

California Opioid Safety Network

Key Strategy: Medication Assisted Treatment (MAT)

What is MAT?

MAT is an evidence-based approach to treat opioid use disorders by combining the use of medications with behavioral therapy. The medications reduce or eliminate withdrawal symptoms and cravings for opioids so patients can make better progress in their recovery. The three FDA-approved medications to treat opioid use disorder are buprenorphine, methadone, and naltrexone. MAT stabilizes brain chemistry so that the part of the brain that manages motivation, self-organization, and bonding with others is able to function again, allowing people on MAT to participate in behavioral therapy and recovery services.

Why is MAT an opioid safety strategy?

Addiction is a chronic yet treatable illness. Treating opioid addiction without medications doubles the overdose death rate; in contrast, MAT increases survival, decreases relapses, decreases the risk of HIV and hepatitis C, and increases retention in treatment.¹ Efforts to increase MAT access have been supported at the federal and state level, notably the California Department of Health Care Services' [MAT Expansion Project](#). There are also many other state and local efforts working to expand MAT access into primary care clinics, mental health clinics, emergency departments, jails, hospitals, primary care, and other health care settings.

What are the barriers to making MAT more available?

Many doctors are reluctant to include MAT as part of their practice. Nationally only about three percent of doctors have received the waiver required to prescribe buprenorphine. This gap means that only 10% of Americans with a substance use disorder obtain this highly effective treatment.² Misconceptions and stigma around MAT have persisted in both the medical and addiction treatment community. In addition, while some 12-step programs allow MAT, others prohibit it as part of their demand for total abstinence. Finally, reimbursement can be complicated, as substance use disorder treatment is paid for in different ways than medical care.

What can be done to overcome these barriers?

Americans generally want their communities to do more to address the opioid crisis. Two-thirds of people surveyed say their community is not doing enough to make substance use programs more affordable and accessible, or to find ways to improve treatment for substance use.³ As more patients' stories emerge, and public understanding of MAT and addiction in general grows,

¹<https://www.drugabuse.gov/news-events/nida-notes/2015/11/long-term-follow-up-medication-assisted-treatment-addiction-to-pain-relievers-yields-cause-optimism>

²<https://addiction.surgeongeneral.gov/sites/default/files/surgeon-generals-report.pdf>

³<http://www.apnorc.org/projects/Pages/HTML%20Reports/Americans-Recognize-the-Growing-Problem-of-Opioid-Addiction.aspx#most>

it is hoped that treatment will become less stigmatized by both the medical community and the public in general.⁴

Enabling universal medical prescribing of buprenorphine can also reduce this stigma and increase use of MAT thereby lowering opioid death rates. This effect was seen in France in the 1990's⁵ when all doctors were allowed to prescribe buprenorphine. Heroin overdose death rates dropped by 80% in subsequent years. California is actively working to integrate MAT into all access points in the health care system.

Does the public understand the value of MAT?

Historically the public viewed patients with addiction as weak willed or just not desiring treatment. However, when the public understands that addiction is a brain disease and not a choice, the stigma associated with addiction begins to abate and increased support for access to treatments with medication has been seen. Polling has shown that a majority of the public supports treatment for those suffering from addiction rather than incarceration, even though they have some misconceptions about the effectiveness of treatment.⁶

Key facts:

All three medications should be available for all patients, and the choice of medication left to the patient and clinician.

