MEDICATION-ASSISTED TREATMENT (MAT) KEY TERMS AND DEFINITIONS

abstinence. Nonuse of alcohol or any illicit drugs, as well as nonabuse of medications normally obtained by prescription or over the counter. Abstinence does not refer to nonuse of or withdrawal from maintenance medications such as buprenorphine when used for treatment therapy.

acute stage. Initial and usually the most symptomatic intensive-treatment phase of MAT.

addiction. Combination of behavioral manifestations of use, and subjective sense of need and craving for a psychoactive substance, leading to compulsive use of the substance either for its positive effects or to avoid negative effects associated with abstinence from that substance. Compare *dependence*.

admission. Formal process of enrolling patients in a methadone or buprenorphine program, carried out by qualified personnel who determine that the patient meets acceptable medical criteria for treatment. Admission can include orientation to the program and an introduction to peer support, patient rights, services, rules, and treatment requirements related to MAT.

agonist. See *opioid agonist*.

analgesic. A compound that alleviates pain without causing loss of consciousness. *Opioid analgesics* comprise a class of compounds that bind to specific receptors in the central nervous system to block the perception of pain or affect the emotional response to pain. Such compounds include opium and its derivatives, as well as a number of synthetic compounds. Chronic administration or abuse of opioid analgesics may lead to addiction.

antagonist. See *opioid antagonist*.

assessment. Process of identifying the precise nature and extent of a patient's substance use disorder and other medical, mental health, and social problems as a basis for treatment planning. Assessment usually begins during program admission and continues throughout treatment. It includes a personal substance abuse history, present and past history of psychiatric and medical disorders, family history of substance use, psychiatric and medical disorder, physical examination, laboratory evaluation (including urine toxicology), and determination of disease morbidity. Severity of disease is often assessed further in terms of physiologic dependence, organ system damage, and psychosocial morbidity. Assessment also involves determining patient motivation and readiness for change.

assessment tools. Instruments (e.g., questionnaires) used to capture the range of patient variables affecting treatment planning, methods, and outcomes. Valid assessment tools contain quantifiable indicators to measure patient progress and to track patients through treatment.

benzodiazepines. Group of medications having a common molecular structure and similar pharmacological activity, including antianxiety, sedative, hypnotic, amnestic, anticonvulsant, and muscle-relaxing effects. Benzodiazepines are among the most widely prescribed medications (e.g., diazepam, chlordiazepoxide, clonazepam, alprazolam, lorazepam).

buprenorphine. Partial opioid agonist approved by the U.S. Food and Drug Administration (FDA) for use in detoxification or maintenance treatment of opioid addiction and marketed under the trade name Suboxone® (containing naloxone). Subutex®, an all-buprenorphine tablet, has been discontinued by the manufacturer, although it remains available in generic form.

certification. Process by which SAMHSA determines that a physician is qualified to provide opioid addiction treatment under the Federal opioid treatment standards. There are separate certification processes for methadone and buprenorphine.

confidentiality regulations. Rules established by Federal and State agencies to limit disclosure of information about a patient's substance use disorder and treatment (described in 42 Code of Federal Regulations [CFR], Part 2 § 16). Programs must notify patients of their rights to confidentiality, provide a written summary of these rights, and establish written procedures regulating access to and use of patient records.

consent to treatment. Form completed with and signed by an applicant for MAT and by designated treatment program staff members which verifies that the applicant has been informed of and understands program procedures and his or her rights and treatment goals, risks, and performance expectations.

counseling. In MAT, a treatment service in which a trained counselor and a case manager evaluate both a patient's external circumstances and immediate treatment progress and offer appropriate advice and assistance or referral to other experts and services as needed. A major objective in MAT is to provide skills and support for a substance-free lifestyle and encourage abstinence from alcohol and other psychoactive substances.

cultural competence. Capacity of a service provider or organization to understand and work effectively in accord with the beliefs and practices of persons from a given ethnic/racial/religious/social group or sexual orientation. It includes the holding of knowledge, skills, and attitudes that allow the treatment provider and program to understand the full context of a patient's current and past socioenvironmental situation.

dependence. State of physical adaptation that is manifested by a drug class-specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, and/or decreasing blood level of a substance and/or administration of an antagonist. Dependence includes increased *tolerance* (see below). Compare *addiction*.

detoxification. Treatment for addiction to an illicit substance in which the substance is eliminated gradually from a patient's body while various types and levels of reinforcing treatment (including pharmacological treatment) are provided to alleviate adverse physical or psychological reactions to the withdrawal process.

diversion. Sale or other unauthorized distribution of a controlled substance, usually for a purpose other than the prescribed and legitimate treatment of a medical or mental disorder.

