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AAPL Practice Resource for Prescribing in Corrections

I. Statement of Intent

This Practice Resource is intended as a review of the literature and expert opinion, to give guidance and assistance in the provision of psychiatric treatment, with specific reference to psychopharmacology, in correctional facilities. It was developed by correctional psychiatrists with various backgrounds, including clinical administration, system consultations, research, teaching, and direct patient care for inmate patients. Some contributors are actively involved in administration, oversight, and academic endeavors related to psychiatric prescribing in jails and prisons. The process of developing this document incorporated a thorough review that integrated feedback and revisions into the final draft.

The Council of the American Academy of Psychiatry and the Law (AAPL) reviewed and approved the Practice Resource on May 21, 2017. It reflects a consensus among members and experts about the principles and practice of prescribing psychiatric medications in correctional settings. Although recommendations are sometimes articulated when backed by research evidence, ethics standards, or expert opinion, this document should not be construed as dictating the standard of care. Rather, it is intended to inform practice in this area. Practice guidelines published more than five years ago may require updating and are not considered current by the American Psychiatric Association.^{1,2} However, this document may cite sections of such practice guidelines when deemed still current, relevant, and appli-

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cable to correctional practice. Legal cases cited are jurisdiction specific, and the reader is advised to be aware of local laws and regulations.

All acceptable current ways of performing psychiatric assessment and treatment are not presented herein, and following the recommendations does not lead to a guaranteed outcome. Differing clinical factors, relevant institutional policies, and the psychiatrist's judgment determine how to proceed in individual clinical scenarios. Adherence to the approaches and methods set forth in this document will not ensure any specific outcome. The parameters discussed are not intended to represent all acceptable current or future methods of evaluating inmate patients for medical or mental health disorders and drawing conclusions about the appropriate psychiatric treatment. The Practice Resource is directed toward psychiatrists and other clinicians who are working in a clinical role in conducting evaluations and providing recommendations related to the treatment of mental disorders in a correctional setting. The terms "psychiatrist," "psychiatric provider," and "prescriber" are used interchangeably, but are intended to refer to a professional authorized to provide psychiatric services, including the prescription of medications, in a correctional facility. It is expected that any clinician who agrees to engage in psychiatric assessment and treatment in these settings has appropriate qualifications.

2. Introduction and Legal Framework

Inmates with serious mental illness are overrepresented in correctional facilities, with rates in incarcerated persons ranging from 9 to 20 percent.³ The consequences of undertreatment of serious mental illness are legion. In the community, these problems have been linked with a greater risk of unemployment, homelessness, emergency medical care, hospitalization, substance use, suicide, being a victim of crime, engaging in violence toward others, and having a poor quality of life.^{4,5} The life expectancy of

those with mental illness is shortened, most likely related to a combination of medical comorbidities, lifestyle, suicide, accidents, and victimization by others.⁶ Although incarceration may correct for some of these factors, a higher mortality rate in this group is still observed when compared with inmates without mental illness.⁷

The management of serious mental illness is optimized by a comprehensive, individualized treatment plan that may include some form of medication management. Besides the professional duty of psychiatrists and other mental health providers to relieve suffering, the treatment of incarcerated persons with mental illness, including pretrial detainees, is guaranteed by the United States Constitution.^{8,9}

Constitutional requirements in terms of adequate treatment with psychiatric medications were articulated in a decision by the U.S. Court of Appeals for the Fourth Circuit Court in *Bowring v. Godwin*, in which the court held that mental health treatment was not an absolute right for prisoners and that “the essential test is one of medical necessity and not simply that which may be considered merely desirable” (Ref. 9, p 48). Furthermore, limitations on mental health treatment could be based on what can be provided at a reasonable cost, both of money and of time.

Other appellate cases have indicated concern that medications are used indiscriminately for the convenience of staff or prison officials. In *Ruiz v. Estelle*,¹⁰ the U.S. District Court of Southern Texas listed “the components of a minimally adequate mental health treatment program,” and called unacceptable the “prescription and administration of behavior-altering medications in dangerous amounts, by dangerous methods, or without appropriate supervision and periodic evaluation.” (Ref. 10, p 1339–1340). In *Langley v. Coughlin*,¹¹ the U.S. District Court of New York suggested that “failure to prescribe proper medication,” “prescription of inappropriate medication,” and “failure to provide any meaningful treatment other than medication” (Ref. 11, p 540) could all be insufficient care under the Constitution.

Health care, or lack thereof, may be considered in violation of constitutional rights when it shows deliberate indifference to a serious medical need.¹² This standard was found applicable to mental health treatment in *Bowring v. Godwin*⁹ and *Guglielmoni v. Alexander*.¹³ Deliberate indifference establishes a high threshold for finding a violation of an inmate’s con-

stitutional rights, requiring actual knowledge or reckless disregard of a danger to an inmate.¹⁴

The American Psychiatric Association Task Force for Psychiatric Services in Correctional Facilities indicated that the goal for psychiatric treatment in corrections is to provide the same level of care to inmates that should be available in the community.¹⁵ Psychiatrists working to provide this level of care in jails and prisons face numerous challenges. In these settings, safety and security concerns typically take precedence over routine health care services. Confidentiality may be limited, whether by law, regulation, policy, or the proximity of corrections officers. Inmate-related factors, such as a high rate of personality disorders¹⁶ and malingering,^{17,18} neither of which is mutually exclusive in serious mental illness,¹⁹ further complicate assessment and treatment. Psychiatrists working in jails and prisons must cope with operational limitations not seen in community inpatient or outpatient settings, such as formulary restrictions, structured times for medication administration, scheduled inmate movements, and unscheduled security lockdowns. When policies and procedures have an affect on the quality of psychiatric treatment of patients with serious mental illness, especially when the standards are long-standing, those pursuing change may encounter resistance.

The goal of this Practice Resource is to provide a tool for psychiatrists and others prescribing psychiatric medications in correctional facilities. It summarizes the best available evidence for treating mental health problems in inmates, or applies guidelines or practice resources intended for the general treatment of mental disorders to the context of correctional settings. When no evidence specific to inmates is available, expert consensus is used and is clearly designated as such.

3. Health Care Operations Related to Medication in Correctional Institutions

3.1 Administration of Medication

Ensuring that the right medication is accurately administered to the correct patient at the indicated time within a correctional facility is a challenging and complex process that involves coordinated efforts by medical, mental health, nursing, pharmacy, and custody staff. This section focuses on the essential components of medication delivery that involves the dispensing and distribution of prescribed medications without interruption.²⁰

Psychotropic medications in correctional settings are typically administered by nursing staff to each patient on a dose-by-dose basis (referred to as directly observed therapy or DOT). However, some states allow correctional officers to administer medications to inmates that have been dispensed from the pharmacy. If this is the case, the National Commission on Correctional Health Care recommends that the staff be specially trained in matters of security, accountability, common side effects and documentation of administration of the medication.²¹ Psychotropic medications are usually not classified as “keep on person” (KOP; i.e., self-administered), because of concerns about adherence to the dose schedule and misuse, including hoarding for purposes of self-harm. (See also Sections 6.3, Medication Nonadherence and 6.5, Misuse, Abuse and Diversion of Psychotropic Medications.) We are aware of some exceptions: Departments of Corrections may allow or have allowed the prescription of lower risk psychotropic medications KOP on a case-by-case basis. In at least one system this practice was abandoned because patients hoarded the medications for nonmedical reasons.

The actual setting where medication administration occurs primarily depends on the size of the facility, the patient’s custody level, and the patient’s housing location. Pill call lines may occur on a scheduled basis within the inmate’s housing unit or in a centralized location such as a medical clinic or infirmary. In lockdown units, nursing staff often go from cell to cell to administer medications. Alternatively, inmates receiving medications are released from their cells one by one, to go to a nearby nurse’s medication cart. Custody and nursing staffs should work together during the medication administration process to ensure that each person is receiving the correct medication and that it is ingested.

It is not uncommon for correctional facilities to have only two pill calls daily, with the second pill call occurring in the late afternoon rather than at bedtime, which prevents nighttime HS (i.e., hours-of-sleep) medications from being administered at the appropriate time. Limiting medication to two passes instead of three saves nursing time and workload as well as correctional officer escort and supervision time.²² Prescribers should consider the medication administration workload for nursing staff and order administration consistent with the pharmacodynamics of the medications and according to clinical ap-

propriateness and institutional pill call schedules. For example, medications that are appropriate for administration on a once-per-day basis are usually prescribed in that manner, unless divided doses are clinically appropriate. When bedtime medication is clinically indicated, it is appropriate for the HS medication to occur after 8 p.m.

In light of concerns regarding misuse in correctional facilities, medications are often ordered by either prescribers or by institutional policy to be crushed by the nurse and administered in liquid (i.e., “crush and float”) to minimize the risk of cheeking or palming the medication by the inmate for later use or diversion. Crushing tablets is always time-consuming for nursing staff, may alter the pharmacokinetics of the medicine, may increase the risk of adverse drug reactions, may pose a danger to the nurse exposed to the particles, and may be contraindicated by the manufacturer.²³ Although serious harm from this practice has rarely been described, we suggest that prescribers and institutions consult with a pharmacist before instructing a nurse to alter the form of the medication.²⁴ If a liquid form of the medication is available, it may be a reasonable alternative to crush and float.

The medication administration process should be timely and efficient and make allowances for operational barriers to optimize adherence.²² Prescribers must be familiar with the facility’s policies and practices relevant to medication administration as well as the patient’s programming assignments because they may have an impact on adherence. For example, if patients expect a long wait in a pill line during uncomfortable weather, many will choose to avoid the experience. Staggering access to pill call lines by housing units and providing shaded pill call lines during the summer months can improve medication adherence. A job assignment could preclude a patient from attending a particular pill line. It is appropriate to consider prescribing the medicine at a time compatible with the patient’s work and programming schedule. Prescribers should also know the times that medication passes are scheduled and advocate for appropriate medication administration times if the current times are problematic. The timing of pill calls should not interfere with meals, program assignments, visitation, or recreation and should be jointly decided by the health care authority and facility administrator.^{20,21}

Documentation via the medication administration record (MAR) contemporaneous with the administration of the medication is essential. The use of an electronic (e)MAR facilitates such documentation. Delays in the medication administration process can be caused by inmate questions, requests, and refusals. Knox²⁰ recommended that simple questions be answered during the medication administration process and that complicated questions be deferred until after the medication pass is complete or until later in the day, when the nurse has time to address inquiries and problems fully.

Inmate housing changes and unexpected lockdowns (e.g., emergency temporary closure of an area because of a facility disturbance) challenge the continuity of medication administration. Timely communication of housing changes by the custody staff to the nursing staff will reduce lapses in the medication administration process. Consistency of nursing staff, especially on mental health units, will result in more efficient medication administration. Such consistency is difficult to accomplish when registry (i.e., *per diem* or *locum tenens*) nursing staff are used for relatively short periods, resulting in frequent nursing turnover. Knox²⁰ provides a useful summary of nursing interventions that support medication adherence among inmates.

3.2 Pharmacy and Therapeutics Committees and the Formulary Process

In 2010, health care expenditures in state prisons totaled \$7.7 billion and represented 20 percent of total state prison expenditures. Fourteen percent of the health care costs, based on data from 10 states, were directly related to the cost of pharmaceuticals.²⁵ It is thus not surprising that containment of health care costs in corrections is an important goal.

Pharmaceutical costs can be controlled without lowering the quality of correctional health care. For example, a Legislative Analyst's Office (LAO) report from California during February 2005 noted that the California Department of Corrections was paying retail rather than wholesale prices for parolee medications.²⁶ Changing the drug procurement practices, improving the administrative structure and management tools of the pharmacy program, and modifying the drug formulary process were among the effective recommendations made by the LAO.

An effective Pharmacy and Therapeutics Committee (PTC) will help to ensure the safe, rational,

evidence-based, economical, and standardized use of medications in addition to providing overall direction to pharmacy services. Perhaps the most important role of the PTC in corrections is developing, managing, reviewing, and updating the medication formulary, which is the list of medications approved for use by prescribers. Preauthorization for selected (i.e., nonformulary) medications may be necessary because of cost, safety concerns, or prescription by a nonspecialist.²⁷ Factors to consider include adverse drug reactions, medication errors, efficacy, and cost. Thoughtful formulary decisions are expected to improve the quality, safety, and effectiveness of the health care provided.

Other roles for the PTC include development of clinical practice resources related to medication management; monitoring medication use; and reviewing, developing, approving, revising, and monitoring compliance with pharmacy policies and procedures. Such policies and procedures may address selection, procurement, prescribing, storage, security, compounding, distribution, and administration of medications.

Certain matters that may come before the PTC, while not unique to correctional settings, are certainly less commonly encountered in the community. One example may be policy mandates to crush and float particular medications to discourage the act of cheeking (i.e., not swallowing the medication, typically with an intention to use it not as intended by the prescriber). A related topic is making certain medications nonformulary because of their propensity for abuse or diversion. (See also Section 6.5 Misuse, Abuse, and Diversion of Psychotropic Medications.) It is advisable to examine closely decisions related to making medications nonformulary or to systematically crushing them. When a medication is made less accessible to providers for any reason, it is appropriate for PTCs to make viable alternative medications readily available to prescribers.

The PTC is typically established by the agency's health care policies and procedures, which should clearly articulate the authority of the committee to carry out the above functions.^{27,28} The core membership of the PTC may include a health care executive, the medical director, the director of nursing, the chief psychiatrist, the chief dentist, and the director of pharmacy. Other members may include frontline clinicians, perhaps on a rotating basis, to be more inclusive, to inform the committee about facility-

specific concerns, and to educate the line staff regarding the PTC process. It is not unusual for the PTC to consult with specialists on an as-needed basis or to form subcommittees to develop disease management guidelines or other address other problems that require specific expertise.²⁸

When a nonformulary medication is indicated, the prescribing clinician should complete a request form that is designed to specify the prescriber's justification for use of the requested medication. A formal process for submitting and reviewing such requests should be established by the PTC. It is clinically appropriate to have a process in place that allows patients to continue nonformulary medications prescribed in the community until the prescription can be reviewed by a psychiatrist, especially psychotropic drugs with more unique methods of action or pharmacokinetics that do not safely allow immediate substitution (e.g., quetiapine).

The PTC may participate in systemic quality improvement by tracking the percentage of nonformulary requests that are approved as well as the percentage of inmates on medications who are receiving a nonformulary medication. (See also Section 3.3, Quality Improvement.) Off-label prescribing (i.e., use of a drug prescribed for an indication not specifically approved by the U.S. Food and Drug Administration (FDA)) is another matter appropriate for monitoring by the PTC. The PTC may choose to restrict certain medications, perhaps even for specific indications, based on published clinical research findings.

3.3 Quality Improvement

A quality improvement (QI) process is an essential component of an adequate correctional mental health system. Often, there is a significant discrepancy between what a clinician or health care administrator believes is or is not occurring within the health care services and what is actually occurring, particularly in the context of the medication management system, because there are multiple variables that affect whether the right inmate is being administered the intended medication at the indicated time. Such variables include, but are not limited to, the following, all of which must take place in a timely manner:

Scheduling of the inmate for an evaluation by a psychiatrist (or other appropriate prescriber)

Performance of the evaluation

Issuance of a medication order

Processing of the order by nursing staff

Receipt and processing of the order by the pharmacist

Receipt of the medication by the nursing staff

Dispensing of the medication to the intended inmate according to the order

If the any of the above steps did not occur, it is likely that the inmate did not receive the appropriate medication in a timely manner. The reason that a step was omitted requires further exploration in a QI process, to determine whether the underlying problem is systemic or related to other factors (e.g., individual errors or training needs). In general, there are multiple possibilities for a negative answer that could be explored. For example, medication might be dispensed in a timely manner from the pharmacy, but the inmate may not receive it because of failure to show for pill call, refusal, transfer to a different facility, a lockdown, or a nursing staff shortage, among other reasons.

Other examples of QI indicators specific to medication management include:

New medication orders that are administered within 24 hours of receiving the order

Continuity of medication administration (e.g., medications administered without interruption after an inmate's transfer to a different unit or facility or medications ordered on discharge from the mental health infirmary that were continued without interruption)

Documentation on the inmate's MAR of medications that are ordered but not dispensed, consistent with policy

Prompt reporting of incidents of medication nonadherence to the psychiatrist, with appropriate follow-up

Medication renewal on schedule

Appropriate re-examinations before renewal of a medication

Ordering, reviewing, following up, and documenting appropriate laboratory tests

Tracking of nonformulary requests to include percentage of all prescriptions, percentage ap-

proved, time required for approval, and reasons for rejection

Informed consent (i.e., timeliness and documentation)

Medication errors, noting type, frequency, causes, and adverse reactions

Medication administration (i.e., waiting times, protection of inmate patients from extreme weather conditions, mouth checks, proper nursing identification of inmates before administration, correct preparation and administration, and MAR documentation of administration)

Reconciliation of MARs with chart medication orders

Laboratory screening at appropriate intervals for specific medications (e.g., serum levels for lithium or anticonvulsants, metabolic monitoring, and electrocardiograms for second-generation antipsychotics)

Some QI reviews or initiatives may be addressed by PTCs, but a separate QI committee may also be appropriate. Representation by custody and administration staff is valuable in addressing some quality concerns, such as medication diversion (including issuance of disciplinary infractions for medication misuse).

Whenever possible, line staff may be encouraged to participate in local QI initiatives. Health care staff may not be familiar with the actual mechanics necessary to perform a proper QI project, and it is therefore of value to provide training on methods used in health care such as Plan–Do–Study–Act²⁹:

Identify the problem, form a performance improvement (PI) team, and collect baseline data.

Brainstorm solutions and implement changes.

Collect follow-up data.

If improvement occurs, act on and report findings.

A robust QI process will facilitate an effective and efficient medication management process within the correctional facility.²¹

4. General Prescribing Matters

4.1 Continuity of Care

A fundamental goal of correctional psychiatry is to provide timely access to mental health services and

psychotropic medication treatment to inmates who need them, regardless of custody level, disciplinary or legal status, and housing location. Mental health treatment involves more than just prescribing psychotropic medication, and psychiatrists should not be limited to this role.¹⁵ Inmate patients need access to appropriate psychiatric treatments that are equivalent to those that are available in the community.¹⁵

Ensuring continuity of psychotropic medications is a major challenge in correctional settings. For example, during intake screening, during transfer screening for intrasystem transfers (e.g., a transfer from an intake facility to a receiving facility), or during initial health assessment, inmates with mental disorders may not be able to provide complete or accurate information regarding medication history (e.g., medication names, dosages, and schedules). Information from community providers and pharmacies rarely accompanies an inmate on such transfers. Typically, a signed release of information is necessary to request treatment records. Intake staff may be able to contact the community pharmacy to verify the current prescription before the patient is seen by a provider.²⁷ Although electronic medical records may facilitate communication between providers, unless there is an interagency agreement for sharing of information, delays will be likely in verifying psychotropic medications, diagnoses, and recent treatment dates.

