

A photograph of three people running away from the camera on a dirt path in a desert. The scene is backlit by a bright sun, creating a golden glow and long shadows. The person in the foreground is wearing a patterned poncho and a hat. The person in the middle has long hair. The person in the back is wearing a dark jacket and jeans. The background features desert vegetation, including Joshua trees, and a clear sky. A green diagonal shape is on the left side of the image, with two thin lines (one blue, one orange) running parallel to the diagonal.

Best Practices:

Medication-Assisted Treatment

Best Practices: Medication-Assisted Treatment

Medication-assisted treatment (MAT) is a form of substance use disorder treatment that gives patients access to life-saving medications while working toward and living in recovery. In this booklet, you'll learn:

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The Basics

What is MAT?

Medication-assisted treatment (MAT) is a treatment for substance use disorder (SUD) that uses a combination of medications, counseling, and behavioral therapies.¹ This is an evidence-based approach to treatment for opioid use disorder (OUD) and alcohol use disorder (AUD) that is effective at helping patients sustain recovery.² The goal of MAT is to discourage substance use and provide patients with the tools necessary for recovery. MAT is sometimes referred to as medication for opioid use disorder (MOUD).

According to the National Institute on Drug Abuse, the abstinence rate from opioids exceeds 60% in long-term follow up of MAT.³



M
Medications are prescribed to patients struggling with SUD

A
The medication **assists** patients by curbing withdrawal symptoms and cravings

T
The medication is part of a **treatment** plan to help manage symptoms and sustain recovery

How Does MAT Work?

The medications used in MAT help to relieve withdrawal symptoms and psychological cravings that cause chemical imbalances in the body.⁵ The Federal Drug Administration (FDA) has approved five different medications for use during MAT treatment: buprenorphine and methadone for OUD, acamprosate and disulfiram for AUD, and naltrexone for both.⁶ These medications:^{7,8}

- Are safe and reduce the risk of overdose
- Are cost-effective and reduce medical/SUD treatment costs
- Increase treatment retention and abstinence from substance use
- Lower the risks of infectious disease transmission, like HIV or Hepatitis C
- Improve social functioning
- Reduce criminal activity



MAT is commonly misunderstood as simply replacing one drug with another, but research has shown that MAT saves lives. The medications are properly regulated and can only be dispensed through a Substance Abuse and Mental Health Services Administration (SAMHSA)-certified practitioner.¹

Benefits

Benefits of MAT⁹

IT WORKS

MAT can help patients stay in recovery and prevent unnecessary deaths from drug overdose. When used with counseling and/or behavioral therapies, the benefits are stronger.

IT'S COST-EFFECTIVE

Treatment for SUD can be very costly, but not nearly as costly as maintaining an addiction. MAT offers an affordable alternative by eliminating the cost of illicit drugs as well as health problems that could occur due to SUD.

PATIENTS GET THEIR LIVES BACK

SUD can be an all-consuming part of life. Through MAT, patients can receive medical and psychological support to move toward and maintain recovery.

PART OF A GREATER TREATMENT PLAN

Holistic therapies can be used to support MAT. In OUD treatment, the medication manages withdrawal symptoms, allowing patients to fully engage in therapy. Participating in MAT can keep patients stable and in recovery.



MAT can save participants lifetime costs of up to \$105,000 in health care and criminal justice expenses, so it's important to seek evidence-based treatment despite financial concerns.¹⁰ Federal and state programs allow people without insurance to receive MAT. The Alabama Department of Mental Health has contract treatment facilities that base cost on income level and ability to pay.

