



Health Workforce Policy Brief

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Behavioral Health Workforce Implementation Challenges Related to Medication Assisted Treatment

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BACKGROUND

The current opioid epidemic has spurred questions about the capacity of the workforce available to provide treatment to individuals with opioid use disorder (OUD). The 2015 National Survey on Drug Use and Health (NSDUH) found that an estimated 3.8 million people aged 12 or older were current misusers of pain relievers, and an estimated 338,000 people aged 12 or older were current misusers of heroin. The same survey indicated that an estimated 19.3 million people aged 12 or older who were classified as needing substance use treatment did not receive it.¹ In 2013 alone, the economic burden of prescription opioid overdose, abuse, and dependence was estimated to be 78.5 billion.² Given the extent of what the federal government has declared a “public health crisis,” all evidence-based treatment options must be offered to stem the tide of this epidemic.

One viable option is the use of medications in conjunction with psychosocial and recovery support services to treat OUD, an intervention often referred to as medication-assisted treatment or “MAT.” Despite its proven efficacy in treating OUD,^{3,4,5} rates of MAT implementation vary widely across the country.⁶ Less than one-fifth of all substance use treatment programs provide some form of MAT for OUD.⁷ This gap persists despite decades of evidence supporting treatment with methadone,^{8,9,10,11} growing research to support the outcomes associated with buprenorphine,^{12,13} and

CONCLUSIONS AND POLICY IMPLICATIONS

Reasons for the underutilization of medication-assisted treatment (MAT) in behavioral health settings include: 1) inadequate workforce training, 2) financial constraints, 3) inability to leverage modern technologies to increase access, and 4) little provider support in navigating financial and operational barriers. To improve the adoption and utilization of MAT the following should be considered:

- Encourage higher education accrediting agencies and state certification/licensing bodies to adopt standardized training guidelines on the topic of addiction.
- Create mechanisms such as provider reimbursement for MAT as part of telemedicine and increased funding for mobile treatment services in rural populations to decrease geographic barriers.
- Develop technical assistance and guidelines to support providers in navigating the clinical, financial, and operational considerations for implementing MAT.

¹ SAMHSA. [Results from the 2015 National Survey on Drug Use and Health: Detailed Tables](#). Rockville, MD: SAMHSA; 2015.

² Florence CS, Zhou C, Luo F, Xu L. The economic burden of prescription opioid overdose, abuse, and dependence in the United States, 2013. *Med Care*. 2016;54(10):901-906.

³ Johnansson BA, Berglund M, Lindgren A. Efficacy of maintenance treatment with naltrexone for opioid dependence: a meta-analytical review. *DARE Review*. 2016.

⁴ Schwartz RP, Gryczynski J, O’Grady KE, et al. Opioid agonist treatments and heroin overdose deaths in Baltimore, MD, 1995-2009. *Am J Public Health*. 2013;103(5):917-922.

⁵ Mattick RP, Breen C, Kimber J, Davoli M. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database Syst Rev*. 2009;Jul 8 (3):CD002209.

⁶ Knudsen HK, Roman PM, Oser OB. Facilitating factors and barriers to the use of medications in publicly funded addiction treatment organizations. *J Addict Med*. 2010;4(2):99-107.

⁷ SAMHSA. [2013 State Profile-United States N-SSATS](#). Rockville, MD: SAMHSA, 2013.

⁸ Mattick RP, Breen C, Kimber J, Davoli M. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database Syst Rev*. 2009;(3):CD002209.

⁹ Yancovitz SR, Des Jarlais DC, Peyser NP, et al. A randomized trial of an interim methadone maintenance clinic. *Am J Public Health*. 1991;81(9):1185-1191.

¹⁰ Vanichseni S, Wongsuwan B, Choopanya K, Wongpanich K. A controlled trial of methadone maintenance in a population of intravenous drug users in Bangkok: implications for prevention of HIV. *Int J Addict*. 1991;26(12):1313-1320.

¹¹ Schwartz RP, Highfield DA, Jaffe JH, et al. A randomized controlled trial of interim methadone maintenance. *Arch Gen Psychiatry*. 2006;63(1):102-109.

¹² Mattick RP, Breen C, Kimber J, Davoli M. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database Syst Rev*. 2014;(2):CD002207..

