend); 80% employed at Advocate Lutheran Health and Hospitals Corporation; Spouse and father of Advanced Practice Nurses.
Jenny Boyer, MD: Department of Veterans Affairs – salaried; small private practice; Board of Trustee member of the Oklahoma State Medical Association
Saul M. Levin, MD, MPA: CEO/Medical Director – APA salary; Chair of the APAF Board of Directors
Theresa Miskimen, MD: Robert Wood Johnson School of Medicine – salaried; Consultant for involuntary medical panels;
Gail Robinson, MD: Professor of Psychiatry – University of Toronto; Expert witness; Member – Ministry of Health Task Force on Sexual Abuse of Patients; GAP Board; Vice President of ACP.
Paul Summergrad, MD: excused

JRC Administration:

Margaret Cawley Dewar – Director, Association Governance
Laurie McQueen, MSSW – Associate Director, Association Governance

APA Administration:

Rodger Currie, JD – Chief of Government Affairs
Yoshie Davison, MSW – Chief of Staff
Tristan Gorrindo, MD – Director, Division of Education
Kristin Kroeger – Chief, Policy, Programs, & Partnerships
Ranna Parekh, MD, MPH – Director, Division of Diversity and Health Equity
Shaun Snyder, JD – Chief Operating Officer
Philip Wang, MD, PhD – Director, Division of Research
Jason Young – Chief Communications Officer

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
2	<u>Review and Approval of the Summary of Actions from the July 2015 Joint Reference Committee Meeting</u> Will the Joint Reference Committee approve the draft summary of actions from the July 2015 meeting?	The Joint Reference Committee approved the draft summary of actions from the July 2015 meeting.	Shaun Snyder, JD Margaret Dewar Laurie McQueen, MSSW	Association Governance
3	CEO/Medical Director's Office Report Updates on Referrals			

DRAFT

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
3.A	<p><u>Fostering the Next Generation of Leaders within the APA</u></p> <p>The development of the next generation of leaders within APA is a critical function that will require input and collaboration from across the organization. The Administration, Divisions of Membership, Education, and Diversity and Health Equity are working on addressing this issue. The Administration has also solicited feedback from the Council on Medical Education and Lifelong Learning. We agree with the author's cost estimate as the scope of the paper was narrowed.</p> <p>The Council on Medical Education and Lifelong Learning had a robust discussion of this topic which they deemed important. Focusing on this issue primarily through the lens of GME training, the Council noted that there is already a day-long leadership conference for residents at the Annual Meeting. In future years, this conference will be available to all senior residents and fellows, not just chief residents. Additionally, the scientific program committee is evaluating a number of proposals which would also include leadership forums at the next Annual Meeting in conjunction with potential sponsorship from the Association for Academic Psychiatry. The new online transition to practice curriculum will also focus on basic leadership and managements skills that residents require. The Council will continue to support leadership opportunities of this nature for trainees. The Council is supportive of one-to-one mentorship with APA leadership.</p> <p>The Education Department is exploring ways in which to incorporate a community service activity during the annual meeting that includes leadership opportunities for residents and medical students.</p>	<p>The Joint Reference Committee thanked the CEO and Medical Director for the update on this referral.</p>		<p>N/A</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
4.A	<u>Caucus: Korean American Psychiatrists</u> Will the Joint Reference Committee recommend that the Board of Trustees approve the establishment of a Caucus of Korean American Psychiatrists under the auspices of the Council on Minority Mental Health and Health Disparities?	The Joint Reference Committee recommended that the Board of Trustees establish a Caucus of Korean American Psychiatrists under the Council on Minority Mental Health and Health Disparities. The JRC noted that it may be prudent to clarify the procedures and requirements for establishing a caucus under the auspices of a council and under the auspices of the Assembly.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/15)
4.B	<u>Proposed Position Statement on Telepsychiatry</u> Will the Joint Reference Committee recommend that the Assembly approve the proposed position statement on <i>Telepsychiatry</i> , and if approved, forward to the Board of Trustees for consideration?	The JRC reviewed the proposed position statement and made revisions to the 1995 statement. The Joint Reference Committee recommended that the Assembly approve the position statement on <i>Telemedicine in Psychiatry</i> as revised by the JRC, and add it to the October/November 2015 Assembly agenda as new business.	Shaun Snyder, JD Margaret Dewar Allison Moraske	Assembly October/November 2015
4.C	<u>Senior Psychiatrists (ASMMA1512.CC)</u> The Board of Trustees referred the action paper <i>Senior Psychiatrists</i> to the Joint Reference Committee for further action. The action paper asked that the Board of Trustees appoint a work group comprised of members from the Board and Assembly to include senior psychiatrists. The work group will be charged to explore mechanisms to best meet the needs of this group of members and bring its recommendations to the Assembly and to the Board within 1 year for implementation.	The Joint Reference Committee referred the action paper to the Membership Committee and requested that they provide feedback on how best to address this action paper. The JRC requested a report for the January 2016 meeting.	Jon Fanning Susan Kuper	Joint Reference Committee January 2016 (Deadline: 1/6/2016)
5	Award Nominees			
5.A	<u>2015 Jacob Javits Award</u> Will the Joint Reference Committee recommend that the Board of Trustees approve the 2015 Jacob Javits Award nominee, US Representative Tim Murphy (R-PA)?	The Joint Reference Committee deferred recommendation on the Jacob Javits Award until the January 2016 JRC Meeting.	Shaun Snyder, JD Margaret Dewar Laurie McQueen	Joint Reference Committee January 2016 (Deadline: 1/6/2016)

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
5.B	<u>2016 George Tarjan Award</u> Will the Joint Reference Committee recommend that the Board of Trustees approve the 2016 George Tarjan Award nominee, Emmanuel Cassimatis, MD	The Joint Reference Committee recommended that the Board of Trustees approve the 2016 George Tarjan Award nominee, Emmanuel Cassimatis, MD.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/15)
5.C	<u>2016 Jack Weinberg Award</u> Will the Joint Reference Committee recommend that the Board of Trustees approve the 2016 Jack Weinberg Award nominee, Constantine G Lyketsos, MD, MHS, DFAPA, FAPM, FACNP?	The Joint Reference Committee recommended that the Board of Trustees approve the 2016 Jack Weinberg Award nominee, Constantine G Lyketsos, MD, MHS, DFAPA, FAPM, FACNP.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/15)
5.D	<u>2015 Psychiatric Services Achievement Award</u> Will the Joint Reference Committee recommend that the Board of Trustees approve the 2015 Psychiatric Services Achievement Awards as detailed in attachment 5.D?	The Joint Reference Committee recommended that the Board of Trustees approve the 2015 Psychiatric Services Achievement Awards as detailed in attachment 5.D	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/15)
5.E	<u>2016 Bruno Lima Award</u> Will the Joint Reference Committee recommend that the Board of Trustees approve the 2016 Bruno Lima Award nominee, Kathleen Clegg, MD?	The Joint Reference Committee recommended that the Board of Trustees approve the 2016 Bruno Lima Award nominee, Kathleen Clegg, MD.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/15)
6	Assembly Report	Dr. Anzia noted that the Assembly will be meeting October 30 th – November 1 st , 2015 at the Omni Shoreham in Washington, DC. A primary issue to be addressed will be the direct referral of action papers to the Board of Trustees.		N/A

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
7	Council Assessments	<p>In the course of their review and discussion of the council assessments, the JRC considered the gaps in knowledge-base that may occur on councils. It was thought that enriching the appointment process may support and expand the council role by increasing their member depth of knowledge and breadth of diversity and experience.</p> <p>One change is to provide a description of each council and the work and areas covered and detail the requisite experience each council requires. From year to year, the knowledge base and expertise on any given council may be altered based on the work plan and current membership. Applications, which would include a bio-sketch and an individual's credentials to serve, for the open council positions would be requested from the APA membership.</p> <p>Operationalizing the appointments process with a clear structure and procedures would create a more transparent and fair activity and serve the needs of the Association.</p> <p>APA Administration will create a template for an appointment application and council descriptions. Such procedures, if supported by the Board of Trustees, could be implemented for the next Presidential cycle.</p>	Shaun Snyder, JD Margaret Dewar Laurie McQueen	Association Governance

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
7.A	Council on Advocacy and Government Relations	<p>The Joint Reference Committee thanked the Council for submitting the assessment information as requested.</p> <p>Overall, the JRC found that the information was not presented in an easily digestible way. The Administration will revise the format of the assessment documents. Specifically, the JRC found the tasks of the Council to be general, lacking any specific projects or initiatives. It was suggested that the Council could take on specific projects for themselves and when needed, established task oriented work groups under its auspices.</p> <p>The JRC thanked the Council for dedicating their time to the Council and the APA and looks forward to a reinvigorated and proactive Council work plan.</p>	Rodger Currie, JD Deana McRae	Council on Advocacy and Government Relations
7.B	Council on Healthcare Systems and Financing	<p>The Joint Reference Committee thanked the Council for submitting the assessment information as requested.</p> <p>The JRC noted that the Council has many ongoing projects requiring a lot of time and effort from its members and the Administration. The Council's work plan was seen as comprehensive, broad and ambitious. The JRC supported the Council's utilization of work groups to parse the workload and involve experts from outside the Council.</p>	Kristin Kroeger Becky Yowell	Council on Healthcare Systems and Financing
8.A	Council on Addiction Psychiatry			

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.A.1	<p><u>Proposed Position Statement: Integrating Opioid Use Disorders Treatment with Buprenorphine and Naltrexone with that of Co-Occurring Mental Illnesses</u> (Please see attachment #1)</p> <p>Will the Joint Reference Committee recommend that the Assembly approve the proposed Position Statement: Integrating Opioid Use Disorders Treatment with Buprenorphine and Naltrexone with that of Co-Occurring Mental Illnesses, and if approved, forward it to the Board of Trustees for consideration?</p>	<p>The Joint Reference Committee recommended that the Assembly approve the proposed position statement on <i>Integrating Opioid Use Disorders Treatment with Buprenorphine and Naltrexone with that of Co-Occurring Mental Illnesses</i>.</p> <p>A few minor edits to the language were requested by the JRC that did not affect the content of the statement. These edits will be made and circulated to the JRC prior to the Assembly action deadline.</p>	Shaun Snyder, JD Margaret Dewar Allison Moraske	Assembly May 2015 (Deadline: 3/24/2016)
8.A.2	<p><u>Revised Position Statement: Assuring the Appropriate Care of Pregnant and Newly Delivered Women with Substance Use Disorder</u> (Please see attachment #2)</p> <p>Will the Joint Reference Committee recommend that the Assembly approve the proposed Position Statement: Assuring the Appropriate Care of Pregnant and Newly Delivered Women with Substance Use Disorder, and if approved, forward it to the Board of Trustees for consideration?</p> <p>N.B. If the revised position statement is approved, the 2007 PS on Care of Pregnant and Newly Delivered Women Addicts will be retired.</p>	<p>The Joint Reference Committee referred the revised position statement back to the Council on Addiction Psychiatry. It was requested that the revised statement be formatted into a resource document and a shorter and more concise statement be drafted as a position statement. The position statement template will be sent to the chairperson and administration liaison. The redrafted documents are requested for the JRC's January meeting.</p>	Kristin Kroeger Bea Eld	Council on Addiction Psychiatry Joint Reference Committee January 2016 (Deadline: 1/6/2016)

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.A.3	<p>Revised Position Statement: <u>Equitable Access to Quality Medical Care for Persons with Substance Related Disorders</u> (Please see attachment #3)</p> <p>Will the Joint Reference Committee recommend that the Assembly approve the proposed Position Statement: Equitable Access to Quality Medical Care for Persons with Substance Related Disorders, and if approved, forward it to the Board of Trustees for consideration?</p> <p>N.B. If the revised position statement is approved, the 2007 PS on Inclusion of Substance-Related Disorders as Psychiatric Disorders in Any Program Designed to Assure Access and Quality Care for Persons with Mental Illness will be retired.</p>	<p>The Joint Reference Committee referred the revised position statement back to the Council on Addiction Psychiatry for revision. Non-emotive language is to be used in position statements. The JRC requested the statement be revised and returned to for review at its January 2016 meeting.</p>	<p>Kristin Kroeger Bea Eld</p>	<p>Council on Addiction Psychiatry</p> <p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.B	<p>Council on Advocacy and Government Relations</p>			
8.B.1	<p><u>Revision to Council's Composition</u></p> <p>Will the Joint Reference Committee recommend that the Board of Trustees approve adding one additional member position to the Council on Advocacy and Government Relations, for a total of 15 members, meeting the conditions state below?</p> <ul style="list-style-type: none"> a) The chairperson of the APAPAC shall serve as an ex officio member of the Council b) The position held would remain a voting member of the Council, and c) The position held will be term-limited to align with the term length as chairperson of the APAPAC Board of Directors. 	<p>The Joint Reference Committee recommended that the Board of Trustees approve that the chairperson of the APAPAC be appointed, ex officio, as a corresponding member to the Council on Advocacy and Government Relations. Additionally, it is understood that the APAPAC, will include the Chairperson of the Council on Advocacy and Government Relations as an ex officio corresponding member to the APAPAC Board of Directors.</p>	<p>Shaun Snyder, JD Margaret Dewar Ardell Lockerman</p>	<p>Board of Trustees December 2015 (Deadline: 11/18/2015)</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.B.2	<p>Referral Update (see also 8.L.4) <u>Promoting Military Cultural Knowledge among Psychiatrists</u> (ASMMAY1512.M; JRCJULY156.10) The Council on Advocacy and Government Relations discussed the JRC referral of the Action Paper, "Promoting Military Cultural Knowledge among Psychiatrists." Of the five Resolves within the Action Paper, the Council unanimously supported the three Resolves concerning the promotion of educational awareness and the development of military cultural competency educational materials and resources. While the Council supported Resolve #5, members agreed the development of a position statement would not be in the purview of the Council. Furthermore, from the Council's discussion members remained divided in supporting the first Resolve requiring the question as a core professional component of the clinical evaluation.</p> <p>In summary, there was general support by the Council for Resolves #2, #3, #4 and #5; and an inconclusive outcome on Resolve #1. The Action Paper addresses an important issue impacting the field of psychiatry, in which educational modules should be made available to physicians. The APA should urge our membership to become familiar with military cultural competency in order to be a well-educated psychiatrist. The Council has shared their recommendations with the Council on Medical Education and Lifelong Learning (LEAD) and will await feedback for further participation in the development of a position statement.</p>	<p>The Joint Reference Committee thanked the Council for the update.</p>		<p>Please see item 8.L.7</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.B.3	<p>Referral Update (see also 8.G.7) <u>Emergency Department Boarding of Individuals with Psychiatric Disorders</u> (ASMMAY1512.S; JRCJULY156.13) The Council on Advocacy and Government Relations discussed the JRC referral of the Action Paper, "Emergency Department Boarding of Individuals with Psychiatric Disorders." From the discussion, members of the Council were of a mind that boarding is unacceptable and needs to be remedied. In response to the JRC directive, the Council established the following recommendations:</p> <p>a) The Council should continue advising APA on relevant federal advocacy both in terms of current policy and recommendations. APA will continue to support federal legislation driving forward comprehensive mental health reform, because of its significant impact on psychiatric bed availability.</p> <p>b) APA should—through the Department of Government Relations and Communications—collaborate with state associations/district branches so states encountering this problem can develop a campaign which will inform citizens and state legislators about the consequences of diminishing mental health funding and the repercussions on bed availability. The Council and APA's State Government Affairs infrastructure could assist APA's DBs/SAs in their advocacy activities related to expanding community and inpatient access.</p> <p>c) In working with state associations/district branches, APA should use the crisis of the boarding issue and the handling of violent patients to inform state legislators of the ramifications associated with substantial cuts to mental health budgets; emphasizing the justification for expanding mental health resources and program allocations.</p> <p>d) APA should continue to highlight the consequences of trans-institutionalization.</p> <p>Understanding this is a complicated issue; the Council will collaborate with the Council on Psychosomatic Medicine (LEAD) in exploring these mechanisms. A position statement examining these causes is currently being developed by the Council on Psychosomatic Medicine in consultation with other Councils including CAGR. The Council has shared their recommendations with the Council on Psychosomatic Medicine (LEAD).</p>	<p>The Joint Reference Committee thanked the Council for the update. With regard to item B in the recommendations, the JRC referred this to the Council on Communication in order that they may be aware and involved in any communications campaign regarding this issue.</p>	<p>Jason Young James Carty</p>	<p>Council on Communications</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.B.4	<p>Referral Update (See also 8.J.7) <u>Location of Civil Commitment Hearings</u> (ASMMAY1512.V; JRCJULY156.16) The Council on Advocacy and Government Relations discussed the JRC referral of the Action Paper, "Location of Civil Commitment Hearing." The Council's directive is to provide input on the issue to the Council on Psychiatry and Law (LEAD). In advance of the October 2016 deadline, CAGR member (Newkirk) and visiting RFM (Reid) volunteered to participate as Council representatives to the newly created Council of Psychiatry and Law work group to address the issue. The Council has shared their recommendations with the Council on Psychiatry and Law (LEAD); DGR staff will remain attentive to the progress of the work group.</p>	<p>The Joint Reference Committee thanked the Council for the update.</p>		<p>Please see 8.J.7</p>
8.B.5	<p>Referral Update (see also 8.G.10) <u>Multiple Co-payments Charged for Single Prescriptions</u> (ASMMAY1412.A) The Council on Advocacy and Government Relations discussed the JRC referral of the action paper, "Multiple Co-payments Charged for Single Prescription." DGR staff has worked closely with the Office of Healthcare Systems and Financing. They have learned that the Council on Healthcare Systems and Financing (LEAD) is in the process of reviewing the developed survey. It is our understanding that once this survey is approved by the lead Council, it will be sent to APA membership requesting feedback on this issue. Following the compilation of the survey results, the lead Council will forward their recommendations to be reviewed by our Council.</p>	<p>The Joint Reference Committee thanked the Council for the update.</p>		<p>Please see 8.G.10</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.B.6	<p>Referral Update <u>Endorsement of Principles for the Provision of Mental Health and Substance Abuse Treatment Services: A Bill of Rights</u> (JRCOCT148.G.17)</p> <p>The Council on Advocacy and Government Relations discussed the JRC referral of the position statement, "Endorsement of Principles for the Provision of Mental Health and Substance Abuse Treatment Services: A Bill of Rights." Following the May 2015 meeting, the Council moved to form a work group led by Drs. Bailey and Badaracco (Council on Health Care Systems and Financing). DGR staff worked with other council staff liaisons to gather facts on the use of the current Bill of Rights and made inquiries with APA Administration policy staff to best inform deliberation by the work group.</p> <p>The Council members, being advised of the CHSF initial recommendation to retire the paper and the ongoing deliberation by the joint Council work group, voted the following recommendations, while the work group continues their work:</p> <ul style="list-style-type: none"> a) Retire the position statement (originated 1996, reaffirmed 2007); b) Notify signatories and other components; c) The joint Council work group will review existing APA policies to see if said policies satisfy the need of members with regards to having an organizational statement of a patient's bill of rights. d) Based on their evaluation, the joint Council work group will determine the potential need, recommending whether or not the drafting of a new bill of rights is essential. <p>Contingent on the results of reviewing APA policies and if determined as necessary, the Council instructed the work group to craft a new APA document which would address the rights of patients, revised to reflect developments in law and policy over the past 15 years. Additional members of the Council volunteered to serve on the work group: Drs. Jenny Boyer, Napoleon Higgins, and Morgan Melock (RFM).</p>	<p>The Joint Reference Committee thanked the Council for the update. While the joint council work group deliberates, the JRC thought it best not to retire the position statement. To kick start the functioning of joint work group, the JRC transferred 'ownership' of the work group from the Council on Advocacy and Government Relations to the Council on Healthcare Systems and Financing. A conference call of the work group was requested within the next month.</p> <p>The JRC would like the position statement revised as it would be useful from both a member and advocacy standpoint.</p>	<p>Kristin Kroeger Becky Yowell</p>	<p>Council on Healthcare Systems and Financing</p> <p>Joint Reference Committee January 2016 (deadline: 1/6/2016)</p>
8.C	<p>Council on Children, Adolescents and Their Families</p>			

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.C.1	Request for Caucus: <u>Infancy and Early Childhood</u> Will the Joint Reference Committee recommend that the Board of Trustees approve the establishment of a Caucus on Infancy and Early Childhood under the auspices of the Council on Children, Adolescents and Their Families?	The Joint Reference Committee recommended that the Board of Trustees establish a Caucus on Infancy and Early Childhood under the Council on Children, Adolescents and Their Families.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/15)
8.C.2	Referral Update <u>Mental Health Leave in Colleges</u> (ASMMAY1512.Y; JRCJULY156.18) A work group of council members was formed at the September council meeting to determine if the existing APA Position Statement on College Mental Health should be revised to address college mental health leave or if a separate policy should be developed. Upon consideration, the work group believes the action paper has merit (in that forced leave of absence due to mental health issues may be detrimental) and is best served as part of a revised Position Statement on College Mental Health. The work group intends to have this revised position statement prepared and vetted by the entire council in time for submission to JRC in January.	The Joint Reference Committee thanked the Council for the update and was pleased to know that after review of the Council, the position statement as drafted by the Council on Psychiatry and Law will be coming to the JRC in January 2016.	Kristin Kroeger Ranna Parekh, MD, MPH Alison Bondurant	Council on Children, Adolescents and Their Families Joint Reference Committee January 2016 (Deadline: 1/6/2016)
8.C.3	Referral Update <u>Revision to Position Statement: Psychiatric Hospitalization of Children and Adolescents</u> A reworked draft of the position statement incorporates within the body of the statement salient points articulated in the Recommendations section of the previously revised document, as was suggested by JRC last July. This latest draft is currently being evaluated by the council. The council-approved iteration will be forwarded to JRC in January.	The Joint Reference Committee thanked the Council for the update and was pleased to know that a revised position statement would be forwarded to the JRC in January 2016.	Kristin Kroeger Ranna Parekh, MD, MPH Alison Bondurant	Council on Children, Adolescents and Their Families Joint Reference Committee January 2016 (Deadline: 1/6/2016)
8.D	Council on Communications No actions			
8.E	Council on Geriatric Psychiatry			

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.E.1	<p><u>Proposed Position Statement: Role of Psychiatrists in Assessing Driving Ability</u> (JRCJAN158.E.2; ASMMAY154.B.8)</p> <p>Will the Joint Reference Committee recommend that the Assembly approve the proposed position statement: Role of Psychiatrists in Assessing Driving Ability, and if approved, forward it to the Board of Trustees for consideration? (Please see attachment #1)</p>	<p>The Joint Reference Committee recommended that the Assembly approve the proposed position statement on the <i>Role of Psychiatrists in Assessing Driving Ability</i>. The Council noted that input was received from the Council on Psychiatry and Law in the development of the statement and that the statement is consistent with the AMA guidelines on assessing driving ability.</p> <p>The JRC requested some minor formatting changes prior to the action deadline for the May 2016 Assembly meeting.</p>	<p>Shaun Snyder, JD Margaret Dewar Allison Moraske</p>	<p>Assembly May 2016 (Deadline: 3/24/2016)</p>
8.E.2	<p>Referral Update</p> <p><u>Revision of the position statement Principles of End of Life Care for Psychiatry (2001)</u> (JRCJAN158.E)</p> <p>The Council is working with the Council on Psychosomatic Medicine to revise the position statement. Both councils have appointed volunteers to serve on a workgroup to develop the document. The council plans to discuss this further in the October conference call.</p>	<p>The Joint Reference Committee thanked the Council for the update and looks forward to receiving a draft of the position statement in January 2016.</p>	<p>Kristin Kroeger Ranna Parekh, MD, MPH Sejal Patel</p>	<p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.F	<p>Council on International Psychiatry</p> <p>No actions</p>			
8.F.1	<p><u>2016 Human Rights Award</u></p> <p>Will the Joint Reference Committee recommend that the Board of Trustees approve the 2016 Human Rights Award nominee, Dr. David Satcher?</p>	<p>The Joint Reference Committee recommended that the Board of Trustees approve the 2016 Human Rights Award nominee, Dr. David Satcher.</p>	<p>Shaun Snyder, JD Margaret Dewar Ardell Lockerman</p>	<p>Board of Trustees December 2015 (Deadline: 11/18/15)</p>
8.G	<p>Council on Healthcare Systems and Financing</p>			

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.G.1	<p><u>Referral of Position Statement for Review</u> Will the Joint Reference Committee refer the position statement Any Willing Physician to the Council on Advocacy and Government Relations for their review and recommendation whether to retire or revise the statement? The Council on Healthcare Systems and Financing reviewed the statement and consensus was that the statement was no longer necessary and could be retired.</p>	<p>The Joint Reference Committee referred the position statement <i>Any Willing Physician</i> to the Council on Advocacy and Government Relations. The CAGR is requested to review the position statement and provide an opinion with regard to retiring the position statement and report back to the JRC for the January 2016 meeting.</p>	<p>Rodger Currie, JD Deana McRae</p>	<p>Council on Advocacy and Government Relations Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.G.2	<p><u>Parity in Payment, Parity in Policy Implementation</u> (ASMMAY1512.U; JRCJULY156.15) Will the Joint Reference Committee request the Division of Government Affairs to draft a letter to the Veterans Administration (VA) to address the specific concerns raised in the Assembly action paper Parity in Payment, Parity in Policy Implementation within the VA System? The CHSF discussed this at their September meeting. Much of this falls within the ongoing work plan regarding parity. A communications plan should be developed in conjunction with relevant APA offices to ensure that parity information is communicated to key stakeholders/decision makers. The CHSF recommends that the Department of Government Relations draft a letter to the VA to address specific concerns rose within the VA system.</p>	<p>The Joint Reference Committee requested that the APA Administration send a letter to the Veterans Administration to address the concerns raised in the Assembly action paper. The letter would be drafted by DGR and reviewed by CHSF and the CEO/Medical Director.</p>	<p>Rodger Currie, JD Kristen Kroeger</p>	<p>Letter drafted and sent by November 25, 2015</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.G.3	<p>Referral Update</p> <p><u>Access to Care Related Action Papers</u></p> <p><u>Developing an Access to Care Toolkit</u> (ASMMAY1512.C)</p> <p><u>Compendium of Access to Care Action Papers and Position Statements</u> (ASMMAY1512.D)</p> <p><u>Access to Care Survey</u> (ASMMAY1512.E)</p> <p>The Council on Healthcare Systems and Financing reviewed the three access to care related items at their September meeting. The Council supported the actions and will incorporate this work into its work plan. It was felt that the survey would provide data that will be necessary to advance advocacy efforts. Consideration will be given to existing instruments as well as doing a survey on a routine basis to capture trends. A communications plan will be developed as appropriate. Dr. Mawhinney will lead the project.</p>	<p>The Joint Reference Committee thanked the Council for the update and noted that the Council on Communications and the Division of Communications should be utilized in the development of a communications plan. The JRC requested that a timeline of the work and communications plans be forwarded to the JRC not later than its January Meeting.</p>	<p>Kristin Kroeger Becky Yowell</p> <p>Jason Young</p>	<p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.G.4	<p>Referral Update</p> <p><u>Level of Service Intensity Instrument</u> (ASMMAY1512.F)</p> <p>APA staff have begun to compile information on the various level of care criteria (i.e., LOCUS, CANS, ANSA, Interqual/Milliman) to see what is currently available. This is an important issue as it is tied to medical necessity decision making and there are many parity issues inherent in this. CHSF thinks that this task is a very large undertaking and likely involves expertise from several APA councils and perhaps from experts who are not currently on an APA component. CHFS recommends that if this project is to be accomplished due consideration needs to be given to creating a special APA workgroup to do this.</p>	<p>The Joint Reference Committee thanked the Council for the update.</p>		<p>N/A</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.G.5	<p>Referral Update (see also 8.L.4) <u>Timely Reimbursement for Psychiatric Treatment</u> (ASMMAY1512.G)</p> <p>The Council discussed the paper and suggests that it be sent back to the author for further clarification including a definition of the problem that is being addressed. It was noted that there are state laws currently in place that dictate allowable turnaround times for claims payment. How this proposal would interact with those laws is unclear. CHSF further recommends, given this, and the paper's request for legislation, that the paper be referred to the Council on Advocacy and Government Relations for input as well.</p>	<p>The Joint Reference Committee thanked the Council for the information and referred the item to the Council on Advocacy and Government Relations for their input regarding the action paper.</p>	<p>Rodger Currie, JD Deana McRae</p>	<p>Council on Advocacy and Government Relations</p> <p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.G.6	<p>Referral Update (see also 8.L.5; 8.I.1) <u>Removing Barriers to Providing Compassionate Care to Victims of Sexual Assault</u> (ASMMAY1512.H)</p> <p>The Council discussed item 4 of the action paper. There was consensus that an individual's health insurance provides coverage for mental health services. There is no evidence to show that benefits/coverage for these services do not already exist. Absent specific data to the contrary the CHSF has no basis for further recommendations. CHSF does not feel it is the appropriate council to deal with this request. FYI: Council on Minority Mental Health and Health Disparities is the LEAD</p>	<p>The Joint Reference Committee thanked the Council for the update and forwards the CHSF comments to the Council on Minority Mental Health and Health Disparities (LEAD).</p>		<p>Please see 8.I.1</p>
8.G.7	<p>Referral Update (see also 8.B.3) <u>Emergency Department Boarding of Individuals with Psychiatric Disorders</u> (ASMMAY1512.S)</p> <p>The CHSF is in the process of reviewing the draft position statement and will provide comment back to the Council on Psychosomatic Medicine.</p>	<p>The Joint Reference Committee thanked the Council for the update and requested that the Council on Healthcare Systems and Financing provide its comments on the draft position statement by November 25, 2015.</p>	<p>Kristin Kroeger Becky Yowell</p>	<p>Please see 8.B.3 Comments to the Council on Psychosomatic Medicine by November 25, 2015</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.G.8	<p>Referral Update <u>Reconfiguring the Health Care Percentage of the GDP</u> (ASMMAY1512.W) CHSF recommends that this paper be sent back to the author for further clarification to define what is being sought/what is the desired outcome, how this information can shape public opinion in a way that leads to meaningful change, and how this information might help shape how much of the health care dollar is spent on behavioral health conditions. The author is also asked to explain why the newly created medical loss ratios are insufficient to meet these concerns.</p>	<p>The Joint Reference Committee thanked the Council for the update and referred the action paper back to the Council for review and feedback. The JRC noted that once approved by the Assembly, the action paper is a product of the Assembly.</p>	<p>Kristin Kroeger Becky Yowell</p>	<p>Council on Healthcare Systems and Financing Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.G.9	<p>Referral Update <u>Proposed Position Statement: Patient Access to Treatments Prescribed by their Physicians</u> (JRCOCT148.G.9) The CHSF was advised of the CAGR recommendation to maintain the existing position statement. A subsequent discussion with CAGR resulted in CAGR endorsing our support for the revised statement. It was reiterated that members of the CHSF thought that the original statement combined too many issues, and lacked clarity for that reason. The Councils on Government Relations and Research support the revised position statement as proposed by the CHSF. The Council on Children has been asked to determine if a separate statement on encouraging Clinical Research in Child and Adolescent Psychiatry was needed.</p>	<p>The Joint Reference Committee thanked the Council for the update and looks forward to receiving the proposed position statement on <i>Patient Access to Treatments Prescribed by their Physicians</i> once it has been vetted by the Council on Children, Adolescents and Their Families.</p>	<p>Kristin Kroeger Becky Yowell Ranna Parekh, MD, MPH Allison Bondurant</p>	<p>Council on Healthcare Systems and Financing (LEAD) Council on Children, Adolescents and Their Families Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.G.10	<p>Referral Update (see also 8.B.5) <u>Multiple Co-payments Charged for Single Prescriptions</u> (ASMMAY1412.A) The CHSF provided feedback on the draft PBM survey. The document will be finalized and sent to survey participants and this is incorporated as part of the council's work plan for the next 12 months.</p>	<p>The Joint Reference Committee thanked the Council for the update and requested a timeline for the dissemination of the survey.</p>	<p>Kristin Kroeger Becky Yowell</p>	<p>Report to JRC on timeline by November 25, 2015</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.G.11	<p>Referral Update <u>Critical Psychiatrist Shortages at Federal Medical Centers</u> (ASMNOV1412.D) The CHSF reviewed the action paper and recommends that the author consider broadening the issue to encompass not only Federal Medical Centers, but also the Indian Health Service, Veterans Administration, and other federal programs. General consensus is that this is an issue in other areas also. CHSF does not think there are any current APA position statements that speak to the issue of compensation. The council thinks the issue of developing a position statement that concerns compensation needs careful consideration from a number of components and the APA's General Counsel. We will report back on what kinds of salary income data we are able to discover.</p>	<p>The Joint Reference Committee thanked the Council for the update and requests a progress report and timeline from the Council as part of its report to the JRC in January 2016.</p>	<p>Kristin Kroeger Becky Yowell</p>	<p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.H	<p>Council on Medical Education and Lifelong Learning</p>			
8.H.1	<p>Referral Update <u>Addressing the Impact of Environmental Toxins on Neurodevelopment and Behavior</u> (ASMAY1512.T; JRCJULY156.14) (Please see attachment #1) Will the Joint Reference Committee reassign the referral of this action paper from the Council on Medical Education to the Council on Children, Adolescents and Their Families and request that they form a work group on this topic?</p> <p>Rationale: CMELL is supportive of this action paper but does not see a role for the Council. Primary responsibility for implementation should remain with the Division of Education. The Council on Children should constitute a workgroup of advisors on this topic to advise the Division of Education.</p>	<p>The Joint Reference Committee referred the action paper to the Council on Children, Adolescents and Their Families. The Council on Children will be the LEAD council on this referral.</p>	<p>Kristin Kroeger Ranna Parekh, MD, MPH Alison Bondurant</p>	<p>Council on Children, Adolescents and Their Families</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.H.2	<u>Revision of Charge: APA/Minority Fellowship Selection and Advisory Committee</u> (please see attachment #2) Will the Joint Reference Committee recommend that the Board of Trustees approve revising the charge to the APA/Minority Fellowship Selection and Advisory Committee to include the assignment of mentors to the fellowship recipients?	The Joint Reference Committee recommended that the Board of Trustees approve the revised charge to the APA/Minority Fellowship Selection and Advisory Committee.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/2015)
8.H.3	<u>Revision of Charge: APA Public Psychiatry Fellowship Selection and Advisory Committee</u> (Please see attachment #3) Will the Joint Reference Committee recommend that the Board of Trustees approve revising the charge to the APA Public Psychiatry Fellowship Selection and Advisory Committee to include the assignment of mentors to the fellowship recipients?	The Joint Reference Committee recommended that the Board of Trustees approve the revised charge to the APA Public Psychiatry Fellowship Selection and Advisory Committee.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/2015)
8.H.4	<u>Revision of Charge: American Psychiatric Leadership Fellowship Selection Committee</u> (Please see attachment #4) Will the Joint Reference Committee recommend that the Board of Trustees approve revising the charge to the American Psychiatric Leadership Fellowship Selection Committee to include the assignment of mentors to the fellowship recipients?	The Joint Reference Committee recommended that the Board of Trustees approve the revised charge to the American Psychiatric Leadership Fellowship Selection Committee.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/2015)
8.I	Council on Minority Mental Health and Health Disparities			
8.I.1	Referral Update (see also 8.G.6; 8.L.5) <u>Removing Barriers to Providing Compassionate Care to Victims of Sexual Assault</u> (ASMMAY1512.H; JRCJULY156.7) The Council established a work group to study the feasibility of this action paper and to whom the APA would advocate around this issue. Members of the work group are Drs. Ludmila De Faria (chair), Daena Petersen, Pamela Montano, Matthew Dominguez, and Racquel Reid. The work group met for one hour during the September Components Meetings and will have its first conference call on October 20. A report of this effort will be submitted to JRC in January.	The Joint Reference Committee thanked the Council for the update and looks forward to receiving a report on the workgroup's progress and plans in January 2016.	Kristin Kroeger Ranna Parekh, MD, MPH Alison Bondurant	Joint Reference Committee January 2016 (Deadline: 1/6/2016)

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.I.2	Referral Update <u>Impact of Global Climate Change on Mental Health</u> (ASMMAY1512.L; JRCJULY156.9) Dr. Nyapati Rao is leading a work group, including Drs. Puneet Sahota, Debbie Carter, and Pamela Montano, that will study and produce a position statement on the mental health impact of severe weather events and disasters resulting from global climate change. As part of the process, the work group is seeking additional input from the Councils on International Psychiatry and Communications and Committee on Psychiatric Dimensions of Disasters. Dr. Rao will submit a report in January.	The Joint Reference Committee thanked the Council for the update and looks forward to receiving a progress report and plans from the workgroup as part of the Council's report to the JRC in January 2016.	Kristin Kroeger Ranna Parekh, MD, MPH Alison Bondurant	Joint Reference Committee January 2016 (Deadline: 1/6/2016)
8.I.3	<u>Improving APA Support of Mental Health of African American Males</u> (ASMMAY1512.O; JRCJULY156.12) Attachment 1 presents input from the Council concerning this action paper. The document was delivered to the action paper's lead, the Division of Education.	The Joint Reference Committee thanked the Council for the update and forwards the council's input to the Division of Education.	Kristin Kroeger Ranna Parekh, MD, MPH Alison Bondurant Tristan Gorrindo, MD	Joint Reference Committee January 2016 (Deadline: 1/6/2016)
8.J	Council on Psychiatry and Law			
8.J.1	<u>Resource Document: Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment</u> (Please see attachment #4) Will the Joint Reference Committee approve the Resource Document: Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment? Developed by the Council on Psychiatry and Law, reviewed by the Ethics Committee	The Joint Reference Committee approved the Resource Document: <i>Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment</i> .	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	FYI: Board of Trustees December 2015

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.J.2	<p>Proposed Position Statement: <u>Patient Access to Electronic Mental Health Records</u> (Please see attachment #5)</p> <p>Will the Joint Reference Committee recommend that the Assembly consider the proposed Position Statement Patient Access to Electronic Mental Health Records and if approved, forward it to the Board of Trustees for consideration?</p> <p>Developed by the Council on Psychiatry and Law and the Committee on Mental Health Technology. The current version addressed the concerns of the Assembly – May 2015</p>	<p>The Joint Reference Committee recommended that the Assembly approve the proposed position statement on <i>Patient Access to Electronic Mental Health Records</i>, and if approved, forward it to the Board of Trustees for consideration.</p>	<p>Shaun Snyder, JD Margaret Dewar Allison Moraske</p>	<p>Assembly May 2015 (Deadline: 3/24/2016)</p>
8.J.3	<p>Proposed Position Statement: <u>Trial and Sentencing of Juveniles in the Criminal Justice System</u> (Please see attachment #6)</p> <p>Will the Joint Reference Committee recommend that the Assembly consider the proposed Position Statement Trial and Sentencing of Juveniles in the Criminal Justice System and if approved, forward it to the Board of Trustees for consideration?</p> <p>The Council on Psychiatry and Law rewrote the 2005 Position Statement Adjudication of Youths as Adults in the Criminal Justice System and is now submitting the above proposed position statement.</p>	<p>The Joint Reference Committee recommended that the Assembly approve the proposed position statement on <i>Trial and Sentencing of Juveniles in the Criminal Justice System</i>, and if approved, forward it to the Board of Trustees for consideration.</p>	<p>Shaun Snyder, JD Margaret Dewar Allison Moraske</p>	<p>Assembly May 2015 (Deadline: 3/24/2016)</p>
8.J.4	<p>Retire Position Statement: <u>2005 Adjudication of Youth as Adults in the Criminal Justice System</u> (Please see attachment #7)</p> <p>Will the Joint Reference Committee recommend that the Assembly retire the 2005 Position Statement Adjudication of Youths as Adults in the Criminal Justice System, and if retired, forward it to the Board of Trustees for consideration?</p>	<p>The Joint Reference Committee recommended that the Assembly retire the 2005 position statement <i>Adjudication of Youth as Adults in the Criminal Justice System</i>, as a revised statement <i>Trial and Sentencing of Juveniles in the Criminal Justice System</i>, has been drafted to replace it.</p>	<p>Shaun Snyder, JD Margaret Dewar Allison Moraske</p>	<p>Assembly May 2015 (Deadline: 3/24/2016)</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.J.5	<p>Referral Update</p> <p><u>Proposed Position Statement on Firearm Access, Acts of Violence, and the Relationship to Mental Disorders and Mental Health Services</u></p> <p>The Council on Psychiatry and Law discussed the JRC referral. The Council felt that the suggested changes would not strengthen the paper and believe that no edits are necessary at this time to the existing position statement.</p>	<p>The Joint Reference Committee thanked the Council for the update. The Joint Reference Committee supported maintaining the position statement as written.</p>		N/A
8.J.6	<p>Referral Update</p> <p><u>Removing Barriers to Providing Compassionate Care to Victims of Sexual Assault</u> (ASMMAY1512.H; JRCJULY156.7)</p> <p>The Council discussed the referral and there was some confusion on the Council as to why this was referred to the Council on Psychiatry and Law since there are no legal issues. The Council has no comment at this time. (This has been reported back to the lead, Council on Minority Mental Health and Health Disparities)</p>	<p>The Joint Reference Committee thanked the Council for the update.</p>		See item 8.I.1
8.J.7	<p>Referral Update (see also 8.B.4)</p> <p><u>Location of Civil Commitment</u> (ASMMAY1512.V; JRCJULY156.16)</p> <p>The Council on Psychiatry and Law discussed this issue at their meeting in September. A workgroup was formed and is being chaired by Dr. Elizabeth Ford. A proposed position paper will be available for JRC review at their meeting in January.</p>	<p>The Joint Reference Committee thanked the Council for the update and looks forward to receiving the position statement.</p>	Rodger Currie, JD Lori Klinedinst	Joint Reference Committee January 2016 (Deadline: 1/6/2016)
8.K	Council on Psychosomatic Medicine			
8.K.1	<p>Resource Document: <u>Dissemination of Integrated Care within Adult Primary Care Settings: the Collaborative Care Model</u></p> <p>Will the Joint Reference Committee approve the resource document Dissemination of Integrated Care within Adult Primary Care Settings: the Collaborative Care Model which identifies the roles and responsibilities of psychiatrists?</p>	<p>The Joint Reference Committee approved the resource document <i>Dissemination of Integrated Care within Adult Primary Care Settings: the Collaborative Care Model</i> and recommended that the Board of Trustees consider releasing the authors to publish/submit for peer review the resource document.</p>	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	FYI: Board of Trustees December 2015 (Deadline: 11/18/2015)

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.K.2	Referral Update <u>Position Statement: Emergency Department Board of Individuals with Psychiatric Disorders</u> (ASMAY1512.S; JRCJULY156.13) Kim Nordstrom, MD, lead author, completed the draft position statement. The Council reviewed the document, suggested revisions and it was revised. The position statement is being reviewed by Council on Healthcare Systems & Financing, Council on Advocacy and Government Relations and Council on Psychiatry and the Law and awaiting revisions.	The Joint Reference Committee thanked the Council for the update. Given that this issue is a high priority for the Assembly, the JRC requested that the draft position statement be ready for the JRC to review at their meeting in January 2016.	Kristin Kroeger Karen Sanders	Council on Psychosomatic Medicine Joint Reference Committee January 2016 (Deadline: 1/6/2016)
8.K.3	Referral Update <u>Revision of Position Statement: Principles of End-of-Life Care for Psychiatry</u> (JRCJULY158.E.3) The CPM and the Council on Geriatric Psychiatry (LEAD) have created a small work group to collaborate on re-drafting the position statement.	The Joint Reference Committee thanked the Council for the update and looks forward to receiving a draft of the position statement in January 2016.	Kristin Kroeger Ranna Parekh, MD, MPH Sejal Patel Karen Sanders	Joint Reference Committee January 2016 (Deadline: 1/6/2016)
8.L	Council on Quality Care			
8.L.1	<u>Unnecessary Interventions in Psychiatry</u> Will the Joint Reference Committee recommend to the Board of Trustees that additional unnecessary interventions in psychiatry be determined under the premise that a new ABIM Foundation Choosing Wisely list will be developed? (Please see attachment #1 ABIM Foundation Choosing Wisely materials and attachment #2 original APA Choosing Wisely List)	The Joint Reference Committee recommended to the Board of Trustees that additional unnecessary interventions in psychiatry be determined under the premise that a new ABIM Foundation Choosing Wisely list will be developed.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Board of Trustees December 2015 (Deadline: 11/18/2015)
8.L.2	<u>Retire Position Statement: Infectious Disease Epidemics Including H1N1</u> Will the Joint Reference Committee recommend that the Assembly retire the position statement: Infectious Disease Epidemics Including H1N1, and if retired, forward it to the Board of Trustees for consideration? (Please see attachment #5)	The Joint Reference Committee recommended that the Assembly retire the position statement <i>Infectious Disease Epidemics Including H1N1</i> , and if retired, forward it to the Board of Trustees for consideration? Rationale: The position statement is out of date as H1n1 is no longer an issue.	Shaun Snyder, JD Margaret Dewar Ardell Lockerman	Assembly May 2015 (Deadline: 3/24/2016)

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.L.3	<p><u>Development of Position Statement on Vaccines</u> Will the Joint Reference Committee support and approve the development of a position statement on vaccines in general?</p>	<p>The Joint Reference Committee supported the development of a position statement on vaccines and believed that this issue could be addressed within the scope of a statement on <i>Addressing the Impact of Environmental Toxins on Neurodevelopment and Behavior</i>, currently under development by the Council on Children, Adolescents and Their Families.</p>	<p>Kristin Kroeger Ranna Parekh, MD, MPH Alison Bondurant</p>	<p>Council on Children, Adolescents and Their Families</p> <p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.L.5	<p>Referral Update (see also 8.G.5) <u>Timely Reimbursement for Psychiatric Treatment</u> (ASMMAY1512.G; JRCJULY156.6) The Council on Quality Care yields to the opinion of the Council on Health Systems and Financing (CHSF) that this paper be sent back to the author for further clarification including a definition of the problem that is being addressed. It was noted that there are state laws currently in place that dictate allowable turnaround times for claims payment. How this proposal would interact with those laws is unclear. CHSF further recommends, given this, and the paper's request for legislation, that this be referred to the Council on Advocacy and Government Relations for input as well. Per the CHSF recommendations, and the opinion of the Council on Quality Care, the Council on Quality Care requests to be removed from this assignment at present time, as this is not currently a quality issue.</p>	<p>The Joint Reference Committee thanked the Council for the update and noted that action papers could not be sent back to the authors.</p>		<p>N/A</p>
8.L.6	<p>Referral Update (see also 8.G.6; 8.I.1) <u>Removing Barriers to Providing Compassionate Care to Victims of Sexual Assault</u> (ASMMAY1512.H; JRCJULY156.7) In response to the request that the Council on Quality Care provide their opinion to the Council on Minority Mental Health and Health Disparities the Council recommends working with outside groups that assist with victim advocacy.</p>	<p>The Joint Reference Committee thanked the Council for the update and referred the comments to the Council on Minority Mental Health and Health Disparities.</p>		<p>Please see item 8.I.1</p>

Agenda Item #	Action	Comments/Recommendation	Administration Responsible	Referral/Follow-up & Due Date
8.L.7	<p>Referral Update (see also 8.B.2) <u>Promoting Military Cultural Knowledge among Psychiatrists</u> (ASMMAY1512.M; JRCJULY1512.10) In response to the request that the Council on Quality Care provide their opinion to the Council on Medical Education and Lifelong Learning (LEAD), the Council on Quality Care agreed that the question, "Have you or someone close to you served in the military?" as part of the clinical evaluation, is a good question to ask as related to quality care, but that it will be important to develop educational materials to assist psychiatrists in what to do with the information they elicit from this question.</p>	<p>The Joint Reference Committee thanked the Council for the update and referred the comments to the Council on Medical Education and Lifelong Learning (LEAD).</p> <p>The Joint Reference Committee requested that the question be referred to the Caucus on VA Psychiatrists and back to the Council on Quality Care to determine how a 'standard of care' question on this topic would be worded.</p>	<p>Kristin Kroeger Samantha Shugarman</p> <p>Rodger Currie, JD Deana McRae</p> <p>Tristan Gorrindo, MD</p>	<p>Council on Quality Care</p> <p>Caucus on VA Psychiatrists</p> <p>Council on Medical Education and Lifelong Learning</p> <p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.M	Council on Research			
8.M.1	<p><u>Revised Position Statement: Atypical Antipsychotic Medication</u> (Please see attachment #1) Will the Joint Reference Committee recommend that the Assembly approve the revised Position Statement Atypical Antipsychotic Medication, and if approved, forward it to the Board of Trustees for consideration?</p> <p>The statement is still relevant, but the Council is recommending that this statement be slightly revised for language and clarity. It has also been reformatted so that it conforms to the latest APA position statement formatting guidelines.</p> <p>N.B. If the revised position statement is approved, the 2009 PS Atypical Antipsychotic Medication will be retired.</p>	<p>The Joint Reference Committee referred the revised position statement back to the Council on Research for additional revision. The JRC noted that antipsychotics should not be used as sleep aides or be prescribed for anxiety. The statement should include language regarding the use of antipsychotics for the FDA approved indications.</p> <p>The JRC requested that the revisions be made and a revised position statement be submitted to the JRC in January 2016.</p>	<p>Kristin Kroeger Philip Wang, MD, PhD Emily Kuhl, PhD</p>	<p>Council on Research</p> <p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>
8.M.2	<p>Referral Update <u>Current Health Services Literature on Integrated Care Models</u> (JRCOCT148.G.22)(Please see attachment #2) The Division of Research has completed its compilation of the literature, which is included here as attachment 2. A more detailed report based on the literature review is under development.</p>	<p>The Joint Reference Committee thanked the Council for the update and requested a progress report in the Council's report to the JRC in January 2016.</p>	<p>Kristin Kroeger Philip Wang, MD, PhD Emily Kuhl, PhD</p>	<p>Joint Reference Committee January 2016 (Deadline: 1/6/2016)</p>

**Report to the APA Board of Trustees
Finance and Budget Committee
Alan Schatzberg, MD, Chair**

ACTION #1

APA Operating Budget: Will the APA Board of Trustees approve the 2016 Operating budget as proposed?

ACTION #2

Foundation Operating Budget: Will the APA Board of Trustees approve the 2016 Foundation Operating Budget as proposed?

ACTION #3

APA Capital Budget: Will the APA Board of Trustees approve the 2016 APA Capital Budget as proposed?

ACTION#4

International RFM's: Will the APA Board of Trustees approve the proposed dues structure for International RFM's?

ACTION#5

Education Joint Sponsorship Expansion: Will the APA Board of Trustees approve the expansion of the CME joint sponsorship programs to include allied groups?

APA Operating Budget

At its recent meeting, the Finance & Budget Committee reviewed the budget presented by the Administration and recommended its adoption by the Board of Trustees. The proposed budget is balanced within the current funding policies and supports the strategic priorities established by the Board of Trustees:

- 1) Advancing the integration of psychiatry in the evolving health care delivery system.
- 2) Supporting research to advance treatment and the best possible clinical care, as well as inform credible quality standards; advocating for increased research funding. APA will enhance clinical care and reduce the burden of mental illness for our patients and society.
- 3) Educate patients, families, the public and other practitioners about mental disorders and evidence-based treatment options.
- 4) Support and increase diversity within APA; serve the needs of evolving, diverse, underrepresented and underserved patient populations; and work to end disparities in mental health care.

The proposal contains support for initiatives and resources that will promote APA membership and member value, enhance and leverage partnerships with critical stakeholders, develop effective communication strategies and infrastructure, and position the APA as a thought leader in mental health at the state and national level.

The 2016 budget includes unrestricted revenue of \$49.2M, unrestricted expense of \$52.2M and funding from reserves of \$3.0M, resulting in a budget surplus of \$88K. In addition, there are activities supported by Board Designated funds totaling \$1.5M. In comparison, the 2015 budget included unrestricted revenue of \$50.0M, unrestricted expense of \$53.1M and reserve funding of \$2.8M, resulting in a budget deficit of \$341K.

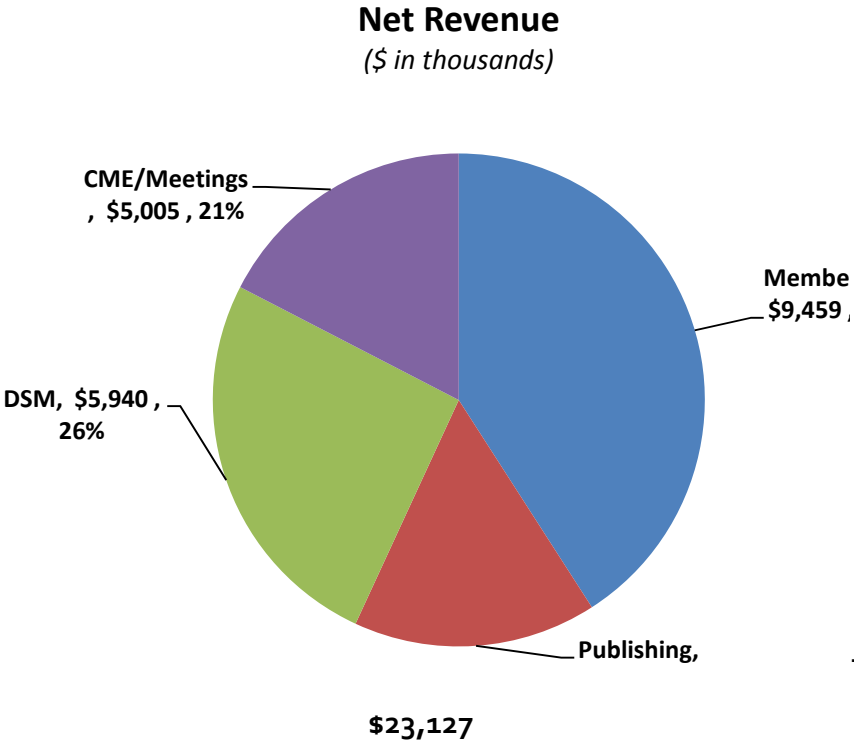
Comparative review of 2015 and 2016 Budgets (*In Millions*)

	<u>2015</u> <u>Budget</u>	<u>2015</u> <u>Forecast</u>	<u>2016</u> <u>Budget</u>
Unrestricted Revenue	\$50.0	\$49.3	\$49.2
Unrestricted Expense	<u>\$53.1</u>	<u>\$49.8</u>	<u>\$52.2</u>
Net Income (Deficit)	\$(3.1)	\$(0.5)	\$(3.0)
Reserve Funding	<u>\$2.8</u>	<u>\$0.5</u>	<u>\$ 3.0</u>
Budget Surplus (Deficit)	<u>\$0.3</u>	<u>\$0.0</u>	<u>\$0.0</u>

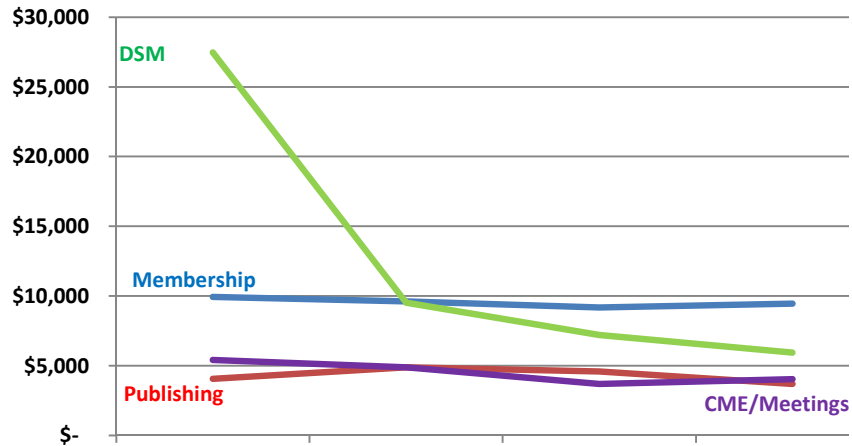
The financial presentation has been updated in order to focus attention on three distinct areas: revenue generating activities, programs and services and governance and operations. Each of these areas is shown net of revenue or expense in order to reflect a more accurate financial impact of each area.

Revenue Generating Activities (net):

The APA has four lines of business that generate revenue for the association: Membership, Publishing, DSM, and Meetings/CME. **Membership** is the largest contributor of revenue at 41% and has been relatively stable, with some small revenue growth over the last few years with the only significant growth item of the APA job bank. **Publishing** net revenue spiked in 2014, but has been trending slightly downward based on lower book sales and advertising revenue from Psych News. **DSM** revenue peaked in 2013 with the release of *DSM-5* and has followed the expected sales trends toward normalization. Sales revenue is offset by DSM product ion costs and the amortization of *DSM-5* development costs. **Meetings/CME** net revenue trends are driven by the financial results of the Annual Meeting, which is primarily dependent on the event location.



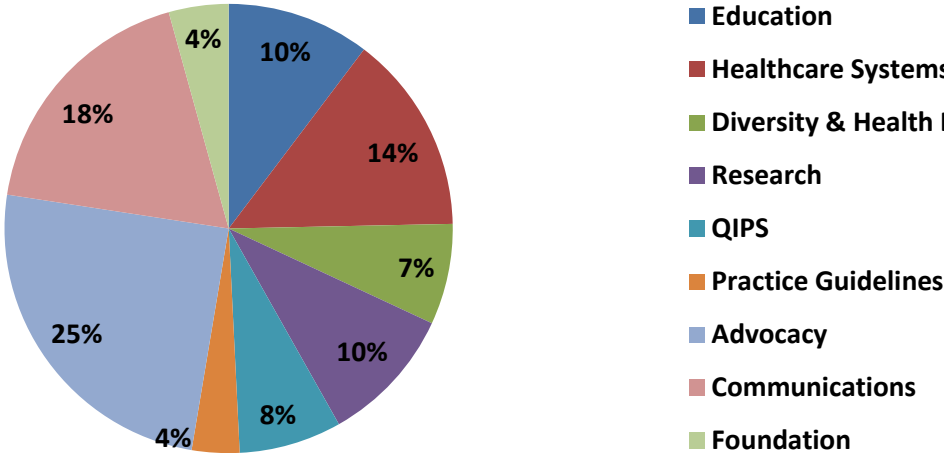
Net Revenue Trends



Programs & Services:

This section of the budget encompasses the broad array of programs created for the benefit of the APA membership. It includes education, which covers all forms of education content from online learning to live learning sessions at the APA meetings. There are technical programming topics such as integrated care, alternative payment models, diversity in practice as well as scope of practice issues. Also included here is APA's advocacy team, which is addressing legislative issues at both the federal and state levels. The state advocacy team is funded through a Board Designated funding allocation through 2017. Communications/Public Affairs is included in this section of the budget because messaging is a critical component of advocacy and education.

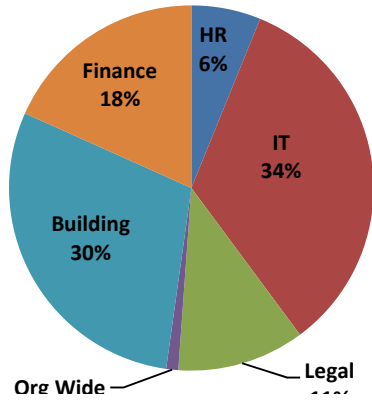
Programs and Services Expenses



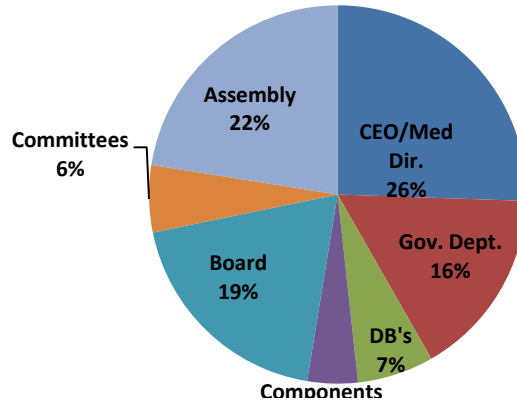
Governance & Operations:

Operations includes all the support functions of the association including IT, HR, Finance, building services, and legal. In the past, operational expenses have fluctuated greatly from year to year based on changes in the pension liability calculation prepared by the plan actuary. Now that the plan has been frozen, the liability calculations should be more consistent from year to year. The increase in budget from 2015 to 2016 pertains to several distinct items: 1) IT is planning a modernization of the IT infrastructure in order to consolidate systems and databases, increase efficiencies, and to increase cyber security. Governance covers the CEO & Medical Director's office as well as the Governance team that facilitates the logistics and workflow for the various APA leadership groups, including the Board of Trustees, AEC, Assembly, Joint Reference Committee, and Councils and Components, and BOT workgroups.

Operations



Governance



Reserve Funding:

In 2014, the Finance and Budget Committee recommended, and the Board approved, the use of the interest on the reserves to support operations with the calculation as follows:

APA may use 4% of the June 30 three-year rolling average net unrestricted reserve balance (total long term investment portfolio less externally restricted funds) to supplement operations. If the average return over the three-year time frame exceeds the long-term investment target by greater than 100 basis points, the amount may be adjusted upward for the budget year under consideration.

For 2015-2017, the allocation is set at 4% of the June 30 balance of the reserves of the prior year, with the three-year average to begin in the 2018 budget. Based on that policy, the contribution to operations for 2016 will be \$3,029,560.

The committee expressed concern over the potential to spend down the reserve balance, based the current reserve spending policy and the board designated funding. There was also discussion regarding the actual reserve policy and whether the policy is 50% of the investment returns over a three-year rolling average or 4% as currently written. A resolution passed that committee will make the Board of Trustees aware of its concern and ask that the Board consider carefully the use of reserves for recurring expenditures.

American Psychiatric Association
Budget Summary
For the years ending December 31, 2014, 2015 and 2016
(In thousands)

	2014 Actual	2015 Budget	YTD 31-Oct	2015 Projection	2016 Budget	Budget vs. Forecast
Revenue Generating Activities						
Membership Dues & Programs	\$ 9,612	\$ 9,177	\$ 9,533	\$ 9,426	\$ 9,459	\$ 33
Publishing	4,893	4,577	4,259	4,126	3,698	(428)
DSM	9,524	7,194	6,378	7,229	5,940	(1,289)
CME & Meetings	4,893	3,686	4,605	3,892	4,030	138
Miscellaneous	8	5	214	214	-	(214)
	<u>\$ 28,930</u>	<u>\$ 24,639</u>	<u>\$ 24,989</u>	<u>\$ 24,887</u>	<u>\$ 23,127</u>	<u>\$ (1,760)</u>
Programs & Services						
Policy, Programs & Partnership	\$ (4,454)	\$ (5,818)	\$ (3,512)	\$ (4,812)	\$ (5,112)	\$ (300)
Advocacy	(1,891)	(3,251)	(2,327)	(2,424)	(2,404)	20
Communications	(1,384)	(1,940)	(1,419)	(1,826)	(1,774)	52
Foundation Operations	(457)	(419)	(368)	(433)	(419)	14
	<u>\$ (8,186)</u>	<u>\$ (11,428)</u>	<u>\$ (7,626)</u>	<u>\$ (9,495)</u>	<u>\$ (9,709)</u>	<u>\$ (214)</u>
Management & Operations						
Operations	\$ (13,790)	\$ (11,104)	\$ (8,408)	\$ (10,861)	\$ (11,124)	\$ (263)
Governance	(5,476)	(5,600)	(3,865)	(5,078)	(5,235)	(157)
	<u>\$ (19,266)</u>	<u>\$ (16,704)</u>	<u>\$ (12,273)</u>	<u>\$ (15,939)</u>	<u>\$ (16,359)</u>	<u>\$ (420)</u>
Net Operating Income						
	\$ 1,478	\$ (3,493)	\$ 5,090	\$ (547)	\$ (2,941)	\$ (2,394)
Board Designated Fund Activities	(104)	(1,355)	(452)	(598)	(1,465)	(867)
Investment Income (net of contribution)	4,282	-	1,336	-	-	-
Temporarily Restricted Funds	(102)	-	(30)	-	-	-
	<u>\$ 5,554</u>	<u>\$ (4,848)</u>	<u>\$ 5,944</u>	<u>\$ (1,145)</u>	<u>\$ (4,406)</u>	<u>\$ (3,261)</u>
Reconciliation to Budget Performance						
Net Income	\$ 5,554	\$ (4,848)	\$ 5,944	\$ (1,145)	\$ (4,406)	\$ (3,261)
Reserve Funding	-	2,800	-	547	3,029	2,482
Membership	19	-	7	7	20	13
Government Relations	-	1,355	315	461	1,195	734
Legal - Anthem	85	-	123	123	150	27
Legal - Health Parity	-	-	7	7	100	93
	<u>\$ 5,658</u>	<u>\$ (693)</u>	<u>\$ 6,396</u>	<u>\$ -</u>	<u>\$ 88</u>	<u>\$ 88</u>

Membership: Includes revenue from membership dues, the APA Inc. insurance program, the APA job bank and membership affinity programs. Expenses include the staff and expenses associated with membership support, retention and recruitment, support of the district branches, and expenses associated with member programs. The 2016 budget projects net revenue to be \$33K higher than the 2015 projections, based on increased revenue from the APA job bank.

Publishing: Revenue includes book sales, licensing, royalties, subscriptions and advertising revenue associated with the following business lines: American Journal of Psychiatry, Journal of Psychiatric Services, Psych News, Specialty Journals, Books, Psychiatry Online, the FOCUS journal and electronic publishing. Expenses include the production costs of each line of business as well as customer service, sales, editing and income taxes. The 2016 budget anticipates net income to be \$428K lower than the 2015 projections, in large part due to an expected reduction in advertising income for the American Journal of Psychiatry and Psych News. This decline is partially offset by an expected increase in book sales. Expenses are projected to remain flat from year to year.

DSM: Includes revenue from DSM sales, royalties, licensing and online publishing, while the expenses include the production costs and amortization of the DSM capitalized costs. DSM sales are facilitated by the publishing team and those costs are not attributed to DSM, but are captured in publishing line above. DSM net income is expected to decline by \$1.3M as it reaches the normalized income level in 2016. The budget is prepared with only estimates of the 2015 4th quarter sales activity and should they exceed expectations then we would anticipate that 2016 income would exceed the 2016 budget expectations.

CME and meetings: Revenue: Key business lines include the Annual meeting, the Institute on Psychiatric Services (IPS) and CME programs, both live and online. Expenses include the meeting costs as well as the costs of the meetings, education and scientific program departments. The budget anticipates that net income will increase by \$138K mostly due to a net increase in revenue at the Annual meeting. One area of concern for both the Annual meeting and IPS are the hotel attrition costs due to fewer attendees staying at the event hotels. The F & B committee has requested the administration put forth a proposal to mitigate this issue.

Policy, Programs & Partnerships (PPP): This budget line includes the Education department, Health Care Systems and Finance, Diversity & Health Equity and Research. Some of the key initiatives for 2016 are:

- Developing member focused practice based research resources
- Educating members, our patients and partners about cross cultural issues and mental health disparities
- Develop innovative education programs to diversify revenue sources and increase meeting attendance and member engagement.
- Develop alternative payment models for psychiatric/SUD care across all levels of care and payers.

- Optimizing payment for psychiatry under the new MOIPS formula for Medicare
- Educate members on changes in quality improvement practices as a result of merit-based incentive program through Medicare.
- Develop best practices for selecting, implementing and using EHR's.

The overall PPP budget is budgeted to increase \$300K over 2015 mainly due to the filling of vacant positions, which generated significant budget savings in 2015.

Advocacy: This budget line includes the Government Relations activities, the administrative costs of the Political Action Committee (PAC), the CALF grants and Congressional Advocacy Network (CAN). The budget anticipates a slight decline in expense of \$20K, which is mainly attributable to the reduction in the use of contract lobbyists. The state advocacy team and activities are funded separately through a Board Designated funding allocation through 2017.

Communications: This budget line item includes the communications, public affairs and marketing teams. They are involved in almost everything that APA does, from education to advocacy to meetings. The 2016 budget anticipates a \$52K decline in part because of the reduction in fees paid to outside consultants, with that work now being undertaken by APA staff.

Foundation: This budget line item represents the credit to APAF for fundraising activities. The foundation staff handles the product theaters and other sponsorship opportunities at the APA Annual conference and IPS.

Operations: This budget line includes all the APA support functions: IT, HR, Finance, office services and rent, legal, the APA call center and organization wide expenses. This is where the 2.5% merit increase for 2016 is budgeted; however, once it is awarded it increases the salaries within the cost centers. The budget anticipates that expenses will increase by \$263K over the 2015 projection, in large part because of the budget savings attributable to vacant positions within the support departments.

Governance: This budget line includes the CEO's office, the governance staff and the costs associated with the Officers, the Board of Trustees, the Assembly, the Components, and support of the District Branches, various committees and work groups. The budget anticipates expenses to be \$157K greater than the 2015 projection largely due to the restructuring of the Assembly and the funding of the attendance of ECP's, RFM's, MUR and ACROSS representatives.

APA Capital Budget

The 2016 proposed capital budget includes new requests totaling \$540,000 and \$424,000 of related operating expenses including license fees, maintenance and other user related expenses. This is a total new funding request of \$964,000. Additional capital costs totaling \$668,000 and \$80,000 of related operating expenses previously approved for the Personify Upgrade, Advantage System Business Intelligence Module, the Business Intelligence Project, Salesforce Marketing Cloud and Communities and SaaS Data Integration and Social Single Sign-on Enhancement Project are being reallocated in order to fund the Single System of Record.

2016 Capital Budget New Request	Capital Cost	2016 Operating Expense				Total Capital & Operating Expenditure
		License Fee	Maintenance	Other Expense	Op Exp Subtotal	
1 Single System of Record	310,000	280,000		60,000	340,000	650,000
2 Accounting and Finance Application	100,000	50,000			50,000	150,000
3 Workplace Mental Health and other Websites	130,000		24,000	10,000	34,000	164,000
<u>Carryover funding to be used toward Single System of Record:</u>						
1 Personify Upgrade - SSO & Outlook Integration	355,000	40,000	3,000	8,500	51,500	406,500
2 Advantage System Business Intelligence Module	37,000	20,000	3,500	5,000	28,500	65,500
Business Intelligence Project - Development and						
3 Deployment	216,262					216,262
4 SalesForce Marketing Cloud and Communities	50,000					50,000
SaaS Data Integration and Social Single Sign-on						
5 Enhancement Project	10,000					10,000
Total	1,208,262	390,000	30,500	83,500	504,000	1,712,262

Budget Impact

The impact on the 2016 operating budget is projected to be \$906,000, \$504,000 in licenses, maintenance and support plus \$402,000 in depreciation expense. Capitalized software is amortized over three years.

Project Descriptions:

1. Single System of Record

Over the last 10 years, APA has adopted a number of independent systems that serve specific needs. As a consequence, the applications and related data, while working well for each department and function are an impediment to any future enhancement and are cumbersome to APA's processes as it relates to members, donors and clients. The Single System of Record will replace two of our major systems (Personify and Advantage) with a single system of record that would allow us to improve our marketing campaign, streamline our operations, and improve our services. This project requires \$310,000 of new capital funding and \$340,000 of related operating cost. Additional funding that will be needed in the amount of \$668,000 of capital costs and \$80,000 of related operating expenses will be reallocated from other projects for the purpose of streamlining the APA's systems into a Single System of Record.

2. Accounting and Finance Application

APA has been using Microsoft Dynamics SL (formerly known as Solomon) for over eight years. The software was built for a different time, when business was done exclusively in the office, exclusively in a Windows environment, and when the users did not have expectations of self-service financial reporting. Its budgeting and planning component – Microsoft Forecaster – is not supported anymore. Dynamics SL itself currently is due for a version update. It is imperative for APA to modernize its financial and accounting system, with one that supports mobile users, self-service real time reporting and proper forecasting. While SL is a solid "stand-alone" financial system, it is not a compatible product for the overall technology plan for the APA. The capital request for this project is \$100,000 with related operating expenditures of \$50,000.

3. Workplace Mental Health & Other Websites

Following the completion of the rebranding and redesign of the Association's main website and appi.org, APA can now focus on the modernization and rebranding of some of its other web properties which still reside on older, unsupported platforms. The first site that should be moved to this new platform is the website for the Partnership for Workplace Mental Health. The capital cost request is \$130,000 and related operating expenditures of \$34,000.

APAF Operating Budget

At its October, 2015 meeting, the Board of the American Psychiatric Foundation (APAF) approved a 2016 budget requesting a reserve drawdown of \$2.7M, compared to \$2.8M in 2015. The slight decrease in the drawdown is attributable to a \$173K decrease in Governance & Operational expense. The Finance & Budget Committee reviewed the proposal and is recommending the budget for approval by the APA Board of Trustees.

Comparative Review of 2015 & 2016 Budgets

	2015 Approved	2016 Proposed	Change
Unrestricted Revenue	2,496	2,620	124
Unrestricted Expense	5,257	5,322	65
Net Income (Deficit)	(2,761)	(2,702)	59

The 2016 unrestricted operating budget reflects the use of \$793K in Board designated funding, which includes \$411K towards the building the development infrastructure in order to fund current and future programs. This infrastructure will play a crucial role in APAF’s plan to be self-sustaining before 2020.

Funding Sources

The proposed budget for 2016 contemplates unrestricted revenue of \$2.6M (\$930K in federal grants, \$897K from private awards and \$793K in Board Designated funding). In addition, APAF anticipates \$1.8M in private grants and contributions that will flow through temporarily restricted funds.

Expenditures

Unrestricted expenditure requests for 2016 total \$5.3M, of which \$917K is for Federally funded grants work, \$2.1M are foundation programs, \$793K are activities within Board Designated funds and \$1.5M is for governance and operations. In addition, there is \$2.4M in activity through the temporarily restricted funds.is funded from restricted awards.

Summary – APAF

The budget as proposed continues the Foundation’s signature programs and adds the APEX awards dinner, but also relies on reserve funding of \$2.7M or 49% of the three year average returns.

Membership Committee Report to the
Finance and Budget Committee

Membership Dues Rates for International Resident-Fellow Members

In July 2015, the Board of Trustees approved a recommendation from the Membership Committee to establish a category of membership for International Resident-Fellow Members. The action item was referred to the Bylaws Committee and the Board approved the changes to the Bylaws at the October 2015 meeting. Due to the timing of report deadlines, the Assembly will not vote to ratify the Bylaws changes until May 2016. The Membership Committee plans to launch the new category at the 2016 Annual Meeting shortly after the Bylaws are ratified. The dues rates for the new International RFM category must be determined in advance.

The Membership Committee recommends that the dues rates for International RFMs be set at the same proportional discounted rate to the regular U.S. Resident-Fellow Member rate as the International Member dues are to the regular U.S. full dues rate, outlined below.

	Full Dues Rate		RFM Rate	
US Member	\$575		\$105	
World Bank Income Groups	Intl Mbr Rates	% of \$575	Proposed Intl RFM Rates	% of \$105
High Income	\$210	36.5%	\$38	36.5%
Upper Middle Income	\$180	31.3%	\$33	31.3%
Lower Middle Income	\$130	22.6%	\$24	22.6%
Lower Income	\$50	8.7%	\$9	8.7%

Will the Finance and Budget Committee recommend to the Board of Trustees that the rates for the new category of International Resident-Fellow Member be set at the same discounted proportion to the regular U.S. Resident-Fellow Member rate as the International Member dues are to the regular U.S. full dues rate, (High Income-36.5%, Upper Middle Income-31.3%, Lower Middle Income-22.6%, Lower Income-8.7%)?

It's important for the rates to be approved at either the December 2015 or March 2016 meeting of the Board of Trustees so that plans can proceed for launching the new membership category at the 2016 Annual Meeting.

Respectfully submitted,

Rahn Kennedy Bailey, M.D., DFAPA

Chair, Membership Committee

October 26, 2015



Expansion of the CME Joint Sponsorship Accreditation Program

The APA is accredited as an ACCME provider which allows the Division of Education to review/create programs and deem them worthy of *AMA PRA category 1* CME credit. To be an accreditor requires completion of a several years long application process, thousands of dollars per year in fees to the ACCME, and a robust review, tracking, and regulatory infrastructure. Small groups like the district branches, allied organizations, or other affiliated groups do not have the financial or human resource strength to become independent accreditors, especially when they only complete a handful of programs each year (such as a ½ day meeting, an evening seminar, a 1 hour webinar). These groups approach accreditors, like the APA, and ask for the accreditor to review and approve their programs on a program by program basis. This process is called “Joint Sponsorship.”

In 1992, the APA Board of Trustees modified the scope of the Joint Sponsorship Program to include only live meetings hosted by District Branches (DBs). This has been a low-cost, high-value service to the DBs. Currently 26 DB’s participate in this program, generating approximately \$18,250 in revenue on an annual basis. As education has changed, so have the needs of this program. Currently DB’s are looking for the APA to also consider accrediting online activities, and the APA has been approached by allied groups also looking to participate in the Joint Sponsorship program.

The APA Division on Education would like to pilot the expansion of this program using online tools which allow the staff to automate much of the workflow. Fees for the district branches in the existing Joint Sponsorship program will not change (Table 1, column 1). Fees for DBs are approximately 25% of market rate, fees for APA affiliated groups are approximately 50% of market

rate, and fees for other groups are set at market rate for CME accreditation. New fees for allied groups and online accreditation are based on these market rates (Table 1 and Table 2).

Joint Sponsorship Fees

Table 1: Live Activity Fees for 2016

Credits	APA District Branch (current)	APA District Branch (new)	APA affiliated	Outside Entity without commercial support
1-3.75	\$250	\$250	\$500	\$1000
4-5.75	\$250	\$500	\$1000	\$2000
6-7.75	\$500	\$500	\$1000	\$2000
8-11.75	\$500	\$750	\$1500	\$3000
12+	negotiated	negotiated	negotiated	negotiated

Table 2: Online Fees 2016

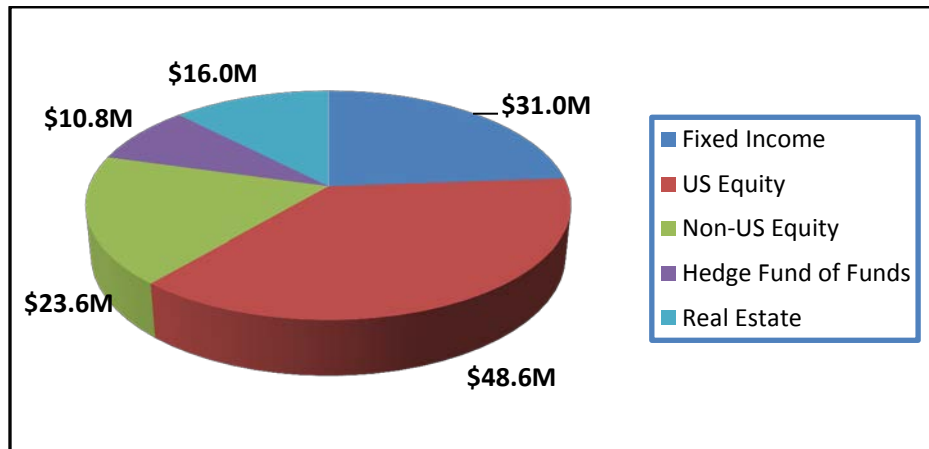
Credits	APA District Branch	APA affiliated	Outside Entity without commercial support
0.25-1	\$250	\$500	\$1000
1.25-3	\$500	\$1000	\$2000
3.25-5	\$750	\$1500	\$3000
5+	negotiated	negotiated	negotiated

Investment Oversight Committee
Report to the APA Board of Trustees
David Fassler, MD., Chair

The following is an update for the APA Board of Trustees about the third quarter investment performance for 2015.

As of October 31, 2015, the market value of the long term pooled investment portfolio was \$131 million including \$31 million fixed income, \$48.6 million U.S. equity, \$23.6 million non-U.S. equity, \$10.8 million hedge fund of funds, and \$16 million real estate. This is a decrease of approximately \$1 million compared with the investment performance as of June 30, 2015.

Long Term Reserves Investment Performance Summary as of October 31, 2015



Current Portfolio Allocation: The portfolio remains well diversified with allocations within the ranges in accordance with policy guidelines.

Asset Class	% of Portfolio	Policy Asset Allocation Guidelines		
		Minimum	Target	Maximum
Fixed Income	23.7%	22.5%	25.0%	32.5%
U.S. Equity	37.2%	35.0%	37.5%	45.0%
Non-U.S. Equity	18.1%	10.0%	17.5%	20.0%
Hedge Fund of Funds	8.3%	5.0%	8.0%	15.0%
Real Estate - Core	12.3%	2.5%	12.0%	12.5%
Cash Equivalentents	0.0%	0.0%	0.0%	5.0%

There is no recommendation for rebalancing the portfolio at this time. The Committee has requested our investment advisor to conduct a review of the current policy with a recommendation regarding a potential increase in our real estate allocation to be discussed at the spring 2016 meeting.

UBS Trumbull Property Growth and Income Fund: At its meeting of December 7 – 9, 2013 the APA Board of Trustees approved increasing the real estate target allocation from 7.5% to 12%. The investment advisors recommended adding an investment in UBS Trumbull Property Growth and Income Fund (UBS-TPG) with a commitment of \$3 million pending capital call. In June 2015, the notice of capital call was received for the full amount of \$3 million. Effective July 1, 2015 funds were reallocated within the portfolio for this investment. The portfolio remains within the ranges set forth for this asset allocation.

Fees: The fees for the overall management of the portfolio are \$537,668, or 43 basis points (0.43%). This is below average industry standards of 53 basis points (0.53%) for a fund with this target asset allocation. After all fees are paid, APA's share of the reserves is \$71.8 million and APF's share is \$59 million.

Pension Fund

The market value of the Pension Fund as of October 31, 2015 was approximately \$10.6 million including \$3.9 million fixed income, \$4.8 million U.S equity, \$1.4 million non-US equity, and \$508,000 cash equivalents.

Fixed income was 36.7% versus a policy target of 40.0%, U.S. equity was 45.2% versus a target of 45.0%, non-U.S. equity was 13.3% versus a policy target of 15%, and cash equivalents totaled 4.8% versus a policy target of 0.0%.

The fee for management of the portfolio as of September 30, 2015 was \$14,822, or fifteen basis points (0.15%) compared to an industry average of twenty nine basis points (0.29%).

The Committee noted that there are currently 223 participants in the Plan, including 40 active participants, 113 vested and 70 currently receiving benefits.

The committee noted that several years ago APA looked into buying out the pension obligations and requested that APA staff review the costs of maintaining the plan and investigate options for buying out the obligations.

Retirement Savings Plan

The market value of the Retirement Savings Plan as of September 2015 was approximately \$31 million. The assets include \$9.8 million Fixed Income, \$14.7 million U.S. equity, \$2.4 million

Non-U.S. equity, and \$3.7 million lifestyle funds. There are loans of \$314K, and self-directed brokerage of \$309K. The breakdown of current utilization is fixed income 31.4%, U.S. equity 47.0%, non-U.S. Equity 7.8%, lifestyle funds 11.8%, loans 1.0%, and the portion of the portfolio in self-directed brokerage is 1.0%. There are 298 participants in the Plan.

Fees: The estimated annual fee for investment management is \$211k, 67 basis points, (0.67%). The industry average is 61 basis points (0.61%).

Review of Custodian

Mike Piotrowski, Marquette Associates has engaged SunTrust in fee negotiations and will report back to the Committee in the Spring 2016.

Retirement Savings Plan - Review of New York Life/John Hancock

David Keen, Chief Financial Officer informed the Committee that APA engaged an ERISA attorney to perform a legal review of the plan. The attorney suggested several best practices that could be implemented and raised a concern regarding the fiduciary responsibility for the Retirement Savings Plan. The Committee discussed the attorney's suggestion of moving oversight of the Retirement Savings Plan from under the Committee and establishing a Committee of employees to provide oversight of the Plan.

The Committee agreed with the recommendation and asked that the Administration present an action to the Board of Trustees that would transition the oversight of APA Retirement Savings Plan from the Investment Oversight Committee and the establish a Committee of employees to provide oversight for the Retirement Savings Plan.

Investment Strategy for New Building

The Committee discussed whether a specific investment strategy might be necessary in preparing for the lease/purchase of the new Headquarters. The Committee noted that the estimated cost of the buildout is approximately \$3 – 4 million. Given that the APA will lease with the option to purchase, the Committee discussed a variety of scenarios, including whether it might be helpful to allocate a portion of the reserves to be invested separately in the event of a decision to purchase, or whether it might be better to leave the funds as part of the reserve pool with the current asset allocation. The general consensus of the Committee is to leave the funds in the reserve pool with the current asset allocation.

Next Meeting

Item BOT #8B
Board of Trustees
December 12 – 13, 2015

The next meeting of the Investment Oversight Committee will take place in 2016, to coincide with the meeting of the Finance and Budget Committee. The Committee agreed that it is better to conduct the meetings of the Committee in-person rather than by conference call.

**Report of the Membership Committee
Executive Summary**

1. DB/SA Competitive Grants

ACTION: Will the Board of Trustees approve the recommendation of the Membership Committee that the \$30,000 for the DB/SA Competitive Grant funds be awarded as listed on page 4 of the committee's report?

2. Student Loan Program

ACTION: Will the Board of Trustees vote to approve the recommendation of the Membership Committee to partner with Credible, an affinity program that serves as an independent marketplace for student loans?

3. Guidelines for Election to Distinguished Fellowship

ACTION: Will the Board of Trustees vote to approve the recommendation of the Membership Committee to revise the Guidelines for Election to Distinguished Fellowship as shown in Attachment F?

4. Fellowship Applications

ACTION: Will the Board of Trustees vote that the Members listed in Attachment G be approved for Fellowship and Life Fellowship?

5. International Fellowship Applications

ACTION: Will the Board of Trustees vote that the Members listed in Attachment H be approved for International Fellowship?

6. Distinguished Fellowship Nominations

ACTION: Will the Board of Trustees vote that the Members listed in Attachment I be advanced to Distinguished Fellow or Distinguished Life Fellow?

7. International Distinguished Fellowship Nomination

ACTION: Will the Board of Trustees vote to approve the nominations listed in Attachment L for International Distinguished Fellow of the APA?

8. Dropping of Members – Membership Terminated by APA (off cycle)

ACTION: Will the Board of Trustees authorize dropping from APA membership the Members listed in Attachment O for failure to meet the requirements of membership?

9. International Membership

ACTION: Will the Board of Trustees vote to approve the applicants listed in Attachment P for International Membership?

10. Dues Relief Requests

ACTION: Will the Board of Trustees vote to approve the Membership Committee's recommendations on the due relief requests as listed in Attachment Q?

**Report of the Membership Committee
to the APA Board of Trustees
Rahn Kennedy Bailey, M.D., DFAPA, Chairperson**

The Membership Committee met October 17-18, 2015 to discuss a variety of membership issues, many of which are highlighted in this report.

Present: *Members:* Rahn K. Bailey, MD, DFAPA (Chairperson), William Arroyo, MD (Vice Chairperson), Frank Clark, MD, Karon Dawkins, MD, Kimberly Gordon, MD, Annette Matthews, MD, Elizabeth Morrison, MD, David Safani, MD, MBA, Emily Stein, MD; *Consultant:* Ms. Teri Harnisch; *Corresponding Member:* Joseph Rubin, MD; *Administration:* Susan Kuper, Yolanda Brunson, Trang Smith, Mia Smith, Jon Fanning

Unable to Attend: Jonathan Amiel, MD, Carol Bernstein, MD, Megan Testa, MD, Rudra Prakash, MD, Ms. Sara Stramel-Brewer, Kenneth Busch, MD

Membership Activity

Over 3,000 members were dropped in July for non-payment of dues and by the end of October approximately 500 (16%) of those dropped members have paid 2015 dues to reinstate. Total membership in October 2015 is up slightly from October 2014, primarily due to an increase in medical student membership. We are working diligently to demonstrate value at the earliest possible point to introduce potential psychiatrists to the APA, demonstrate value and create a pipeline of members. The RFM and ECP member segments are not trending at the same rate as last year but we have rolled out an end of year recruitment effort that we hope will have a positive impact. We thank the Board and Assembly members who participated in our RFM and General Member recruitment efforts over the past few months. The International membership segment is experiencing strong headwinds. As highlighted at the previous Board meeting, the double digit increase in the value of the dollar has made the price of APA membership correspondingly more expensive and the International segment is currently down double digits.

Attachment A shows an annual comparison of dues-paying and dues-exempt membership categories from January 2006 through January 2015, as well as monthly comparisons in 2015 through October. Attachment B shows gains and losses by membership class for all membership transactions in the month of October 2015, as well as year-to-date totals. This includes new members, reinstatements, drops, resignations, deceased members, as well as changes from one membership category to another (i.e., Resident-Fellow Member to General Member advancements or Life Member to Inactive Member status).

DB/SA Competitive Grants Process

The APA Board of Trustees reinstated monies in 2011 for a competitive grant process which allows District Branches and State Associations (DBSA) to apply for funding through a competitive application process. The Competitive grant options include the Expedited and Innovative grants. The APA Membership Committee is charged with establishing criteria, reviewing the submissions and making recommendations to the Board of Trustees for grant funding.

Competitive Grants

Competitive Grants consist of the Innovative and Expedited grants. While both grants are deemed competitive in nature, it was the intent of the Membership Committee to ensure that all District Branches and State Associations (DBSA) have access to funding; and not be hindered from participating in the application process due to human capital limitations. Each grant requires an application. However, the Expedited grant is a less rigorous process and is funded at the same amount for all applicants. The Innovative grant is funded at a variance not to exceed \$10,000; must demonstrate quantitative member value; and easily be replicated by other DBSA. In 2015, \$180,000 was allocated to Competitive grants with \$150,000 ear marked for Expedited grants. The remaining \$30,000 funds the Innovative grants.

Funding and Proposed Awards

The Competitive grant process is facilitated through the DB/SA Relations department. The Membership Committee is charged to establish grant criteria, review applications; including the evaluation, rating, and scoring of grant submissions leading to a formal recommendation for funding to the Board of Trustees.

The Expedited grants are intended to be accessible to all DBSA that apply. Since the grants are funded equally among all applicants that adhere to the application process, the awards are immediately processed and funded upon receipt of the grant agreement as determined by the grantor and grantee. In 2015, 56 DBSA applied for and received grants in the amount of \$2,678.57 each for a total award distribution of \$149,999.92. All awards have been dispersed to date with the exception of one pending receipt of the grant agreement.

In 2015, Innovative grant applications more than doubled over last year. Of the sixteen submissions, the grants that received the highest ratings are being recommended by the Membership Committee to receive funding up to \$30,000. A summary of all grant submissions is provided in Attachment C.

As mentioned, the available funding for the 2015 Innovative grant is \$30,000. Grant submission original requests among finalist total \$39,713. Upon completion of scoring, and deliberation among the Committee members, the Committee requests the following DBSAs receive awards as follows:

1. New York County Psychiatric Society, **\$5,300**
2. New Jersey Psychiatric Society, **\$2,500**
3. Northern California Psychiatric Society, **\$3,500**
4. New York State Psychiatric Association, **\$7,460**
5. South Carolina Psychiatric Association, **\$ 6,000**
6. Orange County Psychiatric Society **\$5,300**

Upon the Membership Committee reaching a funding consensus on the grant submissions, the Director of DB/SA Relations scheduled follow-up conference calls with DBSA Executive Directors to discuss the Membership Committee's proposed funding adjustments. Upon receipt of confirmation that the DBSA will adhere to the Membership Committee's recommendations; it is the Committee's hope that the

Board of Trustees will concur with recommendation to fund the aforementioned Grant submissions in the amounts defined for a total of \$30,000 in awards for the 2015 fiscal year.

Will the Board of Trustees approve the recommendation of the Membership Committee that the \$30,000 for the DB/SA Competitive Grant funds be awarded as listed on page 4 of the committee's report?

2015 Membership Recruitment and Retention Activities (September-December)

Ms. Trang Smith, Associate Director of Membership Development, reported on multiple recruitment and retention activities implemented by the APA Membership Department since the last committee report to the Board of Trustees. Recruitment efforts include an email campaign to non-member medical students of AMSA, a final push for residency programs to qualify for the 100% Club for residents, and an end of year direct mail campaign to over 2,000 non-member residents. Promotions to members include an email campaign to RFMs highlighting the exclusive benefits and opportunities for residents and fellows (open rate 31%), email campaign to ECPs highlighting the complimentary online subscription to FOCUS (724 ECPs have taken advantage of the offer this year), and email campaigns to members about the Find-A-Psychiatrist benefit with over 900 members opting-in through mid-November. Membership staff also exhibited at the American Academy of Child and Adolescent Psychiatry in October. They have also been working closely with the APA Integrated Marketing Department to rebrand membership marketing collateral and develop new materials. Details about these recruitment and retention efforts as well as other projects are detailed in Attachment D.

Student Loan Program

The Membership Department explored the benefits of Credible, an independent marketplace for student loans, and presented a proposal for the Committee to review and consider. Credible currently works with nine student loan lenders and expects to have a total of twenty in 2016. Some of the benefits for APA members using this marketplace include: 1) the ability to compare personalized offers from top lenders through a simple and free process, 2) a broad selection of loan products (variable and fixed rates), and 3) access to educational content related to student debt. Additionally, the member will receive up to \$150 when closing a loan, if APA agrees to forego the \$50 royalty fee so the member can receive it instead (per the recommendation of the committee). Several medical associations provided positive references. The APA General Counsel also reviewed the proposal and researched the firm. Overall, the Membership Committee was impressed with the student loan marketplace program and believes that it could be useful to members with heavy student loan debt to save money by refinancing. For additional information, refer to Attachment E.

Will the Board of Trustees vote to approve the recommendation of the Membership Committee to partner with Credible, an affinity program that serves as an independent marketplace for student loans?

Group and Solo Discount Programs

Jon Fanning reported on the group and solo discount programs that were approved by the Board of Trustees in July. The committee reviewed the FAQs and learned that eight DB/SAs have approved offering the discount programs to their members and another eight are considering doing so. Only one DB/SA has indicated that it is not interested. The Membership Department is developing promotional

material for the DB/SAs to use to promote the solo discount options. And the DB/SAs have been sent a toolkit with resources to assist them in promoting the group discount to hospitals and systems.

2016 Dues Renewal Cycle

The Committee reviewed the communications plan and membership marketing efforts to inform members about the new dues payment deadline for 2016. With the deadline moving up from June 30 to March 31, the Membership Department is focusing efforts to encourage members to pay by December 31, 2015. There was an Apple Watch promotion for members who paid by November 1, webpage banners reminding members to renew, and multiple email and direct mail communications highlighting various benefits and resources for members. The December issue of AJP will have a cover tip with “this is your last issue” to encourage members to pay by the end of the year. Starting in January, the communications will focus on the 90-day grace period members have to pay 2016 before losing their membership after March 31.

Membership Dues Rates for International Resident-Fellow Members

In July 2015, the Board of Trustees approved a recommendation from the Membership Committee to establish a category of membership for International Resident-Fellow Members. The action item was referred to the Bylaws Committee and the Board approved the changes to the Bylaws at the October 2015 meeting. Due to the timing of report deadlines, the Assembly will not vote to ratify the Bylaws changes until May 2016. The Membership Committee plans to launch the new category at the 2016 Annual Meeting shortly after the Bylaws are ratified and therefore the dues rates for the new International RFM category must be determined in advance.

The Membership Committee recommended to the Finance and Budget Committee that the dues rates for International RFMs be set at the same proportional discounted rate to the regular U.S. Resident-Fellow Member rate as the International Member dues are to the regular U.S. full dues rate, outlined below.

	Full Dues Rate		RFM Rate	
US Member	\$575		\$105	
World Bank Income Groups	Intl Mbr Rates	% of \$575	Proposed Intl RFM Rates	% of \$105
High Income	\$210	36.5%	\$38	36.5%
Upper Middle Income	\$180	31.3%	\$33	31.3%
Lower Middle Income	\$130	22.6%	\$24	22.6%
Lower Income	\$50	8.7%	\$9	8.7%

Changing ECP Status to 8 Years

During its June 2015 meeting, the Joint Reference Committee (JRC) referred an action paper to the Membership Committee and the Finance and Budget Committee. It was requested that both committees look into the feasibility of implementing the action paper including a cost/benefit analysis. The action paper asks that the APA adopt a similar position to the AMA in defining the ECP period as eight years following the completion of residency/fellowship training. The Membership Committee did

not fully understand the benefits of extending ECP status by one year. The paper referenced mentorship and leadership opportunities, so giving the opportunity to serve as the ECP representative to the Assembly to more members would be a benefit. APA offers a complimentary online subscription to FOCUS, which is a benefit that would then be extended to an additional 850 members at a *potential* cost of \$336 per subscription were these members to purchase a subscription. Of the voting members present, three were in favor, three were opposed, and three abstained from voting. This information will be reported back to the JRC.

Dues Abatement for Puerto Rico Members

During its July 2015 meeting, the Board of Trustees referred an action from the report of the Speaker to the Membership Committee and the Finance and Budget Committee. The action was to approve an action paper from the May 2015 Assembly, 2015A1 12.X: *Dues Abatement for General Psychiatrists/Members in Puerto Rico*. The paper requests that APA dues for members in Puerto Rico be assessed at the same rate as members in Canada (\$350 vs. \$575) for several reasons, including that members do not have access to APA sponsored malpractice insurance and Puerto Rico does not receive PAC or other legislative support from APA. There was a lot of discussion with some committee members favoring the dues reduction and others voicing their opposition. The discussion closed with a vote and the Membership Committee voted not to support reducing dues for members in Puerto Rico.

Dues Relief Options

As a result of several items on the agenda for discussion at the May 2015 meeting, a work group was formed to meet and discuss the issues over the summer and bring recommendations to the Membership Committee in October. The discussion items included a request from the BOT WG on MUR Issues for the committee to look at part-time dues options and another was a request from a district branch to review the requirements for Permanent Inactive status. The work group met via conference call in August and had an extensive discussion on these and other issues. Ultimately, they agreed that it would not be feasible to offer reduced dues to part-time employees for many reasons. They also did not have strong opinions about making changes to the existing dues relief criteria and agreed the current guidelines and policies are adequate because they provide options for members to request reduced dues under various scenarios. The Membership Committee supported the recommendations of the work group.

International Medical Students

The Membership Committee was informed that there was some discussion at the October 2015 Board of Trustees meeting held the previous week about establishing a new membership category for International Medical Students and a request for the Membership Committee to explore further. This came to the committee as a new business item and there was not adequate time for discussion. Therefore, a new work group was formed to review this further and bring a recommendation to the full committee at its next meeting in May 2016. The work group will also consider whether there should be changes to the current policy for determining eligibility of psychiatrists who were training abroad but now living in the U.S. without ACGME-approved training or if a new category of membership should be established.

Life Status Dues

The Committee was also informed that the subject of dues for members in Life status and whether the length of time should be extended has been raised on several occasions by various APA leaders. A request was made for the Membership Committee to review the current policy and explore whether any changes should be made. This came to the committee as a new business item and there was not adequate time for discussion during the meeting. The committee agreed to continue discussion as a group via conference calls before the next in person meeting.

Guidelines for Election to Distinguished Fellowship

At last year's committee meeting a work group was appointed to review the Distinguished Fellowship guidelines. The primary objectives for reviewing the current Distinguished Fellowship Guidelines were to 1) provide a clearer explanation of what the committee is looking for in each of the ten categories so the applicant has a better understanding of how to document his/her activities and accomplishments, and 2) standardize the scoring for reviewers. The work group met several times throughout the year to revise both the guidelines and the nomination form. They also started drafting a document with examples for each of the ten categories to be a supplement to the guidelines. Dr. Safani, work group chair, presented all three documents in draft form for the committee to review and discuss. The Committee agreed with the direction of the work group's recommendations and as a group further revised the Guidelines which are presented in Attachment F. The recommended changes do not alter the meaning or value of Distinguished Fellowship, but rather are meant to clarify the intent of what the Membership Committee expects the nominees to document in their application. The Guidelines are included in the Operations Manual and therefore any changes must be approved by the Board of Trustees.

Will the Board of Trustees vote to approve the recommendation of the Membership Committee to revise the Guidelines for Election to Distinguished Fellowship as shown in Attachment F?

The work group is continuing to work on revisions to the nomination form and the supplemental documentation and expects to have the information finalized in time for the start of the 2016 Distinguished Fellowship nomination process.

Fellowship Applications

There were 759 applications for Fellowship this year from members in 68 District Branch/State Associations (DB/SAs). The names of all Fellowship applicants were provided to the DB/SAs in September for the 30-day comment period. Only a few responded with comments, but those that did had positive, supportive comments about the applicants. Additionally, one deferral for Distinguished Fellow was approved for Fellowship. The committee voted that all 760 applications for Fellowship be approved (from 697 General Members, 62 Life Members, 1 Resident-Fellow Member).

Will the Board of Trustees vote that the Members listed in Attachment G be approved for Fellowship and Life Fellowship?

International Fellowship Applications

There were 211 applications submitted for International Fellowship from members in 49 countries. The committee voted that all applications for International Fellowship be approved.

Will the Board of Trustees vote that the Members listed in Attachment H be approved for International Fellowship?

Distinguished Fellowship Nominations

This year the Committee received 129 nominations for Distinguished Fellowship from 41 District Branch/State Associations. Nominations were assigned a preliminary, secondary, and tertiary reviewer in August to score in advance of the Committee's meeting. The reviewers submitted their scores in September which determined the nominations that would be reviewed at the meeting. Nominations that scored below the threshold of 25 points and 5 categories were reviewed and discussed by the Committee. Of the 129 nominations, 127 were approved (from 38 General Members, 74 Fellows, 3 Life Members, and 12 Life Fellows listed in Attachment I) and 2 were deferred (Attachment J). Attachment K is a comparison of the number of Distinguished Fellowship nominations submitted by the DB/SAs from 2006-2015.

Will the Board of Trustees vote that the Members listed in Attachment I be advanced to Distinguished Fellow or Distinguished Life Fellow?

International Distinguished Fellowship Nomination

The Committee reviewed and approved 3 nominations for International Distinguished Fellowship listed in Attachment L.

Will the Board of Trustees vote to approve the nominations listed in Attachment L for International Distinguished Fellow of the APA?

Resignations

With the authorization of the Board of Trustees, the Medical Director has regretfully accepted the resignations of 5 members listed in Attachment M (September – October 2015).

Medical Student Members Whose Memberships Have Expired

Medical Student Members who graduated in 2015 are listed in Attachment N (n=804). Their memberships will expire on December 31, 2015, since they are no longer eligible for medical student membership.

Membership Processing Action Items

Dropping of Members – Membership Terminated by APA (off cycle)

Will the Board of Trustees authorize dropping from APA membership the Members listed in Attachment O for failure to meet the requirements of membership?

International Membership

Between September and October, 8 applications for International Membership have been reviewed and approved. The applicant names are provided in Attachment P for the Board's approval.

Will the Board of Trustees vote to approve the applicants listed in Attachment P for International Membership?

Dues Relief Requests

The Membership Committee reviewed 14 requests for dues relief (see Attachment Q) and recommends that:

- 1 dues waivers be approved
- 9 dues reductions be approved
- 4 transfers to Permanent Inactive Member status be approved

Will the Board of Trustees vote to approve the Membership Committee's recommendations on the due relief requests as listed in Attachment Q?

Respectfully submitted,

Rahn Kennedy Bailey, M.D., DFAPA
Chairperson, APA Membership Committee

**Comparison of Membership Totals 2006 - Present
Dues-Paying and Dues-Exempt Membership Categories**

Item: 8.C
Board of Trustees
December 12-13, 2015
Attachment A

Number of Members in Dues-Paying Member Categories

Mbr Class	Jan-06	Jan-07	Jan-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-13	Jan-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15
RFM	4,370	4,339	4,357	4,432	4,249	4,187	3,725	3,939	4,396	4,546	4,683	4,740	4,828	4,873	4,884	3,456	3,708	3,918	4,181
GM	15,486	15,433	15,552	15,335	14,947	14,136	13,366	13,116	12,666	12,163	12,259	12,367	12,479	12,571	12,703	12,208	12,317	12,397	12,470
DF	2,072	2,032	1,996	1,910	1,777	1,642	1,552	1,482	1,425	1,365	1,367	1,366	1,367	1,366	1,367	1,347	1,349	1,352	1,352
FE	934	1,045	1,039	1,210	1,406	1,587	2,010	2,177	2,620	3,373	3,373	3,371	3,374	3,374	3,373	3,256	3,276	3,277	3,279
AM	11	9	6	6	4	3	3	3	1	0	0	0	0	0	0	0	0	0	0
LM	1,874	1,908	2,023	2,060	2,133	2,185	2,135	2,167	2,125	2,068	2,067	2,062	2,062	2,063	2,062	1,975	1,979	1,980	1,978
DLF	1,636	1,657	1,651	1,656	1,625	1,656	1,638	1,640	1,597	1,549	1,549	1,548	1,548	1,547	1,546	1,526	1,526	1,526	1,526
LF	101	155	198	286	355	406	550	609	668	756	758	758	758	758	758	740	742	744	741
LA	21	16	17	12	6	6	5	4	4	4	4	4	4	4	4	3	3	2	2
IMBR	1,213	1,363	1,531	1,582	1,693	1,515	1,388	1,424	1,525	1,553	1,587	1,611	1,658	1,758	1,758	1,331	1,351	1,364	1,367
IFE	62	63	62	59	53	46			147	427	427	427	427	427	427	408	408	408	409
IDF							49	64	68	65	64	65	65	66	66	60	62	62	62
Sub total	27,780	28,020	28,432	28,548	28,248	27,369	26,421	26,625	27,242	27,869	28,138	28,319	28,570	28,807	28,948	26,310	26,721	27,030	27,367

Number of Members in Dues Exempt Member Categories

MS	1,980	2,256	1,910	1,217	1,152	1,017	981	1,111	1,456	1,997	2,067	2,293	2,412	2,498	2,563	2,625	2,719	2,891	2,884
LM	1,664	1,673	1,693	1,715	1,594	1,651	1,675	1,719	1,801	1,869	1,864	1,845	1,841	1,834	1,829	1,825	1,822	1,816	1,811
DLF	2,267	2,280	2,230	2,227	2,113	2,165	2,186	2,245	2,322	2,398	2,393	2,372	2,368	2,362	2,353	2,350	2,345	2,339	2,328
LF	2	4	20	29	39	56	87	132	170	229	229	228	228	227	227	227	227	227	226
LA	55	55	51	54	53	51	49	48	44	42	42	41	41	41	41	41	41	41	41
IM/IF	2,010	2,096	2,078	2,057	1,986	1,978	1,942	1,937	1,924	1,929	1,925	1,931	1,931	1,928	1,924	1,944	1,939	1,937	1,938
HF	58	54	53	52	52	51	46	45	44	41	41	41	41	41	41	41	41	41	41
Sub total	8,036	8,418	8,035	7,351	6,989	6,969	6,966	7,237	7,761	8,505	8,561	8,751	8,862	8,931	8,978	9,053	9,134	9,292	9,269
TOTAL	35,816	36,438	36,467	35,899	35,237	34,338	33,387	33,862	35,003	36,374	36,699	37,070	37,432	37,738	37,926	35,363	35,855	36,322	36,636

RFM Resident-Fellow Member	LF Life Fellow
GM General Member	LA Life Associate
DF Distinguished Fellow	IMBR International Member
FE Fellow	IFE International Fellow (re-named IDF and new criteria established for IFE 2013)
AM Associate Member	IDF Intl Distinguished Fellow (*IFE category name changed to IDF Jan 2012)
LM Life Member	MS Medical Student
DLF Distinguished Life Fellow	IM/IF Inactive Member/Inactive Fellow
	HF Honorary Fellow

**Membership Transactions -- Gains and Losses
October 2015**

Item: 8.C
Board of Trustees
December 12-13, 2015
Attachment B

DUES-PAYING MEMBER CATEGORIES																						
Member Class	Mbr Counts 9/30/15	GAINS								LOSSES								Net Gain/Loss		Member Counts End of Month		
		New		Reinstate		Class Changes In		Subtotal Gains		Drop		Resign		Deceased		Class Changes Out					Subtotal Loss	
		Mo	YTD	Mo	YTD	Mo	YTD	Mo	YTD	Mo	YTD	Mo	YTD	Mo	YTD	Mo	YTD	Mo	YTD		Mo	YTD
RFM	3,918	146	924	46	288	74	344	266	1,556		892		16		0	3	908	3	1,816	263	-260	4,181
GM	12,397	5	157	81	968	9	926	95	2,051	1	1,492	2	31		3	19	1,378	22	2,904	73	-853	12,470
DF	1,352		0		16		105	0	121		24		0		3		145	0	172	0	-51	1,352
FE	3,277		0	3	41		964	3	1,005		124	1	2		5		172	1	303	2	702	3,279
AM	0		0		0		0	0	0		0		0		0		1	0	1	0	-1	0
LM	1,980		0		21		277	0	298		89	1	4	1	5		241	2	339	-2	-41	1,978
DLF	1,526		0	1	6		161	1	167		22		0	1	4		183	1	209	0	-42	1,526
LF	744		0		9		163	0	172		18		0	2	2	1	62	3	82	-3	90	741
LA	2		0		0		1	0	1		1		0		1		0	0	2	0	-1	2
Intl Mbr	1,364	3	214	1	79		3	4	296		418		32		1	1	293	1	744	3	-448	1,367
Intl FE	408		0	1	3		282	1	285		19		1		1		0	0	21	1	264	409
Intl DF	62		0		3		2	0	5		6		0		1		0	0	7	0	-2	62
Subtotal	27,030	154	1,295	133	1,434	83	3,228	370	5,957	1	3,105	4	86	4	26	24	3,383	33	6,600	337	-643	27,367
NON DUES-PAYING CATEGORIES																						
MS	2,891	52	1,286		0		0	52	1,286		28		0		0	59	248	59	276	-7	1,010	2,884
LM	1,816		0		1		146	0	147		1		1	5	64		18	5	84	-5	63	1,811
DLF	2,339		0		0		181	0	181		0		0	11	78		9	11	87	-11	94	2,328
LF	227		0		0		63	0	63		1		1	1	1		2	1	5	-1	58	226
LA	41		0		0		0	0	0		0		0		1		0	0	1	0	-1	41
Inact	1,937		0	1	2		33	1	35		0		0		25		7	0	32	1	3	1,938
HF	41		0		0		0	0	0		0		0		0		0	0	0	0	0	41
Subtotal	9,292	52	1,286	1	3	0	423	53	1,712	0	30	0	2	17	169	59	284	76	485	-23	1,227	9,269
TOTAL	36,322	206	2,581	134	1,437	83	3,651	423	7,669	1	3,135	4	88	21	195	83	3,667	109	7,085	314	584	36,636

2015 Grant Summaries

I. Alabama Psychiatric Physicians Association (APPA) - \$5,000

The APPA would like to have a follow up mini conference for our early career psychiatrist and resident fellow members in conjunction with our fall conference. This grant allows us to not charge them a registration fee and bring in good quality speakers to talk about employment contracts, burn out, and so much more. This program specifically targets young psychiatrists and shows value in why they need to belong to the organization. We want to be able to provide them specific and valuable tools for their practice environment.

II. Hawaii Psychiatric Medical Association (HPMA) - \$2,900

The Hawaii Psychiatric Medical Association (HPMA), District Branch requests a renewal in the amount of \$2900 of our previously funded 2013 DB INNOVATIVE GRANT of \$2700 to improve psychiatric access in Hawaii's underserved and rural communities due to increasing concern in Hawaii regarding limited access to psychiatric care. Factors identified were the lack of understanding about mental illness and stigmatization of mental health conditions, which may be, in part, culturally based. The two components we propose for our revised project and would like to request renewal of funding for based on the success of the first project are: 1) Grass Roots Outreach to Rural Consumers, and 2) Outreach to Rural Providers (Psychiatrists).

III. Maine Association of Psychiatric Physicians (MAPP) - \$10,000

To collaborate with Safe Space Radio (SSR) to provide CME's from podcasts about the human, often silenced, experience of living with mental illness and other challenges to mental health. Safe Space Radio is a public health intervention to reduce stigma and shame, provide hope and access to resources to reduce suicide. This grant would create a partnership between our DB and SSR in order to create an online platform for CME's about often hidden subjects. It will also serve as a clinical resource for psychiatrists, our mental health and primary care colleagues as well as some of our underrepresented patients.

IV. Montana Psychiatric Association (MPA)- \$10,000

The MPA will organize 1 (one) live CME event in 2016 that will be simultaneously webcast to our rural members and non-members. An MPA committee will meet in 2015 to gather information on desired CME courses as well as location. This all-day event will also have speakers and printed take-home materials. To correspond with the event, depending on funds received, a meet & greet reception will be hosted by the MPA in order to increase relevance and participation with Montana psychiatrists – whether they be members or non-members. This will be the first event like this for the MPA.

