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SUBJECT: Medication Assisted Treatment for Substance Use Disorders

The Center for Medicaid and CHIP Services (CMCS) has issued a series of Informational Bulletins on effective practices to identify and treat mental health and substance use disorders (SUDs) covered under Medicaid.1,2 Nearly 12 percent of Medicaid beneficiaries over 18 have a SUD, and CMCS is committed to helping States effectively serve these individuals.3 The purpose of this Bulletin is to highlight the use of FDA-approved medications in combination with evidence-based behavioral therapies, commonly referred to as “Medication Assisted Treatment” (MAT), to help persons with SUDs recover in a safe and cost-effective manner. Specifically, the Bulletin provides background information about MAT, examples of state-based initiatives, and useful resources to help ensure proper delivery of these services.

Background

SUDs impact the lives of millions of Americans in the general population, including individuals who are enrolled in the Medicaid program. On average, 105 people die every day as result of a drug overdoses.4 Additionally, 6,748 individuals across the country seek treatment every day in

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1 Additional Informational Bulletins on behavioral health can be found at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Mental-Health-Services-.html
2 http://www.drugabuse.gov/drugs-abuse
3 http://store.samhsa.gov/shin/content/SMA13-4757/SMA13-4757.pdf, p.10
the emergency department for misuse or abuse of drugs.\textsuperscript{5} In 2010, drug overdose was the leading cause of injury death\textsuperscript{6} and caused more deaths than motor vehicle accidents among individuals 25-64 years old.\textsuperscript{7} The monetary costs and associated collateral impact to society due to SUDs are high. In 2009, health insurance payers spent $24 billion for treating SUDs, of which Medicaid accounted for 21 percent of spending.\textsuperscript{8}\textsuperscript{9} Therefore, understanding how MAT could reduce the high rates of SUDs and associated costs of medical and SUD treatment is crucial. The use of medications in combination with behavioral therapies to treat SUDs can help reestablish normal brain functioning, reduce cravings, and prevent relapse.\textsuperscript{10} The medications used can manage the symptoms of substance use withdrawal that often prompt relapse and allow individuals to utilize other treatments, such as behavioral therapy. In addition, these medications and therapies can contribute to lowering a person’s risk of contracting HIV or hepatitis C by reducing the potential for relapse.\textsuperscript{11}

Medication assisted treatment is the use of FDA-approved medications in combination with evidence-based behavioral therapies to provide a whole-patient approach to treating SUDs. There is strong evidence that use of MAT in managing SUDs provides substantial cost savings. For instance:

- Persons with untreated alcohol use disorders use twice as much health care and cost twice as much as those with treated alcohol use disorders,\textsuperscript{12} and medications treating SUDs in pregnant women resulted in significantly shorter hospital stays for SUD treatment than drug-addicted pregnant women not receiving MAT (10.0 days vs. 17.5 days).\textsuperscript{13}

\begin{thebibliography}{99}
\bibitem{6} “Injury deaths are those caused by acute exposure to physical agents, e.g., mechanical force or energy, heat, electricity, chemicals, and ionizing radiation, in amounts or at rates that exceed the threshold of human tolerance.” From http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_10.pdf.
\bibitem{12} Holder, HD. \textit{Costs Benefits of Substance Abuse Treatment: An Overview of Results from Alcohol and Drug Abuse}. J. Mental Health Policy Econ, March, 1998.
\end{thebibliography}
• For individuals with alcohol dependence, MAT was associated with fewer inpatient admissions. Total healthcare costs were 30 percent less for individuals receiving MAT than for individuals not receiving MAT.\textsuperscript{14}

• Medical costs decreased by 33 percent for Medicaid patients over three years following their engagement in treatment. This included a decline in expenditures in all types of health care settings including hospitals, emergency departments, and outpatient centers.\textsuperscript{15}

Studies have shown that prior to alcoholism treatment initiation, total monthly health care costs increased and costs substantially increased during the 6–12 months prior to treatment. Following treatment initiation, monthly total medical care costs declined and the overall trend was downward. Early intervention in the cycle of addiction for younger individuals with SUDs can bring costs down as they have lower pre-treatment costs than older adults with SUDs.\textsuperscript{16}

Medication Assisted Treatment

This section provides an overview of the medications and therapies that comprise MAT. These medications fall into two larger categories: medications to treat opioid use disorders and medications to treat alcohol use disorders.

