MAT
Medication-Assisted Treatment for Opioid Use Disorder
A Printable Pocket Guide

Created in partnership with AHCCCS and the ASU Medical Advisory Board

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Medication-Assisted Treatment (MAT) combines behavioral therapy and medication to treat substance use disorders for the purposes of promoting and maintaining recovery.

The Evidence
Research on MAT shows:

- Half of patients participating in treatment with behavioral therapies alone will be lost to attrition.
- Treatment that combines medication with behavioral therapies has been shown to be more effective than treatment with behavioral therapies alone.
- MAT has been found to improve treatment retention, reduce illicit opiate use, decrease cravings, and improve occupational functioning.
- MAT has demonstrated a 75% reduction in mortality and premature death.
- MAT has been found to reduce healthcare costs, primarily in the form of fewer and shorter inpatient admissions. When considering the costs of drug-related crime, criminal justice costs, and total healthcare expenses, every dollar invested in addiction treatment programs yields twelve-fold savings.
I work with pregnant women, what are the standards of care for this population?

Due to the risk of miscarriage with untreated opioid withdrawal, the American College of Obstetricians and Gynecologists endorses methadone and buprenorphine (mono-product), accompanied by behavioral therapy, as the standard of care for pregnant women with opioid use disorders and dependence.

How do I know if my patient needs MAT?

If you suspect your patient has an opioid use disorder, they may be an appropriate candidate for MAT. Patients who have struggled to maintain abstinence from opioids through traditional forms of treatment alone may benefit from the addition of pharmacotherapy to behavioral therapies.

Isn’t treating my patient’s opioid use disorder with medication just replacing one addiction for another?

Addiction differs from physical dependence, in that addiction involves using a substance compulsively, using a substance despite negative consequences, and using it to reach a state of euphoria. With medications to treat substance use, a patient may become physiologically dependent on the substance, but the medication is used to feel and stay well, not to achieve euphoria or a “high.” Medications, such as methadone, actually have greater chemical similarities to the brain’s natural hormones (e.g. endorphins), than do other opioids.

How long should my patient remain on MAT?

MAT, like other forms of pharmacological treatment, is individualized. Some patients may utilize MAT to stabilize in their recovery for a period of time, while others may remain on these medications for their lifetime. Research suggests brief courses of MAT may not be sufficient and a minimum of 12-month courses or longer may be optimal.

My patient is currently abstaining from opioids, do they really need MAT?

Patients who are currently abstenent, but at risk for relapse, may be good candidates for MAT. Patients are most at risk for overdose when they have a reduced tolerance for opioids, which may occur after a period of abstinence, incarceration, or detoxification services. This may be a critical time to consider medication-assisted treatment.

Aren’t methadone overdoses common? Would I be putting my patient at risk?

A federal panel of national experts, through an extensive review of the research literature and national data, determined the majority of methadone overdoses occur when methadone is used as an analgesic, not when methadone is dispensed in Opioid Treatment Programs (OTPs). Methadone and other forms of MAT are some of the most heavily regulated and monitored forms of medication in the healthcare system.

Is one form of medication better than another?

The best medication is the one that works for the patient. A patient’s response to a medication is primarily based on genetic markers, though the patient’s history and the treatment setting are also factors that can be used in deciding the most appropriate medication.

I work with pregnant women, what are the standards of care for this population?

Due to the risk of miscarriage with untreated opioid withdrawal, the American College of Obstetricians and Gynecologists endorses methadone and buprenorphine (mono-product), accompanied by behavioral therapy, as the standard of care for pregnant women with opioid use disorders and dependence.

Arizona Opioid Assistance & Referral Line

This free 24/7 hotline, gives providers information about safe prescribing limits, potentially dangerous drug combinations, chronic pain treatment options, and caring for patients who are suffering from opioid-use disorder.

1-888-688-4222

Patients at Risk for Overdose:

- Individuals receiving rotating opioid medication regimens
- Individuals who inject opioids
- Individuals with reduced tolerance who have:
  - Recently been released from incarceration and are a past user of opioids
  - Recently been released from emergency medical care following opioid intoxication or poisoning
  - Completed opioid detoxification or have been abstinent for a period of time
Opioid Withdrawal Symptoms
If your patient experiences withdrawal symptoms when they attempt to stop their opioid use, they may be a good candidate for MAT. Opioid withdrawal symptoms include:

- Anxiety
- Dilated pupils
- Watery eyes
- Diarrhea
- Vomiting
- Sweating
- Cramping/abdominal pain
- Rapid heart rate
- Excessive yawning
- Nausea
- Restlessness
- Insomnia
- Tremors
- “Goose bumps”

As a healthcare provider, YOU can help your community address this epidemic:

Interested in obtaining a waiver to prescribe buprenorphine?
SAMHSA Information and Training
https://www.samhsa.gov/medication-assisted-treatment

Need to refer your patient for MAT services?
Buprenorphine Treatment Practitioner Locator
www.samhsa.gov/medication-assisted-treatment/physician-program-data/treatment-physician-locator

