

## Medication-assisted treatment (MAT): An evidence-based intervention for opioid use disorder



### **Medication-assisted treatment (MAT) is evidence-based, highly effective and underused for millions struggling with substance use disorders involving prescription opioids and heroin. The United States is in the midst of a devastating public health crisis.**

Every 16 minutes, someone in the United States dies from an overdose of opioids, a classification of drugs that includes prescription painkillers, morphine and heroin.<sup>1</sup> Binding to nerve receptors in the brain and body, opioids ease pain and create euphoria. At excessive dosages, they are lethal.

Physicians prescribe opioid painkillers for conditions ranging from severe cancer pain to discomfort from dental procedures. Most patients are able to take these pain relievers without serious issues. However, some patients prescribed high-volume, high-dosage medications may struggle to manage their prescription drug use responsibly. This can lead to a substance use disorder (SUD) — a chronic, relapsing brain disease that drives the individual to chase the drug-generated high, regardless of cost or consequence.

4.5 million Americans are estimated to have a substance use disorder with prescription painkillers.<sup>2</sup> When people become dependent on these medications yet can no longer obtain them either because their doctor stops prescribing them, or the medication has become too expensive, many turn to a cheaper and more readily available opiate — heroin. Research shows that one of the most promising treatments for this population is medication-assisted treatment (MAT), which combines FDA-approved medications with counseling to prevent overdose, relieve cravings and promote recovery.<sup>3</sup> Yet less than half of individuals struggling with opioid or heroin use disorders receive MAT.<sup>4</sup>

Optum<sup>®</sup> has observed greater success in substance use disorder treatment outcomes when MAT is used. In this white paper, we explore the roots and reach of this deadly epidemic, the barriers to successful treatment and how MAT is delivered.

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### **The roots of the crisis**

Nearly two decades ago, several trends emerged:

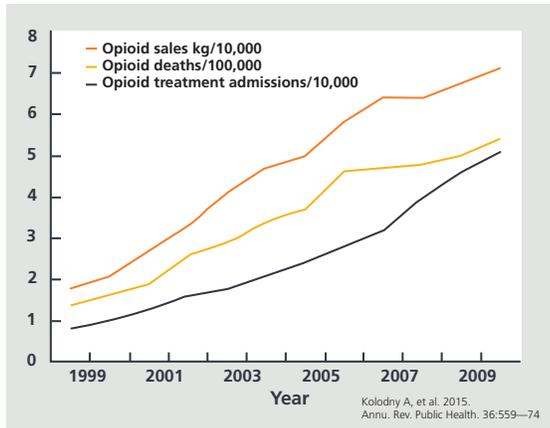
- There was a movement among medical providers to treat pain more aggressively. In 1996, the American Pain Society dubbed pain as “the fifth vital sign.”<sup>5</sup>
- It was mistakenly assumed that prescription opioids were not addictive and could safely treat a range of painful conditions.
- An extended-release opioid painkiller debuted. It was marketed as having significant therapeutic benefit and little potential for misuse.

By 2012, America was awash in opioids, with enough prescriptions written to give every American adult their own bottle of pills — with some left over.<sup>6</sup> In fact, it has been reported that 80% of the world’s supply of all Rx opioids are consumed in the U.S.<sup>7</sup>

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### A rapidly growing crisis

As sales of prescription opioids soared over a 10-year period, the number of people addicted to these medications and heroin also rose significantly.



Deaths from opioid overdoses have climbed the same steep trajectory.<sup>8</sup>

Misuse of prescription opioids is now so prevalent that among illicit drugs, only marijuana draws more new users each year. It is more common among non-Hispanic white populations and has spread relentlessly in rural, suburban and small urban areas.<sup>9</sup>

### The path from prescription opioids to heroin

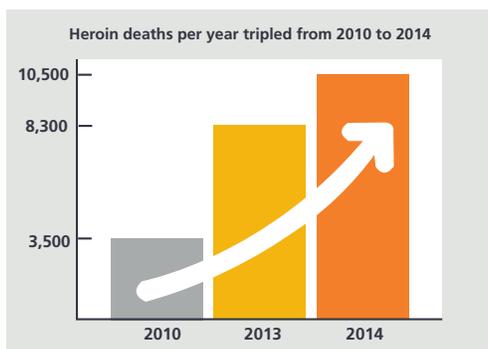
Growing awareness of the opioid epidemic has led to recent measures aimed at reducing the number of unnecessary prescriptions. But as prescriptions for painkillers have become more difficult to obtain, the number of people using heroin has increased. In fact, four out of five new heroin users say they first took prescription pain medications.<sup>12</sup>