V. Northern California Psychiatric Society (NCPS)- \$8,500 The Wellness Committee of the Northern California Psychiatric Association proposes the creation of support groups for psychiatrists that will address various difficult and stressful situations that arise in nearly everyone's career. The groups will be facilitated by members of the Wellness Committee. The groups will meet at a time, place, and

frequency decided by each group, mostly likely every other week. Confidentiality will be important. The groups will be characterized as support, rather than treatment.

VI. New Jersey Psychiatric Association (NJPA) - \$2,500

The NJPA is proposing a 2016 two part recruitment campaign focusing on ECPs. The first recruitment effort would kick-off in December 2015 offering eligibility for prize packages for any ECP joining and paying by March 31, 2016. There will be three winners with the second place package being more valuable than the third, and so on. Phase two will be a "15 for 12" campaign (15 months of membership for the price of 12). NJPA will market the campaign in August 2016 to all non-member ECPs (excluding those who had just lapsed in 2016). The ECP could join beginning October 1 and NJPA would waive 2016 dues.

VII. New York County Psychiatric Society (NYCPS)- \$5,253

The RFM (Resident Fellow Member) to ECP (Early Career Psychiatrist) Career Transition Project will provide one-on-one career consultation sessions between psychiatrists at the beginning of their careers and experienced psychiatrists, as well as individualized CV review. During their session, RFMs/ECPs will receive CV tips, general career advice, and answers to specific career field questions they have regarding leaving residency and beginning their career. These sessions will also assist RFMs and ECPs in building a professional network by introducing them to psychiatrists outside of their residency or fellowship programs. The program will be open to last year residents, fellows, and first year ECPs

VIII. New York State Capital District Branch - \$10,000

A day-long conference will encourage interest and participation of Capital Region psychiatrists in Medicaid transformation and the effects of this transformation on psychiatric practice. The overall goal is to engage psychiatrists in understanding key decisions being made about Medicaid and other psychiatric practice issues, and to help psychiatrists position themselves to be able to take advantage of opportunities to enhance or expand their role in assisting individuals work toward recovery in community-based settings.

IX. New York State Psychiatric Association (NYSPA) - \$7,460

All Residency Training Directors (RTDs) from New York State Psychiatry Residency Programs will be invited to meet to discuss how NYSPA and the APA can increase their value to RTDs and residents. Following the meeting(s) with the RTDs, a Committee for Residency Training Directors will be formed to increase communication between RTDs and the local, state and national APA.

X. Ontario District Branch (ODB) - \$6,165.50

The University of Toronto, Department of Psychiatry has about 800 faculty members (600 MD's) and is enlarging its 5 year postgraduate training to 200 MIT's. Our project aims to organize a major recruiting drive to increase the number of those who might join APA, and motivate those on drop lists to stay. Our District Branch will organize a special 'Recruiting Salon' to achieve this objective, as an innovative extension of our award winning CME Psych Salon Program*.

XI. Orange County Psychiatric Society (OCPS) – \$10,000

In light of alarming rates of physician suicide in the US, efforts to promote resident wellness have become increasingly dire. Resident well-being has been shown not only to impact the quality of training during residency, but also to affect patient care. While studies suggest that small, focused interventions may positively affect resident wellness, the most convincing evidence supports the efficacy of comprehensive resident wellness programs. The following proposal is for a resident wellness program (RWP) targeting psychiatry residents in training at UCI Medical Center. The RWP encompasses six main areas: mentorship, socialization, professional development, education, community service and mental health.

XII. Queens County Psychiatric Society (QCPS) - \$5,522

Within the borough of Queens, the second most populous county in New York State, six hospitals exist side by side providing psychiatric services to its approximately 2.3 million residents. It is estimated that more than three hundred and fifty psychiatrists are employed by these hospitals – many are American Psychiatric Association members *but* many are not. It is our *mission* to *target* and *educate* these non-APA members on the benefits of joining over 36,000 colleagues in a professional organization that promotes the highest quality of care for individuals with mental disorders and their families. At the same time we will continue to engage our current active members to retain them.

XIII. South Carolina Psychiatric Association (SCPA) - \$6,000

We propose a “Women in Psychiatry Mentorship Program” to originate from the SCPA, but that could be duplicated by other District Branches. This program would be an outreach project to provide mentoring and networking for young female physicians who are in their residency training or in the early stages of their career. The grant money would be used to provide a “Women in Psychiatry Soiree” at the SCPA Annual Meeting in January of 2016 to kick off the program. The overall program would include a webpage to provide mentorship materials and information as well as sign up for mentors and mentees as well as quarterly in person events.

XIV. Society of Uniformed Services Psychiatrists (SUSP) - \$10,000

In an effort to grow membership by expanding the organization’s capabilities and services to members, SUSP proposes holding a two day Summit in Washington, DC focusing on member recruitment and member engagement. In deploying the meeting, SUSP will give highest priority to the great geographic diversity of its members and potential members. The meeting will be professionally facilitated. Participants will include SUSP leadership and selected SUSP members, again focusing on geographic diversity.

XV. Washington Psychiatric Society (WPS) - \$ 10,000

The purpose of the project is to create a "viewbook" showcasing WPS activities and accomplishments. The publication will be offered online in a "flipbook" format, as well as in hard copy magazine format. The "viewbook" will be used as a tool to recruit and retain members, but also as a way to educate members about the engagement opportunities available within WPS. The online version of the book

will be enhanced through the use of live links and videos. The hard copy version will use QR codes for Web links.

XVI. Western Canada District Branch (WCDB) - \$5,500

WCDB appreciates your consideration for funding our proposal to host an educational evening with a keynote speaker (TBD) in Vancouver in March 2016, to increase recruitment of new members, and cultivate and retain existing members. Resident-Fellow Members will be engaged by competing for a stipend which will offset the costs of attending the meeting. In October 2012, a similar evening with Canada's former First Lady Margaret Trudeau as keynote speaker was held. Please refer to the review by Resident-Fellow Member Dr Tyler Oswald published in our 2013 newsletter *Catharsis!* and appended to this application (page 4).

**2015 Membership Recruitment and Retention Activities
 (September-December 2015)**

Medical Students

An email campaign to AMSA email list of 6,920 medical students who are graduating in 2017 and 2018 is scheduled for November. Membership has also signed up to exhibit at the 2016 AMSA Annual Meeting, April 1-2 in Crystal City, Virginia.

Resident-Fellow Members

100% Club

An email campaign to residency training directors was sent in mid-September. This email was targeted to programs that were in the 100% Club last year, encouraging them to reach out to their nonmember residents and residents who need to pay dues so they can qualify again this year. A follow up email was sent in mid-October. District branches were also contacted with the status of residency training programs and rosters within their regions and were encouraged to visit/assist in getting these programs and residents to achieve 100% status. An email campaign was also sent to lapsed RFM members to pay their dues in order to maintain 100% status. Residency Coordinators of programs close to 100% were called and emailed throughout October informing them of members who need to join or pay. Programs that have not submitted resident rosters will continue to receive personal calls and email requests.

As of November 2015 the number of training programs and residents qualifying for 100% Club increased over the previous year. Current standings are as follows:

	2014-2015		2015-2016	
	# of Programs	# of Residents	# of Programs	# of Residents
Platinum level (100% for 5 consecutive years)	6	121	7	146
Gold level (100%)	46	1,117	44	1068
Silver level (90-99%)	8	213	11	299
Bronze level (80-89%)	11	308	19	325
TOTAL	71	1,759	81	1,839

The 100% Club deadline was extended to December 31, 2015 to encourage more residents and fellows to join the APA. To take advantage of the extension an email campaign to all residency training directors and program coordinators will be sent. There will also be an announcement on the Chief Resident listserv encouraging them to galvanize their peers to join; and an announcement on the DB/SA listserv to encourage DB/SA executives to continue their local recruitment efforts.

An email campaign to RFMs was sent on September 10th to over 3,500 with an open rate of 31%. The email promoted exclusive resources and opportunities to residents and fellows.

Recruitment Campaign

In November a direct and email campaign was also implemented to all nonmember residents in our database. Five target markets were identified:

- (1) Residents who have never joined (1,286)
 - (2) Dropped RFMs in 2015 (440)
 - (3) Dropped RFMs prior to 2014 (210)
 - (4) Former Medical Student members who are enrolled in psychiatry residency training (253)
 - (5) Current MS members with memberships expiring in December who are enrolled in psychiatry residency training (210)
- TOTAL = 2,299

The direct mail package consisted of a specifically tailored cover letter along with the RFM membership brochure, application and a flyer promoting the first monthly free Learning Center module.

RFM to GM Advancement

RFMs who finished residency training in 2015 (according to our records) have been automatically upgraded to General Member status. In order to remain in the General Member status, we must have verification of a current valid medical license and that residency training was in fact completed. Email and direct mail campaigns are sent in an attempt to obtain verification directly from members. Membership staff also search for medical licenses online and request training programs to verify completion. The RFM to GM advancement is an ongoing process that often takes up to a year to complete. The following campaigns have been conducted since September.

Date:	Channel:	# of 2015 RFM Graduates:
September 17	Direct Mail Brochure	722
September 23	Email	577
October 6	Direct Mail Brochure	510
October 13	Email	497
November 6	Direct Mail Brochure	420
November 19	Email	412

ECP Focus –Complimentary Online Subscription Offer

An email campaign was sent on October 23 to 4,100 ECP members who do not subscribe to *Focus* to promote the complimentary online subscription offer to ECPs. Year to date 724 ECPs have taken advantage of this offer.

Find a Psychiatrist Opt-In Campaign

On October, another round of emails to over 13,800 US and Canadian members (excluding RFMs, Medical Students, Intl Member, Intl Fellow and Intl Distinguished Fellow) was sent to encourage members accepting new patients to opt-in to the Find a Psychiatrist database. There are 929 providers in the database as of October 29.

- Opt-in link is <http://apps.psychiatry.org/optinfap/Login.aspx>
- Link to see the functionality of the Find a Psychiatrist database - <http://finder.psychiatry.org/>

Exhibits (U.S.)

Membership staff exhibited at American Association of Child and Adolescent Psychiatry in San Antonio, Texas, October 26-31. We received 1 general member application, 1 resident-fellow application, and 1 FAPA application. Attendee traffic to the booth was mainly APA members stopping by to say hello and request information on specific APA programs.

Savings Programs

Membership has developed marketing collateral for DB/SA use to promote various ways for APA members to save time and money on their membership dues including the multi-year discount, couple discount, recruit 3 members discount, lump sum dues, and the scheduled payment plan. Marketing collateral includes flyers, buckslips, and ads which are posted on the DB/SA membership resource webpage for download and use in local branch communications and promotions.

District Branches/State Associations

Ms. Trang Smith, Associate Director of Membership Development, continues to do individual DB/SA outreach with a focus this quarter on residency training programs to boost RFM enrollment and retention.

General Activities

Membership continues to work with Marketing to get all of our membership collateral rebranded and designed. New membership brochures, benefits sheets, invoices, forms, welcome and renewal packets, ads, etc. New collateral will be posted on DB/SA membership resource page as they come available and announced on the DB/SA listserv. Membership has also been working with Communications on redesigning and updating content on the membership Join and membership benefits webpages.

credible

The Student Loan Marketplace

CONFIDENTIAL, SEPTEMBER 2015

Credible's Partner Program empowers Affinity Groups to help solve the \$1.2 trillion student debt problem

Student debt

- Fastest growing consumer debt category of the last decade
- \$1.2 trillion in student loans affecting millions of young people
- Affinity Groups uniquely positioned to help their members

Benefits of the marketplace model

- Marketplace model has multiple advantages over partnering with a direct lender
- Increases repayment options, allows broader eligibility, improves product transparency, and provides the ability to access new lenders

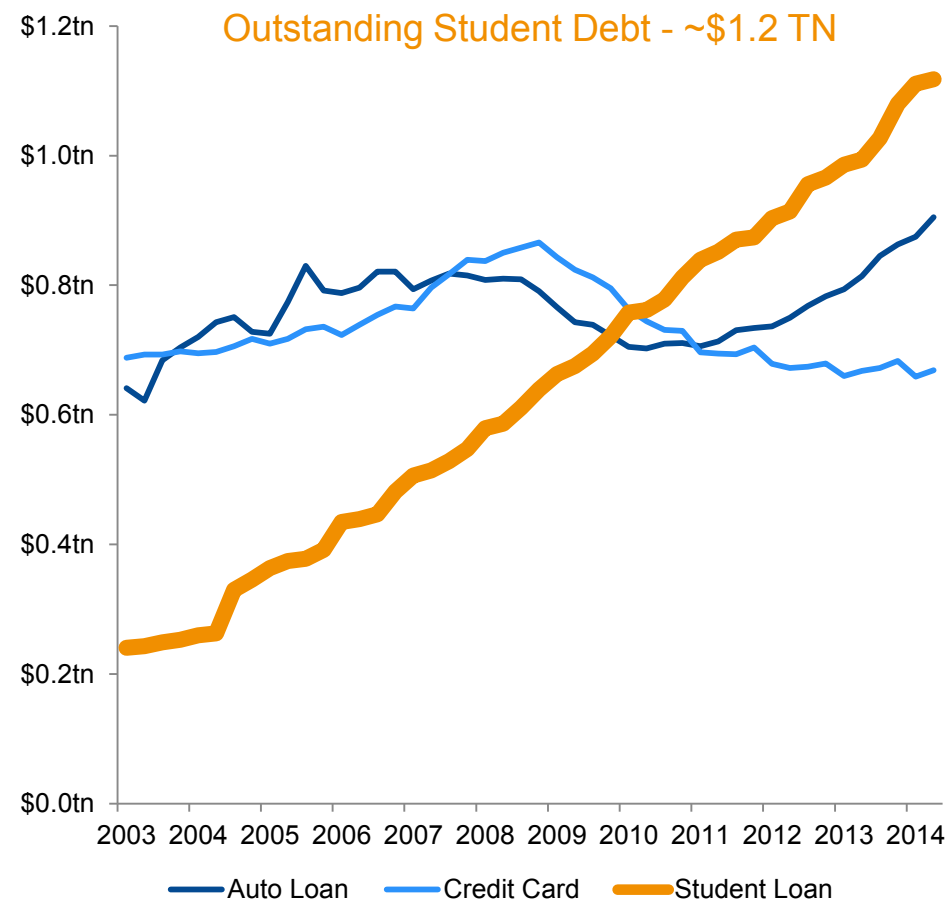
Credible's Partner Program

- Significant benefits to APA members and the APA organization
- Opportunity to increase engagement and generate revenue
- Credible is the trusted partner to 40+ Affinity Groups

Student debt and affinity groups

Student debt has been the fastest growing consumer debt category of the last decade

- Student debt is the fastest growing debt category of the last decade, rising to \$1.2 trillion in 2015
- Second-highest category of debt behind mortgages
- 40 million borrowers with average balance of \$33,000
- The average medical student accumulates \$170,000 in student loan debt

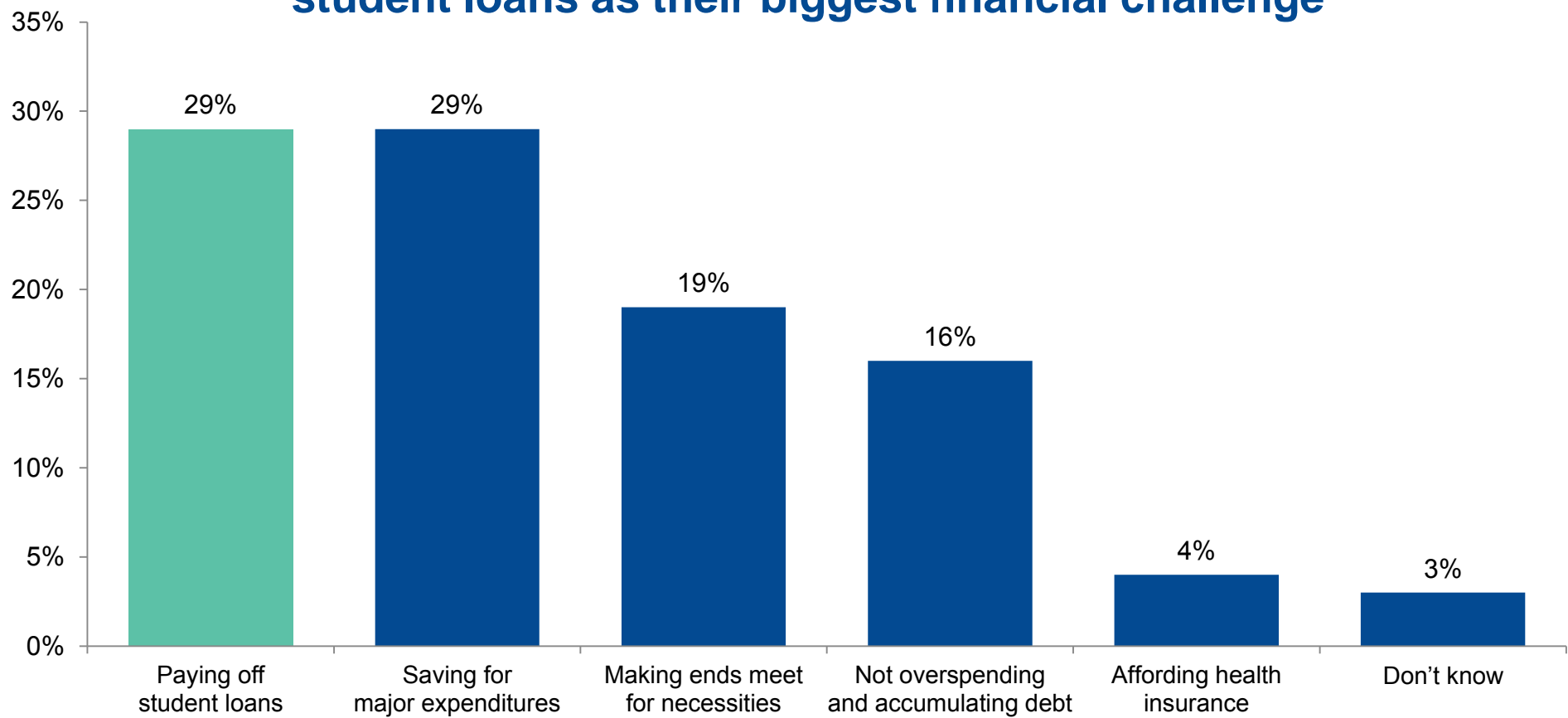


Source: Federal Reserve Bank of New York (2014)

Note: Excludes mortgage debt

The biggest financial challenge for young people is paying off student loans

Young people who define themselves as starting out cite paying off student loans as their biggest financial challenge



Source: Allstate/National Journal Heartland Monitor XXIII Key Findings - FTI Consulting (29 May 2015)

Affinity Groups are uniquely positioned to help their members with student debt – Credible is the ideal solution

Selected Credible partners:



Benefits of the marketplace model

Credible's marketplace helps create better solutions for the financing needs of American Psychiatric Association members

Credible manages the marketplace with dedicated, US-based customer care

40+ Affinity Partners
with 4 million members



credible



A dedicated customer care team to guide members through the process



Direct, VIP lines of communication to each lender




Advocacy, from Credible, on behalf of your members

9 lenders in an open, transparent marketplace



Credible provides significant advantages over a direct lender in the refinancing process

		Direct Lender
1 Broadest selection of repayment options	Fixed and variable rate products with 2, 3, 5, 8, 10, 12, 15, 20 and 25 year terms	Most lenders offer only a few loan term options
2 Broader eligibility and increased conversion	Higher conversion rate as a result of greater selection and eligibility, with loan products for every state	Lower conversion as a result of fewer choices and more stringent eligibility
3 Transparent view of borrowers options	Borrowers can compare multiple offers, from multiple lenders	Single lender products only
4 Access to new lenders entering the market	As new lenders enter the market, new products can be made available on Credible	Committed to a single lender for the term of the partnership

1

Allows members to find the right product through the broadest selection of repayment options

Fixed and variable products with 2, 3, 5, 8, 10, 12, 15, 20, and 25 year terms

Jeremy has just finished school, has a young child and second on the way. Money is tight and lower monthly loan payments are his top priority.



15 year / 4.94% fixed

Stacy is single and earning a high salary. She is more comfortable with the risk than most as she intends to pay her loans off ahead of schedule.



5 year / 1.90% variable

Amy and Ron just recently graduated and will be getting married. Plotting their financial future together would be made easier with consistently lower payments.



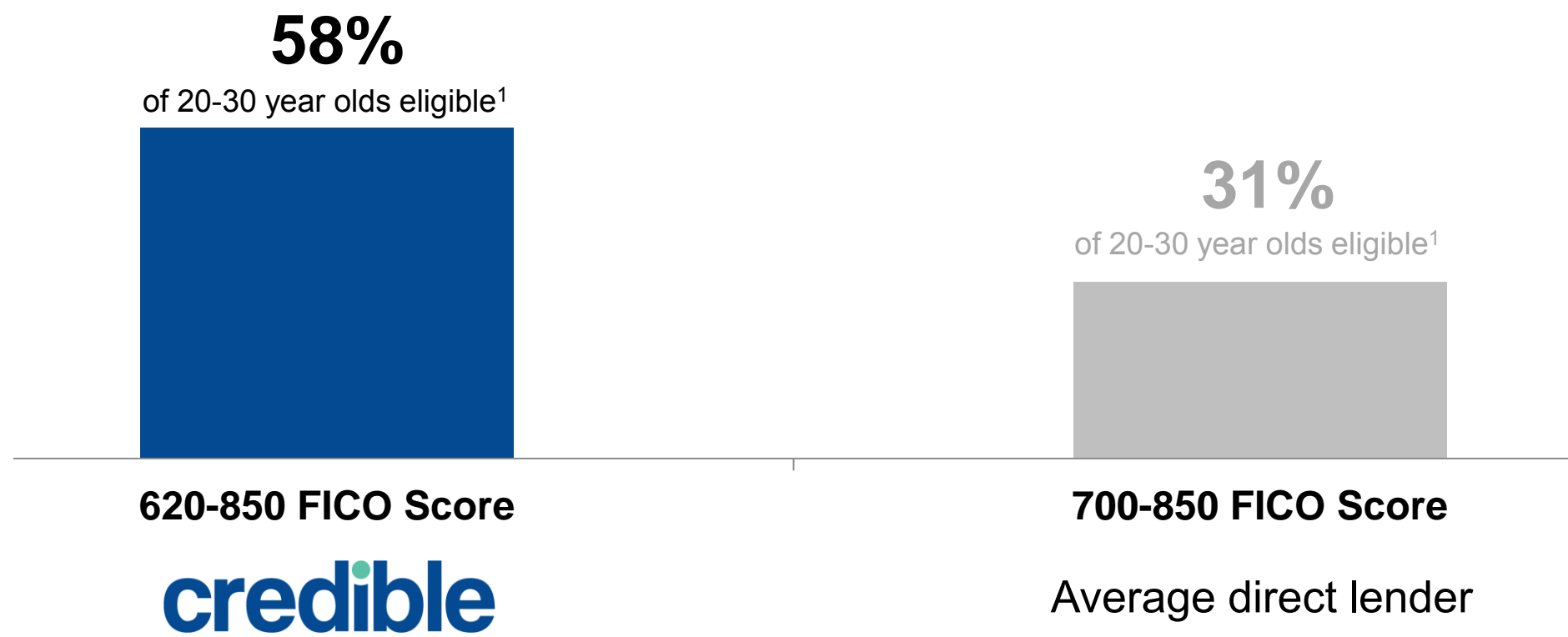
8 year / 4.45% fixed

APA Members find the lender that is right for them

2

More members can refinance due to Credible's broad eligibility criteria

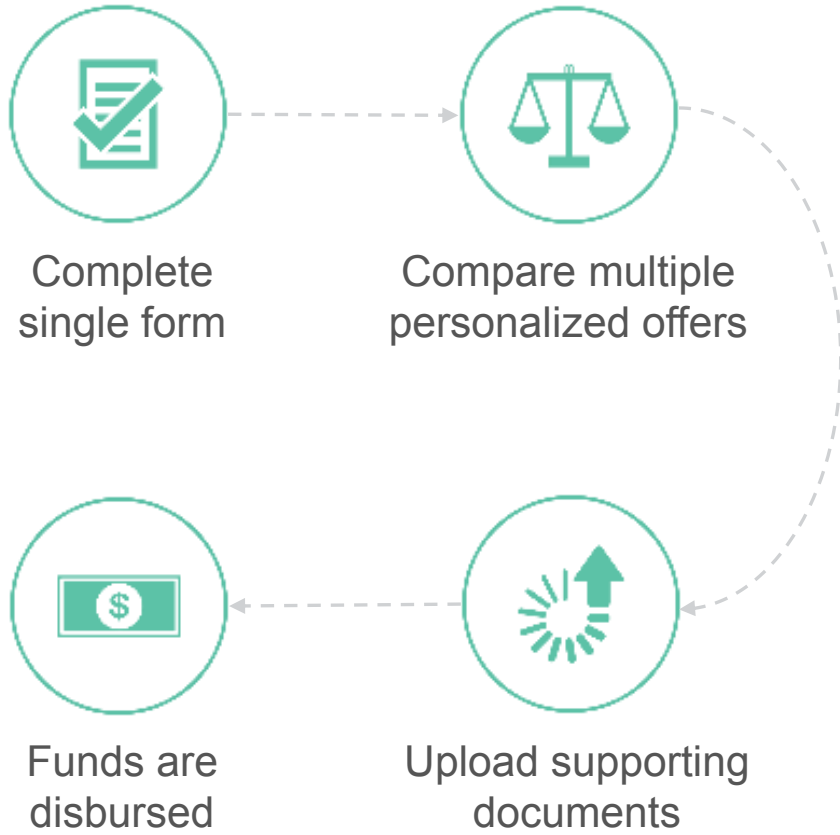
Borrowers with a FICO score as low as 620 are eligible on Credible vs. the average direct lender's minimum of 700, meaning 27% more of APA's members may be eligible to refinance¹



Notes: A borrower with a FICO score of 620 requires a qualified co-signer to refinance with Credible
1. Based on FICO™ Banking Analytics Blog for distribution of FICO scores for 20 – 30 year olds

3

Gives American Psychiatric Association members a transparent view of their options, with personalized, firm offers of credit

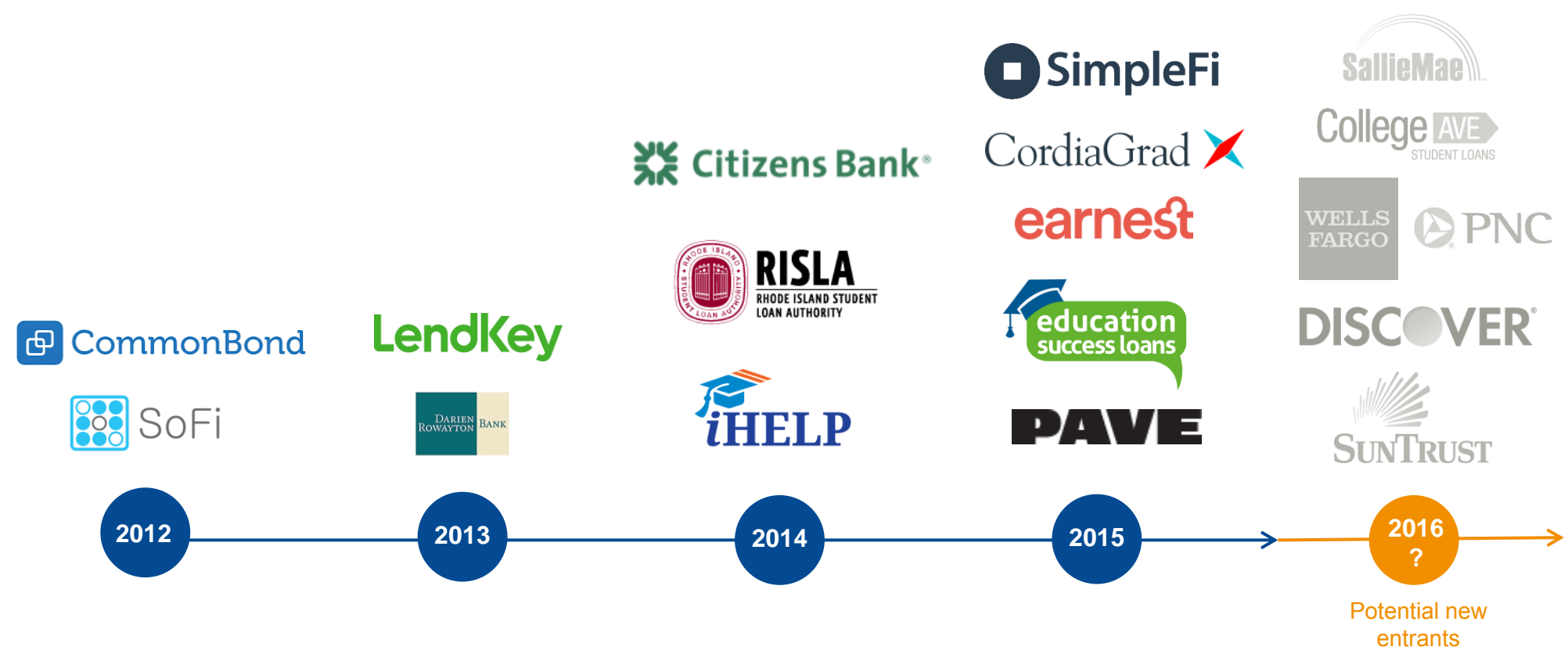


	Term	APR	Rate Type	Monthly Payment	Estimated Savings	Status
	15 yrs	2.31% ¹	Variable rate	\$328	\$23,273 <small>(total cost of \$59,209)²</small>	Offer Received GET LOGIN DETAILS
	20 yrs	2.56% ¹	Variable rate	\$266	\$18,542 <small>(total cost of \$53,042)²</small>	Offer Received GET LOGIN DETAILS
	15 yrs	3.75% ¹	Variable rate	\$363	\$17,032 <small>(total cost of \$65,450)²</small>	Offer Received GET LOGIN DETAILS
	15 yrs	4.74% ¹	Fixed rate	\$388	\$12,524 <small>(total cost of \$69,958)²</small>	Offer Received GET LOGIN DETAILS
	15 yrs	5.74% ¹	Fixed rate	\$419	\$7,793 <small>(total cost of \$74,689)²</small>	Offer Received GET LOGIN DETAILS

4

Provides access to new lenders entering the market, giving American Psychiatric Association members flexibility

Since 2012, the number of lenders offering private and federal refi has quadrupled



Credible's Partner Program

Credible Partner Program offers significant benefits to both APA members and APA as an organization

Benefits for your members

- ✓ Compare multiple lenders on single platform
- ✓ Broadest product selection in the market
- ✓ Exclusive educational material and member benefits
- ✓ US-based customer care and support


Benefits for your organization

- ✓ Engage with young members
- ✓ Program available to the broadest population of your membership
- ✓ Customized education materials
- ✓ Generate royalty revenue

Credible provides a customized experience for its partners

Debt Statistics (Average Pharmacist)	Student Debt	Average Salary	Monthly Payment	Refinancing Savings
	\$114,422	\$116,500	\$1,028	\$32,776

Credible creates customized educational content and provides a turnkey marketing program



We recently announced a partnership with Credible, an innovative company that helps graduates save money on student loans.



[Credible](#) has simplified the refinancing process, enabling the average user to save \$11,668 on his or her student loan payments by refinancing.

[Find My Savings](#)

With those savings in mind, we wanted to pass along a few best practices tips from them about refinancing your student loans.

1. **Pick a goal:** i.e. to maximize your long-term savings or minimize your short-term payments.
2. **If possible, refinance when interest rates are low:** Lenders generally provide better offers when interest rates are lower (like now).
3. **Comparison shop:** Rates differ significantly from lender to lender so use [Credible](#) to receive and compare offers side-by-side from multiple lenders.
4. **Consider refinancing only your high interest rate loans:** To maximize your savings, consider keeping your loans with very low rates (> 4%), and refinancing those with higher rates.
5. **Consider adding a cosigner:** If your credit score is below 700, having a creditworthy cosigner can help you get a better rate.

To find out what you could save in 30 seconds, give [Credible](#) a try!



Association for Computing Machinery

Our partner Credible can help save you thousands on your student loans!

Join us on this month's free webinar to learn more about refinancing your student debt. [Credible](#) is an innovative company that makes it easy to refinance and save on your student loans. Using their tool, you can find out how much money you can save in less than 30 seconds. The average graduate saves over \$11,000 by refinancing their loans with [Credible](#).

[Find My Savings](#)

WEBINAR: If you want to learn more about the process of refinancing and what to consider, then please join the following webinar:

July 14th 7:00 pm EDT [RSVP HERE](#)

On the day of the webinar, simply log on to join.me/crediblelabs to enter! To find out how much you could save in 30 seconds, visit [Credible](#).

Borrower testimonials – thousands of students and graduates have already benefited from Credible

"As I prepare for my wedding and begin to look at houses with my fiancé, I can't express how thankful I am to Credible for allowing me to live my life knowing I can manage my debt."



Jordan Adams
University of Dayton,
2012

\$55,000 saved

"I was extremely happy with how quickly and simply I was able to refinance through Credible. I reduced my interest rate by 2% and will save over \$20,000."



Todd Dewess
University of Missouri,
2009

\$20,000 saved

"I'm glad I found the lender I did through Credible. I had an offer a few days after completing my form, and the reduction in interest will help me pay my loans off in half the time!"



Erika Beers
Utica College, 2012

**Reduced rate
6.55% 4.55%**

Partner testimonials – Credible is a trusted partner to world renowned affinity associations

"Paying back student debt is top of mind for many of our young members, and Credible's unique platform will enable them to do that effectively."



Brian EGGLESTON
Director of Affinity Programs, American Medical Association

"Our goal was to ensure our members had access to the very best rates and they were provided options... This is what made Credible the easy choice."



Kurt Wehrs
Sr. Director, Strategic Business Initiatives, Texas Pharmacy Association

"Partnering with Credible has been an easy way to help support our members. It has particularly allowed us to attract, and engage with, younger members."



David Johnson
Executive Vice President, Massachusetts Pharmacists Association

credible

Stephen Dash
Founder & CEO

917 940 1173
sdash@credible.com

Kyle Dougherty
Partnerships Manager

781 632 6271
kyled@credible.com



GUIDELINES FOR ELECTION TO DISTINGUISHED FELLOWSHIP

All nominations for the honor of Distinguished Fellowship are reviewed by the APA Membership Committee, which ~~then~~ submits ~~its~~ recommendations to the Board of Trustees for final approval. Nominations for Distinguished Fellowship are primarily the responsibility of the District Branches. ~~The p~~rocedures are as follows:

1. The APA Membership Department annually sends to each District Branch a list of its members who have been APA General Members or Fellows for a combination of at least eight years and have board certification. The branch should check the list carefully and verify years of General Membership or Fellowship for any prospective nominee.
2. The District Branch nominates from the list and asks only those members meeting the following requirements to complete the Distinguished Fellowship nomination form:
 - a) ~~At least Not less than~~ eight consecutive years as a General Member ~~and/or~~ Fellow of APA. (Exceptions to the requirement that the years be consecutive may be considered ~~by the Committee~~ under unusual circumstances).
 - b) Certification by the American Board of Psychiatry and Neurology, the Royal College of Physicians and Surgeons of Canada, the American Osteopathic Association or equivalent certifying board. (Board Certification became a core ~~and necessary~~ requirement ~~beginning in 2013~~. A waiver may be granted under extraordinary circumstances.)
 - c) The District Branch should not ~~re~~submit ~~the names~~ nominations of members who were nominated but not ~~approved~~ the preceding year. ~~The purpose of this requirement is to~~ This allows time for members being re-nominated to improve their qualifications in areas where previously they did not show adequate strength. While a waiver of the two-year requirement is possible, there must be compelling reasons adequately documented by the branch.
 - d) The General Member or Fellow should be an outstanding psychiatrist who has made significant contributions in at least five of the areas listed below. **Excellence**, not mere competence, is the hallmark of a Distinguished Fellow.
- (1) **Certification by the American Board of Psychiatry and Neurology, the Royal College of Physicians and Surgeons of Canada, the American Osteopathic Association or equivalent certifying board.** Once Distinguished Fellowship status is attained, maintenance of certification is encouraged but not required. If certified by another Board, details of the certification standards and process should be submitted so ~~that~~ the Committee might evaluate the equivalence of that certification. Additional credit in this category may be earned through certification by other medical boards, sub-specialty boards, or psychoanalysis, or for a Ph.D. or Masters degree in a related field. Training without certification warrants no ~~additional~~ credit. Board certification in general psychiatry is worth category credit four points if the Board is current. ~~Re-certification is~~

~~worth one point and if~~ the Boards are expired, no points will be awarded for this category.

(2) **Involvement in ~~the work of the~~ district branch, chapter, and state association activities.**

~~Since Distinguished Fellowship is an APA honor, participation in this category and/or category 3 is extremely important.~~ Length and quality of service to the Chapter, District Branch or State Association, as documented by the supporting letters, are taken into consideration. ~~No credit is given for membership alone in the APA or district branch.~~ Elected offices, committee work as a chair or member, newsletter work, website design/maintenance for the DB, political action committee oversight, or special projects at the district branch/chapter level are examples of activities earning credit in this category. Presentations at local meetings are usually considered under teaching activities. Substantial committee work together with elected office or membership on the Executive Council for several years will usually qualify the nominee for higher credit in this category. Membership alone does not earn credit.

(3) **Involvement in other components and activities of APA.**

Involvement in the work of Area Councils, the Assembly or Board of Trustees counts ~~toward credit here,~~ as does holding elected office, ~~or a salaried APA position.~~ Other examples of activities earning credit in this category are work on APA Councils, Committees, ~~or~~ Task Forces, ~~and~~ service on the editorial boards of APA publications, ~~APA advocacy work or APA PAC leadership. Several years of activity in two or more of the above roles will usually qualify the nominee for category credit. A longer term of service or elected office in one of the components mentioned will also usually qualify the nominee for category credit.~~ Presentations at APA meetings ~~are usually considered~~ should be listed under teaching activities.

(4) **Involvement in other medical and professional organizations.**

The role, length and quality of service, as well as the level of responsibility in the positions held, determine level of credit. Membership alone does not earn credit. Activities in such ~~or~~ Organizations may include international organizations (e.g., as the World Health Organization ~~(WHO),~~ World Psychiatric Association ~~(WPA),~~ national organizations (e.g., American Academy of Child and Adolescent Psychiatry, American Medical Association ~~(AMA),~~ state and county medical societies, ~~and~~ associations representing other medical specialties (e.g., pediatrics or neurology), or related professions (e.g., psychology, anthropology, sociology). ~~are included in this group. Again, no credit is given for membership alone. Length and quality of service as documented by supporting letters, as well as positions held, determine credit given.~~

(5) **Participation in non-compensated mental health and medical activities of social significance.**

Voluntary ~~A~~ activities or service demonstrating the physician's social responsibility and humanitarian concerns, ~~such as work with survivors of natural disasters, mental health patient advocacy groups (AMIs) or with AIDS service organizations,~~ are included in this criterion. Voluntary service for mental health patient advocacy groups (includes service on boards or task forces, event/fundraising committees, outreach and education), free mental health clinics, educational events, mental health fairs, mental health stakeholder or advocacy groups should be included in this category. Volunteer service to survivors of

natural or man-created disasters and medical humanitarian efforts (i.e., Doctors without Borders, Give an Hour, non-compensated medical service in a foreign country, etc.) may also qualify for credit groups. Nominees should specify the nature of their contributions and the time commitments made. ~~For example, "Chaired Advocacy Coalition task force, which met every month for four hours over a five year period."~~ Letters from individuals (medical or non-medical) directly involved, specifically documenting the type, quality and length of involvement, are very helpful. The highest weight is given to service performed over a period of time, or on a short-term but intensive basis.

(6) Participation in non-medical, non-income-producing community activities.

The Committee looks for significant contributions to the political, religious, charitable, artistic, educational, athletic or ethnic life of the community, i.e., contributions unrelated to medical income-producing activities. Mere membership in, or financial donation to, a community service organization does not earn ~~no~~ credit. Supporting letters detailing the nominee's contributions from persons directly involved with these activities are very important in documenting this category. ~~Examples: serving as an officer in a church or synagogue; playing an instrument in a community orchestra or chairing the board of a local school PTA or charity.~~ Nominees should specify the nature of their contributions and the time commitments made. The highest weight is given to service performed over a period of time, or on a short-term but intensive basis.

(7) Clinical contributions.

This category is meant to recognize excellence in direct patient care activity. Letters attesting to and detailing exemplary skill, knowledge, diagnostic ability and therapeutic expertise are necessary. ~~The~~ Committee will recognize clinical distinction achieved in any of a spectrum of settings, but may take special note of work done in public service or underserved settings. Many years of respected private practice or staff work in a clinic or inpatient unit will usually qualify the nominee for credit in this category, especially when supported by letters detailing clinical excellence. Supervision of others who provide direct patient care should be included in this category. Service on hospital committees and other medical administrative work ~~may should~~ be listed ~~here or~~ under Administrative Contributions (8) below.

(8) Administrative contributions.

In this category the Committee looks for advancement in administrative positions in institutional, community/public, or private settings, as well as the level of responsibility associated with the position(s). Intraspecialty administration as well as administration within broader mental health, medical or overarching venues count towards credit in this category. Responsibilities documented should include such non-clinical activities as program development and oversight, committee work, budgeting, management of human and financial resources, strategic planning or policy formulation. Letters giving the specifics, as well as the quality of the nominee's achievements in this area are needed.

(9) Teaching contributions.

Teaching in all settings is acceptable. Teaching may include academic instruction (i.e., medical school curriculum or didactics or didactics within a residency training program), clinical instruction (i.e., supervising clinicians), non-psychiatrist instruction (i.e., teaching nurses or allied health professionals), or others. In university settings, advancement in

academic rank is taken into consideration, as is the extent and quality of teaching activities in other settings. There should be letters from faculty members, heads of departments or others familiar with the nominee's work. Teaching in non-institutional, non-professional settings should be supported by letters from individuals directly involved. As indicated above, presentations at scientific meetings should be included under this category.

(10) **Scientific and scholarly publications.**

~~Articles in journals, B~~books (other than privately published), ~~and~~ -book chapters ~~and articles in journals earn credits should be listed~~ in this category. Higher weight will be given to articles published in ~~peer-reviewed~~, refereed and/or widely circulated journals and to lead authorship. ~~Both number and quality of publications are considered in evaluating this category.~~ No credit is given for unpublished research. ~~Both number and quality of publications are considered in evaluating this category.~~

3. ~~In order that the Membership Committee may arrive at the correct decision, d~~**Detailed** comments must address the quality of nominee's accomplishments in the categories in paragraph 2 ~~d~~**e**. At least three of the letters must be from Distinguished Fellows or Distinguished Life Fellows of the APA; however, letters from other individuals (other members or non-psychiatrists) are ~~strongly encouraged~~. Letters that amplify and delineate the quality of each activity reported on the nomination form are crucial. ~~to the Committee in its evaluation of the nominee.~~ Letters should not simply repeat the information on the nomination form, but tell about the quality and thrust of the individual's achievements or experiences. Each person asked to comment on a nominee should have a copy of these guidelines. All letters must be typewritten and on letterhead. If a nomination is submitted electronically, the branch will not be required to mail a hardcopy. Nominations should not include links to websites. Recommendation letters ~~on letterhead~~ without an actual signature will be accepted if the District Branch submit~~ted~~**ted** the letter with the nomination.
4. Nominations must be submitted on the form provided by the APA. ~~to the district branches.~~ All information should be documented within the respective sections (i.e., expand the form to accommodate written information). Nominations will be returned if completed incorrectly. The form ~~can may~~ be completed by either the District Branch or the nominee. ~~However, a~~**All** nominations are the responsibility of the District Branch and nomination packets **must be submitted by a District Branch**. Handwritten forms will not be accepted.
5. Curriculum vitae in lieu of, or as supplements to, completed nomination forms are not acceptable.
6. Distinguished Fellows will be expected to maintain the dignity of their profession and the practice of medicine including all relevant ethical guidelines.
7. The District Branch Distinguished Fellowship Chairperson shall forward nominations to the APA Membership Committee by the **1st of July**.

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**2015 Fellowship Candidates-Approved
Confidential**

Item: 8.C
Board of Trustees
December 12-13, 2015
Attachment G

Mbr ID#	CANDIDATE NAME	DB_NAME	Member Class
76153	Daniel Scott Schechter, MD	Member-at-Large	GM
70235	Scott A Shoup, MD	Member-at-Large	GM
309133	Violeta Ong Tan, MD	Member-at-Large	GM
35224	Laureano Gomez Angel, MD	Member-at-Large	LM
41678	Robert Orgain Hardy M.D.	Member-at-Large	LM
10894	Arthur S Liebeskind M.D.	Member-at-Large	LM
1013567	Leona J Graham, MD	Alabama Psychiatric Physicians Association	GM
68973	Eddie Lee Huggins Jr M.D.	Alabama Psychiatric Physicians Association	GM
1020672	Clinton Martin, MD	Alabama Psychiatric Physicians Association	GM
1040840	Praveen Narahari, MD	Alabama Psychiatric Physicians Association	GM
85381	Mary Avery Strong, DO	Alabama Psychiatric Physicians Association	GM
103620	Eyob Hailu Tessema, MD	Alabama Psychiatric Physicians Association	GM
300883	Paul Jiri Topol, MD	Alaska District Branch	GM
1002860	Vanessa A Venezia, MD	Alaska District Branch	GM
1004133	Margaret E Balfour PhD, MD	Arizona Psychiatric Society	GM
1016744	LaDan Goble, MD	Arizona Psychiatric Society	GM
85891	Leticia G Jacinto M.D.	Arizona Psychiatric Society	GM
307820	Joanna K Kowalik, MD, MPH	Arizona Psychiatric Society	GM
1063320	Steven Kwoh, MD	Arizona Psychiatric Society	GM
61865	Randall Kenneth Ricardi, DO	Arizona Psychiatric Society	GM
1000254	Jerry J Thomas, MD	Arizona Psychiatric Society	GM
39019	Houshang Aminian M.D.	Arizona Psychiatric Society	LM
33968	Houshang Semino M.D.	Arizona Psychiatric Society	LM
1041169	Jason Beaman, DO, MS	Arkansas Psychiatric Society	GM
308042	John Randolph Schay, MD	Arkansas Psychiatric Society	GM
80209	James Scott Stanley, MD	Arkansas Psychiatric Society	GM
68335	Adele Tabo Munsayac M.D.	Bronx District Branch	GM
1013834	Andrei Y Nagorny, MD	Bronx District Branch	GM
1014237	Kiyoko R Ogoke, MD	Bronx District Branch	GM
37887	Jacob Daniel Kanofsky, MD, MPH	Bronx District Branch	LM
1008113	Joseph P Carmody, MD	Brooklyn Psychiatric Society, Inc	GM
312972	Himani Janapana, MD	Brooklyn Psychiatric Society, Inc	GM
85104	Delia M Jano M.D.	Brooklyn Psychiatric Society, Inc	GM
311409	Marian Moca, MD	Brooklyn Psychiatric Society, Inc	GM
26495	Kenneth Jay Schwartz, MD	Brooklyn Psychiatric Society, Inc	LM
1013545	Manish S Aggarwal, M.D.	Central California Psychiatric Society	GM
42559	Jorge Heriberto Beber M.D.	Central California Psychiatric Society	GM
1050490	Sukhjot Brar, MD	Central California Psychiatric Society	GM
90388	Jason P Bynum M.D.	Central California Psychiatric Society	GM
90346	Karla T Lacayo MD	Central California Psychiatric Society	GM
80954	Kimberly W Larsen, MD	Central California Psychiatric Society	GM
312776	William J Newman, MD	Central California Psychiatric Society	GM
303465	Alcira B Revelo Sahami, MD	Central California Psychiatric Society	GM
300860	Harjot Singh M.D.	Central California Psychiatric Society	GM
1020132	Anoopinder Singh, MD	Central California Psychiatric Society	GM
1013655	Franco Song Seo, MD	Central California Psychiatric Society	GM
304033	Arturo L Villamor M.D.	Central California Psychiatric Society	GM
306844	Nanette M Dowling, DO	Central New York District Branch	GM
88181	Mahfuzur Rahman M.D.	Central New York District Branch	GM

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79918	Kirk C Anderson M.D.	Colorado Psychiatric Society	GM
79983	Patrick Kevin Fox, MD	Colorado Psychiatric Society	GM
77060	Gregory L Kirk M.D.	Colorado Psychiatric Society	GM
307586	B Harrison Levine, MD, MPH	Colorado Psychiatric Society	GM
304934	Jennifer M Lytle, MD, MPH	Colorado Psychiatric Society	GM
1006689	Anna K McDowell, MD	Colorado Psychiatric Society	GM
1017611	Leon T Que Jr, MD	Colorado Psychiatric Society	GM
1076954	Jody D Robinson, MD	Colorado Psychiatric Society	GM
1015164	Scott Alan Simpson, MD, MPH	Colorado Psychiatric Society	GM
30311	Roy Douglas Rosenthal M.D.	Colorado Psychiatric Society	LM
307880	Bachaar Arnaout, MD	Connecticut Psychiatric Society	GM
73410	Sanjay Banerjee, MD	Connecticut Psychiatric Society	GM
1008074	Debra J Forrest, MD	Connecticut Psychiatric Society	GM
304610	Asini Enoka Gunawardana, MD	Connecticut Psychiatric Society	GM
33483	Stephen Paul Herman, MD	Connecticut Psychiatric Society	GM
67863	Pamela J Moore M.D.	Connecticut Psychiatric Society	GM
73509	Susan T Savulak M.D.	Connecticut Psychiatric Society	GM
71182	Jean Ellen Vogel M.D.	Connecticut Psychiatric Society	GM
37466	David B London M.D.	Connecticut Psychiatric Society	LM
28970	Owen B Schneider M.D.	Connecticut Psychiatric Society	LM
301756	Fariya S Afridi, MD	Florida Psychiatric Society	GM
79575	Michele R Babin, MD	Florida Psychiatric Society	GM
67707	Susan L Balk-Kradel, MD	Florida Psychiatric Society	GM
1017435	Colleen E Bell, MD	Florida Psychiatric Society	GM
1008515	Sabrina M Caceres, DO	Florida Psychiatric Society	GM
310961	Mouvielle E Caro Gracia, MD	Florida Psychiatric Society	GM
1013055	David A Dada, MD, MPH	Florida Psychiatric Society	GM
1000855	Daniel Delgado, MD	Florida Psychiatric Society	GM
1005364	Erika P Dudley, MD	Florida Psychiatric Society	GM
72324	Noel Figueroa M.D.	Florida Psychiatric Society	GM
1130541	Dimy Fluyau, MD	Florida Psychiatric Society	GM
66940	Cheryl Ann France, MD	Florida Psychiatric Society	GM
1004865	Melissa D Jackson, MD	Florida Psychiatric Society	GM
303578	Audrey Elaine Jain, DO	Florida Psychiatric Society	GM
80212	Anastasia V Kelley M.D.	Florida Psychiatric Society	GM
1020251	Jing Liu, MD	Florida Psychiatric Society	GM
1067847	Nivedita Mathur, MD	Florida Psychiatric Society	GM
310589	Robert M Nastasi, MD	Florida Psychiatric Society	GM
1005357	Michelle F Paley, MD	Florida Psychiatric Society	GM
1020180	Panchajanya Paul, MD	Florida Psychiatric Society	GM
1008927	Sean Paul, MD	Florida Psychiatric Society	GM
77305	Michelle M Pearce, MD	Florida Psychiatric Society	GM
311337	Nicole A Pearl, DO	Florida Psychiatric Society	GM
312438	Jared Tristan Ritter, MD	Florida Psychiatric Society	GM
63605	David M. Rube, MD	Florida Psychiatric Society	GM
1017358	Molly Ryan, DO, MPH	Florida Psychiatric Society	GM
63108	Joseph Eugene Sarachene M.D.	Florida Psychiatric Society	GM
1050488	Bih Bikelle Tambi, MD	Florida Psychiatric Society	GM
1004090	Prasanti Tatini, MD	Florida Psychiatric Society	GM
1000879	Peter P Ventre, MD	Florida Psychiatric Society	GM

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70891	Wendy Ann Welch, MD	Florida Psychiatric Society	GM
1082122	Joel Ira Wertheimer, MD	Florida Psychiatric Society	GM
63797	George Chacko Winny, MD	Florida Psychiatric Society	GM
13441	Ronald J Catanzaro, MD	Florida Psychiatric Society	LM
28185	Russell Calvert Packard, MD	Florida Psychiatric Society	LM
65706	Christopher R Galbreath, DO	Genesee Valley Psychiatric Association	GM
62314	Victoria Frances Korth, MD	Genesee Valley Psychiatric Association	GM
38096	Gregory Lawler Seeger, MD	Genesee Valley Psychiatric Association	GM
305990	Robert Whelpley, MD	Genesee Valley Psychiatric Association	GM
311791	Yilmaz Yildirim, MD, PhD	Genesee Valley Psychiatric Association	GM
12448	Lakshman Prasad M.D.	Genesee Valley Psychiatric Association	LM
62792	Scot Nelson Bay M.D.	Georgia Psychiatric Physicians Association, Inc	GM
78339	Josue Becerra, MD	Georgia Psychiatric Physicians Association, Inc	GM
303856	Deepti Jain Bhasin, MD	Georgia Psychiatric Physicians Association, Inc	GM
59591	Deborah Botti, MD, PhD	Georgia Psychiatric Physicians Association, Inc	GM
1013633	Donald J Brown, DO	Georgia Psychiatric Physicians Association, Inc	GM
70426	Richard F Camino-Gaztambide, MD	Georgia Psychiatric Physicians Association, Inc	GM
1011881	Chelsea M Carson, MD	Georgia Psychiatric Physicians Association, Inc	GM
72306	Cathleen A Cleary M.D.	Georgia Psychiatric Physicians Association, Inc	GM
1014656	Kelly Lynn Coffman, MD MPH	Georgia Psychiatric Physicians Association, Inc	GM
1079260	Emily Seifert Collins, MD	Georgia Psychiatric Physicians Association, Inc	GM
1007266	Nicole King Cotton, MD	Georgia Psychiatric Physicians Association, Inc	GM
311669	Alana Palomar Cox, MD	Georgia Psychiatric Physicians Association, Inc	GM
304713	Kristin M Dickson, MD	Georgia Psychiatric Physicians Association, Inc	GM
59113	Erica Joan Duncan M.D.	Georgia Psychiatric Physicians Association, Inc	GM
301914	Ericka L Goodwin M.D.	Georgia Psychiatric Physicians Association, Inc	GM
75381	Yolanda P Graham M.D.	Georgia Psychiatric Physicians Association, Inc	GM
71870	Ann Montanaro Groover, MD	Georgia Psychiatric Physicians Association, Inc	GM
40907	Aron Halfin MD PC	Georgia Psychiatric Physicians Association, Inc	GM
307146	Nzinga Ajabu Harrison M.D.	Georgia Psychiatric Physicians Association, Inc	GM
310219	Linda Green Harvey, MD	Georgia Psychiatric Physicians Association, Inc	GM
305593	Shahzad M Hashmi M.D.	Georgia Psychiatric Physicians Association, Inc	GM
61532	Susan Louise Haverstock M.D.	Georgia Psychiatric Physicians Association, Inc	GM
306827	Kwanna V Hayes, MD	Georgia Psychiatric Physicians Association, Inc	GM
1004853	Jennifer E Holton, MD	Georgia Psychiatric Physicians Association, Inc	GM
63612	E Jane Howell M.D.	Georgia Psychiatric Physicians Association, Inc	GM
73783	Mary Lisa Huber M.D.	Georgia Psychiatric Physicians Association, Inc	GM
77146	Kingsley E Iyamu M.D.	Georgia Psychiatric Physicians Association, Inc	GM
84428	Debora S Johnson, MD	Georgia Psychiatric Physicians Association, Inc	GM
55075	Bettina Baechtold Kilburn M.D.	Georgia Psychiatric Physicians Association, Inc	GM
1008473	Srinivas Kolipaka, MD	Georgia Psychiatric Physicians Association, Inc	GM
1008360	Jonathan Levy, MD	Georgia Psychiatric Physicians Association, Inc	GM
83110	Linda R Neale, DO	Georgia Psychiatric Physicians Association, Inc	GM
1006163	Karen Marie Padron, MD PhD	Georgia Psychiatric Physicians Association, Inc	GM
1098832	Viorica Mihaela Pencea, MD	Georgia Psychiatric Physicians Association, Inc	GM
74311	Judith M Rochon, MD	Georgia Psychiatric Physicians Association, Inc	GM
1004137	Hilaire Shongo-Hiango MD	Georgia Psychiatric Physicians Association, Inc	GM
1000865	Felipe Suplicy, MD	Georgia Psychiatric Physicians Association, Inc	GM
40059	Franckel Val MD	Georgia Psychiatric Physicians Association, Inc	GM
1017658	David R Williams, MD	Georgia Psychiatric Physicians Association, Inc	GM

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305311	Glenda L Wrenn, MD	Georgia Psychiatric Physicians Association, Inc	GM
1002521	Ying Ming Zhang, MD	Georgia Psychiatric Physicians Association, Inc	GM
31320	Franklin Jefferson Duffey Jr, MD	Georgia Psychiatric Physicians Association, Inc	LM
40825	Stephen D Mallary, MD	Georgia Psychiatric Physicians Association, Inc	LM
35078	Alexander John Mercer M.D.	Georgia Psychiatric Physicians Association, Inc	LM
31086	Lyndon Dale Waugh, MD	Georgia Psychiatric Physicians Association, Inc	LM
301871	Michael N Arena, DO	Greater Long Island Psychiatric Society	GM
311193	Kamil Atta, MD	Greater Long Island Psychiatric Society	GM
1017548	Lama Bazzi, MD	Greater Long Island Psychiatric Society	GM
71729	Julia A Becker, MD	Greater Long Island Psychiatric Society	GM
306487	Claudine Higdon, MD	Greater Long Island Psychiatric Society	GM
45124	Steven Kenny Hoge, MD	Greater Long Island Psychiatric Society	GM
1001900	Saira Y Hussain DO	Greater Long Island Psychiatric Society	GM
311008	Howard D Linder, MD	Greater Long Island Psychiatric Society	GM
66064	Barry Mildener M.D.	Greater Long Island Psychiatric Society	GM
79184	Ramin V Parsey, MD, PhD	Greater Long Island Psychiatric Society	GM
303783	Asra F Siddiqi, MD	Greater Long Island Psychiatric Society	GM
78486	James B Snyder M.D.	Greater Long Island Psychiatric Society	GM
27881	Ruth Dowling Bruun M.D.	Greater Long Island Psychiatric Society	LM
81902	Michael K Champion M.D.	Hawaii Psychiatric Medical Association	GM
73016	Steven L Chaplin M.D.	Hawaii Psychiatric Medical Association	GM
1004079	Berdine Chong, MD	Hawaii Psychiatric Medical Association	GM
65814	Kenneth A Hirsch M.D.	Hawaii Psychiatric Medical Association	GM
1014938	June C Lee, DO	Hawaii Psychiatric Medical Association	GM
305770	Russ S Muramatsu M.D.	Hawaii Psychiatric Medical Association	GM
21813	Alvin Edwin Murphy, MD	Hawaii Psychiatric Medical Association	LM
1065604	Tushar Advani, MD, PhD	Illinois Psychiatric Society	GM
309868	Thomas W Allen, MD*	Illinois Psychiatric Society	GM
1013828	Chrisantha Ernest Anandappa, MD	Illinois Psychiatric Society	GM
309078	Soraya Asadi, MD	Illinois Psychiatric Society	GM
59560	Lee Howard Becker M.D.	Illinois Psychiatric Society	GM
1014353	Kara E Driscoll, MD	Illinois Psychiatric Society	GM
57883	Geraldine Susan Fox, MD	Illinois Psychiatric Society	GM
1040355	Elizabeth McIlduff Georges, MD	Illinois Psychiatric Society	GM
1013802	Brandon C Gimbel, MD	Illinois Psychiatric Society	GM
84347	Franchot Givens M.D.	Illinois Psychiatric Society	GM
1002324	Brian Patrick Gomoll, MD	Illinois Psychiatric Society	GM
67247	Juan Manuel Medina M.D.	Illinois Psychiatric Society	GM
1001614	Shoab Ahmed Memon, MD	Illinois Psychiatric Society	GM
63626	Louis James Mini M.D.	Illinois Psychiatric Society	GM
1092356	Marcos Modiano-Esquenazi, MD	Illinois Psychiatric Society	GM
87928	Shah Nawaz, MD	Illinois Psychiatric Society	GM
1052060	Trinadha R Pilla, MD	Illinois Psychiatric Society	GM
1004640	Theodote K Pontikes, MD	Illinois Psychiatric Society	GM
89524	Jeffrey T Rado, MD	Illinois Psychiatric Society	GM
1004642	Alma Ramic, MD	Illinois Psychiatric Society	GM
1013496	Sajjad R Sarwar, MD	Illinois Psychiatric Society	GM
1013538	Mohammed S Siddiqui, MD	Illinois Psychiatric Society	GM
1013462	Melanie Monroe Venable, MD	Illinois Psychiatric Society	GM
1101982	Adrian Zhubi, MD, MS	Illinois Psychiatric Society	GM

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30855	Yogi Ahluwalia, MD	Illinois Psychiatric Society	LM
29060	Fredric J Levy M.D.	Illinois Psychiatric Society	LM
301020	Geoffrey M Fortner M.D.	Indiana Psychiatric Society	GM
1005423	Princess Gloria Gaitawe-Johnson, MD	Indiana Psychiatric Society	GM
88944	Manana Gegeshidze, MD	Indiana Psychiatric Society	GM
81212	Mohammad S Kamal M.D.	Indiana Psychiatric Society	GM
1013768	Santosh Maharjan, MD	Indiana Psychiatric Society	GM
303547	Kimberly Carr Mayrose, MD	Indiana Psychiatric Society	GM
75913	Grace George Thomas, MD	Indiana Psychiatric Society	GM
1001416	Umesh Kumar Vyas, MD	Indiana Psychiatric Society	GM
57794	Shagufta Jabeen Chowhan M.D.	Indiana Psychiatric Society	LM
1039959	Aaron John Kauer, MD	Iowa Psychiatric Society	GM
1068206	Cord David Huston, MD	Kansas Psychiatric Society	GM
1006046	Rachna Kalia MD	Kansas Psychiatric Society	GM
69702	John F L'Ecuyer M.D.	Kansas Psychiatric Society	GM
85170	Michael C Leeson, MD, PhD	Kansas Psychiatric Society	GM
1015615	Moneeshindra S Mittal, MD	Kansas Psychiatric Society	GM
1017153	Osama Ali, MD	Kentucky Psychiatric Medical Association	GM
1001794	Amy L Meadows, MD	Kentucky Psychiatric Medical Association	GM
66952	Thor Tangvald, MD	Kentucky Psychiatric Medical Association	GM
312865	Shri K Vaish M.D.	Kentucky Psychiatric Medical Association	GM
69511	Ted Bloch III, MD	Louisiana Psychiatric Medical Association	GM
1008548	Jason Michael Broussard, DO	Louisiana Psychiatric Medical Association	GM
1039813	Rachel Bischoff Csaki, MD	Louisiana Psychiatric Medical Association	GM
312964	Kimberly A Gordon, MD	Louisiana Psychiatric Medical Association	GM
1005588	Jamie Hutchinson, MD	Louisiana Psychiatric Medical Association	GM
72346	Charlotte N Hutton M.D.	Louisiana Psychiatric Medical Association	GM
310968	Scott D Mayers, MD	Louisiana Psychiatric Medical Association	GM
45932	Pamela Kay McPherson M.D.	Louisiana Psychiatric Medical Association	GM
303753	Sudheera Rachamalla, MD	Louisiana Psychiatric Medical Association	GM
1002505	Erin Stanton, MD	Louisiana Psychiatric Medical Association	GM
68502	Ron Vincent Taravella M.D.	Louisiana Psychiatric Medical Association	GM
32590	Cecil Clifton Dopson Jr, MD	Louisiana Psychiatric Medical Association	LM
8598	Wallace W Fleetwood, MD	Louisiana Psychiatric Medical Association	LM
28783	Richard Ray Roniger M.D.	Louisiana Psychiatric Medical Association	LM
1007319	Subhadeep Barman MD	Maine Association of Psychiatric Physicians	GM
1017261	Dylan McKenney, MD	Maine Association of Psychiatric Physicians	GM
1016412	Ryan Mathew Smith, DO, MS	Maine Association of Psychiatric Physicians	GM
102265	Maurice M Bachawati M.D.	Maryland Psychiatric Society, Inc	GM
89118	Benedicto R Borja, MD	Maryland Psychiatric Society, Inc	GM
1059053	Monica Chawla, MD	Maryland Psychiatric Society, Inc	GM
1010950	Jennifer Marie Coughlin, MD	Maryland Psychiatric Society, Inc	GM
76333	Johannes G Dalmasy-Frouin M.D.	Maryland Psychiatric Society, Inc	GM
311727	Cynthia D Fields, MD	Maryland Psychiatric Society, Inc	GM
54463	David Brian Glovinsky, MD	Maryland Psychiatric Society, Inc	GM
1002114	Fernando S Goes, MD	Maryland Psychiatric Society, Inc	GM
42213	David Gonzalez-Cawley M.D.	Maryland Psychiatric Society, Inc	GM
69635	Deoroop Gurprasad M.D.	Maryland Psychiatric Society, Inc	GM
63913	George C James M.D.	Maryland Psychiatric Society, Inc	GM
73723	Kim B Jones-Fearing M.D.	Maryland Psychiatric Society, Inc	GM

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1014028	Lilly Sehgal La Porta, MD	Maryland Psychiatric Society, Inc	GM
45502	Jeffrey Allen Lafferman, MD	Maryland Psychiatric Society, Inc	GM
1013602	Tamela D McClam, MD	Maryland Psychiatric Society, Inc	GM
73757	Rhonda Gregory McMillian, MD	Maryland Psychiatric Society, Inc	GM
1181887	Jessica Veronica Merkel-Keller, MD	Maryland Psychiatric Society, Inc	GM
1008201	Ramin Mojtabai, MD, MPH, PhD	Maryland Psychiatric Society, Inc	GM
305622	Javier A Muniz M.D.	Maryland Psychiatric Society, Inc	GM
302670	Suzy F Nashed, MD	Maryland Psychiatric Society, Inc	GM
77784	Drew A Pate, MD	Maryland Psychiatric Society, Inc	GM
308888	Johanna Fermina Paulino-Woolridge, DO	Maryland Psychiatric Society, Inc	GM
1013690	Rachna S Raisinghani, MD	Maryland Psychiatric Society, Inc	GM
80830	Vikram N Shah M.D.	Maryland Psychiatric Society, Inc	GM
1007591	Arman Taghizadeh, MD	Maryland Psychiatric Society, Inc	GM
305870	Adela Valadez-Meltzer M.D.	Maryland Psychiatric Society, Inc	GM
87949	Mariles Vilorio-Grageda, MD	Maryland Psychiatric Society, Inc	GM
66439	Kimberly C Walker M.D.	Maryland Psychiatric Society, Inc	GM
64647	Debbie Lakin Weaver, MD	Maryland Psychiatric Society, Inc	GM
1012157	Meera Wells, MD	Maryland Psychiatric Society, Inc	GM
77863	Joseph A Afonso M.D.	Massachusetts Psychiatric Society	GM
61094	Suzanne Bird M.D.	Massachusetts Psychiatric Society	GM
311276	Argyro Pericles Caminis, MD, MPH	Massachusetts Psychiatric Society	GM
311348	Lois W Choi-Kain, MD	Massachusetts Psychiatric Society	GM
77186	Hilary S Connery MD PhD	Massachusetts Psychiatric Society	GM
78850	Sandra M DeJong M.D.	Massachusetts Psychiatric Society	GM
1004946	Michelle P Durham, MD, MPH	Massachusetts Psychiatric Society	GM
1016653	Jeffrey C Eisen, MD, MBA	Massachusetts Psychiatric Society	GM
65102	James Feldman M.D.	Massachusetts Psychiatric Society	GM
59770	Sandra M Fitzgerald M.D.	Massachusetts Psychiatric Society	GM
1013570	Carl Fleisher, MD	Massachusetts Psychiatric Society	GM
1080420	Eric D Huttenbach, MD, JD	Massachusetts Psychiatric Society	GM
311499	Dawn F. Ionescu, MD	Massachusetts Psychiatric Society	GM
1002864	Janet C Kennedy MD	Massachusetts Psychiatric Society	GM
80348	Kirk C Lum M.D.	Massachusetts Psychiatric Society	GM
87538	Chitra Malur, MD	Massachusetts Psychiatric Society	GM
73008	Charles R Morin M.D.	Massachusetts Psychiatric Society	GM
1019429	Adeliza Olivero, MD	Massachusetts Psychiatric Society	GM
45525	Thomas A Posever M.D.	Massachusetts Psychiatric Society	GM
60549	Karin Powell Cole, MD	Massachusetts Psychiatric Society	GM
59269	Helen Riess, MD	Massachusetts Psychiatric Society	GM
1007940	Marion Russell, MD	Massachusetts Psychiatric Society	GM
1014584	Deepika Shaligram, MD	Massachusetts Psychiatric Society	GM
1014589	Thomas Paul Simeone, MD	Massachusetts Psychiatric Society	GM
301733	Renee M Sorrentino M.D.	Massachusetts Psychiatric Society	GM
1040746	Veronika M Stock, MD	Massachusetts Psychiatric Society	GM
1014595	Nagaraj Uddhandi, MD	Massachusetts Psychiatric Society	GM
69908	Eileen Jan Wong M.D.	Massachusetts Psychiatric Society	GM
76935	Marcia L Zuckerman M.D.	Massachusetts Psychiatric Society	GM
30165	Robert M Stern M.D.	Massachusetts Psychiatric Society	LM
40575	Roberta Ann Williamson M.D.	Massachusetts Psychiatric Society	LM
1062548	Jaya Padmanabhan, MD	Massachusetts Psychiatric Society	RFM

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62995	Dominic Vito Barberio, DO	Michigan Psychiatric Society	GM
53376	William Thomas Beecroft M.D.	Michigan Psychiatric Society	GM
1017654	Anuradha C Challa, MD	Michigan Psychiatric Society	GM
62910	Randy Dean M.D.	Michigan Psychiatric Society	GM
1008054	Robert E Dempsey, DO	Michigan Psychiatric Society	GM
70652	Michael Ingram M.D.	Michigan Psychiatric Society	GM
62900	Richard Steven Jackson, MD	Michigan Psychiatric Society	GM
1015947	Jillian Ann Lankford, MD MPH	Michigan Psychiatric Society	GM
80814	Mukesh Lathia, MD	Michigan Psychiatric Society	GM
1013830	Dayna J Le Platte, MD	Michigan Psychiatric Society	GM
1001063	Sunita S Muranjan, MD	Michigan Psychiatric Society	GM
72112	Vijaya C Ramesh M.D.	Michigan Psychiatric Society	GM
59642	Chilakamarri Ramesh, MD	Michigan Psychiatric Society	GM
87965	Timothy Lee Todd, MD	Michigan Psychiatric Society	GM
1011970	Annie N Williams, DO	Michigan Psychiatric Society	GM
19308	Mufid Bahnam Al-Najjar, MD	Michigan Psychiatric Society	LM
82695	Simona G Amalathas M.D.	Mid-Hudson Psychiatric Society	GM
64626	Carlos Felipe Valle-Clemente, MD	Mid-Hudson Psychiatric Society	GM
68785	David C Anderholm, MD	Minnesota Psychiatric Society	GM
40836	Daniel Kevin Flavin, MD	Minnesota Psychiatric Society	GM
1014099	Wei Guan, MD, PhD	Minnesota Psychiatric Society	GM
1017622	Benjamin Lane Hersey, MD	Minnesota Psychiatric Society	GM
64822	Steven Henry Lutzwick, MD	Minnesota Psychiatric Society	GM
1078192	Gavin P Meany, MD	Minnesota Psychiatric Society	GM
75083	Jeffrey B Sawyer M.D.	Minnesota Psychiatric Society	GM
1053423	Chhabi Lall T Sharma, MD	Minnesota Psychiatric Society	GM
1009040	Israel O Sokeye MD	Minnesota Psychiatric Society	GM
1081652	Joshua David Stein, MD	Minnesota Psychiatric Society	GM
304799	Eduardo D Trinidad, MD	Minnesota Psychiatric Society	GM
88430	Mark Tsibulsky M.D.	Minnesota Psychiatric Society	GM
66464	Mark Douglas Williams M.D.	Minnesota Psychiatric Society	GM
41783	Charles Brien Godfrey M.D.	Minnesota Psychiatric Society	LM
37007	Janet Adele Zander M.D.	Minnesota Psychiatric Society	LM
80370	Fawaz Abdrabbo M.D.	Mississippi Psychiatric Association, Inc	GM
1004961	Angela M Burt, MD	Mississippi Psychiatric Association, Inc	GM
1008066	Deepak Khemka MD	Mississippi Psychiatric Association, Inc	GM
1014097	Manpreet Khemka, MD	Mississippi Psychiatric Association, Inc	GM
1013693	Efosa O Airuehia, MD	Missouri Psychiatric Association	GM
311445	Faheem S Arain M.D.	Missouri Psychiatric Association	GM
1043577	Nauman Ashraf, MD	Missouri Psychiatric Association	GM
1002053	Roshan Dasari, MD, MPH	Missouri Psychiatric Association	GM
1031167	Osamede Edokpolo, MD	Missouri Psychiatric Association	GM
1017425	Nezar Ali El-Ruwie, MD	Missouri Psychiatric Association	GM
304168	Usama H Mabrouk, MD	Missouri Psychiatric Association	GM
72750	Candice A Moore M.D.	Missouri Psychiatric Association	GM
1078651	Daniel Abel Murray, MD	Missouri Psychiatric Association	GM
77889	Omar H Quadri, MD	Missouri Psychiatric Association	GM
70557	Robert G Sarrazin M.D.	Missouri Psychiatric Association	GM
1016931	Robert Burton Wieck, DO	Missouri Psychiatric Association	GM
312310	John Douglas Napier Muir, MD	Montana Psychiatric Association	GM

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313146	Kimber L Pezzoni M.D.	Montana Psychiatric Association	GM
86326	Timothy Visscher M.D.	Montana Psychiatric Association	GM
1017221	Ashutosh Atri MD MS	Nebraska Psychiatric Society	GM
1052841	Venkata B Kolli, MD	Nebraska Psychiatric Society	GM
78826	Thomas M Magnuson M.D.	Nebraska Psychiatric Society	GM
68734	Priscilla M Cusi M.D.	Nevada Psychiatric Association	GM
91290	Charles E Nielsen M.D.	Nevada Psychiatric Association	GM
87860	Karen Melissa Moyer, DO	New Hampshire Psychiatric Society	GM
60826	Douglas Noordsy MD	New Hampshire Psychiatric Society	GM
31447	Osvaldo Jose Evangelista, MD	New Hampshire Psychiatric Society	LM
306050	Gary A Brown, DO	New Jersey Psychiatric Association	GM
61396	Edward Michael Collopy, MD	New Jersey Psychiatric Association	GM
80941	Bonnie Ann M Fenyar, MD	New Jersey Psychiatric Association	GM
304868	Agdel J Hernandez, MD	New Jersey Psychiatric Association	GM
307165	David Huang M.D.	New Jersey Psychiatric Association	GM
81424	Debra E Koss, MD	New Jersey Psychiatric Association	GM
90579	George L Nodarse M.D.	New Jersey Psychiatric Association	GM
79073	Mark Charles Schuchman, MD	New Jersey Psychiatric Association	GM
69530	Vivian Shnaidman, MD	New Jersey Psychiatric Association	GM
74816	Samiris Sostre, MD	New Jersey Psychiatric Association	GM
1007457	Elizabeth Streicker Albertini, MD	New York County Psychiatric Society	GM
305600	Melissa R Arbuckle, MD PhD	New York County Psychiatric Society	GM
44902	David W Brody, MD	New York County Psychiatric Society	GM
82696	Bryan J Bruno M.D.	New York County Psychiatric Society	GM
1108411	Michael Brus, MD	New York County Psychiatric Society	GM
312811	Brian Clinton, MD	New York County Psychiatric Society	GM
1001621	Ziv E Cohen, MD	New York County Psychiatric Society	GM
70438	Yasmin M Collazo MD	New York County Psychiatric Society	GM
1000918	Ravi B Desilva, MD	New York County Psychiatric Society	GM
45941	Michael James Devlin, MD	New York County Psychiatric Society	GM
1014184	Nery Diaz, D.O.	New York County Psychiatric Society	GM
65632	Lourdes M Dominguez M.D.	New York County Psychiatric Society	GM
307811	Omar Fattal MD MPH	New York County Psychiatric Society	GM
1000505	Elizabeth M Fitelson, MD	New York County Psychiatric Society	GM
1197522	Erika Antoinette Gerz, MD	New York County Psychiatric Society	GM
309036	Himani Ghoge M.D.	New York County Psychiatric Society	GM
42251	Andrea M Hessel, MD	New York County Psychiatric Society	GM
1005459	Lauren B Kotcher, MD	New York County Psychiatric Society	GM
307789	Kevin Lam, MD	New York County Psychiatric Society	GM
63553	Patricia Kay Leebens, MD	New York County Psychiatric Society	GM
310350	Bruce D Leuchter, MD	New York County Psychiatric Society	GM
1054506	Daniel Linhares, MD	New York County Psychiatric Society	GM
102140	Manuel Lopez-Leon, MD	New York County Psychiatric Society	GM
43798	Christian Maetzner M.D.	New York County Psychiatric Society	GM
1002757	Marc W Manseau, MD, MPH	New York County Psychiatric Society	GM
82909	Michelle E Montemayor, MD PhD	New York County Psychiatric Society	GM
40665	Helen Gertrude Muhlbauer M.D.	New York County Psychiatric Society	GM
1011568	Nicole A Naggar, MD	New York County Psychiatric Society	GM
307183	Goksin M Ozkarahan MD	New York County Psychiatric Society	GM
308036	Julie B Penzner, MD	New York County Psychiatric Society	GM

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1090200	Maria Perez Coste, MD	New York County Psychiatric Society	GM
1013445	Maria Mercedes Perez-Rodriguez, MD, PhD	New York County Psychiatric Society	GM
1006520	Victoria I Pham, DO	New York County Psychiatric Society	GM
310300	Dennis Michael Popeo, MD	New York County Psychiatric Society	GM
74497	Alicia J Salzer, MD	New York County Psychiatric Society	GM
1002826	Samuel L Sharmat, MD	New York County Psychiatric Society	GM
89394	Gabrielle Helen Silver, MD	New York County Psychiatric Society	GM
75128	Anthony W Termine M.D.	New York County Psychiatric Society	GM
32654	Antonio U Beltramini M.D.	New York County Psychiatric Society	LM
38902	Judy Blitman M.D.	New York County Psychiatric Society	LM
37463	Scott Bruce Cutler M.D.	New York County Psychiatric Society	LM
30790	Robert Arthur Davis M.D.	New York County Psychiatric Society	LM
21160	Gary Lee Lefer M.D.	New York County Psychiatric Society	LM
28712	Robert Marantz M.D.	New York County Psychiatric Society	LM
32730	Myles Shelley Schneider, MD	New York County Psychiatric Society	LM
13196	S Warren Seides M.D.	New York County Psychiatric Society	LM
26584	Stephen Stuart Teich, MD	New York County Psychiatric Society	LM
1004645	Amit P Pradhan MD	New York State Capital District Branch	GM
89596	Erica Middle Arrington, MD	North Carolina Psychiatric Association	GM
1006813	Hasan A Baloch, MD	North Carolina Psychiatric Association	GM
90778	John E Barkenbus M.D.	North Carolina Psychiatric Association	GM
1008492	Durga P Bestha, MD	North Carolina Psychiatric Association	GM
1089793	Lee M Bourgeois, MD	North Carolina Psychiatric Association	GM
303114	Iverson Brooks Carter, MD	North Carolina Psychiatric Association	GM
1000062	Manuel Alberto Castro, MD	North Carolina Psychiatric Association	GM
38911	Mary M Christenbury M.D.	North Carolina Psychiatric Association	GM
74688	Karla L deBeck, MD	North Carolina Psychiatric Association	GM
1004820	James A Disney, MD	North Carolina Psychiatric Association	GM
71502	Linda D Francis MD	North Carolina Psychiatric Association	GM
92065	Lance R Fuller, MD	North Carolina Psychiatric Association	GM
307808	Tesfa-Alem Gebremeskel M.D.	North Carolina Psychiatric Association	GM
307313	Logan G Graddy, MD	North Carolina Psychiatric Association	GM
302845	Nicola S. Gray, MD	North Carolina Psychiatric Association	GM
309821	Jessica K Hairston, MD	North Carolina Psychiatric Association	GM
1004434	Obinna Ogbonnaya Ikwechegh, MD	North Carolina Psychiatric Association	GM
310759	Tia R Konzer, DO	North Carolina Psychiatric Association	GM
301464	Philip L Lartey M.D.	North Carolina Psychiatric Association	GM
1047569	Andrew Richard Newberg, MD	North Carolina Psychiatric Association	GM
1014359	Joshua J Pagano, DO	North Carolina Psychiatric Association	GM
70371	Marcus A Pelucio M.D.	North Carolina Psychiatric Association	GM
75954	Rommel Ramos M.D.	North Carolina Psychiatric Association	GM
1001400	Jennifer S Segura, MD	North Carolina Psychiatric Association	GM
58705	Warren Jay Steinmuller M.D.	North Carolina Psychiatric Association	GM
312123	Qionna Mariel Tinney Railey, MD	North Carolina Psychiatric Association	GM
78912	Rodney Anthony Villanueva, MD	North Carolina Psychiatric Association	GM
75270	R Lance Waycaster, MD	North Carolina Psychiatric Association	GM
1008980	Jason A Webb, MD	North Carolina Psychiatric Association	GM
1007988	April E Welborn, MD, PhD	North Carolina Psychiatric Association	GM
63689	Nicholas Saleh Zarzar M.D.	North Carolina Psychiatric Association	GM
33592	Ira Nathaniel Doneson M.D.	North Carolina Psychiatric Association	LM

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32214	Bahman Malekpour, MD	North Carolina Psychiatric Association	LM
21912	Robert Harvey Weinstein M.D.	North Carolina Psychiatric Association	LM
1087575	Marsal Sanches, MD, PhD	North Dakota Psychiatric Society	GM
305413	Indu Latha Aramandla M.D.	Northern California Psychiatric Society	GM
1131281	Jacob Chacko, MD	Northern California Psychiatric Society	GM
76957	Cynthia R Chatterjee, MD, MA	Northern California Psychiatric Society	GM
1132621	Victor Chen, MD	Northern California Psychiatric Society	GM
1007042	Jasen Andrew Christensen, DO	Northern California Psychiatric Society	GM
1004908	Shannon Michelle Easton-Carr, MD MPH	Northern California Psychiatric Society	GM
309135	Elizabeth L Hegarty, MD	Northern California Psychiatric Society	GM
312683	Rex W Huang, MD	Northern California Psychiatric Society	GM
1061535	Celeste Nicole Lopez, MD	Northern California Psychiatric Society	GM
1002281	Derek Skeet Mongold, MD	Northern California Psychiatric Society	GM
309006	Erica L O'Neal M.D.	Northern California Psychiatric Society	GM
309748	Sarah Polfliet, MD	Northern California Psychiatric Society	GM
92001	Surender P Punia, MD	Northern California Psychiatric Society	GM
59402	Harvey Paul Segalove, MD	Northern California Psychiatric Society	GM
1052192	Sidharth G Sharma, MD	Northern California Psychiatric Society	GM
1014645	Seth Sherman, MD	Northern California Psychiatric Society	GM
1014356	Sasha D Waring, MD	Northern California Psychiatric Society	GM
1009052	Kimberly Yang, MD	Northern California Psychiatric Society	GM
90619	Mansoor S Zuberi M.D.	Northern California Psychiatric Society	GM
67014	Marcia Jane Adelman, MD	Ohio Psychiatric Association	GM
1001372	Benjamin H Albrecht, DO	Ohio Psychiatric Association	GM
307993	Sumru A Bilge-Johnson, MD	Ohio Psychiatric Association	GM
1008514	Christina Yvette Bilyeu, MD	Ohio Psychiatric Association	GM
1017530	Mary Rosa Cairns, MD	Ohio Psychiatric Association	GM
77299	Alan S Castro M.D.	Ohio Psychiatric Association	GM
72173	Leah Slone Casuto, MD	Ohio Psychiatric Association	GM
53693	Michael Alan Chan M.D.	Ohio Psychiatric Association	GM
308072	Meicheng Chiang, MD, PhD	Ohio Psychiatric Association	GM
45571	Anne Stripling Davidson M.D.	Ohio Psychiatric Association	GM
1016694	Leslie Ann Deckter, MD	Ohio Psychiatric Association	GM
1077984	Pavan Kumar Dontineni Venkata, MD	Ohio Psychiatric Association	GM
310901	Brian E Evans, DO	Ohio Psychiatric Association	GM
1100775	Mary T Gabriel, MD	Ohio Psychiatric Association	GM
310161	Julie N Hyman, MD	Ohio Psychiatric Association	GM
1017608	Diana L Kallis, MD	Ohio Psychiatric Association	GM
1017451	Sarah Lytle, MD	Ohio Psychiatric Association	GM
62370	Phillip G Maiden M.D.	Ohio Psychiatric Association	GM
308193	Mary T Matias Akhtar, MD	Ohio Psychiatric Association	GM
1139478	Michael F Potesta, MD	Ohio Psychiatric Association	GM
1059744	Michelle Elizabeth Romero, DO	Ohio Psychiatric Association	GM
75058	Simran K Sehbi M.D.	Ohio Psychiatric Association	GM
88674	Darshan Singh, MD	Ohio Psychiatric Association	GM
1008751	Megan E Testa, MD	Ohio Psychiatric Association	GM
1016608	Dimitrios Michael Tsatiris, MD	Ohio Psychiatric Association	GM
1000422	Elizabeth A Yoder, DO	Ohio Psychiatric Association	GM
33271	Antoine Yvan Demosthene, MD	Ohio Psychiatric Association	LM
41942	Lawson Reed Wulsin MD	Ohio Psychiatric Association	LM

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28978	Denton H Wyse MD	Ohio Psychiatric Association	LM
312402	Charles Huston Dukes, MD	Oklahoma Psychiatric Physicians Association	GM
89530	Kristy M Griffith M.D.	Oklahoma Psychiatric Physicians Association	GM
82162	Richard R Hartman, MD	Oklahoma Psychiatric Physicians Association	GM
1013488	Haiwang Tang, MD, PhD	Oklahoma Psychiatric Physicians Association	GM
308058	Keely W Wheeler, DO	Oklahoma Psychiatric Physicians Association	GM
34410	Stephen Norman Harnish M.D.	Oklahoma Psychiatric Physicians Association	LM
1147297	Rajasekar Basker, MBBS	Ontario District Branch	GM
306542	Heena Y Desai, MD	Ontario District Branch	GM
1015697	Ahmed Nabeel Hassan, MD	Ontario District Branch	GM
1092885	Diana Kljenak, MD	Ontario District Branch	GM
83908	Popuri M Krishna, MD	Ontario District Branch	GM
304933	Christopher A McIntosh M.D.	Ontario District Branch	GM
1015703	Diana Felicia Nicolici, MD	Ontario District Branch	GM
310614	Nosa Bernard Omoruyi, MD	Ontario District Branch	GM
89334	Jegapathy Rajendra M.D.	Ontario District Branch	GM
311979	Dallas P Seitz M.D.	Ontario District Branch	GM
1048426	Gurpeet S Sidhu, MD	Ontario District Branch	GM
45760	Sherry Taub, MD	Ontario District Branch	GM
1008445	Renata M Villela, MD	Ontario District Branch	GM
63165	Maselle Gaerlan Virey, MD	Ontario District Branch	GM
69536	Evangelos Coskinas M.D.,Ph.D.	Orange County Psychiatric Society	GM
309128	Kwitka Durana Peratt, MD	Orange County Psychiatric Society	GM
91519	Daniel Jon Kostalnick M.D.	Orange County Psychiatric Society	GM
1007054	Jay H Leathers MD	Orange County Psychiatric Society	GM
305939	Moira Shae Locke M.D.	Orange County Psychiatric Society	GM
300204	Deena Shin McRae, MD	Orange County Psychiatric Society	GM
1013434	Michelle J Park, MD	Orange County Psychiatric Society	GM
83754	Sonya R Rasminsky M.D.	Orange County Psychiatric Society	GM
1021955	Sina M Safahieh, MD	Orange County Psychiatric Society	GM
1016432	David Safani, MD, MBA	Orange County Psychiatric Society	GM
1061823	Hina Sidhu, MD	Orange County Psychiatric Society	GM
62891	Philip Bradly Anderson, MD	Oregon Psychiatric Physicians Association	GM
1054009	Daniel Bristow, MD	Oregon Psychiatric Physicians Association	GM
65499	Alexander R Burt M.D.	Oregon Psychiatric Physicians Association	GM
312495	Rohana P Calnaido, MD	Oregon Psychiatric Physicians Association	GM
76177	Ann Marie Childers, MD	Oregon Psychiatric Physicians Association	GM
305008	Laurence Colman MD MPH	Oregon Psychiatric Physicians Association	GM
1015616	Jonathan C Fellers, MD	Oregon Psychiatric Physicians Association	GM
88187	Michael A Franz M.D.	Oregon Psychiatric Physicians Association	GM
85099	Kiku E Kim M.D.	Oregon Psychiatric Physicians Association	GM
1013744	Jonathan Reynolds Lloyd, MD	Oregon Psychiatric Physicians Association	GM
311935	Stephanie M Lopez, MD	Oregon Psychiatric Physicians Association	GM
66715	Keith Greg Lowenstein M.D.	Oregon Psychiatric Physicians Association	GM
312180	Soroush Mohandessi M.D.	Oregon Psychiatric Physicians Association	GM
104714	Stewart S Newman, MD	Oregon Psychiatric Physicians Association	GM
1002112	Jane G Payne, MD	Oregon Psychiatric Physicians Association	GM
1005523	Rachel Ponni Rittman, MD	Oregon Psychiatric Physicians Association	GM
1012073	Jennifer Schumann MD	Oregon Psychiatric Physicians Association	GM
77490	Mujeeb U Shad, M.D., M.S.C.S.	Oregon Psychiatric Physicians Association	GM

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66788	J Teresa Shelby M.D.	Oregon Psychiatric Physicians Association	GM
71545	Mary-Lynn Theel M.D.	Oregon Psychiatric Physicians Association	GM
64950	Barbara J Baker, MD	Oregon Psychiatric Physicians Association	LM
25768	Owen Edward Clark M.D.	Oregon Psychiatric Physicians Association	LM
43375	Marvin Dwane Fickle M.D.	Oregon Psychiatric Physicians Association	LM
60659	Norwood Knight-Richardson, MD	Oregon Psychiatric Physicians Association	LM
61873	Dale Keith Adair M.D.	Pennsylvania Psychiatric Society	GM
1017275	Santiago A. Almanzar Disla, MD	Pennsylvania Psychiatric Society	GM
1004715	David T Anthony, MD	Pennsylvania Psychiatric Society	GM
1015052	Michael Sam Ascher, MD	Pennsylvania Psychiatric Society	GM
1017191	Raman Baweja, MD, MS	Pennsylvania Psychiatric Society	GM
1011415	Jonathan A. Beatty, MD	Pennsylvania Psychiatric Society	GM
1199448	Paul Michael Burkat, MD, PhD	Pennsylvania Psychiatric Society	GM
68697	Colleen Marie Connor, MD	Pennsylvania Psychiatric Society	GM
312121	Jaclyn N Crawford, DO	Pennsylvania Psychiatric Society	GM
1016022	Susan S Douglas, MD	Pennsylvania Psychiatric Society	GM
311704	Carol A Eidsvoog M.D.	Pennsylvania Psychiatric Society	GM
1013493	Kawish Garg, MD	Pennsylvania Psychiatric Society	GM
1000490	William C Jangro, DO	Pennsylvania Psychiatric Society	GM
1016780	Shabana Khan, MD	Pennsylvania Psychiatric Society	GM
37213	David Alan Lewis, MD	Pennsylvania Psychiatric Society	GM
89008	Yong-Tong Li MD	Pennsylvania Psychiatric Society	GM
1052356	Tushar J Makadia, MD	Pennsylvania Psychiatric Society	GM
307630	Tania C Martinez-Jimenez, MD	Pennsylvania Psychiatric Society	GM
78259	John M McCafferty, MD	Pennsylvania Psychiatric Society	GM
306364	Robert F McFadden M.D.	Pennsylvania Psychiatric Society	GM
311943	Habibah E Mosley, DO	Pennsylvania Psychiatric Society	GM
310438	Wally N Novero, MD	Pennsylvania Psychiatric Society	GM
86798	Nwe Oo M.D.	Pennsylvania Psychiatric Society	GM
1008431	Camille I Paglia, MD	Pennsylvania Psychiatric Society	GM
1065180	Elizabeth Anne Ramsey, DO	Pennsylvania Psychiatric Society	GM
1010108	Manish Sapra, MD	Pennsylvania Psychiatric Society	GM
311891	Jennifer Beth Sokol, DO, MPH	Pennsylvania Psychiatric Society	GM
1060892	Dmitry A Vilensky, MD	Pennsylvania Psychiatric Society	GM
19963	Jerrold Charles Bonn, MD	Pennsylvania Psychiatric Society	LM
1002218	David J Manno PhD, MD	Psychiatric Medical Association of New Mexico	GM
79258	Jolynn H Muraida M.D.	Psychiatric Medical Association of New Mexico	GM
103360	Michelle Pent MD MPH	Psychiatric Medical Association of New Mexico	GM
44797	Frank John Pieri M.D.	Psychiatric Medical Association of New Mexico	GM
300704	Sofya M Rubinchik, MD	Psychiatric Medical Association of New Mexico	GM
1017636	Meriam B Chua, MD	Psychiatric Society of Delaware	GM
59811	Paul Jon Gitlin, MD	Psychiatric Society of Delaware	GM
82988	Saurabh Gupta, MD	Psychiatric Society of Delaware	GM
1015956	Laura Polanec McLafferty, MD	Psychiatric Society of Delaware	GM
1012112	Nassima Ait-Daoud, MD	Psychiatric Society of Virginia, Inc	GM
71237	Armin Ansari M.D.	Psychiatric Society of Virginia, Inc	GM
1052080	Frank A Clark, MD	Psychiatric Society of Virginia, Inc	GM
1013594	Joseph C Guthrie, MD	Psychiatric Society of Virginia, Inc	GM
1017486	Joseph Waheb Iskandar, DO	Psychiatric Society of Virginia, Inc	GM
1014794	Prakash B Karn, MD	Psychiatric Society of Virginia, Inc	GM

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1053923	Elionora Katz MD, PhD	Psychiatric Society of Virginia, Inc	GM
71242	Stephanie E Page M.D.	Psychiatric Society of Virginia, Inc	GM
1007963	Mahmudur Rabbi, MD	Psychiatric Society of Virginia, Inc	GM
1049207	James Rapley III, MD	Psychiatric Society of Virginia, Inc	GM
304728	Sala Suzette Webb, MD	Psychiatric Society of Virginia, Inc	GM
1004093	Danielle N Wroblewski MD	Psychiatric Society of Virginia, Inc	GM
32888	Eleanor Law Gagon, MD	Psychiatric Society of Virginia, Inc	LM
18579	Robert Niccolini, MD	Psychiatric Society of Virginia, Inc	LM
1000412	Dimitry Francois, MD	Psychiatric Society of Westchester County, Inc	GM
59832	Flemming Gomme Graae M.D.	Psychiatric Society of Westchester County, Inc	GM
1013405	Uchenwa Okoli, MD	Psychiatric Society of Westchester County, Inc	GM
38810	Frank Richard Pastore, MD	Psychiatric Society of Westchester County, Inc	GM
42173	Mark Jack Russ, MD	Psychiatric Society of Westchester County, Inc	GM
72182	Carlos E Sotolongo, MD	Psychiatric Society of Westchester County, Inc	GM
92463	Jing Xu M.D.	Psychiatric Society of Westchester County, Inc	GM
26177	Arthur Lew, MD	Psychiatric Society of Westchester County, Inc	LM
307917	Marlene M Pierantoni, MD	Puerto Rico Psychiatric Society	GM
86675	Maria L Reyes-Rabanillo, MD	Puerto Rico Psychiatric Society	GM
61415	Odette Bernazzani M.D.	Quebec & Eastern Canada District Branch	GM
86569	Khalil Geagea, MD	Quebec & Eastern Canada District Branch	GM
84193	Niaz Ahmed Khan M.D.	Quebec & Eastern Canada District Branch	GM
57667	Ken Richter, MD	Quebec & Eastern Canada District Branch	GM
35177	Robert Howard Dicker M.D.	Queens County Psychiatric Society	GM
64362	Martin H Maurer M.D.	Queens County Psychiatric Society	GM
1000713	Indroneil (Neil) Mukerji, MD	Queens County Psychiatric Society	GM
304066	Marie Rosette Pierre-Louis, MD	Queens County Psychiatric Society	GM
1005408	Dario M Shuster MD	Queens County Psychiatric Society	GM
1042596	Joanna V MacLean, MD	Rhode Island Psychiatric Society	GM
77786	Ann L Potter M.D.	Rhode Island Psychiatric Society	GM
302389	Bushra Farooq Ahmad, MD	San Diego Psychiatric Society	GM
45345	Steven Parker James, MD	San Diego Psychiatric Society	GM
1017392	Adeniyi Alatise, MD	Society of Uniformed Services Psychiatrists	GM
1017326	Rohul Amin, MD	Society of Uniformed Services Psychiatrists	GM
1008586	Nicole M Ballinger, DO	Society of Uniformed Services Psychiatrists	GM
1007896	April L Breeden, MD	Society of Uniformed Services Psychiatrists	GM
1039936	Michael J Colston, MD, Capt MC US Navy	Society of Uniformed Services Psychiatrists	GM
63196	Stephen John Cozza M.D.	Society of Uniformed Services Psychiatrists	GM
1207497	Daniel De Cecchis, MD	Society of Uniformed Services Psychiatrists	GM
1017709	Alissa Renee Garcia, MD	Society of Uniformed Services Psychiatrists	GM
88433	Sharette K Gray M.D.	Society of Uniformed Services Psychiatrists	GM
1015668	Brent Harlan, MD	Society of Uniformed Services Psychiatrists	GM
1017003	Heather Hauck, MD	Society of Uniformed Services Psychiatrists	GM
1019830	Adam Lee Hunzeker, MD	Society of Uniformed Services Psychiatrists	GM
1018558	Daniel J Lee, MD	Society of Uniformed Services Psychiatrists	GM
1000192	Christopher T Manetta, DO	Society of Uniformed Services Psychiatrists	GM
1053312	Eric G Meyer II, MD	Society of Uniformed Services Psychiatrists	GM
1139998	Sebastian R Schnellbacher, DO	Society of Uniformed Services Psychiatrists	GM
1171064	Carla Wilhelmina Schnitzlein, DO	Society of Uniformed Services Psychiatrists	GM
1004485	Alyssa A Soumoff, MD	Society of Uniformed Services Psychiatrists	GM
1013708	Rachel M Sullivan, MD	Society of Uniformed Services Psychiatrists	GM

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82961	David Kevin Weber, MD, MPH	Society of Uniformed Services Psychiatrists	GM
33761	Stephen N Xenakis M.D.	Society of Uniformed Services Psychiatrists	GM
1133380	Amara Chudhary, MD	South Carolina Psychiatric Association	GM
75374	Mayank H Dalal, MD	South Carolina Psychiatric Association	GM
68866	Deborah Deas, MD, MPH	South Carolina Psychiatric Association	GM
57633	Elizabeth M Leonard, MD	South Carolina Psychiatric Association	GM
1130803	Hosain Manesh, MD	South Carolina Psychiatric Association	GM
1036199	Christian Reusche, MD	South Carolina Psychiatric Association	GM
34219	Louis John Dolinar M.D.	South Carolina Psychiatric Association	LM
1005292	William B Gammeter, MD	South Dakota Psychiatric Association	GM
310897	Christopher K Haas, MD	South Dakota Psychiatric Association	GM
312931	Meredith B Powell, MD	South Dakota Psychiatric Association	GM
1019686	Anish Ranjan Dube, MD	Southern California Psychiatric Society	GM
1090203	Tatyana Ellison, MD	Southern California Psychiatric Society	GM
73738	Carlotta V Freeman M.D.	Southern California Psychiatric Society	GM
68859	Nick Martin Gutierrez, MD	Southern California Psychiatric Society	GM
65782	Phill V Halamandaris M.D.	Southern California Psychiatric Society	GM
1017664	Ijeoma Ijeaku, MD, MPH	Southern California Psychiatric Society	GM
1014338	Heather M Kurera, DO	Southern California Psychiatric Society	GM
85656	Jeffrey N Mar, MD	Southern California Psychiatric Society	GM
1036499	Maria Theresa Mariano, MD	Southern California Psychiatric Society	GM
304315	Larissa J Mooney M.D.	Southern California Psychiatric Society	GM
306564	Joann Ng, MD	Southern California Psychiatric Society	GM
306183	Elena Ortiz-Portillo M.D.	Southern California Psychiatric Society	GM
1005389	Lauren Burr Ozbolt, MD	Southern California Psychiatric Society	GM
88411	Natasha S Sane, MD	Southern California Psychiatric Society	GM
306821	Phuong Chi Truong M.D.	Southern California Psychiatric Society	GM
87827	Lauren M Walton M.D.	Southern California Psychiatric Society	GM
60461	Diane Judith Weiss M.D.	Southern California Psychiatric Society	GM
1015925	Lawrence David Willison IV, MD, PhD	Southern California Psychiatric Society	GM
22245	Robert Joe Cooper M.D.	Southern California Psychiatric Society	LM
38879	Jerry L Dennis, MD	Southern California Psychiatric Society	LM
24846	Iradj Siassi M.D.	Southern California Psychiatric Society	LM
76841	Franklin J Drummond, MD, MBA	Tennessee Psychiatric Association	GM
78324	Rebecca Jill Pate, MD	Tennessee Psychiatric Association	GM
301474	Jyotsna S Ranga, MD	Tennessee Psychiatric Association	GM
311253	John P Abraham, DO	Texas Society of Psychiatric Physicians	GM
1007872	Melissa K Allen, DO	Texas Society of Psychiatric Physicians	GM
1000488	Helene M Alphonso, DO	Texas Society of Psychiatric Physicians	GM
75320	Jaime Arbona M.D.	Texas Society of Psychiatric Physicians	GM
85635	Ali A Asghar-Ali, MD	Texas Society of Psychiatric Physicians	GM
1019396	Jeremy S Bass, MD	Texas Society of Psychiatric Physicians	GM
312335	Claire Alease Bradley, MD	Texas Society of Psychiatric Physicians	GM
44313	Oscar Gary Bukstein, MD	Texas Society of Psychiatric Physicians	GM
71052	Louis E Costello M.D.	Texas Society of Psychiatric Physicians	GM
70890	Susan Jones Hardesty, MD	Texas Society of Psychiatric Physicians	GM
81802	Jennifer C Heath, MD	Texas Society of Psychiatric Physicians	GM
1002038	Qazi U Javed, MD	Texas Society of Psychiatric Physicians	GM
304745	Antonio Rafael Lopez-Canino, MD	Texas Society of Psychiatric Physicians	GM
76874	Daniel B Morehead M.D.	Texas Society of Psychiatric Physicians	GM

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1012741	Milena Newhook, DO	Texas Society of Psychiatric Physicians	GM
1008333	Jacob R O'Meilias, MD	Texas Society of Psychiatric Physicians	GM
1089212	Nicholas K Piotrowski, MD	Texas Society of Psychiatric Physicians	GM
87662	Aneta Predanic, MD	Texas Society of Psychiatric Physicians	GM
44708	Tarakumar B Reddy M.D.	Texas Society of Psychiatric Physicians	GM
309089	Duke J Ruktanonchai, MD	Texas Society of Psychiatric Physicians	GM
75551	Kathleen A Salvatore M.D.	Texas Society of Psychiatric Physicians	GM
81169	Marzenna J Senktas M.D.	Texas Society of Psychiatric Physicians	GM
1005008	Steven Starks, MD	Texas Society of Psychiatric Physicians	GM
1044068	Poonam K Thandi, MD	Texas Society of Psychiatric Physicians	GM
1008903	Tho Van Tran, MD	Texas Society of Psychiatric Physicians	GM
44081	Renu Kapur Thapar M.D.	Texas Society of Psychiatric Physicians	LM
307830	Roger Jared Martineau MD	Utah Psychiatric Association	GM
85219	Robert R Althoff, MD, PhD	Vermont Psychiatric Association	GM
67570	Steven Neil Sobel M.D.	Vermont Psychiatric Association	GM
1017463	Yu Dong, MD, PhD	Washington Psychiatric Society	GM
1037317	Miriam Galescu, MD	Washington Psychiatric Society	GM
85184	Anne H Horst M.D.	Washington Psychiatric Society	GM
301959	Richard K Kim, MD	Washington Psychiatric Society	GM
1010098	Alok Kumar, MD	Washington Psychiatric Society	GM
1004985	Ted San Liao, MD	Washington Psychiatric Society	GM
1011726	Partam Manalai, MD	Washington Psychiatric Society	GM
1000136	Phillip C Perez, MD	Washington Psychiatric Society	GM
1015964	Nathan L Pilgrim, DO, MPH	Washington Psychiatric Society	GM
1004539	Beverly A Reader, MD	Washington Psychiatric Society	GM
307796	Xiaoping Shao M.D.	Washington Psychiatric Society	GM
1010709	Syed Iftikhar Haider Zaidi, MD	Washington Psychiatric Society	GM
31139	Frances Espy Rankin M.D.	Washington Psychiatric Society	LM
84322	Rinah I Gutierrez M.D.	Washington State Psychiatric Association	GM
1017804	Tara-Willow Ferren James, MD	Washington State Psychiatric Association	GM
70106	Ann Louise Lyles, MD	Washington State Psychiatric Association	GM
1053389	Zhendong J Ma, MD, PhD	Washington State Psychiatric Association	GM
79997	Syed Jamal Mustafa, MD	Washington State Psychiatric Association	GM
85706	Jagoda Pasic MD PhD	Washington State Psychiatric Association	GM
37827	Thomas L Dillon M.D.	Washington State Psychiatric Association	LM
311095	Omar K Hasan, MD	West Virginia Psychiatric Association	GM
1011076	Rabiya Khalid Hasan, MD	West Virginia Psychiatric Association	GM
1000068	Kari B Law, MD	West Virginia Psychiatric Association	GM
41796	Carl Rollynn Sullivan, MD	West Virginia Psychiatric Association	GM
1007694	Amy N Wehrle, DO	West Virginia Psychiatric Association	GM
1017223	Brandon Michael Workman, DO	West Virginia Psychiatric Association	GM
1316932	Vincent Opoku Israel Agyapong, MD	Western Canada District Branch	GM
1143116	Anthony Akinjide Akinnawonu, MBBS	Western Canada District Branch	GM
1128450	Edwin Okeibuno Chete, MD, MRCPsych, FRCPC	Western Canada District Branch	GM
1138417	Chaudhry Liqa Hussain, MD	Western Canada District Branch	GM
1076108	Akinyele Akeem Iyiola, MBBS	Western Canada District Branch	GM
86903	Harinath Mallavarapu M.D.	Western Canada District Branch	GM
1203571	Stephen Ayotunde Ogunremi, MD	Western Canada District Branch	GM
1265344	Abiola Olumide Oshodi, MBBS	Western Canada District Branch	GM
1016271	Daniel Read, MD	Western Canada District Branch	GM

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85161	Wei-Yi Song M.D.	Western Canada District Branch	GM
307085	Syed Shoab Ahmed, MD	Western New York Psychiatric Society	GM
1017545	Melissa Ann Perry, MD	Western New York Psychiatric Society	GM
1001717	Loida D Reyes, MD	Western New York Psychiatric Society	GM
1005290	Jacob M Behrens, MD	Wisconsin Psychiatric Association	GM
67516	Bernadette A De Muri, MD	Wisconsin Psychiatric Association	GM
312168	Frederick John Paul Langheim, MD PhD	Wisconsin Psychiatric Association	GM
1017682	Susan C Uyanna, MD MPH	Wisconsin Psychiatric Association	GM
1008531	Jack C Yen, MD	Wisconsin Psychiatric Association	GM
1053422	Jasper James Chen, MD	Wyoming Association of Psychiatric Physicians	GM
43148	Scott Elliott Pollard, MD	Wyoming Association of Psychiatric Physicians	GM
	n=760		
*Deferred DF automatically becomes a Fellow			

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Mbr ID# Country/Applicant Name
ARGENTINA

69043 Gustavo A Delucchi, MD
309795 Norma Cristina Echavarria M.D.
82763 Salvador M Guinjoan, MD PhD
1235049 Guillermo Nicolas Jemar, MD
87065 Gabriela S Jufe, MD
91963 Julio Kuschnir M.D.
87076 Eduardo A Leiderman M.D.
89920 Juan Pablo Licciardo M.D.
1016068 Ricardo Licovetzky, MD
1015828 Jorge Carlos Lomoc, MD
82119 Julio Moizeszowicz, MD
302666 Raul R Quiroga M.D.
302664 Edgardo Schmal M.D.
89979 Luisa Cristina Schmidt, MD
90022 Julio C Zarra M.D.
104364 Norberto M Zelaschi M.D.