Several medications have been found effective in treating addiction to opioids, alcohol, and nicotine in adults.\textsuperscript{17} There are currently no FDA-approved medications to treat addiction to cannabis, cocaine, or methamphetamine.

Medications to Treat Opioid Use Disorders

Three medications have received FDA-approval for treating opioid use disorders:

• \textbf{Methadone} prevents opioid withdrawal symptoms and reduces craving by activating opioid receptors in the brain. It has a long history of use in treatment of opioid dependence in adults, and is available in specially licensed methadone treatment programs. In some States, opioid-dependent adolescents between the ages of 16 and 18 may be eligible for methadone treatment, provided they have two documented failed treatments of opioid detoxification or drug-free treatment and have a written consent for methadone signed by a parent or legal guardian.\textsuperscript{18}

• \textbf{Buprenorphine} reduces or eliminates opioid withdrawal symptoms, including drug cravings, without producing the euphoria or dangerous side effects of heroin and other opioids. It does

\textsuperscript{14} Baser, o., Chalk, M. Rawson, R. et al. (2001) Alcohol treatment dependence: comprehensive healthcare costs, utilization outcomes, and pharmacotherapy persistence. \textit{The American Journal of Managed Care, 17}(8), S222-234.


\textsuperscript{16} Holder, HD. \textit{Costs Benefits of Substance Abuse Treatment: An Overview of Results from Alcohol and Drug Abuse}. J. Mental Health Policy Econ, March, 1998.

\textsuperscript{17} This Bulletin will only focus on medications for treating opioid and alcohol disorders. See \texttt{http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Tobacco.html} for detailed information about treating nicotine disorders.

this by both activating and blocking opioid receptors in the brain. It is available for sublingual (under-the-tongue) administration both in a stand-alone formulation and in combination with another agent called naloxone. The naloxone in the combined formulation is included to deter diversion or abuse of the medication by causing a withdrawal reaction if it is intravenously injected by individuals physically dependent on opioids.\(^{19}\) Physicians with special certification may provide office-based buprenorphine treatment for detoxification and/or maintenance therapy.\(^{20}\) It is sometimes prescribed to older adolescents on the basis of two research studies indicating its efficacy for this population\(^{21,22}\) and has proven efficacy to treat those 16 years and older. More information can be found here and here.

- **Naltrexone** is approved for the prevention of relapse in adult patients following complete detoxification from opioids. It acts by blocking the brain’s opioid receptors, preventing opioid drugs from acting on them and thus blocking the euphoria the user would normally feel and/or causing withdrawal if recent opioid use has occurred. It can be taken orally in tablets or as a once-monthly injection given in a doctor’s office.\(^ {23}\)

In addition to the above medications for opioid use disorder treatment, **naloxone** is a medication used to prevent opioid overdose deaths. The medication binds to opioid receptors and can rapidly reverse or block the effects of other opioids. In doing so, naloxone can very quickly restore normal respiration to a person whose breathing has slowed or stopped as a result of heroin use or the misuse of prescription opioids.

### Medications to Treat Alcohol Use Disorders

Three medications have received FDA-approval for treating alcohol use disorders:

- **Acamprosate** reduces symptoms of protracted withdrawal (i.e., insomnia, anxiety, restlessness, and dysphoria) by normalizing brain systems disrupted by chronic alcohol consumption in adults. It is thought to be more effective in patients with severe alcohol use disorders.\(^ {24}\)

- **Disulfiram** inhibits an enzyme involved in the metabolism of alcohol, causing an unpleasant

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\(^{20}\) Substance Abuse and Mental Health Services Administration. Physician Waiver Qualifications. Available at: [http://buprenorphine.samhsa.gov/waiver_qualifications.html](http://buprenorphine.samhsa.gov/waiver_qualifications.html)


reaction (i.e., flushing, nausea, and heart palpitations) if alcohol is consumed after taking the medication.\textsuperscript{25} Compliance can be a problem, but among motivated patients this can be very effective.