Both National Commission on Correctional Health Care (NCCCHC) standards^{21,30,31} and American Psychiatric Association (APA) Guidelines on psychiatric services in jails and prisons¹⁵ require that incoming inmates undergo appropriate mental health screening and that those with positive results have a mental health evaluation. Mental health screening includes inquiring about current treatment with psychotropic medications. Some psychoactive agents are not immediately available in all jails or prisons, which may affect the continuity of medication for incoming inmates. Many correctional systems restrict the prescribing of controlled medications, such as benzodiazepines (except for limited uses, such as alcohol and benzodiazepine withdrawal) and psychostimulants that pose a high risk for abuse, dependence, and diversion. Most correctional systems use formulary management or other strategies to limit the availability of agents with a high potential for abuse and to reduce the significant cost of brand-name psychotropic medications when equally effec-

tive but lower cost alternatives are available. (See also Sections 3.2, Pharmacy and Therapeutics Committees and the Formulary Process and 6.5, Misuse, Abuse and Diversion of Psychotropic Medications.) When a specific psychotropic medication is clinically indicated but not available, the correctional psychiatrist must either identify an appropriate alternative or advocate for access to the medication (such as through a backup pharmacy) to prevent discontinuity of care.

Delays in continuing treatment with psychotropic medications when inmates with serious mental illness enter a correctional facility may result in clinical deterioration, a mental health emergency, or other adverse events. Incoming inmates who report recent treatment require assessment by health care staff and referral for timely evaluation by psychiatric staff.¹⁵ Medical or psychiatric staff can order bridging medications, if indicated, before that evaluation. However, this practice requires caution when staff are unable to verify an inmate's self-reported medication history. Although changes to an established treatment regimen should be based on an appropriate assessment and sound clinical reasoning (see also Section 4.4, Assessment), incarceration provides an opportunity to evaluate the necessity or appropriateness of continuing to prescribe the psychoactive agents that an inmate was receiving in the community.³²

Occasionally, medications are not transferred with inmates when they move between facilities (e.g., from jail to prison, *vice versa* on remand, or from a prison intake unit to a permanent unit). Transfers can inappropriately interrupt medication continuity until the medication is forwarded or the pharmacy dispenses a new supply. The latter scenario may require a new medication order and additional time to fill, package, and ship the agent to the new facility. There is increasing recognition of the need for effective pharmacy operations within correctional systems. Delays in processing or delivering prescriptions by correctional pharmacies can contribute to medication discontinuity and clinical decompensation.²⁰ A well-managed correctional pharmacy needs a back-up plan for promptly obtaining agents that they do not stock from an off-site pharmacy.

In some cases, inmates in a mental health crisis may be transferred to a local emergency department, community psychiatric hospital, or state hospital for evaluation or inpatient treatment. Similarly, jail inmates may be sent to a state hospital or other off-site

forensic facility for restoration of competency to stand trial. Doctor-to-doctor communication, either verbally or via a written transfer document, may improve outcomes by helping the receiving facility to be aware of the current treatment and recent changes that may have contributed to the need for transfer. The return of inmates from off-site psychiatric settings often poses challenges to medication continuity. For example, medication formularies or procedures for involuntary treatment may differ between the facilities. Psychiatrists for such returning patients are advised to obtain a discharge summary from the sending facility.

Records of outside prior treatment can be integral to clinical and risk assessments. In jails, where length of stay can be relatively short, obtaining such documentation can be challenging. Longer lengths of confinement in prisons can provide the opportunity to obtain more extensive records. In jails where rapid return to the community is common, effective communication between psychiatrists is an integral part of continuity of care, particularly in the case of hand-offs upon entrance or exit from a correctional facility and when release occurs before clinical resolution of substance intoxication and withdrawal, acute psychosis, or suicidal states. Open communication with community clinicians can significantly improve the quality of care and improve reentry from jails and prisons.³³

Ensuring medication continuity after inmates return to the community is essential to reducing the risk of relapse. Discharge planners might arrange for a supply of psychotropic medications or refills to last until the patient can be seen by a community mental health provider. Methods to enhance the likelihood of medication continuity in the community include stabilizing an inmate's mental health before release, using psychotropic medications that are available and not cost prohibitive in the community, and using long-acting medication formulations.^{15,20} For patients anticipated to be released on parole, it may be possible to coordinate with the parole department to make adherence with mental health treatment a condition of parole. Transition planners should link inmates with serious mental illness with timely connections with long-term, community-based mental health programs.³⁴ Case management services can help released offenders to continue to receive long-term mental health care. Growing evidence indicates that community reentry initiatives play a vital role in

improving continuity of care for inmates with mental illness.³⁵

4.2 Coordination with Custody Staff

Delivering psychiatric care in correctional facilities requires active collaboration with custody personnel to effectively navigate the complex matrix of official and unofficial rules, roles, relationships, and communications. Efforts to develop positive relationships with custody staff can yield significant dividends for psychiatrists and patients. Collaborative relationships contribute to lowering barriers to providing care, including ready access to security escorts, flexibility in scheduling appointments with inmates, expedited movement of the clinician within a facility, and ease in obtaining information to enable the psychiatrist to work more effectively with inmates and other staff.

Effective collaboration requires a foundation of mutual respect, cooperation, and ongoing communication.³⁶ Key elements necessary to build successful working relationships with custody staff include a goal of maintaining safety and security, valuing the multidisciplinary approach, and an appreciation of the challenges faced by officers and inmates in the correctional environment. Relationships between psychiatrists and custody personnel can become strained when clinical interventions run counter to standard correctional practices.¹⁵

Psychiatrists navigating in the correctional environment must successfully communicate and interact with staff who operate in a structured chain of command. This chain includes a hierarchy from line officers, to supervising officers, with progressive ranks up to the facility warden or chief administrator. Interactions between inmates and custody staff occur regularly in general population settings, specialized housing (e.g., mental health units), when inmates are on watches, and in segregation units. (See also Section 6.1, Special Settings.) Competent communication supports both security and clinical missions.

Patients in correctional settings are entitled to confidentiality in their mental health care, although with exceptions: some in common with community settings and some unique to corrections.¹⁵ Limits of confidentiality may or may not be defined by state statute, regulations, or institutional policy. Reasonable examples include danger to self or others, inability to care for self, or posing a threat to security (e.g., escape, riot, or drug distribution). When necessary,

disclosure of otherwise confidential information to nonclinical staff should be limited to the minimum necessary to meet standards.¹⁵

Successful coordination with custody staff flows from being available for consultation, sustaining ongoing communication, and agreement on mutual goals. Inmates with active psychiatric symptoms can affect the safety and efficiency of day-to-day operations in a correctional facility. Suboptimal adaptation of inmates to the correctional environment can lead to behavioral dysregulation and disruption that taxes staff resources, creates stress for officers, and increases the risk of injury for inmates and staff. Problem solving is most effective when communication underscores shared responsibility.³⁷ Psychiatrists have much to contribute in helping to stabilize the environment for the benefit of both inmates and officers. Officers and psychiatrists can serve as resources for one another, and in doing so, develop positive relationships built on confidence and trust.

Psychiatrists may be involved in formal or informal training to help officers understand common symptoms and signs of mental illness in inmates along with psychological and behavioral manifestations of stress in both inmates and staff. A psychiatrist can provide valuable information to help officers identify when an inmate is having troubles that go beyond an expected reaction to typical stressors in the correctional environment and thus may pose a risk to self, peers, or staff. Addressing and alleviating the symptoms of mental illness in inmates reduces the stress level of both inmates and the custody staff who work with them.

Custody staff may serve as a resource to psychiatrists in a variety of ways. Psychiatrists have relatively little contact with inmates compared with custody staff who are present in the facility 24 hours a day. Officers can thus serve as the psychiatrist's eyes and ears within the institution and are typically the first to spot changes in the inmate's routine and behavior. Information provided by officers can assist the psychiatrist with diagnosis, implementation of treatment plans, and ongoing risk assessment and management. Useful information includes observations of an inmate's interpersonal interactions, adaptive and maladaptive responses to events, attitude, personality style, and hygiene. Officers' observations can support the clinical assessment of neurovegetative signs and symptoms, as well as medication side effects (e.g., akathisia or dyskinesia). Information from

custody staff may illuminate the consistency between a self-report and observed behavior, thus aiding in narrowing a differential diagnosis. In most correctional settings, officers accompany nursing staff during medication administration to those on cell blocks or in medication lines, allowing the staff the opportunity to interact daily with inmates receiving psychotropic medications. Officers can provide information about medication adherence, use (or misuse) of keep on person (KOP) medications that are stored in the inmate's cell, and behaviors that may increase the risk of self-harm, including hoarding over-the-counter medications.

Officers can provide additional information that may clarify the context, circumstances, and conditions affecting an inmate's experience, including changes in institutional security classification, results of cell searches, reports of personal and professional visits, and content of shift and behavior logs. Reports of stressors are particularly important, including the inmate's receipt of distressing news or changes in behavior during or after phone calls and scheduled visitations.

Monitoring for illicit substance use in correctional settings is a complex process that involves correctional and health staff. One means of detecting illicit substance use in correctional facilities is toxicology, which typically involves obtaining urine samples but may also involve the collection of saliva, hair, or other samples. There are many steps from the point of collection to final interpretation of results and subsequent security actions. Depending on the clarity of facility policies governing toxicology screening, the role of the psychiatrist may be nebulous. Given the potential disciplinary outcomes for prisoners based on toxicology results, competent interpretation is crucial. In systems that lack a designated medical professional who is competent in the interpretation of toxicology screens, the psychiatrist may be asked if a positive result could be explained by the inmate patient's prescribed medications. Although psychiatric medications are not the only class of pharmacologic agents that can cause false-positive results in urine toxicology screens, such medications are frequent culprits. In such a situation, the psychiatrist should obtain consent from the patient (preferably written, if practical) and disclose the minimum amount of information necessary.

Several psychiatric medications can cause false-positive results in immunoassay drug screens.³⁸ Bu-

propion, chlorpromazine, and trazodone have been associated with false-positive amphetamine screens (Ref. 38, p 389); amisulpride, sulpiride, quetiapine, chlorpromazine, clomipramine, and thioridazine with false-positive opiate screens (Ref. 38, p 392); sertraline with false-positive results for benzodiazepines (Ref. 38, p 390); and lamotrigine and venlafaxine with false-positive results for phencyclidine (Ref. 38, p 393). The list of psychiatric medications that cause false-positive LSD results includes: amitriptyline, benzphetamine, bupropion, buspirone, chlorpromazine, desipramine, doxepin, fluoxetine, haloperidol, imipramine, labetalol, risperidone, sertraline, thioridazine, and trazodone (Ref. 38, p 393).

A distinction should be made between forensic (i.e., for the purpose of determining if an inmate has committed a crime or a rule infraction) and clinical (i.e., for the purposes of diagnosis and treatment) toxicology testing. The National Commission on Correctional Health Care prohibits the participation of health care staff from collecting information for forensic purposes.³⁹ Clinical toxicology testing will be ordered by a medical professional for medical purposes, and results are protected by confidentiality unless otherwise specified by statute, regulation, or institutional policy. Should confidentiality not be guaranteed in this scenario, the inmate patient should be apprised before testing.

4.3 Coordination with Other Professionals

Correctional psychiatrists ordinarily do not work in a vacuum. Many other noncustody professionals provide services and are key partners in delivering care and treatment to inmate patients. The mental health team may include psychologists, counselors, mental health nurses, and mental health assistants. The broader health care team may include primary care physicians, specialty consultants, nurse practitioners, physician assistants, nurses, nursing assistants, pharmacy technicians, and medical records personnel. Psychosocial services may also be provided by noncustody corrections personnel, such as case managers, social workers, recreation staff, educational staff, vocational trainers, and chaplains. Volunteers from the community may provide tutoring, pastoral counseling, religious services, leisure activities, and services in support of Alcoholics and Narcotics Anonymous programs. Professional staff that interact with inmates can provide valuable information to assist in diagnosis, implementation

of treatment plans, and ongoing risk assessment and management.

The size and breadth of the health care team depends on the size of the facility and inmate population. Large jails and prisons may have extensive teams, whereas smaller facilities may have only a single medical staff member, practicing solo. Primary-care clinicians may evaluate inmate patients in acute care, general, or chronic care disease-based clinics (e.g., diabetes, infectious disease, and chronic obstructive pulmonary disease (COPD)). Correctional systems may contract with specialty physicians to run clinics on site or may transport inmates into the community.

Ideally, psychiatric care in correctional facilities is delivered in a collaborative multidisciplinary medical context. Clear and open communication between the primary care medical team and the psychiatrist is a critical component of effective, quality-driven health care. Members of the primary care medical team may refer inmates to mental health professionals to address distress related to medical problems or for emerging symptoms of mental illness. Psychiatrists in correctional settings may be consulted by the medical team for various reasons, including emerging psychiatric symptoms, distress related to medical problems, and (when in doubt) an inmate patient's capacity to give (or decline) informed consent. Psychiatrists may collaborate in the care of complex medical conditions that co-occur with emotional and psychological symptoms, including hepatitis C and its treatment. Primary care clinicians may assist in monitoring and managing complications and side effects of psychiatric treatment (e.g., metabolic complications, constipation).

Communication and collaboration with nursing staff are essential. Nurses typically are the medical staff members with the most frequent clinical contacts with inmate patients and are in a good position to relay important observations and information to the psychiatrist. Nurses typically conduct "sick call" clinics to screen requests for care and provide triage, appropriate initial treatment, and referral. This triaging process can be a significant source of referrals to the psychiatrist. Nursing staff dispense medications that are kept on person (KOP), and they administer directly observed therapy (DOT) medications during pill calls. Nurses may also see inmates during health care rounds in general population or segregation units. They may relay information such as

lab test results, behavior of inmate patients on observation, medication adherence, and response to treatment.

Nonprescribing mental health staff are important partners in delivering and monitoring care. These individuals may provide screening services for inmates at admission, upon interfacility transfer, and at critical times, such as transfer from general population to segregation housing. They may be responsible for rounds in segregation, an important component of surveillance for decompensation in this environment. Mental health clinicians may provide psychotherapy either as a crisis intervention or as part of the overall treatment plan. These additional clinical contacts can be an important source of information about medication response, medication adherence, and adaptive functioning.

Nonclinical correctional professionals have a significant influence on inmates and can be important additional allies in providing relevant clinical information. Educational staff offer classroom and individual instruction, and they often have much contact with inmates. Teachers may be in the best position to describe an inmate's cognitive and behavioral abilities, attention, challenges, and response to treatment. Correctional case managers monitor sentence length and release dates, working with inmates to develop re-entry plans and support networks in- and outside the prison. Recreational staff have frequent interactions with inmates and can share important information about inmates' physical limitations and behavior with peers. Correctional chaplains play an important role in the spiritual lives of inmates who request their services. They provide pastoral and supportive counseling in a manner consistent with the inmates' faith and belief systems. It is important to understand the meaning of spirituality and role of religious practice for an inmate receiving psychiatric treatment and to make appropriate referrals to this important source of support. Consultation with the chaplain may be appropriate when a religious practice (e.g., fasting) potentially interferes with treatment. A well-trained and clinically sensitive chaplain can be an integral part of the wider treatment team.¹⁵

4.4 Assessment

Appropriate decision-making regarding prescribing (including a decision to not prescribe) is dependent on quality assessment. Psychiatric evaluations in jails and prisons may be challenging because of oper-

ational and clinical aspects that differ from community settings. This section describes the elements of the psychiatric assessment of greatest importance for identifying and documenting an inmate patient's medication needs. It is not intended to describe all elements of a comprehensive psychiatric assessment. Evaluations for administrative or forensic reasons and how to conduct a complete assessment of suicide and violence risk are beyond the scope of this document. This section relies heavily on the AAPL Guideline for the Forensic Assessment⁴⁰ as well as the American Psychiatric Association's Practice Guideline for the Psychiatric Assessments of Adults, Third Edition.⁴¹

A referral for a psychiatric evaluation may originate from several sources: custody, administration, medical providers, nursing staff, other mental health clinicians, family members, or a self-referral. Important goals for initial psychiatric evaluation include preliminary diagnostic impression, assessment of suicide and violence risk, and treatment recommendations. Besides history from the patient, valuable information may be gleaned from the referral source, the institutional medical record, the physical examination, diagnostic tests, custody or classification records, outside medical records, and collateral informants.

The setting of the evaluation (e.g., general-population clinic, mental health unit, infirmary unit, or segregated housing) is an important first consideration. (See also Section 6.1, Special Settings.) Reasonable steps should be taken to prevent others from hearing the interview to better maintain confidentiality, while respecting the safety of the clinician and others. For segregated housing settings, confidentiality is improved by arranging in advance with custody staff for the evaluation to occur in a secure location out of earshot from other inmates.

The American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition,⁴² suggests that greater suspicion of malingering is appropriate in a medicolegal context, and studies have identified high rates of malingering in jails¹⁷ and prisons.¹⁸ Inconsistencies between symptoms and behavior, atypical symptoms, and rational ulterior motives for presenting symptoms (e.g., housing changes, special privileges, avoiding culpability or punishment for institutional infractions, and obtaining medications for nonclinical purposes) may alert correctional clinicians that the inmate may be

feigning or exaggerating illness. Referral for psychological testing, if possible, may help to clarify whether malingering is present.⁴⁰ However, malingering and serious mental illness are not mutually exclusive,⁴³ and malingering mental illness may be a creative method of seeking help for legitimate institutional problems (e.g., harassment or other conflicts with peers or custody staff).

When the patient does not speak the same language as the psychiatrist, the resulting communication barrier presents a substantial clinical challenge. A common practice in correctional settings is to use bilingual inmates or nonclinical staff for interpretation. The dangers of this approach include the lack of confidentiality, reluctance to share information via a nonconfidential interpreter, undue influence conferred by an interpreter, and poor quality of interpretation.⁴⁴ In light of these concerns, for nonemergency psychiatric evaluations of inmate patients, when needed, the use of either clinical staff or a qualified, confidential interpreter is recommended.