¹³ Kakko J, Svanborg KD, Kreek MJ, Heilig M. 1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomised, placebo-controlled trial. *Lancet Lond Engl*. 2003;361(9358):662-668.

naltrexone,^{14,15} and the numerous formulations that exist for MAT medications (e.g., long-acting injectable naltrexone, subdermal implant buprenorphine). There are many reasons for this treatment gap including cost, limited insurance coverage, low provider confidence in assessing addiction, provider availability, provider unwillingness to prescribe, lack of implementation support from practice leadership and stakeholders, and bias. The research team at the Behavioral Health Workforce Research Center investigated the perceived barriers that inhibit providers in offering MAT services within behavioral health settings. This brief places particular emphasis on the most prevalent workforce and operational barriers with MAT adoption.

METHODS

The research team utilized a mixed methods approach to investigate barriers related to MAT for both providers who are eligible to prescribe/dispense medications to treat opioid use disorder (henceforth known as “prescribers”) and those who are not eligible to prescribe/dispense medications to treat opioid use disorder (henceforth known as “non-prescribers”):

- An online survey was disseminated to non-prescribing behavioral health providers in ten states (Missouri, New Mexico, New York, Ohio, Oklahoma, Oregon, Tennessee, Utah, Vermont, West Virginia) to investigate the role these providers play in MAT provision. These providers work in organizations that prescribe or administer medications for the treatment of substance use disorders. The 10 states were selected based on the impact of the opioid epidemic in the area and to account for regional variation. The survey focused on five medications provided during MAT: buprenorphine, probuprenorphine, methadone, extended release naltrexone, and oral naltrexone. Respondents were drawn from National Council for Behavioral Health (National Council) member organizations; data were analyzed using SPSS.
- Six virtual focus groups were conducted: three with prescribers ($n=9$) and three with non-prescribers ($n=12$). Participants were drawn from National Council member organizations, and focus group transcripts were analysed using NVivo qualitative analysis software.
- Geospatial Analysis were conducted to investigate the correlation between the number of MAT providers and incidence of opioid overdose death. Provider addresses from the SAMHSA Buprenorphine Treatment Practitioner Locator¹⁶ and Opioid Treatment Program Directory¹⁷ were geocoded using Quantum Geographic Information System (QGIS) software, and compared with county-level rates of opioid overdose deaths as ascertained from the CDC Wide-ranging Online Data for Epidemiological Research (WONDER) database.¹⁸ Spearman’s Correlation was conducted using SPSS with a significance level of 0.05 to describe the relationship between opioid related overdoses and the number of buprenorphine providers at the county level.

KEY FINDINGS

Non-prescriber Survey

Eighty-five non-prescriber behavioral health providers responded to the survey. About one third (29%, $n=25$) of respondents identified their profession as licensed professional counselors or licensed counselors, followed by licensed clinical social workers (22%, $n=19$). Fifty-one responders (60%) worked at either an outpatient mental health clinic or a community health center/public health clinic. The majority (68%, $n=58$) of providers surveyed reported that they screen all clients for substance use disorders; however, the proportion of patients seen specifically for OUD was low for many. Less than half of respondents (44%, $n=37$) reported that they treat OUD or manage OUD treatment for 1-25% of their clients; all other survey respondents indicated that they do not treat OUD or manage OUD treatment.

¹⁴ Krupitsky E, Nunes EV, Ling W, Gastfriend DR, Memisoglu A, Silverman BL. Injectable extended-release naltrexone (XR-NTX) for opioid dependence: long-term safety and effectiveness. *Addict Abingdon Engl*. 2013;108(9):1628-1637.

¹⁵ Nunes EV, Krupitsky E, Ling W, et al. Treating Opioid Dependence With Injectable Extended-Release Naltrexone (XR-NTX): Who Will Respond? *J Addict Med*. 2015;9(3):238-243.