- \textit{Naltrexone} blocks receptors involved in the rewarding effects of drinking and in the craving for alcohol similarly to how it blocks the effects of opioids. It reduces relapse of heavy drinking behavior and is highly effective in some but not all patients, where varied outcomes could be due to genetic factors. Naltrexone is available in both oral tablet and long-acting injectable preparations.\textsuperscript{26}

\section*{Behavioral Therapies}

To improve outcomes, the medications discussed above are recommended to be combined with behavioral therapies. Research shows that when treating SUDs, a combination of medication and behavioral therapies is the most effective. Behavioral therapies help patients engage in the treatment process, modify their attitudes and behaviors related to drug and alcohol abuse, and increase healthy life skills. These treatments can also enhance the effectiveness of medications and help people stay in treatment longer. Treatment programs that combine pharmacological and behavioral therapy services increase the likelihood of cessation relative to programs without these services.\textsuperscript{27} There are a number of treatment strategies that can be used in combination with medications to successfully address SUDs. These include:

- \textit{Individual therapy, group counseling, and family behavior therapy} each provide different types of support for individuals in recovery from SUDs:
  - Individual therapy can help people learn new skills to maintain a substance-free life, address co-occurring mental health issues, address the benefits of utilizing prescription medication in treatment, and support individuals to pursue meaningful work, school and family goals.
  - Group counseling can help reduce a person’s sense of isolation, provide peer support and feedback, and develop social and problem-solving skills.
  - Family behavior therapy provides education, allows family members to express their feelings and concerns, and helps secure the family’s support for the person in recovery. More information on family behavior therapy can be found here.

- \textit{Cognitive-behavioral therapy} seeks to help patients recognize, avoid, and cope with the situations in which they are most likely to abuse drugs. More information on cognitive-behavioral therapy can be found here.

- \textit{Motivational enhancement} capitalizes on the readiness of individuals to change their behavior and enter treatment. More information on motivational enhancement can be found here.

\textsuperscript{26} http://www.ncbi.nlm.nih.gov/books/NBK64042/
Motivational incentives (contingency management) use positive reinforcement to encourage abstinence from drugs. More information on motivational incentives can be found here.

Information on other behavioral therapies that can be effective when combined with medications for SUD can be found here.

**Additional Services**

*Screening and Management of Co-occurring Physical Health Issues*

A significant number of individuals receiving MAT for SUDs also have physical health issues. Many suffer from serious chronic conditions including: diabetes, asthma, HIV/AIDS, Hepatitis C, chronic obstructive pulmonary disease, and severe dental problems. SUDs can cause or exacerbate these chronic conditions; many of the health problems associated with substance use could be managed alongside MAT programs. Providers offering substance use treatment can screen for chronic physical health conditions and provide services onsite (with appropriate primary care supports in place) or make referrals to community providers. Studies have found that integrating care for individuals with a chronic SUD condition with MAT is cost-effective and improves patient care.  

*Screening and Management of Co-occurring Mental Health Issues*

A significant number of individuals with a SUD also suffer from a co-occurring mental health issue; of 21 million adults aged 18 or older in 2012 with a past year SUD, 40.6 percent also had a mental illness. Understanding SUDs and mental health issues interact with each other is important as a co-occurring disorder can complicate recovery if it is not adequately addressed. Rapidly identifying and addressing a co-occurring mental health issue can help improve MAT outcomes. Similar to screening and management of co-occurring physical health issues, providers offering substance use treatment can screen for mental health issues and provide services onsite (with appropriate mental health professional supports in place), along with referrals to community provider depending on the illness severity and onsite mental health capacity. Screening tools can include the PHQ-9 (Patient Health Questionnaire), the GAD-7 (Generalized Anxiety Disorder), and the Columbia-Suicide Severity Rating Scale (C-SSRS). For more information about screening tools, please visit here.