We suggest that the psychiatrist perform as comprehensive an evaluation as the circumstances allow. While interviewing the patient, important elements of history to obtain include:

Presenting problems

Current stressors, including interactions with cellmates, other peers, correctional officers, and other staff; bad news from the community; disciplinary infractions; gang involvement

Current and historical psychiatric disorders and historically associated symptoms

Substance use history, including misuse of alcohol, tobacco, prescription medications, and non-traditional illicit substances that may not be detected in standard drug screening tests (e.g., K2/Spice)^{45,46}

If substance use disorder is identified, recent use of substances, history of withdrawal symptoms, history of abstinence, and relationship to psychiatric symptoms

History of inpatient or emergency department psychiatric care

Prior psychiatric treatments (if known: type, duration, dosages, efficacy, and side effects)

History of medication nonadherence and involuntary treatment

Current medications, allergies, and general medical conditions including head injuries

Family history of mental illness and substance use disorders

Social history, including cultural origins, educational level, occupational history, sexual and reproductive history, history of military service, physical or sexual traumas, and juvenile and adult legal history (including prior experience with and adjustment to incarceration)

History of self-harm and suicide attempts

History of violence toward others

Psychiatric providers should perform an appropriate mental status examination and, if indicated, perform or obtain a focused physical examination, to include but not limited to the following:

Conduct or have access to a recent physical exam with vital signs, height, weight, and body mass index

Observe general appearance

Observe coordination and gait

Observe for involuntary movements, tremor, and abnormalities in motor tone

Observe speech pattern (i.e., speed, tone, fluency, and articulation)

Assess for current problems with mood, anxiety, thought content and perception

Assess for current hopelessness, passive thoughts of death, suicidal ideas, suicidal plans, and aggressive thoughts

Assess memory and attention

Clinical judgment may guide the frequency of follow-up visits. We suggest having more frequent contacts with patients having active psychiatric symptoms or side effects, recent medication changes (including discontinuation), known serious institutional or outside stressors, or medications prescribed over objection in accordance with institutional policy.

4.5 Patient Education and Psychotherapeutics

The effectiveness of psychotherapy for many psychiatric disorders, either as monotherapy or as an adjunct to medication, has been well-established. Positive outcomes for combined treatment with both

medication and psychotherapy have been demonstrated for mood disorders,⁴⁷ anxiety disorders,⁴⁸ adult attention-deficit disorder,⁴⁹ and personality disorder,⁵⁰ among others. Psychotherapy can be of value, even for the most serious mental illnesses, including schizophrenia.⁵¹

Providing psychotherapy in jails and prisons presents several unique challenges.⁵² Facility staffing patterns may not be sufficient for providing meaningful psychotherapy, beyond mere monitoring of the prisoner's clinical status. Frequent patient turnover (caused by releases, interfacility transfers, or intrafacility relocations) is expected to disrupt long-term psychotherapies. Limitations on real or perceived confidentiality, and general lack of trust, may be barriers for engagement.

Nevertheless, the available treatments for psychiatric disorders in correctional settings cannot be restricted to medications alone.¹¹ An inmate patient may receive psychotherapy from a psychiatrist, a psychologist, a social worker, a counselor, or other appropriately trained professional mental health staff.¹⁰ (See also Section 4.3, Coordination With Other Professional Staff.) Consistent with national trends in the community,⁵³ psychiatrists in jails and prisons are less likely to provide psychotherapy than they are to prescribe medication. In correctional facilities, a nonphysician directly providing psychotherapy is the norm when such therapy is available. The psychiatrist should play a leadership role in an inmate patient's treatment team.⁵⁴ Whether the formal relationship with the nonphysician mental health provider is supervisory, consultative, or collaborative, coordination of care in a split-treatment model is critically important.⁵⁵

It is valuable for any mental health staff in correctional facilities, and especially psychiatrists, to engage patients in psychoeducation about diagnosis and treatment. Patient education on some subjects, including sleep hygiene (Appendix I) and depression self-management activities (Appendix II), may in some cases minimize or eliminate the need for pharmacotherapy. Mental health providers may choose to facilitate this process by selecting or creating handouts. We suggest that patient education materials provided for inmates be developed by or in consultation with a psychiatrist, be sensitive to the limitations on the freedom of the patient, use plain speech and avoid the use of jargon, and be ap-

proved for distribution to inmates by an authorized administrator.

4.6 Informed Consent

A prescriber in ordinary circumstances has an ethics-based and legal duty to disclose the information reasonably necessary for a patient to make an intelligent, voluntary, and competent decision regarding a recommended psychotropic medication.⁵⁶ Working with inmates does not abrogate this responsibility.⁵⁷ Federal appellate decisions have supported the right of inmates to provide informed consent before being prescribed psychotropic medications,^{58–60} although, in *White v. Napoleon*, the Third Circuit Court qualified that “prisoners may not bring treatment to a halt, insisting on answers to questions that are unreasonable, time-wasting or intended to turn the doctor-patient relationship into a battle for control over treatment.” (Ref. 58, p 113). In *Pabon v. Wright*, the Second Circuit Court concurred, indicating that a prisoner’s right to information about a proposed treatment was “far from absolute.” (Ref. 60, p 250).

Whether truly voluntary consent can be obtained in a correctional environment, given the inherently coercive nature of these settings, is controversial.⁵⁷ Limited education, limited access to information (e.g., internet access), and limited prior access to health care services may put inmates at a disadvantage when compared with typical patients in the community making medication decisions. Also, privacy limitations may influence an inmate patient to decline indicated medication, because they may be concerned about being viewed as having mental illness by peers and correctional officers when they go to mental health appointments and to the nurse for medication. Factors limiting a prescriber from obtaining valid informed consent include formulary restrictions, language and cultural barriers, limited time with patients, and conflicting duties to the institution. All may constrict the discussion about treatment options and risks.

Despite these challenges, a discussion that promotes informed consent is a necessary and important component of every clinical interaction involving prescribing in nonemergency situations. At a minimum, this conversation includes the indication for the treatment, common and serious risks, and alternative options including reasonable nonformulary treatments and no medication, if appropriate. Al-

though additional information relevant to medication administration in a correctional setting may have to be provided (e.g., a set early-evening medication line time that may complicate the prescription of a sedating medication), the discussion regarding informed consent may not be substantially different from that in the community setting. Failure to document informed consent sufficiently could generate a risk of liability. A formal consent form will facilitate adequate documentation and minimize liability risk; an individualized chart note outlining the discussion with the inmate patient is an acceptable alternative.⁶¹

If medication is prescribed involuntarily on an emergency or nonemergency basis (see Section 6.4, Treatment Over Objection), informed consent is not required. Nevertheless, we suggest that the provider attempt to discuss elements of medication consent, including indications and risks to the extent possible, consistent with safety and professional judgment. Simple consent (i.e., assent to take medication, regardless of full capacity to understand risks and benefits) in this context, when possible, may improve patient cooperation, staff safety, therapeutic alliance, and could be a prelude for later informed consent.

5. Evidence-Based Prescribing Practices in Correctional Institutions

5.1 Psychiatric Emergencies

The management of most psychiatric emergencies does not differ substantially in the correctional setting from an outpatient or an emergency room setting. For example, the 2009 revision of the Schizophrenia Patient Outcome Research Team study (PORT) recommended that, for the treatment of acute agitation in schizophrenia, that an oral or intramuscular antipsychotic, alone or in combination with a rapid-acting benzodiazepine, be used.⁶² Medications used in the community to manage psychiatric emergencies should be available in jails and prisons, so long as they have appropriate facilities and qualified staff to administer them safely. For example, the risk for abuse of benzodiazepines is not sufficient reason to avoid using them in correctional settings.

The PORT study also recommends, “If possible, the route of antipsychotic administration should correspond to the preference of the individual” (Ref. 62, p 98). A review of the management of patients with agitation suggests that patients with agitation typi-

cally prefer an oral treatment, and there is little difference in outcome when comparing oral versus injectable medications.⁶³ Intramuscular injections of benzodiazepines or antipsychotics, if clinically necessary and appropriate to manage behavioral emergencies, may require coordination with custody for safety reasons. When restraint is necessary to administer emergency medications, protocols for clinical monitoring by appropriate staff is necessary, especially given the established risk of death and other adverse outcomes in these circumstances.⁶⁴ A complete discussion of restraint in correctional settings is beyond the scope of this document.

The capacity for correctional facilities to provide in-house emergency medical and psychiatric care, including emergency psychiatric medications, is more difficult to achieve in smaller systems with limited resources and staffing, such as jails, lockups, and smaller prisons. When a correctional facility does not have the capacity to provide 24-hour emergency psychiatric care, provisions should be made in policy for transfer to a setting capable of competently managing these situations. Training of correctional officers to recognize psychiatric emergencies is on the rise and improves the ability to recognize and more quickly assess these situations.⁶⁵

Emergency involuntary medication is appropriate in correctional settings for the same reasons as it is elsewhere. Such care does not require inmate consent, but should be limited to what is medically necessary and should only be for a limited length of time.⁶⁶ (See also Section 6.6., Informed Consent.) It is essential that emergency involuntary medications not be confused with nonemergent forced medications, which is addressed in Section 6.4, Treatment Over Objection.

As is often encountered in inmate patients who have recently been in the community, withdrawal from alcohol or benzodiazepines is a medical emergency with significant risk of morbidity and mortality. Long-acting benzodiazepines are the medications most often used for supervised withdrawal from alcohol and benzodiazepines.⁶⁷ For patients with cirrhosis, benzodiazepines that are relatively shorter acting (e.g., clonazepam) or have fewer metabolites (e.g., lorazepam or oxazepam) may be appropriate. As above, the risk for abuse of benzodiazepines is not sufficient reason to avoid using them in correctional settings. The risk may be mitigated by clinically appropriate time-limited protocols and supervision on

a medical unit. A symptom-based (as opposed to a preemptory taper) strategy using a long-acting benzodiazepine has been recommended for safer and more rapid detoxification of patients while minimizing the overall use of medications in a correctional setting.⁶⁸ Fluids and thiamine are important adjunctive treatments for acute alcohol withdrawal, the latter to prevent neurologic sequelae.^{67,69}

The recognition and treatment of withdrawal from other substances in correctional settings is clinically appropriate and humane. Opiate withdrawal is widely regarded as not life threatening, but a classic paper on heroin-dependent individuals in the United Kingdom reported the suicides of four prisoners who were in the midst of drug withdrawal.⁷⁰ For opiate withdrawal, options include agonist medications such as methadone or buprenorphine, or α -2-adrenergic receptor agonists like clonidine.⁶⁸ Management of withdrawal from other substances is largely supportive.⁶⁹

It is appropriate to consider intoxication for inmate patients presenting with an acute change of mental status, especially for those with fewer risk factors for delirium. The limited access to controlled or illegal substances in jails and prisons does not exclude them as a factor. Also, legitimately prescribed medications may be either hoarded for personal recreational use, or diverted to peers who are not intended to receive them. Tricyclic antidepressants are an example of a potentially diverted medication in correctional settings with a substantial risk for morbidity or mortality by overdose, and may be readily discovered by testing serum levels. (See also Section 6.5, Abuse, Misuse, and Diversion of Psychotropic Medications.) Clinical screening for drugs of abuse is appropriate in otherwise unexplained cases of delirium. (See also Section 4.2, Coordination with Custody Staff.)

Hunger strikes occur more frequently in prisons than in most other psychiatric settings. They often have very little to do with a psychiatric illness and are more often undertaken to achieve a desired response from the correctional system. Most hunger strikes are brief, and therefore only a small percentage are life threatening.⁷¹ An adequate review of the ethics and clinical dilemmas involved in psychiatric management of hunger strikes is beyond the scope of this document. If called upon to evaluate voluntariness of food refusal, decision-making capacity, or advance directives for hunger striking inmates, the correc-

tional psychiatrist is advised to be aware of the international guidelines for physician management of hunger strikes.⁷² Although these situations are generally managed administratively and medically, it is essential to confirm that there are no psychiatric disorders, such as depression or psychosis, contributing to this behavior. Feelings of lethargy and poor concentration, for example, may be sequelae of insufficient sustenance. However, symptoms such as anhedonia, suicidal ideation, guilt, depressed mood, and decreased self-worth are unlikely to be a direct effect of the hunger strike, and may suggest an independent mood disorder.⁷²

When a psychiatric diagnosis is thought to contribute to food refusal, it is useful to consider medications that can be given intramuscularly (should it become necessary to administer psychotropic medication on an emergency or nonemergency basis), if a nasogastric tube has not been placed. It is important to consider the risks of administering psychiatric medications to a malnourished or dehydrated patient. Examples of medications that require particular caution include bupropion, with its known risk of seizures in patients with an eating disorder; tricyclic antidepressants, with a risk of aggravating orthostatic hypotension; and lithium, with a risk of toxicity in the setting of dehydration. If administering medications with greater risk for QTc prolongation, such as certain antipsychotics, electrocardiogram (EKG) monitoring is advised.⁷³ Similarly, if already on psychiatric medications, the safety of those medications in the setting of the hunger strike must also be evaluated.

As discussed in Section 5.6, Trauma- and Stressor-Related Disorders, inmates, especially those with mental health problems, are at high risk for being physically or sexually victimized. Acute stress symptoms, including anxiety, agitation, irritability, depression, insomnia, or exacerbation of an existing mental illness are commonly seen in the context of physical or sexual assault, and when severe, should be managed as a psychiatric emergency. Reporting that follows institutional policy, and assessment for immediate patient safety are critical. Symptomatic pharmacologic management of the acute physiologic and emotional symptoms related to an acute trauma may be clinically appropriate.⁷⁴ If symptoms are less urgent, community guidelines suggest that watchful waiting is an appropriate approach in the first four weeks after a trauma.⁷⁵

5.2 Schizophrenia and Other Psychotic Disorders

The appropriate identification and management of schizophrenia and other psychotic spectrum disorders is an essential component of an adequate correctional mental health care system. According to a meta-analysis of the prevalence of serious mental disorders in prisons, rates of 3.7 percent for males and 4.0 percent for females suggest that psychotic disorders are several times more prevalent in incarcerated settings than in the community.⁷⁶

Evidence from community samples suggests that untreated or undertreated psychosis is associated with poor quality of life, lower life expectancy, violence, victimization by others, self-injury, and treatment resistance.^{5,6,77} However, there is substantial risk of morbidity and even mortality from antipsychotic medications.⁷⁷ (See also Section 6.2, Adverse Effects of Medications.) A well-reasoned diagnosis based on an adequate assessment will better ensure appropriate treatment and reduce the risk of unnecessary prescribing of antipsychotic medication. Environmental factors in jails and prisons may complicate the assessment of psychotic symptoms. Suspiciousness, for example, may be reality based and potentially adaptive. In distinguishing psychotic disorders from feigned illness, it is valuable to take note of objective signs, such as negative symptoms, formal thought disorder, and disorganized behavior, and to obtain relevant collateral information from family or staff who have observed the patient. When in doubt and when consistent with safety, consider delaying treatment until sufficient observation of the patient (preferably on a designated mental health unit) and a confident diagnosis has been made.

The 2004 APA Practice Guideline for the Treatment of Patients with Schizophrenia promotes three goals: 1) reduce or eliminate symptoms, 2) maximize quality of life and adaptive functioning, and 3) promote and maintain recovery from the debilitating effects of illness to the maximum extent possible.⁷⁸ These objectives remain relevant in a correctional setting. A patient's functioning in a jail or prison may be reflected by participation in activities such as work or programming, compliance with institutional rules and appropriate staff direction, interpersonal interactions, and personal hygiene.

The use of antipsychotic medication is indicated for the treatment of psychotic illnesses in any setting and the latest NICE guideline reports that there is no efficacy-based evidence for recommending one anti-

psychotic versus another for first-line treatment.^{79,80} When selecting an antipsychotic medication for initial treatment, considerations include the patient's prior response to medication, history of side effects, history of nonadherence, medical comorbidities, and the risk for drug–drug interactions.⁸¹ The side-effect profile of the medication (e.g., sedation, activation) in relation to patient symptoms is important to consider along with patient preference as much as the institution's formulary and security considerations will allow. (See Section 6.5, Misuse, Abuse and Diversion of Psychotropic Medications.) Although formulary prescribing is more convenient, the psychiatrist may need to advocate for a nonformulary medication when it represents a better clinical choice. We suggest in such a situation, that the psychiatrist be prepared to obtain collateral information to support the nonformulary request.

Consider the adjunctive use of benzodiazepines to treat catatonia, agitation, or anxiety in the acute phase of treatment.⁸¹ We recommend that benzodiazepines be closely monitored, administered in crushed form, and usually prescribed for the short term when used as an adjunct treatment for psychosis, given their inherent risk for abuse and diversion.

Patients with psychotic disorders need closer monitoring in the acute phase of treatment. The dose of antipsychotic medication may be titrated to effect, as tolerated.⁸¹ In the event of failure to respond to the chosen treatment, consider overt or covert nonadherence. (See also Section 6.3, Medication Nonadherence.) Although serum levels of antipsychotics are of variable clinical utility, this strategy may have value for identifying nonadherence.⁸² Long-acting injectable antipsychotic medications are another strategy to reduce nonadherence.^{77,83} If treatment is refused and the patient may have impaired decision-making capacity, consider pursuing medications over objection (see Section 6.4, Treatment over Objection), in accordance with local statutes, regulations and institutional policies.

Generally at least four to six weeks is recommended for an adequate trial.⁸¹ If an adherent patient fails to respond to antipsychotic medication, verify that the dose has been optimized, that there has been adequate time for response, and that the medication is being administered for optimal efficacy. Considerations include timing and frequency of administration, drug–drug interactions, and relationship of pill calls to meal times. For some antipsychot-

ics like ziprasidone⁸⁴ or lurasidone,⁸⁵ problems with absorption may arise when institutionally scheduled meal times are not in sync with scheduled pill calls.

Patients in whom two adequate trials of antipsychotic medications have failed may be candidates for clozapine.⁸⁶ Requirements for blood monitoring and reporting⁸⁷ may present logistical challenges for prescribers in correctional settings. However, clozapine has been demonstrated to be effective in several prison settings^{88,89} and may reduce the risk of disciplinary infractions in those patients for whom it is indicated. A recent study showed that inmates in a Canadian prison who were prescribed clozapine at the time of release took significantly longer to reoffend than those prescribed other antipsychotics.⁹⁰

Community practice guidelines recommend continuing antipsychotic medications in the maintenance phase to reduce the risk of relapse, using the lowest dose that accomplishes this aim and minimizes side effects.⁸¹ Given the risks of emerging side effects and relapse, we recommend closer follow-up of patients whenever medication doses are increased or decreased. We furthermore recommend caution when discontinuing antipsychotic medications for patients with a confident diagnosis of a chronic psychotic illness. Transient psychotic symptoms, especially nonbizarre persecutory delusions, have been observed in prisoners and may be a function of environmental stressors such as solitary confinement⁹¹ or exposure to trauma. In such cases, once asymptomatic, a trial off medication with careful monitoring may be appropriate.

