

# PRIMARY CARE INVESTMENT: EVIDENCE SNAPSHOT

## Medication-Assisted Treatment for Substance Use Disorder

by Brenna Miller  
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### Background

Nearly 80 percent of individuals with an opioid use disorder do not receive treatment.<sup>1</sup> In 2018, the Massachusetts Department of Public Health reported 2,033 deaths from opioid overdose.<sup>2</sup> The economic cost of the opioid crisis in 2015 was estimated to be \$504 billion, equal to 2.8 percent of the national GDP.<sup>3</sup> Medicaid bears a disproportionate burden of substance use treatment costs.<sup>4</sup> In 2013, \$28.9 billion was attributed to increased health care and substance abuse treatment costs associated with the opioid epidemic.<sup>5</sup>

Medication-assisted treatment (MAT) is the standard of care for opioid use disorders. There are three types of opioid-assisted treatment available:

1. Naltrexone can be administered monthly and works as an opioid antagonist, making it useful for relapse prevention.<sup>1</sup>
2. Methadone is taken daily and acts as a full opioid agonist, preventing withdrawal symptoms and reducing cravings. It is administered orally at SAMHSA-certified opioid treatment programs.<sup>1</sup>
3. Buprenorphine is also taken orally and daily but acts as a partial opioid agonist. Physicians with board certifications in addiction medicine or addiction psychology can prescribe this medication.<sup>1</sup>

The ability to access MAT depends on: the availability of qualified practitioners and their capacity to meet patient demand; perceptions of MAT and its value among patients, practitioners, and institutions; and limitations of insurance coverage.<sup>6</sup> As many patients seek primary care services prior to addiction care, some cities such as Chicago, Baltimore, and New York have implemented MAT in primary care with positive results, suggesting offering MAT in primary care settings could effectively reach more individuals who need help.<sup>7-9</sup>

### Quality Implications

***Increased access to MAT for opioid addiction care is associated with improved health outcomes.***

- In Baltimore, between 1995 and 2009, increased access to methadone and buprenorphine treatments was associated with a reduction in heroin overdose deaths.<sup>7</sup>
- Two separate meta-analyses concluded that buprenorphine and methadone are associated with reduced illicit opioid use and increased retention in treatment.<sup>10,11</sup>
- A small randomized controlled trial (n=175) found that buprenorphine administered during pregnancy can reduce the incidence of neonatal abstinence syndrome.<sup>12</sup>

## Cost Implications

### ***Expanding access to MAT can result in lower health care costs by avoiding costly utilization.***

- The average price for MAT varies depending on the medication and support services needed.
  1. Naltrexone plus related services: \$1,176.50/month or \$14,112/year.<sup>13</sup>
  2. Methadone plus daily integrated behavioral and medical services: \$126/week or \$6,552/year.<sup>13</sup>
  3. Buprenorphine plus weekly integrated services: \$115/week or \$5,980/year.<sup>13</sup>
- A study of the Medicaid-enrolled population in Vermont suggested that establishing a network of community practices and specialized addiction treatment centers to deliver expanded MAT services was associated with better opioid addiction treatment compliance and lower overall health care costs, in part due to lower inpatient admissions and emergency department visits.<sup>14</sup>

#### References

1. SAMHSA. *Pocket guide: Medication-assisted treatment for opioid use disorder*. Rockville, MD: SAMHSA;2016.
2. Massachusetts Department of Public Health. *Data brief: Opioid-related overdose deaths among Massachusetts residents*. Boston, MA: Massachusetts Department of Public Health;2019.
3. The Council of Economic Advisors. *The underestimated cost of the opioid crisis*. Washington, DC: Executive Office of the President of the United States 2017.
4. SAMHSA. Projections of national expenditures for treatment of mental and substance use disorders, 2010-2020. In. Rockville, MD: SAMHSA; 2014.
5. 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.
6. United States Government Accountability Office. Report of the Majority Leader, US Senate. Opioid addiction: Laws, regulations, and other factors can affect medication-assisted treatment access. In. Washington, DC: U.S. GAO; 2016.
7. Schwartz RP, Gryczynski J, O'Grady KE, et al. Opioid agonist treatments and heroin overdose deaths in Baltimore, Maryland, 1995-2009. *Am J Public Health*. 2013;103(5):917-922.
8. Gunderson EW, Fiellin DA. Office-based maintenance treatment of opioid dependence: how does it compare with traditional approaches? *CNS Drugs*. 2008;22(2):99-111.
9. Knudsen HK, Roman PM. Financial factors and the implementation of medications for treating opioid use disorders. *J Addict Med*. 2012;6(4):280-286.
10. Thomas CP, Fullerton CA, Kim M, et al. Medication-assisted treatment with buprenorphine: Assessing the evidence. *Psychiatr Serv*. 2014;65(2):158-170.
11. Fullerton CA, Kim M, Thomas CP, et al. Medication-assisted treatment with methadone: Assessing the evidence. *Psychiatr Serv*. 2014;65(2):146-157.
12. Jones HE, Kaltenbach K, Heil SH, et al. Neonatal abstinence syndrome after methadone or buprenorphine exposure. *N Engl J Med*. 2010;363(24):2320-2331.
13. National Institute on Drug Abuse. How much does opioid treatment cost? . <https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/how-much-does-opioid-treatment-cost>. Published 2018. Updated June 2018. Accessed February 16, 2020.
14. Mohlman MK, Tanzman B, Finison K, Pinette M, Jones C. Impact of medication-assisted treatment for opioid addiction on medicaid expenditures and health services utilization rates in Vermont. *J Subst Abuse Treat*. 2016;67:9-14.