ARUBA

1149124 Pamela Arlene De Coteau, MD

AUSTRALIA

1101451 Akinsola Akinbiyi, MBBS
1038125 Richard H Baker, MD
102362 George J Jacobs M.D.
1089667 Homayoun Khozouei, MD
1305853 Stephen Kisely, MD
1004913 Peter D McCarthy, MBBS
73141 Nicholas Leo Stewart Potts, MD
1035062 Suzanne Felicity Redston, MD
1300986 Pamela G Robinson, MD
1132949 Mathew Samuel, MBBS
1136623 Garnet Mark Sanbrook, MBBS
302342 Lindy J Schur, MD
1001214 Michaela Anna Skopek, MD
1344934 Nalin C Wijesinghe, MBBS

AUSTRIA

1001240 Sigrun Rossmann, MD

BANGLADESH

1255231 Mohammad Tariqul Alam, MBBS

Mbr ID# Country/Applicant Name
BANGLADESH Cont'd

1008543 Dr. Supriyo Roy, MBBS, MSc, PhD
1344828 M M Jalal Uddin, MD

BELGIUM

311915 Marc H M Hermans, MD
309221 Gerry Peeters, MD
303995 Eric Vermetten, MD, PhD

BRAZIL

1007165 Ibiracy De Barros Camargo, MD, PhD
1068263 Andre Gordilho Joaquim De Carvalho, MD
61289 Valter M Daudt, MD
1012664 Rodrigo Bernini de Brito, MD, PhD
1345110 Jose Gallucci-Neto, MD, MSc
1052305 Rafael Ferreira Garcia, MD, MSc
313183 Ricardo N Krause M.D.
303927 Julieta J Mejia-Guevara M.D.
1016783 Antonio Leandro Carvalho de Almeida Nascimento, MD
302549 Sandra Nunes, MD, PhD
1002111 Mauro Porcu, MD
301644 Fabio L Rocha M.D.
1335495 Homero P F Vallada, MD, PhD

CHILE

101966 Policarpo E Rebolledo M.D.

CHINA

1284436 Hongbo He, MD, PhD

COLUMBIA

91680 Maria Idalid Carreno Salazar M.D.
1012503 Castulo Fernando Cisneros, MD
1002713 Carlos Lopez-Jaramillo, MD, MSc, PhD
1314241 Silvia Martinez, MD
1011911 Juan Carlos Molano, MD
1016732 Fredy J Sanchez, MD

COSTA RICA

104325 Mercedes Rivas-Torres MD

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1344827 MD. Abdul Mohit, PhD, MD
1227736 Md Golam Rabbani, MBBS

DENMARK

1016993 Flemming Bjoerndal, MD

DOMINICAN REPUBLIC

93079 Luis E Montalvo-Arzeno, MD
73408 Pedro P Paredes M.D.

ECUADOR

1045078 Juan Karolys Martinez, MD
1016669 Jose A. Mosquera, MD

EGYPT

1344776 Mohamed Adel Elhadidi, PhD, MD
1240753 Ahmed AG El-Missiry, MD
1344780 Mohamed Ahmed Elwasify Bily, PhD, MD
1005544 Nahla El-Sayed Nagy, MD
1087066 Doaa N Radwan, MD
1036031 Mohamed Roshdy, MD

FRANCE

305493 Pascal S Lagadic M.D.

GERMANY

1002712 Gunter Paul Niklewski, MD

GHANA

91976 Sammy K Ohene M.D.

INDIA

1284381 Gautam Anand, MD
1284899 Simon Melvin Das Chagas E Silva, MBBS
1008286 Abdul Majid Gania, MD
63448 Gajraj R Golechha M.D.
1008142 Prasad Rao Gundugurti, MBBS
1103322 Ashok Gupta, MBBS
1007419 Harish Matai, MD
1344823 Sameer Moideen, MD
1181174 Himakar Pedapenki, MBBS
1000917 Sabina Rao MD
1271629 Debasish Sanyal, MBBS, MD
1006482 Bharat Raichand Shah, MD, MBBS
91696 Ashit S Sheth, MD

INDIA Cont'd

1115480 Preeti Sinha, MBBS
1006076 Sethumadhavan Venkatraman, MD
1201019 George Reddy Vimantala, MBBS

IRAQ

1290136 Arfat Al-Dujaili, MD

IRELAND

103459 John Tobin M.D.

ISRAEL

61101 Deborah Rachel Duitch, MD
301915 Raz Gross, MD, MPH

ITALY

1007512 Guido Di Sciascio, MD
1041677 Lupo Macolino, MD
1007045 Giuseppe Nicolo, MD
313180 Antonio Tundo M.D.

JAPAN

104366 Toshifumi Kishimoto M.D.
313212 Nobutaka Motohashi M.D.
67612 Fumitaka Noda, MD
310644 Akihito Uezato, MD
1013735 Nobutomo Yamamoto, MD PhD

KENYA

1235050 Muthoni Anna Mathai, MBCHB

LEBANON

300660 Josyan Madi-Skaff, MD

MAURITIUS

1029201 Hemlata Charitar, MD

MEXICO

1141252 Juan Manuel Bravo Sierra, MD
1046906 Rodolfo Caballero Lozano, MD
1045138 Joaquin Alejandro Soto Chilaca, MD
1045056 Jacqueline Cortes, MD
1038612 Elodia Guadalupe Leon Nandayapa, MD

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1005478 Hardeep Singh, MD
1006451 Om Prakash Singh M.D

MEXICO cont'd

311125 Yolanda Pica, MD
89042 Beatriz Quintanilla Madero, MD
1205967 Jose Luis Reyes Farfan, MD
104260 Jose Romero-Quezada, MD
90072 Carlos E Salas-Martinez, MD
1229211 Misael Tapia Orozco, MD
301225 Mario Salvador Vergara, MD

NETHERLANDS

1001963 Ronald Baas, MD
306524 Maarten De Boo, MD
1001643 Jan Willem De Vos, MD, PhD
1093065 C. A. De Vries, MD
305497 Pieter De Wit M.D.
1012722 Willem Guijt, MD
1002697 Christian Krappel, MD
1104802 Pieter Rood, MD
1067709 Hans Eric Sanders, MD
1005769 Mark Scherders, MD
1001548 Frank G Van Der Oest, MD
312395 Frederik Hendrik Van Essen, MD

NEW ZEALAND

310848 Rachel A Bratlie, DO
91566 Mila Goldner-Vukov M.D.
309217 Dejan Mandic, MD
300645 Rui Mendel, MD

NIGERIA

1087444 Peter O Ajiboye, MD
1112553 Aishatu Yushau Armiyau, MBBS, MWACP, FMCPsych
1266896 Baba Awoye Issa, MBBS
1271666 Idowu Oladujoye Malomo, MBBS
1284433 Abdullah D Yussuf, MBBS

NORWAY

1126015 Kristin Bjartveit, MD
1100059 Alla A.M. Passeniouk, MD

1205588 Araceli Martinez Estrada, MD

PAKISTAN

1007544 Iqbal Muhammad Afridi, MD
1123919 Shamshad Ahmad, MBBS
1096915 Nayyar Nadeem Ahmed, MBBS
1330854 Sohail Ahmed, MBBS
1069361 Wajid-Ali Akhunzada, MD
1037059 Majid Ali, MD
1035069 Mukesh Ambwani, MD
1100442 Syed Salahuddin Babur, MBBS, PhD
1100886 Mian Iftikhar Hussain, MBBS, DPM
1104640 Raza Ur Rahman, MBBS
1337516 Ahmed Shoaib Tabassum, MBBS

PANAMA

1007428 Ricardo Chang Jimenez, MD

PHILIPPINES

25661 Cornelio G Banaag, MD
1138721 Maria Annette DG Bautista, MD
1002654 Chona C Belmonte, MD
1341252 Carmelita Indefenso Custodio, MD
1338933 Belen Mojares Dimatatac, MD
302503 Paul V Lee, MD
1344767 Dulce Teresa Platon, MD
1012494 Genuina C Ranoy, MD
1007401 Eufemio E Sobrevega, MD
1044004 Gregorio Santos Tan, MD FPPA

ROMANIA

1038115 Adriana Mihai, MD
312292 Tudor Udristoiu, MD

SAUDI ARABIA

1297848 Usama Abdul Kader Abdoul Khafez, MD
1002662 Abdelwahed Mohsen Abougazia, MD
1038611 Meshal Khaled Alaqeel, MD
1013072 Ahmad N Alhadi, MD
1012484 Wael Mustafa Hallaba, MD

SINGAPORE

1131356 Pamela S L Chan, MBBS
92331 Chue Tin Tan M.D.
1012551 John Chee Meng Wong, MD

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SOUTH AFRICA

1305404 Arlene Mapula Dikobe, MD

SPAIN

1346185 Antoni Benabarre, MD, PhD

89029 Gemma Garcia-Pares M.D.

SWITZERLAND

89037 Johann W Meyer M.D.

91550 Alexander Poleski M.D.

83118 Fady H Rachid M.D.

TAIWAN

1010244 Shuai-Ting Lin, MD

92030 Chia-Yih Liu, MD

90012 Tso-Jen Wang M.D.,Ph.D.,MPPM

TRINADAD & TABAGO

1002234 Vashtee Ramoutar, MD

TURKEY

1162359 Tahir Ozakkas, MD

UNITED ARAB EMIRATES

1011171 Ammar Albanna, MD, FRCPC

UNITED KINGDOM

1254944 Khalid Al Abbadey, MD

1092176 Zaid Alabbasi, MD

1352113 Malikayil Skaria Alexander, MBBS

1103321 John A Baird, MB ChB

1221458 Ranjan Basu, MD

1344839 Giles S Berrisford, MD

1090347 Padmaja Chalasani, MD

1202734 Lars Davidsson, MD

1024934 Ankur Gupta, MBBS, MBA

1068217 Richard John Hillier, MB.Ch.B., PhD

87064 Michael T Isaac M.D.

1344830 Sarwar Khan, MBBS, MSc

1302735 Olutade Adekunle Olajitan, MD

311983 Adewunmi K Olusina, MBBS, MSc

1014140 Nadir Omara, MD

UNITED KINGDOM Cont'd

1211773 Alan Nicholas Wear, MBBS

URUGUAY

1060063 Tamara Catalina Messano, MD

VENEZUELA

1002231 Ignacio J Sandia Saldivia MD

ZAMBIA

1316948 Anatolii Tsarkov, MD

n=211

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1112457 Aniekan Orok, MD

1351889 Adrian P Warnock, MBBS

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Member ID	Distinguished Fellow Nominee	Member Class	District Branch
103882	Susan J Hatters-Friedman, MD	FE	Member-at-Large
303724	Marisa A Giggie M.D.	FE	Alabama Psychiatric Physicians Association
73351	Nelson Handal, MD	FE	Alabama Psychiatric Physicians Association
63228	Sandra King Parker, MD	FE	Alabama Psychiatric Physicians Association
20708	Terry Elliot Passman M.D.	LF	Alabama Psychiatric Physicians Association
307662	Bradley J Sadler M.D.	FE	Alabama Psychiatric Physicians Association
66991	Joel Edward Parker M.D.	FE	Arizona Psychiatric Society
64580	Cynthia M Stonnington M.D.	FE	Arizona Psychiatric Society
81527	Monica J Taylor-Desir M.D.	FE	Arizona Psychiatric Society
64649	Karen L Weihs M.D.	FE	Arizona Psychiatric Society
64671	Rodgers McKinley Wilson M.D.	FE	Arizona Psychiatric Society
304737	Veena R Doddakashi M.D.	FE	Central California Psychiatric Society
306174	Mohammed A Molla M.D.	FE	Central California Psychiatric Society
305932	Cecilia H Leonard, MD	FE	Central New York District Branch
88861	Darren Lish, M.D.	GM	Colorado Psychiatric Society
71670	Gregg H Olsen M.D.	GM	Colorado Psychiatric Society
102243	Patricia Westmoreland, MD	GM	Colorado Psychiatric Society
308487	Jean M Fils, MD	GM	Florida Psychiatric Society
71367	Alina C Gonzalez-Mayo, MD	FE	Florida Psychiatric Society
82069	Regina M Velasco, DO	FE	Florida Psychiatric Society
91084	Tonia L Werner M.D.	FE	Florida Psychiatric Society
304798	Elizabeth J Santos M.D.	GM	Genesee Valley Psychiatric Association
91616	Bhushan S Agharkar M.D.	FE	Georgia Psychiatric Physicians Association, Inc
61477	Karen Glaze Drexler M.D.	FE	Georgia Psychiatric Physicians Association, Inc
304802	Felissa P Goldstein, MD	FE	Georgia Psychiatric Physicians Association, Inc
63147	Kerry C Hughes M.D.	FE	Georgia Psychiatric Physicians Association, Inc
58606	Neil Andrew Kahn M.D.	FE	Georgia Psychiatric Physicians Association, Inc
42523	Colleen Owen McLemore, MD	LF	Georgia Psychiatric Physicians Association, Inc
40542	Robert Arnold Channon, MD	LF	Illinois Psychiatric Society
65214	Peter F Fore, MD	GM	Illinois Psychiatric Society
301831	David C Lott M.D.	FE	Illinois Psychiatric Society
1000859	James G Mackenzie, DO	GM	Illinois Psychiatric Society
68669	Joshua Laurence Straus, MD	FE	Illinois Psychiatric Society
83777	Steven L Weinstein M.D.	FE	Illinois Psychiatric Society
63893	Joshua Michael Lowinsky M.D.	GM	Indiana Psychiatric Society
79547	Anthony C Miller, MD	GM	Iowa Psychiatric Society
308579	Carver W Nebbe, MD	GM	Iowa Psychiatric Society
83458	Nancy A Williams M.D.	GM	Iowa Psychiatric Society
78450	Daphne Glindmeyer M.D.	FE	Louisiana Psychiatric Medical Association
68816	Ruth E Frydman, MD	FE	Maine Association of Psychiatric Physicians
36451	Eric W Kuntz M.D.	LF	Maine Association of Psychiatric Physicians
64318	Joseph Gregory Liberto M.D.	GM	Maryland Psychiatric Society, Inc
1002343	Jennifer Teitelbaum Palmer, MD	GM	Maryland Psychiatric Society, Inc
43056	Steven A Adelman M.D.	GM	Massachusetts Psychiatric Society
305047	Rebecca W Brendel, MD, JD	FE	Massachusetts Psychiatric Society
87891	Florina Haimovici M.D.	FE	Massachusetts Psychiatric Society
42884	Gary Stuart Moak M.D.	GM	Massachusetts Psychiatric Society
39749	John Raymond Peteet M.D.	LM	Massachusetts Psychiatric Society
63016	Sally Ann Reyering M.D.	FE	Massachusetts Psychiatric Society

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66293	Cathy R Schen M.D.	FE	Massachusetts Psychiatric Society
300481	John Elgin Wilkaitis, MD MBA MS	FE	Mississippi Psychiatric Association, Inc
300963	Vadim Y Baram, MD	FE	Missouri Psychiatric Association
92374	Leonard K Lantz, MD	FE	Montana Psychiatric Association
102225	Praveen Paul Fernandes M.D.	FE	Nebraska Psychiatric Society
305671	Syed F Qadri M.D.	FE	Nebraska Psychiatric Society
300882	Consuelo C Cagande M.D.	GM	New Jersey Psychiatric Association
58123	Gabrielle Marshall-Salomon, MD	FE	New Jersey Psychiatric Association
74725	Donald Reeves, MD	GM	New Jersey Psychiatric Association
89642	Kai-ping Wang M.D.	GM	New Jersey Psychiatric Association
33899	Joseph Barbuto M.D.	LF	New York County Psychiatric Society
33110	Ronald Edwin Hellman, MD	LF	New York County Psychiatric Society
62306	Robert Lloyd Klitzman M.D.	GM	New York County Psychiatric Society
78089	Stephanie Le Melle, MD	GM	New York County Psychiatric Society
75990	Ubaldo Leli M.D.	FE	New York County Psychiatric Society
57518	Frances Rudnick Levin, MD	FE	New York County Psychiatric Society
68281	Stephen A Lund M.D.	FE	New York County Psychiatric Society
305563	Joseph Z Lux, MD	FE	New York County Psychiatric Society
74408	Jorge R Petit, MD	FE	New York County Psychiatric Society
72119	Justin Richardson M.D.	FE	New York County Psychiatric Society
63175	Margaret Spinelli M.D.	LF	New York County Psychiatric Society
33025	Laurence R Tancredi MD JD	LF	New York County Psychiatric Society
44251	Jeffrey D DeLisle, MD	FE	New York State Capital District Branch
82837	Jane P Gagliardi M.D.	FE	North Carolina Psychiatric Association
92549	James N Kimball M.D.	FE	North Carolina Psychiatric Association
311582	Michael C Lang M.D.	GM	North Carolina Psychiatric Association
87541	Mary T Mandell M.D.	GM	North Carolina Psychiatric Association
302322	Kim J Masters M.D.	FE	North Carolina Psychiatric Association
309033	Christopher R Myers M.D.	GM	North Carolina Psychiatric Association
304661	Christopher Britt Peterson MD	GM	North Carolina Psychiatric Association
65517	Michael Earl Smith M.D.	GM	North Carolina Psychiatric Association
72237	Nicole F Wolfe M.D.	FE	North Carolina Psychiatric Association
304995	Alka Aneja, MD	FE	Northern California Psychiatric Society
39286	James David Eyerman, MD	LM	Northern California Psychiatric Society
67562	Michael J Ostacher MD MPH	GM	Northern California Psychiatric Society
66377	Mark Harris Swoiskin M.D.	GM	Northern California Psychiatric Society
77645	Bhupinder S Waraich M.D.	GM	Northern California Psychiatric Society
307133	Cathleen A Cerny M.D.	FE	Ohio Psychiatric Association
304558	Delaney M Smith, MD	GM	Ohio Psychiatric Association
63021	Joseph David Varley M.D.	GM	Ohio Psychiatric Association
304526	Subhdeep Virk, MD	FE	Ohio Psychiatric Association
76480	Christina G Weston M.D.	FE	Ohio Psychiatric Association
63199	Rebecca Susan Daily, MD	FE	Oklahoma Psychiatric Physicians Association
79018	Lesley MacArthur, MD	FE	Orange County Psychiatric Society
81761	Jody M Rawles M.D.	GM	Orange County Psychiatric Society
303619	Annette M Matthews M.D.	FE	Oregon Psychiatric Physicians Association
68467	Kelly J Felins, MD	FE	Pennsylvania Psychiatric Society
57876	Richard Fischbein M.D.	FE	Pennsylvania Psychiatric Society
30956	Stephan C Mann M.D.	LF	Pennsylvania Psychiatric Society
72016	Kenneth C Nash M.D.	FE	Pennsylvania Psychiatric Society

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35507	Richard Ross Silbert M.D.	LM	Pennsylvania Psychiatric Society
45480	John Rune Evaldson M.D.	GM	Psychiatric Medical Association of New Mexico
58550	Kathryn J Fraser, MD	GM	Psychiatric Medical Association of New Mexico
90243	Cynthia Geppert M.D.	GM	Psychiatric Medical Association of New Mexico
62307	Douglas R Knittel M.D.	FE	Psychiatric Society of Virginia, Inc
70326	Brian E Wood, DO	FE	Psychiatric Society of Virginia, Inc
59435	Tewfik Said, MD	GM	Quebec/E Canada
63341	Gregory Smith McFadden M.D.	LF	San Diego Psychiatric Society
306008	Michael M Takamura M.D.	GM	San Diego Psychiatric Society
69919	Edward D Simmer M.D.	GM	Society of Uniformed Services Psychiatrists
302121	Wendi M Waits M.D.	FE	Society of Uniformed Services Psychiatrists
92504	Christopher H Warner M.D.	FE	Society of Uniformed Services Psychiatrists
89430	R Gregg Dwyer, MD EdD	FE	South Carolina Psychiatric Association
303891	Leslie E Frinks, MD	FE	South Carolina Psychiatric Association
300561	Jennifer E Heath, MD	FE	South Carolina Psychiatric Association
67633	Lyle P Christopherson, DO	FE	South Dakota Psychiatric Association
305550	Jay E Weatherill M.D.	FE	South Dakota Psychiatric Association
1008015	Hanumantha Damerla, MD	GM	Southern California Psychiatric Society
102283	Christopher R Thompson M.D.	FE	Southern California Psychiatric Society
72843	Valerie K Arnold, MD	FE	Tennessee Psychiatric Association
60938	Rodney A Poling M.D.	FE	Tennessee Psychiatric Association
61350	Mark Edwin Kunik, MD	FE	Texas Society of Psychiatric Physicians
40777	Meredith Alden MD	LF	Utah Psychiatric Association
78240	Sylvia Atdjian, MD	FE	Washington Psychiatric Society
54843	Jane Elizabeth Jackson M.D.	FE	Washington Psychiatric Society
27990	Joseph R Silvio M.D.	LF	Washington Psychiatric Society
40233	Ned Henry Kalin, MD	FE	Wisconsin Psychiatric Association
44201	Dean Dennis Krahn, MD	FE	Wisconsin Psychiatric Association

n=127

**Distinguished Fellow Nominee
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Member ID	Name	Member Class	District Branch
309868	Thomas W Allen, MD	GM	Illinois Psychiatric Society
1006382	Laurie Casaus, MD	FE	Southern California Psychiatric Society

n=2

**Number of Distinguished Fellow
Nominations Submitted by District Branch**

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District Branch	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Alabama	0	0	0	0	0	10	5	6	1	5
Alaska	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	2	7	1	1	5
Arkansas	1	0	0	0	0	0	0	0	1	0
Bronx	0	0	0	0	0	0	0	0	0	0
Brooklyn	0	0	1	0	1	0	1	0	0	0
Central California	0	0	0	2	0	0	1	4	1	2
Central Missouri*	0	0	0	0	1	0	0	n/a	n/a	n/a
Central New York	0	1	2	0	0	0	0	0	1	1
Colorado	0	1	7	4	3	3	4	5	4	3
Connecticut	0	0	1	2	3	2	1	1	1	0
Delaware	0	0	0	0	0	0	4	2	1	0
Florida	3	3	1	3	6	8	7	7	11	4
Genesee Valley	0	0	2	2	0	0	0	0	0	1
Georgia	0	7	1	4	4	2	1	1	3	6
Greater Long Island	0	0	1	1	2	0	0	0	2	0
Hawaii	0	2	0	0	0	0	0	0	2	0
Idaho	0	0	0	0	0	0	0	0	0	0
Illinois	1	2	3	3	6	2	1	5	7	7
Indiana	0	0	1	0	2	3	1	0	0	1
Iowa	0	0	1	1	5	2	0	3	2	3
Kansas	0	0	0	0	0	1	0	2	0	0
Kentucky	1	0	3	0	0	0	2	0	1	0
Louisiana	1	8	0	1	0	0	0	3	0	1
Maine	1	2	0	0	2	5	2	0	3	2
Maryland	3	0	4	3	5	2	4	2	2	2
Massachusetts	29	11	5	2	9	5	3	7	4	7
Michigan	0	8	5	0	0	0	0	0	0	0
Mid-Hudson	1	0	0	0	0	0	1	0	0	0
Minnesota	1	0	0	2	4	2	2	2	2	0
Mississippi	1	1	0	0	1	2	0	0	1	1
Missouri*	0	4	1	0	0	0	0	0	0	1
Montana	0	0	0	0	0	0	0	0	0	1
Nebraska	0	1	0	0	0	0	0	0	1	2
Nevada	0	0	0	1	0	0	0	0	1	0
New Hampshire	0	0	0	0	0	0	0	1	0	0
New Jersey	2	0	2	2	0	2	6	9	9	4
New Mexico	0	1	0	0	0	0	0	0	0	3
New York County	0	0	2	1	1	0	1	0	3	12
North Carolina	6	12	9	2	2	6	7	2	11	9
North Dakota	0	0	0	0	0	0	0	0	0	0
Northern California	6	1	0	1	1	0	0	0	10	5
Northern New York	0	0	0	1	0	0	1	0	0	0

**Number of Distinguished Fellow
Nominations Submitted by District Branch**

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NY State Capital	1	0	0	1	1	1	0	1	0	1
Ohio	3	1	2	1	0	2	4	3	2	5
Oklahoma	0	0	0	0	0	0	0	3	2	1
Ontario	4	3	0	2	1	0	4	2	1	0
Orange County	1	1	2	2	1	2	2	2	2	2
Oregon	0	1	4	1	1	0	0	0	0	1
Pennsylvania	5	5	1	6	8	4	3	3	0	5
Puerto Rico	0	0	0	0	0	2	0	0	0	0
Quebec&ECanada	3	3	1	2	0	2	0	1	3	1
Queens	1	0	0	0	0	0	0	0	0	0
Rhode Island	3	2	1	2	2	3	2	2	1	0
San Diego	3	2	2	3	5	1	0	3	4	2
South Carolina	1	3	0	1	2	2	2	2	0	3
South Dakota	0	0	0	0	2	0	1	2	1	2
Southern California	4	9	9	5	5	2	6	5	3	3
Tennessee	0	0	0	1	1	0	2	0	1	2
Texas	2	5	0	1	1	1	1	1	3	1
Uniformed Services	0	1	0	0	1	0	0	3	1	3
Utah	0	0	0	0	1	0	0	4	0	1
Vermont	3	1	0	0	0	1	0	0	0	0
Virginia	4	1	3	2	2	2	0	0	4	2
Washington DC	1	3	3	18	10	14	13	5	7	3
Washington State	0	1	0	4	1	2	3	0	0	0
West Hudson	1	0	0	0	0	0	0	0	0	0
West Virginia	0	0	0	0	0	0	0	2	0	0
Westchester	4	0	0	0	2	1	0	0	1	0
Western Canada	1	1	0	0	0	0	0	0	4	0
Western Missouri*	0	3	0	1	0	0	0	n/a	n/a	n/a
Western New York	2	0	1	0	0	1	0	0	0	0
Wisconsin	0	0	0	1	0	0	0	0	3	2
Wyoming	0	0	0	0	0	0	0	0	0	0
At-Large	0	0	1	0	0	0	0	0	0	1
Total Submissions	104	111	82	92	105	102	105	107	129	129
*merged to Missouri Psych Assn in 2012										

**2015 International Distinguished Fellow Candidates
Approved - Confidential**

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Board of Trustees
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Attachment L

Member ID #	Name	Member Class	Country
1029316	Nagesh Brahmavar Pai, MD	International Member	Australia
69992	Anandamandiram Ramakrishnan, MD	International Member	United Kingdom
91165	Hamid Peseschkian, MD	International Fellow	Germany

n=3

Resignations
September 1, 2015 - October 31, 2015

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Attachment M

Member ID#	Label Name	Member Class	DB #	DB Name	Reason
1357698	Salman Elfeky, MD	Resident-Fellow Mbr	DB10	Florida	Did not specify
71123	Brian Gilfeather M.D.	General Member	DB33	Washington State	Did not specify
312502	Yunnie Lee, MD	General Member	DB30	Northern California	Did not specify
311603	Arun Singh, DO	General Member	DB49	Westchester County	Did not specify
311113	Karen Tie M.D.	General Member	DB07	Connecticut	Did not specify

n = 5

**Medical Students Whose Memberships Expire 12/31/2015
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Member #	Name	Member #	Name
1216587	Abidi, Neil	1264320	Barnett, Gregory
1234009	Abroms, Mark	1221548	Bartell, Jared
1221787	Abuaf, Amanda	1216604	Bass, Noor
1264363	Ackerman, Emily	1231786	Batmazian, Laurence
1230184	Adams, Daniel	1275667	Bayer, Martin
1282065	Adams, Timothy	1246203	Beaubian, Courtnie
1131397	Adebayo, Adewale	1320391	Becker, Jessica
1102379	Adegboro, Olatokunbo	1330514	Beckett, Stephen
1160359	Ahmed, Zakiya	1234000	Bedi, Anuja
1221479	Ahuja, Anita	1216004	Beeler, Michael
1231432	Alam, Reza	1095929	Begasse De Dhaem, Olivia
1269924	Alam, Sonia	1275702	Behroozan, Sepideh
1281277	Alanis, Phillip	1219640	Beland, Brittany
1219697	Alexander-Bloch, Aaron	1275740	Belknap, Toby
1193799	Alghanem, Muhammad	1269933	Bell, Nathaniel
1280923	Alkenbrack, Kaleigh	1276337	Bellis-Jones, Heather
1268276	Alsaedi, Abdulhadi	1248457	Beltran, Andy
1236118	Althausser, Samuel	1216448	Benzl, Jerry
1193739	Alzheimer, Alicia	1244087	Berbara, Rony
1160374	Alvarez Toro, Viviana	1233662	Berberyan, Ani
1231202	Amador, Alcides	1013509	Berlow, Yosef
1107225	Amani, Farhad	1244726	Bernardini, Laura
1229077	Amin, Osman	1248470	Berry, Debra
1140351	Amin, Priyanka	1221550	Bettwieser, Stephen
1248483	Amiri, Farhad	1225177	Bhuiyan, Jana
1152336	Amladi, Anjani	1137185	Bichir, Nicole
1255139	Amrock, Stephen	1269915	Billington, Ryan
1293378	Anagale, Paul	1269876	Bishop, Eric
1136101	Anderson, Andrew	1251601	Bissada, Mary
1162819	Anderson, Nathaniel	1248505	Blacconiere, Mia
1102820	Anderson, Sarah Ann	1225811	Boas, Samuel
1222849	Anderson, Suzanne	1193811	Bodnar, Iryna
1277290	Anyanwu, Eugenia	1152145	Boin, Andre
1281848	Apraku, Abena	1264467	Bond, Joseph
1230460	Arellano, Phillip	1229235	Booth, Ashlie
1255156	Asabere, Nana	1136567	Bosco, Joan
1218338	Asquith, Kerstin	1136483	Bose, Ashley
1231222	Atallah, Rasha	1339012	Bosley, Eudy
1268258	Athar, Osman	1280909	Bouchard, Melodie
1302826	Ausman, Kelly	1283984	Bowen, Jenna
1223722	Aussenberg, Steven	1229140	Bradbury, Matthew
1354616	Ayaz, Madiha	1160362	Bradford, Annabel
1330637	Azer, John	1223285	Brandeland, Megan
1333533	Baig, Faraz	1275263	Breitinger, Scott
1221476	Bailey, Peter	1155244	Brenner, Michael
1229132	Baker, Jason	1104911	Bresler, David

**Medical Students Whose Memberships Expire 12/31/2015
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1136554 Ballard, David	1239789 Brewster, Katharine
1167339 Baluna, Alexandra	1138103 Brodfuehrer, Julie
1268284 Banever, Seth	1229297 Brown, Gregory
1167218 Barenboim, Jessica	1234382 Brown, Kate
1224509 Brown, Ryan	1194182 Comer, Michael
1056506 Buehler, Lauren	1098341 Connor, Andrew
1293502 Burey, Andre	1157570 Conrad, Rachel
1234034 Burns-Benggon, Jennifer	1229949 Cook, David
1267996 Burrow, Jeffrey	1193298 Cook, Jenna
1223395 Butler, Jasper	1236128 Cooley, Benjamin
1113026 Byrne, Patrick	1225832 Coombs, Angela
1119660 Cai, Yi	1193808 Cooper, Timothy
1103228 Caldwell, Kenya	1224666 Copeli, Eric
1221761 Calimlim, Patricia Ann	1113016 Cortina, Sandra
1225817 Callender, Malori	1299945 Cothren, Bryan
1238417 Cameron, Joshua	1135832 Cotler, Samantha
1103230 Capitena, Erin	1248476 Coton, Casey
1094029 Capobianco, Michael	1245780 Crabtree, David
1244073 Cardenas, Cesar	1264453 Crawford, Mitchell
1097253 Carron, Benjamin	1158481 Crowley, Jason
1224418 Carson, Nora	1233977 Cruz, Andrew
1107855 Caruso, Dominic	1276217 Cua, Jana
1158492 Casas De Leon, Sylvia	1275268 Daimee, Umair
1193582 Castillo, Felipe	1240156 Daniel, Sarah
1220314 Cenicerros, Ashley	1235114 Daniel, Steve
1280912 Cerreta, Tara	1193788 Davis, Deron
1234030 Chambers, Joe	1156231 Day, Melissa
1282304 Chang, Danielle	1105319 Dean, Caroline
1267991 Chang, Deidre	1280951 Dedania, Reema
1014696 Chang, Timothy	1330495 Deesing, Michole
1281274 Chansky, Andrew	1140107 DeFlavio, Jeffrey
1166070 Chastain, Logan	1193645 DeFrancisco, Daniel
1333532 Chaudhary, Kiran	1167300 Del Prete, Christopher
1330325 Chen, Lucy	1255157 DeMarco, Emily
1276830 Cherukuru, Nithya	1231881 Denaud, Sarah
1220813 Cheung, KhenYian	1282315 Dhingra, Amitha
1136579 Chiu, Yu	1156225 Diaz, Joseph
1333542 Cho, Eric	1229101 Diaz, Natalie
1230173 Choi, So Eun	1071037 Dickstein, Leah
1216415 Chong, Nubia	1115025 Dieppa, Laura
1241044 Chu, Brandon	1282171 Dietz, Barbara
1233636 Chu, Robert	1236119 Dillon, Derek
1284990 Chugh, Nanak	1131464 Do, Lisa
1155185 Chun, Audrey	1289345 Dodd, Lindsay
1230462 Ciuffetelli, Gary	1239208 Doggette, Robert

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1091197 Clark, Jeffrey	1119657 Dolber, Trygve
1193242 Clark, Stephen	1239082 Dominguez, Luis
1238832 Clark-Raymond, Anne	1193301 Downey, Amanda
1276169 Clarke, Alexander	1094032 Duah, Mary
1289342 Claveau, Jean-Sébastien	1012232 Dudek, David
1283685 Clemons, Jessica	1280950 Dunkerson, Kelsey
1307165 Collier, Elizabeth	1193798 Duran, Alexandra
1147671 Colon, Stephen	1333622 Dvorak, James
1097897 Colon-Alvarado, Ivan	1280911 Dwyer, Luke
1225182 Comer, Latoya	1339014 Ede Allan, Marcus
1162801 Eden, Rina	1304259 Gonzalez, Karime
1222807 Edwards, Laura	1220844 Gonzalez, Victor
1284980 Ehrenreich, Benjamin	1274787 Goodsmith, Nichole
1275720 El-Amin, Suliman	1305476 Gorun, Alyson
1223736 Elias, Hadi	1276361 Gracer, Mira
1167232 Elizondo Romo, Ramon	1288475 Graham, Michael
1293334 Erickson, Russell	1017474 Green, Theophilus
1218309 Esiobu, Nkemka	1193305 Greene, Chad
1129390 Estrada, Elena	1281850 Greenfield, Brandon
1280917 Evans, Sarah	1264384 Greenwald, Fayrisa
1341351 Ewing, Eric	1238878 Grewal, Rajan
1239815 Faludi, Christopher	1298117 Grewal, Vinay Paul
1216009 Fares, Charlene	1269897 Griffin, Heather
1282081 Fein, Rebecca	1136731 Griffin, Kenneth
1274763 Feller, Sophie	1274766 Grzenda, Adreinne
1275677 Feng, Xiaohua	1276214 Gudimella, Preet
1293604 Fernandes, Emily	1282038 Guevara, Claire
1160437 Ferrell, Sean	1152860 Gugino, Natalie
1043811 Fesenko, Anna	1093816 Guillermo, Chrisalbeth
1126061 Fischer, Adina	1354599 Guinto, Wilson
1223497 Flores-Caban, Gloriel	1246206 Gukasyan, Natalie
1253149 Flynn, Victoria	1225831 Gulko, Brian
1193773 Fraser, Patrick	1304753 Gunther, Steven
1163792 Frett, Brigitte	1275708 Guryev, Igor
1222795 Fretwell, Jennifer	1220839 Gyi, Lin
1281231 Friddle, Reagan	1282156 Hackett, Christina
1241526 Friend, Samantha	1282040 Hall, Charles
1166073 Frizzell, William	1021199 Halpin, Laura
1093936 Fu, Tommy	1167181 Halyko, Michael
1253728 Fuller, Ryan	1346972 Hameed, Arslaan
1281859 Furrh, James	1282296 Han, Haesun
1224663 Fusick, Adam	1147675 Hanna, Jamileh
1194167 Gaal, Jordan	1229976 Harari, David
1264345 Gandhi, Kriti	1235416 Harmouche, Suzanna
1345713 Gao, Lu	1233985 Harrell, Audrey

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1289344 Gao, Shan	1065577 Harris, Mark
1193306 Gende, Jack	1222146 Harsch, Brandon
1238877 Getachew, Hoheteberhan	1193639 Hartin, Heather
1229147 Gharbaoui, Yasmine	1091226 Hartley, Alexandra
1293891 Ghoddusi, Faraz	1316967 Hasan, Faiz
1275193 Gibson, Griffin	1269950 Hayatghaib, Farhad
1293462 Giebert, Stephen	1159191 Hayes, Dillon
1163793 Giles, Lizabeth	1158488 Heekin, Richard
1231433 Gizaw, Mahalet	1325656 Heffner, Aaron
1248474 Gledhill, Kristen	1222144 Heise, Lyndsey
1235117 Godecke, Kelly	1136727 Henkle, Laura
1354606 Goel, Atul	1281239 Henson, Hannah
1136556 Goldberger, Adina	1283714 Herrington, Lisa
1341358 Goltz, Jeffrey	1282086 Herzfeldt, Zachary
1354535 Gomez, Ramon	1282076 Heuser, Lindsay
1222827 Gomez, Ulysses	1238412 Hickson, Jonathan
1118012 Hinchin, Ashley	1280928 Kane, Alexander
1281839 Hinckley, Jesse	1225837 Kang, Navdeep
1282043 Hitz, Samuel	1255155 Kaplan, Alexander
1282055 Ho, Patrick	1115491 Kaufman, Joshua
1281926 Hocker, Veronica	1282297 Kaula, Ritika
1235140 Hoff, Allison	1193816 Kazlo, Elena
1220428 Hoffman, Mindy	1264477 Kelly, Matthew
1115500 Hogan, Natalie	1253146 Kerr, Katherine
1264314 Holley, Jessica	1227374 Kha, Christine
1335209 Hora, Sandeep	1014866 Khan, Omair
1343730 Horvath, Joseph	1239796 Kim, Jae
1330639 Hsu, Jonathan	1281866 Kim, Jihye
1216542 Hudson, Zachary	1275262 Kim, Min
1225804 Huertas-Rivera, Amarilis	1282133 King, Simeon
1147733 Hughes, Heather	1093937 King, Terri
1236411 Hughes, Thomas	1118003 Kirsch, Anna
1205504 Huh, Anna	1205496 Kiseler, Boris
1284992 Hunter, Holly	1282037 Klaich, Aubrey
1215988 Hurlbut, Kathryn	1155231 Klarer, Alden
1225180 Husain, Arif	1231221 Klopfenstein, Holly
1281295 Inle Serrano, Nicole	1103676 Kneale, Anne
1242422 Iyoha, Osamuode	1330643 Knowles, Forrestine
1131444 Jackson, Brandi	1236420 Koen, Michael
1264435 Jacob, Rhema	1220427 Kohn, Lisa
1297194 Jacob, Tom	1219797 Kolich, Mallory
1240956 Jafari, Jonathan	1200997 Kostrubala, Anastasia
1232086 Jafri, Syed	1231511 Kramer, Wesley
1281875 Jan, Mian Kouresch	1113014 Krishnan, Sarah
1280927 Janowsky, Mariel	1267985 Kritzer, Michael

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1341856 Jean-Marie, Emy	1234013 Kruse, Kathleen
1281897 Jeffers, Charles	1131431 Kuleto, Anthony
1221775 Jenkins, Aaron	1221760 Kumar, Gaurav
1147679 Jennings, Brian	1359438 Kumar, Heena
1092365 Joel, Ian	1236120 Kwong, Arlen
1131655 Johnson, Charles	1216018 Kye, Clifford
1216034 Johnson, Rajiv	1193642 LaChance, David
1222145 Johnston, Alexandra	1234230 Lamar, Lisa
1240957 Jones, Joy	1224947 Landsman, Samuel
1133833 Jones, Katrina	1216519 Langlois, Kristen
1060274 Jones, Melissa	1135231 Langmann, Gabrielle
1113353 Jones, Travis	1281896 Lapitskaya, Yevgeniya
1167351 Joshi, Priya	1249082 Larson, Alison
1054463 Joshi, Yash	1276352 Layne, Jessica
1249913 Jousma, Ashlee	1239083 Le, Oliver
1224404 Joyce, Jaclyn	1136110 Lederman, Nicole
1330499 Juda, Ari	1268254 Lee, Eric
1163791 Juprasert, Jack	1268236 Lee, Eun Kyung
1223734 Justin, Emily	1316999 Lee, Han
1236418 Kahlon, Jasmine	1232143 Lee, Jason
1276219 Kakulavarapu, Srikruthi	1138104 Lee, Peffin
1098874 Kamis, Danielle	1156235 Lee, Samantha
1282054 Lee, Sung-Eun	1221525 McKently, Heather
1241610 Lemkin, Kimberly	1091192 McKenzie, James
1155396 Lenhard, Madelyn	1200970 Medina, Michel
1282064 Lewicki, Karen	1224958 Mehta, Rohini
1200979 Lewis, Morgan	1266918 Meinhardt, Nicholas
1113073 Liewen, Amanda	1243586 Melendez, Regina
1281902 Liggett, Thomas	1223737 Melendez, Ricardo
1248996 Linberg, Vincent	1230686 Melnyk, Kathleen
1235113 Littlefield, Jay	1229953 Melton, Meredith
1225838 Locher, Michael	1103245 Merideth, Flannery
1233975 Loeck, Shannon	1131446 Mew, Brianna
1219803 London, Daniel	1248475 Michal, Elizabeth
1068497 Londono Tobon, Amalia	1103221 Miller, John
1276393 Long, Katrice	1083708 Mills, Nadine
1281894 Lopez, Maria Del Carmen	1223516 Mintz, Ariel
1221487 Lorts, Stephanie	1330307 Mintz, Jason
1251602 Loyal, Anna	1216454 Mitchell, Jennifer
1252596 Lu, Jiayun	1114514 Miyamoto, Brigitta
1114926 Lubomirsky, Bryan	1225836 Moffitt, Olivia
1136729 Luckow, Michael	1115488 Moghbel, Shahla
1220831 Ludlow, Jason	1276189 Mohabbat, Yasmin
1267994 Lui, Keith	1230023 Montano, Aaron
1220818 Lulejian, Jason	1249923 Moore, Kevin

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1246351 LunBeck, Spencer	1193724 Moore, Ross
1221547 Lundberg, Andrea	1193800 Morales, Jorge
1215978 Mack, Leigh	1276164 Moreno, Cicely
1118005 MacKercher, Jana	1225849 Moreta, Marisa
1281235 Madva, Elizabeth	1253727 Morgan, Juliet
1276172 Maguire, Marguerite	1242427 Morrison, Erin
1276230 Maguire, Nathan	1236124 Morrison, Tyler
1276832 Mahlstedt, John	1216455 Motley, Matthew
1216508 Mahmood, Amna	1242223 Mulligan, Lauren
1335202 Mals, Ryan	1282039 Mullowney, Sarah
1282188 Manchik, Biana	1218308 Mushtaq, Bushra
1303751 Mandadi, Vikas	1275260 Musselman, Meghan
1136555 Marshall, Laurie	1253143 Nafiz, Rayek
1167365 Martin, Casey	1330617 Nagayoshi, Katsuko
1087858 Martina, Andrew	1269929 Namdari, Roaya
1102237 Martinez, Amalia	1251357 Naqvi, Hassan
1200930 Martinez, Ashley	1264416 Naran, Jaya
1221546 Martinez, Brent	1094027 Nebeluk, Taras
1281236 Masuku, Saneliso	1330645 Ngo, David
1269948 Mathis, Myra	1134231 Ngo, Justine
1229130 Mathur, Akriti	1224960 Nguyen, David
1282113 McCartney, Suzanne	1251367 Nguyen, Ha
1330061 McClairan, Lauren	1221759 Nguyen, Kim
1194170 McClure, Matthew	1219682 Nguyen, Kim Phung
1275689 McElroy, David	1234027 Niazi, Harris
1152116 McGee, John Patrick	1153001 Nighohossian, Kyla
1280896 McGill, Sean	1298888 Nijjar, Gursharon
1335988 McGuire, Patricia	1236414 Nik-Ahd, Mahnoosh
1131442 Noble, Kelly	1251355 Pham, Ngoc-Minh
1097760 Norberg, Adam	1140101 Pham, Tony
1280899 Norris, Kelsey	1215975 Pierret, Alexandra
1231787 Novak, Marnie	1268260 Pilar, Mark
1253725 Novy, Blake	1093925 Pinto, Emily
1293662 O'Connell, Heather	1238416 Poole-Boykin, Colette
1060273 O'Neal, Amy	1229090 Posner, Amber
1304752 Obasi, Gloria	1239778 Pourshams, Idean
1167217 Oglivie, Benjamin	1232139 Poyson, Poyrung
1238275 Ojo, Kofoworola	1252360 Prasad, Navin
1221549 Okolo, Amanda	1200947 Preszler, Annah
1234008 Okworogwo, Chukwudi	1288474 Prigge, Alyssa
1121990 Olson, Erika	1131435 Puca, Zachary
1298975 Olteanu, Alexandra	1266940 Pueringer, Cole
1335987 Oluwato, Oluwatobi	1360157 Purohit, Omkar
1162982 Orthmeyer, Thomas	1244945 Quaine, Jennie
1133010 Ortiz, Patricia	1157569 Quick, Johnny

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1216626 Otopalik, Benjamin	1359517 Quinn, Alison
1233682 Otts, Nicholas	1275718 Rahman, Jennifer
1193578 Ozaki, Brent	1137181 Rai, Harinder
1136732 Palla, Nabeel	1216031 Raj, Anish
1193746 Palma, Nadia	1133529 Ramasubbu, Ashwin
1276236 Pan, Katherine	1255118 Raml, Dana
1222195 Paolillo, Allegra	1193580 Ramos Ortega, Ivette
1111867 Papac, Jennifer	1221502 Ramsdell, Geoffrey
1220832 Papoosha, Marta	1335316 Rasool Javaheri, Khodadad
1286061 Paradise, Summer	1108015 Rassi, Arshia
1222815 Park, You Na	1293680 Raveendranathan, Sanjeetha
1249921 Parker, Scott	1216012 Reed, Eric
1122369 Parks, Clayton	1083702 Reed, Sabrina
1162800 Parmar, Monish	1281895 Reid-Varley, William-Bernard
1147736 Parrotta, Scott	1221519 Reiner, Wade
1220424 Parsons, Seth	1245410 Reinheimer, Howard
1162946 Patel, Devangi	1330642 Remi-Johnson, Morolake
1249036 Patel, Dina	1320376 Renshon, David
1249922 Patel, Dipali	1163184 Revelo, Ana
1282312 Patel, Jason	1220822 Reyes, Javier
1308467 Patel, Krishna	1138128 Reyes, Joahnibel
1281861 Patel, Marguerite	1240955 Reykjalin, Erik
1239779 Patel, Neil	1119656 Reynolds, Joshua
1133006 Patel, Nikhil	1104908 Reynolds, Judd
1234161 Patel, Paras	1282036 Reza, Nafisa
1266967 Pedersen, Michelle	1274767 Ricketts, Christine
1219378 Peet, Bradley	1220837 Rienas, Christopher
1167337 Pejic, Marijan	1216013 Rini, James
1238434 Pemberton, Anastasia	1090935 Rivera, Greysha
1167262 Penny, William	1193623 Robell, Nicholas
1121976 Perez, Giselle	1275692 Roberts, Caroline
1296803 Perkins, Finn	1334142 Roberts, Cecil
1275671 Peters, Jeramy	1255153 Robertson, Caroline
1121983 Pham, Jimmy	1096580 Robinson, Jamie
1234162 Rodriguez Penney, Alan	1231223 Sigsworth, Michael
1193236 Rolland, Gabrielle	1167183 Simpson, Chris
1081588 Rosen, Brooke	1331646 Singh, Natasha
1296779 Rosenthal, Esther	1253147 Singh, Satbir
1200941 Rosenthal, Michael	1230181 Skefos, Nicholas
1282173 Rosloff, Daniel	1060486 Slayton, Shawn
1231571 Rotenberg, Martin	1050883 Smigas, Thomas
1157604 Rudnick, David	1280934 Smith, Elyse
1334169 Rutkowski, Charles	1233998 Smith, Kyle
1280952 Ryder, Zachary	1229141 Smith, Phillip
1267006 Sabhapathy, Surya	1234487 Snider, Brittany

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1160337 Saeed, Salman	1194184 Snider, Jakoda
1264399 Safvi, Adnan	1281898 Solomon, Benjamin
1267993 Sagot, Adam	1155207 Song, Helen
1216390 Saint Charles, Jean Max	1235119 Spasovska, Jana
1094037 Saleem, Yasir	1138134 Spatcher, Michael
1242190 Salg, Lucas	1282067 Spelber, David
1222806 Samplin, Erin	1281309 Spencer, Shawn
1140310 Sanchez-Collins, Shakira	1241157 Stacks, Trisha
1118013 Santana, Therese	1205499 Stall, Phillip
1216375 Sarriera, Carlos	1219675 Starnes, Kenneth
1131381 Sattaur, Fiona	1239207 Stay, Emmalie
1151565 Savage, Katherine	1338464 Stein, Steven
1269984 Saylor, Charles	1167168 Stephens, Brian
1091188 Schanker, Benjamin	1194177 Sterchele, Ashley
1264408 Schiavone, Francesca	1238263 Stewart, Elizabeth
1220329 Schissel, Erica	1233979 Strasser, Zachary
1246350 Schmidt, Lauren	1276218 Strouse, Kevin
1167265 Schroeder, Mark	1097898 Suarez Colon, Antonio
1275707 Schwartz, Elizabeth	1111876 Suarez Duran, Gloria
1094030 Schwartzberg, John	1151576 Suhale, Sameer
1220296 Schwenn, Amanda	1275271 Sullivan, Daniel
1137174 Seese, Amy	1299472 Sultan, Joshua
1201066 Seidman, Shari	1151239 Sutherland, Ryan
1216387 Seijo, Leslie	1219699 Swanson, Jon
1275721 Sethi, Kevin	1240958 Swinburne, Alec
1167231 Sexton, Scott	1200969 Swinson, Karl
1167299 Shaffer, Johnathon	1341377 Szymczuk, Rafal
1167269 Shah, Manan	1094031 Tam, Vivien
1277374 Shah, Rohit	1275731 Tarasenko, Yelena
1241043 Shanab, Steven	1246189 Taylor, Cortney
1216585 Sharma, Raman	1253142 Taylor, Erica
1330859 Sharma, Sarita	1229950 Tellez, Juan
1163817 Sharma, Shivani	1229288 Temple, John
1334650 Sharma, Sonia	1293613 Termanini, Rami
1242187 Shaw, Steven	1253730 Terry, Kathleen
1229139 Sheftic, Erick	1193716 Thomas, Joshua
1284978 Shepard, Melissa	1220817 Thomas, Whitney
1219665 Sholtes, David	1299470 Thompson, Chad
1229294 Shukla, Vipul	1163815 Tinajero, Sealtiel
1235415 Sickles, Laura	1249606 Tiwari, Shveta
1249093 Ton, Cuong	1284259 Wentz, Jeffrey
1330640 Tontillo, Katherine	1115497 Wesley, Nicole
1154627 Toofan, Ramin	1277425 Whatley, Kari
1205488 Toor, Ramandeep	1269920 Wickstrom, Kelly
1160445 Torres Martin, Natalia	1092361 Wiegand, Sarah

**Medical Students Whose Memberships Expire 12/31/2015
(Graduated-Not Eligible for MS Membership)**

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1241445 Touma, Daniel	1275266 Wiersma, Carolyn
1193626 Toutoungi, Christina	1234490 Wilde, Kristen
1264373 Trager, Evan	1133009 Williams, Andrew
1304771 Tran, Andy	1162839 Williams, Guy
1266916 Trinh, Eric	1275673 Williams, J. Corey
1136106 Truitt, Melissa	1224667 Williams, Kendra
1301404 Turner, Amos	1219853 Williams, Rebecca
1149932 Tzavaras, Theodore	1276162 Wilson, Ashley
1303748 Uddin, Asif	1225835 Wilson, Christopher
1242184 Ugboh, Florence	1245412 Wilson, Heather
1233668 Unverferth, Katherine	1138846 Wilson, John
1255160 Vaishnav, Mansi	1293486 Wilton, Allister
1235754 Valencia, Ashley	1216618 Winter, Andrea
1230500 Vanderburgh, Jacqueline	1249007 Wise, Dara
1223738 Vandergrift, Kelley	1253742 Wittry, Jennifer
1138316 Vargas, Johanan	1275686 Wong, Chak
1218306 Vargas-Loaiza, Michelle	1293455 Woo, Charl
1103233 Vassar, Chadron	1103069 Woods, Justin
1140089 Veerani, Raheel	1277122 Woznica, Edgar
1235755 Velasquez, Daniel	1282049 Wu, Zhi Yuan
1313502 Verhoef, Shane	1235135 Wurbel, Joseph
1255158 Verma, Teron	1264316 Wylie, Meredith
1225808 Verret, Luke	1239878 Wylonis, Nina
1282044 Vesny, Ryan	1100098 Yamoah, Christabel
1266923 Vester, Geoffrey	1129407 Yanagihara, Adare
1224953 Viglietta, Samuel	1220325 Yang, Gene
1240966 Vijayakumar, Nandini	1110006 Yetter, Elizabeth
1153166 Vitkus, Alisa	1297256 Yi, Richard
1274769 Vu, Hanh	1115501 Young, Jonathan
1239561 Vu, Quynh	1316998 Yu, Haining
1219649 Wagner, Anne	1131395 Yuen, Eunice
1149927 Wagner, Eveleigh	1103671 Zagieboylo, Lauren
1126058 Wai, Alan	1231435 Zhao, Ran
1114709 Wallace, Amanda	1229395 Zhou, Yihou
1200977 Wallace, Emma	1152127 Zhu, Lisa
1282035 Walta, Krin	1284982 Zurhaar, Michaiah
1249050 Waltos, Sam	
1229957 Wang, Luhan	
1276349 Ward, Kathleen	n = 804
1230586 Weaver, Kathryn	
1193308 Webb, Allison	
1115495 Webb, Katie	
1140112 Wedgeworth, John	
1251358 Weinlander, Matthew	
1253148 Weinstein, Melanie	

**Medical Students Whose Memberships Expire 12/31/2015
(Graduated-Not Eligible for MS Membership)**

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1015239 Weiss, Jeremy

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Mbr ID#	Name	Member Class	DB Name	Reason
1035786	Tilahun Haile Abraha, MD	General Member	Washington State	Nonpayment of APA Dues
1329790	Anina Abrie MD	General Member	Quebec & Eastern	Nonpayment of APA Dues
310530	Roohi Abubaker M.D.	General Member	Georgia	Nonpayment of APA Dues
1078742	Maria Ela E Aguilar Donis MD	General Member	Greater Long Island	Nonpayment of APA Dues
1098564	Christina Maria Agustin MD	General Member	Washington State	Nonpayment of APA Dues
1065874	Caroline Ahlers MD	General Member	Washington	Nonpayment of APA Dues
78538	Sadaf R Ahsan M.D.	General Member	Mid-Hudson	Nonpayment of APA Dues
1008553	Nemer Fahd Al Mosyab, MD	General Member	Ontario	No current valid medical license
36038	Norman Emil Alessi M.D.	Distinguished Life Fellow	Michigan	Nonpayment of APA Dues
70108	Christine J Amis MD	General Member	Massachusetts	Nonpayment of APA Dues
1002524	Stacy E Banks, MD	General Member	Northern California	Nonpayment of APA Dues
78018	Richard V Barnes M.D.	General Member	Arizona	Nonpayment of APA Dues
65432	Linda Carole Barr M.D.	General Member	Connecticut	Nonpayment of APA Dues
300889	Eraka P Bath MD	Fellow	Southern California	Nonpayment of APA Dues
1002109	Jennifer B Beldon MD	General Member	Minnesota	Nonpayment of APA Dues
302118	Cheryl-Lisa Ruth Bennett MD	General Member	Westchester County	Nonpayment of APA Dues
1212701	Karla Benzl MD	General Member	Northern California	Nonpayment of APA Dues
78649	Mathieu Bermingham MD	General Member	Massachusetts	Nonpayment of APA Dues
78390	Arudra Bodepudi M.D.	General Member	Central California	Nonpayment of APA Dues
39105	James R Booth M.D.	General Member	West Hudson	Nonpayment of APA Dues
1017056	Manjinder Kaur Brar MD	General Member	Indiana	Nonpayment of APA Dues
84226	Phyllis M Bryant-Mobley M.D.	General Member	South Carolina	Nonpayment of APA Dues
1313705	Jonathan Buchholz MD	General Member	Washington State	Nonpayment of APA Dues
70426	Richard F Camino-Gaztambide	General Member	Georgia	Nonpayment of APA Dues
305681	Angel A Caraballo MD	Fellow	New York County	Nonpayment of APA Dues
1046855	Paolo Cassano MD PhD	General Member	Massachusetts	Nonpayment of APA Dues
1087857	Christian F Cespedes, DO MBA	General Member	North Carolina	Training not completed
1001167	Duane M Chase MD	General Member	New Mexico	Nonpayment of APA Dues
76845	Ayesha K Chaudhary MD	Distinguished Fellow	North Carolina	Nonpayment of APA Dues
1078872	Vicky Chodha MD	General Member	New York County	Nonpayment of APA Dues
305019	Stephanie Christner DO	General Member	Oklahoma	Nonpayment of APA Dues
1144601	Wilson Chung, MD	Resident-Fellow Member	Greater Long Island	Nonpayment of APA Dues
81433	Cheryl L Collins M.D.	General Member	Washington	Nonpayment of APA Dues
1069618	Cyntrell Crawford, MD MPH	Resident-Fellow Member	Texas	Nonpayment of APA Dues
1011932	Daniel Culliford MD	General Member	Brooklyn	Nonpayment of APA Dues
84036	Maria Teresa Samson Daclan M	General Member	New Jersey	Nonpayment of APA Dues
1105133	Roberto Delle Chiaie MD	International Member	American	Nonpayment of APA Dues
80331	Wendy Ellen Doran MD	Fellow	Florida	Nonpayment of APA Dues
86856	Trecia M Doyle M.D.	General Member	New York County	Nonpayment of APA Dues
41155	Russell Duane England MD	General Member	Iowa	Nonpayment of APA Dues
102681	Bryon K Evans M.D.	General Member	Georgia	Nonpayment of APA Dues
63660	Kenneth J Fattmann MD	General Member	Arkansas	Nonpayment of APA Dues
44955	Harris Elliot Feinstein M.D.	Fellow	Florida	Nonpayment of APA Dues
71632	Steven A Fekete MD	General Member	Indiana	Nonpayment of APA Dues
72322	Michael J Feldman MD	General Member	New York County	Nonpayment of APA Dues
70728	Gail Elaine Fernandez MD	General Member	Orange County	Nonpayment of APA Dues
29474	Robert W Ferrell MD	Life Member	Massachusetts	Nonpayment of APA Dues
1000106	Jeffrey C Fetter MD	General Member	New Hampshire	Nonpayment of APA Dues
73290	Diana Rae Fischer M.D.	General Member	Florida	Nonpayment of APA Dues
311728	Brent Fletcher M.D.	General Member	Northern California	Nonpayment of APA Dues

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42268	Jose A Franceschini M.D.	Fellow	Puerto Rico	Nonpayment of APA Dues
1055058	Matthew Jon Frankel MD	General Member	Florida	Nonpayment of APA Dues
31969	James Edward Gaffney M.D.	Life Member	Society of Uniformed	Nonpayment of APA Dues
1244720	Nader Ganim MD	General Member	New York County	Nonpayment of APA Dues
45574	John William Gilkey M.D.	General Member	Michigan	Nonpayment of APA Dues
1016300	Mark Gindi MD	General Member	Illinois	Nonpayment of APA Dues
310668	Christina M Girgis, MD	Fellow	Illinois	Nonpayment of APA Dues
83634	Jeffrey L Gould M.D.	General Member	Northern California	Nonpayment of APA Dues
59836	Yakov Greenstein M.D.	General Member	Brooklyn	Nonpayment of APA Dues
77875	David D Gulden M.D.	General Member	Minnesota	Nonpayment of APA Dues
74838	Marlene Patricia Hart MD MPH	General Member	Florida	Nonpayment of APA Dues
306353	Alexander Hazel DO	General Member	Central California	Nonpayment of APA Dues
40990	Jonathan H Holt M.D.	Life Member	Maryland	Nonpayment of APA Dues
42489	Charita Cherylle Hoyle MD	General Member	New York County	Nonpayment of APA Dues
20583	Guillermo J Hoyos M.D.	Life Member	Puerto Rico	Nonpayment of APA Dues
104201	Kevin G Huang M.D.	General Member	Pennsylvania	Nonpayment of APA Dues
312909	Shakeeb Hussain MD	General Member	New York County	Nonpayment of APA Dues
75292	Julia K Hyland MD PhD	General Member	Indiana	Nonpayment of APA Dues
304427	Rim S Ibrahim M.D.	General Member	Northern California	Nonpayment of APA Dues
1121516	Wilson Igrude MD	General Member	Wisconsin	Nonpayment of APA Dues
60610	Ronald Lee Jackson M.D.	General Member	Georgia	Nonpayment of APA Dues
43515	Lawrence Bruce Jacobsberg MC	Life Fellow	New York County	Nonpayment of APA Dues
1334137	Pratik Jain MD	Resident-Fellow Member	Queens County	Nonpayment of APA Dues
1022562	Vrashali Jain	General Member	Ohio	Nonpayment of APA Dues
84442	Xenia H Johnson MD	General Member	Massachusetts	Nonpayment of APA Dues
311584	Daniel L Johnston MD	General Member	North Carolina	Nonpayment of APA Dues
1117743	Madhavi Kandel MD	General Member	Virginia	Nonpayment of APA Dues
65889	Jemima A Kankam M.D.	Fellow	Washington	Nonpayment of APA Dues
72357	Neal Stuart Kass M.D.	General Member	Massachusetts	Nonpayment of APA Dues
82691	Ravi S Kirbat MD	General Member	Michigan	Nonpayment of APA Dues
1231940	Jamal Kobeissi MD	General Member	New York County	Nonpayment of APA Dues
69787	David Kraus MD	General Member	New York County	Nonpayment of APA Dues
305857	Angela Jo Goss Lacombe DO	General Member	Rhode Island	Nonpayment of APA Dues
1077813	Joseph Frank Lalia, DO	Resident-Fellow Member	Greater Long Island	Nonpayment of APA Dues
81159	Mohammad Jawed Latif-Jangda	General Member	Florida	Nonpayment of APA Dues
1011071	Alvin H Lau, MD	General Member	Northern California	Nonpayment of APA Dues
67254	Regina Y Le Verrier MD	General Member	Colorado	Nonpayment of APA Dues
43490	Deborah D Leverette MD MPH	Distinguished Fellow	South Carolina	Nonpayment of APA Dues
27515	Fred Michael Levin M.D.	Distinguished Life Fellow	Illinois	Nonpayment of APA Dues
1002726	Nomi C Levy-Carrick MD	General Member	New York County	Nonpayment of APA Dues
1005283	Joanna K Mansfield MD	General Member	Ontario	Nonpayment of APA Dues
1344935	Robert George McMaster MD	General Member	Ontario	Nonpayment of APA Dues
32276	Richard B Meyer MD PC	Life Member	Arizona	Nonpayment of APA Dues
80047	Gnaneswara V Midathala M.D.	General Member	Florida	Nonpayment of APA Dues
80193	Claudia T Miles DO	Fellow	South Carolina	Nonpayment of APA Dues
1312956	Nadia Ali Mirza MD	General Member	New Jersey	Nonpayment of APA Dues
1149107	Parimala Moodley, MD	International Member		Nonpayment of APA Dues
32633	Julius David Moore MD	Distinguished Life Fellow	Florida	Nonpayment of APA Dues
1245248	Peter Thomas Morgan PhD MC	General Member	Connecticut	Nonpayment of APA Dues
1000029	Andrew Morson MD	General Member	Louisiana	Nonpayment of APA Dues
1070240	Margaret Ann Moxness MD	General Member	South Carolina	Nonpayment of APA Dues

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1346172	Alana Nagle MD MS	General Member	Massachusetts	Nonpayment of APA Dues
90329	Syed S Naqvi MD	Distinguished Fellow	Southern California	Nonpayment of APA Dues
74289	Christopher S Nelson M.D.	General Member	New York County	Nonpayment of APA Dues
27963	Edward Nersessian M.D.	Distinguished Life Fellow	New York County	Nonpayment of APA Dues
1039928	Rocio Nino-Osorio, MD	General Member	Western Canada	No current valid medical license
1008450	Mohammad Asim Nisar MD	General Member	Florida	Nonpayment of APA Dues
64233	Patricia Isbell Ordorica MD	Distinguished Fellow	Orange County	Nonpayment of APA Dues
66146	Joseph Vincent Pace Jr MD	General Member	Alaska	Nonpayment of APA Dues
1277079	Gargi Patel MD	Resident-Fellow Member	Queens County	Nonpayment of APA Dues
44286	Roger S Perilstein M.D.	Distinguished Life Fellow	North Carolina	Nonpayment of APA Dues
68382	Georgios Petrides M.D.	General Member	Queens County	Nonpayment of APA Dues
1052290	Celia Rae Posada MD	General Member	Oklahoma	Nonpayment of APA Dues
1314478	Alexandra Prevost MD	General Member	Quebec & Eastern	Nonpayment of APA Dues
77079	Lawrence M Raines III M.D.	General Member	North Carolina	Nonpayment of APA Dues
1338944	Shreya Raj MD	General Member	Massachusetts	Nonpayment of APA Dues
1008252	Diana Ratki DO	General Member	Westchester County	Nonpayment of APA Dues
42577	Akram Yacoub Razzouk M.D.	Fellow	Illinois	Nonpayment of APA Dues
1148744	Alfred Robenzadeh MD	General Member	Tennessee	Nonpayment of APA Dues
307641	Rona J Roberts M.D.	Fellow	Kentucky	Nonpayment of APA Dues
44288	Dean Edward Robinson MD	Distinguished Fellow	Louisiana	Nonpayment of APA Dues
69254	Michael C Rockwell M.D.	Fellow	Arizona	Nonpayment of APA Dues
311175	Kristine W Roth MD	General Member	Michigan	Nonpayment of APA Dues
1017358	Molly Ryan DO MPH	General Member	Florida	Nonpayment of APA Dues
31982	Bernardo Savariego M.D.	Distinguished Life Fellow	Florida	Nonpayment of APA Dues
1355185	Julio Scardini DO	Resident-Fellow Member	Florida	Nonpayment of APA Dues
84727	Jennifer R Scarozza M.D.	General Member	Western New York	Nonpayment of APA Dues
79241	William Schneider MD	General Member	Georgia	Nonpayment of APA Dues
1230699	Heather E Schultz MD	General Member	Michigan	Nonpayment of APA Dues
45746	Bharat J Shah M.D.	General Member	Ohio	Nonpayment of APA Dues
313224	Arshad Uddin Siddiqui MD	General Member	New Jersey	Nonpayment of APA Dues
1177416	Jamie Siegel, MD	Resident-Fellow Member	Maryland	Training not completed
1334139	Mobaswera Sikder MD	Resident-Fellow Member	Queens County	Nonpayment of APA Dues
74039	Xiomara Simmons, MD	General Member	Ohio	Nonpayment of APA Dues
60354	Rajkumar R Singh M.D.	Fellow	New Jersey	Nonpayment of APA Dues
1230556	Melissa Smith MD	General Member	Georgia	Nonpayment of APA Dues
1012266	Paula Marie Smith MD	Resident-Fellow Member	Connecticut	Nonpayment of APA Dues
1122728	John Sneed MD	General Member	Texas	Nonpayment of APA Dues
1009545	Michael J Sorna MD	General Member	Florida	Nonpayment of APA Dues
75646	Ayame Takahashi M.D.	General Member	Illinois	Nonpayment of APA Dues
1014020	Seeyam Teimoori Nobandegani	Fellow	Orange County	Nonpayment of APA Dues
1344933	Aleksey Ten MD	General Member	Queens County	Nonpayment of APA Dues
90226	Hazel A Toledo MD	General Member	Puerto Rico	Nonpayment of APA Dues
1077283	Chris Unterseher MD	General Member	Michigan	Nonpayment of APA Dues
78012	Delfin F Valite MD	General Member	South Carolina	Nonpayment of APA Dues
1052199	Geetika M Verma MD	General Member	Oklahoma	Nonpayment of APA Dues
88038	M Andrea Vidal M.D.	General Member	Massachusetts	Nonpayment of APA Dues
92454	Nader Fathi Wassef MD	General Member	Northern California	Nonpayment of APA Dues
1076418	Allison R West DO	Resident-Fellow Member	Greater Long Island	Nonpayment of APA Dues
77349	Julie Marie Wilcox MD	General Member	Montana	Nonpayment of APA Dues
76805	Suzanne R Yoder M.D.	General Member	North Carolina	Nonpayment of APA Dues
1118919	Zaakir Yoonas, MD	General Member	Northern California	Nonpayment of APA Dues

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90969 Ying Zhang M.D.

General Member

Northern California

Nonpayment of APA Dues

n = 153

New International Membership Applicants
September 1, 2015 - October 31, 2015

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Member ID	Label Name	Country	Country Income Cat
1360907	Afrim Blyta, MD	Kosovo	Lower Middle Income
1359357	Anindya Chatterjee, MBBS	India	Lower Middle Income
1358823	Koijam Shantibala Devi, MD	India	Lower Middle Income
1360908	Jusuf Smajl Ulaj, MD	Kosovo	Lower Middle Income

n = 4

1359972	Natalia Soledade Maria Goncalves Laguna, MD	Brazil	Upper Middle Income
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n = 1

1031355	Anand M Choudhary, MBBS	Australia	Upper Income
1360871	Marcia Genevieve Fogarty, MBBS	Australia	Upper Income
1232765	Kentaro Morita, MD	Japan	Upper Income

n = 3

Total n = 8

Dues Relief Requests - Confidential

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Dues Waivers - Approved

Member # Name	Member Class	District Branch
71502 Linda D Francis MD	General Member	North Carolina Psychiatric Assn

n=1

Dues Reductions - Approved

Member # Name	Member Class	District Branch Name
63994 Jo Ellen Brainin-Rodriguez M.D.	General Member	Northern California Psychiatric Soc
306542 Heena Y Desai, MD	General Member	Ontario District Branch
34411 Don Lewis Houts M.D.	Distinguished Life Fellow	San Diego Psychiatric Society
303313 Samar Aisha Jasser, MD	General Member	Pennsylvania Psychiatric Society
1011109 Diana M Meakins, MD	General Member	Western Canada District Branch
1005420 Nick Ramandi, MD	General Member	Connecticut Psychiatric Society
42550 Nina Kram Schlachter, DO	Distinguished Fellow	Georgia Psychiatric Physicians Assn
88765 Ilana M Slaff, MD	General Member	Queens County Psychiatric Society
80776 Onkar N Srivastava M.D.	International Fellow	

n=9

Permanent Inactive Status - Approved

Member # Name	Member Class	District Branch Name
19925 Victor A Albores M.D.	International Member	
41484 Richard Thomas Bradley M.D.	Life Fellow	Arizona Psychiatric Society
30785 Carl Joseph Chiappetta, MD	Life Fellow	New Jersey Psychiatric Association
68995 Joanne Marie Loritz M.D.	Distinguished Fellow	Northern California Psychiatric Soc

n=4

EXECUTIVE SUMMARY

Nominating Committee

The 2015-2016 Nominating Committee, chaired by Paul Summergrad, M.D., met via (5) conference calls in July, August, September, and October to discuss the nominations process and review nominations and recommendations for APA's 2016 National Election. The initial slate of candidates was announced October 28, 2015 in accordance with the *APA Bylaws* to report the nominations to the Board by November 1 for immediate dissemination to the members. A fourth Trustee-at-Large candidate nominated by a petition signed by 420 voting members was announced November 20, 2015. The full report is provided as Attachment 1.

PRESIDENT-ELECT

Frank W. Brown, MD
Anita S. Everett, MD

TREASURER

Bruce J. Schwartz, MD
Linda L.M. Worley, MD

TRUSTEE-AT-LARGE

Jenny L. Boyer, MD, PhD, JD
Rebecca W. Brendel, MD, JD
Geetha Jayaram, MD, MBA
Richard F. Summers, MD

AREA 3 TRUSTEE

Steven Daviss, MD
Roger Peele, MD

AREA 6 TRUSTEE

Robert P. Cabaj, MD
Melinda L. Young, MD

RESIDENT-FELLOW MEMBER TRUSTEE-ELECT (RFMTE)

Jacques H. Ambrose, MD
Uchenna B. Okoye, MD, MPH
Matt R. Salmon, DO

ACTION: Will the Board of Trustees vote to accept the report of the Nominating Committee as presented?

Attachment 1 - REPORT OF THE NOMINATING COMMITTEE

Chairperson & Members:

Paul Summergrad, MD (Chairperson)

Reena Kapoor, MD (Area 1)

Felix Torres, MD (Area 2)

Kenneth Michael Certa, MD (Area 3)

Lisa Rone, MD (Area 4)

Thomas Oscar Dickey, MD (Area 5)

Lawrence Malak, MD (Area 6)

Iqbal Ahmed, MD (Area 7)

Edmond Hsin Pi, MD (M/UR)

Jeffrey Lieberman, MD (Consultant)

Administration: *Margaret C. Dewar, Chiharu Tobita*

The 2015-2016 Nominating Committee, chaired by Paul Summergrad, M.D., met via (5) conference calls in July, August, September, and October to discuss the nominations process and review nominations and recommendations for APA's 2016 National Election. The initial slate of candidates was announced October 28, 2014 in accordance with the *APA Bylaws* to report the nominations to the Board by November 1 for immediate dissemination to the members.

The Committee received and reviewed recommendations for the Area Trustee candidates from two Area Councils (Area III and Area VI), and for the Resident-Fellow Member Trustee-Elect (RFMTE) candidates from the RFMTE Nominating Subcommittee, chaired by Lara Cox, M.D.

The name of the fourth Trustee-at-Large candidate, Jenny L. Boyer, MD, PhD, JD, was put forward by a petition for nomination, signed by a total of 420 valid APA voting members. As outlined in the *APA bylaws*, "Candidates for Trustee-at-Large shall be nominated either (a) by the Nominating Committee, which shall nominate at least two candidates for each position to be filled; or (b) by a petition signed by 400 or more members eligible to vote." Her petition was reviewed and approved by the Nominating Committee. The fourth Trustee-at-Large candidate was announced November 20, 2015.

Dr. Summergrad expresses his appreciation to all the members of the Nominating Committee for their contribution and participation during the nomination process, and to the membership for submitting nominations and letters of recommendation.

The Nominating Committee is pleased to announce the following final slate of candidates for the 2016 National Election, which will become official with the approval of the Board of Trustees.

PRESIDENT-ELECT

Frank W. Brown, MD

Anita S. Everett, MD

TREASURER

Bruce J. Schwartz, MD

Linda L.M. Worley, MD

TRUSTEE-AT-LARGE

Jenny L. Boyer, MD, PhD, JD

Rebecca W. Brendel, MD, JD

Geetha Jayaram, MD, MBA

Richard F. Summers, MD

AREA 3 TRUSTEE

Steven Daviss, MD

Roger Peele, MD

AREA 6 TRUSTEE

Robert P. Cabaj, MD

Melinda L. Young, MD

RESIDENT-FELLOW MEMBER TRUSTEE-ELECT (RFMTE)

Jacques H. Ambrose, MD

Uchenna B. Okoye, MD, MPH

Matt R. Salmon, DO

November 16, 2015

To: APA Board of Trustees

From: Carolyn B. Robinowitz, MD, Sr. Delegate, APA AMA Delegation, and Chair, AMA Section Council on Psychiatry

Re: Update on the Activities of the APA AMA Delegation/AMA Section Council on Psychiatry

Thank you for the opportunity to update you on the activities of the APA AMA Delegation and the Section Council on Psychiatry. The 2015 Interim Meeting of the AMA House of Delegates, held November 14 through 17, is coming to a close as this report is being written. The focus of the Interim Meeting is on advocacy both for the profession and for patients, as demonstrated by considerable emphasis on the impact of consolidation of insurance companies, increased costs of prescription drugs including generic medications, and consideration of various payment systems for medical services. Smaller in scope than the AMA Annual Meeting held each June, the Interim meeting also affords a greater opportunity to implement our strategic goal to increase our successful interactions with other delegations.

Our focus at this meeting was preparing for the future. Not only did we welcome and orient the six new members of the Section Council, but we also engaged in a number of efforts in support of potential candidates for elected or appointed positions. We also focused on leadership development of the younger members of the Section Council—the residents/fellows and the young physicians. To that end, we expanded our interactions with current young leaders in the House including hosting a dinner of the young leaders of the Section Council on Psychiatry and the young leaders of both the Young Physician Section and Resident and Fellow Section. This effort set the stage for greater collaboration with a broad range of future leaders, as well as enhanced collaboration on substantive issues.

The Psychiatric Caucus, a meeting of all psychiatrists attending the AMA HOD meeting representing specialty societies, state medical associations, and AMA sections, continues to provide an opportunity to identify and collaborate on issues of interest. Over 60 psychiatrists attended the Caucus meeting in Atlanta this past week; many of whom are leaders within their own delegations. AMA Past President Jeremy Lazarus, and AMA Board of Trustees Chair Elect Patrice Harris were among the attendees, and members appreciated their input and leadership.

We welcomed several new members to the AMA Section Council on Psychiatry at this meeting including new alternate delegates to the APA and AAPL delegations, and new Young Physician Delegates to AACAP and AAPL. The following delegates and alternate delegates attended the November Interim meeting on behalf of the APA: Delegates Carolyn Robinowitz, MD (senior delegate and chair of the Section Council on Psychiatry), Jeffrey Akaka, MD, Kenneth Certa, MD, Jerry Halverson, MD, Jack McIntyre, MD, Paul Wick, MD; alternate delegates Donald Brada, MD, Frank Brown, MD, Barbara Schneidman, MD, Rebecca Brendel, MD; Young Physician Delegate Paul O'Leary, MD; Resident and Fellow Delegates Alicia Barnes, MD, Simon Faynboym, MD, and Sean Moran, MD. Ray Hsiao, APA YPS Delegate and current President of the Washington State Medical Society, attended this meeting on behalf of Washington State. The American Academy of Child and Adolescent Psychiatry (AACAP) was represented by Louis Kraus, MD, David Fassler, MD, Sharon

Hirsch, MD, and George (Bud) Vanna, MD. The American Academy of Psychiatry and the Law (AAPL) was represented by Barry Wall, MD, Linda Gruenberg, MD, Jennifer Piel, MD, and Tobias Wasser, MD. The American Academy of Geriatric Psychiatry (AAGP) was represented by Allan Anderson, MD. The Gay and Lesbian Medical Association (GLMA) was represented by Brian Hurley, MD. The Section Council on Psychiatry was assisted in its efforts by staff including Amanda Davis, Tristan Gorrindo, MD, Deana McRae, Mark Moran, Kristin Kroeger Ptakowski, Caroline Simms and Becky Yowell (APA staff), Ronald Szabat (AACAP staff), and Jacquelyn Coleman (AAPL staff).

Simon Faynboym, MD, and Sean Moran, MD, were successfully re-elected to RFS Sectional Delegate and Alternate Sectional Delegate seats respectively at this meeting. Jack McIntyre, MD and Jeff Akaka, MD, were also successful in their request for endorsement of their candidacy for the AMA BOT and the AMA Council on Legislation respectively, by the Specialty and Service Society caucus--a caucus whose membership totals approximately 230 voting delegates representing all specialty societies. Dr. McIntyre also received endorsement by the Neuroscience Caucus which will further bolster his nomination for a seat on the AMA BOT, and his campaign will be a major focus of our Spring 2016 efforts.

Attachment 1 lists just some of the actions taken by members of the House of Delegates at this meeting. For additional highlights of the meeting go to the [AMA Interim Meeting site](#).

CMTE *	ITEM	TITLE	AMA HOUSE OF DELEGATES ACTIONS – PARTIAL LIST OF ACTIONS
*	CEJA 3	Modernized <i>Code of Medical Ethics</i>	REFERRED
.Con	BOT 11	Specialty Society Representation in the House of Delegates – Five-Year Review	<p>ADOPTED</p> <p>The Board of Trustees recommends that the American Psychiatric Association (and eight other listed societies and associations) retain representation in the AMA House of Delegates and the remainder of this report be filed. (Directive to Take Action)</p>
B	RES 213	Opioid Abuse Deterrent Prescription Drugs	<p>ADOPTED AS AMENDED</p> <p>RESOLVED, That our American Medical Association support the Food and Drug Administration’s ongoing efforts to evaluate the efficacy, safety, and labeling of abuse-deterrent technology.</p> <p>RESOLVED, That our AMA oppose barriers to appropriate access to and coverage of prescription drugs.</p> <p>ADOPTED with TITLE CHANGE</p> <p>ABUSE-DETERRENT PRESCRIPTION DRUGS</p>

CMTE *	ITEM	TITLE	AMA HOUSE OF DELEGATES ACTIONS – PARTIAL LIST OF ACTIONS
B	RES 202 RES 217	Maintaining Freedom of Choice with Insurance Products Health Insurance Company Consolidation	ADOPTED Substitute Resolution 202 in lieu of Resolution 217 RESOLVED, That our AMA oppose consolidation in the health insurance industry that may result in anticompetitive markets.
B	RES 222	Model State Legislation Promoting the Use of Electronic Tools to Mitigate Risk with Prescription Opioid Prescribing	REFERRED

CMTE *	ITEM	TITLE	AMA HOUSE OF DELEGATES ACTIONS – PARTIAL LIST OF ACTIONS
J	<p>CMS 02</p> <p>RES 806</p> <p>RES 814</p> <p>RES 817</p>	<p>Pharmaceutical Costs</p> <p>Abuse of Free Market Pharma</p> <p>Addressing the Rising Price of Prescription Drugs</p> <p>High and Escalating Prescription Drug Prices</p>	<p>ADOPTED AS AMENDED</p> <p>(Reaffirm HOD Policy):</p> <p>First five recommendations</p> <p>(Directive to Take Action and New HOD Policy):</p> <p>6. That our AMA encourage Federal Trade Commission actions to limit anticompetitive behavior by pharmaceutical companies attempting to reduce competition from generic manufacturers through manipulation of patent protections and abuse of regulatory exclusivity incentives. (Directive to Take Action)</p> <p>7. That our AMA encourage Congress, the FTC and the Department of Health and Human Services to monitor and evaluate the utilization and impact of controlled distribution channels for prescription pharmaceuticals on patient access and market competition. (Directive to Take Action)</p> <p>8. That our AMA monitor the impact of mergers and acquisitions in the pharmaceutical industry. (Directive to Take Action)</p> <p>9. That our AMA continue to monitor and support an appropriate balance between incentives based on appropriate safeguards for innovation on the one hand and efforts to reduce regulatory and statutory barriers to competition as part of the patent system. (New HOD Policy)</p>

CMTE *	ITEM	TITLE	AMA HOUSE OF DELEGATES ACTIONS – PARTIAL LIST OF ACTIONS
			<p>10. That our AMA encourage prescription drug price and cost transparency among pharmaceutical companies, pharmacy benefit managers and health insurance companies. (New HOD Policy)</p> <p>11. That our AMA support legislation to require generic drug manufacturers to pay an additional rebate to state Medicaid programs if the price of a generic drug rises faster than inflation. (Directive to Take Action)</p> <p>12. That our AMA support legislation to shorten the exclusivity period for biologics. (Directive to Take Action)</p> <p>13. That our AMA will convene a task force of appropriate AMA Councils, state medical societies and national medical specialty societies to develop principles to guide advocacy and grassroots efforts aimed at addressing pharmaceutical costs and improving patient access and adherence to medically necessary prescription drug regimens. (Directive to Take Action)</p> <p>14. That our AMA generate an advocacy campaign to engage physicians and patients in local and national advocacy initiatives that bring attention to the rising price of prescription drugs and help to put forward solutions to make prescription drugs more affordable for all patients, and report back to the House of Delegates regarding the progress of the drug pricing advocacy campaign at the 2016 Interim Meeting (Directive to Take Action)</p>
J	RES 801	Health Care While Incarcerated	<p>ADOPTED AS AMENDED</p> <p><i>AACAP submitted language</i></p>

CMTE *	ITEM	TITLE	AMA HOUSE OF DELEGATES ACTIONS – PARTIAL LIST OF ACTIONS
			<p>RESOLVED, That our American Medical Association study mental health and health care for incarcerated juvenile and adult individuals and identify the best mental health and health care models for local, state and federal facilities. (Directive to Take Action)</p>
K	<p>RES 901</p> <p>RES 913</p>	<p>Access to Mental Health Care for Medical Trainees</p> <p>Mental Health Services for Medical Staff</p>	<p>REFERRED</p>
J	<p>RES 909</p>	<p>Study OTC Availability of Naloxone</p>	<p>ADOPTED AS AMENDED</p> <p>RESOLVED, That our American Medical Association encourage manufacturers or other qualified sponsors to pursue the application process for over the counter approval of naloxone with the Food and Drug Administration. (New HOD Policy)</p> <p>RESOLVED, That our American Medical Association study and report back at A-16 on ways to expand the access and use of naloxone to prevent opioid-related overdose deaths. (Directive to Take Action)</p>
K	<p>RES</p>	<p>Mental Health Crisis</p>	<p>ADOPTED AS AMENDED</p>

CMTE *	ITEM	TITLE	AMA HOUSE OF DELEGATES ACTIONS – PARTIAL LIST OF ACTIONS
	923	Interventions	RESOLVED, That our AMA support federal funding to encourage increased community and law enforcement participation in crisis intervention training programs. (Directive to Take Action)
K	RES 927	Should Drug Ads be Banned?	<p>ADOPTED First Resolve of Substitute Resolution 927 AS AMENDED</p> <p>Ban Direct-to-Consumer Advertisement of Prescription Drugs and Implantable Medical Devices</p> <p>RESOLVE, That our American Medical Association support a ban on direct-to-consumer advertising for prescription drugs and implantable medical devices.</p> <p>REFERRED FOR DECISION Second Resolve of Substitute Resolution</p> <p>RESOLVED, that Policy H-105.988 be rescinded</p>

ELECTIONS COMMITTEE

Chairperson: Barry K. Herman, MD., MMM; **Members:** Tanya Nayyirah Alim, MD, Josepha A. Cheong, MD., Justin W. Schoen, MD, Robert E. Kelly Jr., MD (Consultant); **Administration:** Margaret C. Dewar, Chiharu Tobita

Videotaping interviews

The Elections Committee met November 19, 2015 via conference call and agreed to pilot a new campaign opportunity for this election cycle. A total of eight (8) candidates running for the three (3) nationally-elected positions: President-Elect, Treasurer and Trustee-at-Large positions will be invited to the Hyatt Arlington Gateway in Arlington, VA for video-taping their interviews. A set of unbiased interview questions will be developed by the Elections Committee, and their responses will be video-recorded. The videos will be available on the election page of the APA website at: <http://www.psych.org/psychiatrists/awards-leadership-opportunities/leadership-opportunities/2016-elections>.

This project will be a trial to determine the feasibility of implementing it for future APA elections. The Elections Committee will oversee the project to make sure the process is fair and in keeping with APA Election principles and guidelines. An assessment will be carried out after the election to identify strong and weak points and guide any future effort. The APA Division of Communications and the Department of Association Governance will work in collaboration with the Elections Committee to manage the initiative.

EXECUTIVE SUMMARY

Assembly

The Assembly met in Washington, DC, October 30-November 1, 2015, and refers the following actions to the Board of Trustees (BOT), below. The draft summary of actions from the Assembly meeting is provided as attachment 16.

The Assembly brings the following action items:

1. Retain 2012 Position Statement: *Recognition and Management of Substance Use Disorders and other Mental Illnesses Comorbid with HIV* (JRCOCT148.A.2/ASM Item #2015A2 4.B.1)

The Assembly voted, on its Consent Calendar, to retain the 2012 Position Statement: *Recognition and Management of Substance Use Disorders and other Mental Illnesses Comorbid with HIV*. (Attachment 1)

Action: Will the Board of Trustees vote to approve the retention of the 2012 Position Statement: *Recognition and Management of Substance Use Disorders and other Mental Illnesses Comorbid with HIV*?

2. Retain 2008 Position Statement: *Ensuring Access to, and Appropriate Utilization of, Psychiatric Services for the Elderly* (JRCOCT148.E.3/ASM Item #2015A2 4.B.2)

The Assembly voted, on its Consent Calendar, to retain the 2008 Position Statement: *Ensuring Access to, and Appropriate Utilization of, Psychiatric Services for the Elderly*. (Attachment 2)

Action: Will the Board of Trustees vote to approve the retention the 2008 Position Statement: *Ensuring Access to, and Appropriate Utilization of, Psychiatric Services for the Elderly*?

3. Proposed Position Statement: *Opioid Overdose Education and Naloxone Distribution- Joint Position Statement of the APA/AAAP* (JRCJULY158.A.3/ASM Item #2015A2 4.B.4)

The Assembly voted, on its Consent Calendar, to approve the Proposed Position Statement: *Opioid Overdose Education and Naloxone Distribution- Joint Position Statement of the APA/AAAP*. (Attachment 3)

Action: Will the Board of Trustees vote to approve the Proposed Position Statement: Opioid Overdose Education and Naloxone Distribution- Joint Position Statement of the APA/AAAP?

4. Proposed Position Statement: *Substance Use Disorders in Older Adults* (JRCOCT148.A.5/JRCJULY158.E.1/ASM Item #2015A2 4.B.6)

The Assembly voted, on its Consent Calendar, to approve the Proposed Position Statement: *Substance Use Disorders in Older Adults*. (Attachment 4)

Action: Will the Board of Trustees approve the Proposed Position Statement: *Substance Use Disorders in Older Adults*?

5. Revised Position Statement: *Bias-Related Incidents* (JRCJAN158.I.1/JRCJUL158.I.1/ASM Item #2015A2 4.B.7)

The Assembly voted, on its Consent Calendar, to approve the revised Position Statement: *Bias-Related Incidents*. (Attachment 5)

Action: Will the Board of Trustees approve the revised Position Statement: *Bias-Related Incidents*?

6. Retire 2007 Position Statement: *The Right to Privacy* (JRCJULY158.J.1/ASM Item #2015A2 4.B.8)

The Assembly voted, on its Consent Calendar, to retire the 2007 Position Statement: *The Right to Privacy*. (Attachment 6)

Action: Will the Board of Trustees approve the retirement of the Position Statement: *The Right to Privacy*?

7. Retire Position Statement: *Interference with Scientific Research and Medical Care* (JRCJAN158.M.6/JRCJUL158.M.1/ASM Item #2015A2 4.B.10)

The Assembly voted, on its Consent Calendar, to retire the Position Statement: *Interference with Scientific Research and Medical Care* (Attachment 7)

Action: Will the Board of Trustees approve the retirement of the Position Statement: *Interference with Scientific Research and Medical Care*?

8. Revised Position Statement: *Hypnosis* (JRCJAN158.M.3/ASM Item #2015A2 4.B.11)

The Assembly voted, on its Consent Calendar, to approve the revised Position Statement: *Hypnosis* (Attachment 8)

Action: Will the Board of Trustees approve the revised Position Statement: *Hypnosis*?

9. Retain 2010 Position Statement on *Posttraumatic Stress Disorder and Traumatic Brain Injury* (JRCJULY158.M.3/ASM Item #2015A2 4.B.12)

The Assembly voted, on its Consent Calendar, to retain the 2010 Position Statement on Posttraumatic Stress Disorder and Traumatic Brain Injury (Attachment 9)

Action: Will the Board of Trustees approve the retention of the 2010 Position Statement on Posttraumatic Stress Disorder and Traumatic Brain Injury?

10. Retain 2010 Position Statement on *High Volume Psychiatric Practice and Quality of Patient Care* (JRCJULY158.L.2/ASM Item #2015A2 4.B.13)

The Assembly voted, on its Consent Calendar to retain the 2010 Position Statement on *High Volume Psychiatric Practice and Quality of Patient Care*. (Attachment 10)

Action: Will the Board of Trustees approve the retention of the 2010 Position Statement on *High Volume Psychiatric Practice and Quality of Patient Care*?

11. Proposed Position Statement on Tobacco Use Disorder
(JRCJULY158.A.1/ASM Item #2015A2 4.B.14)

The Assembly voted, on its Consent Calendar, to approve the Proposed Position Statement on Tobacco Use Disorder. (Attachment 11)

Action: Will the Board of Trustees approve the Proposed Position Statement on Tobacco Use Disorder?

12. Retain Position Statement: *Psychotherapy as an Essential Skill of Psychiatrists*
(JRCJULY158.L.3/ASM Item #2015A2 4.B.15)

The Assembly voted, on its Consent Calendar, to retain the Position Statement: *Psychotherapy as an Essential Skill of Psychiatrists*. (Attachment 12)

Action: Will the Board of Trustees approve the retention of the Position Statement: *Psychotherapy as an Essential Skill of Psychiatrists*?

13. Proposed Position Statement on *Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment*
(ASMMAY1512.I/JRCJUL158.J.4/ASM Item #2015A2 4.B.16)

The Assembly voted, on its Consent Calendar, to approve the Proposed Position Statement on *Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment*. (Attachment 13)

Action: Will the Board of Trustees approve the Proposed Position Statement on *Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment*?

14. Revised Position Statement on *Telemedicine in Psychiatry*
(JRCOCT148.J.15/ASM Item #2015A2 14.A)

The Assembly voted to approve the Revised Position Statement on *Telemedicine in Psychiatry*. (Attachment 14)

Action: Will the Board of Trustees approve the Revised Position Statement on *Telemedicine in Psychiatry*?

15. APA Practice Guideline: *Use of Antipsychotics to Treat Agitation or Psychosis in Patients with Dementia* (ASM Item #2015A2 8.L.1)

The Assembly voted unanimously to approve the APA Practice Guideline: *Use of Antipsychotics to Treat Agitation or Psychosis in Patients with Dementia*.
(Attachment 15)

Action: Will the Board of Trustees approve the APA Practice Guideline: Use of Antipsychotics to Treat Agitation or Psychosis in Patients with Dementia?

The Assembly brings the following informational item:

1. Assembly Nominating Committee Report

The Assembly voted to approve the slate of candidates for the May 2016 Assembly election as follows:

Speaker-Elect: John de Figueiredo, M.D., Area 1
Theresa Miskimen, M.D., Area 3

Recorder: James R. (Bob) Batterson, M.D., Area 4
David Scasta, M.D. Area 3

APA Official Actions

Position Statement on Recognition and Management of Substance Use Disorders and Other Mental Illnesses Comorbid with HIV

Approved by the Board of Trustees, July 2012

Approved by the Assembly, May 2012

"Policy documents are approved by the APA Assembly and Board of Trustees...These are...position statements that define APA official policy on specific subjects..." – *APA Operations Manual*.

Issue

There is a high prevalence of substance abuse and psychiatric disorders among HIV-infected individuals. Importantly, drug and alcohol-use disorders are frequently co-morbid with depression, anxiety and severe mental illness. Not only do these disorders increase the risk of contracting HIV, they have also been associated with decreased highly active antiretroviral therapy (HAART) utilisation, adherence and virological suppression.

Position Statement

Recommendations:

1. Psychiatrists should attend to the HIV-related prevention and psychiatric and substance use treatment needs of their patients (see position statements for specific settings and patient groups). Psychiatrists treating patients with substance use disorders are encouraged to stay abreast of psychosocial and somatic interventions with proven efficacy for these

problems and their negative consequences (e.g., antabuse, naltrexone, buprenorphine, motivational enhancement therapy, cognitive behavioral therapy, needle exchange programs, and methadone maintenance).

2. Psychiatrists are encouraged to collaborate with their medical colleagues (physicians and others) to provide comprehensive and integrated care for HIV-infected patients. This can include collaboration with the treatment of substance use disorders and other mental illnesses, pain, sleep, and sexual disorders. Coordination is essential to maximize adherence and minimize drug-drug interactions and overlapping medication toxicities. Such coordination may also need to take into account the treatment of medical disorders commonly associated with HIV, such as Hep C, Hep B, and TB. For psychiatrists who regularly evaluate and treat HIV-positive patients, staying knowledgeable about current HIV-related medical care will enhance their abilities to meaningfully engage in these collaborations.
3. When a psychiatrist evaluates a change of mental status in an HIV-infected patient, consideration should always be given to disorders due to general medical conditions and substance-induced disorders as possible underlying causes.

Prepared by the Steering Committee on HIV Psychiatry.

APA Official Actions

Position Statement on Ensuring Access to, and Appropriate Utilization of, Psychiatric Services for the Elderly

Approved by the Board of Trustees, July 2008
Approved by the Assembly, May 2008

"Policy documents are approved by the APA Assembly and Board of Trustees...These are...position statements that define APA official policy on specific subjects..." – *APA Operations Manual*.

The American Psychiatric Association stands as an advocate for access to and delivery of quality psychiatric care for aging populations. Psychiatric treatments have been shown to be effective in the management of the emotional and mental disorders of late life. While older Americans benefit from access to psychiatric treatment, they still do not have adequate access to these services.

The American Psychiatric Association endorses the following fundamental principles regarding the treatment of older Americans with psychiatric illnesses:

1. All older Americans should have access to timely psychiatric consultation and treatment.

2. Treatment of older adults with psychiatric illness must be provided with respect and compassion.
3. Psychiatric physicians caring for older adults must adhere to the ethical standards of the American Psychiatric Association and provide treatments that are appropriate and effective.
4. Psychiatric physicians have unique skills in the provision of psychotherapeutic, psychopharmacologic, social and family interventions. Elderly patients benefit when a psychiatric physician participates in a multidisciplinary treatment team for evaluation and for delivery of treatment services.
5. Additional research (basic and clinical) is necessary to develop new treatments for the elderly that are safe and effective.

Revision of the 1997 position statement by the Council on Aging.

Proposed
**Joint Position Statement of
American Psychiatric Association and
American Academy of Addiction Psychiatry**

TITLE: Opioid Overdose Education and Naloxone Distribution

ISSUE:

There has been a significant increase in mortality from prescription drug overdoses over the past 20 years in the U.S. (1). Overdose deaths now exceed automobile accidents as the leading preventable cause of death in the U.S., posing a significant public health crisis (2). Rates of opioid overdose have surged throughout the world, including in Canada, Europe, Asia, and Australia (3-7). In addition to the traditional risks associated with heroin use, increasing use of opioid analgesics (especially long-acting formulations at high doses) has been a major contributor to increased overdose mortality (8-10).

Position Statement

The American Psychiatric Association and the American Academy of Addiction Psychiatry endorse expanded access to naloxone, along with appropriate training and education, for bystanders, family members, and other individuals who may be in a position to initiate early response to opioid overdose, including EMTs, paramedics, corrections officers, and law enforcement. Naloxone kits should be distributed to individuals at high risk of witnessing or experiencing an opioid overdose, including users of heroin or other opioid drugs. Additionally, naloxone should be prescribed to groups at heightened risk for opioid-induced respiratory depression including individuals: 1) on high-dose full-agonist opioid pharmacotherapy (i.e. greater than 100 mg of morphine equivalence per day), 2) prescribed opioids in combination with benzodiazepines, and/or 3) suspected or known nonmedical opioid use (15).

Individuals authorized to dispense naloxone overdose kits should be required to undergo training and education in the recognition of signs and symptoms of overdose, techniques for administration of naloxone, and referral to emergency medical services. Supervision and training of these individuals should be maintained on an ongoing basis.

Additionally, states should actively protect the efforts of providers and civilians through Good Samaritan laws, amnesty protections for certified providers, and the allowance of third-party prescriptions (i.e. for the family member of the index patient). States with limitations on access to naloxone should be encouraged by their state health officials and medical societies to broaden distribution of naloxone and support legislation to remove barriers to naloxone access.

Background:

Naloxone is an opioid antagonist that is used to rapidly reverse respiratory depression and other effects of opioids in cases of suspected overdose. It is approved for use by IM, SC, or IV routes of administration; an intranasal (IN) spray is also available for off-label use. Adverse effects other than precipitation of opioid withdrawal are rare. Recently, the FDA approved a hand-held autoinjector, similar to an "epi pen" that may be used by untrained persons outside of healthcare settings.

Reversal of opioid overdose is a time-sensitive medical emergency, and individuals at the scene of an overdose may be reluctant to call for emergency services for fear of legal consequences or arrest. Opioid Overdose Education and Naloxone Distribution (OOEND) initiatives involving laypeople who may be first responders at the time of overdose have been associated with reduced mortality from opioid overdose in multiple studies (11-15). Findings have demonstrated that bystanders may safely administer naloxone via intramuscular injection or IN insufflation in cases of suspected overdose. Distribution of naloxone kits should be accompanied by brief training that incorporates education about opioid overdose recognition and response and calling for emergency services. Although a randomized controlled trial has not been conducted due to logistical and ethical barriers, mounting empirical evidence supports this public health intervention. The substantial evidence for effectiveness of naloxone, as well as the low risk and low cost of the intervention, strongly support its use, particularly when considering the lethal potential of opioid overdose.

References

1. Warner M, Chen LH, Makuc DM, Anderson RN, Minino AM. Drug poisoning deaths in the United States, 1980-2008. *NCHS Data Brief* 2011;81:1-8.
2. Mack, K. Drug-induced deaths – United States, 1999–2010. *MMWR* 2013; 62(03): 161–163.
3. Milloy MJ, Wood E, Reading C, Kane D, Montaner J, Kerr T. Elevated overdose mortality rates among First Nations individuals in a Canadian setting: a population-based analysis. *Addiction* 2010;105:1962-70.
4. European Monitoring Centre for Drugs and Drug Addiction. Annual report 2011: the state of the drugs problem in Europe. Publications Office of the European Union 2011;87-91.
5. Coffin P. Overdose: a major cause of preventable death in central and eastern Europe in central Asia recommendations and overview of the situation in Latvia, Kyrgyzstan, Romania, Russia and Tajikistan. *Eurasian Harm Reduction Network (EHRN)* 2008;1-78.
6. Quan VM, Minh NL, Ha TV, Ngoc NP, Vu PT, Celentano DD, et al. Mortality and HIV transmission among male Vietnamese injection drug users. *Addiction* 2011;106:583-9.
7. Stafford J, Burns L. Australian drug trends 2010. Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trend Series* 2011;55.
8. Centers for Disease Control and Prevention (CDC). Vital signs: overdoses of prescription opioid pain relievers—United States, 1999-2008. *Morb Mortal Wkly Rep* 2011;60:1487-92.
9. Hall AJ, Logan JE, Toblin RL, Kaplan JA, Kraner JC, Bixler D, et al. Patterns of abuse among unintentional pharmaceutical overdose fatalities. *JAMA* 2008;300:2613-20.
10. Paulozzi LJ, Ryan GW. Opioid analgesics and rates of fatal drug poisoning in the United States. *Am J Prev Med* 2006;31:506-11.
11. Maxwell S, Bigg D, Stanczykiewicz K, Carlberg-Racich S. Prescribing naloxone to actively injecting heroin users: a program to reduce heroin overdose deaths. *J Addict Dis* 2006;25:89-96.
12. Evans JL, Tsui JI, Hahn JA, Davidson PJ, Lum PJ, Page K. Mortality among young injection drug users in San Francisco: a 10-year follow-up of the UFO study. *Am J Epidemiol* 2012;175:302-8.
13. Walley, AY et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. *BMJ* 2013;346:f174.
14. Wermeling, DP. Review of naloxone safety for opioid overdose: practical considerations for new technology and expanding public access. *Therapeutic Advances in Drug Safety* 2015; 6(1): 20-31.
15. Albert S, Brason FW, Sanford CK, Dasgupta N, Graham J, Lovette B. Project Lazarus: Community-based overdose prevention in rural North Carolina. *Pain Medicine* 2011; 12: S77-S85.

Position Statement: Substance Use Disorders in Older Adults

Issue: Substance use disorders are a growing trend among older adults and aging Baby Boomers (born in 1946-1964) and are currently underdiagnosed and undertreated. Substance use disorders in older adults can lead to significant problems for individuals, families and communities, and present major challenges to primary care and substance use disorder treatment providers due to increased comorbidity with medical, mental and cognitive disorders in later life, and increased rates of suicide. It is currently estimated that 8.2% of older adults misuse alcohol and medications and although the majority (87%) of older adults see a physician regularly about 40% of those who are at risk do not self-identify or seek services for substance-related problems and are unlikely to be identified by their physicians (7).

Position: It is the position of the American Psychiatric Association that:

1. The diagnosis and treatment of substance use disorders should be recognized as an essential part of medical and psychiatric care of older adults. Patients with identified substance use disorders should be educated about the condition and offered or referred for appropriate treatment;
2. Psychiatrists and other involved healthcare providers should promote screening for co-occurring mental and substance use disorders by primary health care, mental health, and substance abuse treatment providers and encourage the development of integrated treatment strategies;
3. Careful attention is needed in evaluating psychosocial stressors that may contribute to increased risk of substance use disorder (e.g., retirement, financial stressors, loneliness, medical problems, etc).
4. Psychiatrists must remember that older adults, and particularly older women, may be more sensitive to the toxic effects of substances due to physiological changes with aging, including reduction in lean body mass, comorbid medical, cerebrovascular and neurodegenerative processes that reduce brain resilience to the effects of substances and prescription pain- and sedative medications. Assessment of these risk factors should be considered routinely in management of older adults, particularly when considering prescribing controlled substances or when managing substance use disorders.
5. Older adult mental health services, including substance use prevention and treatment services, should be integrated into primary health care, long-term care and community-based service systems;
6. Older adults should have full access to an affordable and comprehensive range of mental health services, including substance use disorder services; these should include acute treatment and prevention of substance use disorders and should include home-based care and community-based care, as well as outreach to long-term care facilities;
7. Training at the level of medical school, residency and fellowship should help develop competence in the diagnosis, treatment, and prevention of substance use disorders in older adults;
8. More research is needed on the effects of medicinal and recreational cannabis use in older adults and interaction with comorbid medical and cognitive disorders and other prescription medication;
9. Development of public policy should help modify public and private health and long-term care insurance plans to:
 - eliminate exclusions based on pre-existing conditions;
 - guarantee parity in coverage and reimbursement for physical health and mental health, including substance use disorders;

- ensure that older persons who are eligible for Medicare have access to a full range of treatment options for substance use disorders;
- improve and effectively coordinate benefits, at all government levels, for those individuals who are dually eligible for Medicare and Medicaid coverage;
- promote the development and implementation of home and community-based care for substance use disorders as an alternative to institutionalization through a variety of public and private funding mechanisms;
- promote older adult mental health and substance use disorder treatment research, and coordinate and finance the movement of evidence-based and emerging best practices between research and service delivery;
- increase collaboration among aging, health, mental health, and substance use disorder consumer organizations, advocacy groups, professional associations, academic institutions, research entities, and all relevant government agencies to promote more effective use of resources and to reduce fragmentation of services.

Background document:

The twentieth century witnessed the doubling of life expectancy in the western hemisphere and a three-fold increase in the number of individuals aged 65 years and older (1). Aging is often associated with an increase in psychosocial stressors and health problems. These are recognized risk factors for substance use disorders, and in the elderly, can lead to further health complications as well as social withdrawal and isolation (1).

Substance use disorders (SUD) have traditionally been thought of as disorders disproportionately affecting younger populations. Indeed, many epidemiological studies have shown that the rates of maladaptive substance use decrease with age (2, 3). In fact, it has been shown that a decline in rates of substance use is noted for individuals in their 30's and older and is associated with a substantial shift in accountabilities such as the need to maintain a stable job, steady relationships and parenthood (4, 5). In addition, higher mortality rates have been reported in substance users, contributing to this decline in prevalence of SUD in older adults. (6).

Currently, it is estimated that 8.2% of Americans older than 65 years binge drink alcohol, 2.2% meet diagnostic criteria for alcohol use disorders, 10.3% use tobacco regularly and 1.0% use illicit drugs (7). Some have suggested that the breadth of addictions among the elderly might be even more significant than these numbers seem to report, as in many such cases substance use disorders are ignored or misdiagnosed. To that end, in the context of the relatively lower prevalence of SUD among the elderly, providers often misdiagnose them with a mood or anxiety disorder or dementia (8).

Over the next decade, it is estimated that these numbers will increase dramatically because of the aging baby boomers. A prospective study estimated that by 2020, 4.4 million Americans aged 50 or older will be requiring treatment for SUD. That is triple what these figures were in 2000 and 2001 (9). These noticeable numbers will transform the way healthcare professionals and governmental organizations tackle substance use among the elderly.

Substance Use Disorders are particularly concerning problems among those individuals ages 65 and older because of their effects on associated co-morbid medical and psychiatric conditions such as mood or psychotic disorders, diabetes and cardiovascular disease. Older adults, and particularly older women, may be more sensitive to the toxic effects of substances due to physiological brain changes with aging, and with comorbid medical, cerebrovascular and neurodegenerative processes that reduce brain resilience to the effects of substances and prescription pain and sedative medications (10, 11). Factors that have been found to be associated with SUD's in the elderly include a past history of substance use disorders, social isolation, as well as being a female (12-14). The latter factor is moderated by women being diagnosed with a SUD less frequently and the fact that manifest symptoms occur at an older age in women compared to men (15). While depressive and anxiety disorders can lead many aged 65 and older to "self-medicate", it has been found that older men are more likely to abuse alcohol while older women are more likely to abuse prescription drugs (8). In fact, benzodiazepines and narcotic pain medication are frequently prescribed to the elderly resulting in physical dependence, while withdrawal symptoms or tolerance are infrequently reported (12 – 14).

References:

1. Gossop M, Moos R: Substance misuse among older adults: a neglected but treatable problem. *Addiction* 2008;103:347–348.
2. Substance Abuse and Mental Health Services Administration, 2000. Summary of Findings from the 1999 National Household Survey on Drug Abuse. National Household Survey on Drug Abuse Series H-12. Office of Applied Studies, SAMHSA. DHHS Pub. No. (SMA) 00-3466.
3. Substance Abuse and Mental Health Services Administration, 2000. Treatment Episode Data Set, TEDS) 1993-98. Drug and Alcohol Services Information System Series: S-11. Office of Applied Studies. DHHS Pub. No (SMA) 00-3465.
4. Bachman, J.G., Wadsworth, K.N., O'Malley, P.M., Johnston, L.D., Schulenberg, J.E., 1997. Smoking, Drinking, and Drug Use in Young Adulthood: The Impacts of New Freedoms and New Responsibilities. Lawrence Erlbaum Associates, Mahwah, NJ.
5. Gotham, H.J., Sher, K.J., Wood, P.K., 1997. Predicting stability and change in frequency of intoxication from the college years to beyond: individual-difference and role transition variables. *J. Abnorm. Psychol.* 106 (4), 619-629.
6. Moos, R.H., Brennan, P.L., Mertens, J.R., 1994. Mortality rates and predictors of mortality among late- middle-aged and older substance abuse patients. *Alcohol Clin. Exp. Res.* 18, 187-195.
7. Results from the 2008 National Survey on Drug Use and Health: National Finding, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Substance Abuse and Mental Health Services Administration, Office of Applied Studies
8. Rollason V, Vogt N: Reduction of polypharmacy in the elderly: a systematic review of the role of the pharmacist. *Drugs Aging* 2003;20:817–832.
9. Substance abuse treatment need among older adults in 2020: the impact of the aging baby-boom cohort. *Drug and Alcohol Dependence* 69 (2003) 127-135
10. Barnes AJ, Moore AA, Xu H, Ang A, Tallen L, Mirkin M, Ettner SL. Prevalence and correlates of at-risk drinking among older adults: the project SHARE study. *J Gen Intern Med.* 2010 Aug;25(8):840-6.
11. Blow FC¹, Barry KL. Use and misuse of alcohol among older women. *Alcohol Res Health.* 2002;26(4):308-15.
12. Culbertson JW, Ziska M: Prescription drug misuse/abuse in the elderly. *Geriatrics* 2008; 63:22–31.
13. Simoni-Wastila L, Yang HK: Psychoactive drug abuse in older adults. *Am J Geriatr Pharmacother* 2006;4:380–394.
14. Simoni-Wastila L: The use of abusable pre- scription drugs: the role of gender. *J Womens Health Gend Based Med* 2000;9:289–297.
15. Ziegler PP: Addiction in older women: American health care's best-kept secret. *J Calif Dent Assoc* 2008;36:115–118.
16. Koechl B, Unger A, Fischer G: Age-Related Aspects of Addiction. *Gerontology* 2012;58:540–544

Proposed revision to
Position Statement on Bias-Related Incidents
May 2015

This statement is based on the 1992 position statement that was reaffirmed in 2007.

Issue: Bias-related incidents arise from discrimination and intolerance based on race/ethnicity, color, gender, age, religion/spirituality, places of birth and growing up, migrant status, socioeconomic status, sexual orientation, gender identity, physical and mental illness or disabilities, and veteran status among other characteristics. Biases, both intentional/explicit/conscious and unintentional/implicit/unconscious, underlie these incidents that are widespread in society and continue to be a source of social disruption, individual suffering, trauma, and health and mental health inequities. These bias-related incidents, occurring in both urban and rural areas, consist of acts of violence, harassment, intimidation, and microaggressions based on stereotypes that devalue the human dignity of stigmatized individuals, families, and communities. These bias-related incidents result in despair and hopelessness that undermine the mental health and well-being of affected individuals and ultimately affects the whole nation.

APA Position: The American Psychiatric Association (APA) opposes bias-related incidents. We recognize that these incidents occur in our nation's communities, institutions, organizations and throughout all levels of society. The APA encourages its members to take appropriate actions to prevent such incidents as well as actively respond when such bias-related incidents occur.

Background Information:

A recent publication has summarized the importance of discrimination as a social determinant of mental health. Michael Compton et al. in the book "The Social Determinants of Mental Health" (APPI, 2015) has one chapter on discrimination. Summarizing the chapter in a section entitled "Key Points," it is stated that:

1. The linked concepts of chronic stress and discrimination represent a useful conceptual lens to understand one potential etiology of poor physical and mental health.
2. Clinical programs and clinicians must be sensitive to the nuances of race, color, ethnicity, and nativity, as well as other aspects of individual differences that engender discrimination, in treating behavioral disorders, especially mood and anxiety disorders.
3. Cultural competency and cultural humility training are important vehicles for developing knowledge of different cultural practices, awareness of one's own cultural worldview, attitudes towards differences, and the cross-cultural skills that are needed to understand, be respectful of, and be responsive to the needs of diverse patients.
4. Communities affected by discrimination have to assume greater responsibility in educating and developing effective antiracism and antidiscrimination movements through collaborations with private and government institutions and majority and minority racial communities. Vigorously working to eliminate discrimination is the responsibility of not only those who are discriminated against but also those who might discriminate, either through their own actions or through their interactions that contribute to maintaining forms of institutional discrimination." (p. 40-41)

Secondly, in the DSM-5 revised Outline for Cultural Formulation in the section "Cultural features of the relationship between the individual and the clinician," it is stated: "Experiences of racism and

discrimination in the larger society may impede establishing trust and safety in the clinical diagnostic encounter. Effects may include problems eliciting symptoms, misunderstanding of the cultural and clinical significance of symptoms and behaviors, and difficulty establishing or maintaining the rapport needed for an effective clinical alliance.” (p. 750)

Thirdly, the DSM-5 Cultural Formulation Interview “Guide to the Interviewer” for Question 16 on the “Clinician-Patient Relationship” states: “Elicit possible concerns about the clinic or the clinician-patient relationship including perceived racism, language barriers, or cultural differences that may undermine goodwill, communication, or care delivery.” (p. 754)

Recommendations:

1. The APA, throughout all parts of the organization, must actively affirm that a basic principle of our organization is the importance of valuing human dignity as the basis for optimal mental health and well-being. The APA, throughout all parts of the organization, must actively demonstrate consistent modeling of respect for others and willingness to remain open and curious when assessing for and addressing individual and institutional/organizational biases.
2. APA members must educate themselves about biases, both intentional/explicit/conscious and unintentional/implicit/unconscious, and promote this skill as relevant to all members of society as necessary for optimum mental health and human dignity. This should include specific training on cultural competency and cultural humility in the following levels of training: 1) Medical students consistent with LCME accreditation standards and 2) Psychiatry residents consistent with ACGME core competencies and milestones assessment. Finally, both APA educational meetings such as the Annual Meeting and the Institute on Psychiatric Services and APPI publications should offer sessions and resource materials respectively on these topics.
3. APA leadership and members must develop valuing messages and images to challenge stereotypes and broaden our viewpoints to be inclusive of diverse individuals, families, and communities.
4. APA leadership and members must understand that dissemination of evidence-based research that demonstrates effective paths to decrease or eliminate bias-related incidents is critical to addressing these issues in society, our organization and in our work with patients.