Polypharmacy and high doses of antipsychotics are practices that have been identified in some correctional settings.⁹² Although it may be appropriate for a few patients, we recommend caution with this approach. Antipsychotic polypharmacy is associated with a greater incidence of side effects, with limited evidence to support a clinical benefit for most patients.⁷⁹

5.3 Bipolar and Related Disorders

The prevalence of bipolar disorder is estimated to range from two to seven percent in prisons.⁹³ Bipolar disorder, along with alcohol and drug use disorders, has a greater impact on violent reoffending than other mental health conditions.⁹⁴ Persons with bipolar disorder, compared with others diagnosed with a serious mental illness, also appear to have the highest rate of overall criminal recidivism.³⁴

Community guidelines^{95,96} call for using lithium, divalproex sodium, or a second-generation antipsychotic for first-line therapy for acute manic or mixed episodes. An antipsychotic medication may be combined with lithium or divalproex sodium in the case of a severe episode or when psychotic symptoms are present. Lamotrigine, in light of its need for gradual titration to an effective dose to minimize the risk of a life-threatening rash, is not recommended for the management of acute bipolar illness.⁹⁵ Although posing a risk for abuse or diversion, especially in the correctional environment,⁹⁷ short-term use of benzodiazepines may be appropriate to treat agitation or mania.⁹⁵ Appropriate risk management strategies for benzodiazepines in corrections include crushing tablets and directly observed therapy (i.e. nursing administered medications with mouth checks). (See also Sections 6.3, Medication Nonadherence and 6.5, Misuse, Abuse, and Diversion of Psychotropic Medications.)

For bipolar depression, there is evidence to support the use of olanzapine combined with fluoxetine, olanzapine monotherapy, quetiapine, or lurasidone.^{95,96,98} The most recent update of the APA Guideline for the Treatment of Patients with Bipolar Disorder suggests that there is moderate evidence for the use of antidepressants combined with traditional mood-stabilizing medication for bipolar depression.⁹⁶ This guideline advises against using antidepressant monotherapy in patients with bipolar illness.⁹⁶ In general, antidepressants should be used with caution in patients with bipolar depression. Experts recommend reserving them for severe cases, with discontinuation after resolution of the depressive episode.⁹⁹

In general, continuation of the agent used in the acute phase of treatment is appropriate, if effective and tolerated. If a patient with bipolar disorder has a recurrence of a mood episode, consider checking a serum level (if prescribed an agent for which this is available) to optimize treatment⁹⁵ and to verify adherence. Consider also active substance use or a comorbid medical condition,⁹⁶ with laboratory investigations targeted accordingly.

For patients prescribed lithium, National Institute for Health and Care Excellence (NICE) guidelines recommend checking serum levels one week after starting lithium and after every dosage change. For patients on maintenance therapy, check serum levels every three months for the first year of treatment and

thereafter every six months. More frequent monitoring may be appropriate for older individuals; in cases of renal impairment; and for those with ongoing bipolar symptoms, a history of noncompliance, or levels of 0.8 mM or higher.⁹⁵ Consistent with these guidelines, we suggest collaboration with medical providers to avoid inadvertent prescription of medications likely to interact with lithium, to counsel patients about these risks if they have access to over-the-counter anti-inflammatory medications via the commissary, with consultation as necessary for specific cases.

Some community guidelines do not recommend routine monitoring of serum levels for valproate, but determining these levels may be valuable in relation to efficacy, tolerability, and compliance. The FDA recommends that patients receiving valproate undergo a check of transaminases at baseline and six months thereafter,¹⁰⁰ as well as serum levels when doses are changed and “whenever enzyme-inducing or inhibiting drugs are introduced or withdrawn” (Ref. 100, p 1). As recommended by NICE guidelines, the psychiatrist should consider checking a hepatic panel and complete blood count at baseline, after six months, and annually thereafter.⁹⁵

When selecting an antipsychotic to treat bipolar disorder in a correctional environment, the cautions discussed elsewhere regarding abuse and diversion apply. (See Section 6.5, Misuse, Abuse and Diversion of Psychotropic Medications.)

Algorithm-based pharmacotherapy for bipolar disorder for prisoners was systematically evaluated in two studies^{101,102} in Connecticut and showed improved outcomes on symptom scales and quality of life. A detailed review of the Texas Implementation of Medication Algorithms (TIMA) is beyond the scope of this document, as it is considered out of date (Trestman R, personal communication, January 2016). Nevertheless, these studies are promising in terms of using a structured and stepwise approach for the management of bipolar disorder in correctional settings.

There has been some other research to evaluate the value of mood stabilizers in correctional settings. A chart review of inmate patients in Connecticut supported the use of divalproex sodium for impulsivity and mood lability, although benefits for these problems were also observed in subjects without bipolar disorder.¹⁰³ Similar positive results have been noted for impulsive aggression and violence, not necessarily

tied to diagnosis, in prisoners who are receiving lithium.¹⁰⁴

To our knowledge, the psychopharmacologic treatment of cyclothymic disorder has never been systematically studied in correctional populations. Patients with cyclothymia may be particularly prone to mood switching from antidepressants and side effects from antipsychotics.¹⁰⁵ Psychiatrists in correctional settings frequently encounter patients with cyclothymic symptoms, but are cautioned that none of the medications used for bipolar disorder have been FDA-approved for, or even specifically studied for, cyclothymic disorder.

5.4 Depressive Disorders

When addressing common complaints about depression in correctional settings, we suggest that the psychiatrist approach these cases with a broad differential diagnosis respectful of comorbidities and alternative explanations for mood symptoms in incarcerated persons. Especially in those who have recently been in the community (e.g., pretrial inmates, parole violators, and returning inmates from halfway houses), consider acute adjustment problems or symptoms referable to intoxication or withdrawal from a substance. Transient or subthreshold depressive symptoms may be better explained by a personality disorder or more chronic adjustment problems. (See also Section 5.6, Trauma- and Stressor-Related Disorders.)

Nevertheless, as in the community, major depressive disorder is the most common serious mental illness found in incarcerated settings. In a systematic review on prevalence rates in corrections, major depression was found in 12 percent of females and 10 percent of males.⁷⁶ A study of depression in pretrial detainees using psychological instruments found the rate of moderate to severe depression symptoms of 25.3 to 28.4 percent.¹⁰⁶

Some community guidelines recommend using rating scales both to evaluate depression and to monitor response to treatment,¹⁰⁸ and they may be a useful tool in differentiating a transient depression from one that may benefit from pharmacotherapy. Though rating instruments have been used in studies of inmates with depression, to our knowledge no studies have been conducted thus far to test the validity of depression scales in jails or prisons. Given the realities of confinement, such scales may be confounded in correctional settings by questions about

loss of interest, inability to make decisions, and loss of libido.¹⁰⁶ We are skeptical of self-report rating scales, given the high rates of malingering in these settings. (See Section, 4.4 Assessment.) However, note that clinician-rated scales such as the Quick Inventory of Depression Symptomatology-Clinician (QIDS-C)¹⁰⁷ may be useful. To date, no studies have been conducted to test the validity of the QIDS-C in correctional settings.

Cognitive behavioral or interpersonal psychotherapy, not antidepressants, are the best evidence-based treatments for subthreshold depressive symptoms.¹⁰⁹ However, even for mild to moderate major depressive episodes, antidepressant medication is recommended by the most recent versions of community guidelines.^{108,109} For more severe episodes (including complex depression, depression with psychotic features or with severe self-neglect or if otherwise life-threatening), medication is necessary, and Electroconvulsive Therapy (ECT) may be considered.¹⁰⁸ (See also Section 6.6, Electroconvulsive Therapy.) Although the clinical value of antidepressant medications for less severe cases of depression has been questioned,¹¹⁰ in some correctional settings, such as jails or segregated housing, psychotherapy may not be available or practical. Regardless, patient education (including depression self-management, see Appendix II) and psychotherapeutic techniques are of value in treating depression of any severity and should be provided whenever possible and appropriate. (See also Section 4.5, Patient Education and Psychotherapeutics.) For patients complaining of insomnia in combination with a depressive disorder, advice on sleep hygiene may be helpful.¹¹¹ (See also Appendix I and Section 5.10, Insomnia and Sleep-Wake Disorders.)

When pharmacotherapy is indicated, factors to consider when selecting an initial antidepressant include the medicine's side effect protocol, pharmacological properties (e.g., how frequently it must be administered), and prior response to treatment.¹⁰⁸ The selective serotonin reuptake inhibitors (SSRIs) or the serotonin-norepinephrine reuptake inhibitors (SNRIs) are appropriate for first-line treatment for depression in this population. SSRIs in particular are as effective as other antidepressants, have a favorable risk-benefit profile, and have rarely been identified as being prone to misuse in correctional settings. Some research suggests superiority of some SSRIs within the group, but the clinical meaning of these

differences is not well established.^{108,113} Some antidepressants, such as the tricyclic antidepressants (TCAs) may be more toxic in overdose,¹⁰⁹ a factor that should be taken into consideration in inmate patients at greater risk for suicide or who may be seeking them for their sedating properties. (See also Section 6.5, Misuse, Abuse, and Diversion of Psychotropic Medications.)

As attention-deficit–hyperactivity disorder (ADHD) is a common comorbidity with depression, especially in a correctional setting (see also Section 5.9, Attention-Deficit/Hyperactivity Disorder), it may be useful to consider bupropion, desipramine, nortriptyline, or venlafaxine,¹¹⁴ each of which has some evidence supporting its use in adults with major depression and ADHD. However, bupropion has significant abuse potential, and its use should be carefully monitored in the correctional setting.¹¹⁵ In cases of depression with comorbid insomnia not responsive to psychological interventions, consider either mirtazapine, for which evidence supports efficacy for the treatment of insomnia.¹¹⁶ (See also Section 5.10, Insomnia and Sleep-Wake Disorders.) The prescription of monoamine oxidase inhibitors (MAOIs) in correctional settings is not advised unless it is possible to ensure that the patient will have reliable access to a tyramine-free diet.

If the patient does not respond to the first choice of antidepressant, consider first whether the diagnosis is accurate, medication adherence is a factor, adequate time has been allowed for response, and the dose has been optimized.¹⁰⁸ Although treatment failure complicated by ongoing substance use may not be likely in a prison setting, the ongoing abuse of illegal, controlled, or other substances is certainly possible^{97,115,117} and may be more prevalent in the pretrial detainee and jail population.

If there is no response to a therapeutic dose of an agent by four weeks, or if the side effects are unacceptable, consider switching to another antidepressant. The Sequenced Treatment Alternatives to Relieve Depression STAR*D trial demonstrated the efficacy for switching to bupropion SR, sertraline, or venlafaxine after a failed trial of an SSRI, although none of these second choices was superior.¹¹⁸ Another approach in such cases is augmentation,^{108,109,113} which refers to using an additional nonantidepressant drug or two antidepressants together. Combinations of medications carry with them an increased risk of drug interactions and side

effects.¹⁰⁹ Evidence-based augmentation strategies include lithium, mirtazapine, or second-generation antipsychotic medications such as aripiprazole, olanzapine, quetiapine, or risperidone.^{108,109}

Some guidelines recommend the use of continuation treatment for patients who have had two or more episodes of depression or who have had severe or prolonged episodes. A period of two years is generally considered advisable before considering tapering the medication toward discontinuation. Gradual tapering and monitoring over at least a four-week period is recommended.^{108,109}

5.5 Anxiety Disorders

Correctional psychiatrists are frequently asked to see patients with a chief complaint of anxiety. Those who have recently been arrested or sentenced are facing various real or potential losses (e.g., freedom, reputation, relationships, employment, housing, and certainty about the future), must endure forced abstinence from alcohol and other substances, and are coping with an abrupt change of environment. It is thus not surprising that anxiety problems are common in corrections. Surveys have rarely recorded the prevalence of anxiety disorders in this population. A recent study of Brazilian prisons revealed a lifetime prevalence of anxious–phobic disorders of 50 percent in men and 35 percent in women; and a one-year prevalence of 27.7 percent in women and 13.6 percent in men.¹¹⁹ A study of prisoners in Quebec with the comorbidity of antisocial personality disorder found that the lifetime prevalence of any anxiety disorder (including posttraumatic stress disorder) was 68.5 percent.¹²⁰

In this population, comorbidity is common: depressive disorders, substance use disorders, substance withdrawal, and personality disorders are the most obvious. Withdrawal symptoms must be managed before an assessment for an independent anxiety disorder can be validly performed. (See also Section 5.1, Psychiatric Emergencies). In the case of a comorbid depressive disorder, the NICE guideline suggests that the depression be treated first.¹²¹ It is also important to consider a personality disorder in the differential diagnosis, particularly borderline personality disorder (BPD), because the treatment may be entirely different. (See also Section 5.8, Personality Disorders.)

In the initial stages of treatment, consider psychoeducation, self-help treatments, psychoeduca-

tional groups (when available), and active monitoring. When a diagnosed anxiety disorder is either not responding to the above modes of management or is causing significant functional impairment, then more intensive psychosocial therapies, when available, as well as pharmacotherapy should be considered.¹²¹

The first line of psychopharmacological treatment for anxiety disorders is an SSRI or an SNRI.^{121,122} It is prudent to begin with a low dose and gradually build up to a moderately high dose. Sometimes doses at the higher end of the prescribing range are needed to treat anxiety disorders, although 75 percent of patients respond to the initial low dose of an SSRI for an anxiety disorder, except in individuals with obsessive-compulsive disorder, who generally require a higher dose.¹²³ Some SSRI treatment failures may be prevented by avoiding setting doses aggressively high and by warning patients about the initial risk of short-term activation (i.e., may worsen anxiety in the short-term). Furthermore, it is appropriate to educate patients that the anticipated response from an antidepressant is expected to be gradual over a period of weeks. Sometimes steadfast resolve is required on the part of the prescriber, with support for the patient, to get through this initial period. Psychosocial therapies such as relaxation therapy, mindfulness, and (if available) cognitive behavioral therapy should be continued or initiated as an adjunct to pharmacotherapy.

If the initial SSRI is not tolerated, another may be tried. The SNRI venlafaxine can be quite effective but takes time to titrate to achieve a therapeutic dose.^{121,123} Another SNRI to consider is duloxetine, which is FDA-indicated for chronic pain conditions that are comorbidities frequently found in a prison population.¹²⁴ Some evidence suggests that duloxetine is an effective second-line treatment for ADHD symptoms,¹²⁵ which are also common comorbidities in corrections. (See also Section 5.9, Attention-Deficit/Hyperactivity Disorder.) Other second-line treatments include tricyclic antidepressants (TCAs), particularly imipramine and clomipramine, which are well established in the treatment of anxiety disorders, especially panic disorder and obsessive-compulsive disorder.¹²³ TCAs may be sought out in a correctional environment for their sedating properties, although especially tertiary TCAs (e.g., doxepin or amitriptyline) merit caution, given the risk of cardiac complications and potential lethality.¹¹⁵

Other second-line treatments include buspirone, which is indicated for generalized anxiety disorder and is generally well tolerated; mirtazapine and trazodone, which are indicated only for major depressive disorder, although both have well-known anxiolytic and hypnotic effects^{126,127} and may be sought after in correctional settings.¹¹⁵

NICE guidelines clearly advise against the use of benzodiazepines, except in the very short term, noting that these medications are not effective for the long-term treatment of anxiety.¹²¹ The World Federation of Biological Psychiatry guidelines conclude that benzodiazepines are not found to be effective in obsessive-compulsive disorder and they should generally be excluded from treatment of those with substance use disorders.¹²³ Benzodiazepines, though quite effective for anxiety, are controlled medications with a known abuse potential. Li *et al.*⁹⁷ concluded that they should not be prescribed as a first-line treatment of anxiety in a correctional setting.

Although the use is off label, community guidelines suggest pregabalin as a treatment for anxiety disorders.^{121,123} It may be appropriate to consider this for an anxious patient with a comorbid indication, such as epilepsy, diabetic neuropathy, postherpetic neuralgia, or fibromyalgia. Pregabalin is not frequently prescribed in correctional settings at present, but abuse has been described in community case reports.¹¹⁵ Some antipsychotic medications (such as quetiapine) may have off-label anxiolytic properties, but a NICE quality indicator discourages the prescription of an antipsychotic medication, unless specifically indicated,¹²¹ and these may be subject to misuse in a correctional environment.¹¹⁵

5.6 Trauma- and Stressor-Related Disorders

A meta-analysis of papers regarding posttraumatic stress disorder (PTSD) in incarcerated populations found rates ranging from 4 to 21 percent, which is higher than the reported rates in the community, and women were disproportionately affected.¹²⁸ Many come to a jail or prison with a significant history of trauma exposure. In one study, rates of childhood sexual abuse were 70 percent of female and 50 percent of male prison inmates.¹²⁹ It is not uncommon for military veterans in correctional settings to have a history of traumatic experiences. In a survey of 128 veterans in the King County jail system in Washington State, 39 percent screened positive for PTSD.¹³⁰

Inmates may experience a trauma during their period of incarceration. According to the National Former Prisoner Survey of 2008, 9.6 percent of former state prisoners reported at least one incident of sexual victimization by peers or staff during their most recent stay in a jail, prison, or postrelease community treatment facility.¹³¹ In 2004, 15.9 percent of inmates reported being injured in a physical fight while in prison.¹³² Inmates with mental illness are more likely to be physically or sexually victimized, and those assaulted are at increased risk of suicide.^{133,134}

Although not explicitly included in the DSM-5, complex PTSD may involve a broader range of presentation, including emotional dysregulation, problems with interpersonal relationships, and dissociative symptoms, often occurring with a background of severe and prolonged traumatic experiences.¹³⁵ Early research suggested that symptoms consistent with complex PTSD are common in incarcerated individuals.¹³⁶ Management of this variant may be more challenging.

