Consensus Study Report
HIGHLIGHTS
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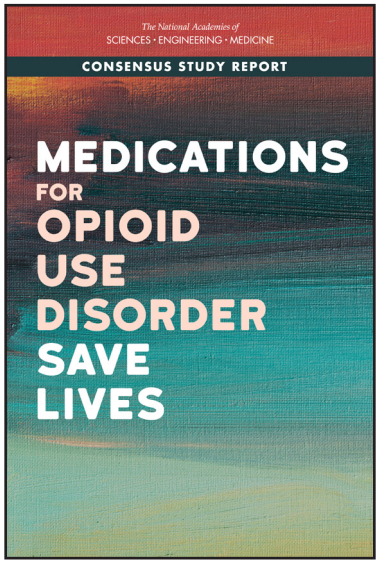
Medications for Opioid Use Disorder Save Lives



More than 2 million people in the United States have opioid use disorder (OUD), a life-threatening chronic brain disease caused by prolonged use of prescription opioids, heroin, or other illicit opioids. People with OUD face a greatly increased risk of early death from overdose, infectious diseases, trauma, and suicide. Deaths related to OUD continue to escalate as the opioid crisis gathers momentum, with opioid overdoses killing more than 47,000 people in the United States in 2017.

Yet in the face of this public health crisis, existing tools to counter the epidemic—like evidence-based medications to treat OUD—are not being used to maximum effect. Methadone, buprenorphine, and extended-release naltrexone are approved medications to treat OUD. Methadone and buprenorphine alleviate withdrawal symptoms, and all three medications reduce opioid cravings and decrease the response to further drug use, making people with OUD less likely to return to opioid use and risk fatal overdose. These medications also help people restore their functionality, improve their quality of life, and reintegrate into their families and communities.

Medications for OUD save lives. Yet most people with OUD in the United States receive no treatment at all, and only a fraction of those who do receive medications for OUD.

With support from the National Institute on Drug Abuse and the Substance Abuse and Mental Health Services Administration, the National Academies of Sciences, Engineering, and Medicine convened an expert committee to examine the evidence base for medications to treat OUD and to identify barriers that prevent people from accessing safe, effective, medication-based treatment. The resulting report, *Medications for Opioid Use Disorder Save Lives,* presents the committee's findings and conclusions.

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"People with OUD have a chronic disease that warrants long-term medical management, like insulin for diabetes or blood pressure medication for hypertension."

ABOUT OPIOID USE DISORDER

Addiction is a chronic disease involving compulsive or uncontrolled use of one or more substances in the face of negative consequences. As with other chronic medical conditions, a combination of genetic, environmental, and social factors affect how vulnerable a person is to addiction, how likely a person is to start and continue using drugs, and how easy it is to recover. They also shape how susceptible a person is to the particular types of changes in the brain that characterize the progression to addiction. Decades of scientific research support the brain disease model of addiction; that is, that prolonged drug use causes lasting effects on the brain structure and function.

Opioids produce powerful and sustained effects on the brain. Their repeated use can lead to tolerance, physical dependence, and addiction. The science shows that these brain changes can be treated effectively with medications that help people refrain from using drugs, sharply reducing the risks of overdose and death and leading to improvements in behaviors associated with addiction.

This scientific understanding of OUD differs from public perception of the disorder, which is colored by the misconception of addiction as simply a moral failing. The social stigma that has long been directed at people who use drugs has now spread to the medications used to treat OUD. In fact, people with OUD have a chronic disease that warrants long-term medical management, like insulin for diabetes or blood pressure medication for hypertension.

MEDICATIONS FOR OUD SAVE LIVES

The medications currently approved by the FDA for treating OUD are evidence-based, safe, and highly effective. Medication-based treatment for OUD focuses first on managing withdrawal symptoms and then on controlling or eliminating the patient's compulsive opioid use, most commonly with the medications methadone or buprenorphine. For patients who have gone through withdrawal from opioids for a sufficient time, extended-release naltrexone may be used for maintenance treatment.

Evidence shows that people who receive longer-term treatment with medication for OUD have better treatment outcomes. They are also less likely to die from overdose if they return to opioid use while on medication. In fact, people with OUD are up to 50 percent less likely to die when they are being treated long term with methadone or buprenorphine.

OVERVIEW OF CONCLUSIONS

To read the full text of the committee's conclusions, visit nationalacademies.org/OUDtreatment.

1. Opioid use disorder is a treatable chronic brain disease.
2. FDA-approved medications to treat opioid use disorder are effective and save lives.
3. Long-term retention on medications to treat opioid use disorder is associated with improved outcomes.
4. A lack of availability of behavioral interventions is not a sufficient justification to withhold medications to treat opioid use disorder.
5. Most people who could benefit from medication-based treatment for opioid use disorder do not receive it, and access is inequitable across subgroups of the population.
6. Medication-based treatment is effective across all treatment settings studied to date. Withholding or failing to have available all classes of FDA-approved medication for the treatment of opioid use disorder in any care or criminal justice setting is denying appropriate medical treatment.
7. Confronting the major barriers to the use of medications to treat opioid use disorder is critical to addressing the opioid crisis.

"Making access to medications for OUD much broader and more equitable is a high priority for making meaningful progress in addressing the opioid crisis and saving lives of those with OUD."

Treatment with a combination of medication and evidence-based behavioral interventions, such as contingency management, can be useful in engaging people with OUD in treatment and improving outcomes. Little is known about which combinations of medication and behavioral interventions are most effective, which patients are most likely to benefit from behavioral interventions, and which patients may do well with medications and appropriate medical management alone. The science shows life-saving aspects of medications for OUD even without behavioral therapies. It is crucial that medications not be withheld just because behavioral interventions are not available.

BARRIERS TO TREATMENT

Most people with OUD in the United States do not receive any treatment at all—and only a fraction of people who do receive medications for OUD. Access to evidence-based treatment is poor across the board, but it is starkly inequitable among certain generational, racial, ethnic, social, and economic groups.

Access also varies among different treatment settings. For instance, for those entering the criminal justice system, evidence-based medications are often withheld or provided on a limited basis. Most residential treatment facilities do not offer medications, and if they do, they rarely offer all three medications. Expanding access through settings such as community health centers and mobile medication units would save lives and build the capacity to make real progress against the epidemic.

Stigma is a major barrier to people seeking and staying in treatment. Medications for OUD also may be stigmatized. Providers may be unwilling to prescribe medications due to concerns about misuse and diversion, or illegal channeling of regulated medications to the illicit market. In fact, the rate of diversion is lower than for other prescribed medications, and it declines as the availability of medications to treat OUD increases.

Other barriers include stringent laws and regulatory policies not rooted in evidence; a fragmented system of care delivery; and inadequate education of professionals working with people with OUD in health care and law enforcement settings.

CONCLUSION

More research is needed to define the best treatment regimen for each of the available medications and to directly compare the effects of the three medications' long-term use. Research should focus on developing new and better medications to treat OUD, on determining the most effective behavioral therapies to be used with medications, and on refining the most appropriate protocols for their effective use. Despite the need for more research, evidence gathered over the past 50 years underscores the benefits of long-term retention on OUD medication.

Curbing the epidemic will require an "all hands on deck" strategy—involving health care, criminal justice, patients and family members, and beyond—because no one group alone will be able to resolve the crisis. Making access to medications for OUD much broader and more equitable is a high priority for making meaningful progress in addressing the opioid crisis and saving lives of those with OUD.

To read the report, please visit **nationalacademies.org/OUDtreatment.**

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