

## Resource Document on Telemedicine: Synchronous Video-conferencing in Psychiatry

*The findings, opinions, and conclusions of this report do not necessarily represent the views of the officers, trustees, or all members of the American Psychiatric Association. The views expressed are those of the authors.*

Authors:  
Committee on Telepsychiatry  
Council on Healthcare Systems and Financing

### **Brief History**

Synchronous video-conferencing in psychiatry began during the 1950s. Synchronous video-conferencing became increasingly common during the 1970s and 1980s. By the early 2000s, the Department of Veterans Affairs was building a national telemedicine program including video-conferencing.

Early research of synchronous video-conferencing demonstrated improved access to care, improved clinical outcomes, and patient and physician acceptance.<sup>1</sup> Synchronous video-conferencing principles and practice guidelines began being published during the 2000s. The American Academy of Child and Adolescent Psychiatry published “*Practice Parameter for Telepsychiatry With Children and Adolescents*” in December 2008.<sup>2</sup> The American Telemedicine Association published “*Practice Guidelines for Videoconferencing-Based Telemental Health*” and “*Evidence-Based Practice for Telemental Health*” both in 2009.<sup>3</sup>

Advances in technology, connectivity and infrastructure have increased the availability, quality and reliability of synchronous video-conferencing. Advances in technology have increased opportunities for synchronous video-conferencing and reduced psychiatrist and other medical provider entry costs.

The U.S. Centers for Medicare & Medicaid Services (CMS) has rules and regulations regarding telehealth practice and reimbursement.<sup>4</sup> The Federation of State Medical Boards published *A Model Policy for the Appropriate Use of Telemedicine Technologies in the Practice of Medicine* in 2014.<sup>5</sup>

The American Medical Association (AMA) has ethical guidelines for the practice of telemedicine.<sup>6</sup> The AMA highlights that regardless of the model of care delivery; a valid patient-physician relationship must exist, a patient must be able to trust that the physician will place patient welfare above other interests, the physician will provide competent care and provide to the patient the information needed to make well-considered decisions about care, respect patient privacy and confidentiality, and take steps to ensure continuity of care. The AMA advocates for ongoing improvements of telemedicine technologies, the development and implementation of

clinical and technical standards and making telemedicine more readily available to all patients who could benefit.<sup>6</sup>

The 2017 American Telemedicine Association advocacy priorities are eliminating artificial governmental barriers to telehealth; preventing new barriers to telehealth; encouraging use of telehealth to reduce health delivery problems; promoting payment and service delivery models to increase consumer and payer value; and enhancing patient choice, outcomes, convenience, and satisfaction.<sup>7</sup>

### **Diagnostic Validity and Reliability**

Advances in video-conferencing technology have greatly improved sound and image quality, transition speed and system stability. Research on diagnostic validity and reliability is now occurring at transmission speeds of 384 Kilobits per second (Kbps) or faster. Diagnostic inter-rater and inter-method reliability for children, adolescents and adults is good.<sup>8</sup> Synchronous video-conferencing appears to be comparable to in-person diagnostic reliability.<sup>8</sup> No studies have provided strong evidence that synchronous video-conferencing is less reliable than in-person assessments.<sup>8</sup>

### **Treatment Outcomes**

A recent review of thirty-two (32) adequately-powered randomized controlled trials found that treatment intervention outcomes using synchronous video-conferencing was comparable to in-person care outcomes.<sup>8</sup> With the exception of one study, the review found no statistical difference in clinical outcomes for pharmacotherapy or psychotherapy delivered by synchronous video-conferencing treatment and in-person treatment.<sup>8,9</sup> The review included patients presenting in outpatient medical clinics and outpatient mental health clinics.

### **Patient Satisfaction**

A recent review of thirty-one (31) studies concluded that patient satisfaction is good to excellent.<sup>8</sup> Patient satisfaction has been evaluated using descriptive, qualitative, experimental and mix-method designs. In summary, ease of use and decreased burden of transportation to appointments were important components of patient satisfaction, especially in rural communities. Patient privacy and confidentiality and establishing a patient-doctor relationship were patient concerns.<sup>8</sup> In one study of forty-eight (48) patients randomized to synchronous video-conferencing consultation or in-person psychiatric consultation, the synchronous video-conferencing patients reported disclosing the same information as they would have during an in-person consultation.<sup>10</sup> However, the synchronous video-conferencing patients rated lower satisfaction than the in-person patients. The synchronous video-conferencing patient felt less supported or less encouraged than the in-person patients.<sup>10</sup>

### **Clinician satisfaction**

In the same review, eleven (11) studies using primarily qualitative self-report assessments found that physicians specializing in child and adolescent psychiatry and adult psychiatry report high satisfaction with synchronous video-conferencing.<sup>8</sup> In general, clinicians (psychiatrists and non-psychiatrists) working in rural settings were more satisfied than those in suburban settings.<sup>8</sup>

Clinicians have reported concerns about patient satisfaction with synchronous video-conferencing and concerns about possible adverse impacts on the therapeutic alliance. One study found

therapists reporting lower therapeutic alliance scores using synchronous video-conferencing than in-person therapists.<sup>11</sup> In the same study, the two patient cohorts reported no differences in therapeutic alliance.<sup>11</sup>

Psychiatrists and non-psychiatrists have reported difficulty accessing training in video-conferencing and how to incorporate video-conferencing into their clinical practice.

### **Medical-Legal Summary**

Each state has its own regulations regarding physician licensure and medical practice and telemedicine practice including video-conferencing. Psychiatrists should have a medical license in each state where they are providing clinical care whether in-person or by video-conferencing. The psychiatrist should know the state statutes and regulations regarding in-person practice and telemedicine practice in each state where video-conferencing is being provided. The state's medical board, the American Telemedicine Association, the American Medical Association and the Center for Connected Health Policy are resources. Medical malpractice insurance carriers may be sources of medical-legal information as well.