**Strategies for Managing Medication Assisted Treatment**

Many state Medicaid programs utilize processes to help manage the prescribing of addiction medications and delivery of evidence-based behavioral therapies. States should ensure that these strategies are consistent with the Mental Health Parity and Addiction Equity Act, when


Medicaid programs may use the following strategies to support access to this benefit.

- **Preferred Drug List (PDL):** A state Medicaid agency or contracted managed care organization (MCO) designates a medication as a preferred or non-preferred drug, indicating those drugs that providers are permitted to prescribe without seeking prior authorization for payment coverage. If a drug is not included on the PDL, the provider must obtain approval from the state Medicaid agency before the drug will be paid for by the Medicaid agency or the agency’s vendor. When a new drug enters the market, it typically has a non-preferred status until the drug can be reviewed by the Pharmacy and Therapeutics Committee. Before a drug’s review and placement on a preferred drug list, a patient’s prescriber is able to prescribe a non-preferred drug through a state’s prior authorization process. This allows prescriber flexibility to prescribe the most effective medication while ensuring appropriate systems measures are in place to manage the benefit.

- **Prior Authorization:** In order for a Medicaid beneficiary to have prescribed medications paid for by the Medicaid agency or contracted MCO, the prescriber must obtain permission from Medicaid or the agency’s vendor. Each state Medicaid program has different policies in place for which medications require prior authorization. Prior authorization criteria should reflect evidence-based standards for appropriate medical use of the pharmaceutical in question.

- **Documentation of Behavioral Therapy:** A state Medicaid agency or contracted MCO may require evidence that the patient seeking an FDA-approved addiction medication is being referred to or has already started to receive behavioral therapy services along with their medication. Presently, 20 states and the District of Columbia require documentation of behavioral therapy with use of buprenorphine-naloxone and 18 states for the use of injectable naltrexone. Care should be used to avoid making such requirements unduly burdensome such that they effectively limit appropriate access to pharmacotherapy.

- **Quantity Limits:** A state Medicaid agency or contracted MCO may impose quantity limits on certain medications as a way to ensure that it is not overprescribed. As many of these medications bind to the same receptors in the brain as other drugs, quantity limits exist to prevent overprescribing leading to abuse, overdose or diversion of the medications. A state must have developed standards for applying these limits that are evidenced based and include the medical necessity criteria used for determining any limit. A state must have developed standards for applying these limits that are evidenced based and include the medical necessity criteria used for determining any limit.

- **Duration Limits:** A state Medicaid agency or contracted MCO may impose duration limits on certain medications as a way to ensure that it is not overprescribed. As many of these medications bind to the same receptors in the brain as other drugs, duration limits exist to prevent overprescribing leading to abuse, overdose or diversion of the medications. Similar

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31 Substance Abuse and Mental Health Services Administration. (2013). Medicaid Coverage And Financing Of Medications To Treat Substance Use Disorders. Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.
32 Quantity limits should comport with MHPAEA requirements sets forth in statute and policies regarding CMS to ensure appropriate access to benefits.
to quantity limits, states must have the necessary evidence and medical necessity criteria for imposing limits on the duration of these medications. Setting limits on the length of medication-assisted treatment can affect retention and outcomes. Medication-assisted treatment should be continued as long as the treatment is medically necessary and the individual participates in treatment as set forth in their treatment plan. 33

- **Provider Selection and Credentialing:** Both state and federal regulations establish guidance regarding who can provide certain prescription medications and in what setting the medication can be administered. Any additional stipulations imposed by state Medicaid agencies or contracted MCO should avoid excluding primary care providers and care sites where comorbid problems may be managed concurrently when otherwise established guidance regarding access and safety are satisfied.