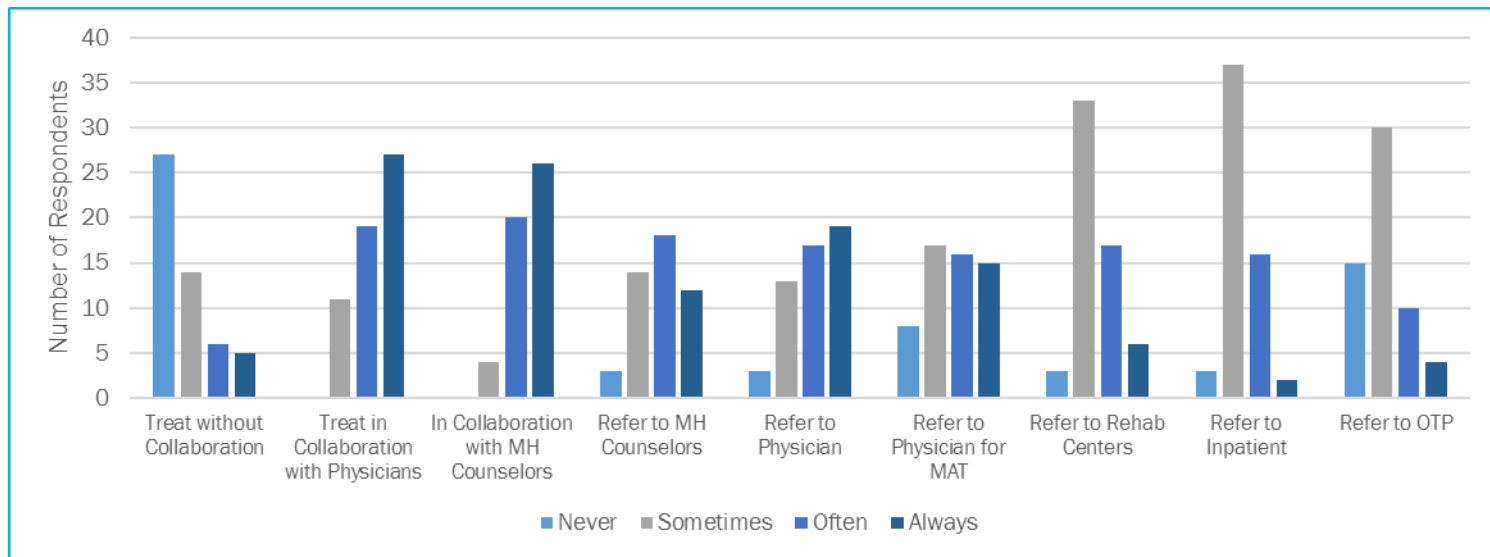
¹⁶ Substance Abuse and Mental Health Services Administration. [Buprenorphine Treatment Practitioner Locator](#); (nd).

¹⁷ Substance Abuse and Mental Health Services Administration. [Opioid Treatment Program Directory](#) (nd).

¹⁸ Centers for Disease Control and Prevention. [WONDER Databases](#); 2017.

For providers who provide OUD treatment, current practices include a broad array of interventions (Figure 1). The majority of these providers never treat clients with OUD without collaboration (45%, $n=27$) and often or always treat in collaboration with other physicians (69%, $n=46$) or with other mental health counselors (64%, $n=46$). Referrals to rehabilitation centers, inpatient treatment facilities, or opioid treatment programs (OTP) were low. According to these data, non-prescribers provide services as their scopes of practice allow, although there may be other reasons for barriers to MAT provision. For example, the survey did not elicit reasons for low referrals; however, lack of referral options could impact these data.

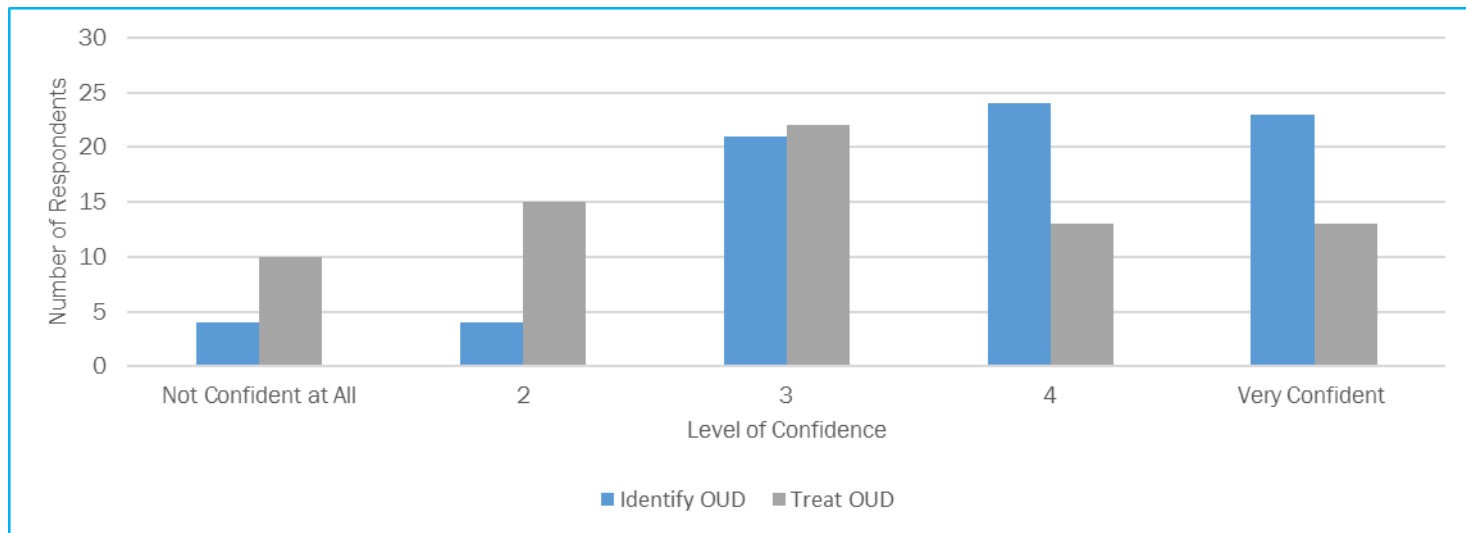
Figure 1. Common Practices for Non-Prescriber Behavioral Health Providers Treating Opioid Use Disorder