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The Right to Privacy POSITION STATEMENT

Approved by the Assembly, November 1991
Approved by the Board of Trustees, December 1991
REAFFIRMED 2007

"Policy documents are approved by the APA Assembly and Board of Trustees...These are ... position statements that define APA official policy on specific subjects..." -- *APA Operations Manual*.

The American Psychiatric Association supports the right to privacy in matters such as birth control, reproductive choice, and adult consensual sexual relations conducted in private, and it supports legislative, judicial, and regulatory efforts to protect and guarantee this right.

This statement was proposed by the Committee on Gay, Lesbian, and Bisexual Issues of the Council on National Affairs.

¹The members of the Committee on Gay, Lesbian, and Bisexual Issues are Richard A. Isay, M.D. (chairperson), Margery Sved, M.D., Rochelle L. Klinger, M.D., Robert M. Kertzner, M.D., Debbie Rene Carter, M.D., Kenneth Ashley, M.D. (APA/NIMH Fellow), and Robert P. Cabaj, M.D. (Assembly liaison and corresponding member).

Position Statement on Interference with Scientific Research and Medical Care

Approved by the Board of Trustees, September 2009
Approved by the Assembly, May 2009

The American Psychiatric Association deploras any and all acts of intimidation, physical interference, terrorism, and violence that impede the progress of scientific research or the provision of legal medical care.

Patients in need of medical psychotherapy should have the same respect and access to care as any other persons needing medical treatment. APA strongly objects to stereotyping or caricaturing patients who utilize medical psychotherapy, especially in ways that minimize the seriousness of their illness.

The position statement originally was approved by the Assembly in May 1995 and by the Board of Trustees in March 1995. This position statement was proposed by the Council on National Affairs. The members of the council are Terry Stein, M.D. (chairperson), Nada L. Stotland, M.D. (vice chairperson and Assembly liaison), Leah J. Dickstein, M.D., Clifford K. Moy, M.D., Lourdes M Dominguez, M.D., Fred Gottlieb, M.D. (Board liaison), Mary Kay Smith, M.D. (Board liaison), Billy Jones, M.D. (observer-consultant), and Andrew J. Elliott, M.D. (APA/BurroughsWellcome Fellow).

Title: Position Statement on HypnosisBackground:

Hypnosis is a state of aroused, attentive, focal concentration accompanied by a relative reduction in peripheral awareness (dissociation), and heightened response to social cues (suggestibility). It can be utilized to facilitate a variety of psychotherapeutic interventions, including psychodynamic, cognitive-behavioral, and exposure-based treatments. Hypnosis is a specialized psychiatric procedure and as such is an aspect of the doctor-patient relationship. Hypnosis is not in itself a therapy, but rather is a state of aroused, attentive, focal concentration with a relative reduction in peripheral awareness that can be utilized to facilitate a variety of psychotherapeutic interventions. The capacity to experience hypnosis can be spontaneous or it can be activated by a formal induction procedure which taps the inherent neural hypnotic capacity of the individual. This capacity varies widely but is a stable trait that can be reliably measured in clinical and research settings. Hypnosis provides an adjunct to research, to diagnosis, and to treatment in psychiatric and other medical practice. Because of its intensity and adaptability to training patients in the use of self-hypnosis for symptom management, it often shortens the clinical time required for a psychotherapeutic effect.

Randomized clinical trials have shown that interventions employing hypnosis are effective in the treatment of pain, anxiety, stress, cancer surgery, phobias, psychosomatic disorders, nausea and vomiting, irritable bowel syndrome, and habit control problems, such as smoking and weight control. It is also helpful in the management of patients with dissociative and posttraumatic stress disorders. Also, hypnosis may enhance the effectiveness of analgesia and anxiolysis in the context of medical procedures. Clinical trials have demonstrated comparable outcomes to exposure-based and psychodynamic treatment for PTSD, smoking cessation rates that compare favorably with pharmacological approaches, and superior analgesia and anti-anxiety effects to standard medication during medical procedures.

Issue:

Hypnosis is being delivered by a wide variety of professional and non-professional clinicians who vary in their training to deliver hypnosis and who vary in the way that they delivery hypnosis therapy.

APA Position:

1. Since h~~Hypnosis is a psychotherapeutic facilitator of a primary treatment strategy, it should be employed by psychiatrists, other physicians, psychologists, or other health care professionals with appropriate licensure and training, and it should be implemented within the scope of their professional expertise.~~
2. Hypnosis should be implemented in the context of a thorough medical and psychiatric evaluation, and its delivery should be consistent with the treatment plan for that patient. ~~or hypnotic treatment, as in any other psychiatric medical procedure, calls for all examinations necessary to a properly diagnose diagnosis and to the formulation of adequately formulate the immediate therapeutic needs of the patient. The technique of induction and termination of the trance state should be clearly structured and usually can be brief. Long induction ceremonies using a sleep paradigm are misleading.~~
3. The induction and termination of the trance state should be clearly structured and consistent with evidence-based hypnosis practice.
4. Hypnosis training should be delivered by professionally credentialed institutions and, optimally, includes both didactic education and supervised clinical contact.

Because of the heightened responsiveness to suggestion in hypnosis, it is especially important that therapeutic strategies and language be formulated carefully. Although similar dangers attend the improper or inept use of all other aspects of the doctor-patient relationship, the nature of hypnosis renders its inappropriate use particularly hazardous. For hypnosis to be used safely, even for the relief of pain or for sedation, more than a superficial knowledge of the dynamics of human motivation is essential.

Since hypnosis has definite application in the various fields of medicine and allied health care disciplines, appropriate training is important. Courses conducted, physicians have recently shown increasing interest in hypnosis and have turned to psychiatrists for training in hypnosis.

To be adequate for medical purposes, all courses in hypnosis should be given in conjunction with recognized medical teaching institutions or teaching hospitals, or appropriate professional organizations in medicine, psychology, and related disciplines provide a basis for practice. Under the auspices of the department of psychiatry and in collaboration with those other departments which are similarly interested. Although lectures, demonstrations, seminars, conferences and discussions are helpful, the basic learning experience must also derive from closely supervised clinical contact with patients. Since such psychiatrically centered courses are virtually non-existent, many physicians have enrolled in the inadequate brief courses available, which are taught often by individuals without medical or psychiatric training. These courses have concentrated on prolonged redundant induction ceremonies and have neglected or covered psychodynamics and psychopathology in a superficial or stereotyped fashion.

Originally developed by the APA Committee on Therapy and adopted by the APA Council in 1961. This revision was prepared by David Spiegel, M.D., Michael First, M.D., and John Krystal, M.D. and Herbert Spiegel, M.D.

(Clean Version, For Readability)

Title: Position Statement on Hypnosis

Background:

Hypnosis is a state of aroused, attentive, focal concentration accompanied by a relative reduction in peripheral awareness (dissociation), and heightened response to social cues (suggestibility). It can be utilized to facilitate a variety of psychotherapeutic interventions, including psychodynamic, cognitive-behavioral, and exposure-based treatments. The capacity to experience hypnosis can be spontaneous or it can be activated by a formal induction procedure, which taps the inherent hypnotic capacity of the individual. This capacity varies widely but is a stable trait that can be reliably measured in clinical and research settings. Hypnosis provides an adjunct to research, to diagnosis, and to treatment in psychiatric and other medical practice.

Randomized clinical trials have shown that interventions employing hypnosis are effective in the treatment of pain, anxiety, stress, phobias, psychosomatic disorders, nausea and vomiting, irritable bowel syndrome, and habit control problems, such as smoking and weight control. It is also helpful in

the management of patients with dissociative and posttraumatic stress disorders. Also, hypnosis may enhance the effectiveness of analgesia and anxiolysis in the context of medical procedures.

Issue:

Hypnosis is being delivered by a wide variety of professional and non-professional clinicians who vary in their training to deliver hypnosis and who vary in the way that they deliver hypnosis therapy.

APA Position:

- 1. Hypnosis should be employed by psychiatrists or other health care professionals with appropriate licensure and training, and it should be implemented within the scope of their professional expertise.**
- 2. Hypnosis should be implemented in the context of a thorough medical and psychiatric evaluation, and its delivery should be consistent with the treatment plan for that patient.**
- 3. The induction and termination of the trance state should be clearly structured and consistent with evidence-based hypnosis practice.**
- 4. Hypnosis training should be delivered by professionally credentialed individuals and, optimally, includes both didactic education and supervised clinical contact.**

Dates and Authorship:

Originally developed by the APA Committee on Therapy and adopted by the APA Council in 1961. This revision was prepared by David Spiegel, M.D., Michael First, M.D., and John Krystal, M.D., in 2015.

Title: Posttraumatic Stress Disorder and Traumatic Brain Injury

Issue:

As the nation cares for those returning from war as well as those who are victims of violence in our own country, the importance of sustaining research and education to better care for those with both psychiatric and neurologic injury such as Posttraumatic Stress Disorder and Traumatic Brain Injury is prominent.

Position Statement:

The APA strongly encourages the support and development of neuropsychiatry research, education and training for care to meet the needs of those with combined psychiatric and neurologic disorders particularly Posttraumatic Stress Disorder and Traumatic Brain Injury.

Adoption Date and Authors:

Approved by the Board of Trustees, May 2010

Approved by the Assembly, November 2009

Developed by the Council on Research and Quality Care and revised by the Joint Reference Committee.

Background:

Posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI) are complex conditions that can co-occur, particularly in combat veterans. The prevalence of PTSD and TBI has increased over the past several decades due to persisting engagement of the U.S. in combat, the increased survival rate of individuals with life-threatening physical injuries, and the increased awareness and screening for each disorder (See NCPTSD Research Quarterly 2010;21(1); available at: <http://www.ptsd.va.gov/PTSD/professional/newsletters/research-quarterly/v21n1.pdf>). In particular, comprehensive screening initiatives in the Department of Defense and Department of Veterans affairs have increased the diagnosis of PTSD and mild-to-moderate TBI. PTSD is among the most common psychiatric disorders in military populations (male and female), and among military personnel, presence of TBI has been found to increase the likelihood of PTSD by 3-fold (Carlson et al. 2010).

PTSD involves the presence of intrusive memories, persistent avoidance of stimuli that are reminders of the trauma, negative alterations in cognition or mood, and alterations in arousal and reactivity. It also carries a significant risk of suicidal ideation and attempts (Panagioti et al. 2012, Panagioti et al, 2009) and is commonly comorbid with substance use disorders, depression, and anxiety disorders (Kessler et al., 1995; Ginzberg et al. 2010).

Symptoms of TBI can vary depending on severity of injury and time elapsed since injury. Changes in memory, headache, and confusion or alteration in mental status all can occur even with mild TBI. At more severe levels, loss of consciousness or death can occur. Physical and neurocognitive symptoms can remain for weeks to months post-injury. TBI is a strong predictor of subsequent PTSD (Yurgil et al., 2014). In addition to PTSD, TBI may be associated with chronic pain (Cifu et al., 2013), mood and anxiety symptoms (Kim et al., 2007; Jorge et al., 2004), and suicidal behavior (Silver et al., 2002). The presence of PTSD may mediate the relationship between mild-to-moderate TBI and behavioral, mood, and anxiety symptoms. Thus, when these symptoms are present in the context of TBI, PTSD treatment may be indicated (Zatzick et al., 2010).

Co-occurrence of PTSD and TBI is associated with significant psychosocial and functional impairments as well as decrements in quality of life. The overlap of symptoms associated with each individual syndrome may make complicate the diagnosis of their co-occurrence. There is some evidence that presence of TBI can influence symptoms of PTSD (Simonovic et al. 2011), but findings are not consistent.

There are no controlled studies of the treatment of PTSD comorbid with TBI; thus, no firm conclusions can be drawn about the optimal treatment of this comorbidity. Cognitive behavioral therapy is a validated treatment for PTSD that has been applied to the comorbid group of patients (McMillan et al., 2003).

References:

Carlson KF, Nelson D, Orazem RJ, Nugent S, Cifu DX, Sayer NA. Psychiatric diagnoses among Iraq and Afghanistan war veterans screened for deployment-related traumatic brain injury. Journal of Traumatic Stress 2010;23:17-24.

Cifu DX, Taylor BC, Carne WF, Bidelspach D, Sayer NA, Scholten J, Campbell EH. Traumatic brain injury, posttraumatic stress disorder, and pain diagnoses in OIF/OEF/OND Veterans. J Rehabil Res Dev. 2013;50(9):1169-76. doi: 10.1682/JRRD.2013.01.0006. PubMed PMID: 24458958.

Ginzburg K, Ein-Dor T, Solomon Z. Comorbidity of posttraumatic stress disorder, anxiety and depression: A 20-year longitudinal study of war veterans. Journal of Affective Disorders 2010;123: 249-257.

Jorge RE, Robinson RG, Moser D, Tateno A, Crespo-Facorro B, Arndt S. Major depression following traumatic brain injury. Archives of General Psychiatry 2004;61:42-50.

Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Posttraumatic stress disorder in the national comorbidity survey. Archives of General Psychiatry 1995;52:1048-1060.

Kim E, Lauterbach EC, Reeve A, et al. Neuropsychiatric complications of traumatic brain injury: A critical review of the literature (a report by the ANPA committee on research). Journal of Neuropsychiatry & Clinical Neurosciences 2007;19:106-127.

McMillan TM, Williams WH, Bryant R. Post-traumatic stress disorder and traumatic brain injury: A review of causal mechanisms, assessment, and treatment. Neuropsychological Rehabilitation 2003;13:149-164.

Panagiotti M, Gooding PA, TARRIER N. A meta-analysis of the association between posttraumatic stress disorder and suicidality: The role of comorbid depression. Comprehensive Psychiatry 2012; 53:915-930.

Panagiotti M, Gooding P, TARRIER N. Post-traumatic stress disorder and suicidal behavior: A narrative review. Clinical Psychology Review 2009;29:471-482.

Silver JM, Hales RE, Yudofsky SC. 2002. Neuropsychiatric aspects of Traumatic Brain Injury. In: Yudofsky SC, Hales RE, editors. Neuropsychiatry and clinical neurosciences. 4th ed. Washington,

DC: American Psychiatric Publishing, Inc. pp 625–672.

Simonovic MM, Radisavljevic MM, Grbes̃a GB. Po2-474 – clinical presentation of the posttraumatic stress disorder with and without traumatic brain injuries. European Psychiatry 2011;26:1070

Yurgil KA, Barkauskas DA, Vasterling JJ, Nievergelt CM, Larson GE, Schork NJ, Litz BT, Nash WP, Baker DG; Marine Resiliency Study Team. Association between traumatic brain injury and risk of posttraumatic stress disorder in active-duty Marines. JAMA Psychiatry. 2014 Feb;71(2):149-57. doi: 10.1001/jamapsychiatry.2013.3080. PubMed PMID: 24337530.

Zatzick DF, Rivara FP, Jurkovich GJ, Hoge CW, Wang J, Fan MY, Russo J, Trusz SG, Nathens A, Mackenzie EJ. Multisite investigation of traumatic brain injuries, posttraumatic stress disorder, and self-reported health and cognitive impairments. Arch Gen Psychiatry. 2010 Dec;67(12):1291-300. doi: 10.1001/archgenpsychiatry.2010.158. PubMed PMID: 21135329; PubMed Central PMCID: PMC3102494.

Other Relevant Resources:

Comorbidity of PTSD and TBI: <http://www.ptsd.va.gov/professional/co-occurring/traumatic-brain-injury-ptsd.asp>

Position Statement on High Volume Psychiatric Practice and Quality of Patient Care

Approved by the Board of Trustees, May 2010
Approved by the Assembly, November 2009

"Policy documents are approved by the APA Assembly and Board of Trustees...These are...position statements that define APA official policy on specific subjects..." – *APA Operations Manual*.

Psychiatrists must practice in ways that maintain the quality of the treatment provided and the safety of their patients. Financial, organizational or other administrative pressures imposed by psychiatric or non-psychiatric administrators should not compromise the quality or safety of the care psychiatrists provide, such as when these non-clinical pressures may impinge on the time allocated to conduct evaluation and treatment in conformance with standard of practice.

Developed by the former Council on Quality Care.

POSITION STATEMENT**TITLE: Tobacco Use Disorder**

ISSUE: As one of the most addictive substances, tobacco has the highest prevalence of all psychiatric and substance-related disorders in the United States; tobacco is also the most common preventable cause of mortality in the United States, causing 480,000 premature deaths, 200,000 of which are among persons with mental illnesses and substance use disorders. Approximately 18% of the U.S. population are cigarette smokers; while smoking rates have declined steadily overall in the US since 1965, prevalence remains high among adults with mental health and substance use disorders, with recent estimates ranging from 50% to 85%. People with mental illness consume about half of all cigarettes sold in the US and carry a disproportionate share of the medical burden, including cardiovascular and pulmonary diseases and cancer associated with smoking. Accruing evidence indicates that tobacco use worsens the course of psychiatric disorders and that quitting tobacco decreases anxiety and improves mood. National practice guidelines recommend providing evidence-based tobacco cessation treatment to all smokers, and given the high prevalence, morbidity and mortality in psychiatric and behavioral health settings, treatment is even more essential.

APA Position:

APA advocates and supports the development of policies and programs that promote prevention, treatment, and research activities in the area of tobacco use disorder. It urges:

1. All mental health providers to ask, advise, assess, assist and arrange follow up on tobacco use disorder at initial intake and as clinically indicated thereafter;
2. Appropriate diagnosis and treatment of tobacco use disorder as a comorbid condition with other psychiatric disorders while recognizing the possible role of tobacco and underlying neurochemical mechanisms in the understanding, diagnosis, and treatment of other psychiatric disorders, including comorbid substance use;
3. Psychiatrists to address the prevention of tobacco use, as patients with other mental disorders are especially vulnerable to developing tobacco use disorder; and
4. Psychiatrists to be active in research, prevention, and advocacy related to reducing tobacco use; and
5. Expanded teaching about the nature of tobacco use disorder and its treatment in medical schools, psychiatry residency training programs, addiction fellowship training programs, and continuing professional education programs to a level comparable to levels for other substance-related disorders.

Additionally the APA supports and advocates for:

1. Policies that aid in the prevention and reduction of tobacco use;
2. Development of tobacco-free policies in all health care facilities and in society at large, and the development provision of treatments for tobacco use disorder for institutionalized patients.
3. Adequate health insurance coverage of both pharmacological and behavioral treatments of tobacco use disorder by qualified health professionals, especially via third party payers or government supported insurance who can provide reimbursement; and
4. Public education to reduce and prevent tobacco use.

Authors: APA Workgroup on Tobacco Use Disorder, Council on Addiction Psychiatry

Background: Tobacco Use Disorder

Tobacco use is the largest and most preventable cause of mortality in the United States. According to the U.S. Office on Smoking and Health, smoking causes more than 480,000 premature deaths annually among U.S. smokers alone, with minority and low-income populations at special risk. Almost half of those deaths that occur each year from smoking are among people with mental illness and/or substance use disorders. There is also evidence for an independent association between suicide in males and current smoking and longer lifetime smoking duration.

Tobacco use disorder and withdrawal can influence the diagnosis and treatment of psychiatric disorders. For example, symptoms of nicotine withdrawal (e.g., dysphoria, irritability, restlessness and insomnia) can be confused with some psychiatric disorders and conditions (e.g., akathisia, depression, and alcohol withdrawal). Smoking, via action of inhaled aromatic hydrocarbons (not nicotine) decreases blood levels of several medications (through induction of the hepatic CYP 1A2 system) which may require higher doses of medications among smokers and necessitate dose adjustments for certain psychotropic drugs if patients quit or reduce smoking. In some cases (e.g. recurrent depression), smoking cessation may appear to temporarily worsen symptoms or produce an exacerbation of illness symptoms, but this is generally due to withdrawal (smoking is not a method of self-medication for psychiatric disorders). On the other hand, treatment of tobacco use disorder is associated with a decreased likelihood of rehospitalization, reduction in psychiatric symptoms, and an increased likelihood of sobriety among smokers in treatment for addictive disorders. There is increasing evidence that treating tobacco use disorder has a synergistic effect in the long term in mental health and substance use recovery.

Tobacco use disorder can be treated by using pharmacological, behavioral, or psychosocial treatments or a combination. Tobacco use disorder should be integrated into every patient's assessment and plan at every visit. The 7 FDA approved pharmacological treatments include nicotine replacement therapies (e.g. patch, gum, lozenge, inhaler and nasal spray), sustained-release bupropion and the nicotinic partial agonist varenicline. Treatment of tobacco use disorders can reduce the deleterious health consequences of smoking that disproportionately affect those with mental illness. Psychiatrists are uniquely positioned to provide an impactful treatment given their knowledge and skills in psychotherapy (ie cognitive behavioral relapse prevention or mindfulness models) and pharmacological therapies. Psychosocial treatments include groups, quit lines and integrated care models.

Psychiatrists must take an active role in research into the causes, prevention and treatment of tobacco use disorders. In a recent survey by the American Association of Medical Colleges, it was found that nearly a quarter of psychiatrists felt that smoking cessation leads to worsening of other symptoms and almost half of psychiatrists felt that there are too many more immediate problems to address. There is extensive research that treating tobacco use disorder does not worsen other psychiatric outcomes and likely improves the course of these disorders. Although tobacco use is recognized as the most preventable cause of early of early death and disability in the Western world, only a small portion of the overall federal budget for medical research supports research on behavioral and psychiatric aspects of tobacco use disorder. Areas of particular relevance to psychiatry include the comorbidity of tobacco use disorder with other mental disorders, the potential role of nicotine in biochemical systems involved in cognition, substance use disorders and motivation in general. The effects of tobacco-free inpatient units on the psychiatric treatment of patients, methods and timing of tobacco cessation treatment for patients with substance use disorders, the potential beneficial effects of nicotine and nicotinic agents

on clinical and cognitive aspects of psychiatric conditions, risks/risk reduction potential of newer electronic delivery systems and the effect of tobacco use on efficacy of interventions for other psychiatric disorders are all deemed to be crucial areas for future research.

Strategies that promote prevention, treatment, and research activities in the area of tobacco use disorder include, but are not limited to, the following:

Primary Focus	Recommendations
Individual Providers	<ul style="list-style-type: none"> • All mental health providers implement the 5 A's: ask, advise, assess, assist and arrange follow up on tobacco use disorder in routine clinical encounters. • Appropriate diagnosis and treatment of tobacco use disorder as a comorbid condition with other psychiatric disorders. • Activity in research, prevention, and advocacy related to reducing tobacco use.
Education	<ul style="list-style-type: none"> • Expand teaching about the nature of tobacco use disorder and its treatment in medical schools, psychiatry residency training programs, psychiatry fellowship training programs and continuing professional education programs to a level comparable to levels for other substance-related disorders. • Specialized training and education for psychiatrists and trainees about the unique assessment and treatment issues for tobacco use and related nicotine products amongst their patients with mental illness and / or substance use disorders, including impact on medication blood levels, severity of tobacco use, and social support for quitting.
Systems	<ul style="list-style-type: none"> • Development of tobacco-free policies in all health care facilities, and in society at large, and the development of treatments for tobacco use disorder for institutionalized patients. • Policies that aid in the prevention and reduction of smoking. These may include the following: <ol style="list-style-type: none"> 1. Prohibiting advertising and sports-activity sponsorship that promote smoking; 2. Controlling the availability of tobacco products to young persons through the establishment of a national minimum age of 21 years for purchase of tobacco products and improving the enforcement of existing laws regulating the sale of tobacco products; 3. Banning advertisements in print and other media and abolishing the use of entertainers or sports activities to promote tobacco; 4. Eliminating subsidies and all other forms of government assistance that encourage the production or exportation of tobacco and tobacco products and, concomitant with this, encouraging funding of transition programs for those with tobacco-related jobs; 5. Increasing the state and federal taxes on tobacco products and applying the proceeds of such taxes to the prevention, treatment, and research on tobacco use disorder; and 6. Changing the warning labels on tobacco products to include the high likelihood of developing tobacco use disorder and the significant effects on morbidity/mortality. • Expand public education in ways such as the following: <ol style="list-style-type: none"> 1. Promote early teaching in schools to inform young people about the high risk of developing tobacco use disorder after experimentation with tobacco and about the health hazards consequent to it; and 2. Promote counter marketing measures, including public service announcements and anti-tobacco marketing programs, to counter the seduction of tobacco advertising imagery and to educate the public about the hazards of smoking, to discourage experimentation with smoking, and to promote tobacco cessation. • Advocate adequate health insurance coverage of both pharmacological and behavioral treatments of tobacco use disorder by qualified health professionals, especially via third party payers or government supported insurance who can provide reimbursement.

In summary, tobacco use disorder takes an enormous toll on the physical and mental health of our nation and the rest of the world, disproportionately affecting people with psychiatric and substance use disorders. APA urges all of its members to work toward the goals outlined in this statement.

References:

- Balbuena, L., Tempier, R. (2014). Independent Association of Chronic Smoking and Abstinence With Suicide. *Psychiatr Serv.* 2014 Oct 1.
- FIORE, M. and 2008 PHS GUIDELINE UPDATE PANEL, LIAISONS, AND STAFF, 2008. Treating tobacco use and dependence: 2008 update U.S. Public Health Service Clinical Practice Guideline executive summary. *Respiratory care*, 53(9), pp. 1217-1222.
- Kleber, H.D., Weiss, R.D., Anton, R.F., Jr., George, T.P., Greenfield, S.F., Kosten, T.R., O'Brien, C.P., Rounsaville, B.J., Strain, E.C., Ziedonis, D.M., Hennessey, G., Connery, H., American Psychiatric Association. *Clinical Practice Guidelines for the Treatment of Patients with Substance Use Disorders*, 2nd edition. *Am. J. Psychiatry*, 2006. 163(8S): p. 5-82.
- Kalman, D., Morrisette, S.B., George, T.P., Co-morbidity of smoking with psychiatric and substance use disorders. *Am. J. Addict.*, 2005. 14: p. 106-123.
- Lasser, K., Boyd, J.W., Woolhandler, S., Himmelstein, D.U., McCormick, D., & Bor, D.H. (2000). Smoking and mental illness: A population-based prevalence study. *Journal of the American Medical Association*, 284(20), 2606-2610.
- Prochaska JJ, Delucchi K, Hall SM: A meta-analysis of smoking cessation interventions with individuals in substance abuse treatment or recovery. *J Consult Clin Psychol* 2004; 72:1144-1156
- Prochaska JJ, Hall SE, Delucchi K, Hall SM: Efficacy of initiating tobacco dependence treatment in inpatient psychiatry: A randomized controlled trial. *Am J Public Health* 2014; 104:1557-1565
- Schroeder SA, Morris CD: Confronting a neglected epidemic: Tobacco cessation for persons with mental illnesses and substance abuse problems. *Annu Rev Public Health* 2010; 31:297-314
- US DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2014. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta (GA): US Department of Health and Human Services, CDC.
- Ziedonis, D., Hitsman, B., Beckham, J.C., Zvolensky, M., Adler, L.E., Audrain-McGovern, J., Breslau, N., Brown, R.A., George, T.P., Williams, J., Calhoun, P.S., Riley, W.T. Tobacco use and cessation in psychiatric disorders: National Institute of Mental Health report. *Nicotine & Tobacco Research*, Dec 10(12):1691-715, 2008

Position Statement on Psychotherapy as an Essential Skill of Psychiatrists

Approved by the Board of Trustees, July 2014

Approved by the Assembly, May 2014

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Issue

Psychiatrists are uniquely positioned to provide comprehensive, integrated treatment either by providing medication alone, psychotherapy alone, or combined treatment. Importantly, psychotherapy and prescribing medication flourish on the same foundation—confidentiality, trust, and active patient participation—which readily allows psychiatrists to change or add treatment modalities e.g., switch from psychotherapy to medications or add medication to psychotherapy, while keeping a clear focus on the complex interplay of patient, practitioner, pharmacotherapy, and psychotherapy. Even when a psychiatrist provides “only” medication, psychotherapeutic elements in the therapeutic alliance enhance the effectiveness of any medication. Indeed, although cost per session is higher for psychiatrists, integrated psychiatric care (as compared to split treatment by a psychiatrist and non-MD therapist) may lead to lower total costs and decreased patient suffering.

Position Statement

The APA advocates for psychotherapy to remain a central treatment option for all patients and for psychotherapy (alone or as part of combined treatment) by psychiatrists to be reimbursed by payers in a manner that integrates care and does not provide financial incentives for isolating biological treatments from psychosocial interventions, e.g., isolated use of medication management without consideration of psychosocial issues requiring essential psychotherapy. The APA supports the Accreditation Council for Graduate Medical Education (ACGME)/ Residency Review Committee (RRC) in their continued accreditation requirement that psychiatry resident training programs provide comprehensive training in evidence-based psychotherapies, as well as in collaborative treatment models. It collaborates with AADPRT and AACDP to address the increasing difficulty programs face in supporting the time and money required for teaching and supervising psychotherapy.

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POSITION STATEMENT ON INVOLUNTARY OUTPATIENT COMMITMENT AND RELATED PROGRAMS OF ASSISTED OUTPATIENT TREATMENT ¹

Prepared by the Council on Psychiatry and Law

Approved by the Board of Trustees, TBD

Approved by the Assembly, TBD

"Policy documents are approved by the APA Assembly and Board of Trustees... These are... position statements that define APA official policy on specific subjects..." -- *APA Operations Manual*.

The American Psychiatric Association recognizes that there is a substantial population of persons with severe mental illness whose complex treatment and human service needs go unmet by community mental health programs. For many persons so affected, their course is frequently complicated by non-adherence with treatment and as a result, they frequently relapse, are hospitalized or incarcerated. They also interact with a variety of human service agencies— substance use disorder treatment programs, civil and criminal courts, police, jails and prisons, emergency medical facilities, social welfare agencies, and public housing authorities. The pressing need to improve treatment adherence and patient outcomes, has led policymakers to consider court-ordered treatment as a way to improve treatment adherence. In this document the term ‘involuntary outpatient commitment’ is used to refer to outpatient treatment mandated under state involuntary commitment statutes.

Involuntary outpatient commitment is a civil court procedure wherein a judge orders a person with severe mental illness to adhere to an outpatient treatment plan designed to prevent relapse and dangerous deterioration. Persons appropriate for this intervention are those who need ongoing psychiatric care owing to severe illness but who are unable or unwilling to engage in ongoing, voluntary, outpatient care. It can be used on release from involuntary hospitalization, an alternative to involuntary hospitalization or as a preventive treatment for those who do not currently meet criteria for involuntary hospitalization. It should be used in each of these instances for patients who need treatment to prevent relapse or behaviors that are dangerous to self or others.

Involuntary outpatient commitment programs have demonstrated their effectiveness when *systematically implemented, linked to intensive outpatient services and prescribed for extended periods of time*. Based on empirical findings and on accumulating clinical experience, involuntary outpatient commitment can be a useful tool in the effort to treat patients with severe mental illness with clinical histories of relapse and re-hospitalization. It is important to emphasize, however, that all programs of involuntary outpatient commitment must include these elements of well-planned and executed implementation, intensive, individualized services and sustained periods of outpatient commitment to be effective. There is also clear evidence that involuntary outpatient commitment programs help focus the attention and effort of the providers on the treatment needs of the patients subject to involuntary outpatient commitment.

¹ Outpatient court-ordered treatment may be referred to as ‘assisted outpatient treatment’, ‘involuntary outpatient commitment’, ‘mandated community treatment’, or ‘community treatment orders’. Some regard the term ‘assisted outpatient treatment’ as a euphemistic term for treatment under coercion. In this document the term ‘involuntary outpatient commitment’ is used to refer to these programs.

Involuntary outpatient treatment raises an ethical tension between the principles of autonomy and beneficence. Therefore states should make every effort to dedicate resources to voluntary outpatient treatment and only if such treatment fails resort to involuntary treatment. Psychiatrists must be aware of the conflict between the patient's interest in self-determination and promotion of the patient's medical best interest. In any system of treatment, including involuntary outpatient treatment, principles of non-maleficence—doing no harm—and justice must be considered. Involuntary treatment, like any intervention, must not be discriminatory, and must be fairly applied and respectful of all persons.

The APA supports the following positions and principles regarding involuntary outpatient commitment.

1. Involuntary outpatient commitment, if systematically implemented and resourced, can be a useful tool to promote recovery through a program of intensive outpatient services designed to improve treatment adherence, reduce relapse and re-hospitalization, and decrease the likelihood of dangerous behavior or severe deterioration among a sub-population of patients with severe mental illness.
2. The goal of involuntary outpatient commitment is to mobilize appropriate treatment resources, enhance their effectiveness and improve an individual's adherence to the treatment plan. Involuntary outpatient commitment should not be considered as a primary tool to prevent acts of violence.
3. Involuntary outpatient commitment should be available in a preventive form and should not be exclusively reserved for patients who meet the criteria for involuntary hospitalization. The preventive form should be available to help prevent relapse or deterioration for patients who currently may not be dangerous to themselves or others (and therefore are not committable to inpatient treatment) but whose relapse would likely lead to severe deterioration and/or dangerousness.
4. Assessment of the likelihood of relapse, deterioration, and/or future dangerousness to self or others should be based on a clearly delineated clinical history of such episodes in the past several years based on available clinical information.
5. Involuntary outpatient commitment should be available to assist patients who, as a result of their mental illness, are unlikely to seek or voluntarily adhere to needed treatment.
6. Studies have shown that involuntary outpatient commitment is most effective when it includes a range of medication management and psychosocial services equivalent in intensity to those provided in assertive community treatment or intensive case management programs. States adopting involuntary outpatient commitment statutes should assure that adequate resources are available to provide such intensive treatment to those under commitment.
7. States authorizing involuntary outpatient commitment should provide due process protections equivalent to those afforded patients subject to involuntary hospitalization.
8. Data have shown that involuntary outpatient commitment is likely to be most successful when it is provided for a sustained period of time. Statutes authorizing involuntary outpatient commitment should consider authorizing initial commitment periods of 180 days, permitting extensions of the commitment period based on specified criteria to be demonstrated at regularly scheduled hearings. Based on clinical judgment, such orders may be terminated prior to the end of a commitment period as deemed appropriate.
9. A thorough psychiatric and physical examination should be a required component of involuntary outpatient commitment, because many patients needing mandated psychiatric treatment also suffer from other medical illnesses and substance use disorders that may be causally related to their symptoms and may impede recovery. Clinical

judgment should be employed in determining when, where and how these examinations are carried out.

10. Clinicians who are expected to provide the court-ordered treatment must be involved in decision-making processes to assure that they are able and willing to execute the proposed treatment plan. Before treatment is ordered, the court should be satisfied that the recommended course of treatment is available through the proposed providers.

11. Efforts to engage patients and, where appropriate, their families in treatment should be a cornerstone of treatment, even though court-ordered. Patients and their families should be consulted about their treatment preferences and should be provided with a copy of the involuntary outpatient commitment plan, so that they will be aware of the conditions to which the patient will be expected to adhere.

12. Involuntary outpatient commitment statutes should contain specific procedures to be followed in the event of patient non-adherence and should ensure maximum efforts to engage patients in adhering to treatment plans. In the event of treatment non-adherence, provisions to assist with adherence may include empowering law enforcement officers to assume custody of non-adherent patients to bring them to the treatment facility for evaluation. In all cases there should be specific provisions for a court hearing when providers recommend involuntary hospitalization or a substantial change in the court order.

13. Psychotropic medication is an essential part of treatment for most patients under involuntary outpatient commitment. The expectation that a patient take such medication should be clearly stated in the patient's treatment plan when medication is indicated. However, involuntary administration of medication should not be authorized as part of the involuntary commitment order without separate review and approval consistent with the state's process for authorizing involuntary administration of medication on an outpatient basis.

14. Implementation of a program of involuntary outpatient commitment requires critical clinical and administrative resources and accountability. These include administrative oversight of and accountability for involuntary outpatient commitment program operations, the ability to monitor patient and provider adherence with treatment plans, the ability to track involuntary outpatient commitment orders and to report program outcomes.

15. There is limited research to evaluate the possible disproportionate use of involuntary outpatient commitment among minority and disenfranchised groups. As a result, independent evaluation of involuntary outpatient commitment programs should be conducted at regular intervals and reported for public comment and legislative review, especially in view of concerns about its appropriate use. Among several outcomes that should be assessed is any evidence of disproportionate use of involuntary outpatient commitment among minority groups and disenfranchised groups, inadequate due process protections and the diversion of clinical resources from patients seeking treatment voluntarily. Any indications of findings in these areas should be followed by program improvement plans and corrective action.

REVISED POSITION STATEMENT:

Position Statement on Telemedicine in Psychiatry

Telemedicine in psychiatry, using video conferencing, is a validated and effective practice of medicine that increases access to care. The American Psychiatric Association supports the use of telemedicine as a legitimate component of a mental health delivery system to the extent that its use is in the best interest of the patient and is in compliance with the APA policies on medical ethics and confidentiality.

CURRENT POSITION STATEMENT:

Position Statement on the Ethical Use of Telemedicine (1995)

The American Psychiatric Association supports the use of telemedicine as a legitimate component of a mental health delivery system to the extent that its use is in the best interest of the patient and is in compliance with the APA policies on medical ethics and confidentiality.

The American Psychiatric Association Practice Guideline on the Use of Antipsychotics to Treat Agitation or Psychosis in Patients With Dementia

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Acronyms/Abbreviations

ABPN American Board of Psychiatry and Neurology

ACCME Accreditation Council for Continuing Medical Education

AD Alzheimer's disease

AHRQ Agency for Healthcare Research and Quality

AIMS Abnormal Involuntary Movement Scale

APA American Psychiatric Association

BEHAVE-AD Behavioral Pathology in Alzheimer's Disease

BMI Body mass index

BPRS Brief Psychiatric Rating Scale

BPSD Behavioral and psychological symptoms of dementia

CATIE-AD Clinical Antipsychotic Trials of Intervention Effectiveness for Alzheimer's Disease

CGI Clinical Global Impressions

CGI-C Clinical Global Impression of Change

CI Confidence Interval

CMAI Cohen-Mansfield Agitation Inventory

CVA Cerebrovascular accident

DLB Dementia with Lewy Body

DSM-IV Diagnostic and Statistical Manual of Mental Disorders, 4th edition

DSM-5 Diagnostic and Statistical Manual of Mental Disorders, 5th edition

EPS Extrapyrarnidal symptoms

FAST Functional Assessment Staging

FGA First generation antipsychotic

GRADE Grading of Recommendations Assessment, Development and Evaluation

HR Hazard ratio

ICD-10 International Classification of Diseases, 10th revision

IR Immediate release

IRR Incidence Rate Ratio

ITT Intention-to-Treat

MDS Minimum Data Set

MI Myocardial infarction

MMSE Mini Mental State Examination

NC Not Calculated

NIA National Institute on Aging

NIMH National Institute of Mental Health

NNH Number Needed to Harm

NPI Neuropsychiatric Inventory

NPI-NH or NPI/NH Neuropsychiatric Inventory-Nursing Home

NPI-Q Neuropsychiatric Inventory Questionnaire

NQF National Quality Forum

NS Not Significant

OR Odds ratio

PANSS-EC Positive and Negative Symptom Scale-Excitement Component

PICOTS Patient population, Intervention, Comparator, Outcome, Timing, Setting

QTc Corrected QT interval

RCT Randomized controlled trial

RR Rate Ratio

SAS Simpson-Angus Scale

SD Standard Deviation

SGA Second generation antipsychotic

SIB Severe Impairment Battery

SMD Standardized Mean Difference

TD Tardive dyskinesia

TIA Transient ischemic attack

NINCDS/ADRDA National Institute of Neurological and Communicative Diseases and Stroke/Alzheimer's Disease and Related Disorders Association

XR Extended release

VTE Venous thromboembolism

Introduction

Overview of the Development Process

Since the publication of the Institute of Medicine report, *Clinical Practice Guidelines We Can Trust*, (2011), there has been an increasing focus on using clearly defined, transparent processes for rating the quality of evidence and the strength of the overall body of evidence in systematic reviews of the scientific literature. These guidelines were developed using a process intended to be consistent with the recommendations of the Institute of Medicine (2011), the Principles for the Development of Specialty Society Clinical Guidelines of the Council of Medical Specialty Societies (2012) and the requirements of the Agency for Healthcare Research and Quality (AHRQ) for inclusion of a guideline in the National Guidelines Clearinghouse. Parameters used for the guidelines' systematic review are included with the full text of the guidelines; the development process is fully described in the following document available on the American Psychiatric Association (APA) website:

<http://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Clinical%20Practice%20Guidelines/Guideline-Development-Process.pdf>. To supplement the expertise of members of the guideline work group, we used a "snowball" survey methodology (Yager 2014) to identify experts on the treatment of agitation or psychosis in individuals with dementia. Results of this expert survey are included with the full text of the practice guideline.

Rating the Strength of Research Evidence and Recommendations

The guideline recommendations are rated using GRADE (Grading of Recommendations Assessment, Development and Evaluation), which is used by multiple professional organizations around the world to develop practice guideline recommendations (Guyatt et al., 2013). With the GRADE approach, the strength of a guideline statement reflects the level of confidence that potential benefits of an intervention outweigh the potential harms (Andrews et al., 2013). This level of confidence is informed by available evidence, which includes evidence from clinical trials as well as expert opinion and patient values and preferences. Evidence for the benefit of a particular intervention within a specific clinical context is identified through systematic review and is then balanced against the evidence for harms. In this regard, harms are broadly defined and might include direct and indirect costs of the intervention (including opportunity costs) as well as potential for adverse effects from the intervention. Whenever possible, we have followed the admonition to current guideline development groups to avoid using words such as "might" or "consider" in drafting these recommendations as they can be difficult for clinicians to interpret (Shiffman et al., 2005).

As described under Guideline Development Process, each final rating is a consensus judgment of the authors of the guidelines and is endorsed by the APA Board of Trustees. A "recommendation" (denoted by the numeral 1 after the guideline statement) indicates confidence that the benefits of the intervention clearly outweigh harms. A "suggestion" (denoted by the numeral 2 after the guideline statement) indicates uncertainty, i.e., the balance of benefits and harms is difficult to judge, or either

the benefits or the harms are unclear. Each guideline statement also has an associated rating for the "strength of supporting research evidence". Three ratings are used: high, moderate, or low (denoted by the letters A, B and C, respectively) and reflect the level of confidence that the evidence for a guideline statement reflects a true effect based on consistency of findings across studies, directness of the effect on a specific health outcome, precision of the estimate of effect and risk of bias in available studies (AHRQ 2014; Guyatt et al., 2006; Balshem et al., 2011).

It is well recognized that there are guideline topics and clinical circumstances for which high quality evidence from clinical trials is not possible or unethical to obtain (CMSS, 2012). For example, many questions need to be asked as part of an assessment and inquiring about a particular symptom or element of the history cannot be separated out for study as a discrete intervention. It would also be impossible to separate changes in outcome due to assessment from changes in outcomes due to ensuing treatment. Research on psychiatric assessments and some psychiatric interventions can also be complicated by multiple confounding factors such as the interaction between the clinician and the patient or the patient's unique circumstances and experiences. For these and other reasons, many topics covered in this guideline have relied on forms of evidence such as consensus opinions of experienced clinicians or indirect findings from observational studies rather than being based upon research from randomized trials. The GRADE working group and guidelines developed by other professional organizations have noted that a strong recommendation may be appropriate even in the absence of research evidence when sensible alternatives do not exist (Andrews et al., 2013; Brito et al, 2013; Djulbegovic et al., 2009; Hazlehurst et al., 2013).

Proper Use of Guidelines

The American Psychiatric Association Practice Guidelines are assessments of current scientific and clinical information provided as an educational service. The Guidelines: 1) should not be considered inclusive of all proper treatments, methods of care, or as a statement of the standard of care; 2) are not continually updated and may not reflect the most recent evidence, as new evidence may emerge between the time information is developed and when the Guidelines are published or read; 3) address only the question(s) or issue(s) specifically identified; 4) do not mandate any particular course of medical care; 5) are not intended to substitute for the independent professional judgment of the treating provider; and 6) do not account for individual variation among patients. As such, it is not possible to draw conclusions about the effects of omitting a particular recommendation, either in general or for a specific patient. Furthermore, adherence to these guidelines will not ensure a successful outcome for every individual, nor should these guidelines be interpreted as including all proper methods of evaluation and care or excluding other acceptable methods of evaluation and care aimed at the same results. The ultimate recommendation regarding a particular assessment, clinical procedure, or treatment plan must be made by the clinician in light of the psychiatric evaluation, other clinical data, and the diagnostic and treatment options available. Such recommendations should be made in collaboration with the patient, whenever possible, and incorporate the patient's personal and sociocultural preferences and values in order to enhance the therapeutic alliance, adherence to treatment, and treatment outcomes. For all of these reasons, the APA cautions against the use of

Guidelines in litigation. Use of these Guidelines is voluntary. APA provides the Guidelines on an “as is” basis, and makes no warranty, expressed or implied, regarding the Guidelines. APA assumes no responsibility for any injury or damage to persons or property arising out of or related to any use of the Guidelines or for any errors or omissions.

Guidelines and Implementation

Guideline Statements

Assessment of Behavioral/Psychological Symptoms of Dementia

Statement 1. APA recommends that patients with dementia¹ be assessed for the type, frequency, severity, pattern and timing of symptoms. (1C)

Statement 2. APA recommends that patients with dementia be assessed for pain and other potentially modifiable contributors to symptoms as well as for factors, such as the subtype of dementia, that may influence choices of treatment. (1C)

Statement 3. APA recommends that in patients with dementia with agitation or psychosis, response to treatment be assessed with a quantitative measure. (1C)

Development of a Comprehensive Treatment Plan

Statement 4. APA recommends that patients with dementia have a documented comprehensive treatment plan that includes appropriate person-centered non-pharmacological and pharmacological interventions, as indicated. (1C)

Assessment of Benefits and Risks of Antipsychotic Treatment for the Patient

Statement 5. APA recommends that non-emergency antipsychotic medication should only be used for the treatment of agitation or psychosis in patients with dementia when symptoms are severe, dangerous and/or cause significant distress to the patient. (1B)

Statement 6. APA recommends reviewing the clinical response to non-pharmacological interventions prior to non-emergency use of an antipsychotic medication to treat agitation or psychosis in patients with dementia. (1C)

Statement 7. APA recommends that, before initiating non-emergency treatment with an antipsychotic in patients with dementia, the potential risks and benefits from antipsychotic medication be assessed

¹ Throughout this guideline, we use the term dementia, which was used in the evidence that was used to develop these recommendations. These recommendations are also meant to apply to individuals with major neurocognitive disorder, as defined in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM–5).

by the clinician and discussed with the patient (if clinically feasible) as well as with the patient's surrogate decision maker (if relevant) with input from family or others involved with the patient. (1C)

Dosing, Duration and Monitoring of Antipsychotic Treatment

Statement 8. APA recommends that, if a risk/benefit assessment favors the use of an antipsychotic for behavioral/psychological symptoms in patients with dementia, treatment should be initiated at a low dose to be titrated up to the minimum effective dose as tolerated. (1B)

Statement 9. APA recommends that, if a patient with dementia experiences a clinically significant side effect of antipsychotic treatment, the potential risks and benefits of antipsychotic medication should be reviewed by the clinician to determine if tapering and discontinuing of the medication is indicated. (1C)

Statement 10. APA recommends that in patients with dementia with agitation or psychosis, if there is no clinically significant response after a 4 week trial of an adequate dose of an antipsychotic drug, the medication should be tapered and withdrawn. (1B)

Statement 11. APA recommends that, in a patient who has shown a positive response to treatment, decision-making about possible tapering of antipsychotic medication should be accompanied by a discussion with the patient (if clinically feasible) as well as with the patient's surrogate decision maker (if relevant) with input from family or others involved with the patient. The aim of such a discussion is to elicit their preferences and concerns and to review the initial goals, observed benefits and side effects of antipsychotic treatment, potential risks of continued exposure to antipsychotics, as well as past experience with antipsychotic medication trials and tapering attempts. (1C)

Statement 12. APA recommends that in patients with dementia who show adequate response of behavioral/psychological symptoms to treatment with an antipsychotic drug, an attempt to taper and withdraw the drug should be made within 4 months of initiation, unless the patient experienced a recurrence of symptoms with prior attempts at tapering of antipsychotic medication. (1C)

Statement 13. APA recommends that in patients with dementia whose antipsychotic medication is being tapered, assessment of symptoms should occur at least monthly during the taper and for at least 4 months after medication discontinuation to identify signs of recurrence and trigger a reassessment of the benefits and risks of antipsychotic treatment. (1C)

Use of Specific Antipsychotic Medications, Depending on Clinical Context

Statement 14. APA recommends that, in the absence of delirium, if non-emergency antipsychotic medication treatment is indicated, haloperidol should not be used as a first line agent. (1B)

Statement 15. APA recommends that in patients with dementia with agitation or psychosis, a long-acting injectable antipsychotic medication should not be utilized unless it is otherwise indicated for a co-occurring chronic psychotic disorder. (1B)

Rationale

The goal of this guideline is to improve the care of patients with dementia who are exhibiting agitation or psychosis. More specifically, this guideline focuses on the judicious use of antipsychotic medications when agitation or psychosis occurs in association with dementia and does not review evidence for or focus on other pharmacological interventions. The guideline is intended to apply to individuals with dementia in all settings of care as well as to care delivered by generalist and specialist clinicians. Recommendations regarding treatment with antipsychotic medications are not intended to apply to individuals who are receiving antipsychotic medication for another indication (e.g., chronic psychotic illness) or individuals who are receiving an antipsychotic medication in an urgent context.

A Practice Guideline for this subject is needed because of the prevalence of dementia in the older adult population, the common occurrence of agitation and psychotic symptoms among patients with dementia, the variability in current treatment practices, and the risks associated with some forms of treatment.

Globally, dementia is associated with a sizeable public health burden that is growing rapidly as the population ages (Brookmeyer et al., 2007; Sloane et al., 2002; World Health Organization 2012). The burden on caregivers is also substantial, and is increased when dementia is associated with behavioral and psychological symptoms and particularly with agitation or aggression (Dauphinot et al., 2015; Ornstein and Gaugler, 2012; Thyrian et al., 2015).

Estimates suggest that 5 to 10% of individuals over age 65 and 30 to 40% of individuals over age 85 have dementia in the United States (Prince et al., 2013; Ferri et al., 2005; Hebert et al., 2013). Data from a nationally representative sample suggested that in 2002 approximately 3.4 million individuals had dementia; Alzheimer's disease was present in about three-quarters of these individuals (Plassman et al., 2007). A later study in an urban community sample estimated that 4.7 million individuals aged 65 years or older had Alzheimer's dementia as of 2010 (Hebert et al., 2013), but this figure likely includes individuals with mixed types of dementia as well as Alzheimer's dementia (Wilson et al., 2011; Plassman et al., 2007).

In addition to cognitive impairments, individuals with dementia often come to clinical attention because of symptoms of a behavioral disturbance (e.g., irritability, agitation, aggression) or psychosis. Many people who experience these symptoms become distressed or dangerous to self or others but some do not. The frequency of such behavioral and psychological symptoms in dementia varies with the clinical setting and severity of dementia as well as with the study design. In population based samples, the point prevalence of delusions was 18-25%, with hallucinations in 10-15% and agitation or aggression in 9-30% of individuals studied (Lyketsos et al., 2000; Lyketsos et al., 2002; Savva et al., 2009). In about half of individuals, these symptoms were rated as severe in frequency, severity and/or associated distress (Lyketsos et al., 2002).

A systematic review of psychotic symptoms among persons with Alzheimer's disease across different settings of care found median prevalences for psychosis of 41.1% (range 12.2%–74.1%), 18% (range

4%–41%) for hallucinations, 36% (range 9.3%–63%) for delusions and 25.6% (range 3.6% to 38.9%) for other psychotic symptoms such as misidentification (Ropacki and Jeste, 2005). In nursing home settings, another systematic review (Selbæk et al., 2013) found that delusions were present in 22% (range 1 to 54%) of individuals, with hallucinations in 14% (range 1 to 39%). Delusions and hallucinations persisted in 13 to 66% and 25 to 100% of study subjects, respectively. At least one symptom of agitation was present in 79% of nursing home subjects (range 66 to 83%), with aggressive behaviors noted in 32% (range 11-77%) and other signs of agitation in 36% (range 17-67%). Agitation and aggression were persistent in 53-75% of individuals. Thus, an overwhelming majority of older adults with dementia will develop psychosis or agitation during the course of their illness. Furthermore, these symptoms are often persistent, occur with increasing frequency as cognition became more impaired, and are more prevalent among residents of nursing home or inpatient facilities, as compared to community settings (Steinberg et al., 2008; Savva et al. 2009; Selbæk et al., 2013; Lyketsos et al., 2002; Ropacki and Jeste, 2005).

Treatment of psychotic symptoms and agitation in individuals with dementia has often involved use of antipsychotic medications. In recent years, the risks associated with use of these agents in the older adult population have become apparent (see sections of the guideline on Benefits and Harms and on Supporting Research Evidence). The need to develop guidelines for appropriate use of antipsychotic medications in dementia follows from this evidence base.

Potential Benefits and Harms

Benefits

In individuals with dementia, as in any patient who presents with a psychiatric symptom, an initial assessment serves as a foundation for further evaluation and treatment planning (American Psychiatric Association, 2015). Assessing the type, frequency, severity, pattern and timing of symptoms such as agitation and psychosis can help in identifying possible contributors and targeting interventions to address symptoms and their causes. Pain is a common contributor to agitation or aggression and may signal other physical conditions, which may also need intervention. It is similarly important to determine the subtype(s) of dementia that are present as this has implications for treatment of behavioral/psychological symptoms as well as providing information on likely disease course. The initial assessment also provides baseline information on symptoms, which is relevant to tracking of symptom progression or effects of intervention. Use of a quantitative measure to document information on symptoms in a systematic fashion can be helpful in monitoring the patient's progress and assessing effects of treatment. A comprehensive treatment plan, as an outgrowth of the initial assessment, is beneficial in fostering a thorough review of the patient's clinical presentation and in reviewing potential options for care that are person-centered and aimed at improving overall quality of life. Discussing the benefits and risks of possible treatments with the patient and surrogate decision makers is valuable in engaging them and helping them make informed decisions. Such discussions can also be beneficial by providing education on dementia, its symptoms and available therapeutic options.

There are a number of potential advantages to including non-pharmacological interventions as a part of a comprehensive treatment plan. The most consistently effective interventions have focused on home-based caregivers and aim to develop their skills, improve their general well-being, and reduce their perceived burden (Adelman et al., 2014; Kales et al., 2015). These caregiver related outcomes are predictive of whether a dementia patient is able to remain in the community or will be transitioned to institutional care (de Vugt et al., 2005; Miller et al., 2012). Other interventions can help in improving the culture and safety of the care environment and in conveying to patients and families that their needs and comfort are important. For most behavioral interventions there have not been a sufficient number of large-scale, well-controlled studies to draw conclusions about efficacy or safety in treating agitation or psychosis <<Include AHRQ review on non-pharmacological treatments of behavioral and psychological symptoms in dementia when final citation is available>>. When studies with less rigorous designs and a broader range of target symptoms are also considered, modest benefits of behavioral interventions have been found (Brodaty and Arasaratnam, 2012; Kales et al., 2015; Livingston et al., 2014). Among the specific benefits reported are reductions in agitation and aggression, alleviation of depression, improvement in sleep, and increased constructive activity. Studies of environmental modifications are even more limited than studies of behavioral interventions and available data from clinical trials do not show significant effects (Kong et al., 2009). Nevertheless, anecdotal observations suggest that some individuals with dementia may benefit from reducing environmental clutter and ambient noise, optimizing lighting and walkways, providing cues to heighten orientation and other environmental modifications.

Placebo-controlled trials of non-antipsychotic medications have not been reviewed in this practice guideline and, thus, no recommendations are made about the appropriateness or sequence of their use based upon their benefits and harms. In addition, no conclusions can be drawn from head-to-head comparisons between non-antipsychotic drugs (e.g., antidepressants, cholinesterase inhibitors, memantine) and antipsychotic drugs because of insufficient evidence (See Review of Supporting Research Evidence).

Expert consensus suggests that use of an antipsychotic medication in individuals with dementia can be appropriate, particularly in individuals with dangerous agitation or psychosis (See Expert Opinion Survey), and can minimize the risk of violence, reduce patient distress, improve patient's quality of life and reduce caregiver burden. However, in clinical trials, the benefits of antipsychotic medications are at best small (See Review of Supporting Research Evidence; Kales et al., 2015; Corbett et al., 2014) whether assessed through placebo-controlled trials, head-to-head comparison trials, or discontinuation trials. Effect sizes of second generation antipsychotics (SGAs) range from non-significant to small depending on symptom domain (agitation, psychosis, and overall behavioral/psychological symptoms) and on agent (See Review of Supporting Research Evidence). First generation antipsychotics (FGAs) are deemed not different from SGAs in the management of agitation and overall behavioral/psychological symptoms, but the strength of the evidence for the comparisons is low and haloperidol is the predominant agent that has been studied. There is not enough evidence to compare the effects of FGAs and SGAs on psychosis.

On the basis of both strength of the research evidence and effect size (moderate and small, respectively), the best evidence for SGA efficacy is in treatment of agitation, results that are driven by findings with risperidone treatment. Although evidence for the efficacy of SGAs suggests low utility (low strength of evidence for a very small effect) in the management of psychosis, the evidence for risperidone is substantially better than for the class (moderate strength of evidence for a small effect). Likewise, the efficacy evidence for SGAs in the management of overall behavioral/psychological symptoms also suggests low utility (high strength of evidence for a very small effect); the evidence for aripiprazole is substantially better than for the class (moderate strength of evidence for a small effect). For patients receiving treatment with an SGA as compared to placebo in the Clinical Antipsychotic Trials of Intervention Effectiveness for Alzheimer's Disease (CATIE-AD) trial, a modest reduction in caregiver burden was noted (Mohamed et al., 2012).

A number of studies have assessed effects of discontinuing an antipsychotic medication in subjects with dementia and the findings suggest a small effect of antipsychotic treatment. In individuals receiving placebo, there was a higher likelihood of symptom recurrence as compared to those continuing on antipsychotic (moderate confidence), with some post hoc analyses showing that individuals with higher baseline levels of symptoms or taking higher baseline doses of antipsychotic were more likely to have recurrent symptoms with discontinuation (See Review of Supporting Research Evidence; Declercq et al., 2013).

A dose-response effect, if present, can also provide suggestive evidence for a therapeutic benefit of a medication. The absence of a dose-response relationship is less informative; such studies are often underpowered and a sufficiently wide range of doses are not always tested. Five published randomized controlled trials (RCTs) assessed differing doses of antipsychotic medications in managing behavioral and psychological symptoms of dementia but these studies were of varying quality, had inconsistent findings and often showed no therapeutic benefit at the highest dose (See Review of Supporting Research Evidence). There are no published studies on the optimal duration of antipsychotic treatment in individuals with dementia and experts are divided in their opinion on optimal treatment duration (See Expert Opinion Survey).

Harms

No studies have directly assessed harm from conducting an assessment or developing a comprehensive treatment plan. It is possible that questioning during an assessment may be upsetting to some patients and could increase rather than reduce agitation. Such worsening of symptoms is expected to be brief as the clinician will be able to curtail questioning or adjust the interview style and format to the patient's responses. In an emergent situation, harm could result to the patient or others if interventions were delayed in order to complete assessment, treatment plan documentation, or discussions with the patient, family, or surrogate decision makers.

None of the available studies have reported direct harm to patients from behavioral interventions (<<Include AHRQ review on non-pharmacological treatments of behavioral and psychological symptoms in dementia when final citation is available>>; Ayalon et al., 2006; O'Neil et al., 2011).

Reported risks associated with these interventions include falls and orthopedic injuries during physical activity, or worsening agitation and aggression with some approaches, particularly those involving physical contact between caregiver and patient (e.g., massage). Harm could also result to the patient or others if emergency interventions were delayed to complete trials of behavioral treatments. No direct comparisons of risk between behavioral and pharmacological therapies have been reported. No data are available on harms of environmental modifications or other non-pharmacological interventions, but again, the potential for harm is likely to be quite small.

With antipsychotic medications, the drugs' potential for harms must be balanced against their modest evidence of benefit. As with any drug, this requires assessing the benefits and harms of prescribing the drug for an individual patient. No studies are available that assess the harms of withholding or delaying a trial of antipsychotic medication for individuals with agitation or psychosis in association with dementia. However, clinical observations suggest that such delays could lead to poorer outcomes for some individuals such as physical injury to themselves or others, disruptions of relationships with family or other caregivers, or loss of housing due to unmanageable behavioral and psychological symptoms.

This estimation of benefits and risks should also consider clinical characteristics of the patient. For example, patients with Lewy body dementia or Parkinson's dementia are at increased risk for adverse effects, which are typically more severe than in patients with other types of dementia and in some instances have been associated with irreversible cognitive decompensation or death. The risk of adverse effects may also be influenced by a history of falls or the presence of co-occurring medical conditions such as other neurological conditions, hypotension, diabetes, or cardiac or cerebrovascular disease.

The strength of evidence for harms of antipsychotic agents ranges from insufficient to high depending on the specific adverse effect; however, on the whole, there is consistent evidence that antipsychotics are associated with clinically significant adverse effects, including mortality (See Review of Supporting Research Evidence). Harms data are rarely a primary outcome of randomized trials and there is a paucity of randomized head-to-head comparisons of antipsychotic medications using equivalent doses of drug. In addition, the absolute number of serious adverse events in randomized trials is typically small, confounding statistical analysis. For example, pooled data from randomized placebo-controlled trials (Maglione et al., 2011) showed deaths in 8 of 340 (2.4%) individuals treated with aripiprazole as compared with 3 of 253 (1.2%) treated with placebo (pooled odds ratio [OR]=2.37 from 3 studies; p=Not Significant (NS)), 2 of 278 (0.7%) treated with olanzapine as compared with 4 of 232 (1.7%) treated with placebo (pooled OR=0.48 from 2 studies; p=NS), 5 of 185 (2.7%) treated with quetiapine as compared to 7 of 241 (2.9%) treated with placebo (pooled OR = 0.91 from 2 studies; p=NS) and 39 of 1561 (2.5%) treated with risperidone as compared with 17 of 916 (1.9%) treated with placebo (pooled OR= 1.19; p=NS). For SGAs as a group, meta-analysis of the data from randomized placebo-controlled trials indicates that there is a statistically significant increase in mortality relative to placebo (Schneider et al., 2005).

From a methodological standpoint, data on harms generally come from studies that are less rigorous than randomized trials, such as observational or cohort studies. Administrative database studies are increasingly common and track associations between prescribed medications and diagnoses. This research cannot consider the effects of confounding variables such as dementia severity, co-occurring conditions or the magnitude of agitation or psychosis. Nevertheless, administrative databases do permit study of large patient samples, which is important when looking at infrequent events. Some of these naturalistic studies have suggested a heightened risk of treatment with haloperidol and other FGAs and possible differences in risk among the other antipsychotic medications (See Review of Supporting Research Evidence). However, as with studies of antipsychotic benefits, the limitations of existing research make it difficult to draw precise conclusions about the likely harms of treatment for an individual patient.

In addition to mortality, other serious adverse events of antipsychotic medications in individuals with dementia have been reported including stroke, acute cardiovascular events, metabolic effects, and pulmonary effects (See Review of Supporting Research Evidence). The strength of the evidence is low for stroke but pooled analyses for risperidone and olanzapine suggest an increase in risk relative to placebo. The strength of the evidence on acute cardiovascular events is also low; however, there is some evidence of increased risk for all antipsychotics, which is highest early in the treatment, and of a greater risk with risperidone and olanzapine than with other agents. Although the evidence on metabolic effects of antipsychotics (including weight gain, diabetes, dyslipidemia and metabolic syndrome) is not as strong in individuals with dementia as it is in younger adults, the existing evidence is in keeping with what is largely known about this risk: highest for olanzapine and risperidone and lowest for aripiprazole and high-potency FGAs. Antipsychotic treatment in individuals with dementia also appears to carry an increased risk for pneumonia and for venous thromboembolism, but the strength of this evidence is low, with no apparent difference between FGAs and SGAs. Evidence is variable for other adverse effects, including cognitive worsening, sedation/fatigue, anticholinergic effects, postural hypotension, prolonged QTc intervals, sexual dysfunction, and extrapyramidal symptoms (e.g., parkinsonism, dystonia, tardive dyskinesia). However, case reports and observational data suggest a substantial increase in the likelihood of adverse effects when individuals with Lewy Body Dementia or Parkinson's disease receive antipsychotic treatment (Aarsland et al., 2005; Stinton et al., 2015). In some instances, these adverse effects have included irreversible cognitive decompensation or death. Less information is available for individuals with frontotemporal lobar degeneration, but a heightened sensitivity to antipsychotic medications has also been reported (Pijnenburg et al., 2003). No evidence is available that specifically addresses the possible harms of antipsychotic treatment in individuals being treated for chronic psychotic illness who subsequently develop dementia.

In terms of decisions about doses of antipsychotic medications, there is strong evidence that SGAs are associated with clinically significant dose-related adverse effects (Maust et al., 2015; Review of Supporting Research Evidence). Thus, if medications are begun at a low dose and increased gradually depending on clinical response, adverse effects may be minimized. On the other hand, it is possible that

harms to the patient or others may occur if the response to treatment is delayed by under-dosing of medication, particularly in emergency situations.

In terms of optimal treatment duration, the data suggest that the greatest risk of mortality occurs in the initial 120 days of antipsychotic use (Maust et al., 2015; Review of Supporting Research Evidence). The mechanisms by which heightened mortality could occur are unclear. In observational studies, unmeasured predisposing factors may lead both to a greater likelihood of antipsychotic treatment and to heightened mortality. However, although the greatest period of risk appears to occur with treatment initiation, the risk of adverse effects also persists with longer-term treatment. The cut-point of 120 days is, at least partially, an artifact of the designs of available research. Discontinuation studies suggest that antipsychotic medications can be tapered and stopped in many patients without return of symptoms (See Review of Supporting Research Evidence). Expert consensus also suggests that an attempt at tapering an antipsychotic medication is indicated (See Expert Opinion Survey), with variation in the suggested timing of a taper attempt; however, only a small fraction of experts favored maintaining the dose of medication without a specific target date for a tapering attempt. Although some individuals will have recurrence of symptoms with antipsychotic discontinuation (moderate confidence), such risks can likely be mitigated by careful monitoring during treatment cessation with adjustments made in the medication tapering plan based on clinical response. However, there are no data on the most appropriate frequency for monitoring or the extent to which monitoring can reduce the severity or risk of symptom reoccurrence, which is unpredictable. There is insufficient evidence to determine whether individuals with more severe dementia, psychosis or agitation will have a greater risk of symptom recurrence with discontinuation. There are also no data on whether symptom response is equivalent if antipsychotic medication is resumed after recurrence of symptoms.

No studies have examined the use of long-acting injectable antipsychotic medications in individuals with dementia. However, the longer duration of action of these medications suggests that they would be associated with an increased risk of harm relative to oral formulations or short acting parenteral formulations of antipsychotic medications, particularly in frail elders.

Costs

The costs of assessment, treatment planning and discussions with patients, family or other surrogate decision makers relate to clinician time. Discussions with family or surrogate decision makers can also introduce direct or indirect costs to those individuals (e.g., lost work time, transportation). The feasibility of any treatment must also consider the unique situation of the patient and family, such as access to transportation, insurance status and coverage for specific services, and effects of treatment requirements on the caregiver's time or employment.

A small number of studies on the cost effectiveness of behavioral treatments have consistently shown modest but favorable results for specific interventions (Gitlin et al., 2010). Prospective cost estimates for specific patients must take into account the need for individual therapists, the number and duration of required sessions and costs of home visits for community-based interventions (Brodaty et al., 2012). Typically, such expenses have been assessed in terms of increased patient activities in the same setting

and associated increases in personnel related costs, but have not been weighed against the cost of pharmacological interventions, the cost of institutionalization for patients who cannot be managed at home or in less restrictive settings or the cost of injuries to patients and caregivers during episodes of agitated or aggressive behavior.

The CATIE-AD trial (Rosenheck et al., 2007) examined the cost-effectiveness of antipsychotic treatment for outpatients with Alzheimer's disease and psychosis, aggression, or agitation. Although individuals treated with an SGA showed no difference in quality adjusted life years or functional measures as compared with placebo, there were significantly lower costs in the placebo group. However, with the availability of generic SGAs the costs of medication are likely to be less. We are not aware of studies on the cost effectiveness of antipsychotic treatment for individuals with dementia in inpatient or nursing facilities or for severely agitated or aggressive individuals who require constant supervision.

Balancing of Benefits and Harms in Rating the Strength of Recommendations

Consensus on rating the strength of recommendations was high within the guideline writing group and the statements were recommended unanimously. One group member (OL) chose not to vote on statements #7-15. The results of the expert opinion survey and input from the Alzheimer's Association were incorporated in decisions about benefits and harms as noted below. Because costs of medications and other interventions vary widely, the guideline writing group did not consider cost-related considerations in weighing the benefits and harms of recommendations.

The strength of research evidence supporting these guideline statements is low to moderate. Statements #1, 2, 3, 4, 6, 7, 9, 11 and 13 are based on expert consensus that is derived from fundamental and generally accepted principles of medical ethics and medical practice, including elements of conducting an assessment, reviewing responses to prior treatments and developing a plan of treatment. These statements also emphasize the importance of involving patients and surrogate decision makers, with input from family members and others. Perspectives of patients and their care partners highlighted the need for such discussions and input at all steps of the decision making and treatment monitoring process to identify person-centered goals, values and preferences that can shape care and enhance outcomes.

In statements #4 and #6, which address treatment planning and review of response to non-pharmacological interventions, the group chose not to comment on specific psychopharmacologic medications other than antipsychotic medications. Although this guideline only reviewed evidence on antipsychotic medications during the development process, available systematic reviews suggested that the harms of non-pharmacological interventions were minimal. In contrast, with other pharmacological treatments more precise details on the balance of benefits and harms would have been needed before making specific recommendations.

In addition to the consensus based recommendations described above, some specific recommendations are derived from more robust supporting evidence. For example, the recommendation for initiation of non-emergent pharmacologic treatment with a low dose of

medication that is slowly titrated to the minimum effective dose (Statement 8) is based on a substantial body of literature in geriatric pharmacology (Mulsant and Pollock, 2015; Jacobson 2014; Wallace and Paauw, 2015; Wooten, 2012; Lassiter et al., 2013) as well as data suggesting that higher doses of antipsychotic medication are associated with a greater risk of harm in individuals with dementia (See Review of Supporting Research Evidence). Statements #5, 8, 10, 14 and 15 are based on moderate strength evidence in individuals with dementia that the benefits of antipsychotic medication are small. In addition, consistent evidence, predominantly from large observational studies, indicates that antipsychotic medications are associated with clinically significant adverse effects, including mortality, among individuals with dementia. The overall strength of evidence for these statements is graded as moderate based upon this balance of benefits and harms data and the fact that there were no studies that directly addressed all of the specific elements of each recommendation.

With respect to Statement #12, harms data suggest a continued risk with ongoing treatment and discontinuation studies show that medications can be tapered in many patients without incurring recurrent symptoms (See Review of Supporting Research Evidence). The guideline writing group members were unanimous in recommending that an attempt at tapering and withdrawing the antipsychotic medication should be done for individuals being treated for psychosis or agitation in the context of dementia. One guideline writing group member (MH-L) felt that an attempt at tapering is indicated for all individuals, where the patient's history of recurrence of symptoms during prior tapering attempts is an input to the tapering decision-making along with other factors, as in Statement #10. The strength of research evidence supporting Statement #12 is rated as low since the precise timing of a tapering attempt was not studied in a randomized fashion and the recommendation to attempt a taper within 4 months was based on the timing of discontinuation in the available clinical trials and information from expert consensus (See Review of Supporting Research Evidence and Expert Opinion Survey). Input from patients and their care partners as well as comments from some geriatric psychiatrists suggested that more flexible timing of a tapering attempt may be warranted. Some guideline writing group members also felt that a longer period of treatment may be justified in some patients before a tapering attempt due to the initial time needed to reach a clinically effective dose and the longer duration of psychosis in many patients as compared to the typical duration of agitated behaviors. It was also noted that, for some patients, a medication taper could negatively affect quality of life or be dangerous for the patient or others. Some retrospective data also suggested that individuals with more severe symptoms may be at a greater risk of relapse with antipsychotic tapering, but the available research did not examine whether an a priori determination of such individuals would predict a high likelihood of symptom recurrence. Consequently, in the final guideline statement, the recommended attempt at tapering antipsychotics is accompanied by two additional recommendations. Statement #11 stresses the importance of patient, surrogate decision maker and family input before a tapering attempt as well as review of the clinical factors related to a tapering attempt, and statement #13 addresses the need for careful monitoring during tapering so that any recurrent symptoms can be addressed quickly.

For Statement #14, the data on harms in observational and administrative database studies sometimes focused on specific medications and sometimes on the class of FGAs as compared to SGAs. Since haloperidol was the most commonly used agent among FGAs, it was difficult to determine whether other FGAs had a comparable risk of harms. For this reason, the group chose to recommend that haloperidol not be used as a first-line agent, rather than recommending against use of any FGA as a first line agent.

For Statement #15, there was an acknowledgement of potential benefits of a long-acting antipsychotic medication for adherence in some selected circumstances. Nevertheless, for the preponderance of patients, the potential harms of a long-acting formulation were viewed as greater than potential benefits. However, there was recognition that, under selected circumstances, this balance may shift. In particular, some individuals will have had a chronic psychotic disorder, such as schizophrenia, that precedes the onset of dementia, and clinical opinion suggests that these patients may have continuing benefits of long-acting antipsychotic medication.

Limitations of the Evidence in Assessing Benefits and Harms

In assessing the balance between the benefits and harms of these recommendations, there are a number of factors to note. As our knowledge of dementia and its treatment evolve, there may be shifts in the balance of benefits and harms for these recommendations. At present, however, studies are either not available or are not designed to give precise guidance on many of the clinical questions. One example is the lack of studies that examine benefits of assessment or discussion with patients, surrogate decision makers, families and others. Another example is the small number of head-to-head trials comparing different pharmacological and non-pharmacological treatments for agitation or psychosis in dementia and an even fewer number of trials with parallel placebo or sham treatment arms. With non-pharmacological interventions, there can be significant variations in methodology from study to study and multiple interventions can be administered together, confounding the interpretation of findings. Trials often fail to examine quality of life or other outcomes that patients and families view as most important. Studies also have not assessed the optimal time at which an attempted tapering of antipsychotic medication is indicated. There is insufficient evidence to determine whether individuals with more severe dementia, psychosis or agitation will have a greater risk of relapse with antipsychotic discontinuation. In terms of monitoring, studies have not examined optimal timing of assessment during antipsychotic treatment or after an attempt at tapering antipsychotic treatment. The optimal frequency of laboratory and physical assessments to detect metabolic or other side effects of treatment also requires study in patients with dementia. It is also not clear whether laboratory data or other findings could predict which patients were at the highest risk of stroke or mortality or whether other interventions could reduce such risks.

Other aspects of research design may introduce variability into the findings and affect the ability to compare studies. A key issue is the way in which behavioral and psychological symptoms are defined and measured, with the definition and measurement of agitation being particularly problematic

(Sultzer et al., 2013). Rating scales for behavioral and psychological symptoms define and measure agitation and aggressive behaviors in different ways and often mix measures of symptom frequency with measures of severity. New, shorter scales are also needed for routine clinical use. When studies have examined adverse effects of antipsychotic treatment in patients with specific subtypes of dementia, these diagnoses are generally based on clinical grounds, which can introduce substantial variability as compared to diagnoses established through structured criteria, biomarker-confirmation or neuropathology (Beach et al., 2012). Studies with heterogeneous samples may fail to find a benefit or harm of a specific treatment, even if one is present for a more homogenous subset of the patients.

As another source of variability, patients with dementia who are enrolled in clinical trials are not likely to be representative of the full range of individuals for whom clinical use of an antipsychotic medication might be considered. Significant physical illness (e.g., cardiopulmonary or renal impairments, cancer), use of certain medications (e.g., anticoagulants) or severe aggression requiring emergent intervention will typically exclude a subject from such research. Other psychiatric disorders, including substance use disorders, are also common exclusion criteria. It is not clear whether these typical exclusion criteria or other factors contribute to the apparent mismatch between clinicians' views of antipsychotic benefits and the limited benefits found in clinical trials. Nonetheless, these limitations of existing clinical trials make it hard to draw precise conclusions about the likely benefits of treatment for an individual patient.

In terms of harms data, typical administrative database studies are unable to show the temporal sequence between treatment and a specific outcome. Thus, an individual with dementia may fracture a hip, become delirious and receive antipsychotic medication. An administrative database study would associate the hip fracture or a subsequent pulmonary embolus with antipsychotic medication even without a causal relationship. Alternatively, the presence of psychiatric symptoms such as agitation may result in both a greater risk of falls as well as an increased likelihood of receiving an antipsychotic medication (Lopez et al., 2013). In the future, prospective collection of harms data using registry reporting or electronic health record data analytics may help delineate the temporal sequence of antipsychotic use and adverse outcomes.

Implementation

Assessment of Behavioral/Psychological Symptoms of Dementia

In individuals with dementia who exhibit psychosis or agitation, initial assessment includes determining the type, frequency, severity, pattern and timing of symptoms. Gathering this information typically requires multiple approaches, including interview and observation of the patient and review of relevant medical records. Flexibility is needed in adapting questions to the level of the patient's understanding and being sensitive to signs of frustration or cognitive overload (e.g., with formal cognitive testing) during the interview. The ability to answer questions can also be affected by language skills, educational achievement or unrecognized impairments in hearing. Given that memory and other cognitive functions are impaired in individuals with dementia, it will probably not be feasible to obtain information on recent symptoms from direct questioning. On the other hand, a patient may minimize

his or her difficulties or give a seemingly coherent response to a question about recent events despite having no actual recall. Thus, it is also important to obtain information from family members and other caregivers, including other treating clinicians and nursing facility or hospital staff.

Quantitative measures provide a structured replicable way to document the patient's baseline symptoms and determine which symptoms (if any) should be the target of intervention based upon factors such as frequency of occurrence, magnitude, potential for associated harm to the patient or others, and associated distress to the patient. The exact frequency at which measures are warranted will depend upon clinical circumstances. However, use of quantitative measures as treatment proceeds allows more precise tracking of whether non-pharmacological and pharmacological treatments are having their intended effect or whether a shift in the treatment plan is needed. Examples of available quantitative measures include the Neuropsychiatric Inventory Questionnaire (NPI-Q), which is part B5 of the National Alzheimer's Coordinating Center Uniform Data Set (<https://www.alz.washington.edu/NONMEMBER/UDS/DOCS/VER2/IVPforms/B5.pdf>) (Kaufer et al., 2000) and Section E (Behavior) of the Minimum Data Set (MDS) - Version 3.0 of the Center for Medicare and Medicaid Services Resident Assessment and Care Screening instrument (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/index.html?redirect=/NursingHomeQualityInits/25_NHQIMDS30.asp) or the Brief Psychiatric Rating Scale (BPRS; Overall and Gorham, 1988; Ventura et al., 1993), each of which incorporate measurement of agitation and psychosis. Alternatively, for individuals who are agitated but do not show evidence of psychosis, the Cohen-Mansfield Agitation Inventory (CMAI) (Cohen-Mansfield et al., 1989) or the 4 item Modified Overt Aggression Scale (Kay et al., 1988). Although these measures and others have been used for reporting purposes as well as research (Gitlin et al., 2014), it remains unclear whether routine use of these scales in clinical practice improves overall outcomes. However, it is clear that each rating scale defines and measures psychosis, agitation, aggression and other symptoms differently (Sultzer et al., 2013), making it preferable to use a consistent approach to quantitative measurement for a given patient. The extent of the assessment, including the use of quantitative measures, will be mediated by the urgency of the situation and by the time that is available for evaluation. Depending upon the clinical circumstances, printed or electronic versions of quantitative scales may not be readily available or information may not be available to complete all scale items. If time constraints are present, the clinician may wish to focus on rating of relevant target symptoms (e.g., on a Likert scale). Another approach is for family or nursing facility staff to keep a log of target behaviors such as aggression and track the number of episodes that occur. In emergent circumstances, safety of the patient and others must take precedence; the initial assessment may need to be brief with a more detailed assessment obtained once the acute clinical situation has been stabilized. If collateral sources of information are not immediately available, treatment may also need to proceed with adjustments in the plan, if indicated, as additional knowledge is gained.

A careful assessment of the type, frequency, severity, pattern and timing of symptoms will also serve as the foundation for determining potentially modifiable contributors to the patient's symptoms and identifying factors, such as the subtype of dementia (American Psychiatric Association, 2013), that may

influence choice of treatment. For example, pain is a common contributor to agitation (Bradford et al., 2012; Husebo et al., 2011; Kunik et al., 2010), but is not easily recognized because of sensory confusion and communication deficits (Pieper et al., 2013). Thus, priority should be given to identifying any source of pain and alleviating it through non-pharmacological and pharmacological approaches, as clinically indicated (American Geriatrics Society, 2009). The pattern and timing of agitation may also suggest that the individual is becoming upset when he or she is hungry, fatigued, or cold or when there is a high amount of noise, clutter or overstimulation in the environment. Vision or hearing deficits in combination with environmental factors can yield additive difficulties in an individual's ability to understand and cope with a situation. Interactions with caregivers may also have a temporal association with behavioral dyscontrol if the caregiver asks cognitively challenging questions, rushes the patient in carrying out tasks or communicates his or her sense of anxiety or frustration, directly or indirectly. If the patient is being assisted with bathing, dressing or other activities of daily living, rejection of care and agitation may be an outgrowth of many factors including overstimulation, pain with particular movements or the patient's sense of loss of control (Volicer et al., 2007). Attention to patient privacy needs is particularly important in assisting with activities of daily living. Constipation, incontinence and other bowel or bladder issues can also prompt discomfort and distress. Other unmet needs may include, but are not limited to, relief from sensory deprivation, boredom and loneliness (Cohen-Mansfield, 2001).

Both precipitants and mitigating factors for agitation should be considered in the context of the patient's unique facets. These include the patient's likes and dislikes, lifestyle, hobbies, personality traits, intimacy and relationship patterns, spiritual and cultural beliefs, and past and current life circumstances. It can also be helpful to elicit information on prior aggressive behaviors (including associated legal problems), impulsivity, gambling, and problems with use of alcohol or other substances use. Using a person-centered approach calls for clinical staff to develop an understanding of the unique illness experience of the person and his or her care partners. This entails recognizing how individuals interpret the meaning of and navigate the difficult terrain associated with dementia and its symptoms. Input from the patient, his or her family members and others (e.g., nursing facility or senior program staff) can give insights into patient preferences and the meaning of the behavior for the individual. It can also help in identifying approaches that have been helpful in managing agitation in the past and are therefore likely to be calming (Cohen-Mansfield, Libin, & Marx, 2007). A person-centered approach also includes collecting information about previous traumatic experiences (e.g., childhood abuse, jail or prison experiences, domestic violence, combat experience, surviving the Holocaust, elder abuse) and possible triggers that may provoke inappropriate behaviors. Past life events including traumas are also relevant in terms of the resilience of the patient and his or her family as well as their previous approaches to coping with stress, loss and decision making.

When interpreting the timing of symptom onset or worsening, clinicians should also consider changes in the patient's physical status such as a recent fall (e.g., associated with head injury or pain), onset of a medical condition (e.g., urinary tract infection, pneumonia), evidence of other psychiatric symptoms (e.g., depression, anxiety) or recent change in medications. Individuals may not take medications in

prescribed doses at home; changes in adherence (e.g., due to forgetfulness, admission to or discharge from a hospital) may be associated with altered clinical response or toxicity. The Beers criteria provide a useful checklist of medications, such as benzodiazepines or anticholinergic agents, that may be particularly likely to cause side effects or toxicity in older individuals <<Insert citation to 2015 Beers criteria when published>>. In inpatient or nursing home facilities where medications have to be re-ordered at designated intervals, it is not uncommon for a medication to be inadvertently stopped. Given the sizable numbers of medications that many older adults are prescribed, it is also important to be mindful of the potential for drug-drug interactions or prescribing of multiple similar drugs. Toxicity with associated psychosis or agitation can develop with seemingly minor dose changes or medication additions. Furthermore, the reduced metabolism, altered distribution and diminished clearance of medications in older individuals means that the time to achieve steady-state levels will be longer than in younger patients. With drugs that have a long half-life or a long half-life active metabolite (e.g., aripiprazole, fluoxetine, clonazepam, diazepam), the full effects of a dose change may not be apparent for several weeks and this fact should be considered if titrating or tapering such medications. The use of long-acting intramuscular depot formulations of medications can be particularly problematic in frail, older individuals due to the longer duration of effect and the inability to stop the medication if an adverse effect occurs.

Another important step is determining the exact nature of the symptom. For example, in an individual with visual or hearing impairments, sensory illusions and other perceptual distortions may occur; these must be distinguished from true hallucinations and delusions before making decisions about interventions. Also, benzodiazepine use can be associated with disinhibition; restlessness or pacing may reflect medication-related akathisia. Whether a symptom such as psychosis or agitation will require intervention is dependent upon how frequently the symptom occurs and whether it is associated with significant distress to the patient or potential harm to the patient or others. To determine the degree of distress and the severity of symptoms, the treating clinician will synthesize information from multiple sources such as direct observations of behavior, verbalizations by the patient and input from family members, others involved with the patient and nursing facility staff (if relevant) to arrive at a clinical judgment.

With agitation and with psychotic symptoms, there can be considerable variability in manifestations and potential for risk. For example, a patient may respond very differently to a delusion that belongings have been stolen as compared to a delusion that their loved one has been kidnapped and replaced by an imposter. Irritability may presage verbal threats, pacing, or emotional outbursts whereas other individuals may develop episodes of rage and severe physical aggression without apparent warning. The potential risk to the patient or others of a particular set of symptoms may vary with the circumstances. Thus, the same behavior may be riskier in a patient residing at home with a frail spouse than in a well-staffed nursing facility.

Development of a Comprehensive Treatment Plan

Given the complexities of addressing agitation and psychosis in individuals with dementia, it is important to develop and document a comprehensive plan of treatment that is an outgrowth of the assessment described above. Such a plan does not need to adhere to a defined development process (e.g., face-to-face multidisciplinary team meeting) or format (e.g., time-specified goals and objectives), but should give an overview of the identified clinical and psychosocial issues along with a specific plan for further evaluation, ongoing monitoring and non-pharmacological and pharmacological interventions, as indicated. Depending upon the urgency of the initial clinical presentation, the availability of caregivers and time for assessment, the initial plan may need to be augmented over several visits and as more details of the history and treatment response are obtained.

If a symptom is rare, reassurance and redirection, with education of family and other caregivers is likely to be sufficient with other time limited interventions used if needed. In some instances family members or other caregivers may find a symptom upsetting even when the patient is not distressed by it. For example, some patients experience visual or auditory hallucinations that are pleasant to them and not associated with anxiety or agitation. Other patients become verbally aggressive at times without physical aggression. Providing education and support to caregivers may aid them in coping with these symptoms (Livingston et al., 2014; Brodaty and Arasaratnam, 2012).

If symptoms are more frequent and specific contributors to symptoms have been identified, these factors can be targeted for direct intervention. Common steps include treating underlying physical causes of psychosis or agitation, and providing treatment for pain (Husebo et al. 2014). Mobility support, hearing aids or eyeglasses should be used, when indicated. Some patients may respond positively to particular interventions (e.g., hand massage, pet therapy, music listening), whereas other patients may find the same non-pharmacological interventions upsetting or overwhelming, depending on their personal preferences and domains of cognitive impairment. Modifications to the environment can also be helpful such as optimizing lighting, reducing clutter, and removing items that the patient finds upsetting or that could be thrown or used as a weapon while agitated.

When individuals with dementia are residing in the community, behavioral symptoms such as agitation and psychosis can be extremely challenging for family and other caregivers to address (van der Lee et al., 2014). The associated impact on interpersonal relationships and increased caregiver burden can increase agitation and aggressive behaviors even further (Kunik et al., 2010). Psychosocial interventions that include individualized interpersonally-based education and support for caregivers also appear to reduce the use of antipsychotic therapies in persons with dementia-related agitation (Richter et al., 2012). Education should increase knowledge, skills and attitudes related to unmet needs, environmental regulation, and respect for individual preferences. One example of such an educational approach is the "Bathing without a Battle" training program (Gozalo et al., 2014). Clear communication of intended tasks, modification of caregiving strategies (e.g., bed baths vs. tub baths) or use of distraction to minimize the focus on caregiving can reduce combativeness and rejection of care (Galindo-Garre et al., 2015; Ishii et al., 2010). Additional strategies include use of therapeutic

communication techniques (Cohen-Mansfield et al., 2007) and other approaches to challenging behaviors (Alzheimer's Association, 2015; Glenner et al., 2005; Mace and Rabins, 2011) that are appropriate for the person's level of impairment. Additional supports can be facilitated by treating clinicians and can be invaluable (Jensen et al., 2015; Tam-Tham et al. 2013), although their availability may depend on factors such as geographical accessibility of resources, financial constraints, insurance limitations, or other obligations of the caregiver (e.g., to work, young children in the home).

Training in reflective practice can increase self-awareness and improve care by having staff or caregivers reflect on behavioral incidents in terms of what occurred, their own thoughts and feelings, their assessment of positives and negatives of the experience, their interpretations of possible contributors to the incident and their conclusions about adaptations to make in the future. Frameworks for understanding agitated behavior (Cohen-Mansfield et al., 2001) may suggest a focus on other factors such as unmet needs, positive rather than negative behaviors, reduced stimulation or promotion of relaxation. In inpatient settings and nursing home facilities, attention to the culture of the treatment setting and having a sufficient number of staff will also be important if staff is to participate in education, develop new skills and be able to apply them. When staff and caregivers learn to view and respond to agitation and aggression in a way that is less emotionally charged, it may also help offset compassion fatigue and burnout, which are often consequences of working with individuals with dementia.

In addition to non-pharmacological interventions, the treatment plan may include pharmacological interventions to address physical conditions or symptoms such as pain or constipation. Although outside the scope of this practice guideline, cholinesterase inhibitors or memantine for dementia, and medications for other psychiatric disorders such as depression or anxiety disorders may also be part of the treatment plan. Monitoring of physiological parameters (e.g., weight, blood pressure), point-of-care testing (e.g., glucose fingersticks), or laboratory testing may be included when indicated. Other elements of the treatment plan will be unique to the individual and his or her past experiences, needs, desires, preferences and values to provide comprehensive person-centered care that is aimed at alleviating distress, promoting comfort and enhancing quality of life.

The plan of treatment should also be reassessed over time, with modifications made to address changes in the patient's cognitive status, symptom evolution and treatment response. This may entail reassessing for contributing or mitigating factors as well as continuing effective behavioral interventions or environmental modifications, adding other approaches if symptoms are not well controlled, and discontinuing ineffective non-pharmacological approaches. Any prescribed medications should also be reviewed for their benefits and for evidence of adverse effects. For example, benzodiazepine use is common, despite minimal evidence of benefit (Defrancesco et al., 2015) and an association with an increased risk of falls (Woolcott et al., 2009), worsening of cognition (Defrancesco et al., 2015), and potentially with increased mortality (Huybrechts et al., 2011).

Assessment of Benefits and Risks of Antipsychotic Treatment for the Patient

Given the risks associated with antipsychotic medications, if non-emergent use of antipsychotic medication is being considered to address agitation or psychosis, it is important to review all aspects of the assessment and the treatment plan. The aims of such a review are to determine the frequency and severity of symptoms in a systematic fashion, identify consequences of agitation or psychosis (e.g., distress to the patient, danger to self or others), discover previously unrecognized contributors to agitation or psychosis, re-assess the clinical response to non-pharmacological or pharmacological treatments, and decide whether different interventions might be indicated.

If agitation or psychosis result in significant negative consequences to the patient and to his or her quality of life, the potential for benefits of an antipsychotic medication should be weighed against the potential for harmful effects (see section on Benefits and Harms). This is particularly important given the modest benefits and demonstrated risks of antipsychotic treatment in clinical trials and in less rigorous observational and cohort studies. In emergent situations, when there is risk of harm to the patient or others, acute treatment may need to proceed to allow the immediate crisis to be stabilized. However, in other contexts, discussion of potential benefits and harms with the patient's family or other surrogate decision makers and eliciting their concerns, values, and preferences is essential in helping them arrive at an informed decision about treatment that will be person-centered and focused on overall quality of life. Patients may also be able to appreciate these factors and offer input on their current and future treatment preferences depending on their level of cognitive impairment. Open-ended questioning and discussion will likely be helpful in identifying potential benefits and side effects of treatment that are most important to the person living with dementia. For example, individuals may be particularly concerned about effects of the medication on their remaining capabilities in terms of cognition and communication. On the other hand, calming effects of medication may be viewed as particularly helpful if they ease distressing anxiety or suspiciousness or alleviate aggressive episodes, allowing individuals to remain safely in their homes. If medication calms the individual for even a few hours, it can facilitate attendance at an adult day program, giving them pleasure through program activities and granting a caregiver a few hours of respite. In all settings of care, such preferences of patients, family and other caregivers should be respected, documented, and reviewed in ongoing discussions as part of the treatment planning process.

The subtype of dementia is another important factor to establish before considering the potential benefits and risks of antipsychotic treatment (Chare et al., 2014; Mrak and Griffin, 2007; Pressman and Miller, 2014). For example, in individuals with Lewy Body Dementia and Parkinson's dementia, the risks of extrapyramidal side effects of antipsychotic medication and the potential for cognitive worsening will be significantly greater than in individuals with other types of dementia (Aarsland et al., 2005; Stinton et al., 2015) and in some instances, have been reported to include irreversible cognitive decompensation or death. Although clozapine and quetiapine may be better tolerated than the other antipsychotic medications in these patients, the evidence for efficacy of these agents in treating psychosis is minimal (Stinton et al., 2015). Consequently, it may be better to avoid antipsychotic treatment for the visual hallucinations that are common among individuals with Lewy Body Dementia

and the psychotic symptoms with Parkinson's disease and dopamine agonist therapy. Individuals with frontotemporal lobar degeneration may also have a heightened sensitivity to antipsychotic medication (Pijnenburg et al., 2003). Even in individuals with a diagnosis of Alzheimer's disease, pathological evidence of Lewy Body disease may be present (Mrak and Griffin, 2007) warranting review of diagnosis before prescribing antipsychotic medications.

Other benefits and risks of treatment will relate to the individual characteristics and circumstances of the patient. For example, individuals who have pre-existing diabetes have an increased risk of hospitalization for hyperglycemia with antipsychotic initiation (Lipscombe et al. 2009), whereas those with pre-existing problems with gait may be at an increased risk for falls if they develop extrapyramidal side effects. Lowering of blood pressure and development of orthostasis can also contribute to falls, particularly in combination with other medications or dehydration. Other co-occurring conditions such as cerebrovascular disease or cardiac disease may also influence the risk of side effects from antipsychotic medications. On the other hand, if agitation or psychosis are severe and distressing to the patient and can be reduced by judicious treatment with an antipsychotic, some individuals may experience an enhanced quality of life (Beerens et al., 2013) and be able to remain in the community for longer periods of time due to reductions in caregiver burden (Mohamed et al., 2012). When behavioral and psychological symptoms are associated with dangerous behaviors to the individual or to others, treatment with an antipsychotic medication may also be appropriate and can reduce risk.

Dosing, Duration and Monitoring of Antipsychotic Treatment

Based on a risk-benefit assessment and discussion with the family or other surrogate decision makers, if antipsychotic treatment is clinically indicated on a non-emergent basis, it is important to begin at a low dose. Typical starting doses for frail or older patients will be one-third to one-half the starting dose used to treat psychosis in younger individuals or the smallest size of tablet that is available. Doses should be titrated gradually to the lowest dose associated with clinical response. Factors such as drug-drug interactions, medication half-life, and renal and hepatic function should be taken into consideration when titrating medications to avoid dose adjustments that are too rapid. Due to variations in the metabolism of antipsychotic medications and variations in the time needed to reach steady-state medication levels, it is not possible to predict the time needed to reach an adequate dose of medication for an individual patient. However, doses used in clinical trials in patients with dementia can serve as a guide to the typical dose of medication required with each agent.

As dose titration proceeds and at all points in the course of treatment with an antipsychotic, the clinician will want to assess the patient and obtain information from caregivers about response to treatment, possible medication side effects and adherence. As described above, use of quantitative measures can be helpful in tracking longitudinal response. Poor adherence may be due to factors such as cost, difficulties with swallowing, resistance to taking medication or intolerable side effects. If side effects are observed or reported, the nature, frequency and severity of these side effects will determine whether the risks and benefits of treatment favor ongoing treatment, an attempt at tapering or immediate discontinuation of the medication. Monitoring for tolerability is also important so that

sedation, extrapyramidal effects, gait disturbance, cognitive impairing effects and other side effects can be minimized. Specific recommendations about the timing of laboratory monitoring have not been developed for individuals with dementia who are treated with antipsychotic medication; however, in individuals with schizophrenia, it has been suggested that an Abnormal Involuntary Movement Scale (AIMS) be done at least every 6 months in geriatric patients (American Psychiatric Association, 2004). Monitoring blood pressure, weight, body mass index (BMI), waist circumference, fasting glucose, fasting lipid profile and personal/family history have been suggested at baseline for individuals receiving antipsychotic medication, with additional personal/family history and waist circumference annually, blood pressure and fasting plasma glucose at 12 weeks and annually, lipid profile at 12 weeks and every 5 years and weight with calculation of BMI monthly for 3 months, then quarterly (American Diabetes Association et al., 2004). Hemoglobin A1C monitoring may be substituted for a fasting glucose level (American Diabetes Association, 2015).

If a partial response to antipsychotic treatment occurs, further dose titration may be indicated depending on whether side effects are present and on the relative balance of benefits and harms for the patient. When patients are being treated for psychotic symptoms, relief of distress or associated agitation may occur even though hallucinations or delusions persist. In such circumstances, further dose adjustments may not be necessary and would add to the potential for side effects. If there is no clinically significant response within 4 weeks of reaching a typical therapeutic dose of medication, the medication should be tapered and stopped to avoid potential harms of medication treatment without any offsetting benefit. If severe, dangerous or significantly distressing symptoms persist, a trial of a different antipsychotic medication may be considered after re-evaluation for contributing factors to the patient's symptoms, additional review of the risks and benefits of treatment and discussion with the patient and surrogate decision maker, with input from family and other involved individuals.

Even when benefit is apparent, patients' symptoms and need for an antipsychotic medication may change. Consequently, in an effort to reduce the potential harms of treatment, an attempt should be made to taper the antipsychotic medication within 4 months of treatment initiation. However, earlier attempts at tapering the medication may also be warranted given the ongoing risk of harms with continued treatment.

In the same way that clinical and patient-specific circumstances will require clinical judgment in the decision to initiate treatment with an antipsychotic, the clinician will need to weigh multiple factors in a decision to attempt a taper of medication. Discussion with the patient, surrogate decision maker, family or others involved with the patient is also important. The aim of such a discussion is to elicit their preferences and concerns as well as to review the initial goals, observed benefits and side effects of antipsychotic treatment; potential risks of continued exposure to antipsychotics; and past experience with antipsychotic medication trials and tapering attempts. The duration of treatment before an attempt at tapering may depend on the chronicity of the symptom prior to treatment initiation and on the severity and degree of dangerousness of the target symptoms. If the initial reasons for antipsychotic medication treatment are unclear after information is obtained from treating health

professionals, medical records, family members or other sources of collateral, an earlier attempt at tapering is may be warranted. When symptoms have been long-standing or associated with significant physical risks, more caution will be needed in efforts at medication tapering. Similarly, if symptoms have recurred with previous tapering attempts, it may be appropriate to continue treatment without an attempt at tapering. In addition, this recommendation is not intended to apply to individuals with a pre-existing psychotic disorder such as schizophrenia for whom ongoing antipsychotic treatment may be necessary. As with decisions about initiating antipsychotic treatment, it is essential to obtain input from patients, family and other caregivers on an ongoing basis and review their preferences, values and concerns about continued treatment or tapering in a person-centered fashion.

When a medication taper is attempted, close monitoring will be needed to note signs of recurrent symptoms, with monthly symptom assessments recommended during the taper and for at least 4 months after medication discontinuation. The nature of such assessment may vary and can include face-to-face assessments, telephone contact, or other approaches to following symptoms and behaviors. Again, it can be helpful to use of quantitative measures or other structured approaches. If breakthrough symptoms are noted with tapering, this suggests that the benefit of the medication may outweigh the potential risks of continued treatment, that other contributing factors may need to be addressed or that other non-pharmacological or pharmacological interventions may be indicated.

Use of Specific Antipsychotic Medications, Depending on Clinical Context

If an antipsychotic medication is being initiated, a number of factors warrant consideration when selecting a specific agent. For example, patients, surrogate decision makers, or family members may express a preference for a specific medication or note concerns about specific side effects (e.g., weight gain, diabetes, sedation or additional cognitive impairment). Such preferences should be considered in concert with the other factors noted below. Barriers to choice of specific medications are also common and typically involve regulatory stipulations, cost considerations, formulary coverage, or pre-authorization requirements.

The potential side effects of specific medications are also important considerations. In studies using administrative databases that have examined a wide range of antipsychotics, the risk of mortality with an FGA in individuals with dementia was generally greater than the risk with a SGA. Head-to-head comparison data from randomized trials is limited and the bulk of the available evidence on FGAs relates to haloperidol. Thus, due to the greater risk of harms with haloperidol treatment reported in clinical trials and cohort studies, this medication is not recommended as a first line agent for non-emergent use in individuals with dementia. On the basis of the available data on harms, it may be preferable to avoid use of other FGAs as well. In emergent situations or in the context of delirium, use of haloperidol may still be appropriate, given its availability in an intravenous and short-acting intramuscular formulation and its relatively rapid onset of action relative to other parenteral antipsychotic medications. However, if longer term treatment is indicated, a different agent should be chosen as a first line medication.

Among the SGAs, the choice of a specific medication involves consideration of a number of factors. As described in the sections on Benefits and Harms and Review of Supporting Research Evidence, data from randomized placebo-controlled trials suggest efficacy for risperidone in treating psychosis and for risperidone, olanzapine and aripiprazole in treating agitation. There was insufficient information from trials of quetiapine to determine whether it was efficacious in treating either agitation or psychosis and it appeared to be no better than placebo in treating behavioral or psychological symptoms of dementia overall. In terms of potential risks, the pooled data from randomized trials indicate a greater risk of mortality with use of a SGA relative to placebo but do not show significant differences in mortality between placebo and individual antipsychotic medications. However, the total number of deaths in each study is small. When pooled placebo-controlled RCT data are considered along with data from larger observational cohort studies and research using administrative databases, evidence suggests that there may be differences in risk between individual antipsychotic agents, but confidence intervals are overlapping and effects are dose dependent. In addition, the number of individuals who had received aripiprazole was very small relative to the number who had received risperidone or olanzapine. There is no information about the benefits or harms of asenapine, brexpiprazole, cariprazine, clozapine, iloperidone, lurasidone, paliperidone, or ziprasidone in individuals with dementia. The lack of head-to-head comparison data among antipsychotic medications on efficacy and on harms makes it difficult to designate a specific antipsychotic as being most appropriate to use as a first-line agent in treating agitation or psychosis in individuals with dementia.

As with all medication related decisions, choice of a medication will also depend on factors such as the patient's prior responses to a specific agent, co-occurring medical conditions, the pharmacokinetic properties of the medication such as absorption and half-life and the potential for drug-drug interactions and additive side effects with other medications that the patient is already taking. Some antipsychotic medications have active metabolites of the parent drug that may be relevant in medication selection. For example, norquetiapine has significantly greater anticholinergic side effects than quetiapine; interactions of other medications with quetiapine's primary metabolic pathway (i.e., cytochrome P₄₅₀ 3A₄) can also worsen anticholinergic effects. The side effect profile of a medication is another important factor in selecting a specific agent. In addition to the potential risk of serious adverse events such as mortality or stroke, commonly relevant side effects include sedation, hypotension, cardiac effects including QTc interval prolongation, extrapyramidal effects, akathisia, falls, dysphagia with associated risk of aspiration pneumonia, effects on seizure threshold and metabolic effects (including weight gain, diabetes, dyslipidemia and metabolic syndrome). Anticholinergic effects of antipsychotic medications can worsen cognition or narrow angle glaucoma as well as contributing to urinary retention and constipation. The frequency of these adverse effects will vary depending upon the antipsychotic medication that is chosen.

Features that individuals in the expert survey noted may influence their prescribing of specific medications included the long half-life, potential for drug-drug interactions, partial agonist mechanism of action and rates of akathisia with aripiprazole; greater likelihood of extrapyramidal effects and hyperprolactinemia with risperidone; anticholinergic effects, sedation, metabolic effects and weight

gain with olanzapine; and QTc prolongation and changes in absorption with food for ziprasidone. For individuals with Lewy Body Dementia or dementia due to Parkinson's disease, quetiapine and clozapine were noted as the most appropriate medications due to the risk of worsened motor symptoms with the other antipsychotic agents.

The available formulations of the antipsychotic may also play a role in the medication selection process. For example, for patients who have difficulty swallowing pills, it would be preferable to choose a medication that is available as a rapid dissolving tablet or oral concentrate formulation. If an intramuscular formulation of antipsychotic is indicated for short-term use in individuals who are unable to take oral medications or in emergent situations, care should be taken to use a short-acting parenteral preparation.

The long-acting injectable decanoate formulation of haloperidol and other long-acting injectable formulations of antipsychotic medications are likely to carry a greater risk of side effects in individuals with dementia. However, individuals with a chronic psychotic disorder, such as schizophrenia, may benefit from treatment with a long-acting injectable antipsychotic medication if they have a history of poor adherence and have tolerated oral formulations of medication. In other selected circumstances a low dose of a long-acting injectable antipsychotic may aid adherence and minimize struggles over the taking of oral medications. Individuals with a pre-existing chronic psychotic illness may also have adherence enhanced by administering long-acting medication. Nevertheless, if used, caution is needed to assure that oral medication is well tolerated before shifting to a long-acting agent. Furthermore, care must still be taken in dosing of long-acting intramuscular formulations due to changes in medication pharmacokinetics with increasing age, changes in body composition, and impairments in renal or hepatic function.

Quality Measurement Considerations

This guideline includes 15 recommendations about the care of individuals with dementia who are exhibiting agitation or psychotic symptoms. Although the guideline focuses on the clinical indications (Statement 5) and judicious use (Statements 8 through 15) of antipsychotic medications to treat agitation or psychosis, other facets of care and clinical decision making are inextricably linked to decisions about pharmacological interventions. Thus, this guideline also incorporates recommendations about assessment of symptoms (Statement 1), potentially modifiable contributors to symptoms (Statement 2) and factors that may influence choices of treatment (Statement 2), approaches to monitoring of symptoms (Statements 3 and 13). Other recommendations relate to having a documented plan of treatment (Statement 4), reviewing response to non-pharmacological treatments (Statement 6), and discussing the potential benefits and risks from antipsychotic medication (Statement 7) or tapering of antipsychotic medication (statement 11) with the patient, if clinically feasible and with the surrogate decision maker with input from family and others involved with the patient .

Existing Measures of Relevance to Antipsychotic Use in Individuals With Dementia

The recommendations of this guideline are consistent with several existing Choosing Wisely recommendations. For example, the American Psychiatric Association advises "Don't prescribe antipsychotic medications to patients for any indication without appropriate initial evaluation and appropriate ongoing monitoring." and "Don't routinely use antipsychotics as first choice to treat behavioral and psychological symptoms of dementia." (American Psychiatric Association, 2015). The latter recommendation is echoed by the Choosing Wisely recommendation of the American Geriatrics Society (American Geriatrics Society). In addition, two existing process measures relating to the use of antipsychotics in individuals with dementia have been endorsed by the National Quality Forum (NQF). (Pharmacy Quality Alliance, 2014) For one of the measures (NQMC-9260), the denominator includes "patients 65 years and older with either a diagnosis of dementia and/or two or more prescription claims and greater than 60 days supply for a cholinesterase inhibitor or an N-methyl-D-aspartate receptor antagonist." The numerator is defined by "The number of patients in the denominator who had at least one prescription AND greater than 30 days supply for any antipsychotic medication during the measurement period and do not have a diagnosis for schizophrenia, bipolar disorder, Huntington's disease or Tourette's syndrome." The other measure (NQMC-9907) applies to long-stay nursing home residents with dementia who are aged 18 years and older and examines the percentage of individuals who are receiving an antipsychotic medication for 12 day or longer. Again, individuals with a diagnosis of schizophrenia, bipolar disorder, Huntington's disease or Tourette's syndrome are excluded from the measure.

Variability in Practice That May be Addressed by Quality Measures

Available administrative data allow calculations of the rates of antipsychotic use in nursing homes (https://www.nhqualitycampaign.org/files/AP_package_20150421.pdf) and other settings. Such data show significant regional and state-to-state variability; however, these data have a number of confounds and do not provide details about the reasons these medications are being prescribed or the severity of symptoms exhibited by the patient. Thus, these data reflect antipsychotic use but, like the currently endorsed NQF measures, do not provide information about appropriate use of antipsychotic medications in individuals with dementia.

In terms of other recommendations, the typical practices of psychiatrists and other health professionals are unknown, but anecdotal observations suggest possible variability across healthcare settings and specialty practices. Such variability could indicate a need to strengthen clinician knowledge, improve training, or increase the time available to assess patients and document decision making. Variability could also indicate a need to address barriers to care such as geographic or socioeconomic differences in the availability of health professionals, skilled staff, specific medications, non-pharmacological interventions or other care-related resources.

Potential Options for Measure Development

Measures could be developed that focus on the assessment of behavioral and psychological symptoms in individuals with dementia, including the type, frequency, severity, pattern and timing of symptoms (Statement 1), potentially modifiable contributors to symptoms (Statement 2), and factors that may influence choices of treatment (Statement 2). The use of a quantitative measure (Statement 3) would be difficult to implement as a quality measure because available rating scales are primarily designed for research. Less formal approaches to quantitative measurement would be better suited to typical clinical settings. Nevertheless, quantitative measures (Statement 3) could be one option of several approaches for documenting symptom type, frequency, severity, pattern and timing (Statement 1). Typically, measures of assessment or screening should be matched to a measure that evaluates follow-up treatment and can therefore affect patient outcomes. Given the weak evidence for efficacy of non-pharmacological and pharmacological treatments for agitation and psychosis in dementia, pairing of a treatment-specific measure may not be appropriate. However, these measures could be paired with a measure relating to the presence of a documented treatment plan (Statement 4).