Some of the greatest increases have occurred among those with historically low rates of heroin use: women, the privately insured and people with higher incomes. In particular, heroin use has more than doubled in the past decade among young adults aged 18 to 25 years. Once largely an inner-city problem, heroin now has a far wider geographic reach.<sup>13</sup>

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**1,100**  
new and vulnerable  
teens experiment with  
a prescription opioid  
every day.<sup>15</sup>

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Heroin overdose death rates increased by 26 percent from 2013 to 2014 and have more than tripled since 2010. In 2014, more than 10,500 people died from heroin overdoses.<sup>14</sup>

## Economic impact of opioid use disorder

The latest available estimated cost of the opioid epidemic is \$504 billion.<sup>16</sup> The private sector bears about three-quarters of this amount — in lost productivity, including fatal and nonfatal overdoses, and increases in health care and substance use treatments; the balance is carried by the public sector in health care, substance use treatment and criminal justice expenses.<sup>17</sup>

## Higher utilization of medical services

People who abuse or are dependent on opioids have more comorbid conditions and use more health services than those who don't have these substance use disorders. The same analysis of private health care claims showed patients diagnosed with opioid use disorder or dependence cost an average of almost \$16,000 more per patient — based on all patients' claims — than those without the disorder.<sup>18</sup> While much of the excess cost comes from more frequent emergency room visits, those diagnosed with opioid use disorder tend to visit physicians more frequently and undergo more lab tests and other related treatments. In fact, the number of such patient services rose from 217,000 in 2007 to about 7 million in 2014 — an increase of 3,000 percent.<sup>19</sup> From 2011 to 2014, the greatest increases emerged in the areas of therapy for substance use disorders (1,189 percent) and related lab tests (848 percent).<sup>20</sup>

## Increased costs from ineffective treatment

Ineffective treatment also exacerbates the cost scenario. In a traditional approach, individuals undergo a medically supervised detoxification process, are weaned off their opioid and return home. But this approach doesn't treat the chronic nature of substance use disorder, nor its effects on the brain.

Research shows that without appropriate maintenance medication to subdue cravings and adequate psychosocial support, most people experience recurrence.<sup>21</sup> The results are often tragic. Even a brief abstinence from opioids can reduce a person's tolerance level, which leads to a greater chance of overdose with later opioid use.<sup>22</sup>

## Medication-assisted treatment: An effective treatment option

With MAT, a medication is prescribed in carefully controlled doses to help people overcome their dependency on an opioid. MAT medications can alleviate cravings and withdrawal symptoms, and block the effects of opioids in the event of recurrence. They also adjust the chemical imbalances in the brain created throughout the development of an addiction.

Several choices of medication are available. Prescriptions are based on an individual's personal and clinical needs. Though MAT may be used for inpatient treatment, it is more often administered in an outpatient setting.

At the proper dose, MAT substances do not impair a person's intelligence, mental capability, physical functioning or employability. On the contrary, they allow people to more fully engage in such proven behavioral interventions as counseling and to begin to reclaim their lives. Many people stay on a maintenance dose of medication for years.

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**“You wouldn't treat a chronic illness like diabetes without medication.”**

– Dr. Martin Rosenzweig,  
Chief Medical Officer of  
Optum Behavioral Health

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## What research shows about MAT

MAT is one of the most effective treatments available for people dependent on opioids. It is associated with a marked reduction in overdose deaths and overall costs, and has proven successful at retaining patients in treatment.<sup>23</sup>

Recent studies have revealed promising long-term outcomes for MAT participants. The research showed that individuals who receive MAT are 50 percent more likely to remain free of opioid misuse, compared to those who receive detoxification or psychosocial treatment alone.<sup>24</sup>

"It's not just 'take these medications and you are fine,'" explains Dr. Rosenzweig. "It's part of a comprehensive treatment plan. For best outcomes, you also need to be in some recovery-based program that includes therapy and other forms of social and medical support." The more than 2,000 MAT providers in the Optum® Behavioral Health network are committed to this lifesaving, evidence-based approach. To facilitate treatment, we work with MAT providers in a bundled payment arrangement, resulting in fewer copays for the consumer and a more streamlined billing process for the provider.

## What providers say about MAT

Dr. Dan Karlin, an Optum Behavioral Health provider board certified in psychiatry and SUD medicine, has offices in the Boston area that actively treat more than 600 patients with opioid use disorders. Dr. Karlin is an advocate for MAT and more specifically, for buprenorphine, a key MAT medication.