* MH – mental health; MAT – medication-assisted treatment; OTP – opioid treatment program

The non-prescriber survey also assessed knowledge and education barriers to the provision of MAT. Respondents displayed a disparity between identifying and treating OUD when asked to rate confidence of these two practices on a scale of one to five (Figure 2). Within this population, there was confidence about identifying OUD; however, fewer providers were confident in their abilities to treat this disorder. On average, over 50% of respondents received less than two hours of formal education for each MAT modality investigated. More education targeted at these non-prescribing providers could alleviate these noted barriers.

Figure 2. Confidence of Non-Prescriber Behavioral Health Providers in Identifying and Treating Opioid Use Disorders



Focus Groups

The focus groups gathered detailed information from prescribers and non-prescribers on barriers related to the use of medications in conjunction with psychosocial and recovery support services. Selection of prescribers was *not* limited to those who currently, or have ever, prescribed or dispensed medications for the treatment of OUD. Focus group transcripts were analyzed and coded for common themes, ideas, and categories. Non-prescriber and prescriber focus group transcripts were analyzed independently.

For non-prescriber practitioners, the largest barriers to implementing MAT were education and provider shortages. Specifically, non-prescribers felt ill-informed about MAT treatment options, and noted a lack of prescribers to receive client referrals for specialty services. Prescribers noted financing barriers to implementing a comprehensive MAT program—that is, all necessary clinical and organizational components to providing MAT.^{19,20,21} Financial barriers were highlighted particularly with regards to the staff time and cost of acquiring necessary continuing education to provide MAT, and the difficulties in ensuring financial sustainability across the diverse MAT billing codes and reimbursement rates. On a similar note, both provider groups expressed difficulties in establishing necessary workflows for providing MAT, particularly in the context of multidisciplinary teams. Both practitioner groups also mentioned the barrier of stigma associated with treating clients with OUD, the reluctance to take on this potentially challenging population, and the importance of psychosocial support as a component of MAT services.

Both the prescriber groups and non-prescriber groups noted the client-driven desire for MAT, and that in many cases clients had searched for MAT services on their own prior to them being referred by a provider. However, many focus group participants noted the lack of providers within the community who were actively providing MAT services as a barrier for clients.

Geospatial Analysis

An examination of prescriber qualifications for MAT medications informed the elements of a geospatial analysis. The examination produced the following findings:

- Methadone: Eligibility to dispense methadone is restricted only to certified Opioid Treatment Programs. Programs must also be registered with the DEA (Drug Enforcement Agency) These qualifications are federal in nature, and thus are found in all 50 states and the District of Columbia.²²
- Buprenorphine: Eligibility to prescribe buprenorphine is restricted to physicians, nurse practitioners, and physician assistants that have received a waiver from SAMHSA. To be eligible for a waiver, providers must meet several requirements, including: educational and licensing requirements to qualify as a physician, nurse practitioner, or physician assistant; 8-24 hours of training (depending upon practitioner type); and, a DEA number to prescribe Schedule III drugs.²³ While most states allow for qualifying nurse practitioners and physician assistants to prescribe buprenorphine, some variation does exist regarding prescribing, administering, and dispensing of this medication at the state level for these disciplines.²⁴
- Naltrexone: Any practitioner that is eligible to prescribe medications can prescribe and administer naltrexone for the treatment of opioid use disorder.²⁵