Several recommendations (Statements 5, 6 and 7) relate to the decision-making that should precede consideration of non-emergency antipsychotic treatment in an individual with dementia. In particular, such treatment should only be used "when symptoms are severe, dangerous and/or cause significant distress to the patient" (Statement 5), after "reviewing the clinical response to non-pharmacological interventions" (Statement 6), and after assessing "the potential risks and benefits from antipsychotic medication" (Statement 7). Statement 7 also recommends that "the potential risks and benefits from antipsychotic medication be assessed by the clinician and discussed with the patient (if clinically feasible) as well as with the patient's surrogate decision maker (if relevant) with input from family or others involved with the patient." This could be incorporated into the above measure as a process focused internal quality improvement measure or a family/surrogate reported satisfaction measure could be developed with patient input obtained, when clinically appropriate. For such measures, the measure denominator would focus on patients who received non-emergency treatment with an antipsychotic medication. Several other recommendations (Statements 10 and 12) are related to attempts at tapering and discontinuing antipsychotic medications. Since many patients with dementia exhibit both agitation and psychosis and clinical responses can be subtle, it would be difficult to develop distinct measures to address each of these recommendations. However, a composite measure could be used to determine whether an attempt to taper the antipsychotic occurred within 4 months of treatment initiation. Statement 11 also focuses on decision-making and discussion with the patient, surrogate decision maker and family, in this case related to tapering of antipsychotic medication in a patient who had experienced a positive response to treatment. The latter inclusion criteria would make it difficult to use this statement as a quality measure.

It may also be possible to develop a measure that assesses the use of haloperidol in individuals with dementia (Statement 14). However, such a measure would require documenting whether or not the patient was experiencing delirium, whether or not the use of antipsychotic was on an emergency basis

and whether or not a different antipsychotic medication had been tried and stopped (e.g., due to side effects or lack of efficacy).

Other statements would be difficult or inappropriate to develop into quality measures due to the lack of a discrete and measurable numerator and denominator (Statements 8, 9, and 13). Since long-acting injectable antipsychotic medications would be expected to constitute a small fraction of prescribed antipsychotic medications, the impact of a quality measure based on Statement 15 is likely to be limited.

Practical Barriers to Measure Development

For all of these recommendations, there are important practical barriers to the derivation and utility of quality measures. For example, to assess a clinician's performance of a clinical process, a measure must clearly define the applicable patient group (i.e., the denominator) and the process that is measured (i.e., the numerator). Furthermore, the clinician's performance of the process must be readily ascertained from chart review or administrative data. When quality measures relate to patient assessment, clinical judgment must determine the factors that merit emphasis in the evaluation of an individual patient. Clinical judgment is also needed to determine the clinical response to non-pharmacological interventions, weigh the potential benefits and harms of antipsychotic treatment and decide on the appropriate timing of attempts to taper antipsychotic medication.

Additional barriers relate to a lack of standardization in how findings are documented. Information in medical records may be lacking or incomplete; more often it does not fully align with the specific requirements of a particular performance measure. Many clinicians appropriately use free text prose to describe symptoms, response to treatment, discussions with family, plans of treatment and other aspects of care and clinical decision-making. Reviewing these free text records for measurement purposes would be impractical and it would be inappropriate to hold clinicians accountable to such measures, without significant increases in electronic medical record use and advances in natural language processing. The presence or absence of scoring from a relevant measurement tool could be included as one of several approaches to fulfill a measure that relates to symptom assessment. Another approach could be to measure only for the presence or absence of text in relevant free text fields of an electronic medical record. This approach would allow for maximum flexibility in how clinicians document findings of their assessments; however, a liability of this approach is that it would have limited utility to address variability in how clinicians assess patients with dementia and document treatment planning and clinical decision-making. Such an approach could also lead to documentation burden and overuse of standardized language that does not accurately reflect what has occurred in practice. On the other hand, if multiple discrete fields are used to capture information on a paper or electronic record form, oversimplification is a possible unintended consequence of measurement. For example, implementation of a measure relating to haloperidol use (Statement 14) would minimally require that a clinician's medical record capture yes or no answers about current delirium, emergent need for treatment and prior antipsychotic trials. Not all electronic medical records may do this without costly modifications, and even if they do, information may not be captured in an easily retrievable and

reportable format. In addition, crucial clinical information might be lost through this type of documentation (e.g., information on responses or side effects from prior antipsychotic trials).

As a result of these practical barriers, it may be difficult to derive meaningful performance measures from these recommendations. Consequently, quality improvement activities including performance measures derived from these guidelines should yield improvements in quality of care to justify any clinician burden, e.g., documentation burden. Possible unintended consequences of any derived measures would also need to be addressed in testing of a fully specified measure.

Additional Uses of Guideline Recommendations to Enhance Quality

In addition to the possible use of these guidelines to develop formal quality measures, these guideline statements can also be used to promote quality care in other ways. For example, quality of care might be improved through educational activities or through electronic clinical decision support. With appropriate controls for case-mix and comorbidities, organizations could examine the effects of the recommendations on overall outcomes (e.g., proportion of individuals with significant behavioral and psychological symptoms of dementia, proportion of individuals experiencing adverse effects of antipsychotic medication, rates of transition from community to nursing care settings). Quality improvement initiatives could then be developed to improve these outcomes.

Guideline Development Process

This guideline was developed using a process intended to meet standards of the Institute of Medicine (2011). The process is fully described in a document available on the APA website:

<http://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Clinical%20Practice%20Guidelines/Guideline-Development-Process.pdf>. Key elements of the development process included the following:

Management of Potential Conflicts of Interest

Members of the Systematic Review Group and Guideline Writing Group members were required to disclose all potential conflicts of interest before appointment, before and during guideline development, and on publication.

Guideline Writing Group Composition

The Guideline Writing Group was initially composed of eight psychiatrists with general research and clinical expertise. To achieve a multidisciplinary group, some experts from other disciplines, i.e., nursing, neurology, and geriatrics, were added to the group. In addition, individuals nominated as experts on the topic were surveyed, as described under "Expert Opinion Survey Data." The Guideline Writing Group was diverse and balanced with respect to their expertise as well as other characteristics, such as geographical location and demographic background. Methodological expertise (i.e., with respect to appraisal of strength of research evidence) was provided by the Systematic Review Group. The Alzheimer's Association was involved in reviewing the draft and provided perspective from patients, families and other care partners.

Expert Opinion Data Collection

An expert opinion survey was fielded to 593 experts on the topic of the guideline. These experts were peer-nominated by current and past APA Council and work group members, chairs of academic departments of psychiatry and directors of psychiatry residency programs in the United States and Canada, other medical organizations, and the APA Assembly. Nominators were asked to identify two types of experts to serve on the panel: researchers and clinicians. "Research experts" were defined as individuals who have significant research activities, scholarly publications, or academic reputation in the treatment of Alzheimer's disease and other dementias, including the use of antipsychotic medications for the treatment of behavioral/psychological symptoms. "Clinical experts" were defined as individuals who have substantial clinical experience in the treatment of Alzheimer's disease and other dementias, including the use of antipsychotic medications for the treatment of behavioral/psychological symptoms. The experts were contacted via email to complete the survey online.

Survey questions were adapted from clinical questions developed by the AHRQ for its 2011 review on off-label use of antipsychotics (Maglione et al., 2011). The survey included questions to address: appropriate use of antipsychotics; duration of treatment; and clinical experience of using antipsychotics to treat agitation or psychosis in patients with dementia in given clinical circumstances.

Most of the experts, 66.2%, were nominated once, 14.7% were nominated twice, and the remainder is nominated up to 19 times. The composition of the portion of the experts who responded to the survey corresponds closely with that of the entire panel, within 0%–5% (i.e., in the number of times panel members were nominated and whether they were identified as clinical or research experts or both).

The response rate for the survey was 34.4% (n=204); 3.9% of the responses were partial, meaning that at least one question was completed. The experts responded to the survey were composed of approximately 61% clinical experts, 11% research experts, 24% experts in both categories, and 4% unspecified.

Quantitative data from the survey are shown under "Review of Available Evidence." The survey also collected many free text comments, which were reviewed during development of the draft guideline. Key themes from qualitative data have been incorporated into the implementation section of the guideline.

Systematic Review Methodology

These guidelines are based upon a systematic search of available research evidence. The search terms and limits used are available on request from APA.

Initial searches of MEDLINE, PsycINFO and Cochrane databases conducted in February 2013 included search terms for SGAs and for off-label indications for SGA use (including dementia), extending the search conducted for the AHRQ systematic review "Off-Label Use of Atypical Antipsychotics: An Update" (Maglione et al., 2011). These searches yielded 1,624 articles in MEDLINE, 657 articles in

PsycINFO, and 1,457 articles in the Cochrane database. Two individuals (R.R. and L.F.) screened the 2,141 articles from the different searches when duplicate references were eliminated. Included articles were a clinical trial (including a controlled or randomized trial), observational study, meta-analysis, or systematic review that were clinically relevant to the off-label use of SGAs. The identified articles were subsequently restricted to the topic of dementia, yielding 12 articles (3 randomized trials, 9 observational studies).

Subsequent systematic searches were conducted in January 2015 and included terms for all antipsychotic medications and for all types of dementia, cognitive disorders and cognitive impairment. Searches were limited to English language articles in adult humans and to clinical trials, observational studies, meta-analyses and systematic reviews. All searches were done for the years from 1900 through 2014. These searches yielded 1,483 articles in MEDLINE, 470 articles in PsycINFO, and 335 articles in the Cochrane database. After duplicate articles were removed, two individuals (S-H.H. and L.F.) screened an additional 1,803 articles for relevance to the use of antipsychotic medications in individuals with dementia.

Rating the Strength of Supporting Research Evidence

“Strength of supporting research evidence” describes the level of confidence that findings from scientific observation and testing of an effect of an intervention reflect the true effect. Confidence is enhanced by factors such as rigorous study design and minimal potential for study bias. Three ratings are used: high, moderate, and low.

Ratings are determined by the Systematic Review Group, after assessment of available clinical trials across four primary domains: risk of bias, consistency of findings across studies, directness of the effect on a specific health outcome, and precision of the estimate of effect. These domains and the method used to evaluate them are described under “Systematic Review Methodology.”

In accordance with the Methods Guide of the Agency for Healthcare Research and Quality (<http://www.ncbi.nlm.nih.gov/books/NBK47095>), the ratings are defined as follows:

- High (denoted by the letter A) = High confidence that the evidence reflects the true effect. Further research is very unlikely to change our confidence in the estimate of effect.
- Moderate (denoted by the letter B) = Moderate confidence that the evidence reflects the true effect. Further research may change our confidence in the estimate of effect and may change the estimate.
- Low (denoted by the letter C) = Low confidence that the evidence reflects the true effect. Further research is likely to change our confidence in the estimate of effect and is likely to change the estimate.

Rating the Strength of Recommendations

Each guideline statement is separately rated to indicate strength of recommendation and strength of supporting research evidence.

“Strength of recommendation” describes the level of confidence that potential benefits of an intervention outweigh potential harms. This level of confidence is informed by available evidence, which includes evidence from clinical trials as well as expert opinion and patient values and preferences. As described under “Guideline Development Process,” the rating is a consensus judgment of the authors of the guideline and is endorsed by the APA Board of Trustees.

There are two possible ratings: recommendation or suggestion. These correspond to ratings of “strong” or “weak” (also termed “conditional”) as defined under the GRADE method for rating recommendations in clinical practice guidelines (described in publications such as Guyatt et al. 2008 and others available on the website of the GRADE Working Group at <http://gradeworkinggroup.org/index.htm>). “Recommendation” (denoted by the numeral 1 after the guideline statement) indicates confidence that the benefits of the intervention clearly outweigh harms. “Suggestion” (denoted by the numeral 2 after the guideline statement) indicates uncertainty (i.e., the balance of benefits and harms is difficult to judge or either the benefits or the harms are unclear).

When a negative statement is made, ratings of strength of recommendation should be understood as meaning the inverse of the above (e.g., “recommendation” indicates confidence that harms clearly outweigh benefits).

When there is insufficient information to support a recommendation or a suggestion, a statement may be made that further research about the intervention is needed.

The Guideline Writing Group determined ratings of strength of recommendation by a modified Delphi method using blind, iterative voting and discussion. In weighing potential benefits and harms, the group considered the strength of supporting research evidence, the results of the expert opinion survey, and their own clinical experiences and opinions. For recommendations, at least nine of the ten members of the group must have voted to “recommend” the intervention or assessment after four rounds of voting. Based upon the discussion among the members of the group, adjustments to the wording of recommendations could be made between voting rounds. If this level of consensus was not achieved, the group could agree to make a “suggestion” rather than a recommendation. No suggestion or statement was made if three or more group members voted “no statement.” Differences of opinion within the group about ratings of strength of recommendation, if any, are described under “Potential Benefits and Harms.”

External Review

This guideline was made available for review in July 31, 2015 by stakeholders, including the APA membership, scientific and clinical experts, allied organizations (including patient advocacy organizations), and the public. 44 individuals and 11 groups/organizations submitted comments on the guideline. The Chair and Co-chair of the Guideline Writing Group reviewed and addressed all comments received; substantive issues were reviewed by the Guideline Writing Group.

Approval

The guideline was submitted to the APA Board of Trustees for approval on XXX. <<N.B. Add the date.>>

Glossary of Terms

Adequate dose. The dose of a medication at which therapeutic effects occurred when tested in clinical trials in a comparable population of subjects. This dose will differ for each medication and may need to be adjusted in an individual patient to address factors that would influence drug absorption, metabolism, elimination or other pharmacokinetic properties.

Adequate response. A reduction in symptoms as a result of treatment that is associated with clinically significant benefit in functioning and/or quality of life. A reduction in symptoms of 50% or more is sometimes used as a threshold for adequacy of response.

Agitation. A state of excessive motor activity, verbal aggression or physical aggression to oneself or others that is associated with observed or inferred evidence of emotional distress. (Adapted from Cummings et al., 2015).

Antipsychotic medication. One of a group of medications used in the treatment of psychosis. Some of the antipsychotic medications are also approved for use in other conditions such as mood disorders or Tourette syndrome. The first generation antipsychotic (FGA) medications, sometimes referred to as "typical" antipsychotic medications, were the initial medications to be discovered. The FGAs include but are not limited to chlorpromazine, droperidol, fluphenazine, haloperidol, loxapine, perphenazine, thiothixene, thioridazine and trifluoperazine. The second generation antipsychotic (SGA) medications, sometimes referred to as "atypical" antipsychotic medications, include but are not limited to aripiprazole, asenapine, brexpiprazole, cariprazine, clozapine, iloperidone, olanzapine, paliperidone, quetiapine, risperidone, and ziprasidone. Within each group of antipsychotic medications, there is significant variability in the pharmacological properties, presumed mechanisms and side effect profiles of specific drugs.

Assessment. The process of obtaining information about a patient through any of a variety of methods, including face-to-face interview, review of medical records, physical examination (by the psychiatrist, another physician, or a medically trained clinician), diagnostic testing, or history taking from collateral sources.

Behavioral and psychological symptoms of dementia. Signs and symptoms of disturbed perception, thought content, mood, or behavior that occur in the context of dementia (Finkel et al., 1996). Behavioral and psychological symptoms of dementia (BPSD) are distinct from the cognitive impairments of dementia and include agitation and psychosis as well as apathy, depression, anxiety, irritability, disinhibition, sleep disturbances, wandering and disruptive or socially inappropriate

behaviors (Kales et al., 2015). This set of symptoms has also been referred to as non-cognitive neuropsychiatric symptoms of dementia (Kales et al., 2014).

Comprehensive treatment plan. A plan of treatment that is developed as an outgrowth of the psychiatric evaluation and is modified as clinically indicated. A comprehensive treatment plan can include non-pharmacological and pharmacological interventions. It is individualized to the patient's clinical presentation, safety-related needs, concomitant medical conditions, personal background, relationships, life circumstances, and strengths and vulnerabilities. There is no prescribed format that a comprehensive treatment plan must follow. The breadth and depth of the initial treatment plan will depend upon the amount of time and extent of information that is available. The fully developed treatment plan will also vary in breadth and depth depending upon factors such as the needs of the patient and the setting in which care is occurring. Additions and modifications to the treatment plan are made as additional information accrues (e.g., from family, staff, medical records, and other collateral sources) and the patient's responses to clinical interventions are observed.

Dementia. A degenerative condition characterized by the development of multiple cognitive deficits that include memory impairment and at least one of the following cognitive disturbances: aphasia, apraxia, agnosia, or a disturbance in executive functioning. The cognitive deficits cannot occur exclusively during the course of a delirium; they must be sufficiently severe to cause impairment in occupational or social functioning and must represent a decline from a previously higher level of functioning (American Psychiatric Association, 2000). The definition of major neurocognitive disorder, as used in *The Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM–5), is somewhat broader than the term dementia, in that individuals with substantial decline in a single domain can receive this diagnosis (American Psychiatric Association, 2013).

Non-pharmacological interventions. Any of a wide variety of interventions other than medications. Non-pharmacological interventions include, but are not limited to, cognitive/emotion-oriented Interventions (e.g., reminiscence therapy, validation therapy, simulated presence therapy, cognitive training and rehabilitation), sensory stimulation interventions (e.g., acupuncture, aromatherapy, light therapy, massage and touch therapy, music therapy, Snoezelen multisensory stimulation therapy), individualized behavioral reinforcement strategies, animal-assisted therapy, exercise, environmental modifications (e.g., reducing noise, decreasing clutter, removing access to sharp objects, establishing daily routines, providing orientation, improving lighting, increasing color contrasts), and caregiver support and education (O'Neil et al., 2011; Kales et al., 2015). Non-pharmacological interventions do not include restraint or seclusion.

Quantitative measures. Clinician- or patient-administered tests or scales that provide a numerical rating of features such as symptom severity, level of functioning, or quality of life and have been shown to be valid and reliable.

Surrogate decision maker. The individual who is designated to make decisions on behalf of the patient in circumstances where the patient lacks the capacity to do so. The specific designation of and terminology used to describe a surrogate decision maker will depend upon state and federal law.

References

Note: References to supporting research evidence are denoted by *.

Aarsland D, Perry R, Larsen JP, et al: Neuroleptic sensitivity in Parkinson's disease and parkinsonian dementias. *J Clin Psychiatry.* 66(5):633-7, 2005

Adelman RD, Tmanova LL, Delgado D, Dion S, Lachs MS: Caregiver burden: a clinical review. *JAMA* 311(10):1052-60, Mar 12 2014

Agency for Healthcare Research and Quality: Methods Guide for Effectiveness and Comparative Effectiveness Reviews. AHRQ Publication No. 10(14)-EHC063-EF. Rockville, MD, Agency for Healthcare Research and Quality. January 2014. Chapters available at: www.effectivehealthcare.ahrq.gov.

Alzheimer's Association. Caregivers for Alzheimer's and Dementia Face Special Challenges. Accessed on October 1, 2015 at <http://www.alz.org/care/overview.asp>

American Diabetes Association: (2) Classification and diagnosis of diabetes. *Diabetes Care.* 38 Suppl:S8-S16, 2015

American Diabetes Association; American Psychiatric Association; American Association of Clinical Endocrinologists; North American Association for the Study of Obesity. Consensus development conference on antipsychotic drugs and obesity and diabetes. *Diabetes Care.* 27(2):596-601, 2004

American Geriatrics Society: Choosing Wisely. Accessed on July 14, 2015 at <http://www.choosingwisely.org/clinician-lists/american-geriatrics-society-antipsychotics-for-dementia/>

American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons. Pharmacological management of persistent pain in older persons. *J Am Geriatr Soc.* 57(8):1331-46, 2009

American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR. 4th ed., text rev. Washington DC, American Psychiatric Association, 2000

American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition. Arlington, VA, American Psychiatric Publishing, 2013

American Psychiatric Association: Choosing Wisely: Five things patients and physicians should question. Accessed on July 14, 2015 at <http://www.choosingwisely.org/societies/american-psychiatric-association/>

American Psychiatric Association: Practice Guidelines for the Psychiatric Evaluation of Adults. 3rd Edition. Arlington, VA, American Psychiatric Association Publishing, 2015

American Psychiatric Association: Practice guideline for the treatment of patients with schizophrenia 2nd Edition. *Am J Psychiatry*. 161(2 Suppl):1-56, 2004

Andrews JC, Schünemann HJ, Oxman AD, et al: GRADE guidelines: 15. Going from evidence to recommendation—determinants of a recommendation's direction and strength. *J Clin Epidemiol* 66(7):726-735, Jul 2013

Ayalon L, Gum AM, Feliciano L, Areal PA: Effectiveness of nonpharmacological interventions for the management of neuropsychiatric symptoms in patients with dementia: a systematic review. *Arch Intern Med* 166:2182-2188, 2006

Ballard C, Hanney ML, Theodoulou M, et al: The dementia antipsychotic withdrawal trial (DART-AD): long-term follow-up of a randomised placebo-controlled trial. *The Lancet Neurology* 8:151-157, 2009*

Ballard C, Lana MM, Theodoulou M, et al: A randomised, blinded, placebo-controlled trial in dementia patients continuing or stopping neuroleptics (the DART-AD trial). *PLoS Medicine* 5:e76, 2008*

Ballard C, Margallo-Lana M, Juszczak E, et al: Quetiapine and rivastigmine and cognitive decline in Alzheimer's disease: randomised double blind placebo controlled trial. *BMJ* 330(7496):874, 2005*

Ballard CG, Thomas A, Fossey J, et al: A 3-month, randomized, placebo-controlled, neuroleptic discontinuation study in 100 people with dementia: the neuropsychiatric inventory median cutoff is a predictor of clinical outcome. *J Clin Psychiatry* 65(1):114-119, Jan 2004*

Balshem H, Helfand M, Schünemann HJ, et al: GRADE guidelines: 3. Rating the quality of evidence. *J Clin Epidemiol* 64(4):401-406, Apr 2011

Barak Y, Plopski I, Tadger S, Paleacu D: Escitalopram versus risperidone for the treatment of behavioral and psychotic symptoms associated with Alzheimer's disease: a randomized double-blind pilot study. *Int Psychogeriatr* 23(9):1515-1519, 2011*

Barnett MJ, Wehring H, Perry PJ: Comparison of risk of cerebrovascular events in an elderly VA population with dementia between antipsychotic and nonantipsychotic users. *J Clin Psychopharmacol* 27(6):595-601, 2007*

Beach TG, Monsell SE, Phillips LE, Kukull W. Accuracy of the clinical diagnosis of Alzheimer disease at National Institute on Aging Alzheimer Disease Centers, 2005-2010. *J Neuropathol Exp Neurol*. 71(4):266-73, 2012.

Beerens HC, Zwakhalen SM, Verbeek H, et al: Factors associated with quality of life of people with dementia in long-term care facilities: a systematic review. *Int J Nurs Stud*. 2013 Sep;50(9):1259-70

- Bradford A, Shrestha S, Snow AL, et al.: Managing pain to prevent aggression in people with dementia: a nonpharmacologic intervention. *Am J Alzheimers Dis Other Demen.* 27(1):41-7, 2012
- Breder C, Swanink R, Marcus R, et al: Dose-ranging study of aripiprazole in patients with dementia of Alzheimer's disease. *Neurobiology of Aging* 25: S190, 2004*
- Brito JP, Domecq JP, Murad MH, et al: The Endocrine Society guidelines: when the confidence cart goes before the evidence horse. *J Clin Endocrinol Metab* 98(8):3246-3252, Aug 2013
- Brody H, Ames D, Snowdon J, et al: A randomized placebo-controlled trial of risperidone for the treatment of aggression, agitation, and psychosis of dementia. *J Clin Psychiatry* 64(2):134-143, 2003*
- Brody H, Ames D, Snowdon J, et al: Risperidone for psychosis of Alzheimer's disease and mixed dementia: results of a double-blind, placebo-controlled trial. *Int J Geriatr Psychiatry* 20(12):1153-1157, 2005*
- Brody H, Arasaratnam C: Meta-analysis of nonpharmacological interventions for neuropsychiatric symptoms of dementia. *Am J Psychiatry* 169:946-953, 2012
- Brookmeyer R, Johnson E, Ziegler-Graham K, Arrighi HM: Forecasting the global burden of Alzheimer's disease. *Alzheimers Dement* 3(3):186-91, Jul 2007
- Chan MC, Chong CS, Wu AY, et al: Antipsychotics and risk of cerebrovascular events in treatment of behavioural and psychological symptoms of dementia in Hong Kong: a hospital-based, retrospective, cohort study. *Int J Geriatr Psychiatry* 25(4):362-370, 2010*
- Chan TC, Luk JK, Shea YF, et al: Continuous use of antipsychotics and its association with mortality and hospitalization in institutionalized Chinese older adults: an 18-month prospective cohort study. *Int Psychogeriatr* 23(10):1640-1648, 2011*
- Chan WC, Lam LC, Choy CN, et al: A double-blind randomised comparison of risperidone and haloperidol in the treatment of behavioural and psychological symptoms in Chinese dementia patients. *Int J Geriatr Psychiatry* 16(12):1156-1162, 2001*
- Chare L, Hodges JR, Leyton CE, McGinley C, et al: New criteria for frontotemporal dementia syndromes: clinical and pathological diagnostic implications. *J Neurol Neurosurg Psychiatry.* 85(8):865-70, 2014
- Chatterjee S, Chen H, Johnson ML, Aparasu RR: Comparative risk of cerebrovascular adverse events in community-dwelling older adults using risperidone, olanzapine and quetiapine: a multiple propensity score-adjusted retrospective cohort study. *Drugs Aging* 29(10):807-817, 2012*
- Cohen-Mansfield J: Nonpharmacologic interventions for inappropriate behaviors in dementia. *Am J Geriatr Psychiatry* 9(4):361-381, 2001

- Cohen-Mansfield J, Libin A, Marx MA: Nonpharmacological treatment of agitation: A controlled trial of systematic individualized intervention. *J Gerontol A Biol Sci Med Sci* 62A(8):908- 916, 2007
- Cohen-Mansfield J, Marx MS, Rosenthal AS: A description of agitation in a nursing home. *J Gerontol* 44(3):M77-84, May 1989
- Corbett A, Burns A, Ballard C: Don't use antipsychotics routinely to treat agitation and aggression in people with dementia. *BMJ* 349:g6420, 2014
- Council of Medical Specialty Societies (CMSS): Principles for the Development of Specialty Society Clinical Guidelines. Chicago, IL, Council of Medical Specialty Societies, 2012
- Culo S, Mulsant BH, Rosen J, et al: Treating neuropsychiatric symptoms in dementia with lewy bodies: a randomized controlled-trial. *Alzheimer Dis Assoc Disord* 24(4):360-364, 2010*
- Cummings J, Mintzer J, Brodaty H, et al: Agitation in cognitive disorders: International Psychogeriatric Association provisional consensus clinical and research definition. *Int Psychogeriatr* 27(1):7-17, Jan 2015
- Dauphinot V, Delphin-Combe F, Mouchoux C, et al: Risk factors of caregiver burden among patients with Alzheimer's disease or related disorders: a cross-sectional study. *J Alzheimers Dis* 44(3):907-916, Jan 2015
- Deberdt WG, Dysken MW, Rappaport SA, et al: Comparison of olanzapine and risperidone in the treatment of psychosis and associated behavioral disturbances in patients with dementia. *Am J Geriatr Psychiatry* 13(8):722-730, 2005*
- De Deyn PP, Carrasco MM, Deberdt W, et al: Olanzapine versus placebo in the treatment of psychosis with or without associated behavioral disturbances in patients with Alzheimer's disease. *Int J Geriatr Psychiatry* 19(2):115-126, 2004*
- De Deyn PP, Eriksson H, Svensson H: Tolerability of extended-release quetiapine fumarate compared with immediate-release quetiapine fumarate in older patients with Alzheimer's disease with symptoms of psychosis and/or agitation: a randomised, double-blind, parallel-group study. *Int J Geriatr Psychiatry* 27(3):296-304, 2012*
- De Deyn P, Jeste DV, Swanink R, et al: Aripiprazole for the treatment of psychosis in patients with Alzheimer's disease: a randomized, placebo-controlled study. *J Clin Psychopharmacol* 25(5):463-467, 2005*
- De Deyn PP, Rabheru K, Rasmussen A, et al: A randomized trial of risperidone, placebo, and haloperidol for behavioral symptoms of dementia. *Neurology* 53(5):946-955, 1999*

Declercq T, Petrovic M, Azermai M, et al: Withdrawal versus continuation of chronic antipsychotic drugs for behavioural and psychological symptoms in older people with dementia. *Cochrane Database Syst Rev*. 3:CD007726, 2013

Defrancesco M, Marksteiner J, Fleischhacker WW, et al: Use of benzodiazepines in Alzheimer's disease: Asystematic review of literature. *Int J Neuropsychopharmacol*. 18(10):1-11, 2015

Devanand DP, Mintzer J, Schultz SK, et al: Relapse risk after discontinuation of risperidone in Alzheimer's disease. *N Engl J Med* 367(16):1497-1507, 2012*

Devanand DP, Pelton GH, Cunqueiro K, et al: A 6-month, randomized, double-blind, placebo-controlled pilot discontinuation trial following response to haloperidol treatment of psychosis and agitation in Alzheimer's disease. *Int J Geriatr Psychiatry* 26(9):937-943, 2011*

de Vugt ME, Stevens F, Aalten P, et al: A prospective study of the effects of behavioral symptoms on the institutionalization of patients with dementia. *Int Psychogeriatr* 17:577-589, 2005

Djulgovic B, Trikalinos TA, Roback J, et al: Impact of quality of evidence on the strength of recommendations: an empirical study. *BMC Health Serv Res* 9:120, Jul 2009

Dutcher SK, Rattiner GB, Langenberg P, et al: Effect of medications on physical function and cognition in nursing home residents with dementia. *J Am Geriatr Soc* 62(6):1046-1055, 2014*

Ferri CP, Prince M, Brayne C, et al: Alzheimer's Disease International. Global prevalence of dementia: a Delphi consensus study. *Lancet* 366(9503):2112-2117, Dec 2005

Finkel S, Costae Silva J, Cohen G, et al: Behavioural and psychological signs and symptoms of dementia: a consensus statement on current knowledge and implications for research and treatment. *Int Psychogeriatr* 8:497-500, 1996
Fontaine CS, Hynan LS, Koch K, et al: A double-blind comparison of olanzapine versus risperidone in the acute treatment of dementia-related behavioral disturbances in extended care facilities. *J of Clin Psychiatry* 64:726-730, 2003*
Freund-Levi Y, Bloniecki V, Auestad B, et al: Galantamine versus risperidone for agitation in people with dementia: a randomized, twelve-week, single-center study. *Dement Geriatr Cogn Disord* 38(3-4):234-244, 2014b*

Freund-Levi Y, Jedenius E, Tysen-Backstrom AC, et al: Galantamine versus risperidone treatment of neuropsychiatric symptoms in patients with probable dementia: an open randomized trial. *Am J Geriatr Psychiatry* 22(4):341-348, 2014a*

Gardette V, Lapeyre-Mestre M, Coley N, et al: Antipsychotic use and mortality risk in community-dwelling Alzheimer's disease patients: evidence for a role of dementia severity. *Curr Alzheimer Res* 9(9):1106-1116, 2012*

Galindo-Garre F, Volicer L, Van der Steen JT. Factors related to rejection of care and behaviors directed towards others: a longitudinal study in nursing home residents with dementia. *Dement Geriatr Cogn Dis Extra* 5: 123-134, 2015

Gareri P, Cotroneo A, Lacava R, et al: Comparison of the efficacy of new and conventional antipsychotic drugs in the treatment of behavioral and psychological symptoms of dementia (BPSD). *Arch Gerontol Geriatr Suppl*(9):207-215, 2004* Gerhard T, Huybrechts K, Olfson M, et al: Comparative mortality risks of antipsychotic medications in community-dwelling older adults. *Br J Psychiatry* 205(1):44-51, 2014*

Gill SS, Bronskill SE, Normand SL, et al: Antipsychotic drug use and mortality in older adults with dementia. *Ann Intern Med* 146(11):775-786, 2007*

Gisev N, Hartikainen S, Chen TF, et al: Effect of comorbidity on the risk of death associated with antipsychotic use among community-dwelling older adults. *Int Psychogeriatr* 24(7):1058-1064, 2012*

Gitlin LN, Hodgson N, Jutkowitz E, Pizzi L: The cost-effectiveness of a nonpharmacologic intervention for individuals with dementia and family caregivers: the tailored activity program. *Am J Geriatr Psychiatry* 18:510-519, 2010

Gitlin LN, Marx KA, Stanley IH, et al: Assessing neuropsychiatric symptoms in people with dementia: a systematic review of measures. *Int Psychogeriatr*. 26(11):1805-48, 2014

Glenner JA, Stehman JM, Davagnino J, Galante MJ, Green ML. *When your loved one has dementia: A simple guide for caregivers*. Baltimore: Johns Hopkins University Press, 2005

Gozalo P, Prakash S, Qato DM, et al: Effect of the bathing without a battle training intervention on bathing-associated physical and verbal outcomes in nursing home residents with dementia: a randomized crossover diffusion study. *J Am Geriatr Soc*. 62(5):797-804, 2014

Guyatt G, Eikelboom JW, Akl EA, et al: A guide to GRADE guidelines for the readers of JTH. *J Thromb Haemost* 11(8):1603-1608, Aug 2013

Guyatt G, Gutterman D, Baumann MH, et al: Grading strength of recommendations and quality of evidence in clinical guidelines: report from an American College of Chest Physicians Task Force. *Chest* 129(1):174-181, Jan 2006

Guyatt GH, Oxman AD, Kunz R, et al; GRADE Working Group: Going from evidence to recommendations. *BMJ* 336(7652):1049-1051, 2008

Hazlehurst JM, Armstrong MJ, Sherlock M, et al: A comparative quality assessment of evidence-based clinical guidelines in endocrinology. *Clin Endocrinol (Oxf)* 78(2):183-190, Feb 2013

Hebert LE, Weuve J, Scherr PA, Evans DA: Alzheimer disease in the United States (2010-2050) estimated using the 2010 census. *Neurology* 80(19):1778-1783, May 2013

- Herrmann N, Mamdani M, Lanctot KL: Atypical antipsychotics and risk of cerebrovascular accidents. *Am J Psychiatry* 161(6):1113-1115, 2004*
- Holmes C, Wilkinson D, Dean C, et al: Risperidone and rivastigmine and agitated behaviour in severe Alzheimer's disease: a randomised double blind placebo controlled study. *Int J Geriatr Psychiatry* 22(4): 380-381, 2007*
- Husebo BS, Ballard C, Aarsland D. Pain treatment of agitation in patients with dementia: a systematic review. *Int J Geriatr Psychiatry*. 26(10):1012-8, 2011.
- Husebo BS, Ballard C, Cohen-Mansfield J et al: The response of agitated behavior to pain management in persons with dementia. *Am J of Geriatr Psychiatry* 22(7):708-717, 2014
- Huybrechts KF, Gerhard T, Crystal S, et al: Differential risk of death in older residents in nursing homes prescribed specific antipsychotic drugs: population based cohort study. *BMJ (Clinical research ed)* 344:e977, 2012*
- Huybrechts KF, Rothman KJ, Silliman RA, et al: Risk of death and hospital admission for major medical events after initiation of psychotropic medications in older adults admitted to nursing homes. *CMAJ* 183(7):E411-E419, 2011*
- Imfeld P, Bodmer M, Schuerch M, et al: Risk of incident stroke in patients with Alzheimer disease or vascular dementia. *Neurology*. 81(10):910-919, 2013*
- Institute of Medicine: *Clinical Practice Guidelines We Can Trust*. Washington, DC, National Academies Press, 2011
- Ishii S, Streim JE, Saliba D. Potentially reversible resident factors associated with rejection of care behaviors. *Journal of the American Geriatrics Society* 58: 1693-1670, 2010
- Jacobson SA: *Clinical Manual of Geriatric Psychopharmacology, Second Edition*. Arlington, VA, American Psychiatric Publishing, 2014
- Jadad AR, Moore RA, Carroll D, et al: Assessing the quality of reports of randomized clinical trials: is blinding necessary? *Control Clin Trials* 17(1):1-12, Feb 1996
- Jalbert JJ, Daiello LA, Eaton CB, et al: Antipsychotic use and the risk of diabetes in nursing home residents with dementia. *Am J Geriatr Pharmacother* 9(3):153-163, 2011*
- Jalbert JJ, Eaton CB, Miller SC, Lapane KL: Antipsychotic use and the risk of hip fracture among older adults afflicted with dementia. *J Am Med Dir Assoc* 11(2):120-127, 2010*
- Jensen M, Agbata IN, Canavan M, McCarthy G: Effectiveness of educational interventions for informal caregivers of individuals with dementia residing in the community: systematic review and meta-analysis of randomised controlled trials. *Int J Geriatr Psychiatry*. 30(2):130-43, 2015

- Kales HC, Gitlin LN, Lyketsos CG: Detroit Expert Panel on Assessment and Management of Neuropsychiatric Symptoms of Dementia. Management of neuropsychiatric symptoms of dementia in clinical settings: recommendations from a multidisciplinary expert panel. *J Am Geriatr Soc* 62(4):762-769, Apr 2014
- Kales HC, Gitlin LN, Lyketsos CG: Assessment and management of behavioral and psychological symptoms of dementia. *BMJ* 350:h369, Mar 2015
- Kales HC, Kim HM, Zivin K, et al: Risk of mortality among individual antipsychotics in patients with dementia. *Am J Psychiatry* 169(1):71-79, 2012*
- Kales HC, Valenstein M, Kim HM, et al: Mortality risk in patients with dementia treated with antipsychotics versus other psychiatric medications. *Am J Psychiatry* 164(10):1568-1576, 2007*
- Katz IR, Jeste DV, Mintzer JE, et al: Comparison of risperidone and placebo for psychosis and behavioral disturbances associated with dementia: a randomized, double-blind trial. Risperidone Study Group. *J Clin Psychiatry* 60(2):107-115, 1999*
- Kaufer DI, Cummings J, Ketchel P, et al: Assessing neuropsychiatric symptoms in clinical practice: The Neuropsychiatric Inventory Questionnaire (NPI-Q). *J of Neuropsychiatry Clin Neurosci* 12(2):233-239, 2000
- Kay SR, Wolkenfeld F, Murrill LM. Profiles of aggression among psychiatric patients. I. Nature and prevalence. *J Nerv Ment Dis.*;176(9):539-46, 1988
- Kleijer BC, van Marum RJ, Egberts AC, et al: Risk of cerebrovascular events in elderly users of antipsychotics. *J Psychopharmacol* 23(8):909-914, 2009*
- Kong EH, Evans LK, Guevara JP: Nonpharmacological intervention for agitation in dementia: a systematic review and meta-analysis. *Aging Ment Health* 13(4):512-520, Jul 2009
- Kunik ME, Snow AL, Davila JA, et al: Causes of aggressive behavior in patients with dementia. *J Clin Psychiatry*. 71(9):1145-52, 2010
- Langballe EM, Engdahl B, Nordeng H, et al: Short- and long-term mortality risk associated with the use of antipsychotics among 26,940 dementia outpatients: A population-based study. *Am J Geriatr Psychiatry* 22(4):321-331, 2014*
- Laredo L, Vargas E, Blasco AJ, et al: Risk of cerebrovascular accident associated with use of antipsychotics: population-based case-control study. *J Am Geriatr Soc* 59(7):1182-1187, 2011*
- Lassiter J, Bennett WM, Olyaei AJ: Drug dosing in elderly patients with chronic kidney disease. *Clin Geriatr Med* 29(3):657-705, Aug 2013

- Liperoti R, Onder G, Landi F, et al: All-cause mortality associated with atypical and conventional antipsychotics among nursing home residents with dementia: a retrospective cohort study. *J Clin Psychiatry* 70(10):1340-1347, 2009*
- Lipkovich I, Ahl J, Nichols R, et al: Weight changes during treatment with olanzapine in older adult patients with dementia and behavioral disturbances. *J Geriatr Psychiatry Neurol* 20(2):107-114, 2007*
- Lipscombe LL, Lévesque L, Gruneir A, et al: Antipsychotic drugs and hyperglycemia in older patients with diabetes. *Arch Intern Med.* 169(14):1282-9, 2009 Jul 27
- Lipscombe LL, Lévesque LE, Gruneir A, et al: Antipsychotic drugs and the risk of hyperglycemia in older adults without diabetes: a population-based observational study. *Am J Geriatr Psychiatry.* 19(12):1026-33, 2011.*
- Liu ME, Tsai SJ, Chang WC, et al: Population-based 5-year follow-up study in Taiwan of dementia and risk of stroke. *PloS One* 8(4):e61771, 2013*
- Livingston G, Kelly L, Lewis-Holmes E, et al: Non-pharmacological interventions for agitation in dementia: systematic review of randomised controlled trials. *Br J Psychiatry.* 205(6):436-42, 2014
- Lopez OL, Becker JT, Chang Y-F, et al: The long-term effects of conventional and atypical antipsychotics in patients with probable Alzheimer's disease. *Am J Psychiatry* 170(9):1051-1058, 2013*
- Lyketsos CG, Lopez O, Jones B, et al: Prevalence of neuropsychiatric symptoms in dementia and mild cognitive impairment: results from the cardiovascular health study. *JAMA* 288(12):1475-1483, 2002
- Lyketsos CG, Steinberg M, Tschanz JT, et al: Mental and behavioral disturbances in dementia: findings from the Cache County Study on Memory in Aging. *Am J Psychiatry* 157(5):708-714, 2000
- Mace NL, Rabins PV. *The 36-hour day: A family guide to caring for people who have alzheimer disease, related dementias, and memory loss.* 5th ed. Baltimore: Johns Hopkins University Press, 2011
- Maglione M, Ruelaz Maher A, Hu J, et al: Off-Label Use of Atypical Antipsychotics: An Update. Comparative Effectiveness Review No. 43. (Prepared by the Southern California Evidence-based Practice Center under Contract No. HHS290-2007-10062-1.) Rockville, MD, Agency for Healthcare Research and Quality, September 2011. Available at:www.effectivehealthcare.ahrq.gov/reports/final.cfm.*
- Marras C, Herrmann N, Anderson GM, et al: Atypical antipsychotic use and parkinsonism in dementia: effects of drug, dose, and sex. *Am J Geriatr Pharmacother* 10(6):381-389, 2012*
- Maust DT, Kim HM, Seyfried LS, et al: Antipsychotics, other psychotropics, and the risk of death in patients with dementia: number needed to harm. *JAMA Psychiatry* 72(5):438-445, May 2015. doi: 10.1001/jamapsychiatry.2014.3018

Miller EA, Rosenheck RA, Schneider LS: Caregiver burden, health utilities, and institutional service use in Alzheimer's disease. *Int J Geriatr Psychiatry* 27(4):382-393, Apr 2012

Mintzer J, Greenspan A, Caers I, et al: Risperidone in the treatment of psychosis of Alzheimer disease: results from a prospective clinical trial. *Am J Geriatr Psychiatry* 14(3):280-291, 2006*

Mintzer JE, Tune LE, Breder CD, et al: Aripiprazole for the treatment of psychoses in institutionalized patients with Alzheimer dementia: a multi-center, randomized, double-blind, placebo-controlled assessment of three fixed doses. *Am J Geriatr Psychiatry* 15(11):918-931, 2007*

Mohamed S, Rosenheck R, Lyketsos CG, et al: Effect of second- generation antipsychotics on caregiver burden in Alzheimer's disease. *J Clin Psychiatry* 73(1):121-128, Jan 2012

Moretti R, Torre P, Antonello RM, et al: Olanzapine as a possible treatment of behavioral symptoms in vascular dementia: risks of cerebrovascular events. A controlled, open-label study. *J of Neurology* 252:1186-1193, 2005*

Mowla A, Pani A: Comparison of topiramate and risperidone for the treatment of behavioral disturbances of patients with Alzheimer disease: a double-blind, randomized clinical trial. *J Clin Psychopharmacol* 30(1):40-43, 2010*

Mrak RE, Griffin WS. Dementia with Lewy bodies: Definition, diagnosis, and pathogenic relationship to Alzheimer's disease. *Neuropsychiatr Dis Treat.* 3(5):619-25, 2007

Mulsant BH, Pollock BG: "Psychopharmacology" in *The American Psychiatric Publishing Textbook of Geriatric Psychiatry, Fifth Edition*; Steffens DC, Blazer DG, Thakur ME. Eds. Arlington, VA, American Psychiatric Publishing, 2015

O'Neil M, Freeman M, Christensen V, et al: Non-pharmacological Interventions for Behavioral Symptoms of Dementia: A Systematic Review of the Evidence. VA-ESP Project #05-225; 2011. Available at <http://www.hsrd.research.va.gov/publications/esp/Dementia-Nonpharm.pdf>. Accessed on July 11, 2015

Ornstein K, Gaugler JE: The problem with "problem behaviors": a systematic review of the association between individual patient behavioral and psychological symptoms and caregiver depression and burden within the dementia patient-caregiver dyad. *Int Psychogeriatr* 24(10):1536-1552, 2012

O'Rourke HM, Duggleby W, Fraser KD, Jerke L. Factors that affect quality of life from the perspective of people with dementia: a metasynthesis. *J Am Geriatr Soc.* 63(1):24-38, 2015

Overall, JE, Gorham DR: The Brief Psychiatric Rating Scale (BPRS): recent developments in ascertainment and scaling. *Psychopharmacology Bulletin* 24:97-99, 1988

Paleacu D, Barak Y, Mirecky I, Maze D: Quetiapine treatment for behavioural and psychological symptoms of dementia in Alzheimer's disease patients: a 6-week, double-blind, placebo-controlled study. *Int J Geriatr Psychiatry* 23(4):393-400, 2008*

Pariante A, Fourrier-Reglat A, Ducruet T, et al: Antipsychotic use and myocardial infarction in older patients with treated dementia. *Arch Intern Med* 172(8):648-653; discussion 654-645, 2012*

Pharmacy Quality Alliance (PQA): Technical specifications for PQA approved measures. Springfield, VA, Pharmacy Quality Alliance (PQA), September 2014. 56 p. Available at <http://www.qualitymeasures.ahrq.gov/browse/by-organization-indiv.aspx?orgid=2491&objid=47489>. Accessed on July 14, 2015.

Pieper MJ, van Dalen-Kok AH, Francke AL, et al: Interventions targeting pain and behavior in dementia: A systematic review. *Ageing Res Rev* 12(4):1042-1055, 2013

Piersanti M, Capannolo M, Turchetti M, et al: Increase in mortality rate in patients with dementia treated with atypical antipsychotics: a cohort study in outpatients in Central Italy. *Riv Psichiatr* 49(1):34-40, 2014*

Pijnenburg YA, Sampson EL, Harvey RJ, et al: Vulnerability to neuroleptic side effects in frontotemporal lobar degeneration. *Int J Geriatr Psychiatry*. 18(1):67-72, 2003

Plassman BL, Langa KM, Fisher GG, et al: Prevalence of dementia in the United States: the aging, demographics, and memory study. *Neuroepidemiology* 29(1-2):125-132, 2007

Pollock BG, Mulsant BH, Rosen J, et al: A double-blind comparison of citalopram and risperidone for the treatment of behavioral and psychotic symptoms associated with dementia. *Am J Geriatr Psychiatry* 15(11):942-952, 2007.*

Pratt NL, Roughead EE, Ramsay E, et al: Risk of hospitalization for stroke associated with antipsychotic use in the elderly: a self-controlled case series. *Drugs Aging* 27(11):885-893, 2010*

Pratt N, Roughead EE, Ramsay E, et al: Risk of hospitalization for hip fracture and pneumonia associated with antipsychotic prescribing in the elderly: a self-controlled case-series analysis in an Australian health care claims database. *Drug Saf* 34(7):567-575, 2011*

Pressman PS, Miller BL. Diagnosis and management of behavioral variant frontotemporal dementia. *Biol Psychiatry*. 75(7):574-81, 2014

Prince M, Bryce R, Albanese E, et al: The global prevalence of dementia: a systematic review and metaanalysis. *Alzheimers Dement*. 9(1):63-75 e62, 2013

- Rafaniello C, Lombardo F, Ferrajolo C, et al: Predictors of mortality in atypical antipsychotic-treated community-dwelling elderly patients with behavioural and psychological symptoms of dementia: a prospective population-based cohort study from Italy. *Eur J Clin Pharmacol* 70(2):187-195, 2014*
- Rainer M, Haushofer M, Pfolz H, et al: Quetiapine versus risperidone in elderly patients with behavioural and psychological symptoms of dementia: efficacy, safety and cognitive function. *Eur Psychiatry* 22(6): 395-403, 2007*
- Richter T, Meyer G, Möhler R, Köpke S et al: Psychosocial interventions for reducing antipsychotic medication in care home residents. *Cochrane Database of Syst Rev*, 2012 12:CD008634. DOI: 10.1002/14651858.CD008634.pub2.
- Rochon PA, Gruneir A, Gill SS, et al: Older men with dementia are at greater risk than women of serious events after initiating antipsychotic therapy. *J Am Geriatr Soc* 61(1):55-61, 2013*
- Rochon PA, Normand SL, Gomes T, et al: Antipsychotic therapy and short-term serious events in older adults with dementia. *Arch Intern Med* 168(10):1090-1096, 2008*
- Ropacki SA, Jeste DV: Epidemiology of and risk factors for psychosis of Alzheimer's disease: a review of 55 studies published from 1990 to 2003. *Am J Psychiatry* 162(11):2022-2030, Nov 2005
- Rosenberg PB, Mielke MM, Han D, et al: The association of psychotropic medication use with the cognitive, functional, and neuropsychiatric trajectory of Alzheimer's disease. *Int J Geriatr Psychiatry* 27(12):1248-1257, 2012*
- Rosenheck RA, Leslie DL, Sindelar JL, et al: Clinical Antipsychotic Trial of Intervention Effectiveness- Alzheimer's Disease (CATIE-AD) investigators. Cost-benefit analysis of second-generation antipsychotics and placebo in a randomized trial of the treatment of psychosis and aggression in Alzheimer disease. *Arch Gen Psychiatry* 64(11):1259-1268, Nov 2007
- Rossom RC, Rector TS, Lederle FA, Dysken MW: Are all commonly prescribed antipsychotics associated with greater mortality in elderly male veterans with dementia? *J Am Geriatr Soc* 58(6):1027-1034, 2010*
- Rountree SD, Chan W, Pavlik VN, et al: Factors that influence survival in a probable Alzheimer disease cohort. *Alzheimers Res Ther* 4(3):16, 2012*
- Ruths S, Straand J, Nygaard HA, et al: Effect of antipsychotic withdrawal on behavior and sleep/wake activity in nursing home residents with dementia: a randomized, placebo-controlled, double-blinded study. The Bergen District Nursing Home Study. *J Am Geriatr Soc* 52(10):1737-1743, 2004*
- Sacchetti E, Turrina C, Valsecchi P: Cerebrovascular accidents in elderly people treated with antipsychotic drugs: a systematic review. *Drug Saf* 33(4):273-288, 2010*

Savaskan E, Schnitzler C, Schroder C, et al: Treatment of behavioural, cognitive and circadian rest-activity cycle disturbances in Alzheimer's disease: haloperidol vs. quetiapine. *Int J Neuropsychopharmacol* 9(5):507-516, 2006*

Savva GM, Zaccai J, Matthews FE, et al: Prevalence, correlates and course of behavioural and psychological symptoms of dementia in the population. *Br J Psychiatry* 194(3):212-219, 2009

Schmedt N, Garbe E: Antipsychotic drug use and the risk of venous thromboembolism in elderly patients with dementia. *J Clin Psychopharmacol* 33(6):753-758, 2013*

Schneeweiss S, Setoguchi S, Brookhart A, et al: Risk of death associated with the use of conventional versus atypical antipsychotic drugs among elderly patients. *CMAJ* 176(5):627-632, 2007*

Schneider LS, Dagerman KS, Insel P: Risk of death with atypical antipsychotic drug treatment for dementia: meta-analysis of randomized placebo-controlled trials. *JAMA* 294(15):1934-1943, 2005

Schneider LS, Tariot PN, Dagerman KS, et al: Effectiveness of atypical antipsychotic drugs in patients with Alzheimer's disease. *N Engl J Med* 355(15):1525-1538, 2006.*

Selbæk G, Engedal K, Bergh S: The prevalence and course of neuropsychiatric symptoms in nursing home patients with dementia: a systematic review. *J Am Med Dir Assoc* 14(3):161-169, Mar 2013

Shekelle P, Maglione M, Bagley S, et al: Comparative Effectiveness of Off-Label Use of Atypical Antipsychotics. Comparative Effectiveness Review No. 6. (Prepared by the Southern California/RAND Evidence-based Practice Center under Contract No. 290-02-0003.) Rockville, MD, Agency for Healthcare Research and Quality, January 2007. Available at: www.effectivehealthcare.ahrq.gov/reports/final.cfm

Shiffman RN, Dixon J, Brandt C, et al: The GuideLine Implementability Appraisal (GLIA): development of an instrument to identify obstacles to guideline implementation. *BMC Med Inform Decis Mak* 5:23, Jul 2005

Sloane PD, Zimmerman S, Suchindran C, et al: The public health impact of Alzheimer's disease, 2000-2050: potential implication of treatment advances. *Annu Rev Public Health* 23:213-231, 2002

Steinberg M, Shao H, Zandi P, et al: Point and 5-year period prevalence of neuropsychiatric symptoms in dementia: the Cache County Study. *Int J Geriatr Psychiatry* 23(2):170-177, 2008

Sterke CS, van Beeck EF, van der Velde N, et al: New insights: dose-response relationship between psychotropic drugs and falls: a study in nursing home residents with dementia. *J Clin Pharmacol* 52(6):947-955, 2012*

Stinton C, McKeith I, Taylor JP, et al: Pharmacological management of Lewy Body Dementia: A systematic review and meta-analysis. *Am J Psychiatry*. 172(8):731-42, 2015

Street JS, Clark WS, Gannon KS, et al: Olanzapine treatment of psychotic and behavioral symptoms in patients with Alzheimer disease in nursing care facilities: a double-blind, randomized, placebo-controlled trial. The HGEU Study Group. *Arch Gen Psychiatry* 57(10):968-976, 2000*

Streim JE, Porsteinsson AP, Breder CD, et al: A randomized, double-blind, placebo-controlled study of aripiprazole for the treatment of psychosis in nursing home patients with Alzheimer disease. *Am J Geriatr Psychiatry* 16(7):537-550, 2008*

Suh GH, Greenspan AJ, Choi SK: Comparative efficacy of risperidone versus haloperidol on behavioural and psychological symptoms of dementia. *Int J Geriatr Psychiatry* 21(7):654-660, 2006*

Suh GH, Son HG, Ju YS, et al: A randomized, double-blind, crossover comparison of risperidone and haloperidol in Korean dementia patients with behavioral disturbances. *Am J Geriatr Psychiatry* 12(5):509-516, 2004*

Sultana J, Chang CK, Hayes RD, et al: Associations between risk of mortality and atypical antipsychotic use in vascular dementia: a clinical cohort study. *Int J Geriatr Psychiatry* 29(12):1249-1254, 2014*

Sultzer DL, Davis SM, Tariot PN, et al: Clinical symptom responses to atypical antipsychotic medications in Alzheimer's disease: phase 1 outcomes from the CATIE-AD effectiveness trial. *Am J Psychiatry* 165(7):844-854, 2008*

Sultzer DL, Schneider LS, Herrmann N for the Neuropsychiatric Syndromes Professional Interest Area of ISTAART Agitation and aggression in Alzheimer's disease: selective review and research priorities. Appendix D in Geda YE, Schneider LS, Gitlin LN, et al: Neuropsychiatric symptoms in Alzheimer's disease: past progress and anticipation of the future. *Alzheimers Dement.* 9(5):602-8, 2013

Tam-Tham H, Cepoiu-Martin M, Ronksley PE, Maxwell CJ, Hemmelgarn BR. Dementia case management and risk of long-term care placement: a systematic review and meta-analysis. *Int J Geriatr Psychiatry.* 28(9):889-902, 2013

Tariot PN, Schneider L, Katz IR, et al: Quetiapine treatment of psychosis associated with dementia: a double-blind, randomized, placebo-controlled clinical trial. *Am J Geriatr Psychiatry* 14(9):767-776, 2006*

Teranishi M, Kurita M, Nishino S, et al: Efficacy and tolerability of risperidone, yokukansan, and fluvoxamine for the treatment of behavioral and psychological symptoms of dementia: a blinded, randomized trial. *J Clin Psychopharmacol* 33(5):600-607, 2013*

Thyrian JR, Eichler T, Hertel J, et al: Burden of Behavioral and Psychiatric Symptoms in People Screened Positive for Dementia in Primary Care: Results of the DelpHi-Study. *J Alzheimers Dis*, Mar 2015 [Epub ahead of print]

- Trifiro G, Verhamme KM, Ziere G, et al: All-cause mortality associated with atypical and typical antipsychotics in demented outpatients. *Pharmacoepidemiol Drug Saf* 16(5):538-544, 2007*
- van der Lee J, Bakker TJ, Duivenvoorden HJ, Dröes RM. Multivariate models of subjective caregiver burden in dementia: a systematic review. *Ageing Res Rev.* 15:76-93m 2014
- van Reekum R, Clarke D, Conn D, et al: A randomized, placebo-controlled trial of the discontinuation of long-term antipsychotics in dementia. *Int Psychogeriatr* 14(2):197-210, 2002*
- Vasilyeva I, Biscontri RG, Enns MW, et al: Movement disorders in elderly users of risperidone and first generation antipsychotic agents: a Canadian population-based study. *PLoS One* 8(5):e64217, 2013*
- Ventura J, Lukoff D, Nuechterlein KH, et al: Training and quality assurance with the Brief Psychiatric Rating Scale. *Int J Methods Psychiatr Res.* 3:221-244, 1993
- Verhey FR, Verkaaik M, Lousberg R: Olanzapine versus haloperidol in the treatment of agitation in elderly patients with dementia: results of a randomized controlled double-blind trial. *Dement Geriatr Cogn Disord* 21(1):1-8, 2006*
- Vigen CL, Mack WJ, Keefe RS, et al: Cognitive effects of atypical antipsychotic medications in patients with Alzheimer's disease: outcomes from CATIE-AD. *Am J Psychiatry* 168(8):831-839, 2011*
- Volicer L, Bass EA, Luther SL. Agitation and resistiveness to care are two separate behavioral syndromes of dementia. *J Am Med Dir Assoc.* 8(8):527-32, 2007
- Wallace J, Paauw DS: Appropriate prescribing and important drug interactions in older adults. *Med Clin North Am* 99(2):295-310, Mar 2015
- Wilson RS, Weir DR, Leurgans SE, et al: Sources of variability in estimates of the prevalence of Alzheimer's disease in the United States. *Alzheimers Dement* 7(1):74-79, Jan 2011
- Woolcott JC, Richardson KJ, Wiens MO, et al: Meta-analysis of the impact of 9 medication classes on falls in elderly persons. *Arch Intern Med.* 169(21):1952-60, 2009
- Wooten JM: Pharmacotherapy considerations in elderly adults. *South Med J* 105(8):437-445, Aug 2012
- World Health Organization: Dementia: a public health priority, 2012. Available at http://www.who.int/mental_health/publications/dementia_report_2012/en/. Accessed online on May 10, 2015
- Yager J, Kunkle R, Fochtmann LJ, et al: Who's your expert?: Use of an expert opinion survey to inform development of American Psychiatric Association practice guidelines. *Acad Psychiatry* 38(3):376-82, 2014
- Zheng L, Mack WJ, Dagerman KS, Hsiao JK, Lebowitz BD, Lyketsos CG, Stroup TS, Sultzer DL, Tariot

PN, Vigen C, Schneider LS. Metabolic changes associated with second-generation antipsychotic use in Alzheimer's disease patients: the CATIE-AD study. *Am J Psychiatry*. 166:583-590, 2009.

Zhong KX, Tariot PN, Mintzer J, et al: Quetiapine to treat agitation in dementia: a randomized, double-blind, placebo-controlled study. *Curr Alzheimer Res* 4(1):81-93, 2007*

Disclosures

The Guideline Writing Group and Systematic Review Group reported the following disclosures during development and approval of this guideline: <<N.B. Updated in September 2015. Will be updated again prior to publication>>

Dr. Reus is employed as a professor of psychiatry at the University of California, San Francisco School of Medicine. He is a member of the board of the Accreditation Council for Continuing Medical Education (ACCME). He receives travel funds from the ACCME and the American Board of Psychiatry and Neurology (ABPN) for board meetings and test development. He receives grant-research support from National Institute of Mental Health (NIMH) and National Institute on Drug Abuse and honoraria for NIMH grant review service. He reports no conflicts of interest with his work on this guideline.

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Appendix

Review of Available Evidence

Clinical Questions

Evidence review for these guidelines was premised on the following clinical questions:

- 1A. What is the efficacy and comparative effectiveness of second-generation (“atypical”) antipsychotics for the treatment of overall behavioral symptoms in patients with Alzheimer’s disease and other dementias?

Sub-Question: How do second-generation antipsychotic medications compare with other drugs, including first-generation antipsychotics, for the treatment of overall behavioral symptoms?

- 1B. What is the efficacy and comparative effectiveness of second-generation antipsychotics for the treatment of agitation in patients with Alzheimer’s disease and other dementias?

Sub-Question: How do second-generation antipsychotic medications compare with other drugs, including first-generation antipsychotics, for the treatment of agitation in patients with Alzheimer’s disease and other dementias?

- 1C. What is the efficacy and comparative effectiveness of second-generation antipsychotics for the treatment of psychosis in patients with Alzheimer’s disease and other dementias?

Sub-Question: How do second-generation antipsychotic medications compare with other drugs, including first-generation antipsychotics, for the treatment of psychosis in patients with Alzheimer’s disease and other dementias?

2. What is the effective dose and time limit for the use of second-generation antipsychotics for the treatment of agitation, psychosis, or overall behavioral symptoms in patients with Alzheimer’s disease and other dementias?

3. What subset of patients with Alzheimer’s disease and other dementias would potentially benefit from the use of second-generation antipsychotics for the treatment of agitation, psychosis, or overall behavioral symptoms? Do effectiveness and harms differ by race/ethnicity, gender, and age group? By severity of condition and clinical subtype?

4. What are the potential adverse effects and/or complications involved with prescribing of second-generation antipsychotics to patients with Alzheimer’s disease and other dementias for the treatment of agitation, psychosis, or overall behavioral symptoms? How do the potential adverse effects and/or complications compare within the class and with other drugs used?

Review of Supporting Research Evidence

Research evidence related to these clinical questions relies on the 2011 systematic review and meta-analysis conducted by AHRQ on off-label uses of atypical antipsychotic agents (Maglione et al., 2011), which built upon a prior AHRQ review (Shekelle et al., 2007). A subsequent systematic review of the literature was conducted by APA staff (See Systematic Review Methodology) and ratings of the risk of bias and the Quality of the Body of Research Evidence were completed by the Systematic Review Group (See Rating the Strength of Supporting Research Evidence).

The randomized placebo-controlled trials with sufficient data for standardized mean difference (SMD) calculations of outcome measures were included in the AHRQ review; reported SMD values and summary statistics are from the AHRQ meta-analysis and use Hedges' *g* to calculate effect size (Maglione et al., 2011). Jadad scores of evidence quality (Jadad et al., 1996), which range from a low of 0 to a high of 5, are also taken from the AHRQ review when available or determined by the APA Systematic Review Group.

Based on the randomized placebo-controlled efficacy trials, the AHRQ report concluded that "aripiprazole, olanzapine, and risperidone have efficacy as treatment for behavioral symptoms of dementia." (p. ES-5; Maglione et al., 2011). The same medications were also noted by the AHRQ report to be superior to placebo for the treatment of agitation, with risperidone superior to placebo for the treatment of psychotic symptoms. However, they also found that the "effect sizes were generally considered to be 'small' in magnitude." (p. ES-5; Maglione et al., 2011).

Research evidence for efficacy from placebo-controlled trials (adapted from Maglione et al., 2011)

Antipsychotic	Symptom Domain	Confidence	Effect	SMD (95% Confidence Interval [CI])
Aripiprazole	BPSD	Moderate	Small	0.20 (0.04, 0.35)
Aripiprazole	Agitation	Low	Small	--
Aripiprazole	Psychosis	Low	Non-significant	0.14 (-0.02, 0.29)
Olanzapine	Overall BPSD	Low	Very Small	0.12 (0.00, 0.25)
Olanzapine	Agitation	Moderate	Very small	0.10 (0.07, 0.31)
Olanzapine	Psychosis	Insufficient	Non-significant	0.05 (-0.07, 0.17)
Quetiapine	Overall BPSD	Low	Non-significant	0.13 (-0.03, 0.28)
Quetiapine	Agitation	Insufficient	Non-significant	0.06 (-0.14, 0.25)
Quetiapine	Psychosis	Insufficient	Non-significant	0.04 (-0.11, 0.19)
Risperidone	Overall BPSD	Moderate	Very Small	0.19 (0.00, 0.38)
Risperidone	Agitation	Moderate	Small	0.22 (0.09, 0.35)
Risperidone	Psychosis	Moderate	Small	0.20 (0.05, 0.36)
SGAs Overall	Overall BPSD	High	Very Small	--
SGAs Overall	Agitation	Moderate	Small	--
SGAs Overall	Psychosis	Low	Very small	--

Research evidence for efficacy from comparator and discontinuation trials

Comparison	Symptom Domain	Confidence	Effect
SGA vs. Haloperidol	Overall BPSD	Low	No difference
SGA vs. Haloperidol	Agitation	Low	No difference
SGA vs. Haloperidol	Psychosis	Insufficient	Unable to determine
Olanzapine or Quetiapine vs. Risperidone	Overall BPSD	Low	No difference
Olanzapine or Quetiapine vs. Risperidone	Agitation	Low	No difference
Olanzapine or Quetiapine vs. Risperidone	Psychosis	Insufficient	Unable to determine
SGA vs. Other Comparators	Overall BPSD	Insufficient	Unable to determine
SGA vs. Other Comparators	Agitation	Insufficient	Unable to determine
SGA vs. Other Comparators	Psychosis	Insufficient	Unable to determine
Lower doses vs. Higher doses		Insufficient	Unable to determine
Continue on Antipsychotic vs. Change to Placebo		Moderate	Small benefit for continued antipsychotic

In reviewing the adverse effects of antipsychotics in individuals with dementia, the authors of the 2011 AHRQ report (Maglione et al., 2011) compiled evidence from randomized clinical trials in dementia including the CATIE-AD trial. These studies were primarily placebo-controlled trials; the number of head-to-head trials was relatively small with few studies on each of the specific comparisons. In general, when compared to placebo, antipsychotics as a class were associated with a greater risk for multiple types of adverse events. In summarizing the strength of evidence for adverse effects of antipsychotics, the authors of the AHRQ report also considered studies of disorders other than dementia in adults of all ages.

Since the 2011 AHRQ report, published data come from observational studies using large populations of patients from community or health care settings. Data were typically from administrative databases or electronic health records or from follow-up of patients enrolled in clinical services for the treatment of dementia. Other studies used broader populations of individuals 65 years and older in nursing facilities. Although these studies were not restricted to subjects with a diagnosis of dementia, it is likely that a sizeable proportion of individuals with dementia were included in the sample. Many of the studies compared effects of classes of medications (e.g. first generation vs. second generation antipsychotic agents, antipsychotic vs. no antipsychotic) but some studies examined effects for specific commonly used antipsychotic agents (e.g., haloperidol, risperidone). Reported outcomes also differed among the studies. Detailed summary statistics were not calculated given these differences in study populations, methodology and reported outcomes.

1A. Efficacy and Comparative Effectiveness of Second-Generation Antipsychotics for Overall BPSD

Second Generation Antipsychotic vs. Placebo

Overview and Quality of Individual Studies

<Aripiprazole>

<small>1=rct 2=SR/MA 3=obs A=from AHRQ review</small>	<small>{Citation}</small>	<small>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</small>	<small>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</small>	<small>{How long were subjects followed?}</small>	<small>{Brief description of outcome measures and main results}</small>	<small>(Rating of quality of evidence)</small>
1A	Breder et al., 2004 and Mintzer et al., 2007	Nursing home residents with Mini Mental State Examination (MMSE) 6 to 22 and Neuropsychiatric Inventory (NPI) or Neuropsychiatric Inventory-Nursing Home (NPI-NH) >5 for hallucinations and delusions Interventions: Placebo and 3 fixed-doses of aripiprazole (2 mg, 5 mg, 10 mg) Design: Double-blind randomized controlled trial Multi-center industry sponsored trial conducted in long-term care facilities internationally including the US and Canada	487 subjects enrolled, 284 subjects analyzed	10 weeks	aripiprazole vs. placebo total SMD = 0.16 (-0.05, 0.37) aripiprazole vs. placebo psychosis SMD = 0.24 (0.03, 0.45) aripiprazole vs. placebo agitation SMD = 0.31 (0.10, 0.52)	1,2
1A	De Deyn et al., 2005	Non-institutionalized subjects with Alzheimer's disease with psychosis Interventions: Placebo, aripiprazole at 2-15 mg/day	208 subjects; 83 % completed the trial with no difference in	10 weeks	aripiprazole vs. placebo total SMD = 0.06 (-0.21, 0.34) aripiprazole vs. placebo psychosis SMD = 0.16 (-0.12,	3

		(average dose 10mg/day) Design: Double-blind, multi-center, and randomized controlled trials Industry sponsored trial conducted in the US, Canada, Western Europe, Australia/ New Zealand	dropouts between placebo and aripiprazole		0.43)	
1A	Streim et al., 2008	Nursing home residents with Alzheimer's disease with psychosis Interventions: Placebo, aripiprazole at 0.7 to 15 mg/day (average dose 8.6 mg/day) Design: Double-blind randomized controlled trial Multi-center industry sponsored trial conducted in long-term care facilities in the US	256 subjects enrolled, 151 subjects analyzed	10 weeks after 1 wk washout	aripiprazole vs. placebo total SMD = 0.36 (0.11, 0.61) aripiprazole vs. placebo psychosis SMD = -0.02 (-0.27, 0.23) aripiprazole vs. placebo agitation SMD = 0.30 (0.05, 0.55)	2

Quality of the Body of Research Evidence for Aripiprazole vs. Placebo for overall BPSD

Risk of bias: Low -- Studies are all RCTs and are primarily of moderate quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are overlapping and have the same size and direction of effect.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively narrow but range of confidence intervals includes negative values in two of the three studies.

Applicability: The included studies all involve individuals with dementia, with two of the studies in nursing home or hospital patients and 1 study in non-institutionalized patients. The studies include

subjects from around the world, including the US, Canada, Western Europe, and Australia/New Zealand. The doses of aripiprazole that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- A single study examined the effect of different doses of aripiprazole relative to placebo. Although examination of confidence intervals suggests a tendency for a dose response, these dose response relationships did not show statistical differences across each pair of doses.

Magnitude of effect: Weak effect -- The effect size is relatively small.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate -- The three available studies of aripiprazole vs. placebo are randomized trials of low to moderate quality and have good sample sizes. However, there is some variability in the confidence intervals and no clear dose-response relationships.

<Olanzapine>

<i>1=rct 2=SR/MA 3=obs A=from AHRQ review</i>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Deberdt et al., 2005	Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or residential settings, with NPI or NPI/NH >5 on hallucination and delusion items Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0	494 subjects: n=94 placebo, n=204 olanzapine, n=196 risperidone	10 weeks	olanzapine vs. placebo total SMD = -0.02 (-0.27, 0.23) olanzapine vs. placebo psychosis SMD = -0.12 (-0.36, 0.13) olanzapine vs. placebo agitation SMD = 0.09 (-0.16, 0.34)	2

		mg/day) Design: Double-blind randomized trial in the US Multi-center industry sponsored				
1A	De Deyn et al., 2004	Subjects in long-term care settings with Alzheimer's disease (MMSE 5 to 26) and hallucinations or delusions Intervention: Placebo or fixed dose olanzapine (1, 2.5, 5, or 7.5 mg/day) Design: Double-blind randomized trial in Europe, Israel, Lebanon, Australia/New Zealand and South Africa Multi-center industry sponsored	652 subjects; 65-75% of the subjects in each arm completed the trial	10 weeks	olanzapine vs. placebo total SMD = 0.14 (-0.05, 0.34) olanzapine vs. placebo psychosis SMD = 0.17 (-0.02, 0.37) olanzapine vs. placebo agitation SMD = 0.14 (-0.05, 0.33)	2
1A	Schneider et al., 2006 and Sultzer et al., 2008	Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	olanzapine vs. placebo total SMD = 0.15 (-0.11, 0.40) olanzapine vs. placebo psychosis SMD = 0.07 (-0.19, 0.33) olanzapine vs. placebo agitation SMD = 0.28 (0.02,	1

		mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day) Stable doses of cholinesterase inhibitor were permitted Design: Multi-center, federally funded CATIE-AD trial – phase 1			0.53)	
1A	Street et al., 2000	Subjects resided in a nursing facility and had possible or probable Alzheimer's disease NPI/NH>2 Intervention: Placebo vs. fixed doses of olanzapine (5, 10 or 15 mg/day) Design: Double-blind randomized controlled trial Multi-center Industry sponsored trial in the US	206 subjects; 66-80% of individuals completed the trial in each study arm	6 weeks	olanzapine vs. placebo total SMD = 0.30 (-0.03, 0.63) olanzapine vs. placebo psychosis SMD = 0.17 (-0.17, 0.50) olanzapine vs. placebo agitation SMD = 0.39 (0.05, 0.72)	5

Quality of the Body of Research Evidence for Olanzapine vs. Placebo for overall BPSD

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are overlapping and have the same size. Three of the four studies show the same direction of effect with the fourth study showing no effect.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively narrow but the range of confidence intervals includes negative values in all four studies.

Applicability: The included studies all involve individuals with dementia, with three of the studies including nursing home or hospital patients and two studies including non-institutionalized patients. The studies include subjects from around the world, including the US, Western Europe, and Australia/New Zealand. The doses of olanzapine that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- Two studies examined different doses of olanzapine and showed opposite effects. One showed improved response at higher doses whereas the other study showed improved response at lower doses.

Magnitude of effect: Weak effect -- The effect size is quite small and barely statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- The available studies of olanzapine vs. placebo are randomized trials and have good sample sizes but the trials are of varying quality and the imprecise nature of the results and the clear lack of a dose-response effect reduces confidence in the findings.

<Quetiapine>

1=rct 2=SR/MA 3=obs A=from AHRQ review	{Citation}	{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}	{Sample size. Where applicable, note overall N as well as group n for control and intervention}	{How long were subjects followed?}	{Brief description of outcome measures and main results}	{Rating of quality of evidence}
1A	Schneider et al., 2006 and Sultzer et al., 2008	Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	quetiapine vs. placebo total SMD = 0.15 (-0.11, 0.42) quetiapine vs. placebo psychosis SMD = 0.16 (-0.10, 0.42) quetiapine vs. placebo agitation SMD = 0.10 (-	1

		<p>mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>			0.17, 0.37)	
1A	Tariot et al., 2006	<p>Subjects with Alzheimer's disease by Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) (MMSE >4) residing in a nursing facility with psychosis and BPRS >23</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 12 mg/day; median of the mean daily dose 1.9 mg) or quetiapine (25 to 600 mg/day; median of the mean daily dose 96.9 mg)</p> <p>Design: Randomized controlled, double-blind, and multi-center trial in the U.S.</p> <p>Industry sponsored</p>	284 subjects, 180 analyzed	10 weeks	<p>quetiapine vs. placebo total SMD = 0.22 (-0.07, 0.28)</p> <p>quetiapine vs. placebo psychosis SMD = 0.00 (-0.29, 0.30)</p> <p>quetiapine vs. placebo agitation SMD = 0.24 (-0.05, 0.54)</p>	4
1A	Zhong et al., 2007	<p>Subjects with possible Alzheimer's disease or vascular dementia, in</p>	333 subjects	10 weeks.	quetiapine vs. placebo total SMD = 0.04 (-	2

	<p>long-term care facility, with agitation and Positive and Negative Symptom Scale-Excitement Component (PANSS-EC)^{>13}</p> <p>Intervention: Placebo vs. quetiapine 100 mg vs. quetiapine 200 mg (adjusted according to fixed titration)</p> <p>Design: Randomized double-blind trial</p> <p>Multi-center industry sponsored trial in the US</p>			<p>0.21, 0.28)</p> <p>quetiapine vs. placebo psychosis SMD = -0.03 (-0.27, 0.21)</p> <p>quetiapine vs. placebo agitation SMD = -0.03 (-0.27, 0.21)</p>	
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Quality of the Body of Research Evidence for Quetiapine vs. Placebo for overall BPSD

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes in the meta-analysis are overlapping and have the same size. The three studies in the meta-analysis show the same direction of effect but in none of the studies is the effect statistically significant. In addition, the overall effect in the meta-analysis is not statistically significant. The fourth study shows an improvement in the Clinical Global Impressions (CGI), which is consistent with a beneficial overall effect.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively narrow but the range of confidence intervals includes negative values in all studies included in the meta-analysis.

Applicability: The included studies all involve individuals with dementia, with two of the studies including nursing home or hospital patients and one study including non-institutionalized patients. An additional study did not specify the setting where the subjects were recruited. The studies include subjects from around the world, including the US. The doses of quetiapine that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- One study examined differing doses of quetiapine and showed no effect at either dose.

Magnitude of effect: Weak effect -- The effect size is quite small and not statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- The available studies of quetiapine vs. placebo are randomized trials of varying quality. Three of the five studies had good sample sizes and the confidence intervals are relatively narrow. However, the lack of precision and the absence of a dose-response effect suggest less confidence in the findings.

<Risperidone>

<i>1=rct 2=SR/MA 3=obs A=from AHRQ review</i>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Brodaty et al., 2003 and Brodaty et al., 2005	<p>Subjects resided in nursing homes had DSM-IV diagnosis of dementia of the Alzheimer's type, vascular dementia, or mixed dementia, had MMSE score <24 and significant aggressive behavior</p> <p>Intervention: Placebo vs. risperidone (flexibly dosed up to 2 mg/day with mean dose 0.95 mg/day).</p> <p>Design: Multi-center, randomized double-blind trial in Australia/New Zealand</p>	345	12 weeks	<p>risperidone vs. placebo total SMD = 0.46 (0.23, 0.69)</p> <p>risperidone vs. placebo psychosis SMD = 0.36 (0.13, 0.59)</p> <p>risperidone vs. placebo agitation SMD = 0.37 (0.14, 0.59)</p>	3

		Industry sponsored				
1A	Deberdt et al., 2005	<p>Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or residential settings, with NPI or NPI/NH >5 on hallucination and delusion items</p> <p>Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0 mg/day)</p> <p>Design: Double-blind randomized trial in the US</p> <p>Multi-center industry sponsored</p>	494 subjects: 94 placebo, 204 olanzapine, 196 risperidone	10 weeks	<p>risperidone vs. placebo total SMD = -0.13 (-0.38,0.12)</p> <p>risperidone vs. placebo psychosis SMD = -0.03 (-0.34, 0.16)</p> <p>risperidone vs. placebo agitation SMD = 0.14 (-0.11, 0.39)</p>	2
1A	De Deyn et al., 1999	<p>Subjects were hospitalized or institutionalized and had a MMSE < 24 and Behavioral Pathology in Alzheimer's Disease (BEHAVE-AD) >7</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 4 mg/day; mean: 1.2 mg/day) or risperidone (0.5 to 4 mg/day; mean: 1.1 mg/day)</p>	344 subjects; 68 of 115 risperidone subjects, 81 of 115 haloperidol subjects and 74 of 114 placebo subjects completed the trial	12 weeks	<p>risperidone vs. placebo total SMD = 0.12 (-0.14, 0.38)</p> <p>risperidone vs. placebo agitation SMD = 0.31 (0.05, 0.57)</p>	4

		Design: Multi-center randomized trial in the UK and Europe Industry sponsored				
1A	Katz et al., 1999	Subjects resided in a nursing home or chronic care facility and had DSM-IV diagnoses of Alzheimer's disease, vascular dementia, or mixed dementia, MMSE <24 and significant psychotic and behavioral symptoms (BEHAVE-AD >7). Interventions: Placebo vs. fixed doses of risperidone at 0.5 mg/day, 1 mg/day, or 2 mg/day Design: Multi-center, double-blind, and randomized controlled trial conducted in the US Industry sponsored	625 subjects, 70% of whom completed the study	12 weeks	risperidone vs. placebo total SMD = 0.32 (0.11, 0.53) risperidone vs. placebo psychosis SMD = 0.20 (-0.01, 0.41) risperidone vs. placebo agitation SMD = 0.38 (0.17, 0.60)	4
1A	Mintzer et al., 2006	Subjects resided in nursing homes or long-term care, were mobile and met criteria for Alzheimer's dementia with psychosis, MMSE 5 to 23. Interventions: Placebo vs. flexibly dosed risperidone (0.5-1.5	473 subjects randomized; 238 placebo and 235 risperidone; 354 completed the study	8 weeks after 1-16 days of placebo run-in/wash-out	risperidone vs. placebo total SMD = -0.01 (-0.21, 0.18) risperidone vs. placebo psychosis SMD = 0.17 (-0.02, 0.36) risperidone vs.	3

		mg/day; mean dose 1.03 mg/day Design: Multi-center, randomized controlled trial conducted in the US Industry sponsored			placebo agitation SMD = 0.04 (-0.16, 0.23)	
1A	Schneider et al., 2006 and Sultzer et al., 2008	Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day) Stable doses of cholinesterase inhibitor were permitted Design: Multi-center, federally funded CATIE-AD trial – phase 1	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	risperidone vs. placebo total SMD = 0.40 (0.13, 0.68) risperidone vs. placebo psychosis SMD = 0.38 (0.11, 0.66) risperidone vs. placebo agitation SMD = 0.10 (-0.17, 0.37)	1

Quality of the Body of Research Evidence for Risperidone vs. Placebo for overall BPSD

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are generally overlapping but vary in direction with four studies show an effect in the direction of risperidone benefit, one study showing no effect and one study showing an effect in the direction of benefit for placebo. Three of the four studies showing a benefit of risperidone were statistically significant, but the other three studies did not show statistically significant benefit.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively narrow but the range of confidence intervals includes negative values in three of the six studies.

Applicability: The included studies all involve individuals with dementia, with four of the studies including nursing home or hospital patients and two studies including non-institutionalized patients. The studies include subjects from around the world, including the US, the UK, Western Europe, and Australia/New Zealand. The doses of risperidone that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- One study examined different fixed doses of risperidone and appeared to show a dose-response effect based on confidence intervals, but these dose response relationships did not show statistical differences across each pair of doses.

Magnitude of effect: Weak effect -- The effect size is small and barely statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate-- The available studies of risperidone vs. placebo are randomized trials of varying quality. The trials have good sample sizes, but the overall effect size of these trials is small according to the AHRQ meta-analysis. Three of the studies show clear benefit but this is not true of the remaining studies.

Quality of the Body of Research Evidence for Second Generation Antipsychotics vs. Placebo in Overall BPSD

Risk of bias: Low -- Studies are all RCTs and the vast majority are double-blind trials. They vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are overlapping but the majority of the studies show an effect in the direction of second generation antipsychotic benefit. The AHRQ meta-analysis shows small but statistically significant effects for aripiprazole, olanzapine and risperidone on overall behavioral symptoms.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals for individual studies are relatively narrow but the range of confidence intervals includes negative values in the majority of studies.

Applicability: The included studies all involve individuals with dementia, including nursing home or hospital patients and non-institutionalized patients. The studies include subjects from around the world, including the US, Canada, Western Europe, and Australia/New Zealand. The doses of second generation antipsychotic medications that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- For aripiprazole, quetiapine and risperidone, only one study of each medication is available that assesses differing doses; two studies are available for olanzapine with no consistency in results. There appear to be trends for dose-response relationships on measures of global behavioral symptoms and psychosis for aripiprazole and risperidone and agitation for risperidone, but these dose response relationships did not show statistical differences across each pair of doses.

Magnitude of effect: Weak effect -- The effect sizes are small for all medications.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: High -- A significant number of randomized trials of second generation antipsychotic agents vs. placebo are available. Trials are of varying quality but most have good sample sizes. The majority of the studies show a beneficial effect, albeit a small one, for treatment with the antipsychotic as compared to placebo.

Second Generation Antipsychotic vs. Haloperidol

Overview and Quality of Individual Studies

<Olanzapine vs. Haloperidol>

<small>1=rct 2=SR/MA 3=obs A=from AHRQ review</small>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Moretti et al., 2005	Subjects with DSM-IV dementia who also had probable vascular dementia by	346 patients enrolled; 173 received	12 months	olanzapine vs. haloperidol total SMD = 0.38 (0.17,	0

		<p>the National Institute of Neurological Disorders and Stroke and the Association Internationale pour la Recherche et l'Enseignement en Neurosciences criteria; MMSE >13, were not bedridden and resided in a nursing facility in Italy</p> <p>Interventions: Olanzapine (flexibly titrated between 2.5 mg and 7.5 mg; mean dose 4.23 mg/day) vs. promazine (54.3 mean dose mg/day) vs. haloperidol (mean dose 1.65 mg/day)</p> <p>Allowed to continue on non-psychiatric medications from baseline</p> <p>Design: Open label, non randomized; groups divided manually with matching for age, education levels, and preliminary NPI scores</p>	<p>olanzapine, 60 received promazine and 113 received haloperidol</p>		<p>0.60)</p> <p>Both treatment groups showed a reduction in NPI scores relative to baseline of about 30% but there was no significant difference between the groups</p>	
1A	Verhey et al., 2006	<p>Subjects with DSM-IV dementia living in nursing homes or their own homes judged to be in need of treatment for clinically significant agitation (CMAI score >44)</p> <p>Interventions: Haloperidol (1 to 3 mg/day; mean dose 1.75 mg) vs. olanzapine (2.5 to 7.5 mg/day; mean dose 4.71 mg)</p> <p>Design: Multi-center,</p>	<p>59 subjects, 1 excluded for missing data; 3 patients withdrew from the study and all were in the olanzapine group</p>	<p>5 weeks total; up to 2 weeks titration, at least 3 weeks at stable dose</p>	<p>olanzapine vs. haloperidol total SMD = -0.18 (-0.77, 0.40)</p> <p>olanzapine vs. haloperidol agitation SMD = -0.21 (-0.73, 0.31)</p> <p>AHRQ does not report SMD for psychosis</p>	3

		<p>randomized controlled, and double-blind two-arm study in Netherlands</p> <p>Randomized after 3-11 day washout.</p> <p>Funding source not noted</p>			<p>comparison but the change in the NPI psychosis item showed no significant difference in the scores for the two treatments.</p>	
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<Quetiapine vs. Haloperidol>

<i>1=rct 2=SR/MA 3=obs A=from AHRQ review</i>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Savaskan et al., 2006	<p>Subjects were inpatients with International Classification of Diseases, 10th revision, (ICD-10) Alzheimer's disease and associated behavioral symptoms</p> <p>Interventions: Haloperidol (0.5 to 4 mg/day; mean dose 1.9 mg/day) vs quetiapine (25 to 200 mg/day; mean dose 125 mg/day)</p> <p>Fixed titration schedule with weekly dose increments to final dose</p> <p>Design: Randomized controlled open label trial in Switzerland</p> <p>Two of the three investigators were noted to be supported by</p>	30 subjects enrolled; 4 dropped out; 4 had missing data; 22 were analyzed	5 weeks after run-in period of up to 7 days	<p>quetiapine vs. haloperidol total SMD = 0.99 (0.10, 1.88)</p> <p>quetiapine vs. haloperidol agitation SMD = 0.06 (-0.78, 0.89)</p>	2

		an industry sponsored grant.				
1A	Tariot et al., 2006	<p>Subjects with Alzheimer's disease by DSM-IV (MMSE >4) residing in a nursing facility with psychosis and BPRS >23</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 12 mg/day; mean dose 1.9 mg/day) or quetiapine (25 to 600 mg/day; mean dose 96.9 mg/day)</p> <p>Design: Randomized controlled, double-blind, and multi-center trial in the U.S.</p> <p>Industry sponsored</p>	284 subjects, 180 analyzed	10 weeks	<p>quetiapine vs. haloperidol total SMD = 0.16 (-0.16, 0.47)</p> <p>quetiapine vs. haloperidol agitation SMD = 0.04 (-0.26, 0.34)</p>	4

<Risperidone vs. Haloperidol>

<i>1=rct 2=SR/MA 3=obs A=from AHRQ review</i>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1	Chan et al., 2001	<p>Subjects were inpatients or outpatients who had a DSM-IV diagnosis of dementia of Alzheimer's type or vascular dementia associated with behavioral symptoms</p> <p>Intervention: Flexibly dosed haloperidol (0.5 to 2 mg/day; mean dose 0.90 mg/day) vs. risperidone (0.5 to 2 mg/day; mean dose 0.85 mg/day)</p>	58	3 months	<p>haloperidol vs. risperidone -- dementia (aggressiveness) change in BEHAVE-AD SMD = 0.057 (-0.472, 0.585)</p> <p>haloperidol vs. risperidone --</p>	3

		<p>Design: Multi-center, randomized controlled, and double-blind trial conducted in Hong Kong</p> <p>Industry sponsored</p>			<p>dementia (psychosis) change in BEHAVE-AD SMD = -0.383 (-0.917, 0.15)</p> <p>Scores on the CMAI and BEHAVE-AD were significantly improved by both haloperidol and risperidone with no significant differences between-the two treatments. Haloperidol- but not risperidone-treated patients showed an increase in extrapyramidal side effects on the Simpson-Angus Scale (SAS).</p>	
1A	De Deyn et al., 1999	<p>Subjects were hospitalized or institutionalized and had a MMSE < 24 and BEHAVE-AD >7</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 4 mg/day; mean: 1.2 mg/day) or risperidone (0.5 to 4 mg/day; mean: 1.1 mg/day)</p> <p>Design: Multi-center randomized trial in the UK and Europe</p> <p>Industry sponsored</p>	<p>344 subjects; 68 of 115 risperidone subjects, 81 of 115 haloperidol subjects and 74 of 114 placebo subjects completed</p>	12 weeks	<p>risperidone vs. haloperidol total SMD = -0.19 (-0.45, 0.07)</p> <p>risperidone vs. haloperidol agitation SMD = -0.07 (-0.19, -0.33)</p>	4

			the trial			
1	Suh et al., 2004; Suh et al., 2006	Subjects were in a nursing facility and had a diagnosis of Alzheimer disease, vascular dementia, or mixed dementia associated with behavioral disturbance (Functional Assessment Staging (FAST) > 3, BEHAVE-D >7, CMAI > 2 on at least 2 items) Intervention: Flexibly dosed risperidone (0.5-1.5 mg/day; mean dose 0.80 mg/day) vs. haloperidol (0.5-1.5 mg/day; mean dose 0.83 mg/day) Design: Randomized, double-blind crossover trial Single center in Korea Industry sponsored	120	18 week	As compared to treatment with haloperidol, risperidone treatment was associated with greater clinical improvement on total and subscale scores of the Korean version of BEHAVE-AD, total and subscale scores of the Korean version of CMAI, and Clinical Global Impression of Change (CGI-C) as well as a lower frequency of extrapyramidal side effects.	4

Quality of the Body of Research Evidence for Second-Generation Antipsychotics vs. Haloperidol for overall BPSD

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are inconsistent for trials of the same medication as well as across the body of comparisons. Several of the studies had an extremely wide confidence interval.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are variable in width and several confidence intervals are extremely wide.

Applicability: The included studies all involve individuals with dementia, with seven of the studies including nursing home or hospital patients and two studies including non-institutionalized patients. The studies include subjects from around the world, including the US, Western Europe, Korea and Hong

Kong. The doses of haloperidol and second generation antipsychotic that were used in the studies are consistent with usual practice.

Dose-response relationship: Not applicable for this comparison

Magnitude of effect: Not applicable

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- The available studies of second generation antipsychotic medications as compared to haloperidol include six randomized parallel arm trials and one randomized crossover trial but the trials are of varying quality and some have small sample sizes. For the five trials that were included in the AHRQ meta-analysis, the effect size is small and does not show evidence of a difference between haloperidol and second generation antipsychotic agents overall. For individual agents, there are no more than two studies for each drug and several of the studies had extremely wide confidence intervals.

Olanzapine or Quetiapine vs. Risperidone

Overview and Quality of Individual Studies

<small>1=rct 2=SR/MA 3=obs A=from AHRQ review</small>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Deberdt et al., 2005	Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or residential settings, with NPI or NPI/NH >5 on hallucination and delusion items Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10	494 subjects: 94 placebo, 204 olanzapine, 196 risperidone	10 weeks	olanzapine vs. risperidone total SMD = 0.10 (-0.10, 0.30) olanzapine vs. risperidone psychosis SMD = -0.03 (-0.23, 0.17) olanzapine vs.	2

		<p>mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0 mg/day)</p> <p>Design: Double-blind randomized trial in the US</p> <p>Multi-center industry sponsored</p>			<p>risperidone agitation SMD = -0.04 (-0.24, 0.16)</p>	
1	Fontaine et al., 2003	<p>Subjects resided in long-term care facilities in the US and had a DSM-IV diagnosis of dementia</p> <p>Interventions: Olanzapine (2.5 to 10 mg/day; mean dose 6.65 mg/day) vs. risperidone (0.5 to 2 mg/day; mean dose 1.47 mg/day)</p> <p>Design: Double-blind parallel study</p>	39; 20 in the olanzapine group; 19 in the risperidone group	2 weeks	<p>Risperidone and olanzapine each were associated with significant decreases in CGI and NPI scores ($p < .0001$) and an improved score on Quality of Life in Late Stage Dementia, quality of life measure ($p < .03$), however, the drugs did not differ in the magnitude of their effects on these measures. The most common adverse events were drowsiness and falls. At baseline, 42% (16/38) of subjects had extrapyramidal symptoms (EPS) and there was no significant change Simpson Angus scores with treatment.</p>	3

1	Gareri et al. 2004	<p>Subjects had a DSM-IV diagnosis of Alzheimer's disease, vascular dementia or mixed dementia associated with behavioral symptoms</p> <p>Intervention: Promazine 50 mg/day vs. risperidone 1 mg/day vs. olanzapine 5 mg/day; doses could be doubled at 4 weeks if no clinical response</p> <p>Design: Randomized double-blind trial</p> <p>Setting of care not specified</p> <p>Conducted in Western Europe</p>	60 enrolled; 20 per group; 1 withdrawal in risperidone group	8 weeks after 10 day washout	Global improvement was noted in 80% of patients treated with risperidone and olanzapine and in 65 % of patients treated with promazine.	3
1A	Schneider et al., 2006 and Sultzer et al., 2008	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Stable doses of cholinesterase inhibitor were permitted</p>	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	<p>olanzapine vs. risperidone total SMD = -0.27 (-0.56, 0.02)</p> <p>olanzapine vs. risperidone psychosis SMD = -0.27 (-0.56, 0.02)</p> <p>olanzapine vs. risperidone agitation SMD = -0.17 (-0.12, 0.16)</p> <p>quetiapine vs.</p>	1

		<p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>			<p>risperidone total SMD = -0.24 (-0.53, 0.06)</p> <p>quetiapine vs. risperidone psychosis SMD = -0.24 (-0.54, 0.05)</p> <p>quetiapine vs. risperidone agitation SMD = 0.10 (-0.20, 0.39)</p>	
1A	Rainer et al., 2007	<p>Subjects were outpatients with mild to moderate dementia of the Alzheimer's, vascular, mixed, or fronto-temporal lobe type according to DSM-IV and ICD-10 who had behavioral disturbance and NPI sub-item scores relating to psychosis or agitation/aggression</p> <p>Interventions: Flexibly dosed quetiapine (50 to 400 mg/day; mean dose 77 mg/day) vs. risperidone (0.5 to 4 mg/day; mean dose 0.9 mg/day)</p> <p>Design: Randomized single blind parallel group trial</p> <p>Multi-center,</p>	72 enrolled with 65 subjects in Intention-to-Treat (ITT) population; quetiapine n= 34, risperidone n= 31	8 week	<p>quetiapine vs. risperidone total SMD = -0.06 (-0.55, 0.43)</p> <p>quetiapine vs. risperidone agitation SMD = -0.17 (-0.66, 0.32)</p>	3

		investigator sponsored study in Western Europe				
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Quality of the Body of Research Evidence for Olanzapine or Quetiapine vs. Risperidone for overall BPSD

Risk of bias: Low -- Studies are all RCTs but vary in quality from low to moderate based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent: Effect sizes are overlapping and the direction of the effect was variable. However, none of the studies, including those that were not part of the AHRQ meta-analysis show prominent differences between risperidone and either olanzapine or quetiapine.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively wide and range of confidence intervals includes negative values in all four studies.

Applicability: The included studies all involve individuals with dementia, including patients in institutional and outpatient settings. The studies include subjects from around the world, including the US and Western Europe. The doses of medication that were used in the studies are consistent with usual practice.

Dose-response relationship: Not applicable to this comparison.

Magnitude of effect: Not applicable

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- The available studies of risperidone as compared to olanzapine or quetiapine are randomized trials of low to moderate quality. The studies vary in their sample sizes. In addition, several of the confidence intervals are wide. For the four trials that were included in the AHRQ meta-analysis, no overall effect size was calculated but there does not appear to be evidence of a difference between olanzapine or quetiapine and risperidone for overall BPSD.

Second Generation Antipsychotic vs. Other Comparators

Overview and Rating of Quality of Individual Studies

<p>1=rct 2=SR/MA 3=obs</p> <p>A=from AHRQ review</p>	<p>{Citation}</p>	<p>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</p>	<p>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</p>	<p>{How long were subjects followed?}</p>	<p>{Brief description of outcome measures and main results}</p>	<p>{Rating of quality of evidence}</p>
<p>1</p>	<p>Ballard et al., 2005</p>	<p>Subjects resided in nursing care facilities in England, had a diagnosis of Alzheimer’s disease and had clinically significant agitation</p> <p>Intervention: Placebo vs. rivastigmine (3-6 mg BID by week 12 and >8 mg daily by week 26) vs. quetiapine (25-50 mg BID by week 12 and 50 mg BID by week 26)</p> <p>Design: Double-blind randomized controlled trial</p> <p>Funded by general donations to the principal investigator’s research program and profits from prior industry sponsored trials.</p>	<p>93; 80 started treatment (25 rivastigmine, 26 quetiapine, 29 placebo), 71 tolerated the maximum protocol dose (22 rivastigmine, 23 quetiapine, 26 placebo); 56 had a baseline score > 10 on the Severe Impairment Battery (SIB), 46 of whom were included in the analysis at six week follow up (14 rivastigmine, 14</p>	<p>26 weeks total; primary outcome was agitation at 6 weeks</p>	<p>rivastigmine vs. quetiapine -- dementia (agitation) change in CMAI SMD = -0.051 (-0.601, 0.499)</p> <p>When treated with either rivastigmine or quetiapine as compared to placebo, subjects failed to show an improvement in agitation. Relative to placebo, quetiapine but not rivastigmine was associated with greater cognitive decline as measured by the SIB score.</p>	<p>4</p>

			quetiapine, 18 placebo).			
1	Barak et al. 2011	<p>Subjects were inpatients with Alzheimer’s dementia who had been admitted for behavioral symptoms including psychosis and agitation.</p> <p>Interventions: Risperidone 1 mg/day vs. escitalopram 10 mg/day</p> <p>Design: Randomized double-blind trial</p> <p>Conducted in Israel</p>	40	6 weeks	<p>The degree of improvement as measured by the NPI was comparable in those treated with risperidone as compared to those treated with citalopram. Premature discontinuation occurred in 45% of risperidone treated subjects and 25% of escitalopram treated subjects, primarily due to adverse events. Serious adverse effects including severe extrapyramidal side effects and acute illness requiring hospitalization occurred in 6 risperidone treated patients.</p>	5
1	Culo et al., 2010	<p>Patients who were hospitalized for behavioral disturbance, with dementia with lewy body (DLB) or Alzheimer’s disease (AD)</p> <p>Intervention: Risperidone (started at 0.5 mg/day for 3 days, then increased to 2 capsules/day for 2 weeks, then 2 additional dosage increases up to 4 capsules/day were</p>	<p>31 patients with DLB</p> <p>66 patients with AD</p> <p>408 patients were prescreened, 111 signed consent and were screened, and 103 were randomized</p>	up to 12 weeks	<p>Efficacy of citalopram or risperidone was comparable for subjects overall, but AD subjects showed improved scores on the NPI and CGI-C whereas DLB subjects showed a worsening on both scales. Discontinuation rates were similar for subjects with DLB who were treated with citalopram (71%) or risperidone (65%). However, premature discontinuation rates were higher in participants with DLB</p>	4

		<p>allowed) vs. citalopram (started at 10 mg/day for 3 days, then increased to 2 capsules/day for 2 weeks, then 2 additional dosage increases up to 4 capsules/day were allowed)</p> <p>Design: Randomized controlled, double-blind trial</p> <p>Western Psychiatric Institute and Clinic, Pittsburgh, PA</p>			<p>(68%) than with AD (50%) and DLB treated subjects who had been randomized to receive risperidone had more side effects.</p>	
1	De Deyn et al, 2012	<p>Subjects were 65+ years old with AD with symptoms of psychosis and/or agitation, in nursing homes or equivalent institutions</p> <p>Intervention: Extended release (XR) vs. immediate release (IR) quetiapine; doses were 50mg/day XR and 25 mg/day IR, Treatment was escalated to 100 mg/day by day 4. At day 8, a flexible-dose (50-300 mg/day) period began when dose adjustment was</p>	<p>Of the 109 patients screened, 100 were randomized to receive quetiapine XR (n = 68) or quetiapine IR (n = 32)</p> <p>90 patients completed study; 1 quetiapine XR patient withdrew because of adverse event</p>	6 weeks enrollment and screening were conducted between May 2002 and February 2003	<p>Relative to baseline, treatment with both the IR and the XR formulation of quetiapine was associated with improvements in NPI frequency x severity total score and the NPI disruption score as well as improvements in the CMAI score. Global ratings using the CGI-Severity of Illness and CGI-Improvement scores also showed benefit from both formulations.</p>	3

		<p>made at the investigator's discretion</p> <p>Design: Randomized controlled trial, double-blind, double-dummy, parallel-group</p> <p>Study was conducted at 14 sites in Australia, Belgium, Canada, Norway, and South Africa</p>				
1	Freund-Levi et al., 2014a and 2014b	<p>Subjects had a diagnosis of dementia, had associated neuropsychiatric symptoms and were treated on an inpatient or outpatient basis at a university hospital in Sweden</p> <p>Intervention: Galantamine (target dose 24 mg) vs. risperidone (target dose 1.5 mg)</p> <p>Design: Randomized open label trial</p> <p>Single center in Sweden</p>	100 (50 in each group); 91 completed the study	12 weeks	<p>Treatments with galantamine and with risperidone were associated with decreases in agitation. However, improvement with risperidone was more pronounced than that with galantamine (mean difference in total CMAI score at 3 weeks was 3.7 points; $p = 0.03$ at 12 weeks was 4.3 points; $p = 0.01$). NPI domains of irritation and agitation also showed greater benefit with risperidone ($F(1, 97) = 5.2, p = 0.02$). However, galantamine treatment was associated with an improvement in MMSE scores with an increase of 2.8 points compared with baseline</p>	0

					(95% CI: 1.96-3.52). No severe treatment-related side effects were reported with either treatment.	
1A	Holmes et al., 2007	<p>Subjects in nursing home setting with severe probable Alzheimer's disease and MMSE <6, CMAI >3 for at least 6 weeks</p> <p>Intervention: Fixed titration with rivastigmine 3-6 mg/day vs. risperidone 0.5 mg/day</p> <p>Exclusion criteria included prior exposure to cholinesterase inhibitor or antipsychotic (>20 mg thioridazine equivalents per day)</p> <p>Design: Randomized controlled, double-blind trial</p> <p>Conducted in the UK</p>	27	6 weeks	Change in CMAI (agitation) rivastigmine vs. risperidone SMD = 1.31 (0.47, 2.15)	3
1	Mowla et al., 2010	<p>Subjects with mild to moderate DSM-IV Alzheimer's disease and behavioral disturbance</p> <p>Interventions: Flexibly dosed</p>	48 subjects, 25 in topiramate group and 23 in risperidone group; 41	8 weeks	Both topiramate and risperidone treatment were associated with significant improvements in all outcome measures. Change in NPI (total) for topiramate vs. risperidone	5

		<p>topiramate (average 44 mg/day) or risperidone (average 1.9 mg/day)</p> <p>Design: Randomized controlled trial, multi-site</p> <p>Bushehr University of Medical Sciences, Iran</p>	<p>total subjects completed the trial</p>		<p>had an SMD of 0.23 (-0.38, 0.85)</p> <p>Change in CMAI (agitation) for topiramate vs. risperidone had an SMD of 0.06 (-0.56, 0.67)</p>	
1	Pollock et al., 2007	<p>Subjects with dementia admitted to hospital due to moderate to severe agitation or psychosis with no significant depressive symptoms or recent depressive episodes and no unstable physical illness</p> <p>Interventions: Flexibly dosed citalopram (average dose 29.4 mg/d) or risperidone (average dose 1.25 mg/d)</p> <p>Subjects could continue cholinesterase inhibitors or memantine if taking them for at least 12 weeks on a stable dose; lorazepam at up to 2 mg/day was</p>	<p>408 subjects screened; 103 were randomized (citalopram, n=53; risperidone, n=50); 45 completed treatment (citalopram, n=25; risperidone, n=20)</p>	<p>12 week trial conducted between February 2000 to June 2005</p>	<p>No significant differences were seen between citalopram and risperidone in outcomes or time to dropout. On the Neurobehavioral Rating Scale, there were significant decreases in psychosis scores for both medications (32.3% and 35.2% decreases for citalopram and risperidone, respectively). The decrease in agitation scores was significant for citalopram (12.5%) but not for risperidone (8.2%).</p>	5

		<p>also permitted for extreme agitation or aggression.</p> <p>Design: Randomized, double-blind trial</p> <p>Canada</p> <p>Funding by US Public Health Service and Sandra A. Rotman Program in Neuropsychiatry, Toronto, Ontario, Canada</p>				
1	Teranishi et al., 2013	<p>Subjects with DSM-IV Alzheimer's dementia admitted to hospital due to unmanageable behavioral symptoms</p> <p>Interventions: Flexibly dosed risperidone (average dose 1.1 mg/d), yokukansan (average dose 7 mg/d) or fluvoxamine (average dose 83 mg/d)</p> <p>Subjects could continue on donepezil and could receive anticholinergic</p>	<p>90 subjects screened, 82 enrolled, 76 patients analyzed (risperidone, n = 25; yokukansan, n = 26; fluvoxamine, n = 25)</p>	<p>8 week trial preceded by 1 week washout, with data collected between January 2009 and August 2010.</p>	<p>All 3 drugs significantly reduced NPI-NH total scores from 26.20 (Standard Deviation (SD), 15.77) to 17.72 (SD, 11.49), with no significant differences among groups. Single item scores were significantly reduced for delusions, agitation, disinhibition, aberrant motor behavior, and night-time behavior disturbances, again with no significant group differences.</p> <p>MMSE scores and Functional Independence Measure scores showed no significant change during the study.</p> <p>Constipation was the most common adverse event in</p>	2

	<p>medications for EPS and zopiclone or brotizolam for insomnia</p> <p>Design: Randomized rater-blinded trial</p> <p>Psychiatric hospital in Japan</p>			<p>all groups, with a significant increase in frequency with risperidone. EPS and muscle rigidity were also significantly increased in frequency with risperidone (19.2% of that treatment group).</p>	
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Quality of the Body of Research Evidence for Second-Generation Antipsychotics vs. Other Medications for overall BPSD

Risk of bias: Moderate -- Studies are all RCTs, but not all are double-blind. The studies also vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent – Virtually all of the studies show no differences between the two treatment groups

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Not applicable – confidence intervals were not available for the majority of the studies.

Applicability: The included studies all involve individuals with dementia and include subjects in institutional and non-institutional settings. The studies include subjects from around the world, including the US, Canada, Western Europe, Australia/New Zealand, Iran and Japan. The doses of medication that were used in the studies are consistent with usual practice.

Dose-response relationship: Not applicable for this comparison.

Magnitude of effect: Not applicable – confidence intervals were not available for the majority of the studies.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Insufficient -- The available studies of second generation antipsychotics compared to other interventions are highly variable in their quality and sample sizes. Although the majority of the studies use risperidone as an antipsychotic medication, the comparators include an anticonvulsant, cholinesterase inhibitors and antidepressants making it difficult to arrive at any overall conclusions from these head-to-head comparisons.

Discontinuation Studies

Overview and Rating of Quality of Individual Studies

1=rct 2=SR /MA 3=obs A=fro m AHR Q revie w	{Citation}	{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}	{Sample size. Where applicable, note overall N as well as group n for control and intervention}	{How long were subjects followed ?}	{Brief description of outcome measures and main results}	(Rating of quality of evidence)
1	Ballard et al., 2004	<p>Subjects were nursing home residents with probable or possible Alzheimer's disease (by National Institute of Neurological and Communicative Diseases and Stroke/Alzheimer's Disease and Related Disorders Association (NINCDS/ADRDA) criteria) who had no severe behavioral disturbances and had been taking neuroleptics for longer than 3 months.</p> <p>Intervention: Prescriptions written, in a twice-daily regimen, allocating the closest dose to participant's preexisting prescription from the doses encapsulated (risperidone 0.5 mg, chlorpromazine 12.5 mg, thioridazine 12.5 mg, trifluoperazine 0.5</p>	100 enrolled; 82 completed 1 month assessment (36 placebo, 46 active treatment)	3 months	<p>Subjects with higher baseline NPI scores (>14) were significantly more likely to develop marked behavioral problems when antipsychotic medication was discontinued (chi(2) = 6.8, p =.009).</p> <p>Similar proportions of antipsychotic- and placebo-treated subjects withdrew from the study prematurely, overall and because of worsening behavioral symptoms.</p>	3

		<p>mg, haloperidol 0.25 mg). After randomization, study medication replaced existing medication on the day of commencement</p> <p>Design: Multi-center, randomized double-blind, and placebo-controlled discontinuation study in the UK</p>				
1	Ballard et al., 2008; Ballard et al. 2009	<p>Subjects with dementia who resided in nursing facilities and had been receiving antipsychotic medication for at least 3 months for behavioral or psychiatric disturbance.</p> <p>Intervention: Continued on antipsychotic (thioridazine, chlorpromazine, haloperidol, trifluoperazine, or risperidone) or change to placebo</p> <p>Design: Randomized blinded placebo-controlled parallel group discontinuation trial</p> <p>Multi-center, Dementia Antipsychotic Withdrawal Trial in the UK</p>	<p>165 randomized (83 antipsychotic; 82 placebo); 128 initiated intervention (64 in each condition); 13 lost to follow-up in each arm. 51 subjects per condition completed study.</p>	12 months	<p>The continuation treatment and placebo groups had no significant difference in the estimated mean change between baseline and 6 months in SIB scores (estimated mean difference in deterioration favoring placebo of -0.4 with 95% CI -6.4 to 5.5) or NPI scores (estimated mean difference in deterioration favoring continued treatment of -2.4 with 95% CI -8.2 to 3.5). There continued to be no difference between continuation treatment and placebo groups at 12 months, although some evidence suggested that subjects with initial NPI scores ≥ 15 showed reduced neuropsychiatric symptoms with continuing treatment. Subjects who continued on antipsychotic treatment had a lower cumulative probability of survival at 12 months with 70% (95% CI 58-80%)</p>	5

					<p>survival in the continued treatment group versus 77% (64-85%) in the placebo group for subjects receiving at least one dose of drug or placebo. Differences between groups were more pronounced at longer periods of follow-up (24-month survival 46% vs 71%; 36-month survival 30% vs 59%) with a Kaplan-Meier hazard ratio (HR) of 0.58 (95% CI 0.35 to 0.95).</p>	
1	Devan and et al., 2011	<p>Patients with Alzheimer's disease with psychosis or agitation who were outpatients and who had responded to 20 weeks of open label haloperidol (0.5-5 mg daily) as defined by a minimum of a 50% reduction in three target symptoms, and improvement on the CGI-C score for psychosis/agitation</p> <p>Intervention: Randomization to placebo vs. continuation of haloperidol</p> <p>Design: Randomized, double-blind trial in the US</p>	44 patients entered trial, 22 responded to haloperidol of whom 21 entered the randomized portion of the trial and 20 had at least one follow-up visit.	6 months	<p>Open label haloperidol was associated with a significant decrease in symptoms but a significant increase in extrapyramidal side effects. 4 of 10 patients who continued on haloperidol relapsed as compared to 8 of 10 patients on placebo but this difference was not statistically significant. (Relapse criteria required 50% worsening in target symptoms and on the CGI-C.)</p> <p>The time to relapse was shorter on placebo than haloperidol (p=0.04)</p>	3
1	Devan and et al., 2012	<p>Patients with AD and psychosis or agitation-aggression, recruited from memory clinics (including Alzheimer's research centers),</p>	180 patients received open-label risperidone	32 weeks in randomized phase	<p>Time to relapse of psychosis or agitation, adverse events, mortality</p> <p>16-week relapse rate: higher in placebo than in risperidone groups (60% [24 of 40 patients in group 3])</p>	5

		<p>geriatric psychiatry clinics, clinics at Veterans Affairs medical centers, physician referrals, and advertising, outpatient or residents at assisted-living facilities or nursing homes and 50-95 years of age</p> <p>Intervention: 16 week open label risperidone phase, then randomization to one of three regimens: continued risperidone therapy for 32 weeks (group 1), risperidone therapy for 16 weeks followed by placebo for 16 weeks (group 2), or placebo for 32 weeks (group 3)</p> <p>Design: Randomized controlled, double-blind trial</p>	<p>e (mean dose, 0.97 mg daily)</p> <p>112 patients met the criteria for response to treatment, of whom 110 underwent randomization</p>	<p>(after the 16 week open label phase)</p>	<p>vs. 33% [23 of 70 in groups 1 and 2]; P=0.004; HR with placebo, 1.94; 95% CI, 1.09 to 3.45; P=0.02)</p> <p>32-week relapse rate: higher in Group 2 than in Group 1 (48% [13 of 27 patients in group 2] vs. 15% [2 of 13 in group 1]; P=0.02; HR, 4.88; 95% CI, 1.08 to 21.98; P=0.02)</p>	
1	Ruths et al., 2004	<p>Subjects were nursing home patients with dementia who were taking haloperidol, risperidone, or olanzapine for nonpsychotic symptoms</p> <p>Intervention: Continue treatment with antipsychotic medication or change to placebo</p> <p>Design: Randomized,</p>	30	4 weeks	<p>In subjects who had antipsychotic discontinued, NPI-Questionnaire (NPI-Q) scores were unchanged or improved in 63% (11/15). Antipsychotic discontinuation was associated with reduced sleep efficiency and greater activity levels as measured by actigraphy.</p>	4

		placebo-controlled, and double-blind trial Multi-center study in Norway				
1	van Reekum et al., 2002	Subjects with dementia who resided in nursing facilities, had been on antipsychotic medication (risperidone, olanzapine, haloperidol, thioridazine or loxapine) for more than 6 months and had behavioral symptoms that were currently stable. Intervention: Continue treatment or change to placebo Design: Randomized trial of antipsychotic discontinuation Multi-center study in Canada Not industry sponsored	34; 10 of 16 placebo subjects and 6 of 16 active treatment subjects withdrew from the trial before completion	6 months	About one-quarter of subjects in each group showed a worsening of behavioral symptoms. More subjects in the placebo group withdrew from the study due to worsening behavior but this difference was not statistically significant. Data suggested that subjects taking a higher baseline dose of antipsychotic were more likely to have a worsening of behavior with discontinuation of antipsychotic medication.	3

Quality of the Body of Research Evidence from Discontinuation Studies in Terms of Overall BPSD

Risk of bias: Low -- All studies use an open label phase of treatment for stabilization on antipsychotic followed by randomization for the discontinuation portion of the trial. The studies vary in quality from moderate to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent – Although the studies with small samples did not always reach statistical significance, the discontinuation studies consistently showed greater proportions of individuals in the placebo group who withdrew due to worsening of symptoms. Studies that examined the effect of baseline behavioral symptoms showed a greater risk of worsening when subjects who had greater symptoms at baseline had their antipsychotic treatment discontinued.