Telemedicine including video-conferencing brings new concerns and vulnerabilities regarding patient confidentiality. The psychiatrist should only use platforms and systems that are secure, encrypted and Health Insurance Portability and Accountability (HIPPA) adherent. The psychiatrist should discuss with the patient the limits and risks of synchronous video-conferencing. Basic steps include verifying patient identity, ensuring privacy at the patient's location, and ensuring confidentiality at the psychiatrist's location during each encounter. The state medical board, the American Telemedicine Association, the American Medical Association and the Center for Connected Health Policy are resources regarding consent and confidentiality rules and regulations.

A pre-assessment process should be in place to reduce the likelihood that the psychiatrist does not unexpectedly begin an evaluation or treatment of a patient who is not appropriate for non-in-person care. The psychiatrist should have a patient safety plan and process in place prior to beginning a video-conference encounter.

The psychiatrist should know the state statutes, regulations and processes regarding initiating a patient intervention for imminent dangerousness to self or others. Ideally, the psychiatrist will know the local emergency psychiatric system, social service resources and have public safety/law enforcement contact information.

### **Reimbursement**

As of March 2017, thirty-five (35) states have laws governing private payer reimbursement of telemedicine.<sup>13</sup> No two states have identical laws. States are more likely to require parity of services covered rather than parity of payment for service.

As of March 2017, forty-eight (48) state Medicaid programs reimburse for synchronous video-conferencing.<sup>13</sup> No two states have identical policies, rules or laws.

A state medical board and state Medicaid program are resources. The American Telemedicine Association, the American Medical Association and the Center for Connected Health Policy are additional resources.

### **Best practices and guidelines**

The American Psychiatric Association has published a resource document on telepsychiatry in 2014.<sup>14</sup>  
Resource Document on Telepsychiatry and Related Technologies in Clinical Psychiatry,  
January 2014

The American Telemedicine Association has published best practices and practice guidelines.<sup>3</sup>  
Practice Guideline for Telemental Health With Children and Adolescents, March 2017  
Core Operational Guidelines for Telehealth Services Involving Provider-Patient Interactions,  
May 2014  
A Lexicon of Assessment and Outcome Measures for Telemental Health, November 2013  
Video-Based Online Mental Health Services, May 2013  
Evidence-Based Practice for Telemental Health, July 2009  
Practice Guidelines for Videoconferencing-Based Telemental Health, October 2009

The American Academy of Child and Adolescent Psychiatry has published principles for telepsychiatry with children and adolescents.<sup>2</sup>  
Practice Parameter for Telepsychiatry With Children and Adolescents, December 2008

### **Telepsychiatry Training**

The APA provides education and training during annual CME meetings and annual Institute for Psychiatric Services (IPS) meetings.

The APA Telemedicine Toolkit provides on-line educational materials on the following topics:

- History and background
- Training
- Legal and reimbursement
- Technical considerations
- Practice and clinical recommendations

## References

1. Hilty DM, Ferrer DC, Parish MB, Johnson B, Callahan EJ, Yellowlees PM. The Effectiveness of Telemental Health: A 2013 Review. *Telemed JE Health* 2013; 19: 444-454.
2. Practice Parameter for Telepsychiatry With Children and Adolescents. *J. Am. Acad. Child Adolesc. Psychiatry*, 47: 12, 1468-1483. December 2008.
3. American Telemedicine Association at [americantelemed.org](http://americantelemed.org).
4. Department of Health and Human Services, Center for Medicare & Medicaid Services. <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsh.t.pdf> (last accessed on August 23, 2017).
5. Federation of State Medical Boards. Model Policy for the Appropriate Use of Telemedicine Technologies in the Practice of Medicine. April 2014.
6. American Medical Association. *AMA Code of Medical Ethics*, Chapter 1.2.12 - Ethical Practice in Telemedicine. June 2016.
7. American Telemedicine Association. Transforming Health Care For Patients: 2017 Policy Priorities. 2017.
8. Hubley S, Lynch SB, Schneck C, Thomas M, Shore J. Review of Key Telepsychiatry Outcomes. *World J of Psychiatr* 2016; 2: 269-282.
9. Mitchell JE, Crosby RD, Wonderlich SA, Crow S, Lancaster K, Simonich H, Swan-Kremeier L, Lysne C, Myers TC. A randomized trial comparing the efficacy of cognitive-behavioral therapy for bulimia nervosa delivered via telemedicine versus face-to-face. *Behav Res Ther* 2008, 46: 581-592.
10. Urness D, Wass M, Gordon A, Tian E, Bulger T. Client acceptance and quality of life – telepsychiatry compared to in-person consultation. *J Telemed Telecare* 2006; 12: 251-254.
11. Ertelt TW, Crosby RD, Marino JM, Mitchell JE, Lancaster K, Crow SJ. Therapeutic factors affecting the cognitive behavioral treatment of bulimia nervosa via telemedicine versus face-to-face delivery. *Int J Eat Disord* 2011; 44: 687-691.
12. Bashshur RL, Shannon GW, Bashshur N, Yellowlees PM. The Empirical Evidence for Telemedicine Interventions in Mental Disorders. *Telemed J E Health* 2016; 22: 87-113.
13. Center for Connected Health Policy at [cchpca.org](http://cchpca.org).
14. APA Council on Psychiatry & Law. Resource Document on Telepsychiatry and Related Technologies in Clinical Psychiatry. January 2014.