To our knowledge, there are no published studies specifically reporting on pharmacotherapy for inmates with trauma-related disorders. Community guidelines call for SSRIs or SNRIs as first-line psychopharmacological treatment for PTSD. The best evidence exists for paroxetine, sertraline, and fluoxetine, the former two of which are FDA approved to treat PTSD. Several studies have called into question the efficacy of SSRIs for combat-related trauma,¹³⁷ but a more recent meta-analysis of treatment studies for PTSD in combat veterans supported the use of SSRIs and TCAs for PTSD, anxiety, and depression symptoms in this group.¹³⁸ One subsequent open-label study suggested that mirtazapine was effective for combat-related PTSD.¹³⁹ The NICE guideline for the management of PTSD questions the evidence for its treatment with SSRIs in general, pointing to stronger evidence for mirtazapine, amitriptyline, and phenelzine.⁷⁵ We again suggest that the prescriber in a jail or prison consider the risk of overdose, hoarding, or diversion of a TCA, and the availability and enforceability of a tyramine-free diet before prescribing an MAOI.

In terms of adjunctive treatments for PTSD, a strong body of evidence supports the use of prazosin off-label to address trauma-related nightmares and sleep disruption, with a typical effective dosage range of 3–15 mg per night.¹³⁷ Several second-generation antipsychotics have shown promise as an augmenta-

tion strategy, although some have suggested that the benefits of these in PTSD are limited to sedation effects.¹⁴⁰

Benzodiazepines may be helpful for agitation, anxiety, and insomnia symptoms, but the risk of abuse and dependence, especially considering the high rate of comorbidity of substance use disorders in incarcerated persons generally (see Section 5.11, Substance-Related Disorders) and PTSD specifically¹⁴¹ suggests that these are best used on a short-term basis, if at all. Research has shown that benzodiazepines are ineffective for acute stress disorder.¹²³ The original APA guideline for posttraumatic stress disorder discourages the use of benzodiazepine monotherapy for PTSD,¹⁴² and recommendations on this class were not addressed in the most recent update.¹³⁷

There is one published case report of eye movement desensitization reprocessing (EMDR) therapy effectively treating PTSD in a male prison inmate.¹⁴³ Several studies have been published addressing effective group psychotherapies for PTSD in incarcerated persons and are addressed in depth elsewhere.¹⁴⁴

Adjustment disorder, which is addressed in part elsewhere in this document (see also Section 5.4, Depressive Disorders), is listed in the DSM-5 in the chapter on Trauma- and Stressor-Related Disorders.⁴² Persons prone to incarceration have high rates of personality traits that may predispose them to a maladaptive reaction to stress including any number of problems, both inside and outside the institution. Loss of freedom and its accoutrement, loss of outside relationships, exposure to hardships intrinsic to a correctional facility, interpersonal conflicts, outstanding legal problems (e.g., trials, sentencing, appeals, and family court), environmental changes (including returns from a lower security setting), and disciplinary problems and sanctions are common precedents to the development of acute adjustment symptoms among inmates. Prevalence studies are limited, but have suggested a rate of 11.48 percent among prisoners on remand, and 7.7 percent among prisoners with an Axis I diagnosis. These are likely underestimates, as rates of adjustment disorder in primary care range from 11 to 18 percent, and in consult-liaison psychiatry, 10 to 35 percent.¹⁴⁵

As in acute trauma, symptomatic pharmacologic treatment for anxiety or insomnia related to adjustment problems may be appropriate, but the need for continuation should be evaluated on an ongoing ba-

sis.¹⁴⁵ There is no good evidence to support the use of an antidepressant for adjustment disorder.¹⁴⁶ Should symptoms worsen or not resolve rapidly with the resolution of the precipitating stressor, the psychiatrist is advised to reconsider the diagnosis and treatment.

5.7 Impulse-Control Disorders and Aggression

Impulsive and aggressive behavior is common in inmates and can be challenging for health care providers in correctional settings.¹⁴⁷ Felthous and Stanford¹⁴⁸ define impulsive aggression as behavior “that is angry or rageful, eruptive, unplanned, and lacking self-control” (Ref. 148, p 456). Such behavior may or may not be part of a mental illness, such as intermittent explosive disorder (IED), although the DSM-5 lists antisocial or other personality disorders as an exclusion criterion if they are a better explanation of the aggression.⁴² Aggression has been linked to traumatic brain injury (TBI),¹⁴⁹ a history of which is reported by up to 82 percent of incarcerated individuals.¹¹² One study in the South Carolina prison system found a rate of medically attended TBI (meaning those whose injury was verified by state hospital or state emergency department records), of 5.65 percent of male inmates and 6.22 percent of female inmates. In both of these groups, and especially in females, a higher rate of violent disciplinary infractions was observed.¹⁵⁰

In practical terms, it may be difficult in correctional settings to distinguish whether the aggressive behavior is associated with character pathology or another mental disorder. Regardless, psychological intervention is appropriate first-line treatment outside of emergency situations.¹⁴⁵ Medication to treat aggression may be reserved for impulsive aggression that is mainly attributable to an underlying mental disorder, or for adjunctive treatment.

Although there are no FDA-approved medications specifically for the management of aggressive behavior, algorithms for the treatment of aggression have been proposed.^{148,151–154} If a diagnostic assessment reveals the presence of a mental disorder (e.g., schizophrenia, a mood disorder, or a neurocognitive disorder), treatment of the underlying disorder with indicated medications is an appropriate first step.

Numerous studies report the effectiveness of mood stabilizers for aggression in bipolar disorder¹⁵⁵ and schizoaffective disorder.^{156–158} Carbamazepine,¹⁵⁹ or as recently suggested, oxcarbazepine,¹⁶⁰

are particularly appropriate if the aggression is associated with epilepsy or other neurologic conditions. Some studies have shown divalproex sodium to have an antiaggressive effect.^{161,162} Hollander *et al.*¹⁶³ demonstrated that divalproex reduces aggression in patients with BPD. Evidence strongly suggests that lithium salts have a specific antiaggressive effect in a variety of disorders. The first clinical study of lithium for this purpose, published in 1971, showed a resolution of angry episodes in aggressive prisoners who were receiving lithium in a single-blind, on-off-on protocol.¹⁶⁴

Atypical antipsychotics may have specific antiaggressive effects. Clozapine has been particularly effective for aggression in schizophrenia^{165,166} and is FDA approved to reduce the risk of suicidal behavior in patients with schizophrenia or schizoaffective disorder.¹⁶⁷ Risperidone has also been found to reduce hostility independent of its efficacy for treatment of the underlying psychosis.¹⁶⁸

Some studies have supported the use of SSRIs to treat aggression associated with personality disorders.^{169,170} One study showed benefit from fluoxetine in a subset of depressed patients with higher levels of baseline hostility, irritability, and paroxysms of anger.¹⁷¹ Other research has supported the use in SSRIs to treat aggression related to traumatic brain injury.¹⁴⁹ Felthous and Stanford¹⁴⁸ proposed that fluoxetine be considered first in subjects with intermittent explosive disorder and as a second-line treatment in those with aggressive outbursts in the context of a BPD. Some patients may display paradoxical aggression within a short time of starting SSRIs, but this is rarely observed in practice.¹⁷²

Several additional medications have been studied for aggression in other settings that could be overlooked by correctional psychiatrists. Studies have demonstrated the efficacy of β -blockers, such as propranolol, nadolol, and pindolol, in patients with psychotic disorders,^{173,174} the intellectually disabled¹⁷⁵ and those with severe dementia.¹⁷⁶ In practice, these medications produce very few side effects and may be useful even in relatively low doses. Evidence has shown buspirone to be effective as an antiaggressive medication across a spectrum of disorders.^{153,177} Trazodone may reduce aggression related to Alzheimer’s disease.¹⁷⁸

Aggression related to adult ADHD may manifest in correctional settings. (See also Section 5.9, Attention-Deficit/Hyperactivity Disorder). The use of

stimulant medication to address aggression in jails and prisons is controversial, and, as we suggest in Section 5.9, conduct problems alone are insufficient justification for the prescription of psychostimulants. Psychostimulants reduce aggressive behavior in children with ADHD, but are not effective in those with conduct disorder.¹⁴⁸ Considering this and the risk for abuse and dependence, Felthous and Stanford wrote that the use of psychostimulants is “strongly discouraged in jails and prisons” (Ref. 148, p 465).

In practice, patients who have been prescribed benzodiazepines, which may have been started or continued by general practitioners in the community, often resist being switched to other treatments. (See also Section 4.1, Continuity of Care.) Inmate patients may demand benzodiazepines, even though the evidence suggests that they can paradoxically exacerbate aggression.^{151,152,154} Felthous and Stanford¹⁴⁸ concluded that benzodiazepines should be avoided in persons who have aggressive tendencies.

5.8 Personality Disorders

A unified interdisciplinary approach to treating patients with personality disorders is essential in correctional systems. Core features of personality disorders often strain working relationships with health care providers and other staff. As in community settings, the treatment of incarcerated patients with personality disorders is challenged by the dearth of data to guide practice and by the complexity of patient presentations. The milieu of prisons and jails, where maladaptive character traits are less tolerated than in other settings, may further complicate management. The presence of psychiatric comorbidities, including mood, anxiety, and psychotic disorders, as well as substance use disorders, is the norm in incarcerated persons with personality disorders.¹⁷⁹ This section will focus on rational medication management of personality disorders that minimizes the potential for harm within correctional facilities.

Among these conditions, BPD, antisocial personality disorder (ASPD), narcissistic personality disorder, and paranoid personality disorder have the highest correctional prevalence.¹⁶ Rather than focusing on diagnosis, much of the literature has described symptom clusters. A pharmacological approach to treating patients with personality disorders is based on evidence that some dimensions of personality are mediated by variations in neurotransmitter physi-

ology and are responsive to medication effects.¹⁸⁰ Obtaining an accurate history of an incarcerated patient’s constellation of symptoms related to character pathology as well as comorbid psychiatric disorders is a crucial first step in pharmacologic management.

Interested readers are referred to a publication by the World Federation of Societies of Biological Psychiatry¹⁸¹ as well as the *Cochrane Database of Systematic Reviews*^{182,183} that generally support the notion that there is some evidence that pharmacologic agents would be useful in the treatment of personality disorders. Pharmacotherapy for personality disorders, although not uncommon, is not generally supported by robust randomized clinical trial evidence.¹⁸⁴ The United Kingdom’s NICE guidelines take a hard stance against pharmacotherapy for BPD¹⁸⁵ and ASPD,¹⁸⁶ and point out that no medications are licensed for use in the United Kingdom for any personality disorder. (Similarly, no pharmacologic agent is FDA approved for the treatment of any personality disorder in the United States.) According to NICE guidelines, there was no consistent evidence, including uncontrolled studies, that supports the use of any pharmacological intervention to treat antisocial personality disorder or to treat the behavior and symptoms that underlie the specific diagnostic criteria for antisocial personality disorder.¹⁸⁶ Drug treatment should not be used specifically for BPD or for the individual symptoms or behaviors associated with it (e.g., repeated self-harm, marked emotional instability, risk-taking behavior, and transient psychotic symptoms). In fact, these guidelines note that polypharmacy is a common problem in BPD, often driven by desperate medication changes during crises, and recommend to review the treatment of those who do not have diagnosed mental or physical comorbidities, with the purpose of reducing and stopping unnecessary drug treatment.¹⁸⁵ Olanzapine in particular was noted to be of no benefit in BPD.

Some exceptions are suggested in the NICE guidelines. Comorbidities, for example, may be treated consistent with their specific guidelines. For example, ASPD may be associated with chronic anxiety, which should be treated accordingly. A randomized controlled trial from 1997 provided evidence that phenytoin had a small but nonsignificant effect compared with placebo on aggression in incarcerated patients with ASPD. NICE guidelines mention SSRIs,

which increase cooperative behavior in persons without personality disorders, as a potential intervention in patients with ASPD in prisons.¹⁸⁶ Pharmacologic interventions for BPD should be reserved for crises; sedatives are the preferred treatment; dosages should be within the normal therapeutic ranges; and comorbidities should be targeted, rather than BPD, specifically for symptoms solely attributable to it.¹⁸⁵

Extrapolating from limited data and the divergent opinions described above to incarcerated patients who have personality disorders and comorbidities is challenging because of the complexity of correctional environments and clinical pressures that are not necessarily present in community settings. Minimal data are available regarding pharmacologic interventions of incarcerated patients with personality disorders. However, strong opposition to medicating patients with personality disorders could be counterproductive in correctional environments. As in any clinical decision, psychiatric providers should weigh the risks and benefits of medication and consider the same analysis for the lack of medication. When medication trials are used, the informed consent process should include disclosure of the off-label nature of proposed treatments if applicable. Therapy should be directed at clearly defined clinical endpoints, regularly evaluated, and should be discontinued if not effective. Polypharmacy should be avoided.¹⁸⁴ Research on pharmacotherapy for personality disorders in correctional settings is particularly needed and encouraged.

5.9 Attention Deficit/Hyperactivity Disorder

Prevalence estimates of ADHD among prison inmates have generally ranged between 9 and 50 percent, but all of the underlying studies have methodologic shortcomings that limit their reliability.¹⁸⁷ Although the actual prevalence among inmates remains unclear, the disorder can cause significant impairments for some of them. ADHD can interfere with an inmate's ability to participate in programming, educational services, and vocational activities. It also can contribute to disruptive behaviors that compromise operations and security. Effective treatments are expected to result in functional improvements that benefit the inmate patient and the facility.

Treating inmates who have ADHD, however, has potentially adverse consequences. Stimulant medications, which are the mainstay of treatment for ADHD, have high potential for abuse. Some inmates

feign symptoms to gain access to these medications, and assessing these individuals diverts scarce psychiatry time and resources. Handling and administration of controlled substances requires additional nursing time. Diversion of medications can occur, both voluntarily for profit and involuntarily when patients come under duress from other inmates to hand over their medications. (See also Section 6.5, Misuse, Abuse and Diversion of Psychotropic Medications.) While NICE guidelines for the treatment of ADHD in adults suggest using stimulants as first-line treatment in general, they specifically suggest the nonstimulant atomoxetine as the first-line treatment in prison and in any other scenario when there is concern about abuse or diversion.¹⁸⁸

Nevertheless, the benefits and risks of using stimulants to treat inmates with ADHD have parallels to use in community settings. A blanket ban on access to effective treatments in or out of correctional facilities lacks justification. Correctional psychiatrists face the challenge of ensuring access for patients in need of treatment while minimizing the potential risks.

How to identify and treat inmates with ADHD has been a source of controversy. A model developed for use in the Massachusetts prison system,¹⁸⁹ and described in the third edition of APA's *Psychiatric Services in Correctional Facilities*,¹⁵ attempts to address the risks of prescribing controlled substances in a way that still ensures treatment for appropriate inmates. Key features of this model include:

Assess and treat only inmates who have current and persistent functional impairments that impede active participation in programming, educational activities, and work assignments.

Whenever practical, conduct a comprehensive diagnostic assessment that includes clinical examination, history of symptoms, record reviews, observations of third parties, and symptom rating scales.

Treat with nonstimulants and nonpharmacological interventions whenever practical and effective.

Do not initiate or continue use of stimulant medications for inmates who do not meaningfully participate in recommended educational and nonpharmacological therapies.

When stimulants are necessary, use shorter acting, crushable medications to lessen the risk of diversion.

Lessen the needed frequency of medication administration by timing the use of shorter acting stimulants to coincide with important activities.

Discontinue stimulants for inmates who misuse or divert their medications.

This model precludes stimulant treatment for inmates who have impairments in only leisure or recreational activities. It also avoids the use of stimulants for inmates based solely on disruptive behavior, to discourage intentionally harmful misbehavior to gain access to medication. Along with restricting treatment to inmates with meaningful functional impairments, these criteria avoid unnecessary diagnostic assessments and thus lessen demands on psychiatric and nursing staff. This model also recognizes that scarcity of time and resources may limit the extent to which some correctional mental health programs can gather historical and third-party information, and conduct testing and other in-depth assessments of the patient.

Using the described model in a well-resourced correctional mental health system, Appelbaum¹⁸⁹ reported a stimulant treatment prevalence of about one percent during a two-year period. This finding led to criticisms that the model is too restrictive and deprives some inmates with ADHD of treatment. At the other extreme, some might contend that any use of stimulants to treat inmates with ADHD is injudicious. The above model, however, represents one attempt to strike a balance that ensures treatment for those who can obtain significant benefits while limiting the substantial problems that can arise with availability of stimulants in correctional facilities. When correctional psychiatrists at the 2016 Annual Meeting of the American Academy of Psychiatry and the Law were surveyed about the preferred approach for stimulant prescription in jails and prisons, the majority (64%) supported a balanced approach like that described above and in the literature. Far fewer supported a blanket ban (29%) or first-line use (2%) of stimulants.¹⁹⁰

Noncontrolled medications for ADHD for inmates have received more attention of late. Jillani *et al.*¹⁹¹ published a case series of five incarcerated adolescents with ADHD who responded to atomoxetine. Two of these subjects were 18 years of age or

older at the time of the study (Kamath J, personal communication, July 2016). Mattes suggested that α -2 agonists such as clonidine and guanfacine could be ideal alternatives to stimulants for ADHD in adult prison inmates. Neither is a controlled medication, and guanfacine in the extended-release form is FDA-approved to treat ADHD. Both have anxiolytic and sedative effects that may be of benefit to some inmate patients.¹⁹² We encourage studies of these and other medications for inmates with ADHD.

5.10 Insomnia and Sleep–Wake Disorders

The DSM-5 describes 10 sleep–wake disorders that present with dissatisfaction about sleep quality and quantity, daytime distress and daytime functional impairment: insomnia disorder, hypersomnolence disorder, narcolepsy, breathing-related sleep disorders, circadian rhythm sleep–wake disorders, non–rapid eye movement (NREM) sleep arousal disorders, nightmare disorder, rapid eye movement (REM) sleep behavior disorder, restless legs syndrome, and substance or medication–induced sleep disorder.⁴² Insomnia, or sleep dissatisfaction at least three nights per week for at least three months, is the most frequently encountered sleep–wake disorder in incarcerated populations.¹⁵ In some correctional settings, especially those that offer overnight work duty for inmates, circadian rhythm sleep–wake disorder may also be an important diagnosis to consider. Insomnia may be secondary to a medical or psychiatric condition, a medication side effect or substance use or withdrawal, but may also be an independent disorder.

At least 40 percent of incarcerated individuals in prison¹⁹³ complain of insufficiently restful sleep, with the rate likely higher in jail populations because of the abrupt change from community living. Prevalence rates of insomnia disorder in correctional settings vary widely (11 to 81%) because of inconsistent definitions and research methods.¹⁹⁴ Regardless, insomnia can have a significant impact on quality of life and is a risk factor for mood disturbances, cardiovascular disease, suicide, and overall mortality.^{194,195} Untreated insomnia and sleep disorders have been linked to aggression, at least in incarcerated adolescents and young adults.¹⁹⁶

As in the community, before initiating any treatment regimen, psychiatrists in jails and prisons may find it helpful to first establish a timeline of the sleep disturbance and its relationship to psychiatric or

medical comorbidities and external stressors. Although it may be difficult to establish firmly whether insomnia is a causative factor or a complication of medical or psychiatric comorbidities, a detailed history can help point to a particular course of treatment.