- Buprenorphine:
 - Buprenorphine maintenance [cuts overdose rates in half](#), compared to short-term use (such as in detoxification).
 - Buprenorphine can be prescribed by doctors, nurse practitioners, and physician assistants after a course and applying for a waiver. Buprenorphine can be started in an office setting or in the home.
 - In a long-term clinical study, 61% of patients treated with buprenorphine had continued their abstinence from opioid pain relievers for 3.5 years.
 - France reduced its number of deaths caused by heroin overdose by 80% between 1994 and 2002 after expanding buprenorphine access across its health care system⁷.
 - Around 32,500 physicians are authorized to prescribe buprenorphine nationally, and 3,105 are authorized in California. However there are not enough waived prescribers to meet California's needs (see [county-by-county snapshots](#) and [SAMHSA Buprenorphine Treatment Practitioner Locator](#)).
 - Buprenorphine is also used to treat pain, and may be a particularly effective treatment for patients with both chronic pain and addiction.
 - Brand names for buprenorphine include: Suboxone, Subutex, Bunavail, and others.
- Methadone:

⁴<https://www.ncbi.nlm.nih.gov/pubmed/22873184>

⁵<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3949694/>

⁶<https://www.nejm.org/doi/full/10.1056/NEJMp1714529?query=TOC>

⁷<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3949694/>

- Methadone has the best data outcomes of all three MAT options, but also is provided in the most restrictive setting, and is ideal for patients with longer-term, more complex addiction.
- Methadone maintenance [cuts death rates by two-thirds](#), compared to short-term use (methadone detox).
- Brand names for methadone include: Methadose, Dolophine, and others.
- Naltrexone:
 - Naltrexone is FDA-approved for both opioid use disorder and alcohol use disorder.
 - Naltrexone is an opioid blocker, and prevents euphoria when illicit opioids are used. Naltrexone can be given by daily pill or monthly injection.
 - Naltrexone requires patients to be completely off opioids for several days; one in four people with opioid addiction are unable to tolerate this, and relapse before they can start naltrexone.
 - Brand names for naltrexone include: Vivitrol, ReVia, Depade, and others.

Anticipated questions:

How effective is MAT?

The science demonstrating the effectiveness of medication for opioid addiction is strong. For example, buprenorphine, methadone, and naltrexone were each found to be more effective in reducing illicit opioid use than no medication in randomized clinical trials (which are the gold standard for demonstrating efficacy in clinical medicine). Only 15% of patients achieve sobriety at one year without medications, and the risk of overdose in that period is unacceptably high. Buprenorphine and methadone lower overdose mortality, and decrease HIV and hepatitis C transmission by reducing intravenous drug use.⁸ A meta-analysis of treatment retention rates at 12 months showed rates between 74-80% for methadone, and a range of 60-90% for buprenorphine, with both treatments resulting in significant reductions in overdose death and illicit drug use.⁹ While these rates may be higher than rates in real-world settings, they show a clear improvement for patients who use medications in treatment settings that have social supports and behavioral therapy.

I know someone who tried MAT and it didn't work at all, why should I trust it?

Opioid use disorder is a chronic disease, and relapses are a common hallmark of the disease. In real world settings as many as 40% of patients may drop out of treatment; yet experience in nicotine addiction shows that most people have to “quit” several times before they are ready to quit for good. There is no “one size fits all” approach to opioid use disorder treatment, so all treatment options should be available to all patients. Some patients may not respond well physically to the medications, or the medications may for whatever reason fail to keep them from misusing drugs. However, MAT is associated with a 50% or greater decrease in mortality for patients.

⁸<https://academic.oup.com/cid/article/41/6/891/479396>

⁹<https://www.chcf.org/wp-content/uploads/2017/12/PDF-Why-Health-Plans-Should-Go-to-the-MAT.pdf>

Isn't MAT just replacing one drug with another?

You can't recover if you are dead; the fact that only 15% of people with opioid use disorder can stay sober without medications— and that those that relapse have a high death rate— means that long-term medication treatment is a small price to pay for recovery. Many other chronic diseases, such as hypertension, mental illness or diabetes, require long-term medications, yet we do not judge these patients for needing medications to survive. With MAT, instead of seeking heroin or using painkillers so much that a patient puts his/her life at risk while enduring negative consequences with family and friends, a patient takes medication to alleviate intense physical cravings and keep their life in order— going to school, work, caring for children, or any other obligations— so they can stay in remission. If a person on buprenorphine or methadone is choosing life responsibilities over drug use while showing they have the ability to decrease or stop use, then they are in remission and no longer meet criteria for active addiction.