Geospatial analysis was performed to investigate the availability of methadone and buprenorphine, in comparison to need as determined by opioid overdose-related mortality rates. Naltrexone was not included in this analysis as no data source exists that lists the number or location of providers who are eligible to prescribe naltrexone. With each county

¹⁹ Center for Substance Abuse Treatment. Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction. Treatment Improvement Protocol (TIP) Series 40. DHHS Publication No. (SMA) 04-3939. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2004.

²⁰ Substance Abuse and Mental Health Services Administration. Federal Guidelines for Opioid Treatment Programs. HHS Publication No. (SMA) XX-XXXX. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2015.

²¹ Substance Abuse and Mental Health Services Administration. Clinical Use of Extended-Release Injectable Naltrexone in the Treatment of Opioid Use Disorder: A Brief Guide. HHS Publication No. (SMA) 14-4892R. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2015.

²² Substance Abuse and Mental Health Services Administration. [Methadone](#); 2015.

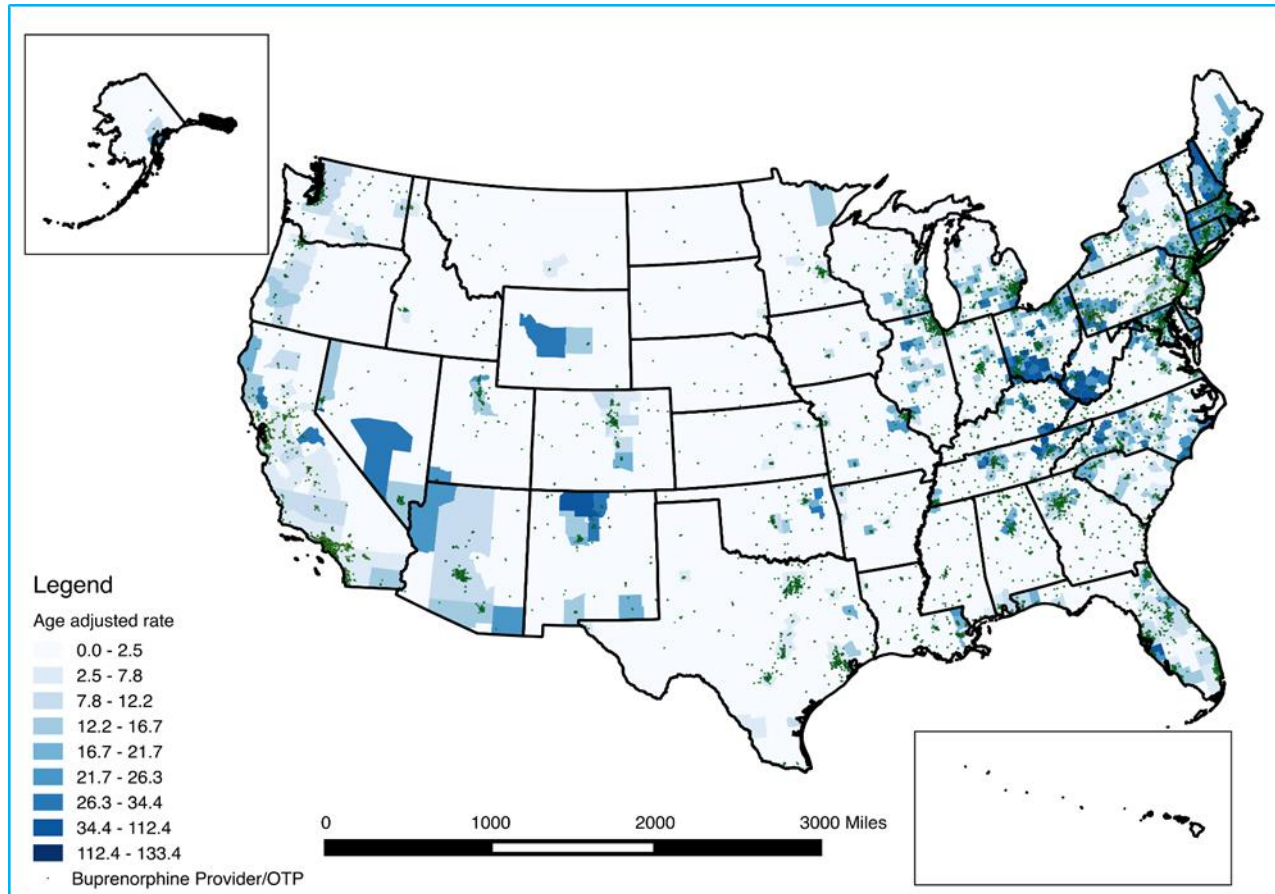
²³ Substance Abuse and Mental Health Services Administration. [Qualify for a Physician Waiver](#); 2016.