The conditions in correctional settings, including confinement, lack of physical activity, legitimate fears about personal safety, inconsistent light and temperature control, idle time during the day that promotes napping, poor mattress quality, considerable institutional concern about medication diversion, as well as considerable concerns about medication diversion, create a unique environment in which to try to manage sleep complaints. The expectation of eight restful and uninterrupted hours of sleep may not be realistic. Each patient with sleep complaints may be educated on these factors in the process of collaborating on reasonable goals for treatment. If the patient's sleep pattern is within normal limits, no treatment may be appropriate (e.g., if the patient wishes to sleep more than is necessary for a healthy adult).

Treatment options should be realistic for the jail or prison setting and offer the best chance for the resolution of symptoms. Cognitive behavioral therapy (CBT) approaches are the least risky, have the greatest chance of success for long-term resolution of symptoms,¹⁹⁷ and should be considered first-line treatment whether alone or in combination with medication.¹⁹⁸ Consistent with this, the American College of Physicians in their 2016 guideline on treating chronic insomnia in adults strongly recommended CBT as first-line therapy, regardless of whether medications are prescribed for this problem.¹⁹⁹ However, correctional settings, particularly jails with shorter and less predictable stays, may not be reasonably able to offer CBT.

Studies on prescribing practices for insomnia in jails and prisons are sparse, and there is no evidence-based recommendation for pharmacotherapy in these settings. Medications that are FDA approved to treat insomnia include benzodiazepines, nonbenzodiazepine hypnotics (e.g., zolpidem, zaleplon, and eszopiclone), melatonin receptor agonists (e.g., ramelteon), doxepin, and suvorexant.¹⁹⁵ According to the American Academy of Sleep Medicine (AASM), a short- or intermediate-acting benzodiazepine agonist or melatonin receptor agonist should be the first- and second-line choices, respectively.²⁰⁰ If neither is

effective, a sedating low-dose antidepressant may be considered. Antihistamines should be avoided because of their risk of adverse effects (e.g., anticholinergic side effects, paradoxical agitation, and reports of tolerance).²⁰¹

Despite AASM recommendations, correctional settings often restrict or actively discourage the prescription of benzodiazepines for conditions other than withdrawal from alcohol or benzodiazepines, because of the potential for abuse and diversion. (See also Section 6.5, Misuse, Abuse and Diversion of Psychotropic Medications.) Many also limit the use of nonbenzodiazepine hypnotics (e.g., zolpidem and zaleplon). Although the evidence for the efficacy of melatonin receptor agonists is limited, the inconsistent light and noise environments in jails and prisons may make them even less likely to be effective.

Because of security and formulary restrictions, prescribing practices for sleep disorders in jails and prisons have evolved inconsistently. Sedating antidepressants (e.g., trazodone), atypical antipsychotics (e.g., quetiapine and olanzapine), and antihistamines (e.g., diphenhydramine) are frequently used, despite the risk of adverse effects and limited evidence of efficacy.^{116,202} An exception may be mirtazapine, although it is not labeled for insomnia and carries the risk of significant weight gain.¹¹⁶ Low-dose (3–6 mg) doxepin was not available at the time of the 2008 AASM recommendations, but has since been approved by the FDA for middle-of-the-night awakening. Studies have supported low-dose doxepin's ability to improve total sleep time, sleep efficiency, and sleep quality, without evidence of dependence or worsening insomnia upon discontinuation.²⁰³

It is appropriate to choose a medication that best matches the patient's symptom profile and considers any comorbid conditions. Off-label use of a medication for insomnia should be disclosed in the informed-consent process. (See also Section 4.6, Informed Consent.) In such scenarios, using the lowest effective dose and the shortest duration of treatment necessary is prudent. The psychiatrist should document clearly the reasons for the choice of medication, the anticipated course, and the treatment goals that will indicate the need for a change or discontinuation of pharmacotherapy.

Patients may present with daytime mood disturbance, irritability, and sleep disturbance, along with complaints of snoring (often relayed via cellmates). A

survey of 438 women in a maximum-security prison found that 10 percent of them were at high risk for sleep apnea.²⁰⁴ To our knowledge, the use of continuous positive airway pressure (CPAP) in jails or prisons has not been formally studied. At the 2016 Annual Meeting of the American Academy of Psychiatry and the Law, in a survey of correctional psychiatrists, more than 92 percent of those aware of institutional policy on CPAP devices reported that these were available for use by inmates, with 77 percent reporting this equipment as being provided by the facility or health care vendor.¹⁹⁰ We recommend that in suspected cases of sleep apnea, the psychiatrist collaborate with the appropriate provider in the facility authorized to manage this condition. (See also Section 4.3, *Coordination with Other Professionals*.)

The other DSM-5 sleep-wake disorders have not been adequately described in the literature as related to correctional settings. Psychopharmacologic management of these disorders should mirror community standards as much as possible.

5.11 Substance-Related Disorders

Substance use disorders (SUDs) are perhaps the most prevalent mental health disorders among incarcerated persons, with more than half of state prisoners meeting criteria for one or more substance use disorders.⁶⁸ Even higher rates are observed for jail inmates,²⁰⁵ incarcerated women,²⁰⁶ and incarcerated persons with comorbid mental health problems.²⁰⁷ Use of drugs and alcohol is strongly linked to crime in the community^{208–210} and, although certainly more difficult to maintain, may continue during incarceration.¹¹⁷ In addition, substance use often resumes after release into the community, with a substantial risk of relapse²¹¹ and mortality.²¹² A recent study from Ontario of coroner's reports of drug overdose deaths found that more than 10 percent of the deceased had been released from provincial incarceration within one year, and 20 percent of those had been released within one week of their demise.²¹³

Detoxification is medically supervised withdrawal; it does not treat the underlying disorder. Detoxification is addressed in more detail in Section 5.1, *Psychiatric Emergencies*. Psychosocial interventions validated for the treatment of substance use disorders in correctional settings, such as cognitive behavioral therapy, relapse prevention training, and therapeutic communities, are appropriate to include as a component of the patient's treatment plan.^{214,215}

Medication-assisted treatment (MAT) for SUDs in inmates has increasingly been attracting attention from researchers.

Both the oral and the long-acting injectable forms of naltrexone, a noncontrolled opiate antagonist, are approved by the FDA to treat both opioid and alcohol dependence. The evidence base is particularly poor for using oral naltrexone in opiate use disorders, probably related to nonadherence.²¹⁶ Consistent with this, a study of parolees with an opiate use disorder found a high dropout rate and thus limited support for oral naltrexone.²¹⁷

Evidence for the long-acting injectable form of naltrexone (XR-NTX) for both alcohol and opiate use disorders is promising. An open-label study of XR-NTX for offenders with repeated arrests for driving while intoxicated (DWI) showed a reduction in alcohol consumption and more days of abstinence.²¹⁸ XR-NTX provided to persons with an alcohol use disorder in drug courts demonstrated a reduction in positive alcohol and drug tests, fewer missed drug court sessions, and fewer arrests in a retrospective study.²¹⁹ A pilot study found good retention for opiate-dependent parolees using XR-NTX.²²⁰ Subjects in that study had fewer opiate-positive urine tests and were less likely to be reincarcerated. Inmates released from Riker's Island Prison on XR-NTX had a lower rate of opiate relapse in an unblinded, randomized study.²²¹ In an open-label multisite study, XR-NTX reduced relapse rates in inmates with opiate use disorder, although the protective effects diminished after the course of XR-NTX was stopped.²²² A drawback to XR-NTX is cost: it is not yet available in a generic form, and particularly relevant to former inmates, is not universally and readily available to Medicaid recipients.²²³

Acamprosate is another noncontrolled, FDA-approved option for the treatment of alcohol dependence. A systematic review of the literature found it comparable with oral naltrexone in terms of reducing alcohol use.²²⁴ Given the cost of this medicine and the lack of evidence specific to justice-involved individuals to support the use of acamprosate, its role in correctional settings is unclear.

Methadone is a long-acting, controlled agonist opioid that is well-supported by the literature for the maintenance treatment of opioid use disorders.²²⁵ Randomized, controlled trials of methadone maintenance therapy (MMT) for released prisoners have

shown increased engagement in treatment, reduced use of heroin,²²⁶ and reduced needle sharing.²²⁷

Buprenorphine is another option for MAT that has advantages for inmate patients anticipating return to the community. Although still a controlled substance, buprenorphine is a partial opioid agonist with limited euphoric effects and respiratory depression. World-wide, studies have demonstrated effectiveness of buprenorphine similar to that of methadone, for reducing illicit drug use and criminal activity and improving adherence to treatment.⁶⁸ In contrast to methadone, it is available in an office-based setting, is more acceptable to former inmates and can be more quickly titrated to an effective dose.⁶⁸ Methadone, however, was found in a *Cochrane Database Systematic Review* to be superior to buprenorphine in retaining patients in treatment.²²⁸

A longitudinal cohort study in New South Wales of agonist therapies (either methadone or buprenorphine) for inmates transitioning to the community reduced the risk of reincarceration by 20 percent.²²⁹ A more progressive study by the same group demonstrated a 74 percent reduction of all-cause death for opiate-dependent prisoners started on agonist therapy during incarceration.²³⁰ A randomized open-label study of inmates serving less than a six-month sentence in Rhode Island showed that continuing MMT during incarceration improved chances of re-engagement with treatment upon release.²³¹

MMT and buprenorphine are readily available in the community and are cost-effective methods to reduce criminal recidivism,⁴⁵ but there are some drawbacks. More so for methadone, individuals may use heroin or other opiates in addition to agonist therapies to augment a high. MMT may require daily visits to a clinic offering this service, which is stigmatizing⁶⁸ and makes adherence challenging.

Correctional systems historically have been reluctant to provide MAT for substance use disorders during incarceration, especially with controlled agonist medications, given the associated stigma and concerns about misuse of these drugs inside the facilities.⁶⁸ Nevertheless, substantial public interests are at stake. The economic costs of substance use in the United States related to health consequences, lost productivity, and crime were estimated to be \$193 billion in 2007.²³² Readdiction to heroin, for example, is linked to increased criminal activity, infection with HIV and hepatitis B and C, unemployment, and poor parenting.²¹¹

The National Association of State Alcohol and Drug Abuse Directors, in a 2013 policy statement, appears to have reversed a recommendation against MAT for incarcerated persons with a substance-use disorder.²³³ The National Institute on Drug Abuse (NIDA), citing favorable research showing that prisoners started on methadone before release had better outcomes in the community, recommends this strategy for inmates with opiate use disorders.⁴⁵ Despite this, prerelease MMT initiation is still uncommon, perhaps with the exception of pregnant incarcerated women with an opiate use disorder.²³⁴

5.12 Sex Offenders and Paraphilic Disorders

Sex crimes, although estimated to constitute less than 2 percent of all crimes in the United States, are highly feared and stigmatized by society. These offenders are perceived by the public as being intractable, but in one study, only 5.3 percent of sex offenders were shown to commit another sex crime within three years of release, which was approximately 10 percent of the overall rate of recidivism. A sex crime may or may not occur in the context of a pre-existing mental illness,²³⁵ but mental illness is often observed in this population. A survey of 113 consecutive male sex offenders from jails, prisons, or residential parole placements found high rates of substance use disorders (74%), mood disorders (35%), impulse control disorders (23%), anxiety disorders (9%), and antisocial personality disorder (56%).²³⁶ Sex offenders are considered to be at the bottom of the social hierarchy in prison and are often subjected to harassment, exploitation, and assault by peers.²³⁷ These individuals are therefore exposed to experiences that may increase risk for the development of a new mood, trauma, or stressor-related disorder during their period of incarceration. Sex offenders frequently, though not universally, have a diagnosable paraphilic disorder. Based on a clinical interview with a series of men referred to a residential treatment facility from prison, jail, or probation, a paraphilia, as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition,²³⁸ was identified in 58 percent.²³⁶ Although the management of other mental disorders is addressed elsewhere, the intent of this section is to address the specific treatment of paraphilic disorders in correctional settings.

In response to the passage of numerous state laws for the involuntary civil commitment of sex offenders at the completion of their sentences, the Ameri-

can Psychiatric Association published a task force report in 1999 that included then current best practices for the treatment of paraphilic disorders. The literature at the time supported antiandrogens (e.g., cyproterone acetate (CPA) and medroxyprogesterone acetate (MPA)) as effective interventions to reduce sex offender recidivism, although the task force cautioned that these drugs are less effective when administered involuntarily as the only form of treatment (i.e., it was recommended that they be combined with psychotherapeutic approaches).²³⁹ The World Federation of Societies of Biological Psychiatry (WFSBP) published a guideline for the treatment of paraphilic disorders in 2010. It recommends a stepwise approach, starting with psychotherapy alone, then an SSRI (at higher doses similar to those appropriate for obsessive-compulsive disorder), then antiandrogen medication (e.g., MPA or CPA), then long-acting gonadotropin receptor hormone agonists (e.g., triptorelin or leuprolide), then various combinations of the above.²⁴⁰ The literature is more promising for CPA,²³⁹ but the drug is unavailable in the United States because of concerns about hepatic toxicity.²⁴¹

Ethics-related concerns are suggested in the use of testosterone-lowering medications in incarcerated persons, some of whom may be judicially compelled to accept treatment. However, these treatments may relieve suffering and reduce the risk for reoffending. Their effects are not expected to cause damage to tissue or irreversible infertility. Rather, the clinical effects of these agents are thought to be related to the pharmacologic reduction of the sex drive. Experts warn that antiandrogens have not been demonstrated to be effective when sex crimes are motivated by anger or hostility.²³⁵ When clinically appropriate, we recommend offering these treatments to patients in correctional facilities on a voluntary basis.

5.13 Neurocognitive Disorders

As a consequence of mandatory sentencing laws, longer prison sentences for certain offenses and three-strikes legislation, where a defendant is sentenced to life in prison after a finding of guilt on a third felony, the fastest growing segment of the prison population consists of older inmates.²⁴² In addition to the growing population of geriatric inmates, incarcerated populations include a large prevalence of patients with chronic and progressive medical diseases, prior drug and alcohol use, poorer

health and nutritional status, higher rates of cancer, and higher rates of psychosocial stressors when compared with nonincarcerated populations. These factors combine to make this group functionally older than the actual chronological age.²⁴³ Most correctional systems and facilities consider inmates to be part of the older inmate or geriatric population when they reach the age of 50 based on their need for additional medical services and support and other care considerations.

Psychiatrists working with the geriatric population must be aware of the usual concerns associated with older patients: potential drug–drug interactions between somatic medications and psychotropic medications, increased sensitivity to effects and side effects of psychotropic medication, and an increased incidence of serious side effects, particularly those that affect cognition. In light of these considerations, it is worthwhile to conduct a periodic review of older inmate patients' medications to reduce or eliminate redundant medications or those with anticholinergic or sedating properties (e.g., diphenhydramine or tricyclic antidepressants) that are frequently prescribed in correctional settings for sleep disturbance or other indications. There is an increased risk of suicide in later life associated with male gender, depression, and cerebrovascular disease. Better integration with medical services and comanagement of patients becomes increasingly important with the geriatric population.

Geriatric correctional populations also experience dementias and other age-related cognitive disorders and decline. Incorporating modifications to the patient screening and assessment process when evaluating older inmates to include a standardized, objective measure of cognitive ability is an important component of the clinical approach to this population. Examples include the Mini-Mental State Examination and the Montreal Cognitive Assessment.^{244,247} Both of these instruments are available on the Internet,^{245,246} and are easy to administer. It is helpful to use one or more of these tests for a baseline determination and at periodic intervals to document and track the older patient's cognitive ability or decline. These tools will assist in determining when and whether to prescribe medication indicated for dementia and will assist in anticipating the types of additional services, supports, and programming needed to manage the population. Specialty neurological consultation, neuropsychological testing, and brain-imaging studies may be helpful in identifying

reversible disorders by distinguishing depression from dementia in older patients with memory deficits, anhedonia, and sleep disturbance.²⁴⁸

Appropriate clinical management of the geriatric population will require formulary considerations, specifically the addition of or access to cholinesterase inhibitors. Several have been approved for use in the management of Alzheimer's dementia. There is no evidence that any of these medications improve or reverse dementia, but there is evidence that they stabilize current functioning and slow disease progression.²⁴⁹ The choice of medication requires consideration of multiple factors including hepatic metabolism versus renal elimination, available preparations (tablet and transdermal patch), and dose schedule (sustained release), in light of institutional medication administration procedures and cost per dose. Transdermal patch preparations may reduce the likelihood of gastrointestinal side effects of cholinesterase inhibitors and may be better tolerated than other delivery methods.

Memantine, a glutamate receptor antagonist rather than a cholinesterase inhibitor, has been approved by the FDA for treatment of moderate to severe Alzheimer's dementia. It is often prescribed in combination with a cholinesterase inhibitor and may delay worsening of symptoms in some patients.²⁵⁰ It is considered a second-line agent and may be more appropriate for use as a nonformulary agent with a prior authorization process, rather than inclusion on the regular correctional formulary.

Correctional facilities typically have not been designed and built to accommodate mobility impaired, aging inmates. It is important to recognize that even modest gains in preserving function and delaying further cognitive loss have significant ramifications in this setting. Most inmates in correctional systems are housed in bunk beds that present a significant risk of falls and other problems for older inmates. Many facilities house hundreds or thousands of inmates who must walk significant distances to get to meals, medication pass, clinic appointments, and programming. Mobility-impaired older inmates are not able to navigate this landscape effectively. With this population, modification of operational procedures including bringing meals and medication administration into housing units, is appropriate. Physical plant modifications including support fixtures for showers and toileting, handrail installations in cells and hallways, and use of single rather than bunk beds are

important additions.²⁵¹ Preserving independent functioning for as long as possible in the correctional setting to support the skills needed to navigate its complex requirements and maintaining basic grooming, personal hygiene, and other activities of daily living will delay or eliminate the need for more intensive and expensive nursing and supportive services. Studies specific to patients with neurocognitive disorders are needed, but we anticipate, based on experience, that access to cholinesterase inhibitors and other effective interventions will facilitate this goal.