Directness: Indirect -- Studies measure overall BPSD following discontinuation which is related to the PICOTS questions

Precision: Imprecise -- Although confidence intervals are not available for these measures, the lack of statistical significance for these measures in several of the studies indicates uncertainty about the conclusions.

Applicability: The included studies all involve individuals with dementia, including nursing home, hospital and non-institutionalized patients. The studies include subjects from around the world, including the US, Canada, the UK and Western Europe. The doses of medication that were used in the studies are consistent with usual practice.

Dose-response relationship: Not applicable

Magnitude of effect: Weak – With effect measured in terms of worsening symptoms in group receiving placebo as compared to group that continued on antipsychotic.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate – The trials are of good quality overall and consistent in the direction of effects seen, but the variations in the statistical significance of results reduce the level of confidence in the finding.

1B. Efficacy and Comparative Effectiveness of Second-Generation Antipsychotics for Treatment of Agitation

Second Generation Antipsychotic vs. Placebo

Overview and Quality of Individual Studies

<Aripiprazole>

1=rct 2=SR/MA 3=obs A=from AHRQ review	{Citation}	{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}	{Sample size. Where applicable, note overall N as well as group n for control and intervention}	{How long were subjects followed?}	{Brief description of outcome measures and main results}	(Rating of quality of evidence)
1A	Breder	Nursing home residents	487	10	aripiprazole vs. placebo total	1,2

	<p>et al., 2004 and Mintzer et al., 2007</p>	<p>with MMSE 6 to 22 and NPI or NPI/NH >5 for hallucinations and delusions</p> <p>Interventions: Placebo and 3 fixed-doses of aripiprazole (2 mg, 5 mg, 10 mg)</p> <p>Design: Double-blind randomized controlled trial</p> <p>Multi-center Industry sponsored trial conducted in long-term care facilities internationally including the US and Canada</p>	<p>subjects enrolled, 284 subjects analyzed</p>	<p>weeks</p>	<p>SMD = 0.16 (-0.05, 0.37)</p> <p>aripiprazole vs. placebo psychosis SMD = 0.24 (0.03, 0.45)</p> <p>aripiprazole vs. placebo agitation SMD = 0.31 (0.10, 0.52)</p>	
1A	<p>Streim et al., 2008</p>	<p>Nursing home residents with Alzheimer's disease with psychosis</p> <p>Interventions: Placebo, aripiprazole at 0.7 to 15 mg/day (average dose 8.6 mg/day)</p> <p>Design: Double-blind randomized controlled trial</p> <p>Multi-center Industry sponsored trial conducted in long-term care facilities in the US</p>	<p>256 subjects enrolled, 151 subjects analyzed</p>	<p>10 weeks after 1 week washout</p>	<p>aripiprazole vs. placebo total SMD = 0.36 (0.11, 0.61)</p> <p>aripiprazole vs. placebo psychosis SMD = -0.02 (-0.27, 0.23)</p> <p>aripiprazole vs. placebo agitation SMD = 0.30 (0.05, 0.55)</p>	2

Quality of the Body of Research Evidence for Aripiprazole vs. Placebo in Agitation

Risk of bias: Moderate -- Studies are both RCTs but are of low quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are overlapping, relatively narrow and in the same direction.

Directness: Direct -- Studies measure agitation which is directly related to the PICOTS questions

Precision: Precise -- Confidence intervals are relatively narrow and the range of confidence intervals do not include negative values.

Applicability: The included studies all involve individuals with dementia, with two of the studies in nursing home or hospital patients and one study in non-institutionalized patients. The studies include subjects from the US and Canada. The doses of aripiprazole that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- In the one study that assessed this for agitation, the 5 mg and 10 mg doses of aripiprazole were more effective than the 2 mg dose although this was not statistically significant.

Magnitude of effect: Weak effect -- The effect size is relatively small.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- Only two studies of aripiprazole vs. placebo are available that assessed agitation. These have good sample sizes and are randomized trials but have low to moderate quality.

<Olanzapine>

<small>1=rct 2=SR/MA 3=obs A=from AHRQ review</small>	<small>{Citation}</small>	<small>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</small>	<small>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</small>	<small>{How long were subjects followed?}</small>	<small>{Brief description of outcome measures and main results}</small>	<small>(Rating of quality of evidence)</small>
1A	Deberdt et al., 2005	Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or	494 subjects: 94 placebo, 204 olanzapine,	10 weeks	olanzapine vs. placebo total SMD = -0.02 (-0.27, 0.23) olanzapine vs. placebo	2

		residential settings, with NPI or NPI/NH >5 on hallucination and delusion items Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0 mg/day) Design: Double-blind randomized trial in the US Multi-center Industry sponsored	196 risperidone		psychosis SMD = -0.12 (-0.36, 0.13) olanzapine vs. placebo agitation SMD = 0.09 (-0.16, 0.34)	
1A	De Deyn et al., 2004	Subjects in long-term care settings with Alzheimer's disease (MMSE 5 to 26) and hallucinations or delusions Intervention: Placebo or fixed dose olanzapine (1, 2.5, 5, or 7.5 mg/day) Design: Double-blind randomized trial in Europe, Israel, Lebanon, Australia/New Zealand and South	652 subjects; 65-75% of the subjects in each arm completed the trial	10 weeks	olanzapine vs. placebo total SMD = 0.14 (-0.05, 0.34) olanzapine vs. placebo psychosis SMD = 0.17 (-0.02, 0.37) olanzapine vs. placebo agitation SMD = 0.14 (-0.05, 0.33)	2

		Africa Multi-center industry sponsored				
1A	Schneider et al., 2006 and Sultzer et al., 2008	Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day) Stable doses of cholinesterase inhibitor were permitted Design: Multi-center, federally funded CATIE-AD trial – phase 1	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	olanzapine vs. placebo total SMD = 0.15 (-0.11, 0.40) olanzapine vs. placebo psychosis SMD = 0.07 (-0.19, 0.33) olanzapine vs. placebo agitation SMD = 0.28 (0.02, 0.53)	1
1A	Street et al., 2000	Subjects resided in a nursing facility	206 subjects;	6 weeks	olanzapine vs. placebo total SMD = 0.30 (-0.03,	5

	<p>and had possible or probable Alzheimer's disease</p> <p>NPI/NH>2</p> <p>Intervention: Placebo vs. fixed doses of olanzapine (5, 10 or 15 mg/day)</p> <p>Design: Double-blind randomized controlled trial</p> <p>Multi-center industry sponsored trial in the US</p>	<p>66-80% of individuals completed the trial in each study arm</p>	<p>0.53)</p> <p>olanzapine vs. placebo psychosis SMD = 0.17 (-0.17, 0.50)</p> <p>olanzapine vs. placebo agitation SMD = 0.39 (0.05, 0.72)</p>	
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Quality of the Body of Research Evidence for Olanzapine vs. Placebo in Agitation

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are overlapping and have the same size. Three of the four studies show the same direction of effect with the fourth study showing no effect.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively narrow but the range of confidence intervals includes negative values in two of four studies.

Applicability: The included studies all involve individuals with dementia, with three of the studies including nursing home or hospital patients and two studies including non-institutionalized patients. The studies include subjects from around the world, including the US, Western Europe, and Australia/New Zealand. The doses of olanzapine that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- Two studies examined different doses of olanzapine and showed opposite effects.

Magnitude of effect: Weak effect -- The effect size is quite small and barely statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate -- The available studies of olanzapine vs. placebo are randomized trials and have good sample sizes but the trials are of varying quality and the imprecise nature of the results and the lack of a dose-response effect reduces confidence in the findings.

<Quetiapine>

1=rct 2=SR/MA 3=obs A=from AHRQ review	{Citation}	{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}	{Sample size. Where applicable, note overall N as well as group n for control and intervention}	{How long were subjects followed?}	{Brief description of outcome measures and main results}	{Rating of quality of evidence}
1A	Ballard et al., 2005	<p>Subjects resided in nursing care facilities in England, had a diagnosis of Alzheimer’s disease and had clinically significant agitation</p> <p>Intervention: Placebo vs. rivastigmine (3-6 mg BID by week 12 and >8 mg daily by week 26) vs. quetiapine (25-50 mg BID by week 12 and 50 mg BID by week 26)</p> <p>Design: Double-blind randomized controlled trial</p> <p>Funded by general donations to the PIs research program and profits from prior industry</p>	<p>93; 80 started treatment (25 rivastigmine, 26 quetiapine, 29 placebo), 71 tolerated the maximum protocol dose (22 rivastigmine, 23 quetiapine, 26 placebo); 56 had a baseline score > 10 on the SIB, 46 of whom were included in the analysis at six week follow up (14</p>	<p>26 weeks total; primary outcome was agitation at 6 weeks</p>	<p>placebo vs. quetiapine - dementia (agitation) change in CMAI SMD = 0.276 (-0.25, 0.603)</p> <p>rivastigmine vs. quetiapine -- dementia (agitation) change in CMAI SMD = -0.051 (-0.601, 0.499)</p> <p>When treated with either rivastigmine or quetiapine as compared to placebo, subjects failed to show an improvement in agitation. Relative to placebo, quetiapine but not rivastigmine was associated with greater cognitive decline as measured by the SIB score.</p>	4

		sponsored trials.	rivastigmine, 14 quetiapine, 18 placebo).			
1A	Paleacu et al., 2008	Subjects with diagnosis of Alzheimer's disease (MMSE <24) associated with behavioral symptoms (NPI > 6 on any item) Interventions: Placebo vs. flexibly dosed quetiapine (50-300 mg/day; median dose 200 mg/day) Design: Randomized double-blind trial Industry sponsored conducted in Israel	40 enrolled; 27 completed treatment	6 weeks	placebo vs. quetiapine - dementia (agitation) change in NPI SMD = -0.48 (-1.11, 0.15) Significant reductions occurred in NPI total scores in both groups (79% for placebo and 68.5% for quetiapine). At 6 weeks the CGI-C score had decreased significantly in the quetiapine group (p = 0.009) but not the placebo group (p = 0.48). MMSE, AIMS, SAS scores and adverse events did not show significant differences between quetiapine and placebo treatment.	3
1A	Schneider et al., 2006 and Sultzer et al., 2008	Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic	quetiapine vs. placebo total SMD = 0.15 (-0.11, 0.40) quetiapine vs. placebo psychosis SMD = 0.16 (-0.10, 0.42) quetiapine vs. placebo agitation SMD = 0.20 (-0.06, 0.46)	1

		<p>in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>		at 12 weeks		
1A	Tariot et al., 2006	<p>Subjects with Alzheimer's disease by DSM-IV (MMSE >4) residing in a nursing facility with psychosis and BPRS >23</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 12 mg/day; mean dose 1.9 mg/day) or quetiapine (25 to 600 mg/day; mean dose 96.9 mg/day)</p>	284 subjects, 180 analyzed	10 weeks	<p>quetiapine vs. placebo total SMD = 0.01 (-0.29, 0.30)</p> <p>quetiapine vs. placebo psychosis SMD = 0.00 (-0.29, 0.30)</p> <p>quetiapine vs. placebo agitation SMD = 0.24 (-0.05, 0.54)</p>	4

		Design: Randomized controlled, double-blind, and multi-center trial in the U.S. Industry sponsored				
1A	Zhong et al., 2007	Subjects with possible Alzheimer's disease or vascular dementia, in long-term care facility, with agitation and PANSS-EC >13 Intervention: Placebo vs. quetiapine 100 mg vs. quetiapine 200 mg (adjusted according to fixed titration) Design: Randomized double-blind trial Multi-center industry sponsored trial in the US	333 subjects	10 weeks.	quetiapine vs. placebo total SMD = 0.04 (-0.21, 0.28) quetiapine vs. placebo psychosis SMD = -0.03 (-0.27, 0.21) quetiapine vs. placebo agitation SMD = -0.03 (-0.27, 0.21)	2

Quality of the Body of Research Evidence for Quetiapine vs. Placebo in Agitation

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes in the meta-analysis are overlapping but the direction of the effect is variable.

Directness: Direct -- Studies measure agitation which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are wide for several studies and the range of confidence intervals includes negative values in all studies included in the meta-analysis.

Applicability: The included studies all involve individuals with dementia, including nursing home and non-institutionalized patients. Studies include subjects from around the world, including the US. The doses of quetiapine that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent: The one study that assessed two fixed doses of quetiapine for agitation found no difference in response.

Magnitude of effect: Weak effect -- The effect size is quite small and not statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Insufficient -- The available studies of quetiapine vs. placebo are randomized trials of varying quality and three of the five studies had good sample sizes. However, the study findings are inconsistent and several confidence intervals are wide making it difficult to draw conclusions about the data.

<Risperidone>

<small>1=rct 2=SR/MA 3=obs A=from AHRQ review</small>	{Citation}	{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}	{Sample size. Where applicable, note overall N as well as group n for control and intervention}	{How long were subjects followed?}	{Brief description of outcome measures and main results}	{Rating of quality of evidence}
1A	Brodaty et al., 2003 and Brodaty et al., 2005	Subjects resided in nursing homes had DSM-IV diagnosis of dementia of the Alzheimer's type, vascular dementia, or mixed dementia, had MMSE score <24 and significant aggressive behavior Intervention: Placebo vs. risperidone	345	12 weeks	risperidone vs. placebo total SMD = 0.46 (0.23, 0.69) risperidone vs. placebo psychosis SMD = 0.36 (0.13, 0.59) risperidone vs. placebo agitation SMD = 0.37 (0.14, 0.59)	3

		(flexibly dosed up to 2 mg/day with mean dose 0.95 mg/day). Design: Randomized, double-blind, and multi-center trial in Australia/New Zealand Industry sponsored				
1A	Deberdt et al., 2005	Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or residential settings, with NPI or NPI/NH >5 on hallucination and delusion items Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0 mg/day) Design: Double-blind randomized trial in the US Multi-center Industry sponsored	494 subjects: n=94 placebo, n=204 olanzapine, n=196 risperidone	10 weeks	risperidone vs. placebo total SMD = -0.13 (-0.38, 0.12) risperidone vs. placebo psychosis SMD = -0.03 (-0.34, 0.16) risperidone vs. placebo agitation SMD = 0.14 (-0.11, 0.39)	2
1A	De Deyn et al., 1999	Subjects were hospitalized or institutionalized and had a MMSE < 24 and BEHAVE-AD >7	344 subjects; 68 of 115 risperidone subjects, 81	12 weeks	risperidone vs. placebo total SMD = 0.12 (-0.14, 0.38) risperidone vs. placebo	4

		<p>Interventions Placebo vs. flexibly dosed haloperidol (0.5 to 4 mg/day; mean: 1.2 mg/day) or risperidone (0.5 to 4 mg/day; mean: 1.1 mg/day)</p> <p>Design: Multi-center randomized trial in the UK and Europe</p> <p>Industry sponsored</p>	<p>of 115 haloperidol subjects and 74 of 114 placebo subjects completed the trial</p>		<p>agitation SMD = 0.31 (0.05, 0.57)</p>	
1A	Katz et al., 1999	<p>Subjects resided in a nursing home or chronic care facility and had DSM-IV diagnoses of Alzheimer's disease, vascular dementia, or mixed dementia, MMSE <24 and significant psychotic and behavioral symptoms (BEHAVE-AD >7).</p> <p>Interventions: Placebo vs. fixed doses of risperidone at 0.5 mg/day, 1 mg/day, or 2 mg/day</p> <p>Design: Multi-center, double-blind, and randomized controlled trial conducted in the US</p>	<p>625 subjects, 70% of whom completed the study</p>	12 weeks	<p>risperidone vs. placebo total SMD = 0.32 (0.11, 0.53)</p> <p>risperidone vs. placebo psychosis SMD = 0.20 (-0.01, 0.41)</p> <p>risperidone vs. placebo agitation SMD = 0.38 (0.17, 0.60)</p>	4

		Industry sponsored				
1A	Mintzer et al., 2006	<p>Subjects resided in nursing homes or long-term care, were mobile and met criteria for Alzheimer's dementia with psychosis, MMSE 5 to 23.</p> <p>Interventions: Placebo vs. flexibly dosed risperidone (0.5-1.5 mg/day; mean dose 1.03 mg/day)</p> <p>Design: Multi-center, randomized controlled trial conducted in the US</p> <p>Industry sponsored</p>	473 subjects randomized; 238 placebo and 235 risperidone; 354 completed the study	8 weeks after 1-16 days of placebo run-in/wash-out	<p>risperidone vs. placebo total SMD = -0.01 (-0.21, 0.18)</p> <p>risperidone vs. placebo psychosis SMD = 0.17 (-0.02, 0.36)</p> <p>risperidone vs. placebo agitation SMD = 0.04 (-0.16, 0.23)</p>	3
1A	Schneider et al., 2006 and Sultzer et al., 2008	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5</p>	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	<p>risperidone vs. placebo total SMD = 0.40 (0.13, 0.68)</p> <p>risperidone vs. placebo psychosis SMD = 0.38 (0.11, 0.66)</p> <p>risperidone vs. placebo agitation SMD = 0.10 (-0.17, 0.37)</p>	1

	<p>mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>				
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Quality of the Body of Research Evidence for Risperidone vs. Placebo in Agitation

Risk of bias: Low -- Studies are all RCTs. They vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are overlapping and the direction of the effect favors risperidone in all of the studies.

Directness: Direct -- Studies measure agitation which is directly related to the PICOTS questions

Precision: Imprecise -- The confidence intervals are narrow but the range of confidence intervals includes negative values for three of the studies.

Applicability: The included studies all involve individuals with dementia, including nursing home or hospital patients and non-institutionalized patients. Studies include subjects from around the world, including the US, UK, Western Europe and Australia/New Zealand. The doses of risperidone that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- One study examined different fixed doses of risperidone and confidence intervals suggest a dose-response effect in the treatment of agitation, but these dose response relationships did not reach statistical significance.

Magnitude of effect: Weak effect -- The effect size is small but statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate -- The available studies of risperidone vs. placebo are randomized trials of varying quality with good sample sizes. The overall effect size according to the AHRQ meta-analysis is small and there is some imprecision, however the direction of the findings are consistent.

Quality of the Body of Research Evidence for Second-Generation Antipsychotics vs. Placebo in Agitation

Risk of bias: Low -- Studies are all RCTs and the vast majority are double-blind trials. They vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are generally overlapping and the majority of the studies show an effect in the direction of second generation antipsychotic benefit. The AHRQ meta-analysis shows small but statistically significant effects for olanzapine and risperidone on agitation.

Directness: Direct -- Studies measure agitation which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals for individual studies are relatively narrow with the exception of two studies of quetiapine but the range of confidence intervals includes negative values in over half of the studies.

Applicability: The included studies all involve individuals with dementia, including nursing home or hospital patients and non-institutionalized patients. The studies include subjects from around the world, including the US, Canada, Western Europe, and Australia/New Zealand. The doses of second generation antipsychotic medications that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- For aripiprazole, quetiapine and risperidone, only one study of each medication is available that assesses differing doses; two studies are available for olanzapine with no consistency in results. There appear to be a trend for dose response relationships for risperidone based on the confidence intervals, but these dose response relationships did not show statistical differences.

Magnitude of effect: Weak effect -- The effect sizes are small for all medications.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate -- A significant number of randomized trials of second generation antipsychotic agents vs. placebo are available. Trials are of varying quality but most have good sample sizes. The majority of the studies show a beneficial effect, albeit a small one, for treatment with the antipsychotic as compared to placebo.

Second Generation Antipsychotic vs. Haloperidol

Overview and Quality of Individual Studies

<p>1=rct 2=SR/MA 3=obs A=from AHRO review</p>	<p>{Citation}</p>	<p>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</p>	<p>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</p>	<p>{How long were subjects followed?}</p>	<p>{Brief description of outcome measures and main results}</p>	<p>(Rating of quality of evidence)</p>
<p>1</p>	<p>Chan et al., 2001</p>	<p>Subjects were inpatients or outpatients who had a DSM-IV diagnosis of dementia of Alzheimer's type or vascular dementia associated with behavioral symptoms</p> <p>Intervention: Flexibly dosed haloperidol (0.5 to 2 mg/day; mean dose 0.90 mg/day) vs. risperidone (0.5 to 2 mg/day; mean dose 0.85 mg/day)</p> <p>Design: Multi-center, randomized controlled, and double-blind trial conducted in Hong Kong</p> <p>Industry sponsored</p>	<p>58</p>	<p>3 months</p>	<p>haloperidol vs. risperidone -- dementia (aggressiveness) change in BEHAVE-AD SMD = 0.057 (-0.472, 0.585)</p> <p>haloperidol vs. risperidone -- dementia (psychosis) change in BEHAVE-AD SMD = -0.383 (-0.917, 0.15)</p> <p>Scores on the CMAI and BEHAVE-AD were significantly improved by both haloperidol and risperidone with no significant differences between the two treatments. Haloperidol but not risperidone-treated patients showed an increase in extrapyramidal side effects on the SAS.</p>	<p>3</p>

1A	De Deyn et al., 1999	<p>Subjects were hospitalized or institutionalized and had a MMSE < 24 and BEHAVE-AD >7</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 4 mg/day; mean: 1.2 mg/day) or risperidone (0.5 to 4 mg/day; mean: 1.1 mg/day)</p> <p>Design: Multi-center randomized trial in the UK and Europe</p> <p>Industry sponsored</p>	344 subjects	12 weeks	<p>risperidone vs. haloperidol total SMD = -0.19 (-0.45, 0.07)</p> <p>risperidone vs. haloperidol agitation SMD = -0.07 (-0.19, 0.33)</p>	4
1A	Savaskan et al., 2006	<p>Subjects were inpatients with ICD-10 Alzheimer's disease and associated behavioral symptoms</p> <p>Interventions: Haloperidol (0.5 to 4 mg/day; mean dose 1.9 mg/day) vs. quetiapine (25 to 200 mg/day; mean dose 125 mg/day)</p> <p>Fixed titration schedule with weekly dose increments to final dose</p> <p>Design: Randomized controlled open label trial in Switzerland</p> <p>Two of the three investigators were noted to be supported by an industry sponsored grant.</p>	30 subjects enrolled; 4 dropped out; 4 had missing data; 22 were analyzed	5 weeks after run-in period of up to 7 days	<p>quetiapine vs. haloperidol total SMD = 0.99 (0.10, 1.88)</p> <p>quetiapine vs. haloperidol agitation SMD = 0.06 (-0.78, 0.89)</p>	2

1	Suh et al., 2004; Suh et al., 2006	<p>Subjects were in a nursing facility and had a diagnosis of Alzheimer disease, vascular dementia, or mixed dementia associated with behavioral disturbance (FAST > 3, BEHAVE-D >7, CMAI > 2 on at least 2 items)</p> <p>Intervention: Flexibly dosed risperidone (0.5-1.5 mg/day; mean dose 0.80 mg/day) vs. haloperidol (0.5-1.5 mg/day; mean dose 0.83 mg/day)</p> <p>Design: Randomized, double-blind crossover trial</p> <p>Single center in Korea</p> <p>Industry sponsored</p>	120	18 weeks	As compared to treatment with haloperidol, risperidone treatment was associated with greater clinical improvement on total and subscale scores of the Korean version of BEHAVE-AD, total and subscale scores of the Korean version of CMAI, and CGI-C as well as a lower frequency of extrapyramidal side effects.	4
1A	Tariot et al., 2006	<p>Subjects with Alzheimer's disease by DSM-IV (MMSE >4) residing in a nursing facility with psychosis and BPRS >23</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 12 mg/day; mean dose 1.9 mg/day) or quetiapine (25 to 600 mg/day; mean dose 96.9 mg/day)</p> <p>Design: Randomized controlled, double-blind, and multi-center trial in the U.S.</p> <p>Industry sponsored</p>	284 subjects, 180 analyzed	10 weeks	<p>quetiapine vs. haloperidol total SMD = 0.16 (-0.16, 0.47)</p> <p>quetiapine vs. haloperidol agitation SMD = 0.04 (-0.26, 0.34)</p>	4

1A	Verhey et al., 2006	<p>Subjects with DSM-IV dementia living in nursing homes or their own homes judged to be in need of treatment for clinically significant agitation (CMAI score >44)</p> <p>Interventions: Haloperidol (1 to 3 mg/day; mean dose 1.75 mg) vs. olanzapine (2.5 to 7.5 mg/day; mean dose 4.71 mg)</p> <p>Design: Multi-center, randomized controlled, and double-blind two-arm study in Netherlands</p> <p>Randomized after 3-11 day washout.</p> <p>Funding source not noted</p>	59 subjects, 1 excluded for missing data; 3 patients withdrew from the study and all were in the olanzapine group	5 weeks total; up to 2 weeks titration, at least 3 weeks at stable dose	<p>olanzapine vs. haloperidol total SMD = -0.18 (-0.77,0.41)</p> <p>olanzapine vs. haloperidol agitation SMD = -0.21 (-0.73, 0.31)</p> <p>AHRQ does not report SMD for psychosis comparison but the change in the NPI Psychosis item showed no significant difference in the scores for the two treatments.</p>	3
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Quality of the Body of Research Evidence for Second-Generation Antipsychotics vs. Haloperidol in Agitation

Risk of bias: Low -- Studies are all randomized trials with one crossover trial. The studies are of moderate to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are consistent in showing minimal difference between haloperidol and the comparison second generation antipsychotic agents.

Directness: Direct -- Studies measure agitation which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are variable in width and several confidence intervals are extremely wide.

Applicability: The included studies all involve individuals with dementia, with the majority of the studies including nursing home or hospital patients. Studies include subjects from around the world, including the US, UK, Western Europe, Hong Kong and Japan. The doses of antipsychotic that were used in the studies are consistent with usual practice.

Dose-response relationship: Not applicable for this comparison

Magnitude of effect: Not applicable

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- The available studies of second generation antipsychotic medications as compared to haloperidol that assessed agitation include five randomized parallel arm trials and one randomized crossover trial. The trials are of varying quality and some have small sample sizes. For the trials that were included in the AHRQ meta-analysis, the effect size is small and does not show evidence of a difference between haloperidol and second generation antipsychotic agents overall. Studies that were not a part of the AHRQ analysis are consistent with this observation. For individual agents, there are no more than two studies for each drug and several of the studies had extremely wide confidence intervals.

Olanzapine or Quetiapine vs. Risperidone

Overview and Quality of Individual Studies

<small>1=rct 2=SR/MA 3=obs</small> <small>A=from AHRQ review</small>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Deberdt et al., 2005	Subjects with Alzheimer's, vascular or mixed dementia, NPI or NPI/NH >5 on hallucination and delusion items Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day;	494 subjects: 94 placebo, 204 olanzapine, 196 risperidone	10 weeks	olanzapine vs. risperidone total SMD = 0.10 (-0.10, 0.30) olanzapine vs. risperidone psychosis SMD = -0.03 (-0.23, 0.17) olanzapine vs. risperidone agitation SMD = -0.04 (-0.24, 0.16)	2

		mean: 1.0 mg/day)				
		Design: Double-blind randomized trial in the US				
		Multi-center Industry sponsored				
1A	Schneider et al., 2006 and Sultzer et al., 2008	Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day) Stable doses of cholinesterase inhibitor were permitted Design: Multi-center, federally funded CATIE-AD trial – phase 1	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	olanzapine vs. risperidone total SMD = -0.27 (-0.56, 0.02) olanzapine vs. risperidone psychosis SMD = -0.27 (-0.56, 0.02) olanzapine vs. risperidone agitation SMD = 0.17 (-0.12, 0.16) quetiapine vs. risperidone total SMD = -0.24 (-0.53, 0.06) quetiapine vs. risperidone psychosis SMD = -0.24 (-0.54, 0.05) quetiapine vs. risperidone agitation SMD = 0.10 (-0.20, 0.39)	1

1A	Rainer et al., 2007	<p>Subjects were outpatients with mild to moderate dementia of the Alzheimer's, vascular, mixed, or fronto-temporal lobe type according to DSM-IV and ICD-10 who had behavioral disturbance and NPI sub-item scores relating to psychosis or agitation/aggression</p> <p>Interventions: Flexibly dosed quetiapine (50 to 400 mg/day; mean dose 77 mg/day) vs. risperidone (0.5 to 4 mg/day; mean dose 0.9 mg/day)</p> <p>Design: Randomized, single blind, parallel group trial</p> <p>Multi-center, investigator sponsored study in Western Europe</p>	72 enrolled with 65 subjects in ITT population; quetiapine n= 34, risperidone n= 31	8 weeks	<p>quetiapine vs. risperidone total SMD = -0.06 (-0.55, 0.43)</p> <p>quetiapine vs. risperidone agitation SMD = -0.17 (-0.66, 0.32)</p>	3
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Quality of the Body of Research Evidence for Olanzapine or Quetiapine vs. Risperidone in Agitation

Risk of bias: Moderate -- Studies are all RCTs but vary in quality from low to moderate based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are overlapping and show no prominent differences between risperidone and either olanzapine or quetiapine in the limited number of studies available. However, the direction of the effect was variable.

Directness: Direct -- Studies measure agitation which is directly related to the PICOTS questions.

Precision: Imprecise -- Confidence intervals are relatively wide and the range of confidence intervals includes negative values in all four studies.

Applicability: The included studies all involve individuals with dementia, including patients in institutional and outpatient settings. The studies include subjects from around the world, including the US and Western Europe. The doses of medication that were used in the studies are consistent with usual practice.

Dose-response relationship: Not applicable to this comparison.

Magnitude of effect: Not applicable

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- The available studies of risperidone as compared to olanzapine or quetiapine are randomized trials of low to moderate quality. The studies vary in their sample sizes. In addition, several of the confidence intervals are wide. However, they are consistent in showing no significant differences between risperidone and either olanzapine or quetiapine.

1C. Efficacy and Comparative Effectiveness of Second-Generation Antipsychotics for Treatment of Psychosis

Second Generation Antipsychotic vs. Placebo

Overview and Quality of Individual Studies

<Aripiprazole>

<small>1=rct 2=SR/MA 3=obs</small> <small>A=from AHRQ review</small>	{Citation}	{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}	{Sample size. Where applicable, note overall N as well as group n for control and intervention}	{How long were subjects followed?}	{Brief description of outcome measures and main results}	(Rating of quality of evidence)
1A	Breder et al., 2004 and Mintzer et al., 2007	Nursing home residents with MMSE 6 to 22 and NPI or NPI/NH >5 for hallucinations and delusions Interventions: Placebo and 3 fixed-doses of aripiprazole (2 mg, 5 mg, 10 mg) Design: Double-blind randomized controlled trial Multi-center Industry sponsored trial conducted in long-term care facilities internationally including the US and Canada	487 subjects enrolled, 284 subjects analyzed	10 weeks	aripiprazole vs. placebo total SMD = 0.16 (-0.05, 0.37) aripiprazole vs. placebo psychosis SMD = 0.24 (0.03, 0.45) aripiprazole vs. placebo agitation SMD = 0.31 (0.10, 0.52)	1,2
1A	De Deyn et al., 2005	Non-institutionalized subjects with Alzheimer's disease with psychosis Interventions: Placebo, aripiprazole at 2-15 mg/day Design: Double-blind, multi-center RCTs Industry sponsored trial conducted in the US,	208 subjects	10 weeks	aripiprazole vs. placebo total SMD = 0.06 (-0.21, 0.34) aripiprazole vs. placebo psychosis SMD = 0.16 (-0.12, 0.43)	3

		Canada, Western Europe, Australia/New Zealand				
1A	Streim et al., 2008	Nursing home residents with Alzheimer's disease with psychosis Interventions: Placebo, aripiprazole at 0.7 to 15 mg/day (average dose 8.6 mg/day) Design: Double-blind randomized controlled trial Multi-center Industry sponsored trial conducted in long-term care facilities in the US	256 subjects enrolled, 151 subjects analyzed	10 weeks after 1 week washout	aripiprazole vs. placebo total SMD = 0.36 (0.11, 0.61) aripiprazole vs. placebo psychosis SMD = -0.02 (-0.27, 0.23) aripiprazole vs. placebo agitation SMD = 0.30 (0.05, 0.55)	2

Quality of the Body of Research Evidence for Aripiprazole vs. Placebo in Psychotic Symptoms

Risk of bias: Low -- Studies are all RCTs and are of low to moderate quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Consistent -- Effect sizes are overlapping and have the same size. Two of the three studies have the same direction of effect and the third study shows no effect.

Directness: Direct -- Studies measure psychosis which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively narrow but the range of confidence intervals includes negative values in two of the three studies.

Applicability: The included studies all involve individuals with dementia, with two of the studies in nursing home or hospital patients and one study in non-institutionalized patients. The studies include subjects from around the world, including the US, Canada, Western Europe, and Australia/New Zealand. The doses of aripiprazole that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- A single study examined the effect of different doses of aripiprazole relative to placebo and inspection of confidence intervals appears to show a dose-response effect between 2 mg and 10 mg, however this did not show statistical significance.

Magnitude of effect: Weak effect -- The effect size is small and not statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- The three available studies of aripiprazole vs. placebo are randomized trials of low to moderate quality and have good sample sizes. However, there was a lack of consistency in study conclusions.

<Olanzapine>

<small>1=rct 2=SR/MA 3=obs A=from AHRQ review</small>	<small>{Citation}</small>	<small>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</small>	<small>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</small>	<small>{How long were subjects followed?}</small>	<small>{Brief description of outcome measures and main results}</small>	<small>(Rating of quality of evidence)</small>
1A	Deberdt et al., 2005	Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or residential settings, with NPI or NPI/NH >5 on hallucination and delusion items Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0 mg/day) Design: Double-blind randomized trial in the US Multi-center Industry sponsored	494 subjects: 94 placebo, 204 olanzapine, 196 risperidone	10 weeks	olanzapine vs. placebo total SMD = -0.02 (-0.27, 0.23) olanzapine vs. placebo psychosis SMD = -0.12 (-0.36, 0.13) olanzapine vs. placebo agitation SMD = 0.09 (-0.16, 0.34)	2
1A	De Deyn et al.,	Subjects in long-term care settings with	652 subjects; 65-	10 weeks	olanzapine vs. placebo total SMD =	2

	2004	<p>Alzheimer's disease (MMSE 5 to 26) and hallucinations or delusions</p> <p>Intervention: Placebo or fixed dose olanzapine (1, 2.5, 5, or 7.5 mg/day)</p> <p>Design: Double blind randomized trial in Europe, Israel, Lebanon, Australia/New Zealand and South Africa</p> <p>Multi-center industry sponsored</p>	75% of the subjects in each arm completed the trial		<p>0.14 (-0.05, 0.34)</p> <p>olanzapine vs. placebo psychosis SMD = 0.17 (-0.02, 0.37)</p> <p>olanzapine vs. placebo agitation SMD = 0.14 (-0.05, 0.33)</p>	
1A	Schneider et al., 2006 and Sultzer et al., 2008	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor</p>	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	<p>olanzapine vs. placebo total SMD = 0.15 (-0.11, 0.40)</p> <p>olanzapine vs. placebo psychosis SMD = 0.07 (-0.19, 0.33)</p> <p>olanzapine vs. placebo agitation SMD = 0.28 (0.02, 0.53)</p>	1

		were permitted Design: Multi-center, federally funded CATIE-AD trial – phase 1				
1A	Street et al., 2000	Subjects resided in a nursing facility and had possible or probable Alzheimer's disease NPI/NH>2 Intervention: Placebo vs. fixed doses of olanzapine (5, 10 or 15 mg/day) Design: Double-blind randomized controlled trial Multi-center Industry sponsored trial in the US	206 subjects; 66-80% of individuals completed the trial in each study arm	6 weeks	olanzapine vs. placebo total SMD = 0.30 (-0.03, 0.53) olanzapine vs. placebo psychosis SMD = 0.17 (-0.17, 0.50) olanzapine vs. placebo agitation SMD = 0.39 (0.05, 0.72)	5

Quality of the Body of Research Evidence for Olanzapine vs. Placebo in Psychotic Symptoms

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are overlapping and some are wide. Three of the four studies show the same direction of effect with the other study showing the opposite effect. In none of the studies is the effect statistically significant.

Directness: Direct -- Studies measure psychosis which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are relatively wide and the range of confidence intervals includes negative values in all five studies.

Applicability: The included studies all involve individuals with dementia, including nursing home or hospital patients and non-institutionalized patients. However, in one of the studies, patients were specifically excluded if they had psychotic symptoms at baseline. The studies include subjects from

around the world, including the US, Western Europe, and Australia/New Zealand. The doses of olanzapine that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- Two studies examined different doses of olanzapine and showed varying effects with olanzapine dose with no consistent trends or statistically significant differences based on dose.

Magnitude of effect: Weak effect -- The effect size is quite small and not statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Insufficient -- The available studies of olanzapine vs. placebo are randomized trials of varying quality and have good sample sizes, however the effect size of these trials is small according to the AHRQ meta-analysis, the confidence intervals are relatively wide and the findings are inconsistent, making it difficult to draw conclusions with any degree of confidence.

<Quetiapine>

<p>1=rct 2=SR/MA 3=obs A=from AHRQ review</p>	<p>{Citation}</p>	<p>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</p>	<p>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</p>	<p>{How long were subjects followed?}</p>	<p>{Brief description of outcome measures and main results}</p>	<p>(Rating of quality of evidence)</p>
<p>1A</p>	<p>Schneider et al., 2006 and Sultzer et al., 2008</p>	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or</p>	<p>421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone</p>	<p>median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks</p>	<p>quetiapine vs. placebo total SMD = 0.15 (-0.11, 0.40)</p> <p>quetiapine vs. placebo psychosis SMD = 0.16 (-0.10, 0.42)</p> <p>quetiapine vs. placebo agitation SMD = 0.10 (-0.17, 0.37)</p>	<p>1</p>

		<p>risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>				
1A	Tariot et al., 2006	<p>Subjects with Alzheimer's disease by DSM-IV (MMSE >4) residing in a nursing facility with psychosis and BPRS >23</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 12 mg/day; mean dose 1.9 mg/day) or quetiapine (25 to 600 mg/day; mean dose 96.9 mg/day)</p> <p>Design: Randomized controlled, double-blind, and multi-center trial in the U.S.</p> <p>Industry sponsored</p>	284 subjects, 180 analyzed	10 weeks	<p>quetiapine vs. placebo total SMD = 0.01 (-0.29, 0.30)</p> <p>quetiapine vs. placebo psychosis SMD = 0.00 (-0.29, 0.30)</p> <p>quetiapine vs. placebo agitation SMD = 0.25 (-0.05, 0.54)</p>	4
1A	Zhong et al., 2007	<p>Subjects with possible Alzheimer's disease or vascular dementia, in long-term care facility, with agitation and PANSS-EC >13</p> <p>Intervention: Placebo vs. quetiapine 100 mg vs.</p>	333 subjects	10 weeks.	<p>quetiapine vs. placebo total SMD = 0.04 (-0.21, 0.28)</p> <p>quetiapine vs. placebo psychosis SMD = -0.03 (-0.27, 0.21)</p>	2

	<p>quetiapine 200 mg (adjusted according to fixed titration)</p> <p>Design: Randomized double-blind trial</p> <p>Multi-center industry sponsored trial in the US</p>			<p>quetiapine vs. placebo agitation SMD = -0.03 (-0.27, 0.21)</p>	
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Quality of the Body of Research Evidence for Quetiapine vs. Placebo in Psychotic Symptoms

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes in the meta-analysis are overlapping and have the same size. The three studies in the meta-analysis have varying directions of effect and in none of the studies is the effect statistically significant.

Directness: Direct -- Studies measure psychosis which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are narrow but the range of confidence intervals includes negative values in all studies included in the meta-analysis.

Applicability: The included studies all involve individuals with dementia, with two of the studies including nursing home or hospital patients and one study including non-institutionalized patients. Studies include subjects from around the world, including the US. The doses of quetiapine that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- One studies examined different doses of quetiapine and showed difference in effect based on dose.

Magnitude of effect: Weak effect -- The effect size is quite small and not statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Insufficient -- The available studies of quetiapine vs. placebo are randomized trials with good sample sizes. They are of varying quality and the direction of findings in the studies was variable, making it difficult to draw conclusions with any degree of confidence. None of the studies included in the meta-analysis showed a statistically significant benefit.

<Risperidone>

<p>1=rct 2=SR/MA 3=obs A=from AHRQ review</p>	<p>{Citation}</p>	<p>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</p>	<p>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</p>	<p>{How long were subjects followed?}</p>	<p>{Brief description of outcome measures and main results}</p>	<p>(Rating of quality of evidence)</p>
<p>1A</p>	<p>Brody et al., 2003 and Brody et al., 2005</p>	<p>Subjects resided in nursing homes had DSM-IV diagnosis of dementia of the Alzheimer's type, vascular dementia, or mixed dementia, had MMSE score <24 and significant aggressive behavior</p> <p>Intervention: Placebo vs. risperidone (flexibly dosed up to 2 mg/day with mean dose 0.95 mg/day).</p> <p>Design: Randomized, double-blind, and multi-center trial in Australia/New Zealand</p> <p>Industry sponsored</p>	<p>345</p>	<p>12 weeks</p>	<p>risperidone vs. placebo total SMD = 0.46 (0.23, 0.69)</p> <p>risperidone vs. placebo psychosis SMD = 0.36 (0.13, 0.59)</p> <p>risperidone vs. placebo agitation SMD = 0.37 (0.14, 0.59)</p>	<p>3</p>
<p>1A</p>	<p>Deberdt et al., 2005</p>	<p>Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or residential settings, with NPI or NPI/NH >5 on hallucination and delusion items</p>	<p>494 subjects: 94 placebo, 204 olanzapine, 196 risperidone</p>	<p>10 weeks</p>	<p>risperidone vs. placebo total SMD = -0.13 (-0.38, 0.12)</p> <p>risperidone vs. placebo psychosis SMD = -0.03 (-0.34, 0.16)</p>	<p>2</p>

		<p>Interventions: Placebo vs. flexibly dosed olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0 mg/day)</p> <p>Design: Double-blind randomized trial in the US</p> <p>Multi-center industry sponsored</p>			<p>risperidone vs. placebo agitation SMD = 0.14 (-0.11, 0.39)</p>	
1A	De Deyn et al., 1999	<p>Subjects were hospitalized or institutionalized and had a MMSE < 24 and BEHAVE-AD >7</p> <p>Interventions: Placebo vs. flexibly dosed haloperidol (0.5 to 4 mg/day; mean: 1.2 mg/day) or risperidone (0.5 to 4 mg/day; mean: 1.1 mg/day)</p> <p>Design: Multi-center randomized trial in the UK and Europe</p> <p>Industry sponsored</p>	<p>344 subjects; 68 of 115 risperidone subjects, 81 of 115 haloperidol subjects and 74 of 114 placebo subjects completed the trial</p>	12 weeks	<p>risperidone vs. placebo total SMD = 0.12 (-0.14, 0.38)</p> <p>risperidone vs. placebo agitation SMD = 0.31 (0.05, 0.57)</p>	4
1A	Katz et al., 1999	<p>Subjects resided in a nursing home or chronic care facility and had DSM-IV diagnoses of Alzheimer's disease, vascular dementia, or</p>	<p>625 subjects, 70% of whom completed the study</p>	12 weeks	<p>risperidone vs. placebo total SMD = 0.32 (0.11, 0.53)</p> <p>risperidone vs. placebo psychosis SMD = 0.20 (-0.01,</p>	4

		<p>mixed dementia, MMSE <24 and significant psychotic and behavioral symptoms (BEHAVE-AD >7).</p> <p>Interventions: Placebo vs. fixed doses of risperidone at 0.5 mg/day, 1 mg/day, or 2 mg/day</p> <p>Design: Multi-center, double-blind, and randomized controlled trial conducted in the US</p> <p>Industry sponsored</p>			<p>0.41)</p> <p>risperidone vs. placebo agitation SMD = 0.38 (0.17, 0.60)</p>	
1A	Mintzer et al., 2006	<p>Subjects resided in nursing homes or long-term care, were mobile and met criteria for Alzheimer's dementia with psychosis, MMSE 5 to 23.</p> <p>Interventions: Placebo vs. flexibly dosed risperidone (0.5-1.5 mg/day; mean dose 1.03 mg/day)</p> <p>Design: Multi-center, randomized controlled trial conducted in the US</p> <p>Industry sponsored</p>	<p>473 subjects randomized; 238 placebo and 235 risperidone; 354 completed the study</p>	<p>8 weeks after 1-16 days of placebo run-in/wash-out</p>	<p>risperidone vs. placebo total SMD = -0.01 (-0.21, 0.18)</p> <p>risperidone vs. placebo psychosis SMD = 0.17 (-0.02, 0.36)</p> <p>risperidone vs. placebo agitation SMD = 0.04 (-0.16, 0.23)</p>	3

1A	Schneider et al., 2006 and Sultzer et al., 2008	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	<p>risperidone vs. placebo total SMD = 0.40 (0.13, 0.68)</p> <p>risperidone vs. placebo psychosis SMD = 0.38 (0.11, 0.66)</p> <p>risperidone vs. placebo agitation SMD = 0.10 (-0.17, 0.37)</p>	1
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Quality of the Body of Research Evidence for Risperidone vs. Placebo in Psychotic Symptoms

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are overlapping but four studies show an effect in the direction of risperidone benefit, with one study showing an effect in the direction of benefit for placebo. Two of the four studies that showed a benefit of risperidone in psychosis were statistically significant, but the other three studies were did not show statistically significant benefit.

Directness: Direct -- Studies measure overall BPSD which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals vary in width and the range of confidence intervals includes negative values in three studies.

Applicability: The included studies all involve individuals with dementia, including nursing home or hospital patients and non-institutionalized patients. Studies include subjects from around the world, including the US, UK, Western Europe and Australia/New Zealand. The doses of risperidone that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent - One study examined different fixed doses of risperidone and appears to show a dose-response effect based upon inspection of confidence intervals, but these dose response relationships did not show statistical differences across each pair of doses.

Magnitude of effect: Weak effect -- The effect size is small but statistically significant.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate -- The available studies of risperidone vs. placebo are randomized trials of varying quality and have good sample sizes, however the overall effect size of these trials is small according to the AHRQ meta-analysis. Four of the studies show benefit, which is statistically significant in two of the studies.

Quality of the Body of Research Evidence for Second-Generation Antipsychotics vs. Placebo in Psychotic Symptoms

Risk of bias: Low -- Studies are all RCTs and the vast majority are double-blind trials. They vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are generally overlapping and the majority of the studies show an effect in the direction of second generation antipsychotic benefit. However, several studies showed no difference or favored placebo. On psychotic symptoms, the AHRQ meta-analysis shows small but statistically significant effects for risperidone only.

Directness: Direct -- Studies measure psychosis which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals for individual studies vary in size and the range of confidence intervals includes negative values in the majority of studies.

Applicability: The included studies all involve individuals with dementia, including nursing home or hospital patients and non-institutionalized patients. The studies include subjects from around the

world, including the US, Canada, Western Europe, and Australia/New Zealand. The doses of second generation antipsychotic medications that were used in the studies are consistent with usual practice.

Dose-response relationship: Absent -- For aripiprazole, quetiapine and risperidone, only one study of each medication is available that assesses differing doses; two studies are available for olanzapine with no consistency in results. There appear to be trends for dose-response relationships on measures of psychosis for aripiprazole and risperidone based upon the confidence intervals, but these dose response relationships did not show statistical differences across relevant pairs of doses.

Magnitude of effect: Weak effect -- The effect sizes are small for all medications and significant only for risperidone.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low -- A significant number of randomized trials of second generation antipsychotic agents vs. placebo are available. Trials are of varying quality but most have good sample sizes. However, there is a great deal of inconsistency in the study findings for individual medications and across the second generation antipsychotic medications as a whole.

Olanzapine or Quetiapine vs. Risperidone

Overview and Quality of Individual Studies

<small>1=rct 2=SR/MA 3=obs A=from AHRQ review</small>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Deberdt et al., 2005	Subjects with Alzheimer's, vascular or mixed dementia, in outpatient or residential settings, with NPI or NPI/NH >5 on hallucination and delusion items Interventions: Placebo vs. flexibly dosed	494 subjects: 94 placebo, 204 olanzapine, 196 risperidone	10 weeks	olanzapine vs. risperidone total SMD = 0.10 (-0.10, 0.30) olanzapine vs. risperidone psychosis SMD = -0.03 (-0.23, 0.17)	2

		<p>olanzapine (2.5 mg-10 mg/day; mean: 5.2 mg/day) or risperidone (0.5 mg-2 mg/day; mean: 1.0 mg/day)</p> <p>Design: Double-blind randomized trial in the US</p> <p>Multi-center industry sponsored</p>			<p>olanzapine vs. risperidone agitation SMD = -0.04 (-0.24, 0.16)</p>	
1A	<p>Schneider et al., 2006 and Sultzer et al., 2008</p>	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>	<p>421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone</p>	<p>median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks</p>	<p>olanzapine vs. risperidone total SMD = -0.27 (-0.56, 0.02)</p> <p>olanzapine vs. risperidone psychosis SMD = -0.27 (-0.56, 0.02)</p> <p>olanzapine vs. risperidone agitation SMD = -0.17 (-0.12, 0.16)</p> <p>quetiapine vs. risperidone total SMD = -0.24 (-0.53, 0.06)</p> <p>quetiapine vs. risperidone psychosis SMD = -0.24 (-0.54, 0.05)</p> <p>quetiapine vs.</p>	1

					risperidone agitation SMD = 0.10 (-0.20, 0.39)	
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Quality of the Body of Research Evidence for Olanzapine or Quetiapine vs. Risperidone in Psychotic Symptoms

Risk of bias: Low -- Studies are both RCTs but vary in quality from low to moderate based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent -- Effect sizes are overlapping but one study favors risperidone and the other study suggests no difference between risperidone and olanzapine.

Directness: Direct -- Studies measure psychosis which is directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals are wide and the range of confidence intervals includes negative values in both studies.

Applicability: The included studies all involve individuals with dementia, including patients in institutional and outpatient settings. The studies include subjects from the US. The doses of medication that were used in the studies are consistent with usual practice.

Dose-response relationship: Not applicable to this comparison.

Magnitude of effect: Not applicable

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Insufficient -- The available studies of risperidone as compared to olanzapine or quetiapine are randomized trials of low to moderate quality but good sample sizes. However, the confidence intervals are relatively wide and there is no consistency in the effect, making it difficult to draw conclusions with any degree of confidence.

2. Appropriate Dosage and Duration of Antipsychotic Treatment in Individuals With Alzheimer's Disease and Other Dementia Syndromes

Overview and Quality of Individual Studies

<i>1=rct 2=SR/MA 3=obs</i> <i>A=from AHRQ review</i>	<i>{Citation}</i>	<i>{Brief description of how subjects were recruited and what intervention(s) were performed in the study, and any additional notes that may impact quality rating}</i>	<i>{Sample size. Where applicable, note overall N as well as group n for control and intervention}</i>	<i>{How long were subjects followed?}</i>	<i>{Brief description of outcome measures and main results}</i>	<i>(Rating of quality of evidence)</i>
1A	Breder et al., 2004 and Mintzer et al., 2007	Nursing home residents with MMSE 6 to 22 and NPI or NPI-NH >5 for hallucinations and delusions Interventions: Placebo and 3 fixed-doses of aripiprazole (2 mg, 5 mg, 10 mg) Design: Double-blind randomized controlled trial Multi-center industry sponsored trial conducted in long-term care facilities internationally including the US and Canada	487 subjects enrolled, 284 subjects analyzed	10 weeks	Beginning at week 6 and continuing to study endpoint at week 10, subjects who received 10 mg aripiprazole daily had a statistically significant degree of improvement on the NPI-NH Psychosis subscale scores as well as significant improvements in CMAI scores and on NPI irritability, agitation/aggression and anxiety items. A greater proportion of subjects who received aripiprazole 10 mg/day showed response to treatment (defined as a >50% decrease in NPI-NH psychosis scale from baseline) compared to subjects treated with placebo. Aripiprazole 5 mg/day differed from placebo in response rate and NPI subscores at early time points but not at 10 weeks, although CMAI scores remained improved. Response to aripiprazole 2 mg/day did not differ from placebo at any time point.	1,2
1A	De Deyn	Subjects in long-term care settings	652 subjects;	10 weeks	On the NPI-NH Psychosis Total and CGI-C scores, no significant	2

	et al., 2004	<p>with Alzheimer's disease (MMSE 5 to 26) and hallucinations or delusions</p> <p>Intervention: Placebo or fixed dose olanzapine (1, 2.5, 5, or 7.5 mg/day)</p> <p>Design: Double-blind randomized trial in Europe, Israel, Lebanon, Australia/New Zealand and South Africa</p> <p>Multi-center industry sponsored</p>	65-75% of the subjects in each arm completed the trial		<p>treatment effects were seen at the 10-week endpoint for any of the doses of olanzapine.</p> <p>Repeated-measures analysis of the Psychosis Total score showed significant within-group improvement from baseline in all five treatment groups.</p> <p>Nevertheless, a secondary comparison pooling across all visits showed a significant main effect of for treatment with either 2.5 mg/day or 7.5 mg/day of olanzapine as compared to placebo.</p>	
1A	Katz et al., 1999	<p>Subjects resided in a nursing home or chronic care facility and had DSM-IV diagnoses of Alzheimer's disease, vascular dementia, or mixed dementia, MMSE <24 and significant psychotic and behavioral symptoms (BEHAVE-AD >7).</p> <p>Interventions: Placebo vs. fixed doses of risperidone at 0.5 mg/day, 1 mg/day, or 2</p>	625 subjects, 70% of whom completed the study	12 weeks	Subjects who received either 1 mg/day or 2 mg/day of risperidone showed significant improvement relative to placebo on BEHAVE-AD total scores and psychosis and aggressiveness subscores. These doses of risperidone remained superior to placebo on measures of aggressiveness after controlling for the effect of psychosis.	4

		mg/day Design: Multi-center, double-blind, and randomized controlled trial conducted in the US Industry sponsored				
1A	Street et al., 2000	Subjects resided in a nursing facility and had possible or probable Alzheimer's disease NPI/NH>2 Intervention: Placebo vs. fixed doses of olanzapine (5, 10 or 15 mg/day) Design: Double-blind randomized controlled trial Multi-center industry sponsored trial in the US	206 subjects; 66-80% of individuals completed the trial in each study arm	6 weeks	On the sum of the Agitation/Aggression, Hallucinations, and Delusions items of the NPI/NH, individuals receiving 5 mg/day or 10 mg/day of olanzapine had a significant improvement relative to placebo whereas those receiving 15 mg/day did not. A similar pattern of findings occurred in terms of the proportion of individuals who showed a response to treatment (as defined by at least a 50% reduction in score from baseline to endpoint) and in responses to the psychosis and agitation items.	5
1A	Zhong et al., 2007	Subjects with possible Alzheimer's disease or vascular dementia, in long-term care facility, with agitation and PANSS-EC >13 Intervention: Placebo vs. quetiapine 100 mg	333 subjects	10 weeks.	There was a greater reduction from baseline to endpoint in the mean PANSS-EC score with quetiapine 200 mg/day compared with placebo but this was not significant using the Last-Observation-Carried-Forward analysis. However, CGI-C scores were significantly improved on 200 mg/day quetiapine. At 100 mg/day, treatment with	2

	vs. quetiapine 200 mg (adjusted according to fixed titration)			quetiapine did not differ from placebo. In terms of response (as defined by at least a 40% reduction on the PANSS-EC from baseline to endpoint), there were no differences among the treatment arms.	
	Design: Randomized double-blind trial, Multi-center industry sponsored trial in the US				

Quality of the Body of Research Evidence for Dose-Related Effects of Second-Generation Antipsychotics

Risk of bias: Low -- Studies are all RCTs and vary in quality from low to high quality based on their described randomization and blinding procedures and their descriptions of study dropouts.

Consistency: Inconsistent – Only a small number of studies includes more than one dose of antipsychotic medication and in the available studies, there is inconsistency whether a dose response is present. Even in the studies for which confidence intervals suggest a dose-response is present, these differences in dose generally do not reach statistical significance. There is overlap in the confidence intervals for the different doses in each study.

Directness: Direct -- Studies measure overall BPSD, agitation/aggression and psychosis which are directly related to the PICOTS questions

Precision: Imprecise -- Confidence intervals vary in width and the range of confidence intervals includes negative values in the majority of the studies.

Applicability: The included studies all involve individuals with dementia, with all of the studies involving nursing home patients. Although studies included subjects from around the world, including the US, Canada, Western Europe, and Australia/New Zealand, the lack of inclusion of outpatients may limit its applicability.

Dose-response relationship: Absent -- There appear to be trends for dose-response relationships on measures of global behavioral symptoms and psychosis for aripiprazole and risperidone and agitation for risperidone, but these dose response relationships did not show statistical differences across each pair of doses.

Magnitude of effect: Not applicable.

Confounding factors: Absent -- No known confounding factors are present that would be likely to reduce the effect of the intervention.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Insufficient – Only one study is available that assesses differing doses for aripiprazole, quetiapine and risperidone with two studies available for olanzapine with no consistency in results.

3. Effects of specific patient characteristics on effectiveness and harms of antipsychotic medications in individuals with dementia

Available research evidence provides only limited data on the relative effectiveness and harms of SGAs for subsets of patients based upon type of dementia, symptom severity, race/ethnicity, sex or age. Although age, sex and type of dementia are typically reported in describing the characteristics of study samples, these characteristics are rarely used in stratifying study results although they are sometimes used in multivariate analyses of harms data in an effort to reduce experimental confounds. For example, one study (Rochon et al., 2013) found that men with dementia who were newly started on an SGA were more likely than women to experience a serious adverse event, be hospitalized or die within 30 days of treatment initiation (adjusted OR = 1.47, 95% CI = 1.33-1.62). Another study (Marras et al., 2012), also using information from administrative databases, found that men with dementia who were newly prescribed quetiapine, olanzapine, or risperidone were more likely to develop parkinsonism than women (adjusted HR 2.29 with 95% CI, 1.88- 2.79). On the other hand, women treated with antipsychotic medication were found to have more rapid cognitive declines than men in one study (Dutcher et al., 2014). Also, in the CATIE-AD trial (Zheng et al., 2009), significant weight gain was noted for women but not for men. In terms of symptom severity, individuals with a greater severity of BPSD may be at a higher risk of recurrent symptoms with discontinuation of antipsychotic medication (see section 1A. Efficacy and Comparative Effectiveness of Second-Generation Antipsychotics for Overall BPSD, Discontinuation Studies).

4. Potential Adverse Effects and/or Complications Involved with Prescribing of Second-Generation Antipsychotics to patients

The findings of the available evidence are summarized below for specific adverse effects. Although the strength of evidence ranges from High to Insufficient for specific adverse effects, taken together, there is a high degree of confidence that several possible harms may be associated with antipsychotic use in individuals with dementia.

Adverse effect	Strength of Evidence AHRQ 2011	Summary of Studies since AHRQ 2011	Overall Strength of Evidence
Mortality	High for SGA relative to placebo; Moderate for FGA relative to SGA	Moderate for FGA relative to SGA; Moderate for haloperidol relative to risperidone and for risperidone relative to quetiapine	High for SGA relative to placebo; High for FGA relative to SGA; Moderate for haloperidol relative to risperidone and for risperidone relative to quetiapine
Stroke	Low	Low	Low
Myocardial infarction	Low	Insufficient	Low

(MI) and other cardiovascular events			
Pulmonary-related adverse effects	Insufficient	Low	Low
Cognitive changes	Low	Insufficient	Low
Sedation/fatigue	Moderate	N/A	Moderate
Extrapyramidal side effects (excluding Tardive Dyskinesia)	Moderate	Low	Moderate
Tardive dyskinesia (TD)	Insufficient	N/A	Insufficient
Falls and hip fractures	Insufficient	Low	Low
Development of diabetes	Low	Insufficient	Low
Weight gain	Moderate for elderly and those with dementia; High for all uses and ages	N/A	Moderate
Urinary symptoms	Low	N/A	Low

Mortality

Overview and Quality of Individual Studies

According to the AHRQ report, a well-conducted meta-analysis (Schneider et al., 2005), which was included in the 2006 AHRQ report, provided the best available estimate of risk of harm from mortality. This analysis, which included both published and unpublished trials, found that the use of second generation antipsychotics (aripiprazole, olanzapine, quetiapine, or risperidone) is associated with an increased risk of death in patients with dementia and agitation, compared with placebo. The analysis showed a small but statistically significant difference in risk for death. For individual drugs, findings were not statistically significant; however, the absolute number of deaths with each drug was small and confidence intervals were wide, potentially obscuring an effect. Sensitivity analyses found no difference between the drugs.

Pooled data on Mortality from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	Nnumber Needed to Harm (NNH)
Death	Aripiprazole	3	8/340	3/253	2.37	(0.55, 14.18)	Not Calculated (NC)
Death	Olanzapine	2	2/278	4/232	0.48	(0.04, 3.62)	NC
Death	Quetiapine	2	5/185	7/241	0.91	(0.22, 3.41)	NC

Death	Risperidone	5	39/1561	17/916	1.19	(0.63, 2.31)	NC
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The authors of the 2011 AHRQ report reviewed six new, large high-quality cohort studies. These studies compared mortality in elderly patients taking second generation and conventional antipsychotics. Taken together, the new studies suggested to the authors of the AHRQ report that conventional antipsychotics pose a same or higher degree of risk of death as second generation antipsychotics. The authors characterize the strength of evidence for this outcome as moderate because the data were primarily from high-quality observational studies.

Since the AHRQ report, a large number of additional observational studies have been published that relate to the risk of mortality or serious adverse effects with antipsychotic treatment in the context of dementia. Data from these studies are consistent with the above conclusions of the AHRQ report in that the studies reported a greater risk of mortality with antipsychotics (first generation or second generation) and a same or higher degree of risk of death with first generation as compared to second generation agents. The majority of studies that examined mortality with first generation antipsychotics reported data on haloperidol. Among the second generation antipsychotic agents, data were most often reported for risperidone, olanzapine, quetiapine and less often aripiprazole. Few studies reported on rates of mortality or serious adverse effects with ziprasidone. Relative to no antipsychotic treatment, a 2 to 3 fold increase in mortality risk was typically seen with antipsychotic treatment, with statistically significant differences in most studies that showed higher mortality with first generation antipsychotic agents as compared to second generation antipsychotics. In comparisons of haloperidol and risperidone, there was typically an increase in risk of about 1.5 fold with haloperidol relative to risperidone. Comparisons among the other second generation antipsychotics were less common but a recent study (Maust et al., 2015) reported values for the number needed to harm as 26 for haloperidol, 27 for risperidone, 40 for olanzapine and 50 for quetiapine.

In the studies that address treatment duration and risk, the largest elevations in mortality were typically observed during the initial 120 to 180 days of treatment. Again, haloperidol and risperidone were most often studied but similar patterns seemed to occur for olanzapine and quetiapine as well. Although a smaller number of studies assessed dose-effect relationship, higher doses of antipsychotic agents appeared to be associated with higher mortality risk.

In the observational studies there was typically a moderate risk of bias and potential confounding factors were not always addressed. For example, the higher risk of death associated with the use of antipsychotics might have been because of patients' underlying neuropsychiatric symptoms (e.g., agitation) that prompted the use of antipsychotics rather than a direct effect of the agents. In studies that assessed this question, psychiatric factors such as the presence of psychosis or the severity of dementia were significantly associated with the time to death.

<p>1=rct 2=SR/M A 3=obs A=from AHRQ review; *cited with other outcome</p>	Study	Subject/Method/Design	N	Duration	Outcomes/Results	(Rating of quality of evidence)
3	Chan et al. 2011	<p>Older adults with dementia residing in one of 9 nursing homes</p> <p>Study design: Prospective cohort study</p> <p>Location: Hong Kong</p>	599	July 2009 to December 2010; 18 months of follow-up	<p>The 18-month rate for all-cause mortality in individuals exposed to an antipsychotic medication was 24.1% while that for individuals who were not exposed to an antipsychotic was 27.5% (P = 0.38). The exposed group also had a lower median rate of all-cause hospitalizations (56 (0-111) per 1,000 person-months vs 111 (0-222) per 1,000 person-months, median (interquartile range), p<0.001).</p>	0
3	Gardette et al., 2012	Community-dwelling individuals with mild to moderate	534 total subjects of which 102 were new users of an	3.5 year-follow-up period	113 deaths occurred during the study. Use of either a first or second	0

		<p>Alzheimer's dementia who were recruited from one of 16 memory centers</p> <p>Study design: Prospective cohort study</p> <p>Location: France</p>	<p>antipsychotic agent during the follow-up period</p>		<p>generation antipsychotic was not an independent predictive factor of all-cause mortality after adjusting for dementia severity in multivariate analyses using a Cox proportional hazards model (HR: 1.12; 95% CI: [0.59-2.12]). However, there was a suggestion of an increased risk of all-cause mortality with antipsychotic treatment in unadjusted and sociodemographically adjusted models. The common use of tiapride in this study may affect generalizability to US populations of patients.</p>	
3	Gerhard et al., 2014	<p>Subjects were over 65 years old, living in the community and given a new prescription for risperidone, olanzapine, quetiapine, haloperidol, aripiprazole or ziprasidone based on data from US</p>	<p>136,393 individuals of whom 36.2% were treated with risperidone was the most, 32.5% olanzapine, 19.2% quetiapine, 9.6%</p>	<p>January 1, 2001 to December 31, 2005</p>	<p>After controlling for dose and propensity score using Cox proportional hazards models, 180-day mortality risk was found to be increased for haloperidol (HR = 1.18, 95% CI 1.06-1.33) and decreased</p>	o

		<p>Medicare or Medicaid claims databases. Individuals with a prior diagnosis of schizophrenia, bipolar disorder or cancer were not included. About 1/3 of individuals had a diagnosis of dementia although the proportion of individuals with dementia were greater in those beginning treatment with risperidone, haloperidol, quetiapine or ziprasidone than in individuals who had treated initiated with olanzapine or aripiprazole.</p> <p>Study design: Retrospective cohort study</p> <p>Funding through AHRQ and US Food and Drug Administration</p> <p>Location: US</p>	<p>haloperidol, 1.4% aripiprazole and 1.1% ziprasidone.</p>		<p>for quetiapine (HR = 0.81, 95% CI 0.73-0.89) and olanzapine (HR = 0.82, 95% CI 0.74-0.90), relative to risperidone. A similar pattern of findings was observed for specific causes of mortality (e.g., circulatory, cerebrovascular, respiratory).</p> <p>The overall non-cancer mortality rate for the sample was 13.6 per 100 person-years (4,216 non-cancer deaths, with an additional 180 cancer-related deaths).</p> <p>Unadjusted mortality rates ranged from 31.4 (95% CI 29.1-33.7) per 100 person-years for haloperidol to 5.8 (95% CI 3.5-8.1) per 100 person-years for aripiprazole. However, haloperidol was given at a higher average dose than other agents, and risperidone,</p>	
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					<p>olanzapine and haloperidol each showed a dose–response relationship to mortality risk. (Sample sizes were insufficient to perform such calculation for other agents except quetiapine, which showed no dose–response relationship.)</p> <p>The inclusion of individuals who did not have a diagnosis of dementia limits generalizability.</p>	
3A	Gill et al., 2007	<p>Subjects were over 66 years of age, had a diagnosis of dementia, were living in the community or in long-term care and were identified through Ontario Health Insurance Plan or Discharge Abstract Databases as a new user of antipsychotic medication.</p> <p>Study design: Population-based, retrospective cohort</p>	27,259 pairs of individuals matched on the basis of propensity scores	April 1, 1997 to March 31, 2002.	<p>In both community dwelling and long-term care dwelling individuals, initiating use with a second generation antipsychotic was associated with a significant increase in the risk of death within 30 days as compared with non-use (adjusted HR 1.31 with 95% CI 1.02-1.7 for community dwelling individuals and 1.55 with 95% CI 1.15-2.07 for</p>	0

		study Location: Canada			individuals living in long-term care) in multivariate analyses. Corresponding values for absolute risk difference were 0.2% and 1.2% respectively. Mortality risk remained elevated at 180 days after treatment initiation. Use of a first generation antipsychotic medication was associated with a higher risk of mortality at 30 days than use of a second generation antipsychotic medication (adjusted HR 1.55 with 95% CI 1.19 - 2.02 for community-dwelling individuals and 1.26 with 95% CI 1.04 to 1.53 individuals living in the long-term care) and, again, this increase in risk was still present at 180 days after treatment was begun.	
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3	Gisev et al, 2012	<p>Individuals were residing in a specific city in Finland on January 1, 2000 and were at least 65 years of age.</p> <p>Data were obtained from the Finnish National Prescription Register with information on diagnoses obtained from the Special Reimbursement Register.</p> <p>Study design: Population-based retrospective cohort study</p> <p>Location: Leppavirta, Finland</p>	2,224 subjects of whom 332 used an antipsychotic medication during the study period.	Follow-up from 2000 to 2008.	<p>Using time-dependent Cox proportional hazard models to assess all-cause mortality, the unadjusted HR for risk of death associated with antipsychotic use was 2.71 (95% CI = 2.3-3.2). After adjusting for baseline age, sex, antidepressant use, and diagnostic confounders, the HR was 2.07 (95% CI = 1.73-2.47). The adjusted HR was the highest among antipsychotic users with baseline respiratory disease (HR = 2.21, 95% CI = 1.30-3.76).</p> <p>The inclusion of individuals who did not have a diagnosis of dementia may limit generalizability.</p>	0
3A	Huybrechts et al., 2011	Subjects were nursing home residents who were aged 65 years or older and had initiated treatment with psychotropics after admission	10,900 individuals of whom a second generation antipsychotic was begun in 1,942, a first generation	1996-2006	Using proportional hazards models with propensity-score adjustments, users of first generation antipsychotics had an increased risk of death (Rate Ratio	0

		<p>Study design: Retrospective population-based cohort Location: British Columbia</p>	<p>antipsychotic in 1,902, antidepressants in 2,169 and benzodiazepines in 4,887.</p>	<p>[RR] 1.47, 95% CI 1.14-1.91 for first generation), as compared with users of second generation antipsychotics. Users of benzodiazepines also had a higher risk of death (RR 1.28, 95% CI 1.04-1.58) compared with users of second generation antipsychotics. Using subgroup adjusted propensity scores, individuals who were started on a first generation antipsychotic (as compared to users of a second generation antipsychotic) had an increased risk of mortality with a RR of 1.37 (0.96-1.95) for individuals with dementia and 1.61 (1.10-2.36) for individuals without dementia. Among individuals with no history of antipsychotic treatment, the corresponding RR was 1.33 (0.99-1.77)</p>	
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					as compared to users of a second generation antipsychotic. The inclusion of individuals who did not have a diagnosis of dementia may limit generalizability.	
3	Huybrechts et al., 2012	Subjects were nursing home residents with dementia aged 65+ years, in the US and eligible for Medicaid Data were obtained from linked data from Medicaid, Medicare, the MDS, the National Death Index, and a national assessment of nursing home quality with propensity score adjustment used to control for potential confounders Study design: observational - retrospective cohort Location: US	75,445 new users of antipsychotic drugs (haloperidol, aripiprazole, olanzapine, quetiapine, risperidone, ziprasidone)	2001 to 2005	Compared with risperidone, users of haloperidol had an increased 180 day risk of all cause and cause specific mortality (HR 2.07, 95%CI 1.89 to 2.26) and users of quetiapine had a decreased risk (0.81, 0.75 to 0.88) There was a dose-response relationship noted for all drugs except quetiapine and the risk of mortality was increased with higher doses of medication.	0
3A	Kales et al., 2007	Subjects were aged 65+ years old and had a diagnosis of dementia; began outpatient	10,615	2001 to 2005	Mortality rates at 12 months did not differ for individuals treated with second generation as	0

		<p>treatment with first generation or second generation (risperidone, olanzapine, quetiapine, aripiprazole, ziprasidone, clozapine) antipsychotic agent.</p> <p>Department of Veterans Affairs national database</p> <p>Study design: observational retrospective cohort</p> <p>Location: US</p>			<p>compared to first generation antipsychotic agents.</p> <p>Individuals treated with an antipsychotic had a higher rate of mortality at 12 months (22.6-29.1%) as compared to those treated with non-antipsychotic medications (14.6%).</p>	
3	Kales et al., 2012	<p>Subjects were aged 65+ years old and had a diagnosis of dementia; began outpatient treatment with an antipsychotic (risperidone, olanzapine, quetiapine, or haloperidol) or valproic acid and its derivatives (as a nonantipsychotic comparison)</p> <p>Department of Veterans Affairs national database; analyzed the data using multivariate models and</p>	33,604	<p>fiscal years 1999-2008; compared 180-day mortality rates</p>	<p>In covariate-adjusted intent-to-treat analyses, haloperidol was associated with the highest mortality rates (relative risk=1.54, 95% CI=1.38-1.73) followed by risperidone (reference), olanzapine (relative risk=0.99, 95% CI=0.89-1.10), valproic acid and its derivatives (relative risk=0.91, 95% CI=0.78-1.06), and quetiapine (relative risk=0.73, 95%</p>	0

		<p>propensity adjustments; covariate-adjusted intent-to-treat analyses; analyses controlled for site of care and medication dosage</p> <p>Study design: observational retrospective cohort</p> <p>Location: Data were obtained from U.S.</p>			<p>CI=0.67-0.80). Mortality risk with haloperidol was highest in the first 30 days but decreased significantly and sharply thereafter. Among the other agents, mortality risk differences were most significant in the first 120 days and declined in the subsequent 60 days during follow-up.</p>	
3	Langballe et al., 2014	<p>Subjects were outpatients with dementia aged 65 years or older who were prescribed anti-dementia drugs and psychotropic medications as identified through the Norwegian Prescription Database Study design: Population-based cohort study Location: Norway</p>	26,940	2004 to 2010	<p>Using Cox survival analyses, adjusted for age, gender, mean daily defined dose, and severe medical conditions, antipsychotic use as compared with use of other psychotropic agents was associated with approximately a 2 fold increase in mortality at all studied time points after first dispensation (HR at 30 days = 2.1 [95% CI: 1.6-2.9] to HR at 730 - 2,400 days = 1.7 [95% CI: 1.6-1.9]). Haloperidol</p>	0

					was associated with higher mortality risk (HR at 30 days = 1.7 [95% CI: 1.0-3.0] to HR at 730 - 2,400 days = 1.4 [95% CI: 1.0-1.9]) than risperidone.	
3A	Liperoti et al., 2009	Subjects had dementia, were over 65 years of age, and were newly prescribed quetiapine, olanzapine, risperidone, clozapine or a first generation antipsychotic as identified through the Systematic Assessment of Geriatric Drug Use via Epidemiology database (Medicare or Medicaid certified nursing facilities in 5 states in the US) Study design: observational-retrospective cohort Location: US	9,729	1998-2000	Rates of all-cause mortality were greater in individuals using first generation as compared to second generation antipsychotic agents (HR 1.26; 95% CI 1.13-1.42).	0
3	Lopez et al., 2013	Subjects were outpatients with a diagnosis of probable Alzheimer's disease (of mild to moderate	957 individuals of whom 241 (25%) were exposed to antipsychotics at some time	mean follow-up time, 4.3 years (SD = 2.7); range,	Death was more frequent in individuals taking first generation than second generation	0

		<p>severity) who had at least one follow-up evaluation</p> <p>Study design: observational cohort study</p> <p>Location: US</p> <p>Funding: NIA, NIMH</p>	<p>during follow-up (138 to a first generation antipsychotic; 95 to a second generation antipsychotic and 8 to both).</p>	<p>0.78–18.0 years</p>	<p>antipsychotics (69% compared with 34%). Nursing home admission was also more frequent in individuals taking first generation than second generation antipsychotics (63% vs. 23%). However, after adjustment for psychiatric symptoms using Cox proportional hazard models that adjusted for different combinations of age, gender, education level, dementia severity, hypertension, diabetes mellitus, heart disease, extrapyramidal signs, depression, psychosis, aggression, agitation, and dementia medication use, the associations between antipsychotic use and mortality or nursing home admission were no longer significant.</p>	
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					Psychosis was strongly associated with nursing home admission and time to death. Neither first generation nor second generation antipsychotics were associated with time to death.	
3	Maust et al., 2015	Subjects were at least 65 years of age, had a diagnosis of dementia and were identified through a Veterans Health Administration database. Study design: observational-retrospective case control study Location: US	90,786 patients of whom 46,008 had received a new prescription for an antipsychotic (haloperidol, olanzapine, quetiapine, and risperidone), valproic acid and its derivatives, or an antidepressant .	October 1, 1998, through September 30, 2009	Compared with respective matched nonusers of psychotropic medication, the increased mortality risk over 180 days of follow-up in individuals receiving haloperidol was 3.8% (95% CI, 1.0%-6.6%; P < .01) with an NNH of 26 (95% CI, 15-99), 3.7% (95% CI, 2.2%-5.3%; P < .01) with an NNH of 27 (95% CI, 19-46) for risperidone, 2.5% (95% CI, 0.3%-4.7%; P = .02) with an NNH of 40 (95% CI, 21-312) for olanzapine and 2.0% (95% CI, 0.7%-3.3%; P < .01) with an NNH of 50 (95% CI, 30-150) for quetiapine.	0

					<p>Compared with antidepressant users, mortality risk ranged from 12.3% (95% CI, 8.6%-16.0%; P < .01) with an NNH of 8 (95% CI, 6-12) for haloperidol users to 3.2% (95% CI, 1.6%-4.9%; P < .01) with an NNH of 31 (95% CI, 21-62) for quetiapine users. As a group, second generation antipsychotics (olanzapine, quetiapine, and risperidone) showed a dose-response increase in mortality risk, with 3.5% greater mortality (95% CI, 0.5%-6.5%; P = .02) in the high-dose subgroup relative to the low-dose group. When compared directly with quetiapine, dose-adjusted mortality risk was increased with both risperidone (1.7%; 95% CI, 0.6%-2.8%; P = .003) and olanzapine (1.5%; 95% CI, 0.02%-</p>	
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					3.0%; P = .047).	
3	Musicco et al., 2011	<p>Subjects had dementia, aged 60+ years, newly prescribed an antidementia drug (donepezil, rivastigmine or galantamine) and identified via the Italian Health Information System</p> <p>Study design: observational - retrospective cohort</p> <p>Location: Milan, Italy</p>	<p>All 4,369 residents of Milan (Italy) aged 60+ years who were newly prescribed an antidementia drug; All new users of antipsychotic drugs in this cohort were categorized according to conventional (n = 156) or second generation (n = 806) -- total of portion of cohort on antipsychotic drugs = 962</p>	<p>January 2002 to June 2008</p>	<p>Mortality was increased two- and five fold in users of second generation and conventional antipsychotics, respectively, as compared to nonusers of antipsychotic medication.</p>	0
3	Piersanti et al., 2014	<p>Subjects were outpatients, >65 years of age with dementia seen at an Alzheimer Evaluation Unit</p> <p>Study design: observational - retrospective cohort</p> <p>Location: Italy</p>	<p>696 individuals of whom 375 were treated with a second generation antipsychotic (quetiapine, risperidone or olanzapine)</p>	<p>January 2007- December 2009</p>	<p>The relative risk of death in patients treated with second generation antipsychotics was 2.354 (95% CI 1.704-3.279) as compared to subjects not treated with antipsychotic medication. Quetiapine was most commonly prescribed and an</p>	0

					association was seen between higher doses of this drug and higher mortality rates.	
3	Rafaniello et al., 2014	<p>Subjects were at least 65 years of age, had dementia with behavioral and psychological symptoms and were new users of second generation antipsychotic agents who were seen at a Dementia Evaluation Unit</p> <p>Study design: prospective cohort study</p> <p>Location: Italy</p>	1,618	Enrolled between September 2006 and March 2010 with an average follow-up of 309 days.	<p>At least one adverse event was noted in 9.3 % of the 1,618 new users of second generation antipsychotics. Adverse effects included drug therapeutic failure (3.0 %), extrapyramidal symptoms (0.5 %) and stroke (0.2 %). Death occurred in 5.1% and the crude all-cause mortality rate was 6.0 per 100 person-years [95% CI 4.8-7.4]. Mortality rates were higher in patients aged >85 years (9.0 per 100 person-years, 95% CI 6.4-12.7) and among male patients (7.5 per 100 person-years, 95% CI 5.3-10.6). In the multivariate analysis, only age was associated to all-cause mortality [HR 1.1; 95% CI 1.0-</p>	0

					1.1 and HR 1.4; 95% CI: 0.9-2.2, respectively) whereas hallucinations (HR 0.4; 95% CI 0.2-0.6) and dosage changes (HR 0.4; 95% CI 0.2-0.78) were associated with a significantly lower risk of all-cause mortality.	
3A	Rochon et al., 2008	Subjects were over age 66, diagnosed with dementia and identified via Ontario Canada administrative health care data Study design: observational - retrospective cohort Location: Ontario, Canada Funding: Canadian Institutes of Health Research	20,682 community dwelling and 20,559 nursing home dwelling subjects	April 1, 1997 and March 31, 2004	The likelihood of experiencing a serious adverse event (e.g., life-threatening, causing significant disability or death) was significantly greater in individuals treated with a first generation antipsychotic (3.8 fold increase; 95% CI 3.31 -4.39) or second generation antipsychotic (3.2 fold increase; 95% CI 2.77 -3.68) as compared to individuals who were not treated with an antipsychotic medication.	0
3	Rochon et	Subjects were older adults with	21,526 older adults (13,760	April 1, 2007, and	1,889 subjects (8.8%) had a serious	0

	al., 2013	dementia newly started on oral second generation antipsychotic therapy; median age of 84 Study design: observational - retrospective cohort Location: Ontario, Canada	women, 7,766 men)	March 1, 2010	event defined as a hospital admission or death within 30 days of treatment initiation (1,044 women, 7.6%; 845 men, 10.9%). Of these, 363 women (2.6%) and 355 men (4.6%) died. Men were more likely than women to be hospitalized or die during the 30-day follow-up period (adjusted OR = 1.47, 95% CI= 1.33-1.62) and consistently more likely to experience a serious event in each stratum. A gradient of risk according to drug dose was found for the development of a serious event in women and men.	
3A	Rossom et al. 2010	Subjects were over age 65, had a diagnosis of dementia and were veterans identified through an administrative Veterans Health database Study design: observational -	18,127 subjects included, predominantly male Subjects treated with antipsychotic (haloperidol (n=2,217), olanzapine (n=3,384),	October 1999 – September 2005	During the initial 30 days of use, there was greater mortality in those exposed to haloperidol (5.4%), olanzapine (2.7%), or risperidone (2.8%) but not quetiapine (1.7%) as compared to individuals not	0

		retrospective cohort Location: US	quetiapine (n=4,277), or risperidone (n=8,249) were compared to those not taking an antipsychotic		taking an antipsychotic (1.7%), with unadjusted hazard ratios of 1.4, 1.6, 1.4 and 1.4 respectively. After the initial 30 day period, there was no difference in mortality in any of the antipsychotic treated groups and compared to individuals who did not receive treatment with an antipsychotic.	
3	Rountree et al., 2012	Subjects had probable Alzheimer's disease. Study design: Prospective cohort Location: US	641 subjects	Mean follow-up time after the baseline visit to censoring or death was 3.0 (=/- 1.94) years.	Using multivariable Cox proportional hazard regression analysis, time-dependent changes in antipsychotic drug use, development of psychotic symptoms, antidementia drug use, and observed MMSE change were not predictive of time to death. Overall disease severity at baseline, medical comorbidities, and education also did not influence time to death. Baseline	0

					<p>covariates significantly associated with increased survival were younger age (p = .0016), female sex (p = .0001), and a slower rate of initial cognitive decline from symptom onset to cohort entry (p < .0001). Median survival time following the onset of symptoms was 11.3 years (CI = 10.4 to 11.8).</p>	
3A	Schneeweiss et al., 2007	<p>Subjects were identified as being >65 years of age and as being treated with an antipsychotic (ripseridone, quetiapine, olanzapine, clozapine or first generation antipsychotic agent) based on data from a British Columbia Ministry of Health Pharmanet Database</p> <p>Study design: observational - retrospective cohort</p>	37,241 individuals were identified as meeting inclusion criteria	January 1, 1996 to December 31, 2004	<p>Risk of death with first generation antipsychotic agents was at least as high (and perhaps greater) in terms of all cause mortality than risk of death with second generation antipsychotic agents (14.1% vs. 9.6%, mortality ratio 1.47 (1.39-1.56 95% CI).</p> <p>The inclusion of individuals who did not have a diagnosis of dementia may limit generalizability.</p>	0

		Location: British Columbia, Canada				
3	Sultana et al., 2014	Subjects with vascular dementia were identified using from anonymized versions of electronic health records from 2 National Health Service Foundation Trusts. Design: observational - retrospective cohort study Location: UK	1531 of whom 337 were exposed to quetiapine, risperidone or olanzapine	2007 to 2010	No significant increases in mortality were noted in subjects exposed to second generation antipsychotics (HR = 1.05, 95% CI: 0.87-1.26), risperidone (HR = 0.85; 95% CI: 0.59-1.24), or quetiapine (HR = 1.14; 95% CI: 0.93-1.39; p-value = 0.20) compared with untreated patients. Too few patients were exposed to olanzapine alone to provide reliable results.	0

Quality of the Body of Research Evidence for Harm related to Mortality

Risk of bias: Moderate -- Studies include 12 placebo-controlled RCTs with small numbers of deaths in each trial condition; mortality was not a primary outcome of these trials which were designed to test efficacy. Mortality findings are also available from 22 observational studies, which are of low quality due to the lack of randomization, potential confounds of administrative database studies and the lack of restriction of some studies to individuals with a presumptive diagnosis of dementia.

Consistency: Consistent -- Pooled data from randomized placebo-controlled trials did not show statistically significant differences in mortality when analyzed for each drug separately. However, the number of individuals in the pooled samples and the number of deaths in each of the treatment groups was relatively small. When placebo-controlled trial results were combined, SGAs had a small increase in mortality risk. In observational studies, 15 studies described at least one comparison in which mortality was increased whereas four of the studies did not report an increase in mortality. In comparisons of mortality with FGAs to SGAs, five studies showed an increase and one study showed a trend for increased mortality with FGAs that did not reach statistical significance. Four studies showed greater mortality with haloperidol than with risperidone and lower mortality with quetiapine than with

risperidone. Haloperidol, risperidone and olanzapine showed increased mortality relative to no treatment in two studies, whereas findings with quetiapine were mixed. Studies of antipsychotics relative to no treatment, FGA relative to no treatment and SGAs relative to no treatment also had mixed findings but more studies of each type showing an increase in mortality (two of three studies, two of three studies and three of five studies, respectively).

Directness: Direct -- Studies measure mortality which is directly related to the PICOTS question on adverse effects.

Precision: Imprecise -- Confidence intervals for the odds ratios from the pooled randomized data are relatively large and the range of confidence intervals includes negative values. In the observational studies, there were also moderately wide confidence intervals on many of the reported hazard ratios, relative risks and odds ratios.

Applicability: The included studies primarily involve individuals with dementia, although some of the administrative database studies included older individuals in nursing facilities without specifying a diagnosis. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The randomized and observational studies include subjects from around the world, including the US, UK, Canada, Finland, Italy and Hong Kong. Randomized trials typically exclude individuals with significant co-occurring medical or psychiatric conditions as well as individuals who require urgent intervention before consent could be obtained, which may influence the estimation of possible harms in broader groups of patients. For most of the observational studies, information about antipsychotic doses, co-occurring conditions, concomitant medications and other factors that may influence applicability is unknown.

Dose-response relationship: Present -- Two of the observational studies reported an effect of dose on mortality.

Magnitude of effect: Weak effect -- The effect size is small in the majority of the observational studies. For the placebo-controlled studies, results were not significant for individual medications but appear to vary by medication; findings were significant when data were pooled in published meta-analyses.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors. Because no information is available on co-occurring medical conditions in individuals receiving antipsychotic medications, these individuals may have been at greater risk of adverse outcomes independent of their use of antipsychotic medication. They also may have had a greater severity of dementia at the time of treatment, which could also impact adverse outcomes. There is also no way to determine whether the antipsychotic medications were given for delirium that was superimposed on dementia and delirium is known to be associated with increased risks of morbidity and mortality.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: High for SGA relative to placebo; High for FGA relative to SGA; moderate for haloperidol relative to risperidone and for risperidone relative to quetiapine

Cerebrovascular Accidents

Overview and Quality of Individual Studies

The authors of the 2011 AHRQ report (Maglione et al., 2011) pooled data on cerebrovascular accidents (CVAs) from placebo-controlled trials and found that risperidone was the only drug associated with increased risk, compared with placebo. As with data on mortality, the number of adverse events was small (20/1479 or 1.4% for all placebo conditions as compared to 35/1902 or 1.8% for all the SGAs combined).

Pooled data on stroke from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	NNH
Stroke	Aripiprazole	3	2/340	2/253	0.70	(0.05, 10.48)	NC
Stroke	Olanzapine	2	6/278	4/232	1.46	(0.33, 7.44)	NC
Stroke	Quetiapine	2	3/185	6/241	0.65	(0.10, 3.08)	NC
Stroke	Risperidone	4	24/1099	8/753	3.12	(1.32, 8.21)	53

An industry-sponsored analysis of five randomized, controlled trials of olanzapine in patients with dementia found that compared to patients on placebo, patients on olanzapine had a three times higher incidence of cerebrovascular adverse events. The AHRQ authors found three studies that reported risk of stroke for antipsychotics. One of the studies reported that risk was 12.4 times higher within the first month of antipsychotic use, compared with non-use. During subsequent months, the risk diminished and became insignificant. The other study found that hospitalization was increased in the first week after use of a conventional antipsychotic. This study did not find risk of stroke to be increased, however, by use of a second generation antipsychotic. A third study reported no difference in stroke risk between individuals treated with either an FGA or an SGA and those who received no treatment.

Since the 2011 AHRQ report, additional observational studies have examined the risks of cerebrovascular adverse events in patients with dementia who were treated with antipsychotic agents. Of studies that compared risk in individuals receiving antipsychotic medication to those who did not receive an antipsychotic, four studies showed an increased risk of stroke (ranging from a 1.17 x increase to a 12.4 x increase in the initial month) whereas two studies showed no increase in the risk of stroke with antipsychotic treatment. Of the five studies that compared a first generation antipsychotic to one or more second generation antipsychotic agents, two studies showed an approximately two fold increase in risk of stroke with first generation as compared to second generation agents whereas three studies showed no difference in risk. As discussed in the section on mortality, these observational studies have a number of limitations and the two studies that also assessed risk in individuals with or without dementia showed that the presence of dementia increased risk about two fold as compared to older individuals with no dementia.

<p>1=rct 2=SR/MA 3=obs A=from AHRQ review; *cited with other outcome</p>	<p>Study</p>	<p>Subject/Method/Design</p>	<p>N</p>	<p>Duration</p>	<p>Outcomes/results</p>	<p>(Rating of quality of evidence)</p>
<p>3A</p>	<p>Barnett et al., 2007</p>	<p>Subjects were over 65 years of age, had a diagnosis of dementia and identified from Veterans Administration and Medicare databases Study design: longitudinal cohort study Location: US</p>	<p>14,029 individuals</p>	<p>2002 to 2003, followed for 18 months</p>	<p>As compared to individuals who did not receive an antipsychotic, the risk of a cerebrovascular event (defined as an inpatient admission with a primary or principal diagnosis of cerebrovascular event by ICD-10, Clinical Modification codes) was comparable for individuals treated with a first generation antipsychotic (HR 1.29 with 95% CI 0.48-3.47) or a second generation</p>	<p>0</p>

					antipsychotic (HR 1.20 with 95% CI 0.83-1.74)	
3	Chan et al., 2010	Subjects were aged 65 or above, diagnosed with Alzheimer's disease, vascular or mixed dementia, with behavioral/psychological symptoms and had an initial visit during the study period. Study design: Retrospective cohort study Location: Hong Kong	1089 individuals of whom 654 had been treated with a first generation antipsychotic, 72 with a second generation antipsychotic and 363 with no antipsychotic.	January 1, 2000 to June 30, 2007	Risk of cerebrovascular adverse events (calculated by Cox regression analysis) did not differ among those treated with first generation (adjusted HR 0.964; 95% CI = 0.584-1.591) or second generation antipsychotic medication (adjusted HR 1.036 (95% CI = 0.350-3.066) as compared to no antipsychotic use. The incidence rates for cerebrovascular adverse events were 44.6/1000, 32.7/1000 and 49.6/1000 person years, respectively.	0

3	Chatterjee et al., 2012	<p>Subjects were community-dwelling elderly in the US, aged 50+ years</p> <p>Risperidone, olanzapine, or quetiapine was initiated anytime during study period</p> <p>Study design: observational - retrospective cohort</p> <p>Authors used propensity-score adjustments; data were obtained from IMS LifeLink Health Plan Claims Database</p> <p>Location: US</p>	<p>12,145 subjects with 5,083 treated with risperidone, 4,377 with olanzapine and 2,685 with quetiapine</p>	<p>Recruited from 1 July 2000 to 30 June 2008</p> <p>Patients were followed until hospitalization or an emergency room visit for a cerebrovascular event, or the end of the study period, whichever occurred earlier</p>	<p>2,458 total cerebrovascular events were identified in the study cohort: 1,081 of 5,083 (21.38%) risperidone users, 816 of 4,377 (18.75%) olanzapine users, and 561 of 2,685 (21.05%) quetiapine users.</p> <p>As compared to use of olanzapine, there was a decreased risk of cerebrovascular adverse events associated with use of quetiapine (HR 0.88; 95% CI 0.78-0.99) but not risperidone (HR 1.05; 95% CI 0.95-1.16) by Cox proportional hazard analysis, which adjusted for multiple propensity</p>	0
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					scores and other medication exposures.	
3	Herrman et al., 2004	Subjects over the age of 66 who were first prescribed an antipsychotic during the observation period were identified from ~1.4 million potential subjects in administrative health care databases in Ontario, Canada. Study design: Retrospective population-based cohort Location: Ontario, Canada Funding: No pharmaceutical funding received	11,400 individuals of whom 1,015 were started on a first generation antipsychotic, 6,964 on risperidone and 3,421 on olanzapine.	April 1, 1997, through March 31, 2002.	As compared to treatment with a first generation antipsychotic, covariate adjusted relative risk estimates for stroke were 1.1 (95% CI = 0.5-2.3) for olanzapine and 1.4 (95% CI = 0.7-2.8) for risperidone, suggesting no statistically significant increase in the risk of stroke. The inclusion of individuals who did not have a diagnosis of dementia limits generalizability. This study was not included in the AHRQ review for this reason.	0
3	Imfeld et al., 2013	Subjects aged 65 years and older with an incident diagnosis of	6,443 cases had Alzheimer's	1998 and 2008	During the follow-up, there were 281	0

		<p>Alzheimer's or vascular dementia were compared to a group of dementia-free patients identified using the UK-based General Practice Research Database.</p> <p>Study design: Nested case-control follow-up study</p> <p>Location: UK</p> <p>Funding source: Unconditional pharmaceutical company grant</p>	<p>dementia, 2,302 had vascular dementia, and 9,984 had no dementia diagnosis</p>		<p>cases with incident ischemic stroke, 139 with hemorrhagic stroke, and 379 with a transient ischemic attack (TIA). The incidence rates of ischemic stroke for patients with Alzheimer's dementia, vascular dementia, or no dementia were 4.7/1,000 person-years (95% CI 3.8-5.9), 12.8/1,000 person-years (95% CI 9.8-16.8), and 5.1/1,000 person-years (95% CI 4.3-5.9), respectively. Compared with dementia-free patients, the odds ratio of developing a TIA when treated with second generation antipsychotic</p>	
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					drugs was increased for patients with Alzheimer's dementia (OR 4.5 (95% CI 2.1-9.2) but not those with vascular dementia.	
3	Kleijer et al., 2009	<p>Community-dwelling patients age 50 or older who were identified through Dutch community pharmacies and hospital discharge records and who started on at least one antipsychotic medication during the study period without receiving an antipsychotic prescription for at least the preceding year.</p> <p>Study design: Nested case-control study</p> <p>Location: Netherlands</p> <p>Funding: No external funding</p>	26,157 individuals (mean age 76 +/- 9.7) met inclusion criteria; 518 of these had a hospital admission for a cerebrovascular event and were matched by sex and age to 4 randomly selected individuals from the cohort.	1986-2003	<p>Current and recent exposure to antipsychotics were associated with an increased risk of a cerebrovascular event compared with non-users (OR 1.7, CI 1.4-2.2). A strong temporal relationship was found; the OR for a history of use less than a week is 9.9 (5.7-17.2). The risk decreases in time and is comparable to non-users after 3 months of use (OR 1.0, CI 0.7-1.3).</p> <p>The inclusion of individuals who</p>	0

					did not have a diagnosis of dementia limits generalizability . This study was not included in the AHRQ review for this reason.	
3	Laredo et al., 2011	Subjects were aged 65+ years, with a diagnosis of dementia who were prescribed a first generation or second generation antipsychotic agent as identified by electronic primary care records in the General Practice Research Database Study design: observational -case control Location: UK Funding: Foundation	26,885 individuals with dementia were aged 65 and older and, of these, 3,149 were eligible for the study and were matched to 15,613 controls	January 1, 1995 to June 22, 2007	After adjusting for confounding variables, the OR of a CVA associated with use of only first generation antipsychotics versus no antipsychotics in individuals with dementia aged 65 and older was 1.16 (95% CI = 1.07-1.27) and for use of only second generation antipsychotics versus no antipsychotics was 0.62 (95% CI = 0.53-0.72). In the comparison of first versus second generation antipsychotics,	0

					the OR was 1.83 (95% CI = 1.57-2.14). First generation antipsychotics appear to be associated with a higher risk of CVA, although the risk disappears with medication discontinuation .	
3	Liu et al., 2013	Subjects were >=65 years and either had dementia aged who had at least one inpatient service claim or at least 2 ambulatory care claims or were randomly chosen from the population as a sex, age, and index year matched comparison subject. All subjects were identified using the Taiwanese Longitudinal Health Insurance Database 2005. Study design: case-control Location: Taiwan	2,243 individuals with dementia of whom 1,450 were treated with antipsychotic and 6,714 matched comparison subjects	5 years of follow-up	Using Cox proportional-hazard regression dementia patients had a 2-fold greater risk of developing stroke within 5 years of diagnosis compared to matched non-subjects, after adjusting for other risk factors (95% CI = 2.58-3.08; P<.001). Antipsychotic usage among patients with dementia increases risk of stroke 1.17-	0

					fold compared to patients without antipsychotic treatment (95% CI = 1.01-1.40; P<.05).	
3A	Pratt et al., 2010	Subjects were over age 65 and identified via an Australian Veterans' Affairs database Study design: observational, self-controlled case series Location: Australia	10,638 subjects of whom 514 had initiation of a first generation antipsychotic and 564 had initiation of a second generation antipsychotic	January 1, 2003 to December 31, 2006	In the first week after initiation of a first generation antipsychotic medication, there was an increased risk of hospital admission for stroke (Incidence Rate Ratio [IRR] 2.3; 95% CI 1.3-3.8) whereas no such risk was seen after initiation of second generation antipsychotic agents. The inclusion of individuals who did not have a diagnosis of dementia limits generalizability .	0
3A	Sacchetti et al., 2010	Subjects were identified as being >50 years of age based on	128,308 individuals were		The risk of stroke at the end of the first	0

		<p>data from a Health Search Database of primary care patients in Italy</p> <p>Study design: observational - retrospective cohort</p> <p>Location: Italy</p>	<p>identified as meeting inclusion criteria</p>		<p>month of treatment was 12.4 times higher in individuals treated with antipsychotic as compared to those without antipsychotic exposure but absolute differences were small in terms of the cumulative proportion surviving [0.9921 (95% CI 0.9899-0.9943) with antipsychotic vs. 0.9995 (95% CI 0.9979-0.9983) without antipsychotic at 1 month; 0.9819 (95% CI 0.9761-0.9879) with antipsychotic vs. 0.9964 (95% CI 0.9960-0.9968) without antipsychotic at 6 months].</p>	
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Quality of the Body of Research Evidence for Harm related to CVA

Risk of bias: Moderate -- Studies include 11 placebo-controlled RCTs with small numbers of CVAs in each trial condition; harms of treatment were not a primary outcome of these trials which were designed to test efficacy. Findings on the occurrence of CVAs are also available from 10 observational studies, which are of low quality due to the lack of randomization, potential confounds of administrative database studies and the lack of restriction of some studies to individuals with a presumptive diagnosis of dementia.

Consistency: Inconsistent – With the exception of risperidone, pooled data from randomized placebo-controlled trials did not show statistically significant differences in CVA occurrence when analyzed for each drug separately. However, the number of individuals in the pooled samples and the number of CVAs in each of the treatment groups was relatively small. A separate industry-sponsored analysis also showed an increase risk of CVA for olanzapine using pooled-data. When placebo-controlled trial results were combined, SGAs had a small increase in CVA risk. Of studies that compared risk in individuals receiving antipsychotic medication to those who did not receive an antipsychotic, four of six studies showed an increased risk of stroke. Of the five studies that compared a first generation antipsychotic to one or more second generation antipsychotic agents, two studies showed increased risk of stroke with FGAs as compared to SGAs.

Directness: Direct -- Studies measure rates of CVAs, which is directly related to the PICOTS question on adverse effects.

Precision: Imprecise -- Confidence intervals for the odds ratios from the pooled randomized data are relatively large and the range of confidence intervals includes negative values in many cases. In the observational studies, there were also moderately wide confidence intervals on many of the reported hazard ratios, relative risks and odds ratios.

Applicability: The included studies primarily involve individuals with dementia, although some of the administrative database studies included older individuals without specifying a diagnosis. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The randomized and observational studies include subjects from around the world, including the US, UK, Canada, Australia, Italy, Taiwan and Hong Kong. It is not clear how many of the administrative database studies included nursing facility patients, which may limit applicability. Randomized trials typically exclude individuals with significant co-occurring medical or psychiatric conditions as well as individuals who require urgent intervention before consent could be obtained, which may influence the estimation of possible harms in broader groups of patients. For most of the observational studies, information about antipsychotic doses, co-occurring conditions, concomitant medications and other factors that may influence applicability is unknown.

Dose-response relationship: Unknown -- This was not assessed in the reported studies.

Magnitude of effect: Weak effect -- The effect size is small in the majority of the observational studies. For the placebo-controlled studies, results were not significant for individual medications but appear to vary by medication; findings were significant when data were pooled in published meta-analyses.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors. Because no information is available on co-occurring medical conditions in individuals receiving antipsychotic medications, these individuals may have been at greater risk of adverse outcomes independent of their use of antipsychotic medication. They also may have had a greater severity of dementia at the time of treatment, which could also impact adverse outcomes. Vascular disease has been reported to affect risk of CVA in some studies and this is also not reported or accounted for in RCTs or observational studies.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low

Cardiovascular Events

Overview and Quality of Individual Studies

From a meta-analysis using data from placebo-controlled trials on symptoms categorized as cardiovascular (including “cardiovascular symptoms,” “edema,” and “vasodilatation”), the authors of the 2011 AHRQ report (Maglione et al., 2011) noted that cardiovascular events were significantly more likely to occur among patients taking olanzapine or risperidone than those taking placebo. However, no statistical association was shown between cardiovascular symptoms and treatment with either quetiapine or aripiprazole. Taken together, the rates of cardiovascular events were 230/3256 (7.1%) for subjects who had received risperidone, olanzapine, quetiapine or aripiprazole and 70/1825 (3.8%) for subjects who had received placebo. An additional observational study also suggested an increased in the risk of myocardial infarction in the first 30-60 days of treatment.

Pooled data on cardiovascular effects from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	NNH
Cardiovascular	Aripiprazole	1	42/366	12/121	1.18	(0.58, 2.55)	NC
Cardiovascular	Olanzapine	5	40/778	9/440	2.33	(1.08, 5.61)	48
Cardiovascular	Quetiapine	3	29/355	15/254	1.08	(0.53, 2.30)	NC
Cardiovascular	Risperidone	6	119/1757	34/1010	2.08	(1.38, 3.22)	34

<p>1=rct 2=SR/MA 3=obs A=from AHRQ review; *cited with other outcome</p>	<p>Study</p>	<p>Subject/Method/Design</p>	<p>N</p>	<p>Duration</p>	<p>Outcomes/Results</p>	<p>(Rating of quality of evidence)</p>
<p>3</p>	<p>Pariante et al., 2012</p>	<p>Subjects were older community-dwelling patients who began treatment with a cholinesterase inhibitor treatment and were identified via the Quebec, Canada, prescription claims database. Study design: observational - retrospective cohort Location: Quebec, Canada</p>	<p>37,138 individuals of whom 10,969 (29.5%) started antipsychotic treatment during the follow-up period and were matched with a sample of non- antipsychotic users</p>	<p>January 1, 2000, and December 31, 2009</p>	<p>Of individuals started on antipsychotic treatment, 1.3% of them had a MI within the initial year of treatment. Hazard ratios were 2.19 (95% CI, 1.11- 4.32) for the first 30 days, 1.62 (95% CI, 0.99-2.65) for the first 60 days, 1.36 (95% CI, 0.89- 2.08) for the first 90 days, and 1.15 (95% CI, 0.89-1.47) for the first 365 days based upon Cox proportional hazards models, adjusting for age, sex, cardiovascular risk factors, psychotropic drug use, and propensity scores. A self-controlled case series study</p>	<p>0</p>

					using Poisson regression in 804 instances of MI in new users of antipsychotic showed incidence rate ratios of 1.78 (95% CI, 1.26-2.52) for 1- to 30-days, 1.67 (95% CI, 1.09-2.56) for 31- to 60-days, and 1.37 (95% CI, 0.82-2.28) for 61- to 90-days.
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Quality of the Body of Research Evidence for Harm related to Cardiovascular events

Risk of bias: Moderate -- Studies include placebo-controlled RCTs but cardiovascular events were not a primary outcome of these trials which were designed to test efficacy. Also, the category of cardiovascular events includes multiple different adverse effects, which are likely to have different degrees of risk and different mechanisms. Findings from the observational study are of low quality due to the lack of randomization

Consistency: Consistent – Across the SGAs as a group and in new users of antipsychotic medication in one large observational study, there was a consistent increase in risk of a cardiovascular event with antipsychotic treatment. Less consistency was noted between SGAs however, with increased rates of cardiovascular events noted for olanzapine and risperidone but not quetiapine or olanzapine in the pooled findings from RCTs.

Directness: Direct -- Studies measure rates of cardiovascular events, which is directly related to the PICOTS question on adverse effects.

Precision: Precise -- Confidence intervals for the odds ratios from the pooled randomized data are moderate in size as are the incidence rate ratios from the available observational study.

Applicability: The included studies involve individuals with dementia. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The randomized studies include subjects from many countries whereas the administrative data from the observational study are from Canada. It is not clear how many of the RCT studies included nursing facility patients, which may limit applicability, as the observational study was only conducted in a community sample. Randomized trials typically exclude individuals with significant co-occurring medical or psychiatric conditions as well as individuals who require urgent intervention before consent could be obtained, which may influence the estimation of possible harms in broader groups of patients. For the observational study, information

about antipsychotic doses, co-occurring conditions, concomitant medications and other factors that may influence applicability is unclear.

Dose-response relationship: Unknown -- This was not assessed in the reported studies.

Magnitude of effect: Weak effect -- The effect size is small based on the pooled odds ratios in the placebo-controlled studies; however, results appear to vary by medication.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors. Because no information is available on co-occurring medical conditions in individuals receiving antipsychotic medications, these individuals may have been at greater risk of adverse outcomes independent of their use of antipsychotic medication. They also may have had a greater severity of dementia at the time of treatment, which could also impact adverse outcomes. The decreasing degree of risk with time that was seen in the observational study may be due to an intercurrent process that prompts antipsychotic use rather than an outgrowth of antipsychotic treatment.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low

Pulmonary-Related Adverse Events

Overview and Quality of Individual Studies

The AHRQ report (Maglione et al., 2011) noted small numbers of pulmonary events in single RCTs of quetiapine and ziprasidone, with no statistically significant differences between placebo and treatment with that limited evidence base.

Pooled data on pulmonary effects from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	NNH
Pulmonary	Aripiprazole	1	6/106	3/102	1.97	(0.41, 12.54)	NC
Pulmonary	Olanzapine	1	0/204	3/94	0.00	(0.00, 1.10)	NC
Pulmonary	Risperidone	1	6/196	3/94	0.96	(0.20, 6.05)	NC

In one head-to-head trial, one patient treated with risperidone had a pulmonary adverse event, compared with no one in the olanzapine group. In observational studies, three studies reported increases in the risk of pneumonia for individuals with dementia treated with antipsychotic agents. In one study the risk was only seen for second generation antipsychotics, but appeared to be dose-dependent. In the other two studies the risk was comparable for first generation antipsychotics as compared with second generation agents, but in one of these

studies the period of increased risk began before the antipsychotic medication was initiated. Overall, risk was highest early in the studies, and declined with time. One observational study showed an approximately 1.5 fold increase in the risk of venous thromboembolism (VTE) with new use of an antipsychotic.