²⁴ Drug Enforcement Administration. [Mid-Level Practitioners Authorization by State](#) (nd)

²⁵ Substance Abuse and Mental Health Services Administration. [Naltrexone](#) (nd)

assessed independently, analyses revealed an inverse relation between buprenorphine providers and opioid related overdoses. Fewer buprenorphine providers was associated with increased opioid related overdoses. There was a small, negative relation between buprenorphine providers and 2015 opioid related overdose mortality at the county level ($r = -0.298, p < 0.001$). Figure 3 provides a snapshot of this correlation. Certain areas of the country, such as the Southwest and Appalachia regions, have higher rates of overdose deaths involving opioids as well as lower numbers of methadone and buprenorphine providers. This demonstrates that there are fewer than needed prescribers to treat this national crisis. Geographic analyses such as this can help local-, regional-, and state-level stakeholders target their interventions appropriately.²⁶

Figure 3. Opioid Overdose Death Rates in the United States (2015)



CONCLUSIONS

The use of medications in conjunction with psychosocial and recovery support services is an underutilized intervention to treat opioid use disorder.^{27,28,29} There are numerous identified reasons for this underutilization including: inadequate and/or highly-regulated workforce training, financial constraints, little provider support in navigating financial and operational barriers, as well as federal laws and regulations (e.g., The Controlled Substances Act of 1970 requires all manufacturers, distributors, and practitioners who prescribe, dispense, or administer controlled substances to register with the Drug Enforcement Administration).

²⁶ Mazumdar, Soumya & Mcrae, Ian & Islam, M. Mofizul. (2015). How Can Geographical Information Systems and Spatial Analysis Inform a Response to Prescription Opioid Misuse? A Discussion in the Context of Existing Literature. *Current Drug Abuse Reviews*. 8. . 10.2174/187447370802150928185302.

²⁷ Oliva EM, Maisel NC, Gordon AJ, Harris AHS. Barriers to use of pharmacotherapy for addiction disorders and how to overcome them. *Current Psychiatry Reports*. 2011;13:374.

²⁸ Legal Action Center. [Confronting an epidemic: the case for eliminating barriers to medication-assisted treatment of heroin and opioid addiction](#); 2015

²⁹ Vestal C. In fighting an opioid epidemic, medication-assisted treatment is effective but underused. *Health Affairs*. 2017;36(6):1052-1057.

In an effort to improve both the adoption and utilization of MAT as a treatment model, the following should be considered by state-level agencies, payers, regional health systems, health professional educators, and providers:

1. Encourage all national higher education accrediting agencies and state certification/licensing bodies to adopt standardized educational and training guidelines on the topic of addiction. Educational standards should ensure:
 - a. Baseline understanding of addiction as a chronic disease, including biological and social causes, prevalence, and manifestation
 - b. Knowledge of the intervention continuum needed to address current and future drug epidemics: prevention, treatment, and recovery support
2. Create mechanisms by which MAT services can be accessed despite geographic barriers. Such mechanisms may include: provider reimbursement for MAT as part of telemedicine, reduction in utilization management techniques that restrict the timeliness and quantity of medications used to treat addiction, and increased support for mobile treatment services in rural populations.
 - a. The DEA should establish regulations on a special telemedicine registration process under the Ryan Haight Online Pharmacy Consumer Protection Act. These regulations will help improve access to MAT via telemedicine for individuals suffering from substance use disorders in rural areas.³⁰
3. Develop technical assistance and guidelines to support providers in navigating the clinical, financial, and operational considerations necessary for adopting and implementing MAT. This should be done in coordination with current SAMHSA-funded work in this space.

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³⁰ Chou R, Korthuis PT, Weimer M, et al. Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2016 Dec. (Technical Briefs, No. 28.) Findings. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK402343/>