6. Special Topics

6.1 Special Settings

Mental health care should be available to incarcerated persons regardless of where they are housed within a correctional facility. Some housing settings have operational differences that may affect the prescribing and provision of psychiatric medications. In this section, we address three of these settings: segregated housing, mental health units, and medical units.

6.1.1 Segregated Housing

Some inmates are housed on tiers separate from other (i.e., general population) settings for administrative (i.e., for an investigation), safety (i.e., for protective custody), or disciplinary (i.e., for an institutional rule infraction) reasons. Disciplinary housing may be called restrictive housing, detention, administrative segregation, isolation, supermax, or solitary confinement, among other designations. Although the conditions of disciplinary housing vary from facility to facility, common features include limited social interaction, limited recreational activities, limited access to property, and limited privileges. Protective custody differs in that it is usually voluntary, although these individuals may be under additional stress related to the reasons for this housing (e.g., threats). Inmates with mental illness may be more likely to violate institutional rules than their peers and may even seek out segregated housing for protection from real (e.g., harassment) or perceived dangers.²⁵² The methodologies of studies critical of segregated housing have themselves been criticized, but time spent by inmates in these units has been linked to affective, cognitive, and psychotic symptoms.²⁵³ Among mental health professionals, there is a strong

consensus that segregated settings often result in psychiatric decompensation and may present barriers to effective treatment.^{254,255} Recent studies have linked disciplinary housing with suicide and serious self-harm in both jail²⁵⁶ and prison²⁵⁷ systems.

Awareness of these risks is important for those with clinical responsibilities for patients in segregated housing settings. It is also important to consider the operational differences that may make effective treatment challenging. Because inmates in segregated housing may not leave the cell to receive medication, this process often occurs at the cell door. Treatment in an inmate's cell may afford nursing staff opportunities to observe evidence of functional impairment (e.g., notably poor patient hygiene or general disarray in the cell), but the significance of these observations may not be grasped in the time available, and covert nonadherence (i.e., cheeking) may be easier for an inmate standing behind a door. Prompt and correct documentation of adherence and medication refusal on the medication administration record and communication of problems or changes of behavior to the psychiatrist is critically important. Closer follow-up by mental health staff for patients in segregated housing is usually appropriate to monitor effectively for decompensation or for the development of new symptoms.

Out-of-cell contacts are preferred for treatment of patients in segregated housing.²⁵³ Even when it is inconvenient, psychiatrists should request accommodation for out-of-cell contacts whenever concerns regarding limits of confidentiality may result in inadequate assessment and when physical access is necessary to complete an effective examination (e.g., in considering extrapyramidal symptoms) or to perform other necessary monitoring procedures (e.g., serum levels). Psychiatrists who have the opinion that effective mental health treatment is impracticable for patients in segregated housing should advocate for patients to be transferred to a secure mental health unit or a forensic hospital capable of providing effective mental health treatment. These recommendations are consistent with the position statement of the 2016 NCHC position statement on solitary confinement.²⁵⁸

Psychopharmacologic management focused on symptoms emerging in segregated housing is often appropriate, although it is important to reassess the patient's treatment needs upon exit from this setting. On the other hand, it is worthwhile to consider

whether the stress related to removal from the general population exposed a nascent or prodromal primary psychopathology.

6.1.2 Mental Health Units

Some inmates' psychiatric problems cause more functional impairment than can be safely managed in a typical jail or prison setting. Correctional systems are well served by offering a continuum of levels of care for mental health services.²⁵⁹ According to the 2011 National Survey of Prison Health Care, 41 of 45 respondent departments of correction provided on-site inpatient mental health services.²⁶⁰ A correctional facility may designate one or more tiers for the treatment of the seriously mentally ill. Mental health units (MHUs) are more often found in prison systems rather than jails, which typically have a lower census and shorter length of stay. Advantages of MHUs usually include a lower staff-to-patient ratio, on-tier nursing services, and increased access to programming, such as group and individual therapies. Staff on these units are more likely to have additional training in mental health, and even correctional staff may be considered part of the treatment team.²⁵⁹ Some systems may have a separate prison hospital that serves the same purpose. An outside forensic psychiatric hospital, possibly under the jurisdiction of a different state agency, may be an option for an even higher level of care. A discussion of treatment in these settings is outside the scope of this resource document, but the reader is referred also to Section 4.1, Continuity of Care.

Psychiatrists may consider recommending transferring a patient to an MHU for several reasons. If the patient's diagnosis is unclear, there may be more opportunities there to gather reliable observational data. Patients with adherence problems (especially those subject to treatment over objection) may be better monitored and counseled by MHU nurses and psychiatrists. Staffing ratios usually allow more frequent contacts with psychiatrists and other mental health staff, and thus more intensive treatment for refractory conditions. Medications that require more intensive monitoring (e.g., clozapine) may be more appropriately initiated on an MHU.

6.1.3 Infirmaries and Hospice

Medical problems are more frequent in justice-involved populations, possibly related to high rates of substance use disorders and socioeconomic factors, including historically limited access to or utilization

of community health care services. A survey of chronic medical conditions among inmates in United States jails and prisons found higher rates of hypertension, asthma, arthritis, cervical cancer, and hepatitis than in the community.²⁶¹ Complicating these concerns is the aging of the prison population, with many inmates having multiple medical problems.²⁵¹ (See also Section 5.13, Neurocognitive Disorders.) Inmates may be housed on either a temporary or long-term basis in an infirmary or specialized medical tier to address acute or chronic medical illnesses. Similar to MHUs, the availability of specialized medical tiers is more likely in correctional systems such as state prisons with a larger population and longer anticipated length of stay.

Infirmaries and specialized medical units, although usually staffed with on-tier nursing, are often oriented toward the management of nonpsychiatric medical problems. Nevertheless, inmates with serious mental illness may be on one of these units when nonpsychiatric medical problems require acute attention. It is important to be aware of the interaction between psychiatric illness and nonpsychiatric medical illness. Research on depression and chronic medical illness in the community shows that depressed patients have increased rates of somatic symptoms, functional impairment, disability, and mortality. Conversely, chronic medical illness is a risk factor for nonadherence with medical recommendations, worse medical outcomes, and suicide.²⁶² Extra caution is appropriate to avoid drug–drug interactions, especially in elderly patients and those with chronic medical conditions already treated with multiple medications.²⁶³ Coordination of care with other medical providers, as always, is important. (See also Section 4.3, Coordination With Other Professionals.)

An infirmary is not a substitute for an MHU because these have different missions. Nevertheless, an infirmary may be used for inmates with mental illness for diagnostic purposes, stabilization purposes, and crisis intervention when an MHU is not available in the facility. MHUs are typically used as a much longer term special needs unit for inmates with mental illness who are unable to function adequately within a general population housing unit.

Some inmates will have terminal illnesses that require palliative, hospice, or end-of-life care. Numerous programs of this type have been identified in prisons nationwide.²⁵¹ According to the 2011 Na-

tional Survey of Prison Health Care, 43 of 45 respondent DOCs provided on-site long-term or nursing home care. All but one provided on-site hospice care.²⁶⁰ The rate of mental disorders in general and anxiety about death specifically is higher in these patients and similarly situated individuals in the community. Concern about misuse of medication is a barrier to effective end-of-life care in correctional settings.²⁶⁴ According to a guideline published in 2009 by the National Hospice and Palliative Care Organization, it was recommended that correctional facilities develop protocols to address non–pain-related psychiatric symptoms in hospice patients such as anxiety, confusion, restlessness, and sleep disorders.²⁶⁵ We recommend that psychiatric treatment for inmates nearing the end of life, as in the community, focus on the compassionate alleviation of suffering from mental health symptoms.

6.2 Adverse Effects of Medications

The management of adverse effects from prescribed medications is a component of effective psychiatric care in any setting. Side effects have been identified as a major risk factor for medication nonadherence in prisons.²⁶⁶ All serious and common adverse drug reactions should of course be monitored for patients in jails and prisons following the same standards as in the community, including laboratory testing and focused physical examinations. Examples include, but are not limited to, baseline and regular periodic monitoring of serum levels for mood stabilizers (e.g., lithium, carbamazepine, and valproic acid), abnormal involuntary movement scales for antipsychotics, and metabolic monitoring parameters for second-generation antipsychotics. The reader is referred to the Goldberg and Ernst textbook *Managing the Side Effects of Psychotropic Medications* for a tabular summary of an evidence-based approach to routine laboratory studies for commonly prescribed psychotropic medications.²⁶⁷

Some side effects may be desirable and even sought after by inmates. In one study, compliance with antipsychotic medication correlated positively with weight gain in prisoners.²⁶⁸ One explanation of this finding is the preference of some inmates to appear more formidable among their peers. In another relevant example, although SSRIs are well-established to be generally better tolerated than tricyclic antidepressants (TCAs), prisoners' adherence to the latter was unexpectedly better.²⁶⁹ Researchers

in that study speculated that the sedating effects of TCAs may have been seen as advantageous to cope with the “stresses of institutional life.” (Ref. 269, p 1446). When adverse effects from an indicated medication are perceived by the inmate patient in a positive light, the psychiatrist should consider whether unintended effects impair functioning or impart risks that exceed the benefits of the medication. In such circumstances, we suggest that the patient be re-engaged in a discussion of these risks and that alternative medications be offered, if clinically appropriate.

If the prescriber suspects that medication is not indicated and is being taken by the patient for nonclinical reasons, we recommend that a careful risk–benefit analysis be undertaken, especially for medications with higher risk for adverse effects. Continuation of nonindicated medications may not be harmless. Particularly relevant for patients in correctional facilities, all antipsychotics and some antidepressants (especially TCAs) have been linked to sudden cardiac death.²⁶⁷ According to data from the Drug Abuse Warning Network, in 2011, there were 1582 reported incidents of treatment in emergency rooms for the nonmedical, non–self-injurious use of antidepressants or antipsychotics, with patients being released to either law enforcement or a correctional facility.²²³

Patients in jails and prisons are more likely to tolerate side effects when they recognize that they are receiving benefits from the medication.²⁶⁶ Thus, psychoeducation about the indications, benefits, and side effects of recommended medications for patients is essential. (See also Section 4.6, Informed Consent.) Such education begins with an informed consent discussion but should continue over the course of treatment. This approach may realize long-term benefits in terms of investment in treatment, adherence, and outcomes, both in the institution and subsequently in the community.

6.3 Medication Nonadherence

Medication nonadherence is a common problem in all treatment settings.²⁷⁰ Regardless of where treatment occurs, it is paramount to identify first why a patient is refusing to take medications. Unlike providers in an outpatient setting, the correctional psychiatrist may be quickly alerted to problems with adherence (e.g., by nursing staff or custody). In some cases, such as simple forgetfulness or fatigue related

to managing a chronic illness, it may be sufficient to provide psychoeducation, re-establish a therapeutic alliance, or co-develop a new treatment plan.

Nonadherence may be directly related to illness effects. Decompensation of a psychotic illness can lead to medication refusals related to persecutory thought content or general suspicion. Inmates who refuse medications are also more likely to be referred to psychiatry for evaluations for threatening behavior and making threats toward others.²⁷¹ In these situations, consideration of transfer to a higher level of care or psychiatric hospitalization may be indicated.

Inmate patients may refuse to take medications because of stigma and peer influences. Inmates may fear that a psychiatric diagnosis will cause them to appear weak, and thus make them a potential target for abuse or extortion. It is important to consider the specific dynamic at work, then design an intervention to address as best as possible both real and perceived social problems that affect adherence. Given the significant loss of rights that occurs while incarcerated, inmates may look for ways to control their environment to regain a sense of power. When psychiatrists prescribe medication without involving the patient in the treatment-planning process, it promotes the inmate’s sense of powerlessness and increases the likelihood that the patient will refuse the medication at pill call. Provided the patient is willing to engage and does not have strong antisocial traits, the psychiatrist can avoid this dynamic by offering appropriate choices in the context of a respectful informed consent discussion.

Certain medications hold value within the correctional system because of their psychoactive properties. (See also Section 6.5, Abuse, Misuse, and Diversion of Prescription Medications.) Inmate patients with legitimately prescribed psychotropic medication may feign adherence, but save the medication for sale or barter later. Some may misuse their own medications to achieve certain effects not intended by the prescriber, such as sedation, euphoria, stimulation, or hallucination. In these situations, the nonadherence is covert. At medication pass, they will accept their medications, but not actually take them. They may then take the medications via a nonindicated route of administration, or after accumulation, a high dosage.

It is important that nurses working in jails and prisons be trained to understand, monitor, and address both overt and covert nonadherence with pre-

Table 1 Signs and Strategies to Prevent Covert Nonadherence

Signs of Covert Nonadherence	Suggested Prevention Strategies
Refusing to speak	Mouth check
Moving the tongue inside the mouth	Liquid medications or water “chasers”
Quickly turning away	Officer observation and intervention
Leaving for the restroom	Restroom restriction
Diverting to inmates in line or near	Restrict inmate-to-inmate contact in pill line
Unwillingness to show hands	Preload pills into a cup to hand to patient

scribed medications. Signs of cheeking (when the medication is taken into the mouth but not swallowed) include refusing to speak, quickly turning away from staff or moving toward the restroom, and moving the tongue inside the mouth abnormally after taking medication. Low-cost interventions to prevent cheeking include conducting “mouth checks” (having the patient open his mouth after taking medications), administering “liquid chasers” (sips of liquid to swish and swallow after taking pills), and requiring the patient to stay with staff or nurses for several minutes after taking medications. Palming (when the medication is taken in the hand by the patient, who may then pretend to put it in his mouth) may be minimized by careful observation and by prefilling cups with the pills to be administered, thus avoiding the need to directly place the pill(s) in the patient’s hand. In the most extreme cases, an inmate patient may take the medication orally, then induce emesis as soon as possible (i.e., when no longer under direct observation).

Correctional officers also have a role in detecting inmate patients who are not taking medications as prescribed during administration times. An officer working alongside a nurse offers a second perspective and increases the chance of detecting unusual behavior. The presence of custody also sends a message that medication administration is important and that failure to take medications as prescribed puts the inmate at peril. Another officer posted to observe the medication line can serve to restrict contact between inmates and to catch the passing of administered medications between inmates. This officer may also observe whether an inmate immediately goes to a nearby restroom to retrieve a cheeked medication or to induce emesis.

Some prescribing strategies may reduce the risk of covert nonadherence to oral medications. For example, oral disintegrating tablets typically dissolve in under 10 seconds. However, they are not absorbed through the oral mucosa and must still be swallowed.

Practically speaking, this makes cheeking more difficult, but a determined inmate may still be able to avoid taking it. Also, orally disintegrating tablets are typically more expensive. Alternatively, some medications may be crushed and dissolved in liquid. This should be followed by a mouth check to ensure that all of the liquid, and therefore the medicine, has been taken. Disadvantages of this approach are increased nursing time, addition of a step in the medication administration process, alteration of the properties of the medication (such as absorption), receipt of an incomplete dose because of residual medication left in the discarded cup, and the nonavailability of crushing for some medications (such as extended-release forms). The reader is referred to the Institute for Safe Medication Practice’s Do Not Crush List.²⁷² When available (e.g., valproic acid and lithium citrate), liquid forms may circumvent many of the drawbacks of crushing medications, although they also require increased nursing time for administration (because of measuring). A blanket policy against unmodified psychotropic pills is therefore impractical in most correctional settings. However, one or more of the above strategies may have value in an individualized treatment plan.

The signs of medication misuse and prevention strategies are reviewed in Table 1.

Laboratory studies, especially serum levels, may be refused to conceal covert noncompliance. It is important to ascertain the reasons for refusal. Although the need for such monitoring ought to have been included in the original informed consent discussion, the patient should be counseled again about the risks of failure to obtain necessary laboratory studies. If the patient still will not agree to participate in clinically indicated monitoring tests, the psychiatrist should carefully consider the risks of continuing the medication versus selecting an alternative.

Long-acting injectable antipsychotics (LAIAs) have several benefits for managing medication adherence when an antipsychotic is indicated. Using a

LAIA route of administration when an antipsychotic is indicated is perhaps the surest method of eliminating the risk of covert nonadherence. Research on LAIAs has shown that they reduce recurrent hospitalizations and improve adherence.²⁷³ Drawing up and administering an LAIA requires time, but there is a net decrease in nursing work in that it eliminates the necessity for administering an antipsychotic daily or more often. Patients receiving monotherapy may prefer an LAIA for the sake of convenience and avoiding the need to attend routine pill calls. Cost, especially for second-generation LAIAs, can be a disadvantage. Additional side effects are usually limited to pain and bleeding at the injection site, but there is a risk of postinjection delirium or sedation from the LAIA olanzapine pamoate. The FDA requirement for continuous monitoring of the patient for three hours after injection by a health care professional is an operational challenge that may make this particular medication option impractical in a correctional setting.²⁷⁴

6.4 Treatment Over Objection

It is not uncommon within a correctional mental health system setting for the use of psychotropic medications on an involuntary basis to be clinically indicated. In general, psychotropic medications can be administered forcibly on an emergency basis in both jails and prisons throughout the United States, although there are differences in procedures that are followed both within and across jurisdictions. For example, the legal frequency and duration of administration of emergency medications involuntarily vary. It is a common practice that involuntary medication is limited to use over a period ranging from 24 to 72 consecutive hours. Procedures involving due process are generally required if medications continue to be clinically indicated beyond these time limits. The location where emergency involuntary medications can be administered varies widely in the context of a health care versus non-health care setting.

The minimum constitutionally appropriate due process requirements for the use of involuntary medications on a nonemergency basis within prisons is fairly well defined, which has facilitated the development of pertinent policies and procedures in prisons. Specifically, the U.S. Supreme Court's 1990 decision in *Washington v. Harper* allows for psychotropic medications to be administered on an involuntary

basis if an internal prison administrative process is followed.²⁷⁵ In brief, the Court held that "given the requirements of the prison environment, the Due Process Clause permits the State to treat a prison inmate who has a serious mental illness with antipsychotic drugs against his will, if the inmate is dangerous to himself or others and the treatment is in the inmate's medical interest." (Ref. 275, p 211). The Court further ruled in *Harper* that judicial review is not required, and that the administrative committee used in that case (which included at least one medical professional, but no members currently involved in diagnosis or treatment) was sufficient to satisfy due process. The Court rejected the principle that the hearing should be conducted in accordance with the rules of evidence, although certain provisions were mandated, such as adequate notice to provide the inmate with a meaningful opportunity to be heard at the hearing.