<p>1=rct 2=SR/MA 3=obs A=from AHRQ review; *cited with other outcome</p>	Study	Subject/Method/Design	N	Duration	Outcomes/Results	(Rating of quality of evidence)
3A*	Huybrechts et al., 2011	<p>Subjects were nursing home residents who were aged 65 years or older and had initiated treatment with psychotropics after admission</p> <p>Study design: Retrospective population-based cohort</p> <p>Location: British Columbia</p>	<p>10,900 individuals of whom a second generation antipsychotic was begun in 1,942, a first generation antipsychotic in 1,902, antidepressants in 2,169 and benzodiazepines in 4,887.</p>	1996-2006	<p>There was no difference observed in the risk of heart failure or pneumonia in individuals receiving first generation antipsychotics, as compared to second generation antipsychotics, with RR of 1.03 (0.62-1.69) and 0.91 (0.41-2.01), respectively. The inclusion of individuals who did not have a diagnosis of dementia may limit</p>	0

					generalizability.	
3*	Pratt et al., 2011	<p>Subjects were over age 65 and exposed to antipsychotic medication according to the Australian Government Department of Veterans' Affairs Health Care Claims Database.</p> <p>Study design: observational - retrospective cohort</p> <p>Location: Australia</p> <p>Funding: Australian Government</p>	<p>8,235 subjects had at least one hospitalization for hip fracture and of these 494 had been started on a first generation antipsychotic and 1,091 had been started on a second generation antipsychotic; 13,324 had at least one hospitalization for pneumonia and of these 807 had been started on a first generation antipsychotic and 1,107 had been started on a second generation antipsychotic during the study period.</p>	<p>2005 to 2008; median follow-up was 3.3 to 4 years.</p>	<p>Using a self-controlled case-series design, the risk of hospitalization for pneumonia was increased during all post-exposure periods for both first generation and second generation antipsychotics and remained significantly increased with >12 weeks of continuous exposure (IRR 1.43; 95% CI 1.23, 1.66). The risk of pneumonia was elevated for up to 12 weeks prior to the initiation of first or second generation antipsychotic agents.</p>	o
3	Schmedt and Garbe, 2013	<p>Subjects had dementia, were at least 65 years of age and identified via the German Pharmacoepidemiologic Research Database</p>	<p>72,591 in total cohort, from which there were 1,028 VTE cases and 4,109 controls matched to</p>	<p>2004 to 2007</p>	<p>Using multivariate conditional logistic regression, an increased risk of VTE was found</p>	o

		<p>Study design: nested case-control study</p> <p>Location: Germany</p> <p>Funding: No pharmaceutical funding</p>	<p>each case according to age, sex, health insurance, and calendar time of the VTE</p>		<p>for current users of antipsychotic medication (OR, 1.23; 95% CI, 1.01-1.50) and for users of a combination of first and second generation antipsychotics (OR, 1.62; 95% CI, 1.15-2.27). In current users, only new use was associated with an increased risk (OR, 1.63; 95% CI, 1.10-2.40).</p>	
3	Trifiro et al., 2007	<p>Subjects were 65 years or older, used an antipsychotic drug, and were identified from the Dutch Integrated Primary Care Information database as having incident community-acquired pneumonia.</p> <p>Study design: Population-based, nested case-control study</p> <p>Location: Netherlands</p>	<p>258 cases with incident pneumonia were matched to 1,686 control subjects on the basis of age, sex, and date of onset</p>	1996 to 2006	<p>Sixty-five (25%) of the case patients died in 30 days with death attributable to pneumonia. By conditional logistic regression current use of either a first generation (OR, 1.76 [CI, 1.22 to 2.53] or second generation (OR, 2.61 [95% CI, 1.48 to 4.61]) antipsychotic drug was associated with</p>	0

					<p>a dose-dependent increase in the risk for pneumonia compared with past use of antipsychotic drugs. Only second generation antipsychotic drugs were associated with an increase in the risk for fatal pneumonia (OR, 5.97 [CI, 1.49 to 23.98]).</p>	
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Quality of the Body of Research Evidence for Harm related to Pulmonary Events

Risk of bias: Moderate -- Studies include two placebo-controlled RCTs with small numbers of pulmonary events in each trial condition and four observational studies which are of low quality due to the lack of randomization, potential confounds of administrative database studies and the lack of restriction of some studies to individuals with a presumptive diagnosis of dementia.

Consistency: Inconsistent – Findings were variable in the small number of available studies. Only one study was available for VTE so no assessment of consistency was possible.

Directness: Direct -- Studies measure rates of pneumonia and rates of VTE, which are directly related to the PICOTS question on adverse effects. An increased risk of VTE could indirectly affect rates of pulmonary embolism and associated pulmonary dysfunction.

Precision: Imprecise -- Confidence intervals for the odds ratios in the observational studies were large for pneumonia and for VTE.

Applicability: Several of the observational studies included older individuals without specifying a diagnosis. Observational studies include subjects from Canada, Australia, and Germany and for the study of VTE, the Netherlands. The observational studies include a mix of nursing home and community based subjects.

Dose-response relationship: Unknown -- This was not assessed in the reported studies.

Magnitude of effect: Weak effect -- The effect size is small in the majority of the studies; studies with a higher odds ratio also had very wide confidence intervals, making interpretation difficult. For the two placebo-controlled studies, results were not significant for individual medications.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors. Because no information is available on co-occurring medical conditions in individuals receiving antipsychotic medications, these individuals may have been at greater risk of adverse outcomes independent of their use of antipsychotic medication. They also may have had a greater severity of dementia at the time of treatment, which could also affect the development of pneumonia (due to swallowing impairments) and VTE (due to immobility).

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low

Neurological Side Effects

Cognitive changes

Overview and Quality of Individual Studies

The AHRQ authors reported that in six head-to-head trials of second generation antipsychotics, patients receiving olanzapine had higher likelihoods of neurological symptoms such as confusion, headaches, and dizziness, than those receiving risperidone, whereas aripiprazole and quetiapine did not differ from placebo in the frequency of these effects. The CATIE-AD trial showed cognitive decline with olanzapine, quetiapine, or risperidone.

Of the two observational trials identified subsequent to the AHRQ report, one study found a slower decline in cognition with antipsychotic treatment whereas 1 study showed a more rapid decline. There is also a potential for significant confounds in terms of dementia severity and neuropsychiatric symptoms that led to initiation of antipsychotic treatment.

<p>1=rct 2=SR/MA 3=obs A=from AHRQ review; *cited with other outcome</p>	<p>Study</p>	<p>Subject/Method/Design</p>	<p>N</p>	<p>Duration</p>	<p>Outcomes/Results</p>	<p>(Rating of quality of evidence)</p>
<p>3</p>	<p>Dutcher et al., 2014</p>	<p>Subjects were older nursing home residents with newly diagnosed Alzheimer's disease or related dementias who were identified based on Medicare enrollment and claims data linked to the Minimum Dataset 2.0.</p> <p>Study design: Prospective cohort study</p> <p>Location: US</p>	<p>18,950 subjects with a mean age 83.6; 76% of the sample was female. At baseline, 15% were taking anti-dementia medications, 40% antidepressants, 13% antipsychotics, and 3% mood stabilizers.</p>	<p>2007-2008</p>	<p>Using marginal structural models to account for time-dependent confounding, antipsychotic use was found to be associated with a slower decline in cognition (slope difference: -0.11 points/year on the Cognitive Performance Scale, 99% CI = -0.17 to -0.06), with more rapid declines observed in females. However, the magnitude of these changes was not noted to be clinically significant although it was statistically significant.</p>	<p>0</p>

3	Rosenberg et al., 2012	<p>Subjects were community-ascertained cases from the Cache County Dementia Progression Study who had incident Alzheimer’s disease</p> <p>Study design: Prospective cohort</p> <p>Location: US</p>	230	Mean follow-up 3.7 years	<p>At baseline, psychotropic medication use was associated with greater severity of dementia and poorer medical status were associated with use of psychotropic medications (e.g., antidepressants, antipsychotics, benzodiazepines). Mixed-effects models showed that a higher proportion of observed time of medication exposure was associated with a more rapid decline in MMSE for all medication classes including antipsychotic agents. In terms of first generation antipsychotic agents, a higher proportion of observed time of medication exposure was associated with a more rapid increase in</p>	o
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					Clinical Dementia Rating Sum of Boxes and the NPI—Total.	
1	Vigen et al., 2011.	<p>As with other analyses from the CATIE-AD study, subjects were ambulatory outpatients living at home or in an assisted-living facility who met DSM-IV criteria for dementia of the Alzheimer's type or NINCDS/ADRDA criteria for probable Alzheimer's disease and had delusions, hallucinations, agitation, or aggression nearly every day over the previous week or intermittently over 4 weeks</p> <p>Study design: Randomized, double-blind, multi-phase, multi-site study. After initial treatment phase, subsequent phases and randomization dependent upon response to initial treatment assignment.</p>	<p>421 patients were randomized in a double-blind fashion to receive olanzapine, quetiapine, risperidone or placebo (randomized allocation 2:2:2:3).</p> <p>342 subjects had at least one follow-up cognitive measure at 12 weeks, 320 at 24 weeks, and 307 at 36 weeks.</p> <p>The sample was 46% male, with mean age 77.6 years, mean education 12.3 years; 64% were taking cholinesterase inhibitors.</p>	36 week study duration	<p>Significant declines occurred in multiple cognitive measures including the MMSE (p=0.004), BPRS cognitive subscale (p=0.05), and a cognitive summary score summarizing change on 18 cognitive tests (p=0.004). Declines were linear and significant over time (e.g., 2.4 point decrease in MMSE and 4.4 point decrease in Alzheimer's Disease Assessment Scale-cog over 36 weeks) without effects of baseline MMSE, baseline BPRS score or size of the study site.</p> <p>Patients on a SGA for at least two weeks showed a greater rate of</p>	1

		<p>Patients could be taking cholinesterase inhibitor medication but not antidepressants or anticonvulsants for mood disorder.</p> <p>Location: US</p>			<p>decline in cognitive function than those on placebo, although these declines were not statistically significant for all measures.</p>	
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Quality of the Body of Research Evidence for Harm related to Cognitive Changes

Risk of bias: Moderate -- Studies include placebo-controlled RCTs for which neurological changes (including cognition) were not a primary outcome of these trials, which were designed to test efficacy of SGAs in BPSD. Data are also available from the CATIE-AD study and two observational studies. However, the latter are of low quality due to the lack of randomization.

Consistency: Inconsistent – The studies varied in their findings with some showing slower cognitive decline and others showing more rapid decline in cognition.

Directness: Indirect -- Studies measure scores on cognitive batteries but the effect of the antipsychotic medication is not readily distinguishable from the effects of the underlying dementia.

Applicability: The included studies primarily involve individuals with dementia. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The CATIE-AD trial and the observational studies include subjects from the US, with some community based subjects and some subjects who resided in nursing facilities. Randomized trials typically exclude individuals with significant co-occurring medical or psychiatric conditions as well as individuals who require urgent intervention before consent could be obtained, which may influence the estimation of possible harms in broader groups of patients. For most of the observational studies, information about antipsychotic doses, co-occurring conditions, concomitant medications and other factors that may influence applicability is unknown.

Dose-response relationship: Unknown -- This was not assessed in the reported studies.

Magnitude of effect: Weak effect -- The effect size is very small and not deemed to be clinically significant in one of the studies.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors. Because no information is available on co-occurring medical conditions in individuals receiving antipsychotic medications, these individuals may have been at greater risk of adverse outcomes independent of their use of antipsychotic medication. They also may have had a

greater severity of dementia at the time of treatment, which could also influence subsequent changes in cognition.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low

Sedation and Fatigue

Overview and Quality of Individual Studies

The AHRQ review (Maglione et al., 2011) reported that aripiprazole, olanzapine, quetiapine, and risperidone were associated with sedation and increased fatigue. Data on haloperidol and FGAs were not reported. Taken together, the results of placebo-controlled trials showed sedation in 19.5% (622/3190) subjects treated with an SGA as compared to 8.0% (167/2089) of subjects treated with placebo. For fatigue, the corresponding proportions were 7.5% (128/1692) and 2.7% (19/1088), respectively.

Pooled data on sedation and fatigue from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	NNH
Fatigue	Aripiprazole	3	47/600	11/272	2.44	(1.19, 5.43)	22
Fatigue	Olanzapine	3	36/482	9/326	2.37	(1.08, 5.75)	34
Fatigue	Quetiapine	2	25/335	5/234	2.92	(1.03, 10.26)	34
Fatigue	Risperidone	2	20/281	4/236	3.56	(1.13, 14.96)	34
Sedation	Aripiprazole	4	116/706	22/374	2.62	(1.57, 4.54)	16
Sedation	Olanzapine	5	158/778	25/440	4.58	(2.87, 7.55)	9
Sedation	Quetiapine	4	84/446	18/353	5.16	(2.93, 9.51)	8
Sedation	Risperidone	6	265/1260	102/922	2.33	(1.79, 3.05)	10

In the CATIE-AD trial (Schneider et al., 2006), rates of sedation with olanzapine, quetiapine and risperidone were 24%, 22% and 15% respectively as compared to 5% for placebo (p<0.001).

Quality of the Body of Research Evidence for Harm related to Sedation and Fatigue

Risk of bias: Low -- Studies include placebo-controlled RCTs with a reasonable number of individuals in each sample condition who experienced sedation or fatigue.

Consistency: Consistent – Each of the SGAs that were assessed showed a statistically significant increase in sedation and in fatigue relative to placebo.

Directness: Direct -- Studies measure rates of sedation and fatigue, which are directly related to the PICOTS question on adverse effects.

Precision: Precise -- Confidence intervals for the odds ratios from the pooled randomized data are small to moderate and none of the confidence intervals include negative values.

Applicability: The included studies all involve individuals with dementia. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The randomized and observational studies include subjects from multiple countries and settings.

Dose-response relationship: Unknown -- This was not reported in the analysis.

Magnitude of effect: Moderate effect -- The effect size is moderate with a two to five fold increase in treated subjects relative to untreated subjects with some variability by medication.

Confounding factors: Present – Many of the studies permit use of lorazepam or other "rescue" medications for significant agitation, which is not taken into account in the analysis.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate

Extrapyramidal Symptoms (EPS)

Overview and Quality of Individual Studies

Moderate strength of evidence suggested that olanzapine and risperidone were associated with an increase in extrapyramidal signs or symptoms relative to placebo. On the basis of data pooled from four placebo-controlled trials of aripiprazole, five of risperidone, and three of quetiapine, risperidone was prone to an increase in EPS, compared to placebo, but aripiprazole and quetiapine were not. In one trial of olanzapine, the olanzapine group was more likely to report EPS than the placebo group. The AHRQ review (Maglione et al., 2011) reported no effect of olanzapine, quetiapine or risperidone on the development of tardive dyskinesia (TD), however the clinical trial durations would not have been long enough to identify new onset tardive dyskinesia in a reliable fashion.

Pooled data on EPS, akathisia and TD from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	NNH
EPS	Aripiprazole	4	39/706	16/374	1.29	(0.68, 2.57)	NC
EPS	Olanzapine	1	18/100	2/142	15.21	(3.50, 138.55)	10

EPS	Quetiapine	3	18/355	9/254	1.15	(0.46, 3.08)	NC
EPS	Risperidone	5	130/1561	31/916	3.00	(1.96, 4.70)	20
Akathisia	Olanzapine	1	1/100	0/142	+Inf	(0.04, Inf+)	NC
Akathisia	Quetiapine	2	1/114	1/162	1.23	(0.02, 98.52)	NC
Akathisia	Risperidone	1	0/85	0/142	NC	NC	NC
TD	Olanzapine	1	3/100	4/142	1.07	(0.15, 6.46)	NC
TD	Quetiapine	1	2/94	4/142	0.75	(0.07, 5.36)	NC
TD	Risperidone	4	4/949	14/713	0.31	(0.07, 1.03)	NC

In the CATIE-AD trial, subjects taking risperidone or olanzapine were more likely to develop extrapyramidal effects than those treated with quetiapine or placebo. In the two observational studies identified since the AHRQ report, risperidone had a lower risk of EPS than first generation antipsychotic agents. In the second study, risperidone, olanzapine and quetiapine had comparable risk of extrapyramidal side effects at usual clinical doses.

<i>1=rct 2=SR/MA 3=obs A=from AHRQ review; *cited with other outcome</i>	<i>Study</i>	<i>Subject/Method/Design</i>	<i>N</i>	<i>Duration</i>	<i>Outcomes/Results</i>	<i>(Rating of quality of evidence)</i>
3	Marras et al., 2012	Subjects had dementia and were newly prescribed quetiapine, olanzapine, or risperidone based upon administrative	From 15,939 person-years of observation, 421 patients developed parkinsonis	2002 to 2010	Using low-dose risperidone as the reference group, the adjusted hazard ratios for developing	0

		<p>database information.</p> <p>Study design: observational - retrospective cohort</p> <p>Location: Ontario Canada</p>	m		<p>parkinsonism were 0.49 (95% CI, 0.07-3.53) for low-dose olanzapine and 1.18 (95% CI, 0.84-1.66) for low-dose quetiapine.</p> <p>Comparing across drugs within the most commonly prescribed dose ranges, the incidence of parkinsonism was higher in the medium-dose olanzapine group compared with the low-dose risperidone group (HR 1.66; 95% CI 0.23-2.23).</p> <p>The adjusted hazard ratio for developing parkinsonism for men (compared with women) was 2.29 (95% CI, 1.88- 2.79)</p>	
1	Schneider et al. 2006	Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or	421 subjects randomized; 142 placebo, 100 olanzapine,	median duration on phase 1 treatment was 7.1	Subjects treated with olanzapine and risperidone had higher rates of	1

		<p>greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>	<p>94 quetiapine, 85 risperidone</p>	<p>weeks, clinical outcomes assessed on those remaining on antipsychoti c at 12 weeks</p>	<p>extrapyramidal signs in the (12% in each group) than subjects treated with quetiapine or placebo (2% and 1%, respectively). Similar findings were noted in terms of Simpson-Angus ratings of greater than 1, which were more frequent with olanzapine (14%) and risperidone (11%) as compared to placebo (2%).</p>	
3	Vasilyeva et al., 2013	<p>Subjects were residents of Manitoba, Canada aged 65 and over, identified via Manitoba's Department of Health's administrative databases as having an antipsychotic medication dispensed for the first time during the study</p>	<p>8,885 persons in the sample were identified as receiving an antipsychotic medication (accounting for values of 4.3% of males and 6.0% of females),</p>	<p>April 1, 2000 to March 31, 2007</p>	<p>Using Cox proportional hazards models to determine the risk of extrapyramidal symptoms in new users of risperidone compared to new users of first generation antipsychotic agents,</p>	o

		<p>period.</p> <p>Study design: observational - retrospective cohort, population-based sample</p> <p>Location: Manitoba Canada</p>	<p>with 4,242 persons were in the group who received a first generation antipsychoti c agent and 4,643 in the risperidone- exposed group.</p>		<p>risperidone use was associated with a lower risk of EPS compared to FGAs at 30, 60, 90 and 180 days (adjusted HR 0.38, 95% CI: 0.22-0.67; 0.45, 95% CI: 0.28- 0.73; 0.50, 95% CI: 0.33-0.77; 0.65, 95% CI: 0.45-0.94, respectively) after controlling for potential confounders (demographics, comorbidity and medication use). At 360 days, the strength of the association weakened with an adjusted HR of 0.75, 95% CI: 0.54-1.05.</p>	
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Quality of the Body of Research Evidence for Harm related to Extrapyramidal Side Effects

Risk of bias: Low -- Studies include placebo-controlled RCTs including the CATIE-AD trial. Data from observational studies are of lower quality but include a large sample size.

Consistency: Consistent – Pooled data from randomized placebo-controlled trials, data from the CATIE-AD study and findings from observational studies all support an increased likelihood of extrapyramidal side effects in individuals with dementia who are treated with antipsychotic medication.

Directness: Direct -- Studies measure rates of extrapyramidal side effects, which is directly related to the PICOTS question on adverse effects.

Precision: Precise -- Confidence intervals for the odds ratios from the pooled randomized data are narrow with the exception of olanzapine, for which only one trial had available results.

Applicability: The included studies involve individuals with dementia, with the exception of one of the observational studies which also included other individuals older than 65 who were treated with a newly dispensed antipsychotic medication. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The CATIE-AD study and observational studies include subjects from the US and Canada. It is not clear how many of the studies included nursing facility patients, which may limit applicability. Randomized trials typically exclude individuals with significant co-occurring medical or psychiatric conditions as well as individuals who require urgent intervention before consent could be obtained, which may influence the estimation of possible harms in broader groups of patients.

Dose-response relationship: Unknown -- This was not assessed in the reported studies.

Magnitude of effect: Moderate effect -- The effect size is small to moderate depending up the specific medication being used.

Confounding factors: Absent – The majority of the available data are from placebo-controlled trials without apparent confounding factors.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate.

Falls and hip fractures

Overview and Quality of Individual Studies

In the AHRQ Report (Maglione et al., 2011), falls were not assessed per se but risperidone and olanzapine had a statistically increased likelihood of problems with gait. Gait issues with aripiprazole and quetiapine did not differ from placebo but confidence intervals were extremely large.

Pooled data on gait problems from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	NNH
Gait issues	Aripiprazole	1	16/366	1/121	5.47	(0.83, 231.93)	NC
Gait issues	Olanzapine	4	79/641	15/373	2.75	(1.52, 5.29)	21
Gait issues	Quetiapine	3	18/426	6/333	2.36	(0.85, 7.59)	NC
Gait issues	Risperidone	3	32/448	8/406	3.04	(1.32, 7.84)	33

In the CATIE-AD trial, rates of falls (including those with injury or fracture) did not differ for the SGAs as compared to placebo. In observational studies, one study found increased fall rates with antipsychotic treatment, with risk that was greater at higher doses of medication. Use of other psychotropic medications also increased risk of falls, particularly when multiple psychotropic agents were used concomitantly. Three additional observational studies examined rates of hip fracture with antipsychotic treatment in individuals over age 65 or nursing home residents. Only one of these studies was limited to individuals with dementia. Two of the studies showed an increased risk of hip fracture following initiation of an antipsychotic, however, one study showed an increased rate of hip fractures in the period prior to antipsychotic initiation suggesting that agitation or psychosis may predispose to falls and hip fractures or that patients became delirious and required antipsychotic medication following a hip fracture. In two studies, use of first generation antipsychotics was associated with a greater risk of hip fracture than use of second generation antipsychotics. Taken together, however, there appears to be an increase in the risk of falls and hip fractures of approximately 1.5 to 2.5 fold in association with antipsychotic treatment.

<i>1=rct</i> <i>2=SR/MA</i> <i>3=obs</i> <i>A=from AHRQ review; *cited with other outcome</i>	<i>Study</i>	<i>Subject/Method/Design</i>	<i>N</i>	<i>Duration</i>	<i>Outcomes/Results</i>	<i>(Rating of quality of evidence)</i>
3A*	Huybrechts et al., 2011	Subjects were nursing home residents who were aged 65 years or older and had initiated treatment with psychotropics after admission Study design: Retrospective population-based cohort Location: British	10,900 individuals of whom a second generation antipsychotic was begun in 1,942, a first generation antipsychotic in 1,902, antidepressants in 2,169 and benzodiazepine	1996-2006	Using proportional hazards models with propensity-score adjustments, users of first generation antipsychotics had an increased risk of death (RR 1.47, 95% CI 1.14-1.91 for first	0

		Columbia	s in 4,887.		<p>generation), and an increased risk of femur fracture within 180 days after treatment initiation (RR 1.61, 95% CI 1.03-2.51 for first generation antipsychotics), as compared with users of second generation antipsychotics. Users of benzodiazepines also had a higher risk of death (RR 1.28, 95% CI 1.04-1.58) compared with users of second generation antipsychotics. There was no difference observed in the risk of heart failure or pneumonia in individuals receiving first generation antipsychotics, as compared to second generation</p>	
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					<p>antipsychotics, with RR of 1.03 (0.62-1.69) and 0.91 (0.41-2.01), respectively. Using subgroup adjusted propensity scores, individuals who were started on a first generation antipsychotic (as compared to users of a second generation antipsychotic) had an increased risk of mortality with a RR of 1.37 (0.96-1.95) for individuals with dementia and 1.61 (1.10-2.36) for individuals without dementia. Among individuals with no history of antipsychotic treatment, the corresponding RR was 1.33 (0.99-1.77) as compared to users of a</p>	
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					second generation antipsychotic.	
3	Jalbert et al., 2010	<p>Subjects were long-stay Medicaid-eligible individuals who were identified from Medicaid claims data as 65 years of age or older, with a diagnosis of dementia, no record of a previous hip fracture, and living in one of 586 nursing homes in California, Florida, Illinois, New York, or Ohio.</p> <p>Excluded were individuals who were receiving hospice care, comatose, bedfast, paralyzed, or in a wheelchair.</p> <p>Study design: Nested case-control study.</p> <p>Location: US</p> <p>Funding: Not explicitly stated.</p>	69,027 individuals in total database of whom 764 experienced a hip fracture and were matched with up to 5 randomly selected controls (N=3,582)	2001-2002	<p>Current use of an antipsychotic was associated with a small increase in the risk of hospitalization for hip fracture (adjusted OR=1.26; 95% CI: 1.05-1.52). Risk of hip fracture was slightly higher for new users of antipsychotics (adjusted OR: 1.33, 95% CI: 0.95-1.88) than for ongoing users (adjusted OR: 1.21, 95% CI: 0.99-1.47).</p> <p>For current users of first generation antipsychotics, risk was higher (adjusted OR: 1.44, 95% CI: 0.84-2.47) than for second generation antipsychotic agents (adjusted OR: 1.27, 95% CI: 1.05-1.54).</p>	0

					<p>Corresponding odds ratios for current users of specific second generation antipsychotic agents were olanzapine (adjusted OR: 1.41, 95% CI: 1.08-1.84), risperidone (adjusted OR: 1.35, 95% CI: 1.07-1.70) and quetiapine (adjusted OR: 1.30, 95% CI: 0.86-1.96). Sample sizes were insufficient to calculate adjusted ORs for the other specific antipsychotics. Cases and controls were similar on most measures but cases had a greater frequency and severity of behavioral and psychological symptoms of dementia.</p>	
3	Pratt et	Subjects were over age 65 and exposed	8,235 subjects had at least one	2005 to 2008;	Using a self-controlled case-	o

<p>al., 2011</p>	<p>to antipsychotic medication according to the Australian Government Department of Veterans' Affairs Health Care Claims Database.</p> <p>Study design: observational - retrospective cohort</p> <p>Location: Australia</p> <p>Funding: Australian Government</p>	<p>hospitalization for hip fracture and of these 494 had been started on a first generation antipsychotic and 1,091 had been started on a second generation antipsychotic; 13,324 had at least one hospitalization for pneumonia and of these 807 had been started on a first generation antipsychotic and 1,107 had been started on a second generation antipsychotic during the study period.</p>	<p>median follow-up was 3.3 to 4 years.</p>	<p>series design a significantly increased risk of hip fracture was found with use of a first generation antipsychotic during all post-exposure risk periods beginning at 1 week of exposure. Risk remained significantly increased with >12 weeks of continuous exposure (IRR 2.19; 95% CI 1.62, 2.95). After initiation of second generation antipsychotics, the risk of hip fracture was highest in the first week (IRR 2.17; 95% CI 1.54, 3.06) and then declined but remained significantly raised with >12 weeks of continuous exposure (IRR 1.43; 95% CI</p>	
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					1.23, 1.66). There was also a significantly increased risk of hospitalization for hip fracture up to 16 weeks prior to antipsychotic initiation.	
1	Schneider et al. 2006	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day)</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial –</p>	421 subjects randomized; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks, clinical outcomes assessed on those remaining on antipsychotic at 12 weeks	Falls, injuries and fractures were reported together and did not show any significant differences between the SGAs and placebo treated patients with rates for olanzapine of 17%, quetiapine of 7%, and risperidone of 12% as compared to a rate of 15% for placebo.	1

		phase 1				
3	Sterke et al., 2012	<p>Subjects were nursing home residents with dementia who had data on drug use abstracted from a prescription database and falls identified using a standardized incident report system.</p> <p>Study design: observational - retrospective cohort</p> <p>Location: Netherlands</p>	248 subjects accounting for 85,074 person-days with an antipsychotic being used in 45.4% of these person-days	January 1, 2006, to January 1, 2008	<p>Fall risk was increased with the use of antipsychotics (HR, 1.53; 95% CI, 1.17-2.00). Fall risk was also increased with age (HR, 1.05; 95% CI, 1.02-1.08) and with use of anxiolytics (1.60; 1.19-2.16), hypnotics and sedatives (1.50; 1.04-2.16), and antidepressants (2.28; 1.58-3.29). There was a significant dose-response relationship between fall risk and use of antipsychotics (HR, 2.78; 95% CI, 1.49-5.17). Also associated with a significant dose-response relationship and an increased risk of falls were anxiolytics (1.60; 1.20-2.14),</p>	0

					<p>hypnotics and sedatives (2.58; 1.42-4.68), and antidepressants (2.84; 1.93-4.16). For antipsychotics, fall risk was increased even at low doses (0.25 of the average dosage of a drug taken by adults for the main indication as indicated by the World Health Organization); it increased further with dose increments and with combinations of psychotropics.</p>	
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Quality of the Body of Research Evidence for Harm related to Falls and Hip Fractures

Risk of bias: Moderate -- Placebo-controlled RCTs describe gait difficulties with SGA but do not consistently report rates of falls, with the exception of the CATIE-AD study. Observational studies are of low quality due to the lack of randomization, potential confounds of administrative database studies and the lack of restriction of some studies to individuals with a presumptive diagnosis of dementia.

Consistency: Inconsistent – Observational studies are consistent in suggesting an increased risk of falls and hip fracture with antipsychotic medications, however the CATIE-AD trial did not report any differences in fall, injury or fracture rates relative to placebo.

Directness: Direct -- Studies measure rates of falls and hip fractures, which are directly related to the PICOTS question on adverse effects.

Precision: Imprecise -- Confidence intervals for the odds ratios from observational studies are relatively narrow but those from the CATIE-AD study overlap the origin.

Applicability: The included studies involve individuals with dementia, although some of the administrative database studies included older individuals without specifying a diagnosis. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The observational studies include subjects from around the world, including the US, Canada, Australia, and the Netherlands. The studies included nursing facility patients as well as community dwelling subjects. Randomized trials typically exclude individuals with significant co-occurring medical or psychiatric conditions as well as individuals who require urgent intervention before consent could be obtained, which may influence the estimation of possible harms in broader groups of patients. Information about antipsychotic doses, co-occurring conditions, concomitant medications and other factors that may influence applicability was present in some of the studies and enhances the applicability of the findings.

Dose-response relationship: Present -- In at least one study, an increase in risk was present with an increasing dose of medication.

Magnitude of effect: Weak effect -- The effect size is small in the observational studies and non-existent in the CATIE-AD trial.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors. These individuals may have been at greater risk of adverse outcomes independent of their use of antipsychotic medication. (The finding in one study of an increase in risk before the initiation of antipsychotic medication is consistent with such a hypothesis.) They also may have had a greater severity of dementia at the time of treatment, which could also impact adverse outcomes.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low

Endocrine Adverse Events

Overview and Quality of Individual Studies

The AHRQ review (Maglione et al., 2011) noted that there was only one placebo-controlled RCT in patients with dementia that reported adverse endocrine outcomes. No difference in diabetes onset or prolactin measures was found between patients receiving risperidone and those receiving placebo, but the number of incident cases was small in all groups. In the CATIE-AD study, no difference was found between changes in glucose and the use of an SGA as compared to placebo. Prolactin was significantly increased only in the group that received risperidone (Schneider et al., 2006).

Of two observational studies, one found no increase in diabetic risk for patients treated with olanzapine as compared to other antipsychotic comparators or placebo. The other observational study reported that the use or duration of use of second generation antipsychotics was not associated with diabetes onset compared with the non-use of antipsychotics. In contrast, first generation antipsychotic treatment was associated with diabetes onset, particularly when treatment duration was less than 30 days. An additional administrative

database study in a sample of older individuals found an increase in hyperglycemic events in users of FGAs and SGAs.

<p>1=rct 2=SR/MA 3=obs</p> <p>A=from AHRQ review; *cited with other outcome</p>	Study	Subject/Method/Design	N	Duration	Outcomes/Results	(Rating of quality of evidence)
3	Jalbert et al., 2011	<p>Subjects were nursing home residents aged 65+ years, with dementia and no record of diabetes within 90 days of nursing home admission; long-stay Medicaid-eligible residents living in nursing homes in California, Florida, Illinois, New York, and Ohio</p> <p>Intervention: first generation and second generation antipsychotics vs. non-users</p> <p>Study design: observational -case control</p> <p>Cases of incident diabetes were identified from MDS</p>	29,203 people; identified 762 incident cases of diabetes and randomly selected up to 5 controls, matched on nursing home and quarter of MDS assessment (N = 2,646)	Recruited from January 2001 to December 2002	<p>Relative to non-users of antipsychotics, use of second generation antipsychotics was not associated with diabetes onset (adjusted OR = 1.03; 95% CI, 0.84-1.27) and risk of diabetes did not increase with length of time on treatment.</p> <p>First generation antipsychotic treatment was associated with diabetes onset, particularly when treatment duration was less than 30 days</p>	0

		<p>assessments and Medicaid claims, medication use was ascertained from Medicaid pharmacy files, and resident characteristics were obtained from MDS assessments</p> <p>Location: US</p> <p>Funding: Unfunded study.</p>			(adjusted OR = 2.70; 95% CI, 1.57-4.65).	
3	Lipscombe et al., 2011	<p>Subjects were over 65 years of age without prior diabetes, initiated treatment with an antipsychotic medication and identified through a population-based health database; 42% of the sample had dementia.</p> <p>Study design: Nested case control</p> <p>Location: Ontario, Canada</p> <p>Funding: Canadian Institutes of Health Research</p>	44,121 individuals of whom 220 had a hospital visit for hyperglycemia and 2,190 served as matched controls	Recruited from April 1, 2002, and March 31, 2006 with an average follow-up duration of 2.2 years	Any current use of antipsychotic, use of a FGA and use of a SGA were all associated with an increased adjusted odds ratio of hyperglycemia compared with use in the remote past (1.52 95% CI 1.07-2.17, 1.44 95% CI 1.01-2.07, and 2.86 95% CI 1.46-3.59, respectively).	0
1A	Micca et al., 2006	Subjects were over 65 years of age, diagnosed with dementia and identified via an olanzapine clinical trial	1,398 subjects of whom 835 received olanzapine (mean modal dose across all studies was	Not specified	There was no statistically significant increase noted in the risk of treatment emergent	0

		<p>database</p> <p>Study design: Post-hoc analysis of pooled data from clinical trials</p> <p>Location: Not specified</p> <p>Funding: Pharmaceutical (Eli Lilly)</p>	<p>4.87 mg/day), 223 received an active comparator (risperidone, haloperidol, or other first generation antipsychotic), and 340 received placebo</p>		<p>diabetes (HR 1.36), defined as 2 glucose values over 200 mg/dl after baseline (or 1 value at the final visit), initiation of antidiabetic medication or clinical diagnosis of diabetes. Other risk factors such as BMI ≥ 25 kg/m² or having at least 7% weight gain during the study were also not significant (HR 0.86 and HR 2.26, respectively).</p>	
1	Zheng et al., 2009	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Phase 1 --Placebo vs. masked flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine</p>	<p>421 subjects randomized in phase 1; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone</p>	<p>median duration on phase 1 treatment was 7.1 weeks; total trial duration 36 weeks</p>	<p>No treatment effects were noted for changes in blood pressure, glucose, and triglycerides but olanzapine was significantly associated with decreases in high-density lipoprotein cholesterol (-0.19 mg/dl/week) and increased girth (0.07</p>	1

		(mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day); phase 2 antipsychotic or citalopram; phase 3 open label			inches/week) relative to the placebo group.	
		Stable doses of cholinesterase inhibitor were permitted				
		Design: Multi-center, federally funded CATIE-AD trial – phase 1				
		Stable doses of cholinesterase inhibitor were permitted				

Quality of the Body of Research Evidence for Harm related to Endocrine Effects

Risk of bias: Moderate -- With the exception of the CATIE-AD trial, a small number of placebo-controlled RCTs assessed endocrine effects and these were not primary study outcomes. Observational studies are of low quality due to the lack of randomization and potential confounds of administrative database studies. One of the studies was an industry sponsored study of pooled post hoc findings, which may also introduce bias.

Consistency: Inconsistent – One study noted an increased risk of diabetes with FGAs whereas other studies using SGAs did not find an increase in risk. A third study of older subjects found an increase in hyperglycemia risk for FGAs and SGAs.

Directness: Indirect -- Studies measure glucose levels, lipid levels and other measures rather than diagnoses of diabetes or metabolic syndrome.

Precision: Imprecise -- Confidence intervals for odds ratios are relatively narrow but the range of confidence intervals includes negative values in some cases.

Applicability: The included studies primarily involve individuals with dementia, although one administrative database study involved older individuals, about 42% of whom had dementia. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. The studies include US and Canadian patients in nursing facilities and community settings. The

observational studies and the CATIE-AD study include subjects with a range of co-occurring conditions, consistent with usual practice.

Dose-response relationship: Unknown -- This was not reported with respect to these parameters.

Magnitude of effect: Weak effect -- The effect size is small when present.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low

Appetite/Weight

Overview and Quality of Individual Studies

The AHRQ report (Maglione et al., 2011) found weight gain to be a risk of treatment with antipsychotic medications, although more data are available in younger individuals than in elders with dementia. Pooled data from placebo-controlled trials found that olanzapine and risperidone were statistically associated with increased appetite/weight.

Pooled data on weight gain from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug Adverse Events/Sample Size	Placebo Adverse Events/Sample Size	Pooled OR	95%CI	NNH
Weight gain	Aripiprazole	2	23/472	10/223	1.02	(0.44,2.49)	NC
Weight gain	Olanzapine	3	34/482	6/326	4.69	(1.87, 14.14)	24
Weight gain	Quetiapine	1	5/94	4/142	1.93	(0.40, 10.01)	NC
Weight gain	Risperidone	2	14/281	5/236	3.40	(1.08, 12.75)	24

The CATIE-AD head-to-head trial showed some weight gain in patients treated with olanzapine, risperidone, or quetiapine (1.0, 0.4, and 0.7 pounds per month, respectively) compared with a weight loss (0.9 pounds per month) among placebo treated patients. A cohort study with mostly underweight or normal-weight patients with dementia found a greater chance of gaining weight with olanzapine than other agents, particularly if the patient's BMI was less than 25 at baseline.

<p>1=rct 2=SR/MA 3=obs</p> <p>A=from AHRQ review; *cited with other outcome</p>	Study	Subject/Method/Design	N	Duration	Outcomes/Results	(Rating of quality of evidence)
3A	Lipkovich et al., 2007	<p>Subjects had dementia, were over 65 years of age, and were newly prescribed olanzapine as identified through an olanzapine clinical trial database</p> <p>Study design: observational - retrospective cohort</p> <p>Location: US</p> <p>Funding: Eli Lilly and Company.</p>	1,267	20 weeks of follow-up	The estimated probability of gaining more than 7% of initial body weight was significantly greater with olanzapine as compared to placebo ($p < 0.001$).	0
1	Schneider et al., 2006; Zheng et al., 2009	<p>Subjects with Alzheimer's disease or probable Alzheimer's disease (MMSE 5 to 26) with moderate or greater levels of psychosis, aggression or agitation who were ambulatory and residing at home or in assisted living</p> <p>Interventions: Phase 1 --placebo vs. masked</p>	421 subjects randomized in phase 1; 142 placebo, 100 olanzapine, 94 quetiapine, 85 risperidone	median duration on phase 1 treatment was 7.1 weeks; total trial duration 36 weeks	Clinically significant weight gain (i.e., $\geq 7\%$ of body weight) was seen among patients with antipsychotic use relative to patients who did not use antipsychotics at all time periods during the trial ($<$	1

		<p>flexibly dosed olanzapine (mean: 5.5 mg/day), quetiapine (mean: 56.5 mg/day) or risperidone (mean: 1.0 mg/day); phase 2 antipsychotic or citalopram; phase 3 open label</p> <p>Stable doses of cholinesterase inhibitor were permitted</p> <p>Design: Multi-center, federally funded CATIE-AD trial – phase 1</p>			<p>or = 12 weeks OR=1.56, 95% CI=0.53 to 4.58; 12 and 24 weeks OR=2.89, 95% CI=0.97 to 8.64; > 24 weeks OR=3.38, 95% CI=1.24 to 9.23). Significant weight gain was noted for women but not for men and for olanzapine and quetiapine but not other study medications. Monthly weight gains were of 0.4 to 1.0 lbs as compared to monthly loss of 0.9 lbs on placebo.</p>	
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Quality of the Body of Research Evidence for Harm related to Appetite and Weight Change

Risk of bias: Low -- Available data are primarily from the CATIE-AD trial and pooled analyses from placebo-controlled RCTs.

Consistency: Consistent – Olanzapine treatment was associated with consistent increases in body weight in several analyses of pooled RCT data as well as in the CATIE-AD trial. Risperidone and quetiapine findings are less consistent but still show increases in weight in some studies.

Directness: Direct -- Studies measure body weight, which is directly related to the PICOTS question on adverse effects.

Precision: Imprecise -- Confidence intervals for the odds ratios from the pooled randomized data are large and confidence intervals in some studies include negative values.

Applicability: The included studies involve individuals with dementia and use doses of antipsychotic that are consistent with usual practice. The study locations include the US. Studies include community-

dwelling subjects but it is less clear whether nursing facility subjects are included in the pooled RCT analyses.

Dose-response relationship: Unknown -- This was not reported.

Magnitude of effect: Weak effect -- The effect size is small to moderate when an effect is present, but confidence intervals are wide which is likely to skew estimates of effect.

Confounding factors: Present – The data from the observational studies have a number of potentially confounding factors. Because no information is available on co-occurring medical conditions in individuals receiving antipsychotic medications, these individuals may have been at greater risk of adverse outcomes independent of their use of antipsychotic medication. They also may have had a greater severity of dementia at the time of treatment, which could also impact adverse outcomes. Vascular disease has been reported to affect risk of CVA in some studies and this is also not reported or accounted for in RCTs or observational studies.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Moderate – The strongest evidence is available for olanzapine but evidence is relatively consistent for other SGAs, particularly when known findings in younger subjects are considered.

Urinary Symptoms

Overview and Quality of Individual Studies

The AHRQ report (Maglione et al., 2011) reported that olanzapine, quetiapine, and risperidone were associated with urinary symptoms, compared with placebo whereas no such association was noted for aripiprazole. One study reported rates of urinary incontinence as an adverse event whereas in the other reported studies the adverse urinary symptoms consisted of urinary tract infections.

Pooled data on urinary symptoms from AHRQ 2011 Review (adapted from Maglione et al., 2011)

Adverse Effect	Drug	No. of studies	Drug (Adverse Events/Sample Size)	Placebo (Adverse Events/Sample Size)	OR	95% CI	NNH
Urinary	Aripiprazole	3	115/603	44/348	1.37	(0.92, 2.09)	NC
Urinary	Olanzapine	1	19/204	1/94	9.51	(1.47, 401.07)	36
Urinary	Quetiapine	2	44/332	12/191	2.37	(1.16, 5.15)	16
Urinary	Risperidone	4	164/1060	71/665	1.55	(1.13, 2.13)	21

Quality of the Body of Research Evidence for Harm related to Urinary Symptoms

Risk of bias: Moderate -- Studies include placebo-controlled RCTs but adverse effects were not a primary outcome of these trials which were designed to test efficacy.

Consistency: Consistent – With the exception of quetiapine, pooled data from randomized placebo-controlled trials of SGAs showed statistically increased rates of urinary symptoms as compared to placebo.

Directness: Direct -- Studies measure rates of urinary symptoms, which is directly related to the PICOTS question on adverse effects.

Precision: Imprecise -- Confidence intervals for the odds ratios from the pooled randomized data are relatively large and the range of confidence intervals includes negative values in one case.

Applicability: The included studies involve individuals with dementia. The doses of antipsychotic that were used in the randomized studies are consistent with usual practice. Randomized trials typically exclude individuals with significant co-occurring medical or psychiatric conditions, which may influence the estimation of possible harms in broader groups of patients. Differences may also exist between male and female subjects and data are not reported in a manner that would allow such distinctions to be made.

Dose-response relationship: Unknown -- This was not assessed in the reported studies.

Magnitude of effect: Weak effect -- The effect size is small for risperidone and quetiapine and not significant for aripiprazole. Olanzapine has a large reported effect but the extremely large confidence interval makes it difficult to interpret.

Confounding factors: Present – The data from the studies may have potentially confounding factors. Although these data are from placebo-controlled RCTs, factors such as sex and co-occurring medical conditions may influence urinary symptoms and does not appear to have been accounted for in the analysis.

Publication bias: Not suspected -- There is no specific evidence to suggest selection bias.

Overall strength of evidence: Low

Expert Opinion Survey Data: Results

Section I: Questions about Appropriate Use

Experts were given the following instructions in terms of providing answers to the survey questions:

A treatment is appropriate if the expected health benefits (e.g., relief of symptoms, improved functional capacity, improved quality of life, increased life expectancy) exceed expected negative consequences (e.g., adverse effects) by a sufficiently wide margin that the treatment is worth doing, exclusive of cost. The expert opinion about appropriateness is based on both available evidence and their clinical experience.

In the context of these questions, “assessment” is defined as obtaining information about the patient’s current symptoms and behavior and past history, including through reports of staff and caregivers. The assessment will typically include the results of a mental status examination by the clinician and may also include readily available laboratory tests, depending upon the urgency of the situation.

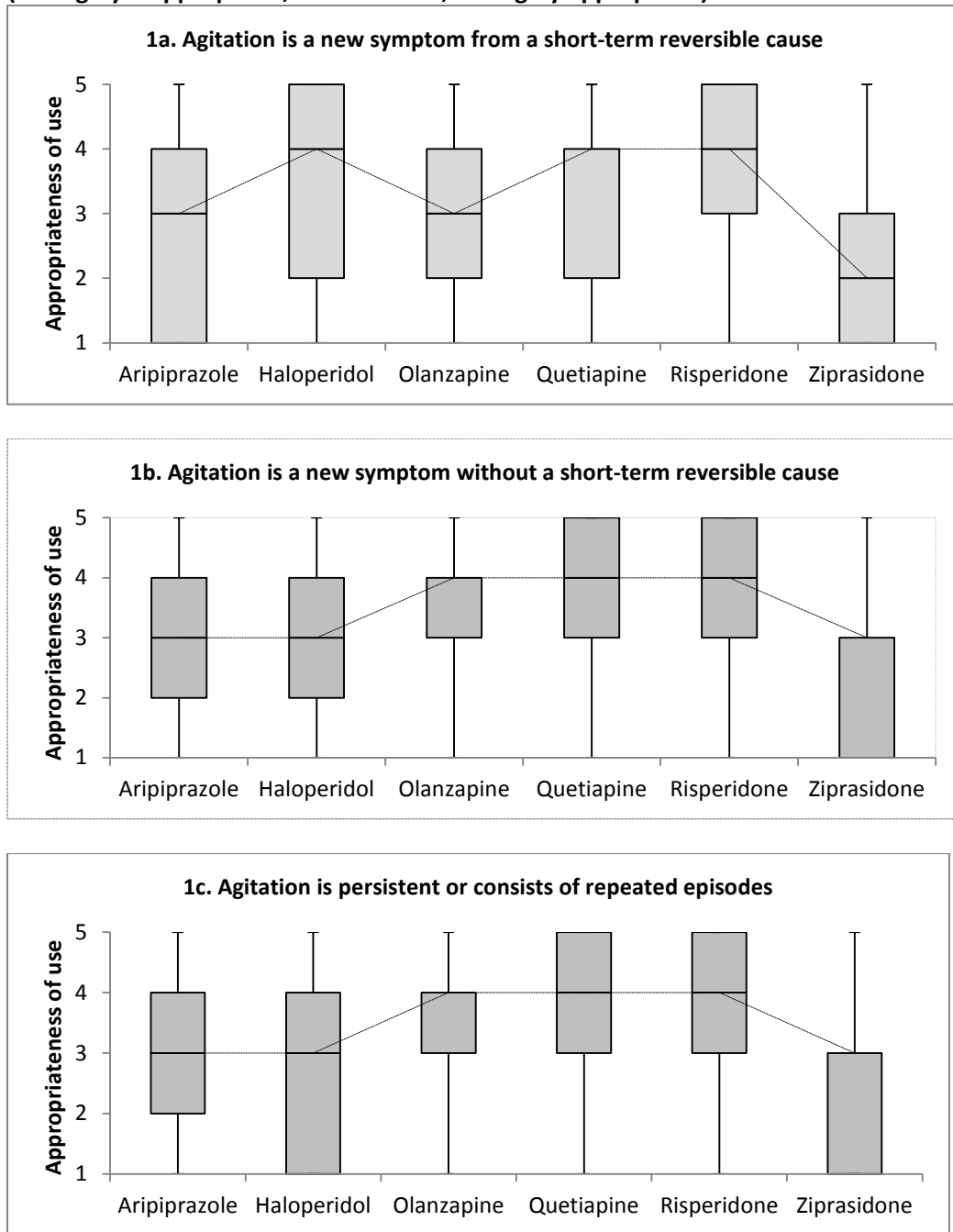
“Dementia” is a degenerative condition characterized by multiple cognitive deficits that include impairment in memory. It has various etiologies and usually affects older adults. For this survey, the term “dementia” should be understood to be equivalent to the term “major neurocognitive disorder” as defined in DSM-5.

1. DANGEROUS AGITATION - Please rate the appropriateness of each treatment for the given clinical circumstance, using a 1-5 scale where 1 = highly inappropriate, 3 = uncertain, and 5 = highly appropriate.

1a. The agitation is a NEW SYMPTOM. Assessment SUGGESTS a short-term reversible cause of the agitation, such as acute delirium, medication side effects, or environmental causes.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=203)		(N=203)		(N=202)		(N=202)		(N=202)		(N=201)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	52	25.6	36	17.7	34	16.8	27	13.4	21	10.4	72	35.8
2	44	21.7	25	12.3	28	13.9	36	17.8	14	6.9	44	21.9
3 (uncertain)	55	27.1	26	12.8	49	24.3	36	17.8	39	19.3	53	26.4
4	30	14.8	40	19.7	60	29.7	62	30.7	65	32.2	19	9.5
5 (highly appropriate)	22	10.8	76	37.4	31	15.4	41	20.3	63	31.2	13	6.5
Median	3		4		3		4		4		2	
Mean	2.6		3.5		3.1		3.3		3.7		2.3	
StdDev	1.3		1.5		1.3		1.3		1.3		1.2	
1b. The agitation is a NEW SYMPTOM. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=198)		(N=199)		(N=201)		(N=200)		(N=199)		(N=198)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	31	15.7	39	19.6	18	9.0	14	7.0	7	3.5	53	26.8
2	31	15.7	34	17.1	26	12.9	18	9.0	14	7.0	35	17.7
3 (uncertain)	71	35.9	42	21.1	44	21.9	46	23.0	35	17.6	74	37.4
4	44	22.2	41	20.6	81	40.3	69	34.5	79	39.7	26	13.1
5 (highly appropriate)	21	10.6	43	21.6	32	15.9	53	26.5	64	32.2	10	5.1
Median	3		3		4		4		4		3	
Mean	3.0		3.1		3.4		3.6		3.9		2.5	
StdDev	1.2		1.4		1.2		1.2		1		1.2	
1c. The agitation is PERSISTENT or consists of repeated episodes. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=200)		(N=201)		(N=200)		(N=201)		(N=199)		(N=198)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	34	17.0	60	29.9	20	10.0	12	6.0	13	6.5	57	28.8
2	30	15.0	32	15.9	20	10.0	20	10.0	12	6.0	37	18.7
3 (uncertain)	54	27.0	39	19.4	43	21.5	39	19.4	36	18.1	61	30.8
4	58	29.0	40	19.9	79	39.5	70	34.8	74	37.2	32	16.2
5 (highly appropriate)	24	12.0	30	14.9	38	19.0	60	29.9	64	32.2	11	5.6
Median	3		3		4		4		4		3	
Mean	3.1		2.7		3.5		3.7		3.8		2.5	
StdDev	1.3		1.4		1.2		1.2		1.1		1.2	

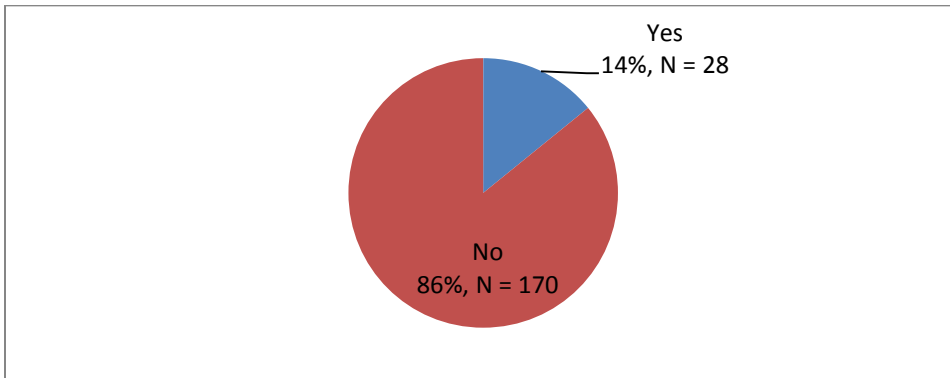
Figure 1. DANGEROUS AGITATION

(1 = highly inappropriate, 3 = uncertain, 5 = highly appropriate)



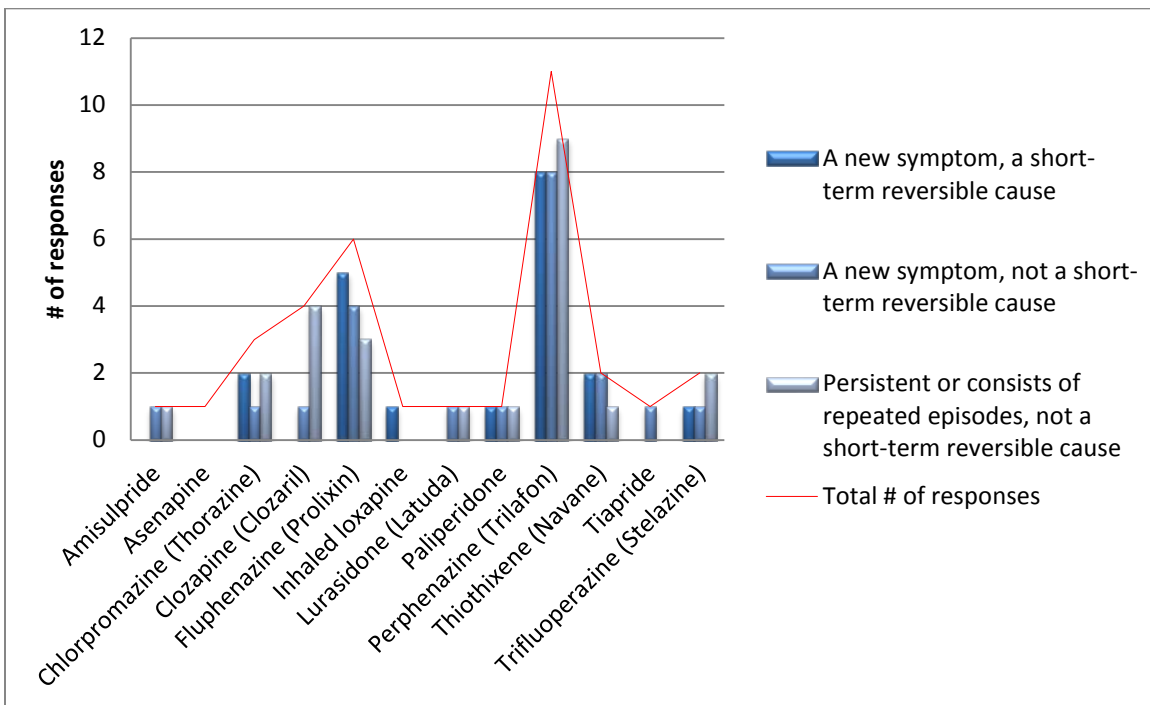
2. Are there other antipsychotics (either first- or second-generation) that you think are highly appropriate (i.e., 5 on the 1-5 scale) for the clinical circumstances described in Question 1

Figure 2.



3. Please specify the other antipsychotic(s) that you think are highly appropriate (i.e., 5 on the 1-5 scale) and check the appropriate clinical circumstance(s). Check all circumstances that apply.

Figure 3.

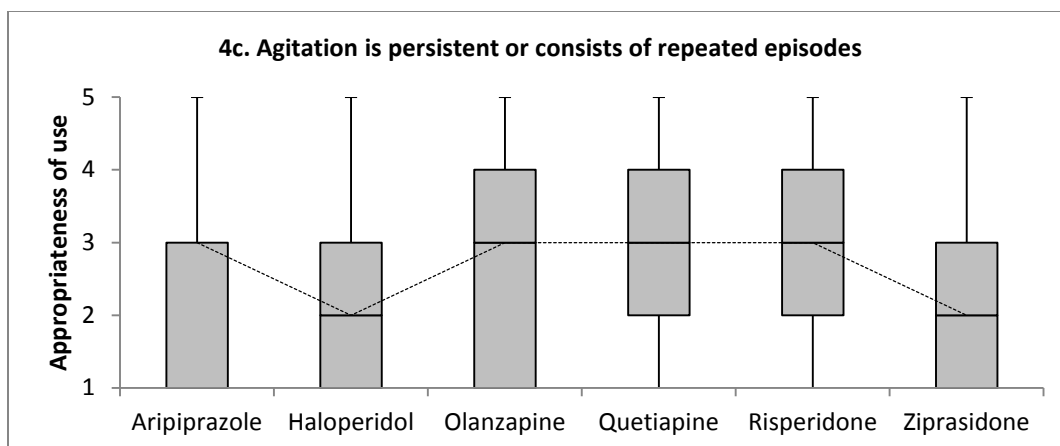
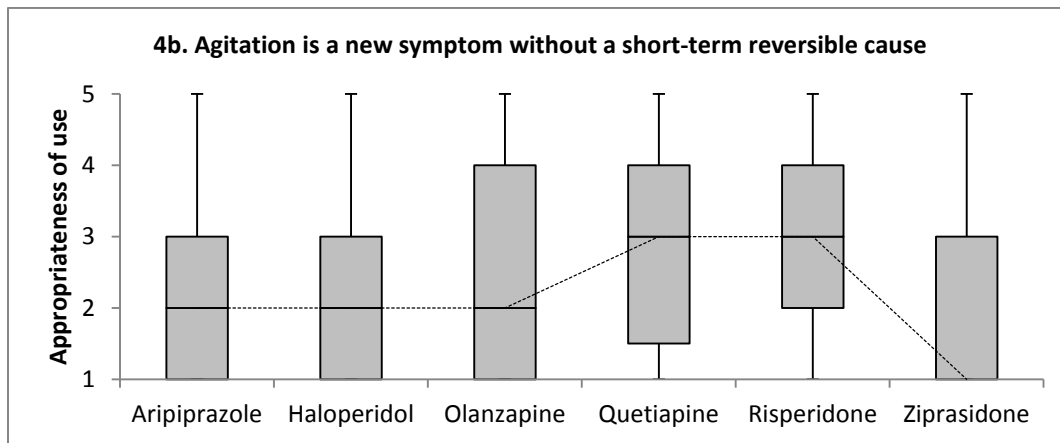
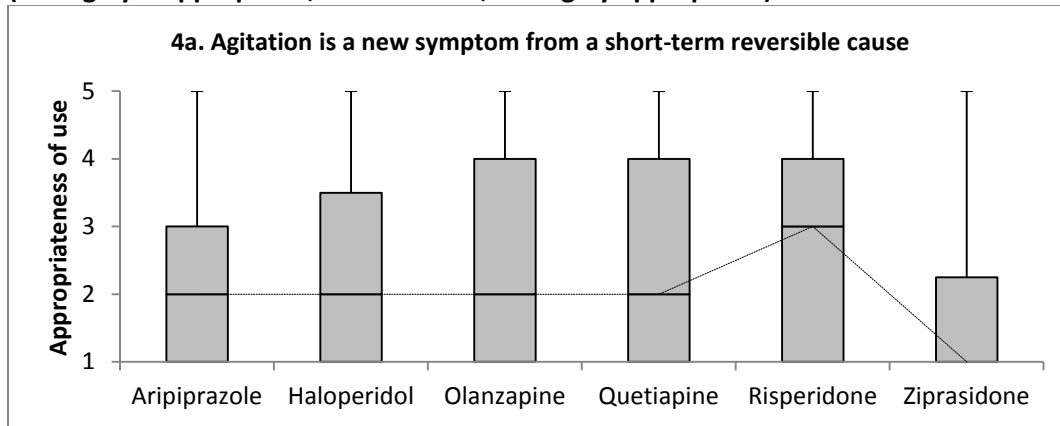


4. NONDANGEROUS AGITATION – Please rate the appropriateness of each treatment for the given clinical circumstance, using a 1-5 scale where 1 = highly inappropriate, 3 = uncertain, and 5 = highly appropriate.

4a. The agitation is a NEW SYMPTOM. Assessment SUGGESTS a short-term reversible cause of the agitation, such as acute delirium, medication side effects, or environmental causes.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=198)		(N=199)		(N=198)		(N=199)		(N=199)		(N=196)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	97	49.0	78	39.2	76	38.4	64	32.2	58	29.2	115	58.7
2	38	19.2	41	20.6	37	18.7	36	18.1	38	19.1	32	16.3
3 (uncertain)	37	18.7	30	15.1	34	17.2	42	21.1	38	19.1	27	13.8
4	18	9.1	29	14.6	39	19.7	32	16.1	44	22.1	15	7.7
5 (highly appropriate)	8	4.0	21	10.6	12	6.1	25	12.6	21	10.6	7	3.6
Median	2		2		2		2		3		1	
Mean	2.0		2.4		2.4		2.6		2.7		1.8	
StdDev	1.2		1.4		1.3		1.4		1.4		1.1	
4b. The agitation is a NEW SYMPTOM. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=193)		(N=191)		(N=192)		(N=191)		(N=193)		(N=186)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	71	36.8	74	38.7	59	30.7	48	25.1	45	23.3	96	50.8
2	39	20.2	48	25.1	41	21.4	37	19.4	37	19.2	35	18.5
3 (uncertain)	53	27.5	33	17.3	41	21.4	44	23.0	46	23.8	38	20.1
4	25	13.0	23	12.0	43	22.4	39	20.4	51	26.4	16	8.5
5 (highly appropriate)	5	2.6	13	6.8	8	4.2	23	12.0	14	7.3	4	2.1
Median	2		2		2		3		3		1	
Mean	2.2		2.2		2.5		2.7		2.8		1.9	
StdDev	1.2		1.3		1.2		1.3		1.3		1.1	
4c. The agitation is PERSISTENT or consists of repeated episodes. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=193)		(N=191)		(N=191)		(N=191)		(N=192)		(N=189)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	62	32.1	81	42.4	59	30.9	37	19.4	43	22.4	88	46.6
2	33	17.1	39	20.4	31	16.2	36	18.9	32	16.7	28	14.8
3 (uncertain)	63	32.6	35	18.3	42	22.0	47	24.6	42	21.9	49	25.9
4	30	15.5	27	14.1	46	24.1	44	23.0	56	29.2	20	10.6
5 (highly appropriate)	5	2.6	9	4.7	13	6.8	27	14.1	19	9.9	4	2.1
Median	3		2		3		3		3		2	
Mean	2.4		2.2		2.6		2.9		2.9		2.1	

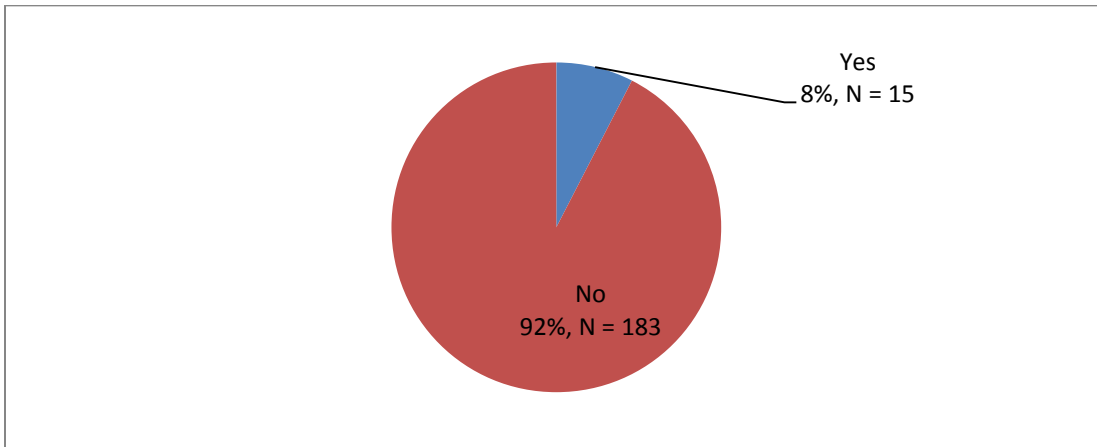
StdDev	1.2	1.3	1.3	1.3	1.3	1.2
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Figure 4. NONDANGEROUS AGITATION
(1 = highly inappropriate, 3 = uncertain, 5 = highly appropriate)



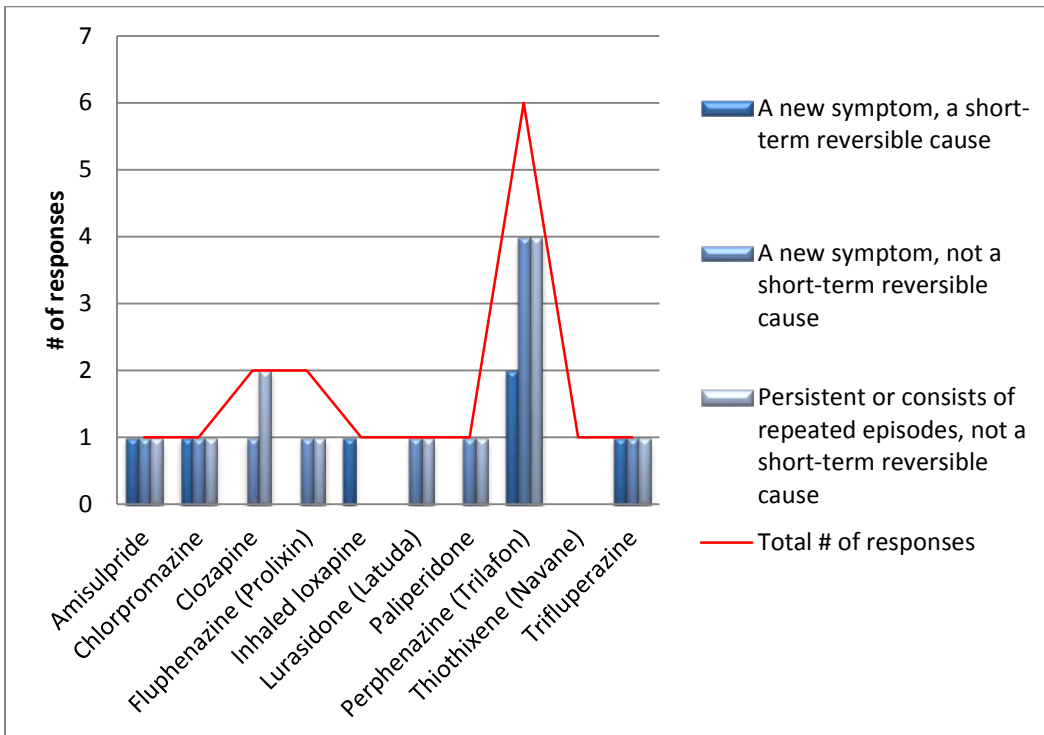
5. Are there other antipsychotics (either first- or second-generation) that you think are highly appropriate (i.e., 5 on the 1-5 scale) for the clinical circumstances described in Question 4?

Figure 5.



6. Please specify the other antipsychotic(s) that you think are highly appropriate (i.e., 5 on the 1-5 scale) and check the appropriate clinical circumstance(s). Check all circumstances that apply.

Figure 6.

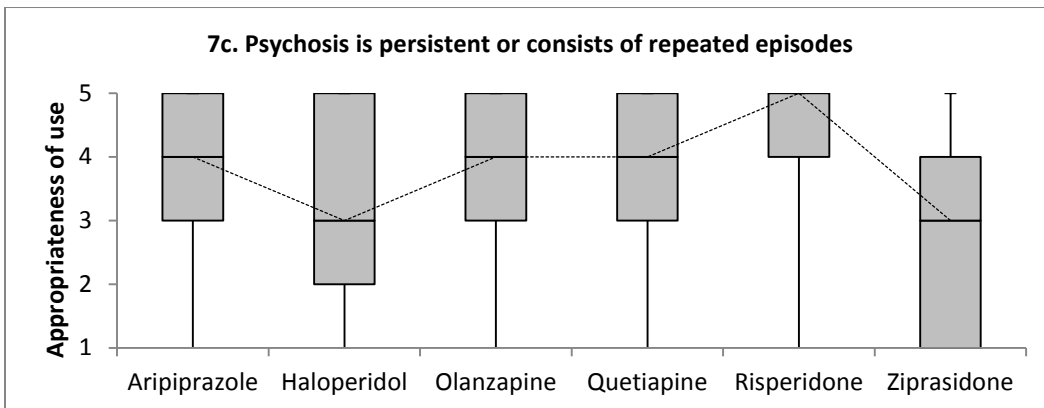
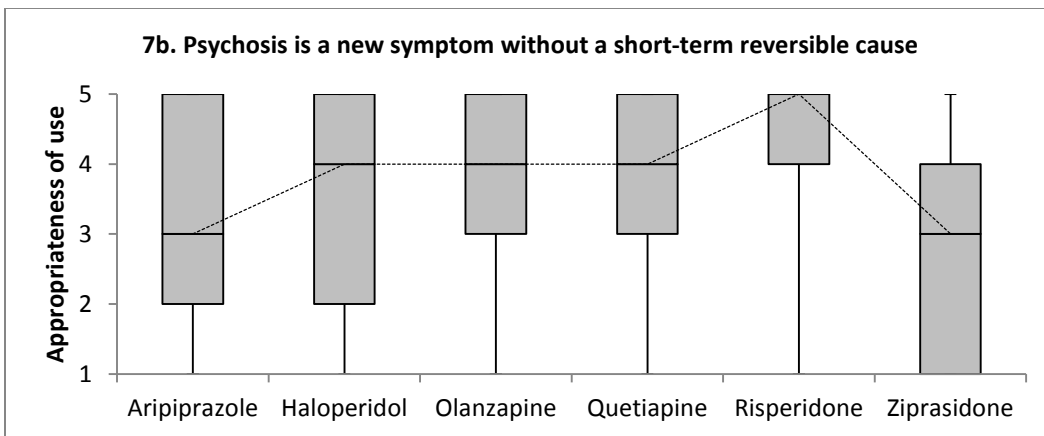
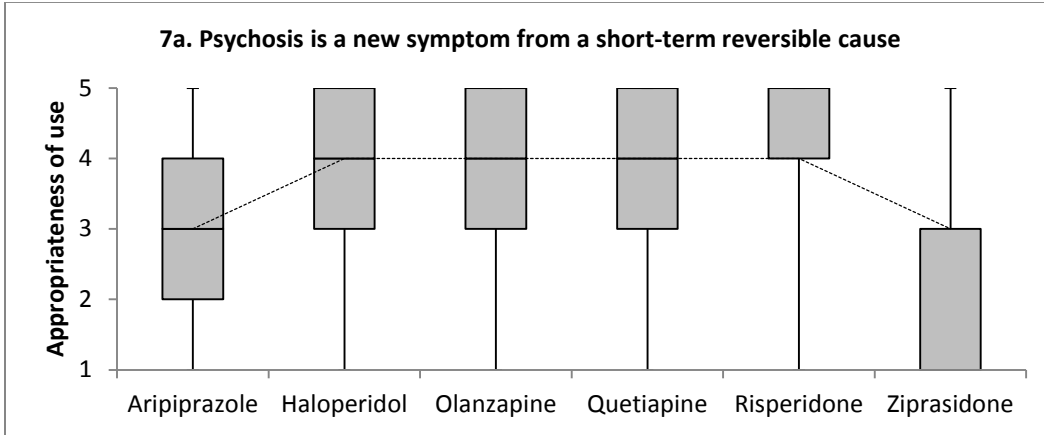


7. DANGEROUS PSYCHOSIS - Please rate the appropriateness of each treatment for the given clinical circumstance, using a 1-5 scale where 1 = highly inappropriate, 3 = uncertain, and 5 = highly appropriate.

7a. The psychosis is a NEW SYMPTOM. Assessment SUGGESTS a short-term reversible cause of the agitation, such as acute delirium, medication side effects, or environmental causes.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=185)		(N=187)		(N=185)		(N=186)		(N=187)		(N=182)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	43	23.2	24	12.8	20	10.8	19	10.2	10	5.4	55	30.2
2	25	13.5	15	8.0	14	7.6	19	10.2	9	4.8	32	17.6
3 (uncertain)	38	20.5	27	14.4	34	18.4	36	19.4	27	14.4	51	28.0
4	38	20.5	36	19.3	61	33.0	54	29.0	48	25.7	22	12.1
5 (highly appropriate)	41	22.2	85	45.5	56	30.3	58	31.2	93	49.7	22	12.1
Median	3		4		4		4		4		3	
Mean	3.0		3.8		3.6		3.6		4.1		2.6	
StdDev	1.5		1.4		1.3		1.3		1.1		1.3	
7b. The psychosis is a NEW SYMPTOM. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=181)		(N=186)		(N=185)		(N=183)		(N=181)		(N=183)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	30	16.6	34	18.3	18	9.7	11	6.0	6	3.3	52	28.4
2	25	13.8	17	9.1	8	4.3	13	7.1	7	3.9	24	13.1
3 (uncertain)	37	20.4	32	17.2	33	17.8	31	16.9	22	12.2	57	31.2
4	41	22.7	38	20.4	59	31.9	57	31.2	53	29.3	27	14.8
5 (highly appropriate)	48	26.5	65	35.0	67	36.2	71	38.8	93	51.4	23	12.6
Median	3		4		4		4		5		3	
Mean	3.3		3.4		3.8		3.9		4.2		2.7	
StdDev	1.4		1.5		1.2		1.2		1		1.4	
7c. The psychosis is PERSISTENT or consists of repeated episodes. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=182)		(N=187)		(N=184)		(N=182)		(N=183)		(N=182)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	27	14.8	44	23.5	18	9.8	12	6.6	9	4.9	50	27.5
2	17	9.3	24	12.8	14	7.6	5	2.8	6	3.3	21	11.5
3 (uncertain)	39	21.4	35	18.7	22	12.0	35	19.2	18	9.8	56	30.8
4	45	24.7	33	17.7	59	32.1	48	26.4	56	30.6	29	15.9
5 (highly appropriate)	54	29.7	51	27.3	71	38.6	82	45.1	94	51.4	26	14.3
Median	4		3		4		4		5		3	
Mean	3.5		3.1		3.8		4.0		4.2		2.8	

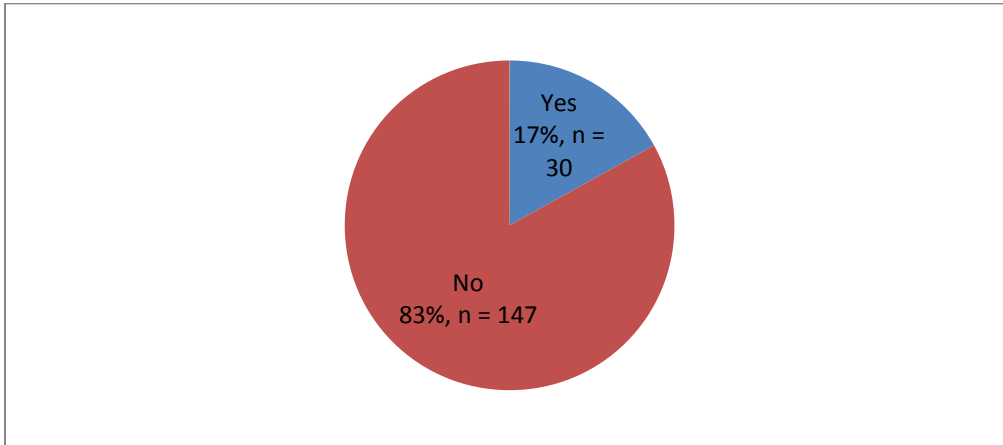
StdDev	1.4	1.5	1.3	1.2	1.1	1.4
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Figure 7. DANGEROUS PSYCHOSIS
(1 = highly inappropriate, 3 = uncertain, 5 = highly appropriate)



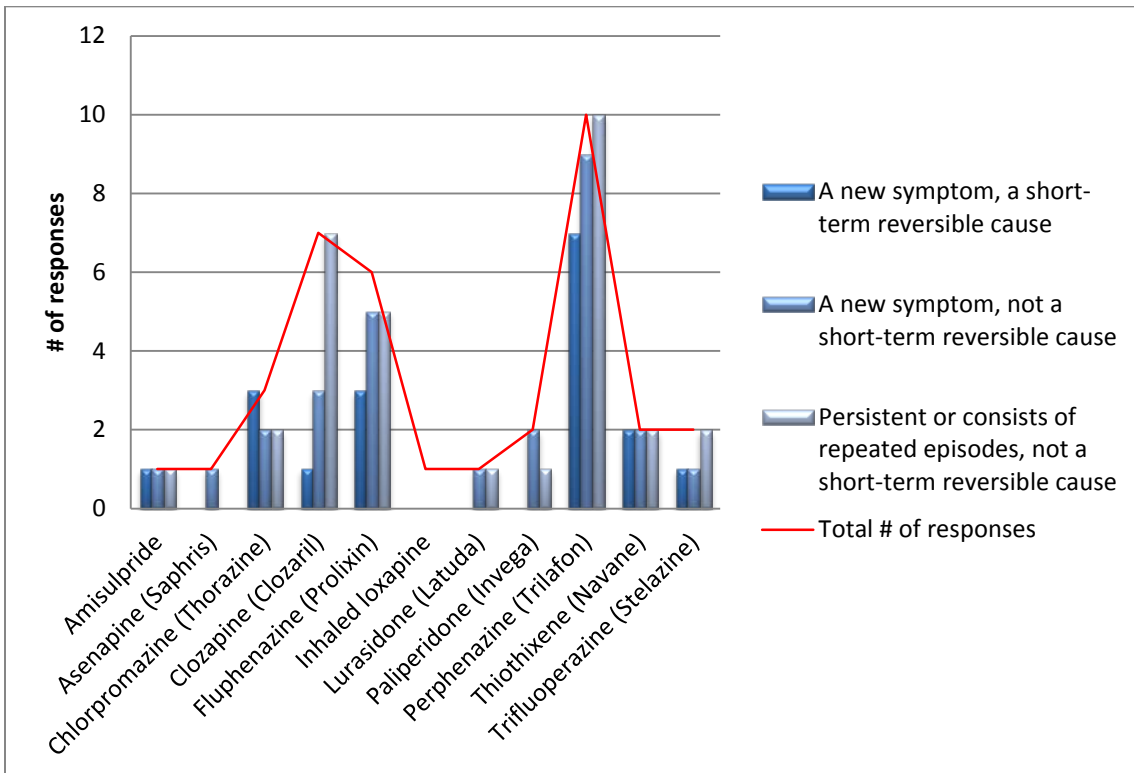
8. Are there other antipsychotics (either first- or second-generation) that you think are highly appropriate (i.e., 5 on the 1-5 scale) for the clinical circumstances described in Question 7

Figure 8.



9. Please specify the other antipsychotic(s) that you think are highly appropriate (i.e., 5 on the 1-5 scale) and check the appropriate clinical circumstance(s). Check all circumstances that apply.

Figure 9.

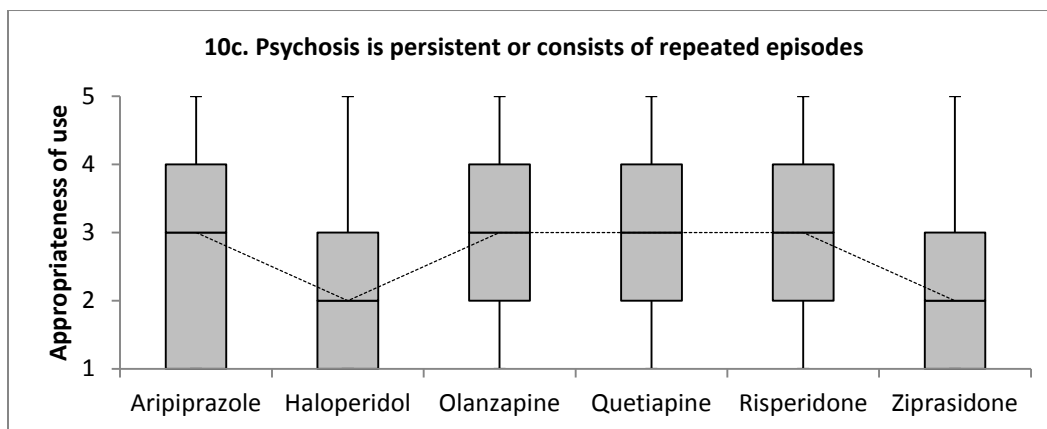
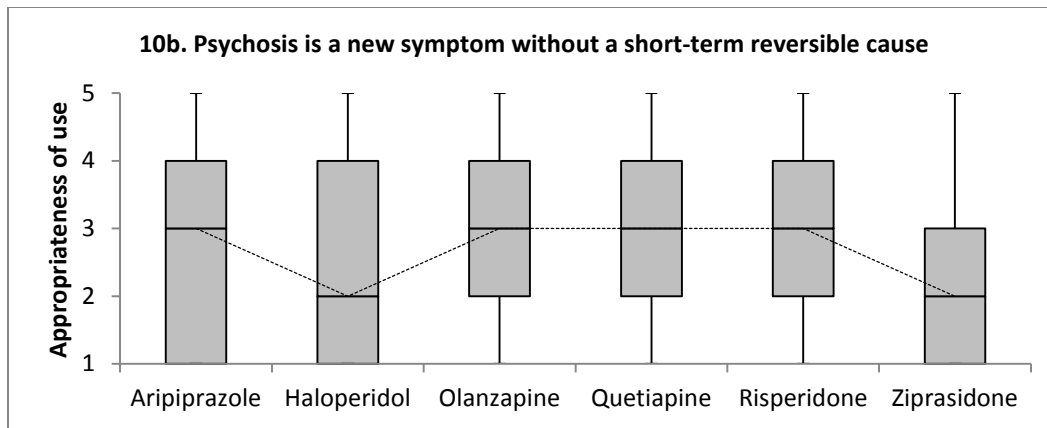
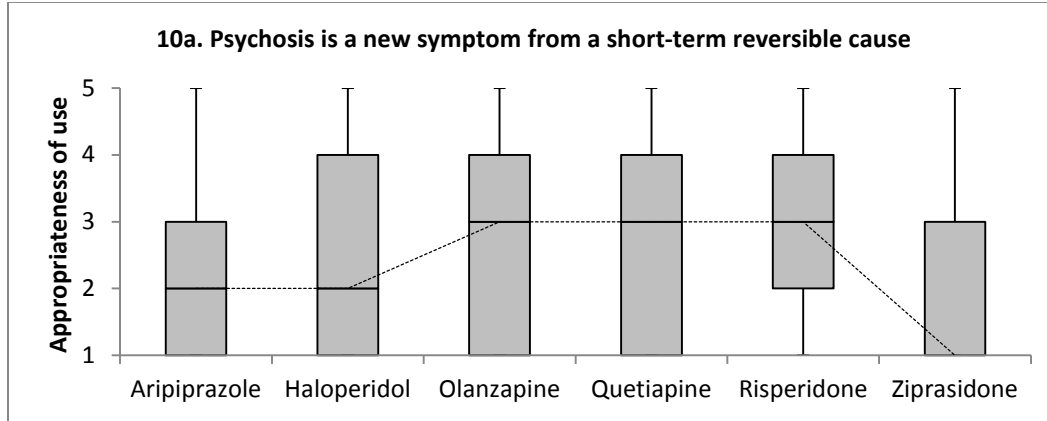


10. NONDANGEROUS PSYCHOSIS - Please rate the appropriateness of each treatment for the given clinical circumstance, using a 1-5 scale where 1 = highly inappropriate, 3 = uncertain, and 5 = highly appropriate.

10a. The psychosis is a NEW SYMPTOM. Assessment SUGGESTS a short-term reversible cause of the agitation, such as acute delirium, medication side effects, or environmental causes.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=187)		(N=188)		(N=187)		(N=187)		(N=186)		(N=181)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	78	41.7	67	35.6	57	30.5	50	26.7	43	23.1	91	50.3
2	25	13.4	36	19.2	34	18.2	37	19.8	33	17.7	30	16.6
3 (uncertain)	48	25.7	27	14.4	38	20.3	38	20.3	34	18.3	39	21.6
4	22	11.8	35	18.6	39	20.9	39	20.9	45	24.2	11	6.1
5 (highly appropriate)	14	7.5	23	12.2	19	10.2	23	12.3	31	16.7	10	5.5
Median	2		2		3		3		3		1	
Mean	2.3		2.5		2.6		2.7		2.9		2.0	
StdDev	1.3		1.4		1.4		1.4		1.4		1.2	
10b. The psychosis is a NEW SYMPTOM. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=184)		(N=183)		(N=183)		(N=184)		(N=181)		(N=182)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	59	32.1	67	36.6	43	23.5	37	20.1	36	19.9	74	40.7
2	23	12.5	34	18.6	32	17.5	33	17.9	27	14.9	31	17.0
3 (uncertain)	49	26.6	33	18.0	35	19.1	45	24.5	43	23.8	44	24.2
4	36	19.6	29	15.9	51	27.9	42	22.8	45	24.9	20	11.0
5 (highly appropriate)	17	9.2	20	10.9	22	12.0	27	14.7	30	16.6	13	7.1
Median	3		2		3		3		3		2	
Mean	2.6		2.5		2.9		2.9		3.0		2.3	
StdDev	1.4		1.4		1.4		1.3		1.4		1.3	
10c. The psychosis is PERSISTENT or consists of repeated episodes. Assessment DOES NOT FIND a short-term reversible cause.												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
	(N=182)		(N=183)		(N=184)		(N=184)		(N=182)		(N=179)	
Appropriateness of use	No	%	No	%	No	%	No	%	No	%	No	%
1 (highly inappropriate)	49	26.9	67	36.6	39	21.2	32	17.4	33	18.1	70	39.1
2	29	15.9	44	24.0	37	20.1	37	20.1	27	14.8	38	21.2
3 (uncertain)	42	23.1	28	15.3	31	16.9	38	20.7	38	20.9	42	23.5
4	44	24.2	23	12.6	53	28.8	44	23.9	50	27.5	15	8.4
5 (highly appropriate)	18	9.9	21	11.5	24	13.0	33	17.9	34	18.7	14	7.8
Median	3		2		3		3		3		2	
Mean	2.7		2.4		2.9		3.0		3.1		2.2	

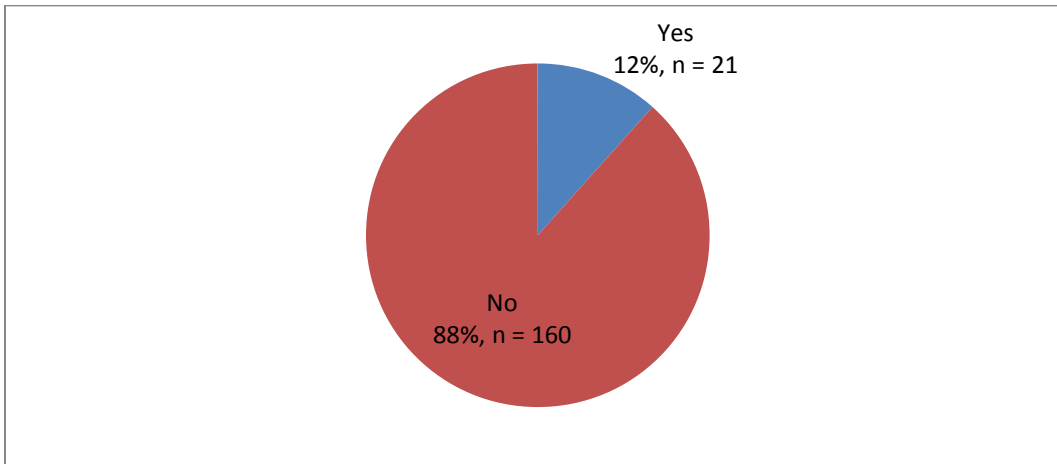
StdDev	1.3	1.4	1.4	1.4	1.4	1.3
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Figure 10. NONDANGEROUS PSYCHOSIS
(1 = highly inappropriate, 3 = uncertain, 5 = highly appropriate)



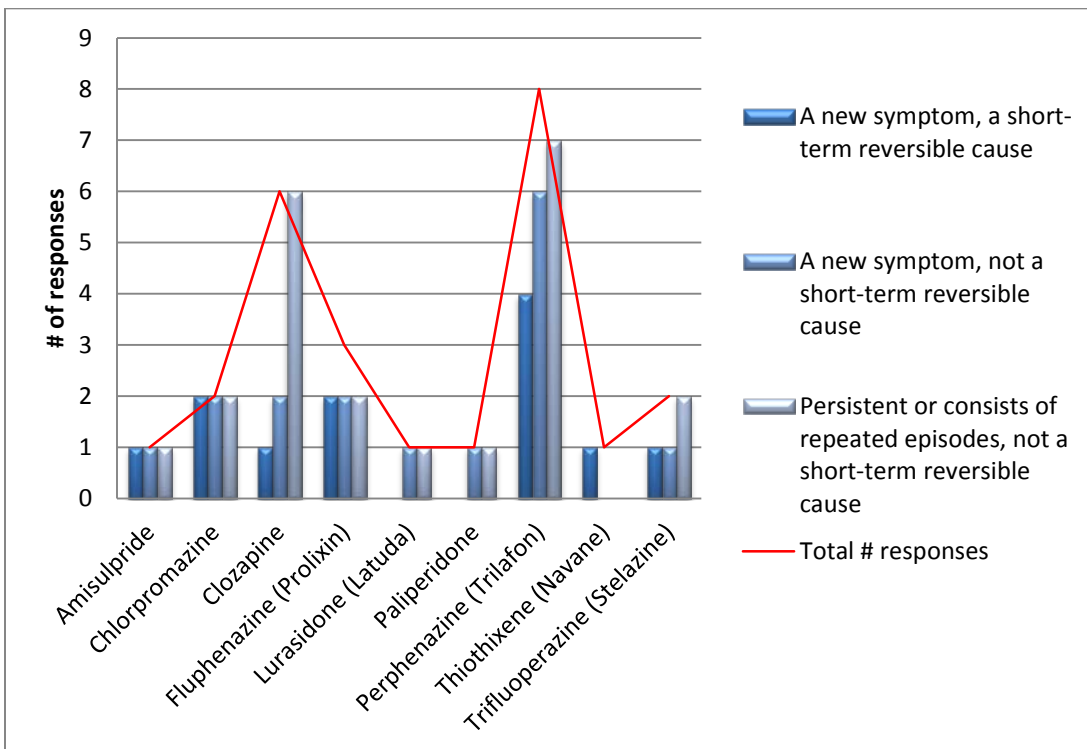
11. Are there other antipsychotics (either first- or second-generation) that you think are highly appropriate (i.e., 5 on the 1-5 scale) for the clinical circumstances described in Question 10

Figure 11.



12. Please specify the other antipsychotic(s) that you think are highly appropriate (i.e., 5 on the 1-5 scale) and check the appropriate clinical circumstance(s). Check all circumstances that apply.

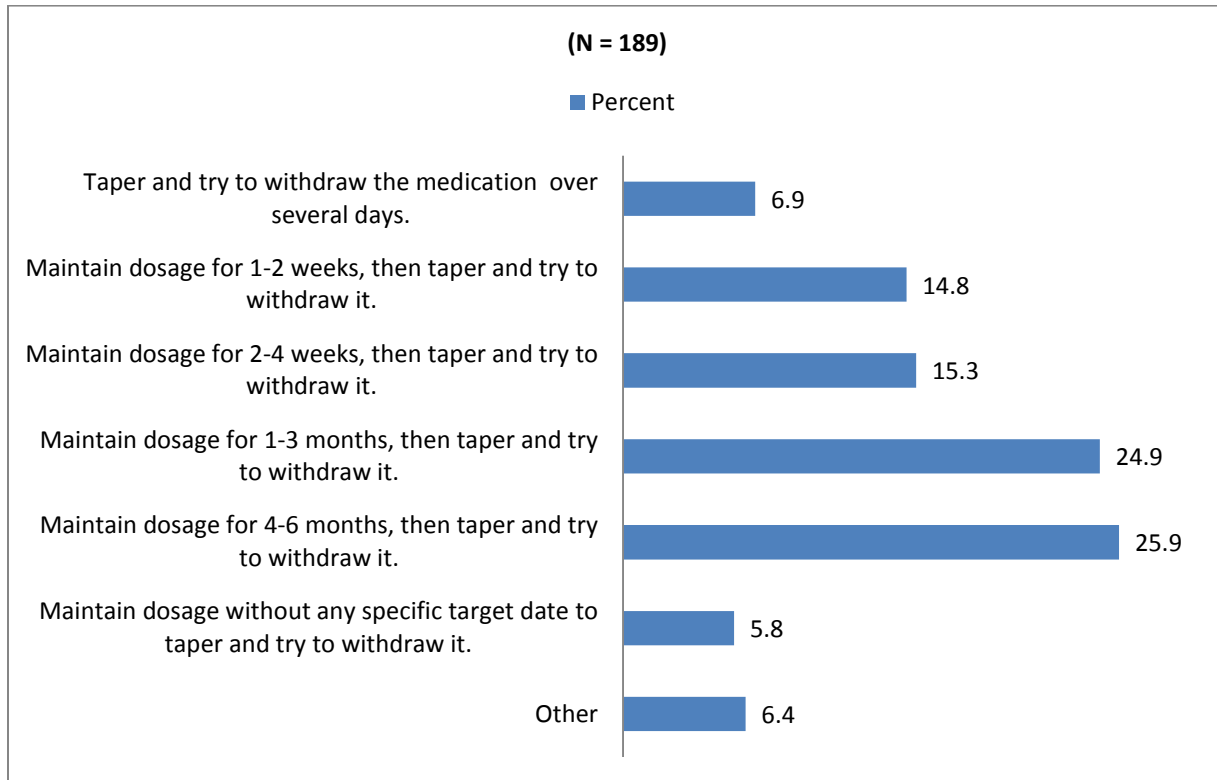
Figure 12.



Section II. Duration of Treatment

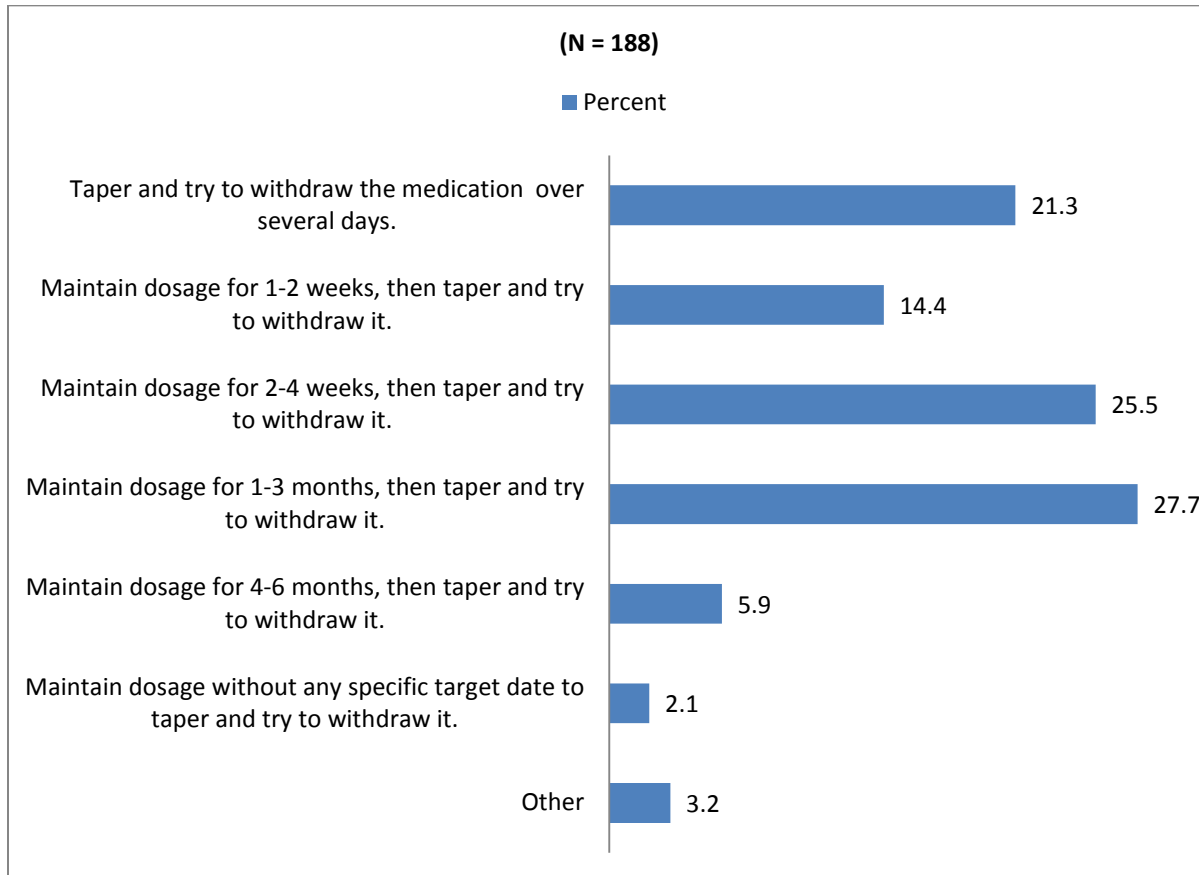
13. If a patient with dementia has been stabilized on an antipsychotic medication for the treatment of DANGEROUS AGITATION, what duration of treatment is usually optimal?

Figure 13.



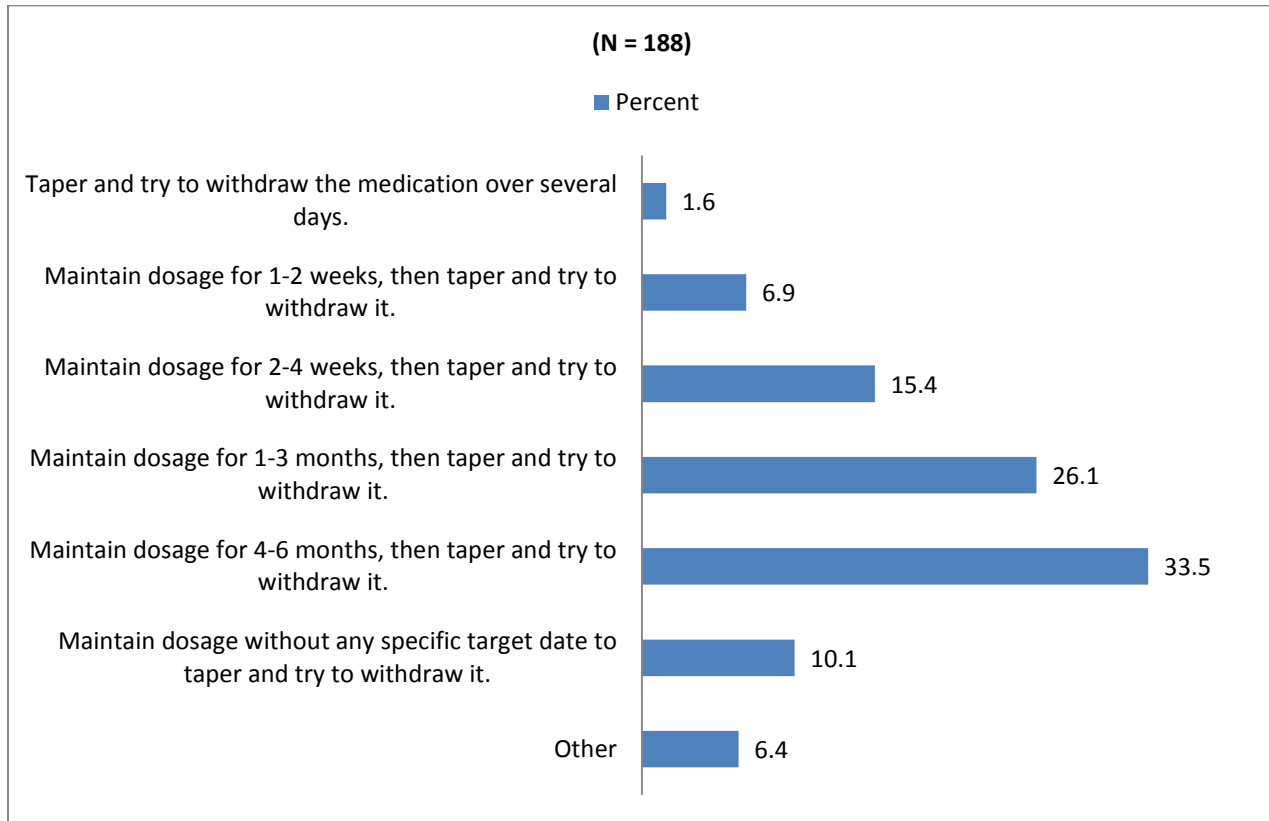
14. If a patient with dementia has been stabilized on an antipsychotic medication for the treatment of NONDANGEROUS AGITATION, what duration of treatment is usually optimal?

Figure 14.



15. If a patient with dementia has been stabilized on an antipsychotic medication for the treatment of DANGEROUS PSYCHOSIS, what duration of treatment is usually optimal?

Figure 15.



16. If a patient with dementia has been stabilized on an antipsychotic medication for the treatment of NONDANGEROUS PSYCHOSIS, what duration of treatment is optimal?

Figure 16.

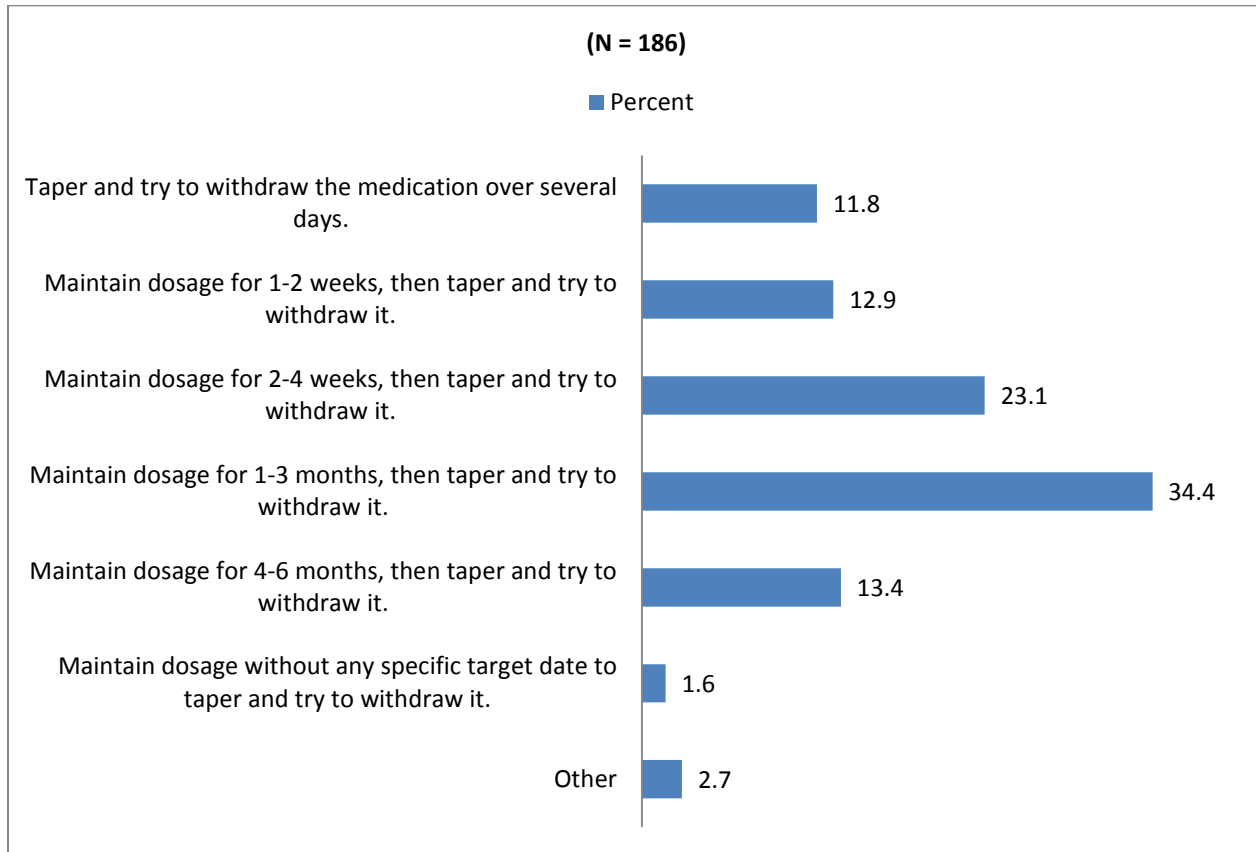
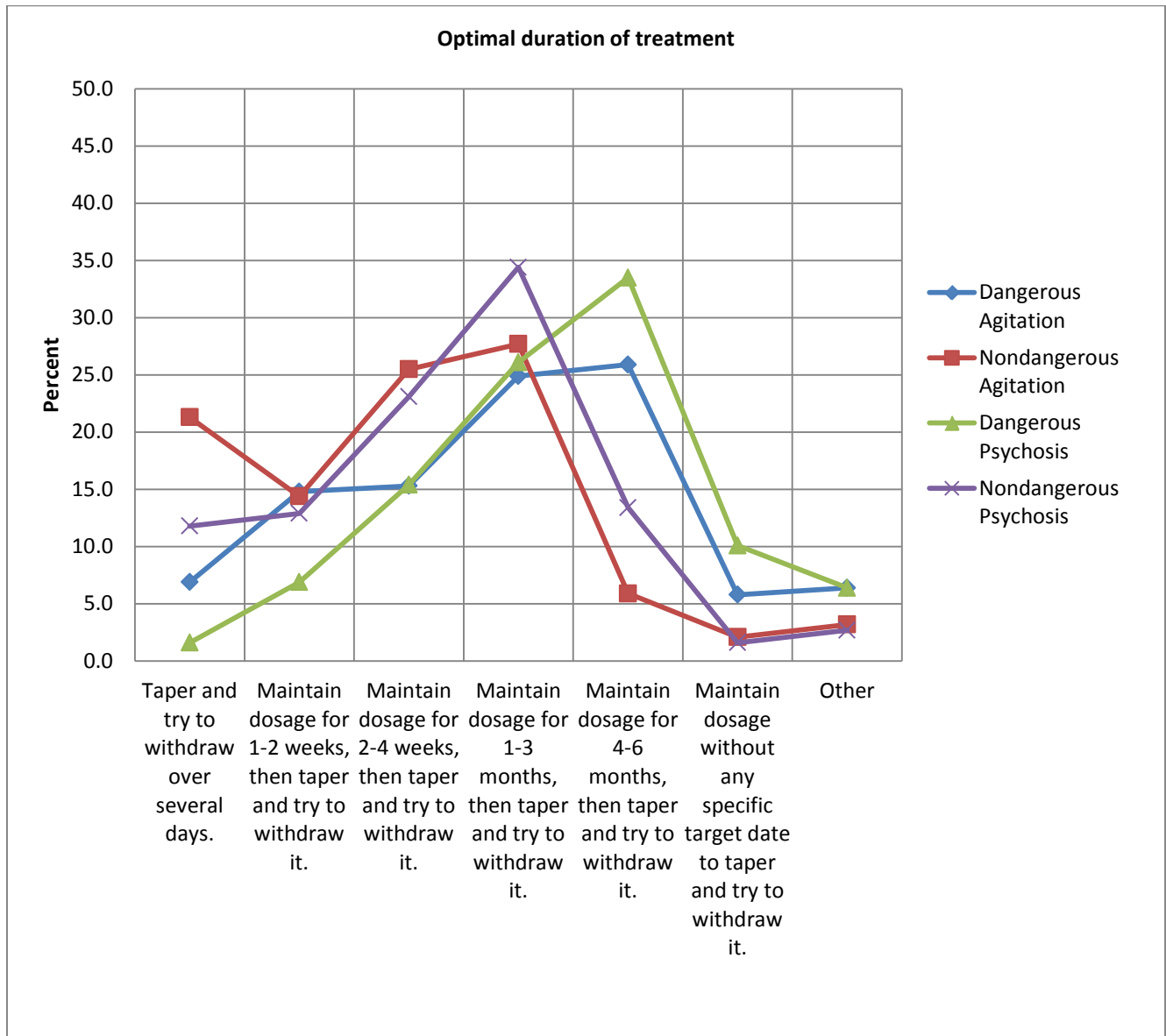


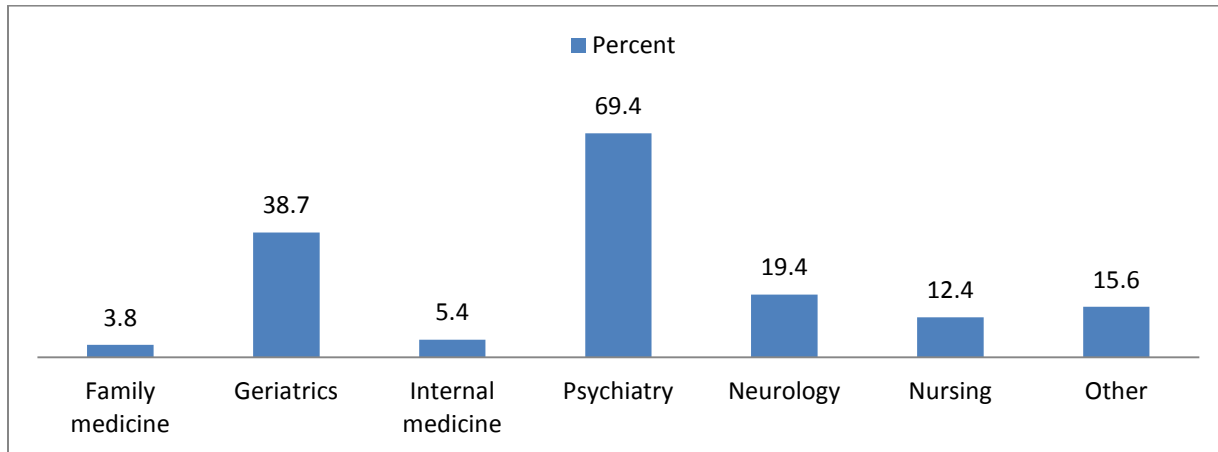
Figure 13-16



Section III. Clinical Experience Using Antipsychotics in Patients with Dementia

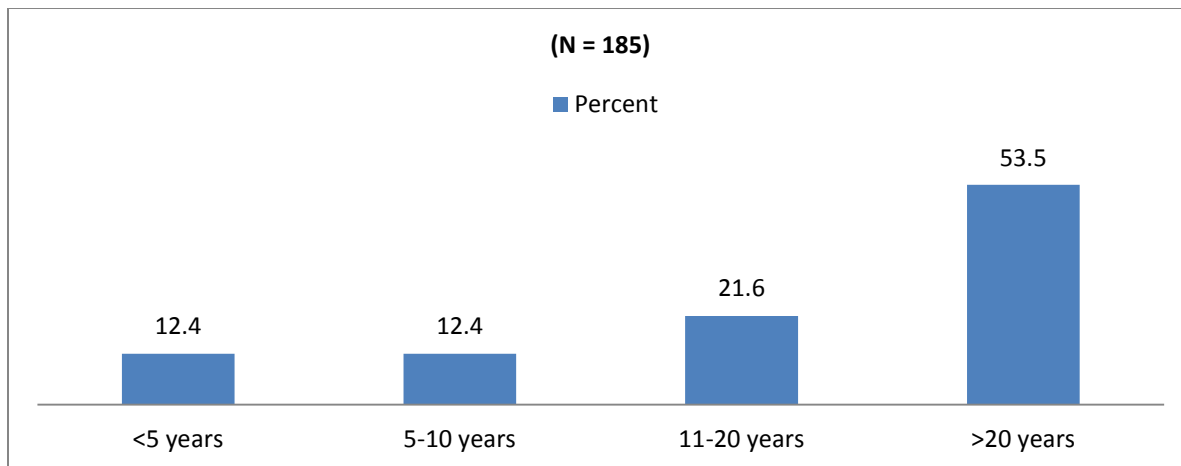
17. Please check any of the following disciplines that describe your own professional training, background, and focus of practice or research:

Figure 17. (Checked any applied)



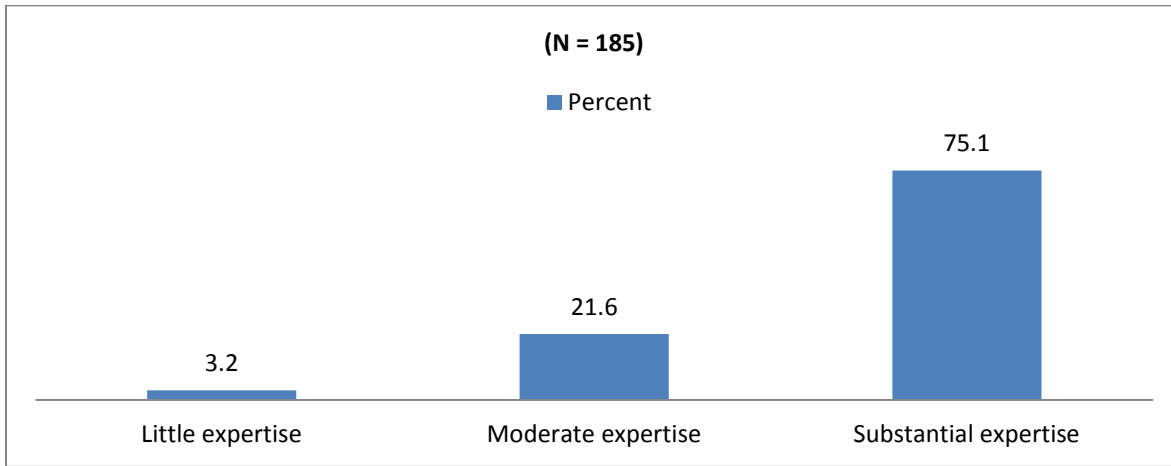
18. Not including training, how many years have you been in practice?