Proper Use

MAT for Opioids vs. Alcohol

The biggest difference between MAT used to treat opioid use disorder versus for alcohol use disorder is the objective of the treatment.⁹

ALCOHOL-FOCUSED MAT

- Used to maintain abstinence
- Helpful for patients who have already gone through a detox program
- Typically reserved for people who struggle with severe AUD or have a history of multiple relapses

OPIOID-FOCUSED MAT

- Used to prevent withdrawal
- Helpful for patients who are trying to reach abstinence



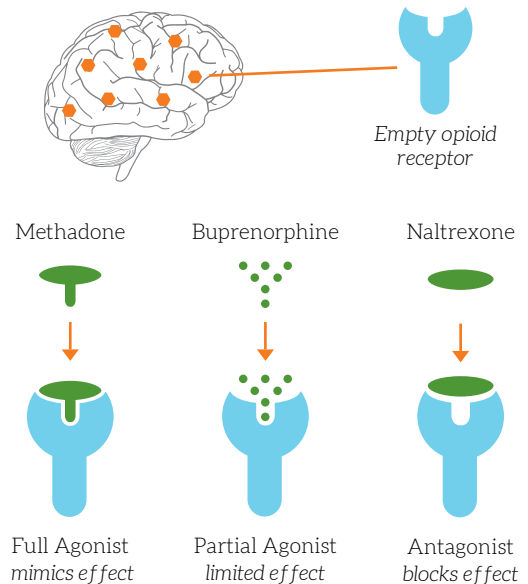
“Access to medication-assisted treatment, including buprenorphine that can be prescribed in office-based settings, is the gold standard for treating individuals suffering from opioid use disorder.”¹¹

– Adm. Brett P. Giroir, MD, Former U.S. Asst. Secretary for Health

Medications and the Brain

Buprenorphine, methadone, and naltrexone are the three medications approved by the FDA for use during treatment of opioid use disorders. These medications are safe and effective, and can be beneficial for anyone who uses opioids. They work for treatment of short-acting opioids like heroin, morphine, and codeine, as well as semi-synthetic opioids like oxycodone and hydrocodone. The medications are safe to use for long-term OUD treatment; patients may participate in MAT for months, years, or even a lifetime.¹²

The Drug Policy Alliance recognizes methadone and buprenorphine as the gold standard of treatment for OUD.¹³



Source: Pew Charitable Trusts, 2020¹¹

Medications for OUD Treatment

Every patient who seeks treatment for OUD should be offered access to each of the three FDA-approved medications for use in MAT. This allows providers to work with the patient to find the right treatment plan for each individual's needs.¹²

FDA-Approved Medications to Treat OUD¹¹

Medication	Mechanism of Action	Route of Administration	Dosing Frequency	Effects	Usage
Methadone ¹³	Full Agonist <i>mimics effect</i>	Pill, liquid, or wafer	Daily	Reduces cravings and withdrawals	To achieve and sustain long-term recovery
Buprenorphine ^{14, 15, 16}	Partial Agonist <i>limited effect</i>	Pill, film, or subdermal implant	Daily/every six months	Suppresses and reduces cravings	During the early stages of withdrawal (abstained for 12-24 hours)
Naltrexone ¹⁷	Antagonist <i>blocks effect</i>	Oral formulation or extended-release injection	Daily/monthly	Prevents euphoric and sedative feelings	For those who have abstained for 7-14 days

Medications for AUD Treatment

There are three medications that are approved for use during MAT to treat AUD. Providers should work with patients to find the most effective treatment for each individual. The patient's severity of AUD and history of relapse should be considered.²

FDA-Approved Medications to Treat OUD²

Medication	Mechanism of Action	Route of Administration	Dosing Frequency	Effects	Usage
Disulfiram ¹⁸	Inhibitor <i>reduces effect</i>	Oral tablet	Daily	Inhibits alcohol metabolism and acts as a psychological deterrent	To prevent relapse in patients who have reached abstinence
Acamprosate ¹⁹	Unestablished <i>thought to balance neuronal excitation and inhibition</i>	Oral tablet	2-3x Daily	Suppresses and reduces cravings	For patients past detox, but still in the early stages of abstinence
Naltrexone ¹⁷	Antagonist <i>blocks effect</i>	Oral formulation or extended-release injection	Daily/ monthly	Blocks euphoric effects of alcohol and feelings of intoxication	To reduce alcohol use, stay in treatment, and avoid relapse