To locate an Opioid Treatment Program (OTP)
Opioid Treatment Program Directory
www.samhsa.gov/medication-assisted-treatment

Reminder: MAT = Pharmacotherapy + Behavioral Therapies
You can locate psychosocial substance abuse treatment services in your area using the Arizona Substance Abuse Treatment Provider Locator: http://substanceabuse.az.gov/

Evidence-Based Practices used by Substance Abuse Counselors

<table>
<thead>
<tr>
<th>Treatment Modality</th>
<th>Motivation Enhancement/Motivational Interviewing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Mechanism</td>
<td>Enhance internal motivation through a strong working alliance/therapeutic alliance and eliciting “change talk” from the patient</td>
</tr>
<tr>
<td>Treatment Frequency and Duration</td>
<td>Can be utilized for brief interventions or longer interactions; useful for initial treatment engagement</td>
</tr>
<tr>
<td>Considerations</td>
<td>Patient must have a clearly identifiable and measurable target behavior</td>
</tr>
<tr>
<td>Cognitive Behavioral Therapy</td>
<td>Patient changes maladaptive thinking and behaviors through structured exercises and activities</td>
</tr>
<tr>
<td>Contingency Management</td>
<td>Reinforces desired behaviors through an incentive-based system</td>
</tr>
<tr>
<td>Treatment Frequency and Duration</td>
<td>Short to long term therapy (approximately 10-20 sessions)</td>
</tr>
<tr>
<td>Considerations</td>
<td>Patients may require a high level of cognitive functioning and ability to work independently to participate in this treatment</td>
</tr>
<tr>
<td>Contingency Management</td>
<td>Should be used to augment other forms of treatment the patient is receiving, not the sole treatment</td>
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</tbody>
</table>

# MAT Medications

<table>
<thead>
<tr>
<th><strong>Pharmacologic Mechanism</strong></th>
<th>Full Agonist - Activates opioid receptors</th>
<th>Partial Agonist - Acts on and blocks opioid receptors</th>
<th>Antagonist - Blocks opioid receptors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administration Route</strong></td>
<td>Liquid or oral tablet</td>
<td>Sublingual tablet or film</td>
<td>Take-home daily oral medication or long term injectable</td>
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<tr>
<td><strong>Administration Frequency</strong></td>
<td>Daily administration; take home doses for stable patients</td>
<td>Take home doses permitted; initial weekly visits, then monthly</td>
<td>Weekly visits or once monthly injection</td>
</tr>
<tr>
<td><strong>Prescriber Requirements</strong></td>
<td>Must be administered at an Opioid Treatment Program (OTP)</td>
<td>SAMHSA waiver required for MD, DO, NP, or PA</td>
<td>Any licensed prescriber</td>
</tr>
<tr>
<td><strong>Pros</strong></td>
<td>Economical/ low cost</td>
<td>Improved safety profile compared to methadone</td>
<td>Does not cause physical dependence</td>
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<td></td>
<td>Long half-life (24-36 hours allows for daily dose in clinic)</td>
<td>Patient convenience (take home dosing available)</td>
<td>Injectable, can prevent diversion and noncompliance</td>
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<td></td>
<td>Good control of cravings and withdrawal symptoms</td>
<td>Naloxone combination prevents misuse</td>
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<td></td>
<td>Acts an analgesic for pain patients</td>
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<td></td>
<td>50-80% 1-year retention rates</td>
<td>40-50% 1-year retention rates</td>
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<td></td>
<td>No abstinence required prior to commencing treatment</td>
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<tr>
<td><strong>Cons</strong></td>
<td>Risk for respiratory depression when combined with opioids, alcohol, benzodiazepines</td>
<td>May provide poor craving control in long-term opioid users due to ceiling effect</td>
<td>Poor control of cravings due to antagonist properties</td>
</tr>
<tr>
<td></td>
<td>Less accessible than other forms of MAT due to in-clinic dosing</td>
<td>Often administered without accompanying psychosocial interventions</td>
<td>Higher cost</td>
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<td></td>
<td>Abstinence of approximately 24 hours required prior to commencing treatment</td>
<td>Extended abstinence (10-14 days) required prior to commencing treatment</td>
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<tr>
<td><strong>Patient Considerations</strong></td>
<td>May provide better control of withdrawal symptoms and cravings for long term opioid users</td>
<td>Patients with high motivation towards compliance and strong social supports may best suited for this treatment</td>
<td>May be most appropriate for patients with shorter term or less severe addiction histories</td>
</tr>
<tr>
<td></td>
<td>FDA-approved for pregnant women</td>
<td>Patients with high motivation towards compliance and strong social supports may best suited for this treatment</td>
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<td></td>
<td></td>
<td>Not currently FDA-approved to treat pregnant women with OUD, but often prescribed off-label; consider risks and benefits when prescribing off-label</td>
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**Effective treatment for Opioid Use Disorder includes medication prescribed in conjunction with behavioral therapies.**