Figure 18.



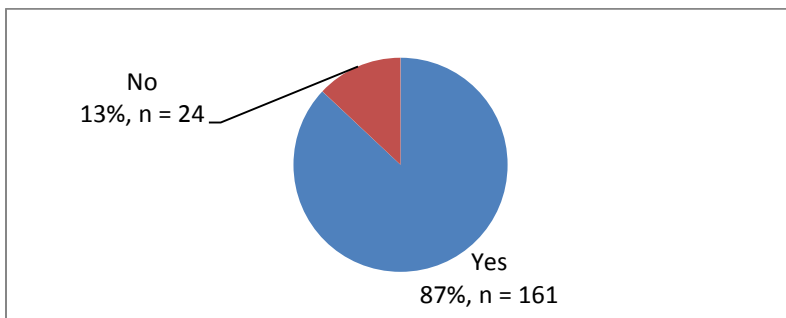
19. Please indicate your degree of expertise in the treatment of patients with dementia, including pharmacological treatment of behavioral symptoms.

Figure 19.



20. Do you currently treat patients with dementia?

Figure 20.



21. To what extent have the following potential adverse effects of antipsychotics decreased your use of them to treat agitation or psychosis in your patients with dementia WITHIN THE PAST YEAR?

(1 = not at all, 3 = somewhat, 5 = very much)

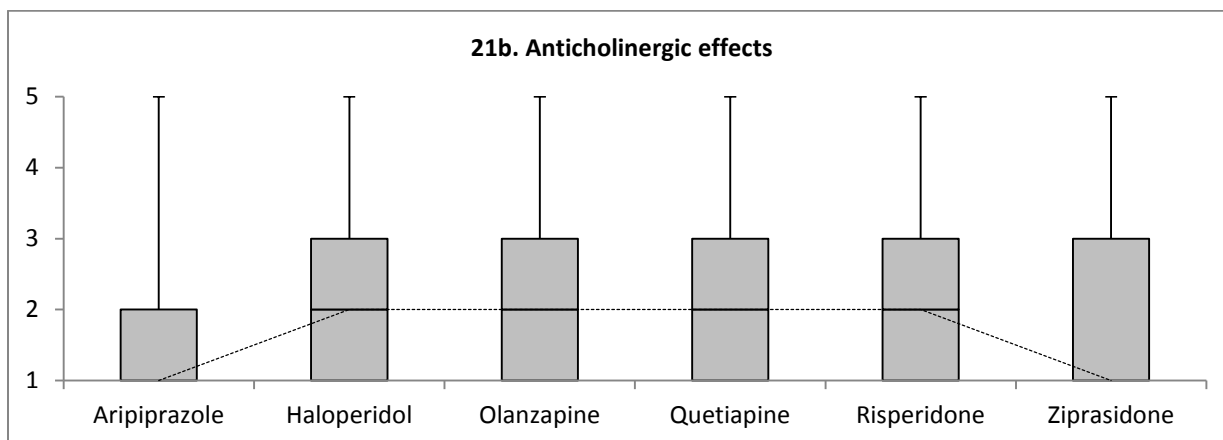
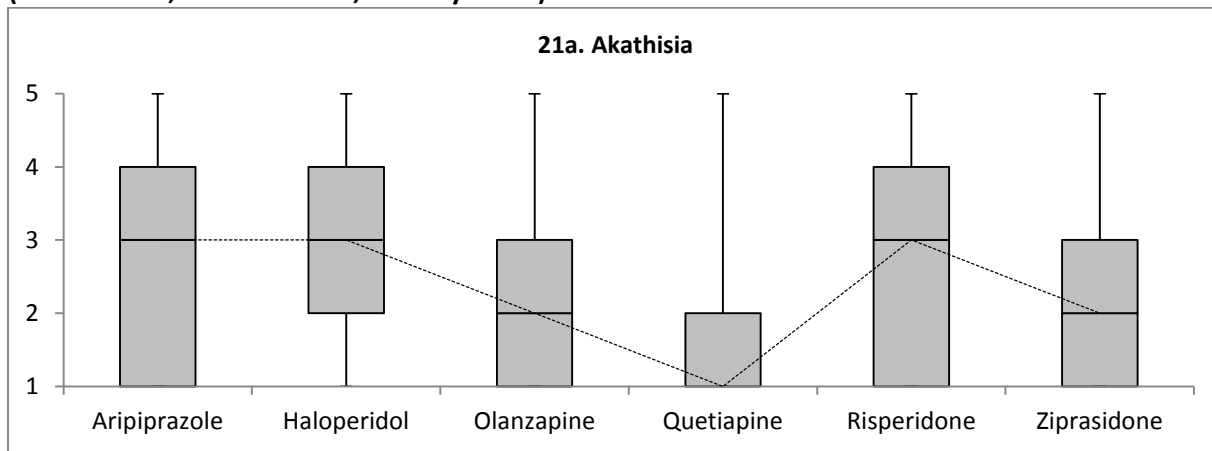
21a. AKATHISIA												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=146)		(N=147)		(N=142)		(N=145)		(N=145)		(N=142)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	46	31.5	31	21.1	50	35.2	77	53.1	38	26.2	56	39.4
2	21	14.4	16	10.9	38	26.8	34	23.5	29	20.0	24	16.9
3 (somewhat)	33	22.6	33	22.5	37	26.1	22	15.2	38	26.2	43	30.3
4	34	23.3	39	26.5	11	7.8	10	6.9	30	20.7	12	8.5
5 (very much)	12	8.2	28	19.1	6	4.2	2	1.4	10	6.9	7	4.9
Median	3		3		2		1		3		2	
Mean	2.6		3.1		2.2		1.8		2.6		2.2	
StdDev	1.4		1.4		1.1		1		1.3		1.2	
21b. ANTICHOLINERGIC EFFECTS												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=145)		(N=146)		(N=143)		(N=147)		(N=145)		(N=143)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	94	64.8	72	49.3	41	28.7	60	40.8	66	45.5	82	57.3
2	24	16.6	24	16.4	31	21.7	33	22.5	37	25.5	22	15.4
3 (somewhat)	16	11.0	24	16.4	39	27.3	31	21.1	23	15.9	29	20.3
4	9	6.2	14	9.6	24	16.8	16	10.9	13	9.0	8	5.6
5 (very much)	2	1.4	12	8.2	8	5.6	7	4.8	6	4.1	2	1.4
Median	1		2		2		2		2		1	
Mean	1.6		2.1		2.5		2.2		2.0		1.8	
StdDev	1		1.3		1.2		1.2		1.2		1	
21c. CARDIAC EFFECTS												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=141)		(N=144)		(N=143)		(N=143)		(N=142)		(N=143)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	81	57.5	56	38.9	55	38.5	58	40.6	55	38.7	43	30.1
2	16	11.4	27	18.8	24	16.8	27	18.9	27	19.0	13	9.1
3 (somewhat)	21	14.9	25	17.4	34	23.8	31	21.7	29	20.4	34	23.8
4	15	10.6	21	14.6	21	14.7	19	13.3	21	14.8	25	17.5
5 (very much)	8	5.7	15	10.4	9	6.3	8	5.6	10	7.0	28	19.6
Median	1		2		2		2		2		3	
Mean	2.0		2.4		2.3		2.2		2.3		2.9	
StdDev	1.3		1.4		1.3		1.3		1.3		1.5	

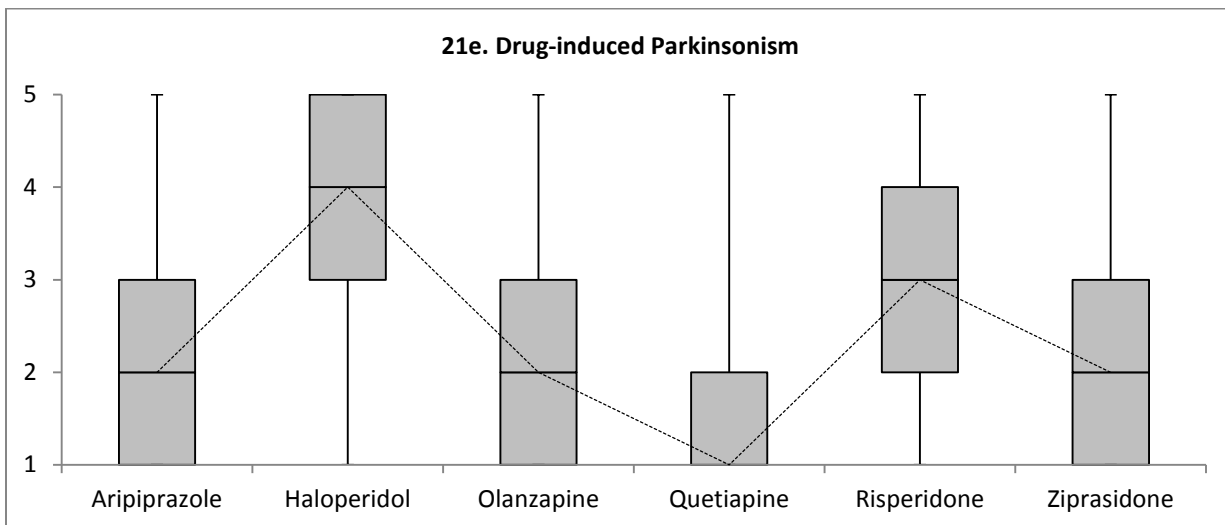
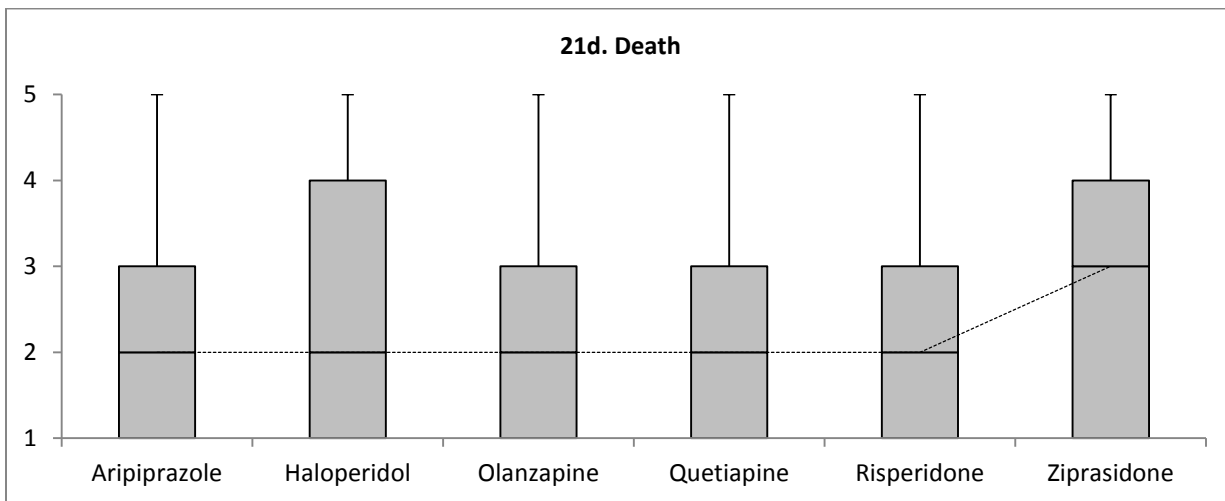
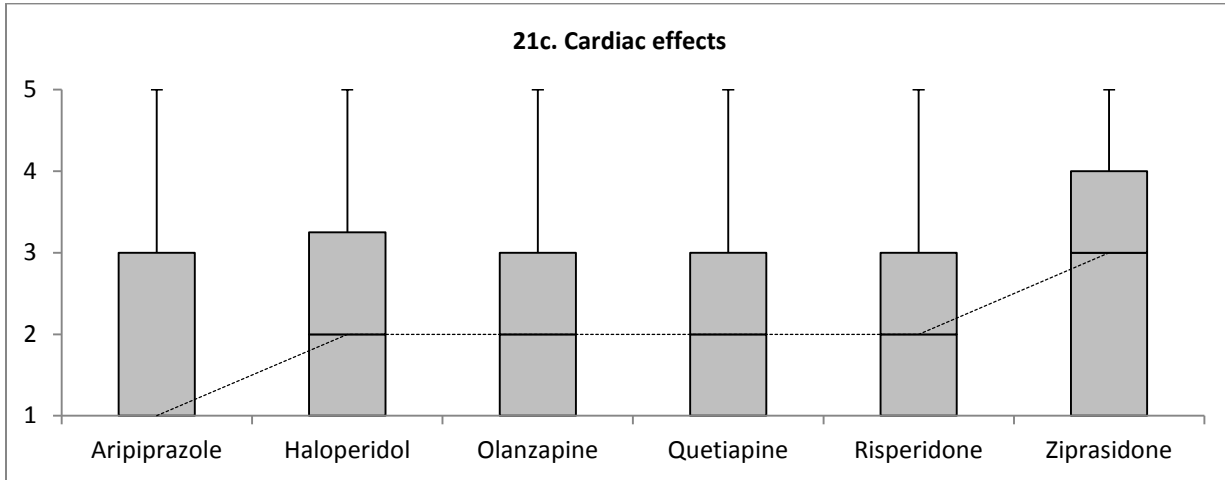
21d. DEATH												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=148)		(N=149)		(N=148)		(N=148)		(N=145)		(N=145)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	73	49.3	62	41.6	59	39.9	63	42.6	59	40.7	58	40.0
2	13	8.8	17	11.4	17	11.5	18	12.2	18	12.4	13	9.0
3 (somewhat)	31	21.0	25	16.8	36	24.3	36	24.3	32	22.1	37	25.5
4	17	11.5	24	16.1	17	11.5	17	11.5	20	13.8	19	13.1
5 (very much)	14	9.5	21	14.1	19	12.8	14	9.5	16	11.0	18	12.4
Median	2		2		2		2		2		3	
Mean	2.2		2.5		2.5		2.3		2.4		2.5	
StdDev	1.4		1.5		1.4		1.4		1.4		1.4	
21e. DRUG-INDUCED PARKINSONISM												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=145)		(N=148)		(N=143)		(N=146)		(N=147)		(N=141)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	65	44.8	20	13.5	46	32.2	79	54.1	23	15.7	61	43.3
2	23	15.9	12	8.1	30	21.0	35	24.0	18	12.2	30	21.3
3 (somewhat)	35	24.1	33	22.3	44	30.8	23	15.8	53	36.1	32	22.7
4	15	10.3	34	23.0	16	11.2	6	4.1	34	23.1	11	7.8
5 (very much)	7	4.8	49	33.1	7	4.9	3	2.1	19	12.9	7	5.0
Median	2		4		2		1		3		2	
Mean	2.1		3.5		2.4		1.8		3.1		2.1	
StdDev	1.2		1.4		1.2		1		1.2		1.2	
21f. METABOLIC EFFECTS, EXCLUDING WEIGHT GAIN												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=143)		(N=145)		(N=149)		(N=147)		(N=146)		(N=143)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	75	52.5	79	54.5	28	18.8	43	29.3	45	30.8	74	51.8
2	31	21.7	31	21.4	18	12.1	26	17.7	37	25.3	30	21.0
3 (somewhat)	22	15.4	20	13.8	32	21.5	38	25.9	39	26.7	29	20.3
4	12	8.4	10	6.9	35	23.5	28	19.1	22	15.1	7	4.9
5 (very much)	3	2.1	5	3.5	36	24.2	12	8.2	3	2.1	3	2.1
Median	1		1		3		3		2		1	
Mean	1.9		1.8		3.2		2.6		2.3		1.8	
StdDev	1.1		1.1		1.4		1.3		1.1		1	
21g. NEUROLEPIC MALIGNANT SYNDROME												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=148)		(N=149)		(N=144)		(N=146)		(N=146)		(N=142)	
	No	%	No	%	No	%	No	%	No	%	No	%

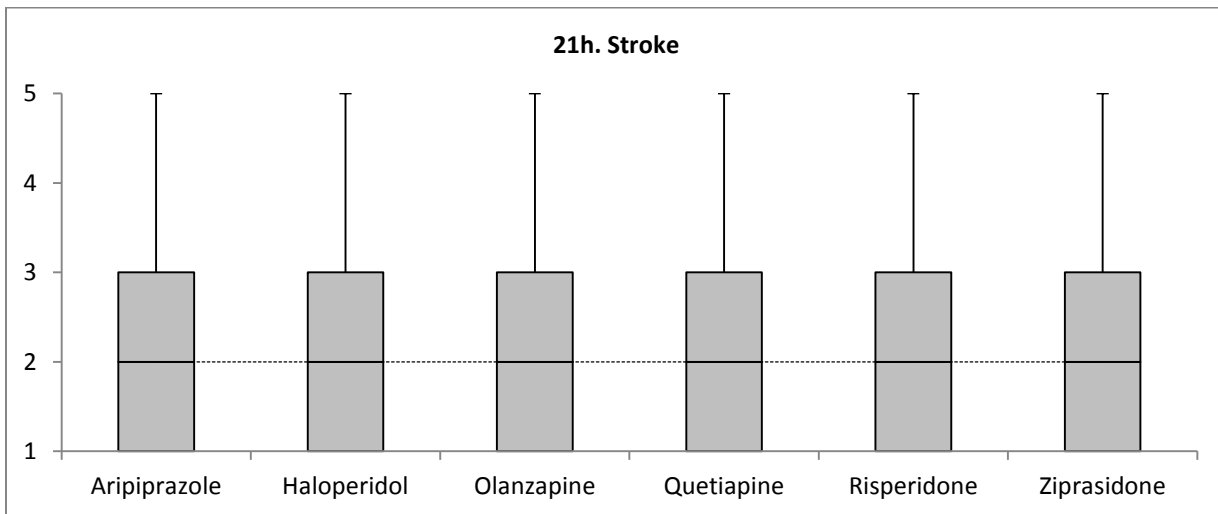
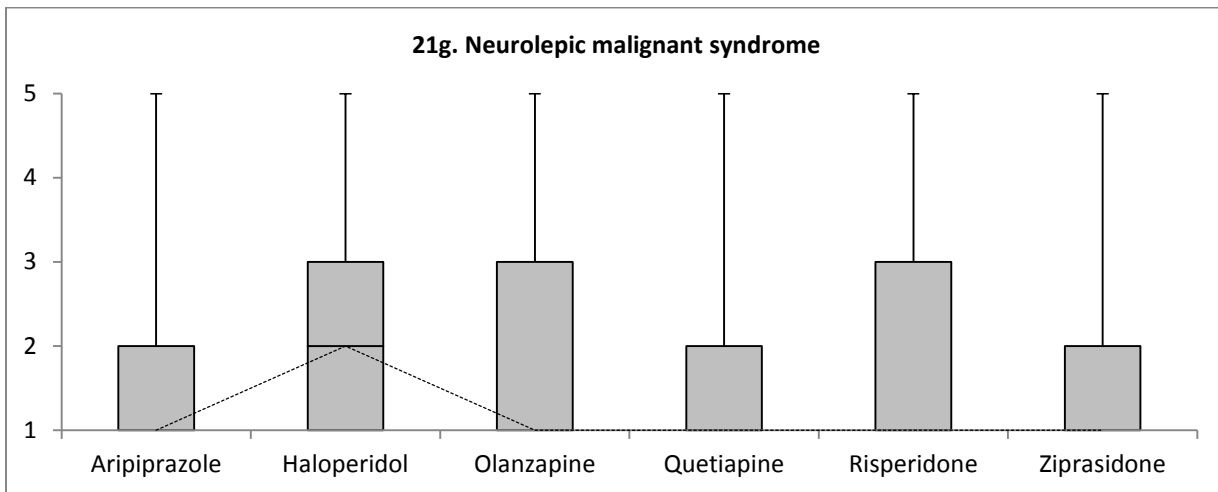
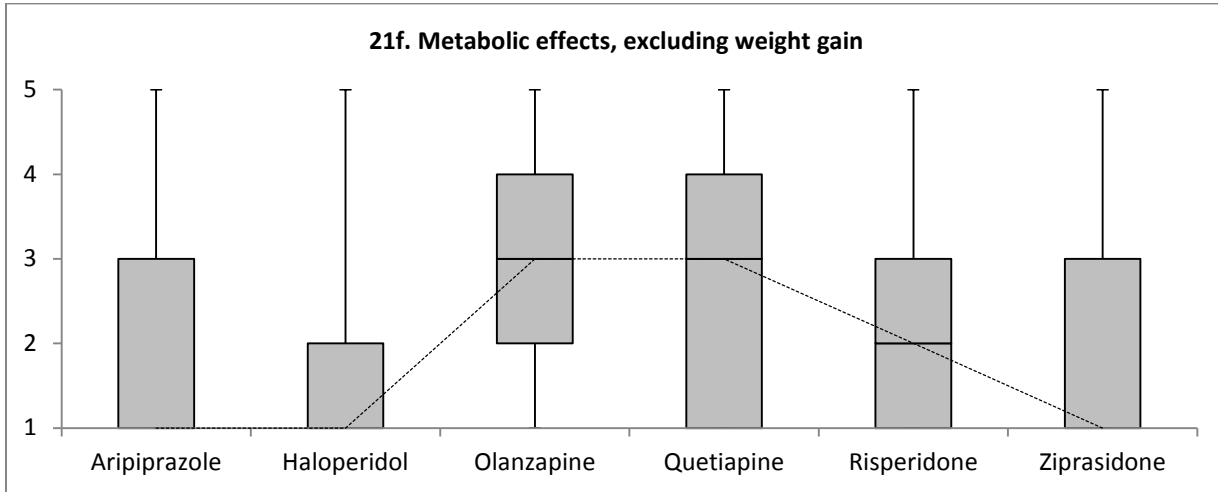
1 (not at all)	93	62.8	72	48.3	86	59.7	95	65.1	82	56.2	87	61.3
2	20	13.5	19	12.8	20	13.9	20	13.7	24	16.4	22	15.5
3 (somewhat)	18	12.2	22	14.8	24	16.7	23	15.8	21	14.4	24	16.9
4	14	9.5	25	16.8	9	6.3	7	4.8	15	10.3	7	4.9
5 (very much)	3	2.0	11	7.4	5	3.5	1	0.7	4	2.7	2	1.4
Median	1		2		1		1		1		1	
Mean	1.7		2.2		1.8		1.6		1.9		1.7	
StdDev	1.1		1.4		1.1		1		1.2		1	
21h. STROKE												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=148)		(N=150)		(N=148)		(N=148)		(N=148)		(N=145)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	71	48.0	62	41.3	55	37.2	61	41.2	55	37.2	62	42.8
2	22	14.9	21	14.0	21	14.2	26	17.6	29	19.6	23	15.9
3 (somewhat)	30	20.3	32	21.3	36	24.3	34	23.0	33	22.3	33	22.8
4	17	11.5	21	14.0	26	17.6	21	14.2	23	15.5	18	12.4
5 (very much)	8	5.4	14	9.3	10	6.8	6	4.1	8	5.4	9	6.2
Median	2		2		2		2		2		2	
Mean	2.1		2.4		2.4		2.2		2.3		2.2	
StdDev	1.3		1.4		1.3		1.2		1.3		1.3	
21i. WEIGHT GAIN												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=145)		(N=147)		(N=147)		(N=149)		(N=146)		(N=143)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	86	59.3	92	62.6	32	21.8	48	32.2	51	34.9	90	62.9
2	24	16.6	22	15.0	11	7.5	21	14.1	37	25.3	18	12.6
3 (somewhat)	23	15.9	20	13.6	33	22.5	39	26.2	36	24.7	27	18.9
4	10	6.9	10	6.8	33	22.5	32	21.5	19	13.0	5	3.5
5 (very much)	2	1.4	3	2.0	38	25.9	9	6.0	3	2.1	3	2.1
Median	1		1		3		3		2		1	
Mean	1.7		1.7		3.2		2.6		2.2		1.7	
StdDev	1		1.1		1.5		1.3		1.1		1	

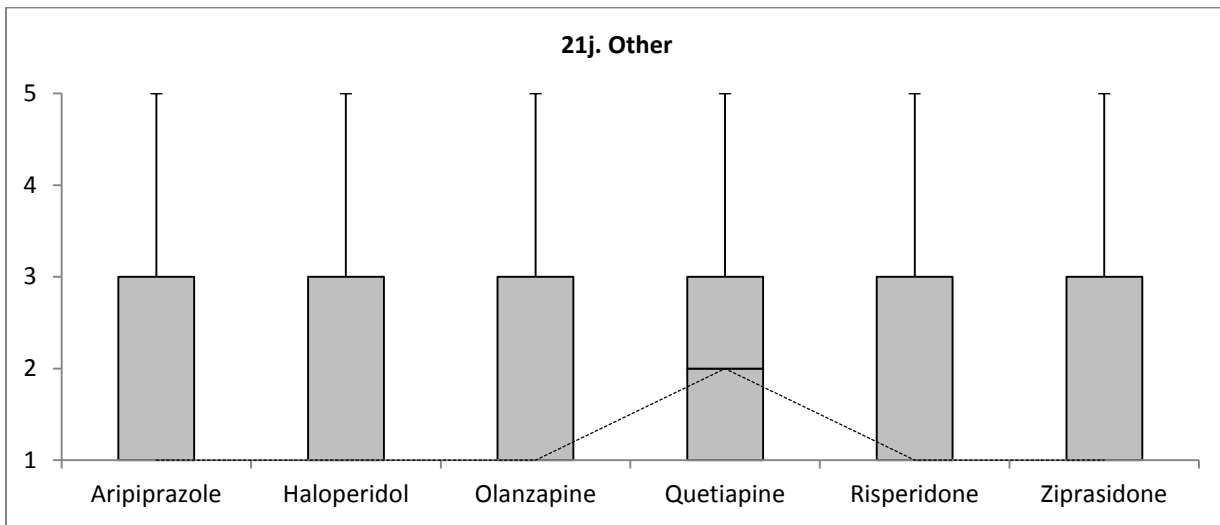
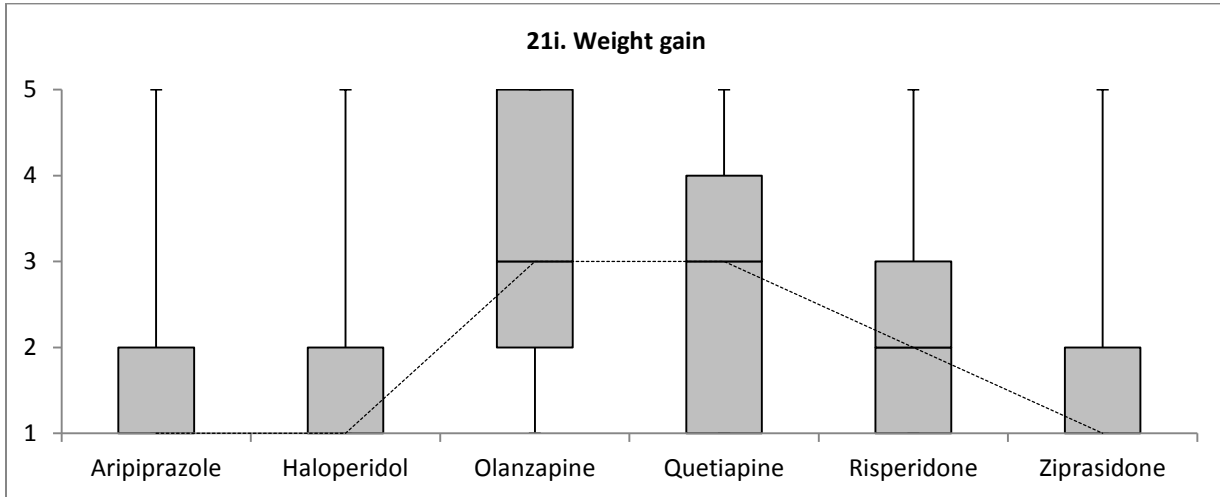
21j. OTHER												
	Aripiprazole		Haloperidol		Olanzapine		Quetiapine		Risperidone		Ziprasidone	
Extent of Decreased Use	(N=66)		(N=65)		(N=62)		(N=63)		(N=63)		(N=60)	
	No	%	No	%	No	%	No	%	No	%	No	%
1 (not at all)	42	64.6	43	65.2	35	56.5	31	49.2	37	58.7	37	61.7
2	4	6.2	4	6.1	5	8.1	2	3.2	9	14.3	7	11.7
3 (somewhat)	11	16.9	6	9.1	10	16.1	15	23.8	9	14.3	7	11.7
4	4	6.2	4	6.1	4	6.5	6	9.5	4	6.4	3	5.0
5 (very much)	4	6.2	9	13.6	8	12.9	9	14.3	4	6.4	6	10.0
Median	1		1		1		2		1		1	
Mean	1.8		2.0		2.1		2.4		1.9		1.9	
StdDev	1.3		1.5		1.5		1.5		1.2		1.4	

Figure 21. Extent of decreased use of antipsychotics due to the potential adverse effects in the treatment of agitation or psychosis in patients with dementia within the past year (1 = not at all, 3 = somewhat, 5 = very much)



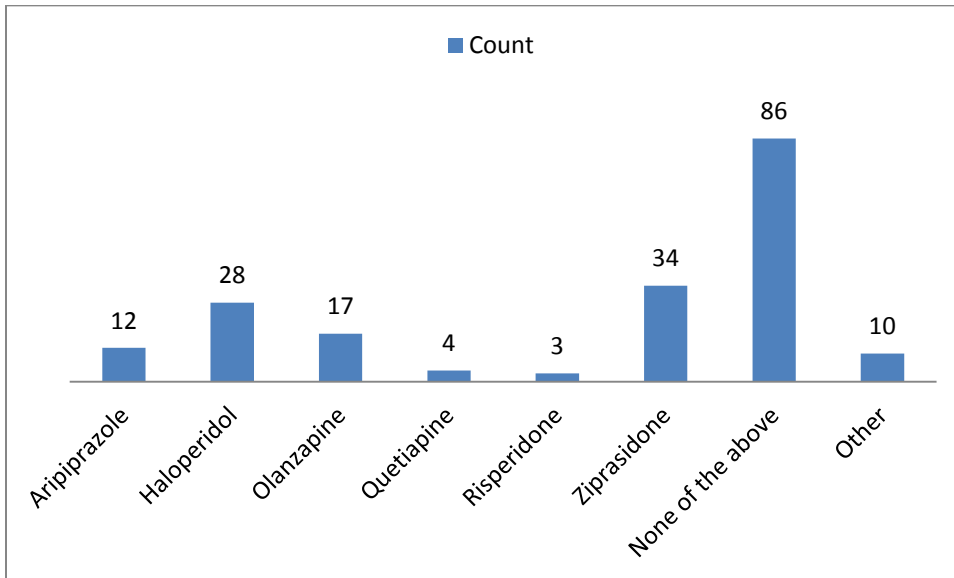






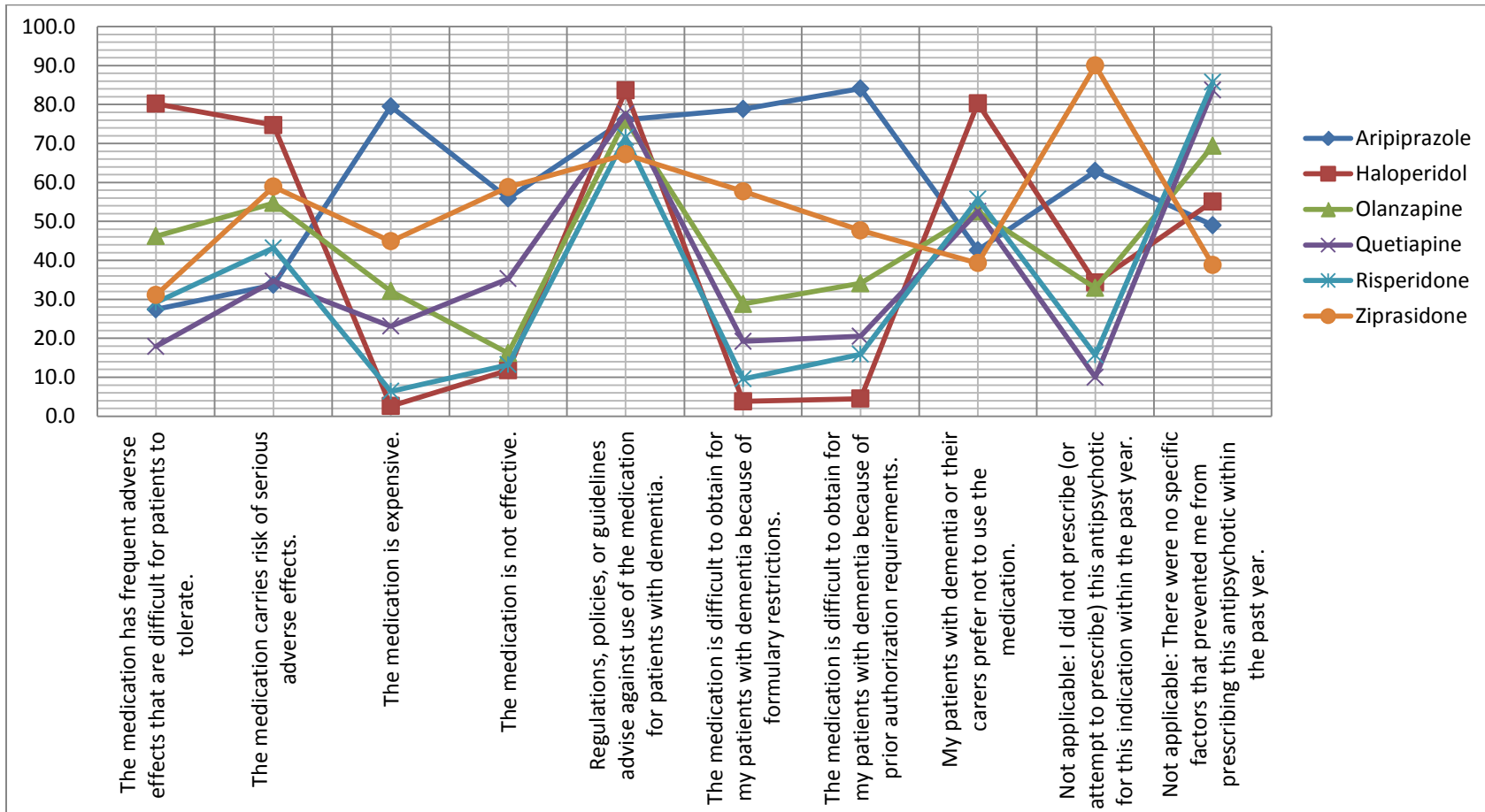
22. Which of the following antipsychotics would you refuse to prescribe to a patient with dementia because of the potential adverse effects? (Check more than one if needed.)

Figure 22. (Checked more than one if needed)



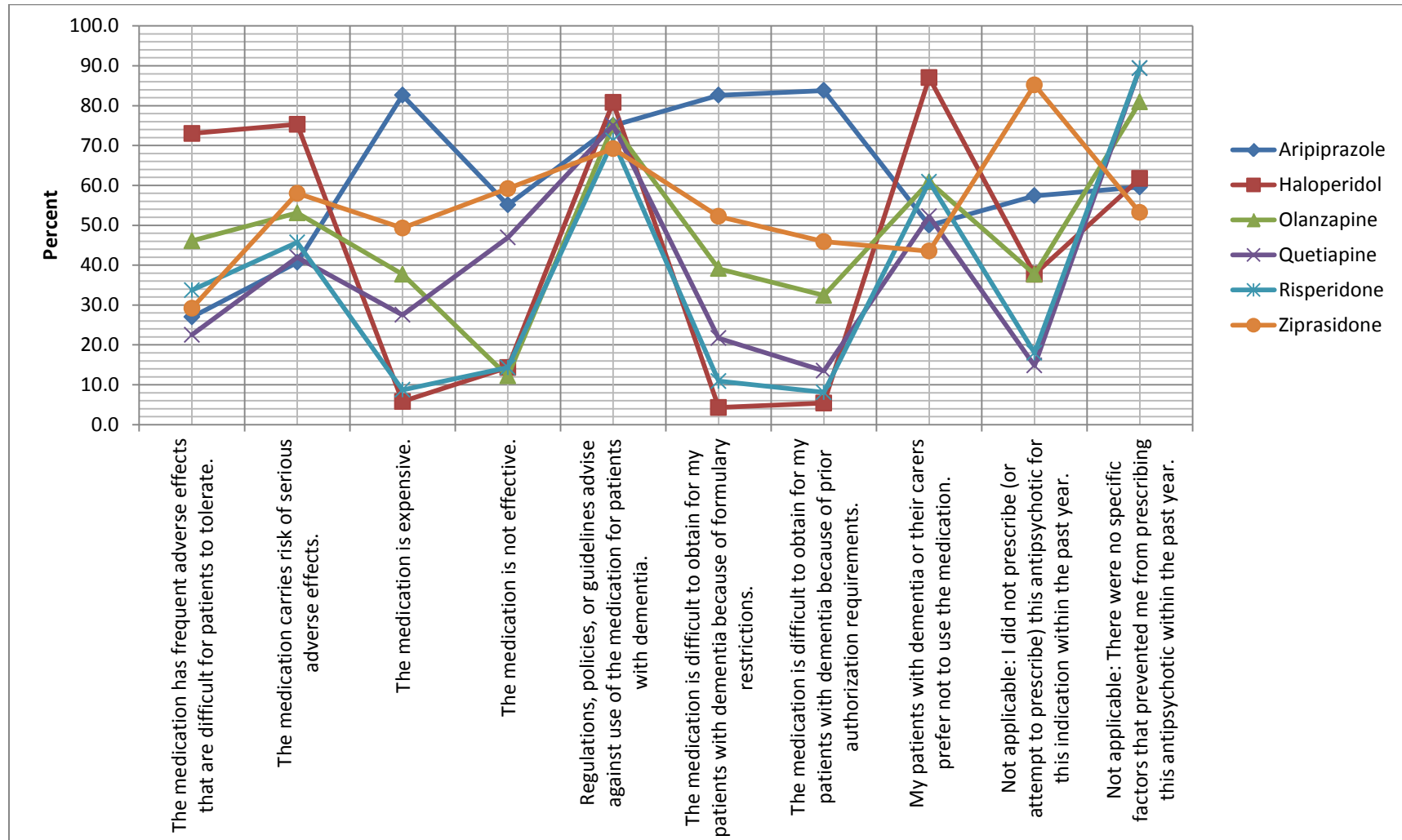
23. Which of the following prevented you in your own clinical practice from using antipsychotics to treat AGITATION in your patients with dementia WITHIN THE PAST YEAR? (You may select more than one antipsychotic in each row.)

Figure 23.



24. Which of the following prevented you in your own clinical practice from using antipsychotics to treat PSYCHOSIS in your patients with dementia WITHIN THE PAST YEAR? (You may select more than one antipsychotic in each row.)

Figure 24.



Assembly

October 30-November 1, 2015
Washington, D.C.

DRAFT SUMMARY OF ACTIONS

Agenda Item #	Action	Comments/Recommendations	Governance Referral/Follow-up
2015 A2 4.B.1	Retain 2012 Position Statement: <i>Recognition and Management of Substance Use Disorders and other Mental Illnesses Comorbid with HIV</i>	The Assembly voted, on its Consent Calendar, to retain the 2012 Position Statement: <i>Recognition and Management of Substance Use Disorders and other Mental Illnesses Comorbid with HIV</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016 Membership & ECP-RFT Trustee
2015 A2 4.B.2	Retain 2008 Position Statement: <i>Ensuring Access to, and Appropriate Utilization of, Psychiatric Services for the Elderly</i>	The Assembly voted, on its Consent Calendar, to retain the 2008 Position Statement: <i>Ensuring Access to, and Appropriate Utilization of, Psychiatric Services for the Elderly</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015 A2 4.B.3	Proposed Position Statement: <i>Segregation of Juveniles with Serious Mental Illness in Correctional Facilities</i>	The Proposed Position Statement: <i>Segregation of Juveniles with Serious Mental Illness in Correctional Facilities</i> was withdrawn by the Council on Psychiatry and Law as the draft position statement is still being finalized.	FYI- Joint Reference Committee, January 2016
2015 A2 4.B.4	Proposed Position Statement: <i>Opioid Overdose Education and Naloxone Distribution- Joint Position Statement of the APA/AAAP</i>	The Assembly voted to approve the Proposed Position Statement: <i>Opioid Overdose Education and Naloxone Distribution- Joint Position Statement of the APA/AAAP</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015 A2 4.B.5	Reaffirm APA's Adoption of the AMA's 2010 Position Statement: <i>Direct to Consumer (DTC) Advertising of Prescription Drugs and Implantable Devices</i>	The Assembly voted to refer the Position Statement to the Joint Reference Committee to assign to the relevant bodies to draft a more meaningful position statement on DTC Advertising. The draft position statement will be presented to the Assembly in November, 2016.	Joint Reference Committee, January 2016
2015 A2 4.B.6	Proposed Position Statement: <i>Substance Use Disorders in Older Adults</i>	The Assembly voted, on its Consent Calendar, to approve the Proposed Position Statement: <i>Substance Use Disorders in Older Adults</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015 A2 4.B.7	Revised Position Statement: <i>Bias-Related Incidents</i>	The Assembly voted, on its Consent Calendar, to approve the revised Position Statement: <i>Bias-Related Incidents</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015 A2 4.B.8	Retire 2007 Position Statement: <i>The Right to Privacy</i>	The Assembly voted, on its Consent Calendar, to retire the 2007 Position Statement: <i>The Right to Privacy</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015 A2 4.B.9	Retire 2007 Position Statement: <i>Sexual Harassment</i>	The Assembly voted to retain the 2007 Position Statement: <i>Sexual Harassment</i>	Joint Reference Committee, January 2016
2015A2 4.B.10	Retire 2009 Position Statement: <i>Interference with Scientific Research and Medical Care</i>	The Assembly voted, on its Consent Calendar, to retire the 2009 Position Statement: <i>Interference with Scientific Research and Medical Care</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016

Agenda Item #	Action	Comments/Recommendations	Governance Referral/Follow-up
2015A2 4.B.11	Revised Position Statement: <i>Hypnosis</i>	The Assembly voted, on its Consent Calendar, to approve the revised Position Statement: <i>Hypnosis</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015A2 4.B.12	Retain 2010 Position Statement on <i>Posttraumatic Stress Disorder and Traumatic Brain Injury</i>	The Assembly voted, on its Consent Calendar, to retain the 2010 Position Statement: <i>Posttraumatic Stress Disorder and Traumatic Brain Injury</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015A2 4.B.13	Retain 2010 Position Statement on <i>High Volume Psychiatric Practice and Quality of Patient Care</i>	The Assembly voted, on its Consent Calendar, to retain the 2010 Position Statement: <i>High Volume Psychiatric Practice and Quality of Patient Care</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015A2 4.B.14	Proposed Position Statement on <i>Tobacco Use Disorder</i>	The Assembly voted, on its Consent Calendar, to approve the Proposed Position Statement: <i>Tobacco Use Disorder</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015A2 4.B.15	Retain Position Statement: <i>Psychotherapy as an Essential Skill of Psychiatrists</i>	The Assembly voted, on its Consent Calendar, to retain the Position Statement: <i>Psychotherapy as an Essential Skill of Psychiatrists</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015A2 4.B.16	Proposed Position Statement on <i>Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment</i>	The Assembly voted to approve the Proposed Position Statement on <i>Involuntary Outpatient Commitment and Related Programs of Assisted Outpatient Treatment</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016
2015 A2 5.A	Will the Assembly vote to approve the minutes of the May 15-17, 2015, meeting?	The Assembly voted to approve the Minutes & Summary of Actions from the May 15-17, 2015 Assembly meeting.	Chief Operating Officer <ul style="list-style-type: none"> Association Governance
2015 A2 6.B	Will the Assembly vote to approve the Consent Calendar?	Items 2015A2, 4.B.3, 4.B.5, 4.B.9 and 12.S were removed from the consent calendar. The Assembly approved the consent calendar as amended.	Chief Operating Officer <ul style="list-style-type: none"> Association Governance
2015 A2 6.C	Will the Assembly vote to approve the Special Rules of the Assembly?	The Assembly voted to approve the Special Rules of the Assembly.	Chief Operating Officer <ul style="list-style-type: none"> Association Governance
2015 A2 7.A	The Assembly voted to accept the report of the Nominating Committee.	The Assembly voted to accept the report of the Nominating Committee. The slate of candidates for the May 2016 Assembly election is as follows: Speaker-Elect: John de Figueiredo, M.D., Area 1 Theresa Miskimen, M.D., Area 3 Recorder: James R. (Bob) Batterson, M.D., Area 4 David Scasta, M.D., Area 3	Chief Operating Officer <ul style="list-style-type: none"> Association Governance

Agenda Item #	Action	Comments/Recommendations	Governance Referral/Follow-up
2015 A2 7.B.1	Will the Assembly vote to approve the recommended AEC-approved amendment to the <u>Procedural Code</u> incorporating the Assembly Committee on DSM composition/function based on the approved Action Paper 12 .M "Assembly DSM Component"?	The Assembly voted to approve the recommended AEC-approved amendment to the <u>Procedural Code</u> incorporating the Assembly Committee on DSM composition/function based on the approved Action Paper 12 .M "Assembly DSM Component".	Chief Operating Officer <ul style="list-style-type: none"> • Association Governance
2015A2 8.L.1	APA Practice Guideline: <i>Use of Antipsychotics to Treat Agitation or Psychosis in Patients with Dementia</i>	The Assembly voted unanimously to approve the APA Practice Guideline: <i>Use of Antipsychotics to Treat Agitation or Psychosis in Patients with Dementia</i> .	Board of Trustees, December, 2015 FYI: Chief of Policy, Programs & Partnerships <ul style="list-style-type: none"> • Quality Care
2015A2 12.A	<u>Access to Care Provided by the Department of Veterans Affairs</u>	The Assembly voted to approve action paper 2015A2 12.A which asks: That the APA support any and all clinical activities that can improve the mental health care and treatment of veterans. That the APA correspond with the Secretary of the Veterans Administration (VA), Robert MacDonald, to actively solicit his support for arranging for fairness in pay for those physician-psychiatrists with more seniority and more administrative responsibility and for those physician-psychiatrists initially entering VA service with educational loans. That the APA actively support and advocate for Congressional appropriations for the loan repayment program provision of the Clay Hunt Suicide Prevention for American Veterans Act also known as the Clay Hunt SAV Act which is intended to funds mental health care and suicide prevention programs within the VA.	Joint Reference Committee, January 2016
2015A2 12.B	<u>Directions to the Area Nominating Committees</u>	The Assembly voted to approve action paper 2015A2 12.B which asks that: Areas should have the latitude to nominate more than two candidates. The Procedures Committee should be asked to change the language accordingly.	Assembly Executive Committee, January 2016 APA Nominating Committee (for information)
2015A2 12.C	<u>New Names for Psychiatric Conditions</u>	The Assembly did not approve action paper 2015A2 12.C.	N/A
2015A2 12.D	<u>Prior Authorization</u>	The Assembly voted, on its Consent Calendar, to approve action paper 2015A2 12.D which asks that the APA explore with other major medical organization whether medical organizations should advocate that clinicians be reimbursed for phone-time spent obtaining prior authorization.	Joint Reference Committee, January 2016

Agenda Item #	Action	Comments/Recommendations	Governance Referral/Follow-up
2015A2 12.E	<u>Ad Hoc Workgroup to Explore the Feasibility of Developing an Electronic Clinical Decision Support Product</u>	<p>The Assembly voted to approve action paper 2015A2 12.E which asks:</p> <p>That the Committee on Mental Health Information Technology and the Council on Quality Care form an ad hoc Workgroup (the "CDS Product Workgroup") for the purpose of evaluating the feasibility of developing an electronic clinical decision support (CDS) product that leverages the information and knowledge within the APA's series of Practice Guidelines, in addition to that within other appropriate APA products; and</p> <p>That the CDS Product Workgroup provide to the Assembly a report at the November 2016 meeting and a report at the Board of Trustees at the December 2016 meeting.</p>	Joint Reference Committee, January 2016
2015A2 12.F	<u>Payer Coverage for Prescriptions from Nonparticipating Prescribers</u>	<p>The Assembly voted to approve action paper 2015A2 12.F which asks:</p> <p>That the APA Department of Government Affairs engage CMS to find a mechanism to continue to pay for prescriptions ordered by psychiatrists who do not participate in Medicaid; and</p> <p>That APA seek legislative sponsorship if statutes and/or regulations are required to cover prescriptions ordered by nonparticipating psychiatrists; and</p> <p>That the relevant APA component develop a Position Statement similar to that of AMA's supporting coverage by all payers of prescriptions and tests ordered by nonparticipating psychiatrists; and</p> <p>That the APA work with the AMA to collect national and state level data on the extent of the problem of insurance non-coverage of prescriptions and tests when ordered by non-participating psychiatrists.</p>	Joint Reference Committee, January 2016
2015A2 12.G	<u>APA Support for NIMH Funding of Clinical Research</u>	<p>The Assembly voted to approve action paper 2015A2 12.G which asks that the APA shall:</p> <ol style="list-style-type: none"> 1. Produce a white paper by the Assembly in May 2016 and the December 2016 Board of Trustees Meeting determining [a] the scope and breadth of change in NIMH funding of clinical trials associated with recent changes in research focus, [b] the public health consequences of the failure to provide such research support, including for patients served by the APA's 35,000 members and for psychiatric researchers who study clinical care; and [c] the need to provide adequate NIMH funding to support research into clinical treatment methods, including psychotherapy research, as part of a national mental health research budget. 2. The APA will advocate the implementation of the recommendations of the White Paper. 	Joint Reference Committee, January 2016

Agenda Item #	Action	Comments/Recommendations	Governance Referral/Follow-up
2015A2 12.H	<u>Is it Ethical for a Psychiatrist to Serve as a Utilization Management Reviewer when Review Standards Fail to Comply with Parity?</u>	The Assembly voted to refer action paper 2015A2 12.H to the Council on Healthcare Systems and Financing.	Joint Reference Committee, January 2016
2015A2 12.I	<u>Strengthening the Role of Residency Training to Improve Access to Buprenorphine</u>	The Assembly voted to approve action paper 2015A2 I which asks that the APA liaise with ACGME/Residency Review Committee (RRC) to promote Buprenorphine training during general adult psychiatric residency training.	Joint Reference Committee, January 2016
2015A2 12. J	<u>Need to Gather Information on Physician Health Program (PHP) Performance</u>	The action paper was withdrawn by the author.	N/A
2015A2 12.K	<u>Equality in Permanent Licensure Policy</u>	<p>The Assembly voted to approve action paper 2015A2 12.K which asks:</p> <p>That the APA adopts a policy supporting equality in the number of years of ACGME-accredited training required for International Medical Graduates and US medical grads for the purposes of obtaining permanent medical licensure, and consider that a letter of this support be sent to the various state medical boards.</p> <p>That the APA will work with the FSMB, ACGME/RRC and the AMA to lobby for equality in ACGME-accredited residencies for International Medical Graduates equivalent to their US medical grad counterpart colleagues for the purposes of obtaining permanent licensure.</p>	Joint Reference Committee, January 2016
2015A2 12.L	<u>Partial Hospital Training in Psychiatry Residency</u>	The Assembly voted to approve action paper 2015A2 12.L which asks that the APA recommend to the Residency Review Committee (RRC) of the ACGME to recognize and incorporate training in partial hospitalization and other intermediate levels of care in the section on Curriculum Organization and Resident Experiences as an important elective clinical experience for psychiatry residency.	Joint Reference Committee, January 2016
2015A2 12.M	<u>Addressing the Shortage of Psychiatrists</u>	The action paper was withdrawn by the author.	N/A
2015A2 12.N	<u>Advocating for Medicaid Expansion</u>	<p>The Assembly voted, on its Consent Calendar, to approve action paper 2015A2 12.N which asks:</p> <p>That the APA Council on Advocacy and Government Relations and the new State Government Affairs Infrastructure will develop a plan to advocate for the expansion of Medicaid in those states which have not yet done so and the APA will continue address work force and other access concerns in relation to expected increased demand for services stemming from Medicaid expansion.</p> <p>That a status report and recommendations be made to the Assembly at the May 2016 meeting.</p>	Joint Reference Committee, January 2016
2015A2 12.O	<u>Systems to Coordinate Psychiatric Inpatient Bed Availability</u>	The Assembly voted to approve action paper 2015A2 12.O which asks that the APA's Councils on Quality Care and Advocacy and Government Relations review existing models and programs of online registered psychiatric bed availability and present recommendations to develop and promote this approach to facilitating access to care.	Joint Reference Committee, January 2016

Agenda Item #	Action	Comments/Recommendations	Governance Referral/Follow-up
2015A2 12.P	<u>Making Access to Treatment for Erectile Disorder Available Under Medicare</u>	<p>The Assembly voted to approve action paper 2015A2 12.P which asks:</p> <p>That the APA seek to collaborate with other medical societies, including the American Urological Assoc., AMA, etc., as well as organizations devoted to advocacy for those with illness which may result in Erectile Disorder to assure access to a full range of evidence based pharmaceutical, mechanical and surgical treatment options for dealing with Erectile Disorder in a cost effective manner.</p> <p>That the Council on Advocacy and Government Relations and the Council on Healthcare Systems and Financing advocate, along with other professional societies and advocacy groups, for legislation to allow access to the full array of medications, mechanical therapies, and other treatments for Erectile Disorder which are currently excluded from coverage under Medicare.</p>	Joint Reference Committee, January 2016
2015A2 12.Q	<u>Lowering the Initial Membership Requirements for Newly Applying Established Subspecialties and Sections Organizations</u>	The paper was not moved by the author.	N/A
2015A2 12.R	<u>Senior Psychiatrist Seat on the Board of Trustees (BOT)</u>	The Assembly voted to refer action paper 2015A2 12.R to the Joint Reference Committee.	Joint Reference Committee, January 2016
2015A2 12.S	<u>Need for Position-Specific Email Addresses for Leadership Roles in the APA</u>	The action paper was withdrawn by the author.	N/A
2015A2 12.T	<u>Election of Assembly Officers</u>	The Assembly voted to approve action paper 2015A2 12.T which asks that the Assembly Procedural Code be rewritten to make the election of Assembly officers based on a majority vote with each voting member of the Assembly casting one vote.	Assembly Executive Committee, January 2016
2015A2 14.A	Revised Position Statement on <i>Telemedicine in Psychiatry</i>	The Assembly voted to approve the Revised Position Statement on <i>Telemedicine in Psychiatry</i> .	Board of Trustees, December, 2015 FYI- Joint Reference Committee, January 2016

REPORT OF THE AMERICAN PSYCHIATRIC ASSOCIATION FOUNDATION

SUBMITTED BY *Paul T. Burke, MA*

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EXECUTIVE SUMMARY

A. AMERICAN PSYCHIATRIC ASSOCIATION (APA) FOUNDATION DEVELOPMENT UPDATE

With the hiring of a new Chief of Philanthropy, Kimberly O'Donnell, strategic planning for Foundation funding is in full swing. The Foundation's long-term growth plan is fourfold:

1. We will cultivate and steward APA membership through an aggressive engagement plan which includes personal networking and integrated marketing tactics.
2. A strategy will be developed to target and upgrade corporate and foundation grants by diversifying our base beyond current funders
3. We are exploring joint funding opportunities with key partners (e.g., nonprofit, governmental, etc.).
4. Finally, we will build our brand among the general public, particularly those who are connected to or benefit from our public education programs, so they also have an opportunity to give.

During the Board of Trustees (BOT) meeting, we will share a roadmap for growth in 2016 that expands on the above and leverages five key areas:

- Corporate giving
- Government and private foundation grants
- Membership giving
- High visibility events
- Board recruitment and development activities (e.g., give and get policy, etc.)

In tandem with these strategic plans, our development team remains focused on increasing contributions to the Annual Fund. As we have previously reported, our efforts are promising: with our busiest fundraising months ahead of us. Through early November, we have raised \$90,000 for our Annual Fund before our big end-of-year push. The \$90,000 breaks down to (rounded):

- \$37,500 from individuals and APA general members, or their practices
- \$33,500 from APAFoundation Board of Directors
- \$16,250 from other APA leadership (Assembly, Area Councils, September Components, other in person meetings) and private foundations
- \$2,750 from APA Board of Trustees

We typically raise more than \$20,000 with our end-of-year fundraising appeal, and we expect stronger results this year as we have expanded our mailing audience and engagement tactics.

To date, we have reached 70% of APA Board giving. As a member of the APA BOT, if you have not yet made a gift in 2015, we encourage you to do so by mailing a check, donating online or at the next Board meeting, or calling a staff member so we can reach 100% giving. Often, funders will ask what percentage of the Board is donating to the organization, and they will use that percentage as an indicator of whether they, too, will provide support. Your contribution not only helps the Foundation, but it also directly influences our ability to secure major donations. If you would like to make a tax-deductible contribution prior to December 31st, please visit www.apafdn.org/donate. If you have any questions about your giving history, please don't hesitate to ask.

Corporate Advisory Council (CAC) Memberships and Meetings

The APA Foundation negotiates sponsorships throughout the year with large pharmaceutical companies, other foundations, and corporate leaders. Each year at the Annual Meeting and IPS, the APA Foundation meets with members of each company to discuss our signature programs and initiatives, their mutual interests and desire to meet with APA leadership, and how we can further develop our working relationship. This year at IPS: The Mental Health Services Conference, Paul Burke and Lindsey Fox met with Otsuka and Teva pharmaceutical companies. Otsuka shared their morethanmydiagnosis.com website geared towards families who have loved ones with mental illness, providing a space where caregivers can learn about holistic ideals when it comes to living with mental illness.

The next CAC meeting will take place on December 8th. Over 20 corporate representatives have already registered and will participate in the meeting. The Partnership Advisory Council and the CAC will join together the night before the CAC meeting for a joint dinner to better introduce the CAC to the workings of the Partnership program. The process for membership renewal is still underway, and we have received \$15,000 to date in membership renewals. These solicitations were mailed on October 29th.

B. APA FOUNDATION PUBLIC EDUCATION PROGRAMS

***Typical or Troubled?*[®] School Mental Health Education Program**

Lindsey Fox, Director of Corporate and Community Relations

In addition to our recent grants, the APA Foundation has awarded a \$1,000 grant to the Brookfield, CT School District, the district adjacent to Sandy Hook. Teachers and school personnel will attend 90 minute trainings at the middle and high school level in mid-November. The APA Foundation and Brookfield, CT are partnered with Western Connecticut State University in this training. You can find more information from the recent press release here:

<http://patch.com/connecticut/danbury/brookfield-schools-partner-westconn-identify-troubled-behavior-students-o>

The APA Foundation received \$43,500K from Eli Lilly to fund a Technical Assistance Program targeting schools in Indianapolis, IN. We look to partner with the United Way and local foundations to further incorporate the program into the 64 schools housed in urban Marion County in the first quarter of 2016.

We are discussing the possibility of co-launching Typical or Troubled?® with the NFL Character Development program and sending out an RFP to Indianapolis Public schools--discussing the two programs and how they complement each other. We plan to ask for proposals from schools to share their ideas of how they would go about implementing the programs in a joint manner.

Partnership for Workplace Mental Health

Clare Miller, Director, Partnership for Workplace Mental Health

Since the last Board meeting, Partnership for Workplace Mental Health's programs and initiatives were presented to several employer audiences. Director Clare Miller delivered a keynote presentation on the business case for mental health and substance use disorder treatment for approximately 100 employers at the Center for Workplace Wellness in Augusta, ME. She also exhibited and moderated a session on the Right Direction worksite initiative at the National Business Coalition on Health conference in Dallas, TX. The session highlighted Right Direction and how three employer coalitions have implemented the program with their own employer members through grants awarded to them by Right Direction. A webinar featuring the Partnership and its resources was presented to the Ohio Business Leadership Network, with more than 25 corporations in attendance.

A CEO summit on mental health took place October 29, 2015, at the New York Stock Exchange. The National Alliance on Mental Illness of New York City (NAMI-NYC Metro) and Northeast Business Group on Health (NEBGH) co-hosted the event in collaboration with The Kennedy Forum, the Mayor's Fund to Advance New York City, and the APAF Partnership for Workplace Mental Health.

Twelve CEOs participated in the dialogue, including leaders from Pershing Square, Dynex Capital, Inc., EY, J. Walter Thompson Company New York, Liberty Bank, and Orix Real Estate USA. Participating thought leaders included Rep. Patrick Kennedy, New York City's First Lady Chirlane McCray, Mary Giliberti of NAMI, Dr. Herbert Pardes representing New York-Presbyterian Hospital where he is Executive Vice Chairman of the Board of Trustees, and Dr. Paul Summergrad in his role as Chairman of Psychiatry at Tufts University.

The CEO Summit was observed by 100 invited guests including dozens of human resources and benefits representatives from U.S. and global employers such as American Express, Barclays, CBS Corporation, Credit Suisse, Goldman Sachs, Johnson & Johnson, the National Football League, and Prudential. The Partnership has played an active role in this initiative, including the development of a toolkit which outlines specific strategies employers can take to realize the summit's goal of fostering workplace cultures that promote, support, and improve the mental health of employees and their families.

The next Partnership Advisory Council meeting is planned for December 8th. The meeting is scheduled to coincide with the APA Foundation's CAC meeting. The councils will come together for a dinner on the evening of December 7th with the expressed purpose of exposing the CAC to the work of the Partnership Advisory Council and the employer perspective.

The first issue of the new *Mental Health Works* monthly was published and distributed to just under 50,000 recipients, including employer health stakeholders, APA members via PsychNews Alert, and a purchased list of 5,000 names. The new monthly online publication combines our former e-updates with our quarterly *Mental Health Works* magazine into one new monthly newsletter. The highlight of our first issue was an article on new research documenting the economic impact of depression.

The Partnership actively continues its Right Direction worksite depression awareness program in collaboration with the employer coalition Employers Health. Foundation staff and our partners at Employer's Health have conducted 50 presentations to employer audiences since the launch of the initiative in May 2013. More than 1,300 companies have accessed Right Direction and are at various stages of implementation.

The primary objective of the Partnership and Employers Health is to get employers engaged in the initiative; metrics in that regard include the numbers of employers using the materials, numbers of companies reached through conferences and webinars, business and trade press media hits, etc. We are also measuring web hits, page views and return visitors to the employee/public facing website component of this initiative.

We provide employers an evaluation guide to measure the program's effect on their population. The guide was developed in consultation with Dr. Debra Lerner, an expert in workplace mental health. Data points generally include EAP, mental health and pharmacy benefit utilization. It is difficult to get access to employer data, but when possible, we are developing case studies (Kent State University, OCLC) that highlight the company's approach and their results. We will be working with the APA research department to better understand promising new data available through Kent State University. Finally, we are measuring the four employer coalitions' implementation grants by fulfillment of grant deliverables, which focus primarily on outreach and engagement to their employer members.

Employer engagement

- 1300 employers have accessed Right Direction and are at various stages in implementation
- 55+ speaking engagements at employer conferences/webinars since launch in May 2013)
- employers who participate in webinars (500+)
- press/media: coverage in Forbes, @Work, HR Magazine, Business Insurance, Employee Benefit News, etc.

Employee measurement

- Web hits (15,000+ unique visitors), page views (50,000+) and length of visits (3:21 minutes), return visits (73%)

- EAP, MH benefit utilization, productivity measurement
- Changes as a result of initiative (new vendors, vendor management)

Other:

- Employer case studies (OCLC, Kent State University)
- 7 ADDY awards
- William K. Wilson Award for Service from Employers Health

National Business Coalition on Health implementation grants

- Number of kits distributed
- How many employers commit to rolling out program
- Number of attendees to educational programs
- Engagement of providers, vendors and/or other stakeholders (who and how)

The four business coalitions that received implementation grants are wrapping up their formal grant period (i.e., Mid-America Coalition on Health Care, Northeast Business Group on Health, the St. Louis Area Business Health Coalition, and the South Carolina Business Coalition on Health); all have expressed an interest in continuing to promote and utilizing Right Direction among their employer members.

Active promotion continues on the [ICU program](#). ICU ("I See You") is an awareness campaign designed to decrease the stigma associated with mental health and foster a workplace culture that supports emotional health by teaching people how to recognize and respond to signs of distress among colleagues. Foundation staff is actively working with one large employer to implement the program to their employee population of 70,000.

Staff is also working closely with APA Communications and Public Affairs and Information Technology on revamping the www.workplacementalhealth.org website.

C. APA FOUNDATION RESEARCH

Philip Wang, MD, DrPH, Director

Medical Informatics Principles and Clinical Practice Guidelines

This study was supported by a grant from the National Library of Medicine (NLM). The work on the grant was completed in July, and a final report was submitted to NLM on November 10, 2015. A manuscript reporting the findings on psychiatrists' comfort using computers and other electronic devices in clinical practice was submitted to *Psychiatric Quarterly* and has been accepted for publication.

Psychiatry Undertaking Freedom from Smoking (PUFFS)

This work is supported by a grant from the Smoking Cessation Leadership Center (SCLC) to the Division of Education, in collaboration with the APA Workgroup on Tobacco Use Disorder (TUD). Preliminary analyses of findings from two small pilot surveys on psychiatrists' treatment approaches to tobacco cessation, conducted by APAF staff in June-August, were completed and shared with the TUD

Workgroup. A total random sample of 117 APA members with email addresses was contacted; 24 completed the pilot surveys online or in paper form (overall response rate=20.5%). Broad patterns that emerged included:

- Respondents listed “patients not being motivated to quit” and “patients having more immediate problems to address” as major barriers to their tobacco cessation efforts.
- Respondents expressed interest in obtaining training in the 5A’s: Ask, Advise, Assess, Assist, and Arrange, as a resource in preparing psychiatrists to help patients stop using tobacco.
- Additional resources identified by respondents as helpful to their tobacco treatment efforts included practice guidelines for use of nicotine replacement therapy and other pharmacotherapy and psychosocial interventions, webinars and workshops on smoking cessation approaches, and information on reimbursement.

Given the overall low response rate to the two pilot studies, there are concerns regarding the feasibility of implementing a larger scale study of tobacco treatment practices in psychiatry. The final grant report was submitted to SCLC at the end of October. In early November, the APA Assembly approved the position statement on TUD that had been developed by the Workgroup.

APA Research Colloquium for Junior Investigators

Preparations are under way for the 2016 Research Colloquium, which will be held on May 15, 2016, at the APA Annual Meeting in Atlanta, GA. Applications from psychiatric residents and early career psychiatrists are being accepted through December 15th. The National Institute on Drug Abuse has expressed interest in receiving a grant application to support the Research Colloquium starting in 2017; the application is being developed and will be submitted in December.

D. OFFICE OF HIV PSYCHIATRY

Roke Iko, Training Coordinator

The Office of HIV Psychiatry is now in the second year of a five-year contract with the Substance Abuse and Mental Health Services Administration (SAMHSA) to create educational materials that focus on HIV/AIDS and mental health. Objectives for this year include creating new and innovative training tools that will benefit physicians who treat HIV-positive patients with mental illness. The Office is currently planning a webinar series titled “HIV in the South” that will focus on the HIV epidemic in various regions of the southern United States, including rural areas and the deep South. Statistically, these areas show higher rates of HIV than other parts of the country, and it is important to focus efforts on providing psychiatrists with necessary tools to treat HIV patients in these areas. This webinar series will take advantage of cutting-edge technology provided by SAMHSA’s contractor, the Education Development Center. The Office also is planning a webinar series to focus on the interdisciplinary overlap that happens in HIV care as well as several regional training sessions for the 2016-2017 contract year.

The Office of HIV Psychiatry, in conjunction with the Education Development Center, is in the final stages of editing a video titled “Cognitive Impairment and HIV,” where APA member Dr. Marshall Forstein provides a compelling lecture on the basic objectives physicians need to know to successfully treat patients with HIV.

The Office of HIV Psychiatry has continued to develop virtual training tools that will be beneficial to physicians treating HIV-positive patients with mental illness. The Education Development Center and the Office of HIV Psychiatry has completed production on a medical update series on HIV and tobacco cessation, which includes a video on patient experience and physician consultation, an info graphic, and a written guide for options on how to engage HIV-positive patients in tobacco cessation. The Office also created a video on HIV and health disparities to highlight sociocultural factors that play into higher rates of HIV among certain populations. These materials have been disseminated to medical students for testing and are now available to the wider public through a SAMHSA-sponsored website through the end of fourth quarter 2015 at <https://hivmentalhealth.edc.org/online-courses>.

The Office of HIV Psychiatry completed its annual medical student elective at the end of September. Students completed intensive clinical rotation at six different sites around the country. Each student produced an original case study based on their experiences with patients on their clinical rotations which will be used as training materials for future medical students. The Office is also piloting virtual training tools to enhance the students' experiences while they are placed at their rotation sites and has successfully hosted one online discussion on how HIV affects different demographics in the U.S.

Finally, the Office continues to engage in policy related to HIV. With World AIDS Day approaching (December 1), the Office is currently planning events to engage the APA as well as other organizations that work with HIV in the Washington, D.C., metro area. The Office also works with the National Association of Social Workers and the American Psychological Association for new areas of collaborative work.

E. DIVISION OF DIVERSITY AND HEALTH EQUITY

Ranna Parekh, MD, MPH, Director

APA Resident Fellowship Programs

Since acquiring stewardship of all nine APA fellowship programs for residents and early career psychiatrists, the Division of Diversity and Health Equity (DDHE) has introduced a series of program enhancements and learning opportunities to afford fellowship recipients with the highest level of professional development. Key improvements include a uniform application timeline, a user-friendly online application system, and clearer communication of essential information and expectations about the fellowships. Under DDHE's guidance, the APA Office of Integrated Marketing has developed a comprehensive and targeted marketing campaign to promote the newly united APA fellowships, to increase awareness, and to grow the applicant pool. The strategy involves intensifying communications to key audiences, including residents and early career psychiatrists, resident influencers (e.g., training directors, department chairs, chief residents) and allied stakeholder groups via a variety of appropriate mediums. New branding along with a redesigned landing page on psychiatry.org is underway. The new marketing campaign will be implemented in November.

FRONT BURNER ISSUES

Item: Stepping Up Initiative

- A. Division/Department Head:** Paul Burke
- B. Division/Offices Involved:** APA Foundation, Communications
- C. Background:** The 'Stepping Up Initiative' and Summit, continues to develop and expand. To date, the Summit has received \$1,006,900 in funding. The APA Foundation, in concert with Council of State Governments and National Association of Counties, will be hosting 50 county teams of five in Washington, D.C., on April 16-18, 2016, at The Mayflower Hotel to participate in a county-level mental health training program.
- Technical Assistance Webinars concluded in October with participating county leaders, and our promotional push will begin with all involved organizations' Communications and Government Relations departments in November. We have over **149 counties** representing 36 states that have passed a resolution to adopt the 'Stepping Up Initiative'. The application process for counties to apply to attend the Washington, D.C.,-based training in April was formally announced on November 17, 2015
- D. Staff Action/Response:** Grants will be submitted for additional Summit and post-Summit activity funding.
- E. Recommendations for Major Policy Issues for Action or Discussion:** This is for information only.

Item: American Psychiatric Excellence Awards (APEX) Awards

A. Division/Department Head: Paul Burke

B. Division/Offices Involved: APA Foundation, Communications, CEO

C. Background: The American Psychiatric Excellence Awards (APEX), presented by the APA and the APA Foundation, will honor individuals who have demonstrated the utmost professionalism, achievement, and success within his or her pursuit of humane care and effective treatment for individuals with mental disorders. These awards are considered to be the highest honor for trailblazers in mental health awareness and advocacy. Awardees can hail from various backgrounds including public policy, research, media, and advocacy.

The APEX awards will be presented on April 18, 2016, in Washington, D.C. The reception and dinner will be from 6:30-9:30 p.m., and we expect 400-plus attendees representing the “who’s who” in psychiatry as well as celebrities, key media contacts, government officials, nonprofit partners, and Stepping Up Summit attendees. The Foundation is focused on raising \$400,000-plus to cover expenses for the event. We already have commitments for \$80,000 in cash contributions as well as a \$75,000 in-kind donor. Sponsorships range from \$3,000-\$50,000. Please contact Paul Burke at pburke@psych.org or 703-907-8518 if you would like to be a sponsor or would like an advance reservation for a table (\$10,000). Individual ticket prices will be announced after December 1st.

The host committee is working on the award details, including celebrity involvement and the types of awards that would be presented.

D. Staff Action/Response: The Foundation is working with the Division of Communications to reach out to our corporate sponsors as well as other private foundations and leaders in the non-pharmaceutical industry to raise money for the APEX Awards event on April 18, 2016.

E. Recommendations for Major Policy Issues for Action or Discussion: This is for information only.

Item: APA Foundation Ambassador Pilot Program

A. Division/Department Head: Paul Burke

B. Division/Offices Involved: APA Foundation

C. Background: Due to ongoing interest from APA members wanting to help foster awareness of the Foundation among membership, the APA Foundation launched a pilot program in October for “Foundation Ambassadors.” These volunteer Ambassadors would be selected from different areas of APA membership (e.g., the Assembly, early career, etc.) and leverage their networks to inform colleagues on Foundation activities and fundraising opportunities. These Ambassadors would:

- be knowledgeable of Foundation programs and priorities through regular updates/training offered by Foundation staff;
- share information digitally—there will be no/little expense to the volunteer or the Foundation to participate in the program;
- devote little time—the Foundation staff will provide email copy and other tools to help the Ambassador(s) engage their networks;
- advocate for awareness of the Foundation and distribute fundraising appeals via their network;
- be recognized for their role at Foundation events; and
- be considered as a recruitment pool for future Foundation board membership.

D. Staff Action/Response: To date, 16 Foundation Ambassadors have been recruited. We will provide training and outreach to this group in December/January and will begin testing their activities with the plan to roll out formally to a larger audience in the 2nd half of 2016 .

The List of Ambassadors includes:

1. Maureen Van Niel, MD
2. Jim Maier, MD
3. Sudhakar Madakasira, MD
4. Steve Daviss, MD
5. Mary Helen Davis, MD
6. Mark Komrad, MD
7. Barbara Weissman, MD
8. Michelle Riba, MD, MS, DFAPA, FAPM
9. Steve Koh, MD, MPH, MBA
10. Jim Nininger, MD
11. Jackie Feldman, MD
12. Ann Marie Sullivan, MD
13. Lara Cox, MD
14. Bob Batterson, MD, DFAPA, DFAACAP
15. Justin Schoen, MD
16. UK Quang-Dang, MD, MS

Please contact Paul Burke at pburke@psych.org or 703-907-8518 if you would like to serve as a Foundation Ambassador or if you know of other prospects for the pilot program.

- E. Recommendations for Major Policy Issues for Action or Discussion:** This is for information only.

AD HOC WORK GROUP ON REVISING THE ETHICS ANNOTATIONS REPORT

EXECUTIVE SUMMARY:

ACTION 1:

Will the Board of Trustees adopt the document as a resource to assist psychiatrists in understanding and applying the *Principles of Medical Ethics with Annotations Especially Applicable to Psychiatry* to their practice? (Attachment 1)

APA Ethics Resource Document

November 20, 2015

Ad Hoc Work Group on Revising the Ethics Annotations

Members

Rebecca W. Brendel, MD, JD (Chairperson)
Charles C. Dike, MD
Harold Ginzburg, MD
Wade C. Myers, MD
Robert Weinstock, MD

Consultants

Paul Appelbaum, MD
Phil Candilis, MD
Ezra H. Griffith, MD
Laura Roberts, MD

APA Ethics Committee

Members

Ezra H. Griffith, MD (Chairperson)
Marvin Firestone, MD
Richard Harding, MD
Mark Komrad, MD
Richard D. Milone, MD
Stephen C. Scheiber, MD

Consultants

Rebecca W. Brendel, MD, JD
Charles C. Dike, MD
Wade C. Myers, MD
Robert Weinstock, MD

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Section 1. Introduction

Ethical conduct by psychiatrists requires more than mere knowledge of ethics principles. It also requires that psychiatrists consistently apply that knowledge in their day-to-day professional activities. This assures that ethically sound judgment is exercised and the actions that follow fall within accepted ethical bounds. Important to the ethical practice of psychiatry are the abilities: 1) to recognize ethical aspects of a professional situation; 2) to reflect on one's role, motives, potential "blind spots", and competing or conflicting interests; 3) to seek out, critically appraise, and make use of additional knowledge and valuable resources, e.g., clinical, ethical, or legal information; 4) to systematically evaluate the ethical aspects of a professional situation and identify possible courses of action; and 5) to create appropriate safeguards in an ethically complex situation. Moreover, obtaining additional data, seeking appropriate consultation or supervision, maintaining clear professional boundaries, and separating roles that may pose conflicts are all actions that can help ensure ethical decision-making and minimize the likelihood of ethical breaches.

This document is a resource to assist psychiatrists in understanding and applying the Principles of Medical Ethics with Annotations Especially Applicable to Psychiatry to their practice.

Uses of this document

This document is written as a resource for psychiatrists who serve in many roles. It may be of particular value to individual psychiatric practitioners in their clinical activities. It may also be helpful to teachers and academic psychiatrists as they convey expectations regarding ethical conduct to the next generation of physicians.

This document is intended as a resource document to aid in understanding the complexity of psychiatric ethics and how they apply in different situations. It is not a "rule book" but rather a tool. It is not intended to cover all ethically important situations and novel ethical questions that psychiatrists may encounter in the course of their careers. It is not intended for the resolution of courtroom disputes, which apply legal rather than clinical standards and values, nor is it intended to undermine ethical practitioners serving in communities where scarce mental health resources call for flexibility. Furthermore, it cannot fully capture all of the circumstances that alter the ethical nature of a particular decision or action.

This document emphasizes the importance of ethical skills as well as knowledge of ethical principles and their application to psychiatric practice; however, an ethics resource is only as good as the integrity and judgment of those who use it.

Section 2. Ethical principles in the professional practices of psychiatrists

By focusing on:

- The ethical basis of the physician-patient relationship;
- Ethically important practices in psychiatric care;
- The ethical basis of relationships with colleagues; and
- Other ethically important topics in psychiatric practice,

this resource document highlights ethical principles that find expression in the professional practice of psychiatrists in their various roles and activities.

Knowledge of ethical principles will allow psychiatrists to respond to complex and novel situations with an understanding of their ethical implications and to make ethically-sound decisions.

Section 3. Practice Domains

3.1: The ethical and professional basis of the physician-patient relationship

Topic 3.1.1 The physician-patient relationship

The physician-patient relationship is the cornerstone of psychiatric practice, and its goal is to promote patient health and well-being, embodying the key ethical considerations of respect for persons, fairness, and beneficence. Patients often lack medical expertise and sometimes struggle with symptoms that adversely affect their autonomous decision-making; the psychiatrist is responsible for rendering medical care in the patients' best interest while respecting the patient's goals and autonomy.

The physician-patient relationship is a collaborative endeavor between two autonomous individuals who establish the professional relationship for the benefit of the patient. Every effort should be made to have the relationship begin by mutual consent. Psychiatrists should be cautious in interactions with persons who are not (or not yet) patients to avoid rendering input, advice, or other suggestions that might lead to the assumption or expectation that a treatment relationship has begun. These early conversations can occur over the phone or through other media. Especially as new consultative roles are emerging for psychiatrists, psychiatrists should ensure clarity of role for themselves, colleagues, and patients in a given system or treatment of a patient to ensure the highest standard of care. The relationship may include a child's parent or guardian, next of kin, an adult's legally recognized substitute decision-maker, or anyone a competent patient invites to participate. For patients lacking competency, psychiatrists should still consider requests to include persons important to the patient in the treatment in consultation with the patient's substitute decision maker. The relationship may continue for as long as an illness persists or until a patient either transfers his or her care to another clinician or chooses to end treatment. Because psychiatric patients share sensitive and intimate details of their lives with the psychiatrist, psychiatric patients may be especially vulnerable to undue influences and the psychiatrist should be sensitive and careful that his/her conduct does not physically, sexually, psychologically, spiritually or financially exploit or harm the patient.

There may be times when the physician-patient relationship is difficult and when the therapeutic alliance erodes. The psychiatrist should try to find ways to improve the relationship by working with the patient jointly to establish parameters that would enable treatment to continue; sometimes a consultant can be helpful. If the relationship cannot be repaired, or the parties cannot abide by the conditions agreed upon, the physician may transfer the patient's care to another clinician, or the patient may terminate the psychiatrist. In either case, the psychiatrist should cooperate with the patient's request to release files and/ or share information with contemporaneous and subsequent treating physicians.

Topic 3.1.2 Professionally competent care

Professional competence is the ability to apply clinical knowledge and to provide care within the accepted standards of clinical practice, which includes providing appropriate expertise as well as adequate time and attention to meet each patient's needs responsibly. Professionally competent care at times may involve the consideration and use of innovative treatments, consulting with other physicians, and practicing only within one's field of expertise.

In a rapidly evolving and diverse field such as psychiatry, competent practice is influenced by advances in a variety of disciplines, including the behavioral, social, and biological sciences, and by religion, and the complex social and economic contexts of practice. Obtaining and maintaining knowledge and skills sufficient for competent professional practice requires attention throughout a psychiatrist's career.

Psychiatrists should maintain professional competence through continuing education, supervision, and/or consultation. Psychiatrists should practice within the bounds of their competence as reflected in their training, education, and professional experience, all of which is kept current through continuous education and practice. Psychiatrists should make referrals or delegate care only to persons who, based on their training and experience, are in the psychiatrists' reasoned judgment, competent to deliver the necessary treatment.

Topic 3.1.3 Dual agency and overlapping roles

By virtue of their activities and roles, psychiatrists may have competing obligations that affect their interactions with patients. The terms "dual agency," "dual roles," "overlapping roles," and "double agency" refer to these competing obligations. Psychiatrists may have competing duties to an institution (e.g., employers, the judicial system, or the military) and to an individual patient, or to two patients or two institutions.

The treating psychiatrist has a primary, but not absolute, obligation to the patient. Wherever possible, the treating psychiatrist should strive to eliminate potentially compromising dual roles by attending to the separation of their work as clinicians from their role as institutional or administrative representatives. However, as the medical system becomes increasingly complex, it is critical for psychiatrists to recognize that not all competing obligations may be resolved. Psychiatrists should remain committed to prioritizing patient interests as treating physicians, expecting that they will find themselves in the position of having to reconcile these interests against other competing commitments and obligations.

Psychiatrists should inform patients about the potential for competing obligations within the treatment or other non-clinical evaluation, such as a forensic

evaluation. At a minimum, the psychiatrist should inform the person being treated as a patient or evaluated for another purpose of the purpose of the clinical encounter or evaluation, the limits on confidentiality of the treatment/examination, and the parameters of the relationship between the physician and the patient or evaluatee. (e.g., who requested the examination/evaluation, whether an ongoing relationship will occur, and, if so, the parameters/expectation of that relationship).

Treating psychiatrists should carefully reflect on the situation when asked to serve as a forensic expert or witness on behalf of a patient under their care. There are many considerations, including the loss of confidentiality between doctor and patient, the potential for the psychiatrist to provide testimony that is adverse to the patient upon cross examination, and the ability of the treatment relationship to continue after the psychiatrist has testified, perhaps having said some things that, while honest, were not to the patient's liking. The central principle in the psychiatrist's decision about whether to testify and/or serve as an expert for the patient is the patient's overall interest and wellbeing. At a minimum, psychiatrists should carefully address with patients that there is a balance that must include weighing the risks and benefits of testifying and not testifying. (For example, if a psychiatrist does not testify, a patient may have no realistic chance of securing deserved disability benefits.) Psychiatrists should be sure to include a candid discussion of the potential risks of unintended outcomes, the lack of scientific precision in the legal process, and the potential for an adverse decision.

3.2: Central ethical and professional practices in psychiatric care

Topic 3.2.1 Confidentiality

Medical confidentiality is the physician's obligation to his or her patient not to reveal the patient's personal or health information without that patient's explicit, informed permission. This obligation is an ethical duty distinct from the legal duty to protect patient privacy.

Patients should be informed of the limits on confidentiality at the beginning of the physician-patient relationship and again as necessary and/or relevant. Disclosures, even with informed consent, should be limited to the requirements of the situation, particularly when legal privacy rules provide a lower standard of protection than ethics require. Progress notes should record only the information necessary for good continuity of patient care.

There are legally imposed limits on confidentiality. For example, most states impose some obligation to warn or protect intended victims or report threats to authorities when there is a reasonable probability that a patient may carry out the threat to harm him- or herself or another person. All states impose a duty to report child abuse and most require reporting of elder abuse. In addition, a

rapidly growing number of states require physicians to check prescription monitoring databases to promote patient safety and to avoid duplicate prescriptions and polypharmacy by multiple providers. Because the specific requirements of each state's law vary, psychiatrists should know the legal limits on confidentiality in the jurisdiction(s) in which they practice.

The advent and expansion of the use of electronic medical records and the increasing use of care coordinators and integration of medical care present challenges to traditional notions of patient confidentiality. The need to share information and coordinate care to benefit the patient must be weighed against the patient's need for confidentiality. Where electronic records are concerned, many hospitals inform patients of how the records will be used upon admission or upon use of the hospital system and patients sign a notice that they have been informed.

The psychiatrist should exercise caution to include in notes that may be available to others only the information that would be necessary for evaluation and treatment of the patient's condition. In addition, as part of their routine practice, psychiatrists may inform patients about the types of information that are included in the record, how the information in the record could be shared with others (with and without consent), and/or patient options for amending the record.

Topic 3.2.2 Honesty and integrity

Patients seeking psychiatric care have the fundamental expectation of honesty from their psychiatrists. Honesty includes both ensuring that information provided is truthful and that information is not withheld from the patient. Psychiatrists should strive to provide complete information to patients about their health and all aspects of their care, unless there are strong contravening cultural factors or overriding therapeutic factors such as risk of harm to the patient or others that would make full disclosure medically harmful. Limiting the sharing of information with the patient should be the exception rather than the rule in respect of the value of honesty in the therapeutic relationship. Decisions not to share information with a patient should be thoughtfully considered and justified after a careful process of analysis. Psychiatrists may consider the value of deliberation with treatment teams, supervisors, and/or colleagues in coming to decisions to withhold clinical information from patients in recognition that decisions not to share information may fundamentally affect the patient's dignity.

In general, omission (intentional failure to disclose) and evasion (avoidance of telling the truth) will undermine a trusting and constructive relationship between the psychiatrist and the patient and should be avoided. Sharing information with any patient, including children, should occur in clinically and developmentally appropriate terms and settings.

During the course of patient care, psychiatrists are often asked to communicate with other individuals and agencies. Psychiatrists should not provide third parties with more information than is needed under the circumstances and they should stick to the facts. Releasing inaccurate or misleading clinical information to insurers, employers, or other third-party entities is a specific example of dishonesty and may constitute fraud.

Topic 3.2.3 Non-participation in fraud

As stated in the above section, psychiatrists should uphold their ethical duty to honesty and integrity. Fraud is an action that is intended to deceive, and ordinarily arises in the context of behavior that seeks to secure unfair or unlawful gain. Psychiatrists should be aware that fraudulent actions, in addition to being unethical, may also trigger legal sanctions. (Moreover, because honest dealings with patients are fundamental to the physician-patient relationship, any act of deception or misrepresentation with a patient has the potential to compromise the psychiatrist's ability to provide competent care.)

Psychiatrists communicate with numerous agencies and individuals during patient treatment. They are responsible for the usual physician contact with funding and reimbursement agencies, families, employers, and other third parties. However, because of their expertise in human behavior, psychiatrists are often asked, formally and informally, for information justifying or excusing patient actions. These requests offer numerous opportunities for ethical missteps. While each unique situation may have particular circumstances affecting the ethical analysis of a psychiatrist's conduct, psychiatrists should be particularly aware of their ethical responsibilities to honesty and integrity even in situations that occur for the benefit of the patient.

Specific examples of fraud in psychiatric practice include making false or intentionally misleading statements to patients, falsifying medical records, research, or reports, submitting false bills or claims for service, lying about credentials or qualifications, supporting inappropriate exemptions from work or school, providing unnecessary treatment, taking credit for another's work, and writing a prescription for a patient in a family member's name. These are some examples of actions that are not ethically acceptable in the practice of psychiatry. Some may also be legally actionable.

Topic 3.2.4 Informed Consent

Psychiatrists should recognize the importance of informed consent for assessment or treatment as an essential means to recognition of and respect for the patient's autonomy and personhood. Informed consent is an ongoing process that involves disclosing information important to the patient and/or decision-maker, ensuring the patient/decision-maker has the capacity to make treatment decisions, and

avoiding coercive influences. Typical elements of disclosure include an accurate description of the diagnosis and the proposed treatment, its potential risks and benefits, any relevant alternatives, including no treatment at all, and the relative risks and benefits of each option. Psychiatrists should honor the specific and enduring values of their patients and, in general, not condition a patient's ongoing treatment on a patient's acceptance of specific treatment recommendations. It is the exception rather than the rule that a psychiatrist would terminate a treatment relationship due to a patient's refusal of a specific recommendation, and generally limited to compelling circumstances in which such refusal involves actual, threatened, or heightened risk of harm to the patient or others. Psychiatrists must balance the ethical principles of patient autonomy with their professional obligations of providing effective – or at least non-harmful – care. Therefore, psychiatrists may ethically refuse to provide or insist on withholding certain treatments to or from a patient when those treatments would be harmful to the patient or contrary to an established and rational therapeutic plan, even if the patient demands those interventions.

Topic 3.2.5 Involuntary psychiatric treatment

Involuntary psychiatric treatment is on occasion needed to ensure the safety of the public or the care and protection of patients. The legal doctrines of police power and of *parens patriae* (i.e., the state as parent) have provided the customary rationale for involuntary treatment. Involuntary treatment may involve interventions such as psychiatric hospitalization, court-ordered outpatient treatment, and/or treatment with psychiatric medications.

Enforced treatment contains an inherent ethical tension among several values: respecting the individual's autonomy, providing care for that individual, and protecting the community. To exercise this coercion while balancing these competing values calls for great sensitivity on the part of the psychiatrist. When involuntary treatment is imposed, it should ensure the least restrictive clinically appropriate alternative and, to the extent possible, respect the informed consent process and the patient's decision-making capacity. Several specific issues requiring particular ethical attention include the commitment of children by parents or guardians, and patients committed to outpatient treatment in the community.

Topic 3.2.6 Therapeutic boundary keeping

Therapeutic boundaries are the professional limits on the conduct of the relationship between psychiatrists and their patients. They are required to ensure that the psychiatrist does not take advantage of a patient and to ensure that there is no appearance of impropriety in the psychiatrist-patient relationship. Psychiatrists must never exploit or otherwise take advantage of their patients, must avoid

patient interactions that are aimed at gratifying the psychiatrist's needs and impulses, and must not use their position to influence the patient in a manner that may undermine or threaten treatment goals. The concept of "beneficence" holds that all interaction with a patient should be for the benefit of the patient and the concept of "non-maleficence" holds that interactions that could potentially cause harm or misunderstanding should be avoided. However, the psychiatrist should show compassion towards, interest in, and kindness to patients.

Sexual behavior with patients is unethical. Further, even the possibility of future sexual or romantic relationship may contaminate current clinical treatment. Therefore, sexual activity not only with current, but also with former patients is unethical. Likewise, any occasion in which the physician interacts with a current or former patient in a way that may be a prelude to a more intimate relationship should be avoided.

While sexual contact is the most obvious form of unethical behavior, other non-sexual behaviors may also undermine the therapeutic relationship and cause harm to the patient. For example, psychiatrists should be aware that business transactions and relationships with patients as well as non-sexual social relationships may negatively affect the therapeutic relationship. Because of the diverse array of treatments and treatment settings, it is impossible to create unambiguous rules of conduct for all areas of clinical practice. However, psychiatrists must maintain awareness that their behavior should be directed toward the patient's therapeutic benefit, and behavior that is likely to conflict with that goal should be avoided.

Finally, rules guiding professional behavior are context sensitive. Because of this contextual element, it is important to distinguish boundary violations from boundary crossings. Boundary violations are transgressions that are immediately harmful, are likely to cause future harm or are exploitive of the patient, and as such, are always unethical. Boundary crossings are deviations from customary behavior that do not harm the patient and that on occasion may facilitate the therapeutic process. However, because of their potential to erode the therapeutic relationship, especially in the context of long-term psychotherapy, boundary crossings should be undertaken in treatment only in an intentional manner and when the benefits clearly outweigh the risks. (For instance, the appropriateness of accepting a small gift from a patient should be evaluated in light of the cultural and community context and the therapeutic impact. Likewise, non-sexual contact, like a hug, may be appropriate in certain circumstances as sign of respect for the culture of the patient or of compassion and support.) The psychiatrist must evaluate the situation and ensure that his or her conduct is not misconstrued and is in the best interest of the patient. Psychiatrists are encouraged to seek peer or other professional consultation in these matters, especially when they are in doubt about what course of action to take or refrain from.

Topic 3.2.7 Ethical philanthropy and political advocacy in psychiatry

Across all fields of medicine, organizational fundraising must be conducted with sensitivity so as not to exploit the relationship of trust that the physician has with the patient. Psychiatrists should consider whether the therapeutic relationship would encourage the patient to donate when he or she otherwise would not but the inherent conflict of interest must also take into account patients' competent decisions and their right to act as citizens. To be ethically acceptable, fundraising in psychiatry must be based in trust and honesty and in the fulfillment of goals of shared importance to the organization and the donor. Most importantly, philanthropic activities must be non-exploitative. Individual psychiatrists must not approach their patients for funds or initiate identification of specific patients for their institutions to solicit, as this may adversely affect the therapeutic relationship and cannot sufficiently safeguard the patient from exploitation.

While psychiatrists are expected to participate in activities contributing to the improvement of the community and public health, care should be exercised when the psychiatrist enters political discussions with the patient. In that context, there is potential for invading and exploiting the treatment relationship, especially when patients are asked to support political causes. Psychiatrists should refrain from attempting to influence the patient's political views, although they may promote the patient's civic engagement. Psychiatrists should exercise thoughtfulness in their interactions with patients regarding political issues, including the materials they provide or make available.

3.3: The ethical and professional basis of the relationship with colleagues

Topic 3.3.1 Seeking professional consultation

Psychiatrists treat challenging illnesses, and psychiatric illnesses are influenced by complex social and cultural contexts, co-morbid conditions, and discrimination. Because of this complexity, psychiatrists should carefully consider the need for consultation with colleagues and/or supervisors, especially when patients are not doing well. Professional competence entails recognizing the limits of one's clinical skills. Consultation in the analysis of ethical dilemmas is also sound practice.

If psychiatrists receive referrals for conditions that are outside their area of particular expertise and more specialized psychiatrists are available, they should consider making a referral to the more experienced clinician. Consideration of such a referral may include consultation with the specialist. Psychiatrists should exercise care in working on teams with and delegating responsibility to non-physicians to assure patients receive sound care.

Psychiatrists should agree to patient requests for consultation (or to the requests of family/guardian for minor or incompetent patients) and are free to accept or reject the consultant's opinions. Psychiatrists may suggest, but should not dictate, a choice among consultants. If psychiatrists disapprove of the professional qualifications of the consultant, or have a difference of opinion with the findings that cannot be resolved with the patient, they may withdraw from the case after suitable attention to the patient's ability to find needed care from another provider.

Topic 3.3.2 Relations with non-psychiatrists on multidisciplinary teams

The treatment of patients often occurs on multidisciplinary teams. Psychiatrists are regularly asked to assume a collaborative role with other mental health clinicians on such a team, and such collaboration can produce an ethical tension regarding the extent of responsibility of the psychiatrist for treatment decisions. When collaboration occurs between independent practitioners (as in split psychotherapy/psychopharmacology treatment), psychiatrists should coordinate care with their colleagues and should be aware that they are assuming shared responsibility for the overall treatment but are still solely responsible for the medical aspects of treatment. The psychiatrist and the collaborating clinician must communicate to their common patient the unique roles of each.

Given that there are times where the number of psychiatrists available is insufficient to meet the needs of the population, the psychiatrist should be willing to consult with and for non-medical or medical non-psychiatric providers when necessary.

Topic 3.3.3 Responsibilities in teaching and in supervising psychiatrists-in-training

As teachers and supervisors, psychiatrists must model not only clinical expertise but also a high standard of professional ethics. They must foster a positive, respectful learning environment, mindful of the asymmetry in power between themselves and their trainees, with a resulting responsibility on teachers (for example, avoidance of sexual involvement with trainees).

Topic 3.3.4 Responding to the unethical conduct of colleagues

All psychiatrists have an obligation to recognize and address the unethical behavior of colleagues, including a variety of behaviors that violate professional standards, such as exploitation of a patient, dishonesty or fraudulent professional activities, or behavior that intentionally demeans or humiliates patients or colleagues/supervisees. In some instances reporting is also mandated by law.

Options for addressing behavior may include seeking advice from supervisors, engaging in consultation with the individual, or reporting behavior to the appropriate authorities (including Ethics Committees of District Branches of the American Psychiatric Association).

Topic 3.3.5 Responding to impaired colleagues

Impairment among psychiatrists may arise from physical-, mental-, or substance use-related disorders. Such impairment may compromise professional competence and pose a serious threat to patient welfare. An impaired psychiatrist who does not seek help and correct the problem fails the community of psychiatrists, its standards, and his or her patients. Patients may not recognize an impairment or, if they do, be reluctant to report it.

A psychiatrist who is concerned about an impaired colleague's ability to care for patients safely may attempt to counsel or encourage the impaired colleague to seek treatment and to refrain from patient care. However, if the impaired psychiatrist does not respond to a collegial approach, the psychiatrist has an obligation to address the problem through appropriate channels such as the state's impaired physician program, the state medical board, the chief of the service, the hospital medical staff procedures, or other available route (e.g. a District Branch wellness committee).

3.4: Other ethically important topics in psychiatric practice

Topic 3.4.1 Working within organized systems of care

While psychiatrists enjoy professional autonomy in their practice, an increasing number of psychiatrists nonetheless work within at least one system of care, such as a hospital, group practice, multispecialty group practice, accountable care organization, government system, military system, or work for third-party payors. These systems have increased complexity but can create opportunities for improved patient care through innovation, clinical research, integration of health care, collegiality and peer relationships. However, they also create potential for conflict between the primacy of the individual patient and the legal, business and political interests of the care system of which the psychiatrist should be aware and monitor.

In increasingly complex systems of care, treating psychiatrists will encounter situations in which the primacy of individual patient care competes with other compelling interests and obligations. Psychiatrists in any system of care, whether or not they are providing clinical care to individual patients, maintain responsibility to patient interests and commitment to promoting organizational ethics supportive of individual patient care and care of patients more generally.

Care systems may employ a variety of cost containing measures, including prospectively, concurrently, or retrospectively reviewing treatment, emphasizing preventive or primary care services, requiring specific approvals for specialty procedures or referral, promoting the use of treatment guidelines, or creating economies of scale to streamline care within large systems. In these systems, other values often compete with the interests of the individual patient. The fundamental tension of psychiatrists working in organized settings, then, is that the terms of employment relate to the needs of the venture, but as physicians, psychiatrists working in organized systems of care cannot wholly ignore the needs of patients. Psychiatrists practicing within such systems must be honest about treatment restrictions, maintain the confidentiality of patient information, ensure reasonable access to care within the system, and help identify alternatives available outside of the system when the patient's psychiatric or medical well-being requires it.

Topic 3.4.2 Clinically innovative practices

Clinical decision-making without established research evidence to guide practice requires informed clinical judgments drawing on the best available research, adherence to the ethical principles of beneficence and non-maleficence, and sound theoretical reasoning. When usual treatments have failed, psychiatrists may offer non-standard or novel interventions using a shared decision-making approach grounded in the patient's informed consent and a thorough discussion of risks, benefits, and alternatives to the innovative treatment. Since innovative practice sometimes leads to important scientific advances, it should not be categorically discouraged; however, because it may prove ineffective or even harmful, psychiatrists should proceed with caution in their use of clinical innovation. When considering use of clinical innovation, psychiatrists should consider first consulting colleagues and exploring other resources to ensure that careful thought has been given to possible alternatives as well as to the safest and most effective use of innovative interventions.

Topic 3.4.3 Psychiatric issues in end-of-life care.

Psychiatrists can have a critical role to play in end-of-life discussions because of their experience in dealing with sensitive and difficult discussions with patients. Psychiatrists can also identify and treat common psychiatric and neuropsychiatric symptoms at the end of life. Finally, psychiatrists may be well-positioned to address the psychological suffering that accompanies the potential stigmatization and marginalization of those nearing the end of life.

Appropriate approaches to end-of-life care often combine treatment-specific information with values histories. Such approaches allow physicians to balance information regarding end-of-life care with accurate knowledge of patient

preferences. Patients must be provided sufficient information for making decisions and their wishes documented and reassessed over time. Ongoing discussions with caregivers can be an invaluable source of information. Use of the full range of tools for improving end-of-life care — including advance directives, treatment vignettes, and values histories — can begin to overcome the barriers to treatment faced by persons requiring end-of-life care.

Where there is doubt regarding the authenticity or stability of decisions, psychiatrists may contribute specialized expertise in focused capacity assessments. In addition, specific assurances that patients will not be abandoned can mitigate feelings of hopelessness. Information on the likely course of an illness and means for managing symptoms can also bring hope. Improved communication is critical for addressing common feelings of dread and despair, identifying and treating depression, addressing medication side effects or related neuropsychiatric symptoms, and supporting families in dealing with psychosocial stressors. Psychiatrists, like all physicians, should be truthful with patients about their diagnoses and prognosis and must have the requisite compassion and skill to thoughtfully and sensitively foster dialogue with patients who are seriously ill and suffering from a terminal illness.

Topic 3.4.4 Relations with the Pharmaceutical and Other Industries

New psychopharmacologic medications, medical devices, and innovations in genetics and biotechnology are increasingly important elements of modern psychiatric practice. Psychiatrists may interact with industry in many ways, including presenting at industry sponsored lectures and appearing in industry sponsored publications and advertisements, accepting and distributing sample products, recommending patients for industry sponsored clinical trials, and accepting personal or office gifts or corporate donations from industry. Psychiatrists should recognize that industry has obligations beyond patient welfare, including primary obligations to shareholders that psychiatrists do not share.

All psychiatrists should be aware of the potential conflicts that interactions with industry pose between business objectives and the psychiatrist's clinical or research responsibilities. Although the mere appearance or existence of a conflict of interest does not by itself imply wrongdoing, the failure to recognize and actively address such conflicts does compromise professional integrity and threatens the independence of the psychiatrist's judgment. For example, receiving gifts from industry may cause the psychiatrist to favor one medication over another.

At a minimum, psychiatrists should disclose their affiliations, relationships, and financial involvement with Industry to their patients in clinical settings and to audiences in professional presentations, even if they believe they are inconsequential.

Addressing conflicts of interest should be guided by three principles: the primacy of patient welfare, the independence of the psychiatrist's judgment, and disclosure. The guiding principle should be that the patient's interest rises above that of the psychiatrist or Industry. In each clinical decision the psychiatrist makes, he must be able to justify why that decision was in the best interest of the patient.

Topic 3.4.5 Ethical issues in small communities

Patients in small or underserved communities may encounter greater barriers to care because of limited health care resources, including the absence of specialty and subspecialty expertise and fewer health services. In small and/or remote communities, psychiatrists may effectively function as generalists across a broad range of clinical areas in psychiatry rather than specialists in a particular area of psychiatry. In an underserved context, if a patient care situation falls outside a psychiatrist's usual scope of practice, he or she may justifiably provide care if the psychiatrist has closely-related training and experience, if the psychiatrist possesses the most readily available relevant expertise, and if the patient's clinical needs warrant evaluation and intervention (e.g., because of severity and/or urgency). Psychiatrists who choose to extend the scope of their practice in such a manner incur an obligation to expand their expertise in appropriate ways by supervision, consultation, formal courses or other means of education.

Topic 3.4.6 Professional Use of the Internet and Communication Technology

Innovations in internet and communications technology over the past several decades have the potential to improve access to, delivery of, and quality of psychiatric care. However, these advances may also pose potential challenges to sound and ethical practice. While each type of technology and situation requires a case-by-case analysis, psychiatrists should be aware of potential ethical challenges in its use before using the technology in providing patient care. Psychiatrists are responsible for obtaining sufficient knowledge about the technologies they employ to respect patient confidentiality and deliver competent care. Psychiatrists must be aware of their responsibility to maintain professional boundaries in their internet activities – both in respecting their patients and in establishing separation between personal and professional internet and social media presence. Before using electronic communications or other technologies in the care of patients, psychiatrists should inform patients of the parameters of this technology use, including appropriate use (e.g. administrative vs. clinical), expectations, and emergency contact procedures.

Topic 3.4.7 Public Statements

For some in our profession, psychiatry can extend beyond the physician-patient relationship into the broader domain of public attention: in administration, politics, the courtroom, the media, and the internet. Psychiatrists need to sustain and nurture the ethical integrity of the profession when in the public eye. A psychiatrist may render a professional opinion about an individual after an appropriate clinical examination and accompanying waiver of confidentiality and should not do so unless the examination and waiver have occurred. When a personal examination has not been performed and when a psychiatrist is asked for a professional opinion about a person in light of public attention, a general discussion of relevant psychiatric topics — rather than offering opinions about that specific person — is the best means of facilitating public education. In some circumstances, such as academic scholarship about figures of historical importance, exploration of psychiatric issues (e.g. diagnostic conclusions) may be reasonable provided that it has a sufficient evidence base and is subject to peer review and academic scrutiny based on relevant standards of scholarship. When, without any personal examination, the psychiatrist renders a clinical opinion about a historical figure,, these limitations must be clearly acknowledged. Moreover, labeling public figures cavalierly with psychiatric conditions, based on limited or indirect clinical knowledge is not consistent with this approach and undermines public trust in the profession of psychiatry. Psychiatrists should also exercise caution when asked to provide the profile of or otherwise comment on the kind of person who might have committed a crime by clearly and publicly identifying the inherent uncertainty in profiling and the necessity of considering additional information as it becomes available.

Topic 3.4.8 Civil disobedience

Civil disobedience is the nonviolent and principled refusal to obey the dictates of government. It may occur when a psychiatrist's ethical obligation to a patient conflicts with the law, for example when the state's request for patient information seems to the psychiatrist to jeopardize the patient's well-being. Psychiatrists should clearly state their ethical obligation in such cases, pursuing options within the law until they have been exhausted. Psychiatrists may subsequently agree to comply with the mandate or not. While physicians have an ethical responsibility to respect the law, it is conceivable that a practitioner could violate the law without violating professional ethics. If psychiatrists refuse to comply with the law, however, they should be aware of the legal consequences of their action and consider obtaining legal counsel.

Topic 3.4.9 Execution

Psychiatrists should not participate in a legally authorized execution and may not assume roles that lead them to facilitate, implement, develop or monitor any techniques involved in execution. When a condemned prisoner has been declared incompetent to be executed, psychiatrists should not treat the prisoner for the *sole* purpose of restoring competence unless a commutation order is issued before treatment begins. However, the psychiatrist may treat the incompetent prisoner, as any other patient, to relieve suffering.

Topic 3.4.10 Psychiatrist participation in interrogations

Psychiatrists providing medical care to individual detainees in military, criminal or civilian settings may face conflict between their primary obligation to their patients and obligations to the institution such as ensuring safety. Treating psychiatrists who become aware that the detainee may pose a significant threat of harm to him/herself or to others are not precluded from ascertaining the nature and the seriousness of the threat or from notifying appropriate authorities of that threat, consistent with the obligations applicable to any psychiatrist relationship. As in any other setting, psychiatrists should safeguard the confidentiality of patient information, understanding that there may be legal or ethical requirements to disclose information. In these settings, the record may be the property of the institution and psychiatrists should be aware that non-clinical entities may have access. Psychiatrists should inform patients in these settings that information disclosed in treatment may not be confidential and of the specific limits on confidentiality.

Psychiatrists should not participate or assist in any way, whether directly or indirectly, overtly or covertly, in the interrogation of detainees on behalf of military or civilian agencies or law enforcement authorities.

EXECUTIVE SUMMARY

Distinguished Service Award Work Group

The Distinguished Service Award Work Group met on November 12, 2015 via conference call, and refers the following action to the Board of Trustees, below. The full report is provided as **Attachment 1**.

Action 1:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Distinguished Service Award to Donna Norris, MD?

Action 2:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Distinguished Service Award to Steven Sharfstein, MD?

Action 3:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Distinguished Service Award to Daniel Winstead, MD?

Action 4:

Will the Board of Trustees approve the recommendation of the Distinguished Service Award Work Group to award the 2016 Organization Distinguished Service Award to American Academy of Psychiatry and the Law (AAPL)?

Attachment 1 - REPORT OF THE DISTINGUISHED SERVICE AWARD WORK GROUP

Chairperson: Renee L. Binder, MD (APA President, 2015-2016)

Members: Paul S. Appelbaum, MD (APA Past President), Paul Summergrad, MD (APA Immediate Past President), Saul Levin, MD, MPA (Chief Executive Officer and Medical Director)

APA Administration: Margaret C. Dewar (Director, Association Governance), Chiharu Tobita (Sr. Projects Manager, Association Governance)

The Distinguished Service Award (DSA) Work Group met via conference call to review and discuss submitted nominees to receive the 2016 Distinguished Service Award. The DSA Work Group is pleased to recommend the following recipients of the 2016 Distinguished Service Award selected unanimously by the Work Group.

2016 Distinguished Service Award (individuals)
- Donna M. Norris, MD - Steven S. Sharfstein, MD, MPA - Daniel K. Winstead, MD
2016 Distinguished Service Award (organization)
- American Academy of Psychiatry and the Law (AAPL)

Distinguished Service Awards (Individuals)

Donna M. Norris, MD, a psychiatrist specializing in child and forensic psychiatry, is the past APA Secretary-Treasurer, Assembly Speaker and on the Board of the American Psychiatric Foundation (APF). She is being recognized for her contributions in psychiatry including community psychiatry and advocacy for the mental health needs of patients, including children, the elderly and returning veterans. She also has been a passionate spokesperson for leadership by women and minorities.

Steven S. Sharfstein, MD, MPA, the President and Chief Executive Officer (CEO) of Sheppard Pratt Health Systems, is being recognized for his many contributions to psychiatry as a scholar of the economics of mental health care, as a top administrator at the NIMH, as the CEO of Sheppard Pratt Health Systems, and as a leader of multiple professional organizations including the APA as its Deputy Director, President, Vice President and Secretary. He also led the APA's efforts to develop ethical principles against participation in interrogations as prisoners were being brought to Guantanamo.

Daniel K. Winstead, MD, the former Chair of the Department of Psychiatry at Tulane University School of Medicine, is being recognized for his outstanding leadership. He has served as President of the American College of Psychiatrists, the American Association of Chairs of Departments of Psychiatry, and the American Board of Psychiatry and Neurology. He also helped New Orleans recover from the devastating effects of Hurricane Katrina.

Distinguished Service Award (Organization)

The American Academy of Psychiatry and the Law (APPL) is being recognized for its leadership and excellence in practice, teaching, and research in forensic psychiatry. The goal of APPL is to promote scientific and educational activities in forensic psychiatry.