- **Drug Utilization Reviews:** The drug utilization review (DUR) process occurs prospectively and retrospectively of a drug being dispensed. The prospective DUR, which occurs prior to a drug being dispensed, may involve a Medicaid agency or its claims processor reviewing documentation of claims against a clinical database containing an individual’s prior pharmacy history to determine whether any problems or issues exist, including duplication of prescriptions and incompatibility with other prescriptions. If an issue is found, a review of the enrollee’s care, prescriber’s practice or pharmacy practice can occur, along with limits placed on a prescription being filled until the issue is resolved. The retrospective DUR is a review process occurring after the drug has been dispensed. It may include a review of individual patient profiles for follow-up and intervention. It may also involve a review of the aggregate claims data to identify patterns in prescribing whether it be underutilization or overutilization, from which the Medicaid agency or its designee can make recommendations for future prescribing. There is no established stepped approach to therapy with any of the pharmaceuticals discussed here. The pharmacotherapy must be matched to the needs of the individual at the time of the assessment.

- **Patient Review and Restriction Programs:** If a Medicaid agency finds that a beneficiary has utilized Medicaid services at a frequency or amount that may not be medically necessary, as determined in accordance with utilization guidelines established by the State, the agency may restrict that beneficiary for a reasonable period of time to obtain Medicaid services from designated providers only. Some States have implemented Patient Review and Restriction programs (PRRs) to address possible patient overuse of physician services and prescription drugs. Medicaid programs may only impose restrictions if they give patients notice and an opportunity for a hearing, ensure that restricted patients still have reasonable access to Medicaid services, and exempt emergency services from the restriction.

**State-Based Initiatives**

MAT can be an effective strategy for addressing the needs of individuals who have a SUD. Policies regarding MAT and implementation practices that combine these medications with supportive counseling vary considerably across states. Many states are experimenting with

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different strategies to encourage the implementation and availability of MAT. States that have implemented strong evidence-based MAT programs tend to support financing and care provisions structures that provide pharmacological, medical, counseling and other supports within an integrated physical health and behavioral health system. The examples below highlight select state-based efforts to implement MAT.

**Vermont**

In Vermont, MAT for opioid addiction was implemented for methadone and buprenorphine in 2002. Vermont incentivized implementation of buprenorphine by funding online training for physicians to obtain the additional DEA registration (also known as the “X-number”) to prescribe buprenorphine and other technical assistance to physicians. To improve the coordination of care for individuals struggling with opioid addiction issues and to facilitate MAT use, Vermont has developed a proposal for a health home model, called the *Hub and Spoke* model.

The *Hub and Spoke* model consists of two levels of care, with the patients’ needs determining the appropriate level. Individuals with complex addictions and co-occurring substance abuse and mental health conditions will receive care through a *Hub*, or specialty treatment center responsible for coordinating care across the health and substance abuse treatment systems of care. Less clinically complex patients who require MAT but not methadone will receive treatment within the *Spoke* system. A *Spoke* is an integrated care system comprised of a prescribing physician and collaborating health and addictions professionals who provide assistance with obtaining a medical home, monitor adherence to treatment, coordinate access to recovery supports, and provide counseling, contingency management, and case management services. This model is incorporated in Vermont’s 1115 Waiver program and in their proposed 2703 health home program. Additional information on Vermont’s MAT approach can be found [here](#) and [here](#).