Duration of MAT

Like most SUD treatment options, the optimal duration of MAT will depend on each patient. A six-month plan is the minimum course of treatment, but most patients benefit from indefinite treatment. There is no maximum recommended duration, but longer treatment courses lead to lower recidivism and mortality rates. Treatment continuation should be periodically reevaluated to ensure the patient is still benefiting from the treatment. For some people, SUD is a chronic condition, but MAT can make it manageable.²⁰



According to the National Institute on Drug Abuse, patients who use methadone during MAT are over four times more likely to stay in treatment than those that don't, and patients who use buprenorphine are nearly twice as likely to stay in treatment than those that don't.²¹

Expectations & Insights

Becoming a Practitioner

There are two options for qualified practitioners to administer MAT: Opioid Treatment Program (OTP) facilities, where patients can receive any of the three approved medications, or by obtaining an X-Waiver to prescribe buprenorphine outside of an OTP setting.

OPIOID TREATMENT PROGRAMS

OTP facilities offer methadone, buprenorphine, and naltrexone. In an OTP facility, staff supervise patients as they take their medications and offer care services like counseling. These facilities can exist in a number of care settings, including intensive outpatient, residential, and hospitals.²²

These programs are regulated by both state and federal governments, certified by the federal Substance Abuse and Mental Health Services Administration (SAMHSA), and registered with the Drug Enforcement Administration. Due to federal regulations, these facilities are the only venue where patients can receive methadone for treatment. Patients must travel to the clinic daily or almost daily.²³

As of June 2021, there were 21 certified OTP facilities in Alabama. MAT services are available in **Calhoun, Chilton, Colbert, Cullman, Dale, Etowah, Houston, Jackson, Jefferson, Madison, Marion, Mobile, Montgomery, Shelby, Tuscaloosa, and Walker counties.**²⁴

BUPRENORPHINE X-WAIVER

Qualified practitioners can become authorized to prescribe buprenorphine outside of an OTP setting through a waiver program. To obtain the waiver, practitioners must complete a federally mandated eight-hour training and receive a Drug Enforcement Administration X-Waiver. Before dispensing or prescribing buprenorphine, practitioners must notify SAMHSA's Center for Substance Abuse Treatment, Division of Pharmacologic Therapies, of their intent.²⁴

Most buprenorphine providers work outside of the communities most impacted by OUD, and they don't accept insurance due to low reimbursement rates. This makes buprenorphine largely inaccessible to those with the most need, so demand is high for practitioners with X-Waivers. Visit samhsa.gov/medication-assisted-treatment and click on "Become a Buprenorphine Waivered Practitioner" to start your journey.

In April 2021, the U.S. Department of Health and Human Services (HHS) issued a Notice of updated waiver requirements.²⁵ The updates include:

- Physicians who only treat patients in states where they are authorized to practice medicine are exempt from the waiver requirement
- Physicians may treat no more than 30 patients with buprenorphine at one time
- Physicians may not prescribe, dispense, or use methadone under the X-Waiver

To learn more about these guidelines, review the HHS' **"Practice Guidelines for the Administration of Buprenorphine for Treating Opioid Use Disorder."**²⁵

Outcomes of MAT

By participating in a MAT program, patients receive treatment that is individually tailored to their needs through the use of medication in tandem with behavioral therapy. MAT has been proven to be a clinically effective treatment and is shown to:²⁶

- Increase participant survival
- Improve treatment retention
- Decrease substance use and criminal activity among participants
- Increase participants' ability to gain and maintain employment
- Improve birth outcomes among pregnant participants




According to the National Institute on Drug Abuse, predictors of poor treatment outcomes include a history of heroin use and greater pain severity at the start of MAT.³

Addressing Stigma

MAT has been proven to reduce fatalities, however, the stigma surrounding SUD and MAT prevents many people from accessing life-saving medications. This stigma leads to inadequate funding, hesitancy from providers to practice MAT, and pressure from friends and family for potential participants to avoid MAT.^{6,8}

Practitioners of MAT should be cognizant of their words and replace stigmatized terms with person-first language. This can positively impact the perspective and behavior of patients and their support systems. Visit stopjudging.org to take a step towards destigmatizing these chronic diseases and removing societal barriers to treatment.