diversion control plan. Documented procedures to reduce the possibility that controlled substances are used for other than their legitimate use. Federal opioid treatment standards [42 CFR, Part 8 § 12(c)(2)] require a diversion control plan in an opioid treatment program as part of its quality assurance program.

dosage determination. Process of identifying the amount of medication that will minimize withdrawal symptoms and craving in patients in MAT in an effort to increase their chance to have a successful recovery. Much evidence supports a linear relationship among the amount of medication provided, the time frame over which it is allowed to act before another dose is administered (dose frequency), and treatment response.

drug–drug interaction. Action of one drug on the effectiveness or toxicity of another drug.

drug testing. Examination of an individual to determine the presence or absence of illicit or nonprescribed drugs or alcohol or to confirm maintenance levels of treatment medications.

elimination half-life. Time required after administration of a substance (e.g., buprenorphine) for one-half the dose to leave the body. Elimination half-life affects the duration of action of a substance or medication and can be influenced by patient factors, such as absorption rate, variable metabolism and protein binding, changes in urinary pH, concomitant medications, diet, physical condition, age, pregnancy, and even use of vitamins and herbal products.

opioid medication addiction. Addiction resulting from use of an opioid usually for pain management. (Prescription opioid medication may have been directly prescribed to a patient or they may have accessed it through other means.)

induction. Initial treatment process of adjusting maintenance medication dosage levels until a patient attains stabilization.

maintenance treatment. Dispensing of an opioid addiction medication at stable dosage levels for a set period of time.

medication-assisted treatment (MAT) for opioid addiction. Type of addiction treatment, usually provided in a certified, licensed Opioid Treatment Program (OTP) or a physician's office-based treatment setting, that provides

maintenance pharmacotherapy using an opioid agonist, a partial agonist, or an antagonist medication, which may be combined with other comprehensive treatment services, including medical and psychosocial services.

methadone. The most frequently used opioid agonist medication. Methadone is a long-acting synthetic opioid that binds to mu opiate receptors and produces a range of mu agonist effects similar to those of short-acting opioids, such as morphine and heroin. Long-acting opioids help keep blood levels steady and control pain for a longer period of time; short-acting opioids need to be taken more frequently but effects are felt more quickly.

naloxone. Short-acting opioid antagonist. Because of its higher affinity than that of opioids for mu opiate receptors, naloxone displaces opioids from these receptors and can precipitate withdrawal, but it does not activate the mu receptors, nor does it cause the euphoria and other effects associated with opioid drugs. Naloxone is not FDA approved for long-term therapy for opioid addiction, except in the combination buprenorphine-naloxone tablet. When taken orally, naloxone does not have an effect. Some programs use naloxone to evaluate an individual's level of opioid dependence. Naloxone is also used to help reverse opioid overdose. See *naloxone challenge test*.

opiate receptors. Areas on cell surfaces in the central nervous system that are activated by opioid molecules to produce the effects associated with opioid use, such as euphoria and analgesia. Opiate receptors are activated or blocked by opioid agonist or antagonist medications, respectively, to mediate the effects of opioids on the body. Mu and kappa opiate receptor groups principally are involved in this activity.

opioid. Natural derivative of opium or synthetic psychoactive substance that has effects similar to morphine or is capable of conversion into a drug having such effects. One effect of opioid drugs is their addiction-forming or addiction-sustaining liability.

opioid addiction. Cluster of cognitive, behavioral, and physiological symptoms resulting from continuation of opioid use despite significant related problems. Opioid addiction is characterized by repeated self-administration that usually results in opioid tolerance, withdrawal symptoms, and compulsive drug taking.

opioid addiction treatment. Dispensing of approved medication to prevent withdrawal and craving in patients with opioid dependence, with or without a comprehensive range of medical and rehabilitation services or medication prescribed when necessary to alleviate the adverse medical, psychological, or physical effects. This term encompasses medically supervised withdrawal, maintenance treatment, comprehensive maintenance treatment, and, under restricted timeframes, interim maintenance treatment (adapted from 42 CFR, Part 8 § 2).

opioid agonist. Drug that has an affinity for and stimulates physiologic activity at cell receptors in the central nervous system normally stimulated by opioids. Methadone is an opioid agonist.

opioid antagonist. Drug that binds to cell receptors in the central nervous system that normally are bound by opioid psychoactive substances and that blocks the activity of opioids at these receptors without producing the physiologic activity produced by opioid agonists. Naltrexone is an opioid antagonist.

opioid partial agonist. Drug that binds to, but incompletely activates, opiate receptors in the central nervous system, producing effects similar to those of a full opioid agonist but, at increasing doses, does not produce as great an agonist effect as do increased doses of a full agonist (ceiling effect). Buprenorphine is a partial opioid agonist.

opioid treatment program (OTP). SAMHSA-certified program, usually comprising a facility, staff, administration, patients, and services, that engages in supervised assessment and treatment, using methadone, buprenorphine or naltrexone, of individuals who are addicted to opioids. An OTP can exist in a number of settings, including, but not limited to, intensive outpatient, residential, and hospital settings. Services may include medically supervised withdrawal and/or maintenance treatment, along with various levels of medical, psychiatric, psychosocial, and other types of supportive care.