**Rhode Island**

In Rhode Island, the state received approval for their 2703 person-centered health home provision focused on opioid dependent Medicaid beneficiaries who are currently receiving or who meet criteria for MAT. Working with opioid treatment providers (OTPs) as the health home providers allows for heightened contact between medical and clinical professionals who have ongoing therapeutic relationships with patients. This will enable providers to use existing and enhanced resources to improve the health of patients and decrease inadequate/ineffective medical care. Each individual is assigned to a team, which may be specialized to their specific healthcare needs. Patients have an assigned nurse and case manager to monitor their healthcare needs; assist with referral, scheduling, and transportation to medical and other appointments; develop a health plan; provide health promotion and wellness activities; facilitate transitions between levels of care; support recovery needs; and identify and provide resources that support wellness and recovery. The Rhode Island health home model aims to provide a mechanism to support stronger, formalized relationships between OTPs and community healthcare providers. Additional information on Rhode Island’s MAT approach can be found [here](#).
Texas

Since February of 2011, qualified physicians and Chemical Dependency Treatment Facilities are able to bill the Texas Medicaid and Healthcare Partnership for MAT. Texas legislation clearly articulated that medication should be available to manage withdrawal/intoxication from all classes of abusable drugs. To this end, the state has established procedure codes and modifiers that provide guidance to MAT providers. Additional information regarding Texas’ approach to covering MAT in Medicaid can be found here and here.

Ohio

In July of 2012, the Ohio Medicaid program began to cover MAT as a component of its Medicaid program. Similar to Texas, Ohio’s Medicaid program allows certain facilities and qualified practitioners to provide MAT. In addition, the Ohio Department of Mental Health and Addiction Services developed protocols for MAT going beyond use of methadone, with specific standards of practice for buprenorphine and buprenorphine/naloxone products. Additional information regarding Ohio’s coverage of MAT can be found here and here.

Resources

**Opioid Treatment Program Directory**

http://dpt2.samhsa.gov/treatment/directory.aspx

**Medication-Assisted Treatment For Opioid Addiction in Opioid Treatment Programs Inservice Training**

Provides a training program for substance abuse treatment counselors and other clinicians on medication-assisted treatment for opioid addiction. Covers basic principles, best practices, history, and regulation. Includes scripted modules and handouts.

http://store.samhsa.gov/product/Medication-Assisted-Treatment-for-Opioid-Addiction-in-Opioid-Treatment-Programs/SMA09-4341

**Opioid Overdose Prevention Toolkit**

Equips communities and local governments with material to develop policies and practices to help prevent opioid-related overdoses and deaths. Addresses issues for first responders, treatment providers, and those recovering from opioid overdose.


**TAP 30: Buprenorphine: A Guide for Nurses**

Gives nurses information about buprenorphine for medication-assisted treatment of addiction to opioids and guidelines for working with physicians to provide office-based screening, assessment, supervised withdrawal (detoxification), and maintenance treatment.
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**TIP 40: Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction**

Practice guidelines help physicians make decisions about using buprenorphine to treat opioid addiction. Includes information on patient assessment; protocols for opioid withdrawal; and the treatment of pregnant women, teens, and polysubstance users.


**TIP 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs**

Gives a detailed description of medication-assisted treatment for addiction to opioids, including comprehensive maintenance treatment, detoxification, and medically supervised withdrawal. Discusses screening, assessment, and administrative and ethical issues.


**TIP 49: Incorporating Alcohol Pharmacotherapies Into Medical Practice**

Provides clinical practice guidelines for using four medications in the medication-assisted treatment of alcoholism and alcohol abuse: acamprosate, disulfiram, oral naltrexone, and extended-release injectable naltrexone. Also discusses patient management.


**General Principles for the Use of Pharmacological Agents to Treat Individuals with Co-Occurring Mental and Substance Use Disorders**

Offers general principles to assist in the planning, delivery, and evaluation of pharmacologic approaches to support the recovery of individuals with co-occurring disorders. Covers engagement, screening, assessment, treatment planning, and continuity of care.


Presents research-based principles of addiction treatment for a variety of drugs, including nicotine, alcohol, and illicit and prescription drugs, that can inform drug treatment programs and services.

Principles of Adolescent Substance Use Disorders: A Research-Based Guide

Presents research-based principles of adolescent SUD treatment; covers treatment for a variety of drugs including, illicit and prescription drugs, alcohol, and tobacco; presents settings and evidence-based approaches unique to treating adolescents.