 27 WHAT'S THE WORD?	INSTEAD OF THIS...	SAY THIS!
	Addict, abuser, junkie, druggie	Person with a substance use disorder
	Alcoholic, drunk	Person with an alcohol use disorder
	Meth-head, pill popper	Person with an opioid use disorder
	Ex-addict, former alcoholic	Person in recovery
	Clean/dirty drug test	Positive/negative results
	Addictive disorder	Substance use disorder

Naloxone²⁸

Naloxone is an opioid antagonist that can reverse and block the effects of other opioids. The medication can be given by **intranasal spray** (into the nose), **intramuscular** (into the muscle), **subcutaneous** (under the skin), or **intravenous injection**.

A practitioner should assess the need to prescribe naloxone for patients who are receiving MAT or otherwise considered a risk for opioid overdose.

Naloxone is effective if opioids are misused in combination with other sedatives or stimulants. It is not effective in treating overdoses of benzodiazepines or stimulant overdoses involving cocaine and amphetamines.

Candidates for naloxone are those who:

- Take high doses of opioids for long-term management of chronic pain
- Receive rotating opioid medication regimens
- Have been discharged from emergency medical care following opioid poisoning or intoxication
- Take certain extended-release or long-acting opioid medication
- Those who have had a period of abstinence to include those recently released from incarceration.

The Future of MAT

As MAT becomes better understood and more widely accepted, there is a need for more MAT programs. Vermont has created a successful Hub and Spoke System (H&SS), which has increased access to MAT in rural areas with little treatment infrastructure. California is following Vermont's example by creating their own H&SS.²⁹ By adding locations and increasing the number of practitioners that are authorized to prescribe buprenorphine, the H&SS expands availability of MAT across the state. H&SS uses two main modes of treatment: Hubs and Spokes. They work together to collaborate and exchange information to ensure the patient receives the most comprehensive treatment possible.³⁰

HUBS

Hubs are regional locations that offer comprehensive and high-intensity MAT. All of the staff members specialize in treatment of SUD. Hubs are particularly helpful for people with severe SUD because they provide daily medication and therapeutic support.³¹ Hubs also work with Spokes to provide consultation and training.²⁹

SPOKES

Spokes are community-level locations that offer maintenance MAT. They are typically located at primary care or family practices. Spokes offer a less complex form of MAT, so patients with less severe SUD may begin their recovery journey at a Spoke or transition from a Hub to continue receiving support.³¹

Key Takeaways

- 1 MAT is the most effective therapy for OUD. It prevents unnecessary deaths and helps people maintain abstinence.
- 2 There are several medications that could fit a patient's need. All are safe and FDA approved.
- 3 MAT is beneficial on its own, but when combined with counseling or other therapies, it can be even more effective.
- 4 MAT should be tailored to each patient. Some need a longer duration or a different medication than others.
- 5 Promoting accessibility of MAT and addressing the stigma associated with it can save lives.
- 6 Becoming a buprenorphine provider can help patients in underserved communities receive MAT.

Resources

Alabama Resources

Alabama Department of Mental Health (ADMH): <https://mh.alabama.gov/>

Recovery Organization for Support Specialists (R.O.S.S.):
24/7 Helpline 1-844-307-1760
<https://ross4u.org/>

VitAL: <https://vitalalabama.com/>

Further Reading

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After suffering from opioid use disorder, chronic pain, and overdose, a man describes how he used MAT to get his life back.

Madden, E. F. (2019). Intervention stigma: How medication-assisted treatment marginalizes patients and providers. *Social Science & Medicine*, 232, 324-331. doi:10.1016/j.socscimed.2019.05.027

This study explores how individuals working in MAT experience discrimination and prejudice known as intervention stigma from other healthcare professionals.

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