OxyContin®. Long-acting class II opioid drug usually obtained by prescription for treatment of pain. OxyContin is one of several prescription opioids increasingly obtained by illicit means and abused by people addicted to opioids.

pain management. Treatment of acute or chronic pain by various treatment methods, often including administration of opioid medications.

pharmacology. Science that addresses the origin, nature, chemistry, effects, and uses of medications and drugs.

pharmacotherapy. Treatment of disease with prescribed medications.

relapse. Breakdown or setback in a person's attempt to change or modify a particular behavior; an unfolding process in which the resumption of compulsive substance use is the last event in a series of maladaptive responses to internal or external stressors or stimuli.

remission. State in which a mental or physical disorder has been overcome or a disease process halted.

residential treatment. Therapy received within the context of a cooperative living arrangement.

screening. Process of determining whether a prospective patient has a substance use disorder before admission to treatment. Screening usually involves use of one or more standardized techniques, most of which include a questionnaire or a structured interview. Screening also may include observation of known presenting complaints and symptoms that are indicators of substance use disorders.

sedative. Medication with central nervous system sedating and tranquilizing properties.

side effect. Consequence (especially an adverse result) other than that for which a drug is used—especially the result produced on a tissue or organ system other than that being targeted.

stabilization (stability). Process of providing immediate assistance (as with an opioid agonist) to eliminate withdrawal symptoms and drug craving.

substance use disorder (frequently referred to as substance abuse or dependence). Maladaptive pattern of drug or alcohol use manifested by recurrent, significant adverse consequences related to the repeated use of these drugs or alcohol. The substance-related problem must have persisted and occurred repeatedly during a 12-month period. It can occur sporadically and mainly be associated with social, legal, or interpersonal problems, or it can occur regularly and be associated with medical and mental problems, often including tolerance and withdrawal.

supportive-care phase. Phase of MAT in which patients maintain abstinence from substances.

take-home medication. Opioid addiction treatment medication dispensed to patients for unsupervised self-administration.

tapering phase. Phase of MAT in which patients maintained on medication attempt gradually to eliminate their treatment medication while remaining abstinent from illicit substances.

tolerance. Condition of needing increased amounts of an opioid to achieve intoxication or a desired effect; condition in which continued use of the same amount of a substance has a markedly diminished effect.

treatment barrier. Anything that hinders treatment. Examples include financial problems, language difficulties, ethnic and social attitudes, logistics (caring for children, transportation), and unhelpful patient behaviors (tardiness, missed appointments).

treatment efficacy. Ability of an intervention or medication in expert hands and under ideal circumstances to produce the desired therapeutic effect.

treatment eligibility. Relative qualification of a prospective patient for admission to an opioid treatment program.

treatment outcomes. Observable results of therapy, including decreased use of illicit psychoactive substances, improved physical and emotional health, decreased antisocial activities, and improved social functioning; considered the best indicator of treatment program effectiveness.

treatment plan. Documented therapeutic approach for each patient that outlines attainable short-term goals mutually acceptable to the patient and their physician.

12-Step program. Self-help program requiring mastery of a set of steps to achieve and maintain abstinence, based on the program of Alcoholics Anonymous. Many addiction treatment programs use a 12-Step structure or philosophy as a construct for treatment design.

urine drug testing. Most common laboratory assessment technique in addiction treatment which involves analysis of urine samples from patients for the presence or absence of specific drugs. Originally used as a measure of program effectiveness, urine testing now is used to make programmatic decisions, monitor psychoactive substance use, adjust medication dosage, and decide whether a patient is responsible enough to receive take-home medication. Methods of urine testing vary widely.

withdrawal. Reduction and elimination of substance use. See *medically supervised withdrawal, withdrawal syndrome*.

withdrawal syndrome (or withdrawal). Predictable constellation of signs and symptoms after abrupt discontinuation of or rapid decrease in use of a substance that has been used consistently for a period. Signs and symptoms of withdrawal are usually opposite to the direct pharmacological effects of a psychoactive substance.

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