Harper established that the protections in the state of Washington's procedure for the use of involuntary psychiatric medications on a nonemergency basis was constitutional from a federal perspective. It should be re-emphasized that these requirements are the minimum necessary to satisfy due process according to the U.S. Supreme Court and that 10 states provide significantly more due process protections (e.g., a hearing before an administrative law judge or district court judge), based on state constitutional grounds, for inmates in this situation.²⁷⁶

The *Harper* process can be criticized from various perspectives, including the lack of meaningful due process and vagueness regarding the appropriate setting for administration of involuntary medications. For example, should this occur only in medical settings? Nevertheless, this case has effected the wide, though not universal, availability of nonemergency treatment over objection for inmates who are seriously mentally ill. As of 2014, 31 states have implemented a *Harper* procedure.²⁷⁶ For a comprehensive analysis regarding the legal aspects of administering antipsychotic medications in correctional institutions, the reader is referred to a review by Dlugacz and Wimmer.⁵⁷

The administration of psychotropic medications on an involuntary and nonemergency basis in jails is much more problematic than in prisons for several reasons. Until the 2012 decision of the Ninth Circuit in *U.S. v. Loughner*,²⁷⁷ the decision in *Harper* was almost universally interpreted as applying only to

prison settings, not to jails. Thus, unless there was state case law or statutes relevant to this question, jail mental health care programs (when they existed) did not have a clearly stated legal right to medicate detainees involuntarily on a nonemergency basis, which meant that many detainees in need of such treatment did not receive it. However, a national survey by Torrey *et al.*²⁷⁶ indicated that all counties in South Dakota and occasional counties in other states use a *Harper* procedure.

States and counties that do have laws pertinent to nonemergency involuntary medications for pretrial inmates generally require the inmate to be transferred to a state forensic psychiatric hospital, where procedures consistent with the process used to medicate a civil patient involuntarily (i.e., persons not involved with the criminal justice system) would have to be initiated. Even in states with such laws, access to these beds for pretrial detainees is very limited. The result is that it is very uncommon for pretrial detainees to be medicated involuntarily on a nonemergency basis, even when clinically indicated. Exceptions include detainees found to be incompetent to proceed who are transferred to a state forensic hospital. However, even in those circumstances significant delays occur because of the judicial process and limited forensic beds.

The majority opinion in *Loughner* affirmed the lower court's ruling that a *Harper* hearing meets constitutional requirements because Mr. Loughner, who was a pretrial detainee, was involuntarily medicated on the basis of being a danger to self. It will not be surprising if larger jail systems begin to use a *Harper* procedure, based on the *Loughner* decision, for involuntary medication purposes, although no non-federal system is known to be doing so at this writing.

There are significant consequences for inmates or detainees who do not receive psychotropic medications when they are clinically indicated. In correctional mental health care systems that have adequate psychosocial rehabilitation services, many of these inmates and detainees will choose not to participate or will be unable to participate in such services because of the symptoms of their serious mental illness. It is very common that inmates or detainees with untreated mental illness are unable to adapt to the correctional environment, which results in their being disproportionately housed in lockdown housing units (i.e., disciplinary segregation) for rule infractions. These housing units generally involve an in-

mate's or detainee's being locked in a small cell for 23 hours per day, often for many months at a time. Inmates with active psychotic symptoms in these housing units often deteriorate clinically or do not improve. One study found that nonemergency involuntary antipsychotic medication administered under a *Harper* procedure in the New Jersey prison system reduced the incidence of serious disciplinary infractions while these patients were receiving medication.²⁷⁸

6.5 Misuse, Abuse, and Diversion of Psychotropic Medications

In the correctional environment, there is a need for health care and custody staff to maintain a high index of suspicion for the abuse, diversion, and trafficking of prescribed medications. Health care professionals providing direct and indirect (such as emergency departments, regional hospitals, clinics, and consulting specialists) services to inmates may be naive to this risk, especially for noncontrolled medications. As previously discussed (see Section 5.11, Substance Use Disorders), there is a high prevalence of substance use disorders among inmates, although access to illicit drugs is limited in institutional settings. Published literature on medication abuse and misuse in correctional settings is limited, leaving clinicians dependent on anecdotal reporting from other clinicians or the "buzz in the yard" among offenders regarding misused medications.²⁷⁹

Some inmates may seek treatment for the purpose of obtaining prescription medications for nonmedical reasons. Requests may be made for specific medications, formulations, or dosages. Some may assert that every other psychotropic medication has failed or may claim to have certain medication allergies. Inmates may seek seemingly innocuous medications that can produce sedation, hallucinations, or euphoria when crushed, snorted, smoked, injected, or taken in higher than intended doses. Other desired effects include enhanced sexual function and potentiation of other drugs.²⁸⁰

Benzodiazepines are controlled substances and thus are well known to carry a risk for abuse and dependence. Nevertheless, correctional health care providers require immediate access to these for managing emergencies, such as acute seizures, status epilepticus, sedative withdrawal syndromes, and acute agitation. PTCs may consider allowing providers short-term access without prior authorization to ben-

zodiazepines that pose a manageable risk (such as intramuscular lorazepam or long-acting oral benzodiazepines limited to intake units). Controlled psychostimulants may be prescribed appropriately in inmates, and managing the risks of misuse of these is addressed elsewhere. (See Section 5.9, Attention-Deficit Hyperactivity Disorder.)

Turning to noncontrolled medications, the risk for misuse in correctional settings has been well described for quetiapine.^{280–282} It is suspected that quetiapine is sought for its sedative and anxiolytic properties.^{282,283} Intranasal, smoked, and intravenous self-administration of quetiapine by inmates has been described in the literature.¹¹⁵ It may also mitigate symptoms of opiate withdrawal, which may contribute to the high rates of quetiapine misuse observed in correctional populations.^{282,284}

The misuse of bupropion in correctional settings has also been well-described in the literature. It has a chemical structure similar to amphetamine,²⁸⁵ has mild stimulating properties, and is sometimes prescribed as an alternative to psychostimulants.²⁸¹ Bupropion may induce euphoria, but only when first-pass metabolism is bypassed via insufflation or smoking.²⁸⁵

TCA's may be sought by inmates for their sedative and anticholinergic properties.¹¹⁵ Some, such as amitriptyline, may be prescribed for nonpsychiatric indications, such as neuropathic pain. Given the high risk for morbidity and mortality from these agents, alternative therapies should be preferred. When clinically necessary, TCA's should be administered as directly observed therapy.

Published reports are limited, but concerns about misuse have been raised for other antidepressants. For example, there are anecdotal reports of an increase in nonformulary requests for venlafaxine after formulary restrictions on bupropion in the Texas prison system (Penn J, McKee J, personal communication, May 2016). When taken in large doses, venlafaxine can produce an amphetamine-like high.^{286–288} Some recreational users of venlafaxine compare its psychoactive effects to those of 3,4-methylenedioxymethamphetamine (MDMA).²⁸⁹ Other antidepressants suspected of misuse in correctional settings include fluoxetine, mirtazapine, trazodone, and citalopram.^{83,115}

Among mood stabilizers and antiepileptic drugs, gabapentin has the best evidence for misuse, both in the community^{290,291} and in correctional²⁹² settings. Gabapentin has furthermore been linked to the

abuse of bupropion in correctional settings.²⁹³ Gabapentin has topical anesthetic properties,²⁹⁴ and there are anecdotal reports about prisoners using its powder to numb nasal passages to prevent irritation from the insufflation of bupropion (Hamel E, personal communication, October 2013). There are community case reports of abuse of carbamazepine, sometimes combined with alcohol,^{295,296} and we are aware of at least two anecdotal reports of such in a correctional setting.²⁹⁷

Anticholinergics such as benztropine, diphenhydramine, and trihexyphenidyl are other medications noted for their abuse in both community and correctional settings.^{115,280} They may be sought for sedative or hallucinatory effects.

Noncontrolled medications prescribed by nonpsychiatric general medical providers may also be at risk for misuse. There is overlap in prescribers of certain medications (such as gabapentin, diphenhydramine, and clonidine), and inmate patients who are permitted to have medications prescribed by general medical providers KOP avoid the need for covert nonadherence at pill call.²⁹⁸

This section is not a comprehensive accounting of all medications at risk for misuse in correctional settings. The reader is referred to the resources cited above.

There are numerous and complementary strategies for managing the risk of misuse of prescription medications in jails and prisons. Administratively, PTCs may limit access to higher-risk medications by using formulary controls. Correctional systems that have removed such agents from their formulary have reported significant reductions in abuse and diversion.²⁸⁵ A study to evaluate the clinical effects of removing quetiapine from a correctional formulary showed no statistically significant changes in objective indicators of clinical functioning (e.g., transfers to higher levels of care, suicidal behavior, or disciplinary infractions) among patients whose quetiapine was discontinued.²⁹⁹ However, if the benefits of prescribing a higher risk medicine are considered to exceed the risks for an individual patient, correctional psychiatrists should be prepared to use the nonformulary prior authorization process available in their system. (See also Section 3.2, Pharmacy and Therapeutics Committees and the Formulary Process.) From a quality improvement perspective, correctional health care administrators may alert prescribers when systemic prescribing patterns change,

especially sudden surges in the use of particular medications.

Ongoing training of psychiatric, nursing, medical and custody staff on the problem of medication misuse will increase awareness of unit-based or regional trends. As an example, Reeves³⁰⁰ described the implementation of a guideline and confidential peer-comparison for staff psychiatrists that discouraged treatment of insomnia with benzodiazepines or low-dose quetiapine. This strategy successfully reduced these practices throughout the state prison system.

Correctional officials may contribute to reducing or preventing the misuse of psychotropic medications and other substances through a variety of methods, such as cell searches, forensic toxicology testing and other surveillance. Although psychiatrists may play a consultative role in this regard or may communicate concerns about drug distribution and resultant safety concerns, they should be mindful to avoid ethics-based conflicts related to dual agency and breach of confidentiality.

In terms of medication administration, covert nonadherence and methods to address it are discussed in Section 6.3, Medication Nonadherence.

At the provider level, reducing medication misuse begins with good clinical care. As mentioned, comorbid substance use disorders, personality disorders, and malingering are highly prevalent in correctional populations. None of these is mutually exclusive with a serious mental illness, but appropriate evaluation of symptoms (see Section 4.4, Assessment) with a preference for objective indicators and collateral information over self-reports will minimize unnecessary treatment. Laboratory studies are sometimes of value for verifying adherence with prescribed medication (in cases of suspected diversion). It may be appropriate, especially for more vulnerable inmates, to inquire directly about coercion or extortion to divert their medications.²⁸⁰

Inmates may file grievances, threaten litigation, file state medical board complaints, intimidate or even threaten harm, or recruit outside advocates to pressure the responsible provider to prescribe preferred medications.²⁸⁰ Correctional psychiatrists should remain open minded regarding appropriate care for an individual patient. However, they should be prepared for such resistance when higher risk medications are thought to be clinically inappropriate, adhere to prudent prescribing practices, and clearly document clinical decision-making.

Finally, it is important for providers to stay attuned to and follow up on reports from administration, custody staff, health care personnel, and even inmates regarding substances that may be targets for abuse. The problem of medication misuse is dynamic, with ever-emerging medications of concern, combinations, and methods for abuse and diversion.³⁰¹

6.6 Electroconvulsive Therapy

Despite its efficacy for severe and treatment-resistant mental illness³⁰² and its recognition as the standard of care for certain clinical scenarios, electroconvulsive therapy (ECT) is rarely used in correctional systems. A recent survey identified only four U.S. prisons systems that had referred patients for ECT within the past five years. The reasons cited for the rare use of ECT include limited knowledge about the indications and side-effect profile of modern ECT procedures, ethics concerns, stigma, and logistical problems.³⁰³

ECT is considered the treatment of choice for treatment-resistant mania, treatment-resistant depression, neuroleptic malignant syndrome (NMS), and catatonia. It has antisuicidal effects in addition to a role as an adjunct treatment for treatment-resistant schizophrenia.^{304–306} ECT has been shown to improve health-related quality of life in both the short and long term.^{307,308}

Considering the previously discussed high rate of serious mental illness in jails and prisons, candidates for ECT can be found in these settings. The logistical and security concerns related to arranging services at an outside facility properly equipped to provide ECT, such as the state psychiatric hospitals or state university hospitals used by the departments of corrections in the above survey, justify reserving it for when other indicated treatment options fail. Nevertheless, it is rarely used as first- or second-line treatment in the community, and both legal and ethics-related arguments can be made that ECT should be available for inmates when indicated.³⁰³ For example, similar security objections could be raised (and roundly rejected) for outside medical tests and procedures. Concerns about side effects from ECT that could impair functioning in a correctional setting, such as short-term memory loss, can be mitigated if necessary by additional support usually available on mental health units from nursing and trained custody staff.

A further consideration is the cost to correctional systems. Besides the cost of professional services, facility access, supplies, and anesthesia, systems must also cover the cost of transportation and security. To our knowledge, there has not been a cost analysis of providing ECT in corrections. A comprehensive cost analysis based on a review of the literature found that for depression, the evidence was inconclusive as to the cost effectiveness of ECT for depression. However, ECT for treatment-refractory schizophrenia was more cost effective than standard treatment, though less cost effective than clozapine.³⁰⁹ What these analyses do not consider are both the human and financial costs incurred by the system related to violent or otherwise dangerous behavior by inmates with serious mental illness, as well as consequent disciplinary housing. Cost savings may also be realized by clinical improvements that may lead to a transfer to a lower level of care. Specialty service contracts, similar to those used for medical subspecialty services, are viable for managing the costs associated with ECT.

7. Conclusions and Future Directions

This Practice Resource presents the best available evidence for the pharmacologic management of mental illness for incarcerated persons. Current research specifically focused on inmates is limited, in general, in both quantity and quality. Inmates with a

serious mental illness are overrepresented in correctional institutions, and their illnesses are frequently complicated by comorbidities to a degree less often seen elsewhere, suggesting a need for more studies specific to this population. There are no established guidelines or practice resources for prescribing psychiatric medications in correctional facilities. Community guidelines or practice resources may be helpful for psychiatrists in these settings, but many need revision, and studies to validate community practices in jails and prisons are also lacking. Even when current, general guidelines may be difficult to implement fully, in part because of operational questions relevant to correctional facilities not considered by the guidelines.

Ethics-related concerns about the vulnerability of incarcerated persons as research subjects have severely limited modern work in this area, though interest in reinvigorating research on this population has been growing.³¹⁰ We recommend engaging institutional review boards to encourage high-quality research on the assessment, pharmacologic management, and monitoring of serious mental illness in jails and prisons. Validation of new or existing guidelines or practice resources for the treatment of psychiatric illnesses in incarcerated persons would be of particular value.

Practice Resource: Prescribing in Corrections

Appendix I Sleep Hygiene Tips

Do not worry about an occasional sleepless night. Even persons who sleep only a couple of hours can function the next day. You will probably sleep better the following night.

Stick to a regular schedule of sleeping and waking. Go to bed at the same time, and wake up at the same time regardless of the amount of sleep you had the night before. It may help to plan your sleep and wake schedule around a regular event such as counts, mess, or pill call.

Do not nap during the day. If you nap during the day, you reset your sleep "clock," and your body may not be ready to sleep when it is supposed to be.

Exercise and other activities during the day will prepare your body to sleep at night. Exercise within 3 hours of sleep can keep you up, though.

Eat a healthy diet. Do not drink caffeinated beverages (such as coffee, tea, or dark sodas) after noon. Some foods like chocolate may also contribute to sleeping trouble. Avoid heavy meals before bedtime. If you are hungry, a light snack may help you fall asleep.

Do not drink a lot of liquids before going to sleep. You may have to wake up to urinate and may not be able to return to sleep.

Develop a relaxing sleep ritual you perform 30 minutes before going to bed (such as reading). Do not get involved in emotional issues immediately before going to bed.

As much as possible, turn off lights at night, keep your cell cool, and keep your cell quiet. If the lighting in your cell bothers you, consider covering your eyes with a clean piece of fabric (such as a sock or a wash cloth). If your cell is too warm, use a fan. During the day, expose yourself to as much light as possible. If you have a cellmate, agree about quiet hours when radio or television will be turned off, or used with headphones.

Do not lie in bed unless you plan to sleep. Use the bed only for sleeping, unless other activities (like reading) are part of your sleep ritual. Do not try to make yourself sleep. If after 30 minutes in bed you are unable to sleep, get out of bed and do something relaxing. Do not return to bed until you are sleepy.

Be aware that other medications (such as opiates, steroids, some antidepressants, interferon) and medical problems (such as chronic pain, asthma, peptic ulcer disease) may also interfere with sleep. Ask the provider prescribing medications for your medical or mental health problems if these problems or the medications you are taking may be a factor in your difficulty sleeping.

If the above do not work, try sleep restriction. Add up the total number of hours you sleep per day, then allow yourself to remain in bed only for that many hours each night. Another approach is paradoxical intention, which is doing the extreme opposite of what one wants or fears.

For example, instead of going through activities leading to sleep, prepare for staying awake and do something energetic. Or, if worry is a factor in sleeplessness, force yourself to worry excessively.

Getting emotional support and expressing your feelings may reduce stress, and help you to sleep.

Practice Resource: Prescribing in Corrections

Appendix II Depression Self-Management Tips

Depression happens to a lot of people behind bars. Helping you feel better is an important goal of your treatment team. YOU are part of this team, and there are plenty of things you can do between appointments to help feel better. You may not be able to do all of these things, but even doing a few of them will help. It will help to start your day by planning to do something you usually would enjoy.

Increase your physical activity

Unless your doctor says no, try walking, jogging, or sports.

If you already do these things, try doing them more.

Plan to do things you can enjoy

Read a book.

Watch a movie or a favorite television program.

Write a letter.

Call a friend or family.

Plan a visit.

Play a game.

Write about your feelings in a private journal.

Do more to relax

Take a shower.

Listen to music.

Meditate.

Breathe deeply.

Go to the yard for fresh air.

Participate in your treatment plan

Take medication as directed, if prescribed by a doctor.

Attend all assigned individual and group therapy sessions.

Stay busy

Staying busy is good for your self-esteem.

If you are on a work detail, do the best job you can do.

Keep your cell neat and clean.

Help someone else.

Good sleep habits

Have regular sleep and wake times; avoid napping during the day.

Avoid caffeine and chocolate, especially after noon.

Quit or cut back on cigarettes.

Do not lie in bed except to sleep.

Avoid exercising, eating, or drinking a lot of fluids just before bed.

Avoid sleeping pills.

Eat healthy foods

Avoid junk food.

Eat more fruits and vegetables.

Do not use alcohol or drugs.

Spirituality

If it is your tradition, pray, read scripture, and attend religious services.

If it is not, think about the people, ideas, and things that are important to you and give your life meaning.

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