How does MAT work with behavioral health/counseling?

Medication is one part of treatment for opioid addiction. For many people, another important part is professional counseling, either one-on-one or in group treatment. Through counseling, an individual can learn about the motivations and behaviors that led them to opioid addiction, and gain support and skills while working with others to manage their recovery long term.

What are the different ways buprenorphine, naltrexone and methadone are prescribed and used?

Buprenorphine, naltrexone, and methadone are prescribed in widely different forms, in different clinical settings. While buprenorphine and methadone block withdrawal from other opioids, naltrexone does not. For more on differences between the three drugs visit:

<https://www.samhsa.gov/medication-assisted-treatment>

How long are individuals with substance use disorder typically on MAT?

Buprenorphine maintenance for at least one to two years is standard of care, because shorter-term treatment doubles the overdose mortality rate. Attempting tapering is appropriate after one to two years, but medication should be resumed if cravings or other symptoms of addiction return.¹⁰ For the other two MAT drugs, the National Institute on Drug Abuse recommends methadone treatment should last a minimum of 12 months, although some patients may require treatment for years. The duration of MAT with naltrexone for opioid dependence varies greatly with patient need, although most patients will require at least six months of treatment. Read more:

<http://www.minddisorders.com/Kau-Nu/Naltrexone.html#ixzz5PbgaO5t9>

¹⁰https://www.omicsonline.org/open-access/long_termsuboxone_treatment_and_its_benefit_on_long_term_remission_for_174.php?aid=32414

Resources:

- [“Medications for Opioid Use Disorder”](#) SAMHSA Treatment Improvement Protocol – reviews the use of the three FDA approved medications used to treat opioid use disorder, contains information for healthcare and addiction professionals, policymakers, patients, and families.
- [“The Facts About Buprenorphine”](#) SAMHSA publication – patient and public facing document which seeks to dispel myths about buprenorphine and provide key facts for families and patients.
- [“Why Health Plans Should Go to the “MAT” in the Fight Against Opioid Addiction”](#) California Health Care Foundation publication – intends to inform health plans, health leadership, policy makers, and others.
- [“The Role of Community Health Centers in Addressing the Opioid Epidemic”](#) Kaiser Family Foundation issue brief – presents findings from a 2018 survey of community health centers on health center activities related to the prevention and treatment of OUD.
- [“California County Fact Sheets”](#) Urban Institute – presents county-level estimates of opioid use disorder and treatment needs in California counties.
- [“Medication-Assisted Treatment Works”](#) video from CHCF – featuring Andrew Kolodny, Corey Waller, Andrew Herring, Rebecca Trotzky-Sirr, Kelly Pfeifer, and others.
- [MAT Reference Library](#): Practical information on Medications for Addiction Treatment (MAT) for providers across health systems (e.g., physical health, mental health, and substance use disorder systems), as well as for patients.
- [Providers' Clinical Support System for MAT](#): National training and mentorship project to give prescribers the tools to be able to prescribe MAT. Provides clinical vignettes, modules, podcasts, videos and webinars - most include CME/CE credit and all are offered at no cost.
- [Webinar Series](#) from California Society of Addiction Medicine on Implementing Medication-Assisted Treatment in Primary Care (free recording or recording with CME credits for a \$25 fee).
- Why Health Plans Should Go to the “MAT” in the Fight Against Opioid Addiction: CHCF [report](#) with strategies and health plan [checklist](#) from Smart Care California.
- UCSF Clinician Consultation Center [Substance Use Warmline](#): Free and confidential clinician-to-clinician telephone consultation focusing on substance use evaluation and management for primary care clinicians.

For additional resources please go to:

<https://californiaopioidsafetynetwork.org/discussionhubs/boots-on-the-ground-opioid-safety-strategy-implementation/tools-and-resources>