"Buprenorphine is the single most effective medication in psychiatry. It's more efficacious than antidepressants for depression," Dr. Karlin said. Along with buprenorphine, "the treatment of comorbid conditions is incredibly important," he said. Through psychotherapy, patients can start addressing their substance use disorder and then move on to other underlying and emerging troubles.

## Barriers to MAT

Despite MAT's powerful outcomes, it is vastly underutilized. There are several reasons for this:

### Misperceptions about effective treatment

Confusion about effective treatment for SUDs is evident in the treatment statistics — only a small fraction of people receive interventions or treatment consistent with scientific knowledge about what works.<sup>26</sup> MAT has been adopted in less than half of private-sector treatment programs, and even in programs that do offer MAT, only 34.4 percent of patients receive it.<sup>27</sup>

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## MAT drugs include:

### Methadone

Relieves withdrawal symptoms and drug cravings. Taken daily, typically at an approved methadone treatment/ outpatient clinic.

### Buprenorphine

Eases withdrawal symptoms and drug cravings. Taken daily, it is available via prescription through a certified physician. To discourage abuse of buprenorphine, naloxone is often added to the medication, which induces withdrawal symptoms if buprenorphine is injected or used with another opioid.

### Naltrexone

Blocks the euphoric and sedative effects of opioids. Taken orally or by injection, it is available via any physician. Patients must be free from opioids for seven days before taking it. During that period, the individual undergoes withdrawal and may relapse. Psychosocial interventions are paramount during this vulnerable period.

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### Lack of providers

Not enough providers are certified in MAT to meet the demand. In fact, according to one recent study, there are only enough providers to treat one out of 238 people with an opioid use disorder.<sup>29</sup> This deficit is most profound in rural areas. At Optum Behavioral Health, we have been aggressively addressing this challenge. In fact, with over 4,000 locations nationally, 95 percent of our members are within 20 miles of a MAT provider.<sup>30</sup>

### Limits on patients for MAT providers

Until recently, MAT providers faced a cap on the number of MAT patients whom they could treat. A recent change in federal regulations that raises the limit from 100 patients to 275 is expected to help.

### Limits on MAT providers

In the past, only physicians could become certified in MAT. Recent federal legislation expanding the pool of eligible providers to include nurse practitioners and physician assistants is expected to increase treatment availability.

### Stigma about substance use disorder

Some providers seem reluctant to take the eight-hour training required for MAT and apply for the federal waiver because they, or their office neighbors, do not want to have people with substance use disorders frequenting their practice. A substantial portion of providers who have undergone the required training still are not treating patients with MAT.<sup>31</sup>

### Stigma about using drugs to treat substance use disorder

Many providers, patients and members of the substance use treatment and 12-step communities, along with many in the public, object to MAT, mistakenly believing that it replaces one dangerous drug with another. At Optum Behavioral Health, we are working to educate providers and consumers to see MAT as a safe and accessible path to recovery.

### Insurance and regulatory limitations on MAT

Utilization-management techniques — including limits on dosages prescribed, annual or lifetime medication limits, minimal counseling coverage and “fail first” criteria requiring that other therapies be tried first — have discouraged participation in MAT.<sup>32</sup>

Our opioid dependency crisis has been years in the making, impacting multiple stakeholders: insurers, health plans, employers, health care providers, the substance use treatment community and consumers. It will take a concerted effort by all to eradicate it. Improving access to MAT and making known its lifesaving potential is imperative for the success of this effort. There are steps we can take to make this a reality.

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### Opioids include:

heroin, prescription  
pain relievers oxycodone,  
hydrocodone, codeine,  
morphine, fentanyl  
and others.

### Call to action for all stakeholders:

- Foster greater recognition of MAT's value and effectiveness among health plans and benefit program stakeholders. Improving awareness among these key stakeholders is vital to increasing access, as well as member and provider participation.
- Erase the stigma about MAT among providers, consumers and the public. Educating these stakeholders about MAT's effectiveness will help remove negative opinions about such treatment and encourage more providers to become certified in MAT.
- Reach out to the recovery community. Continue to work with recovery communities as appropriate to show MAT as a safe, highly effective and evidence-based approach for recovery.
- Support national advocacy organizations that work across the country to support MAT.
- Lift restrictions on MAT and improve access. Many insurers, health plans and employers are already on board with MAT. But we all need to make sure that treatment rules meant to improve care do not restrict it.

**Optum provides health and well-being information and support as part of a patient's health plan. It does not provide medical advice or other health services, and is not a substitute for a doctor's care.**

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