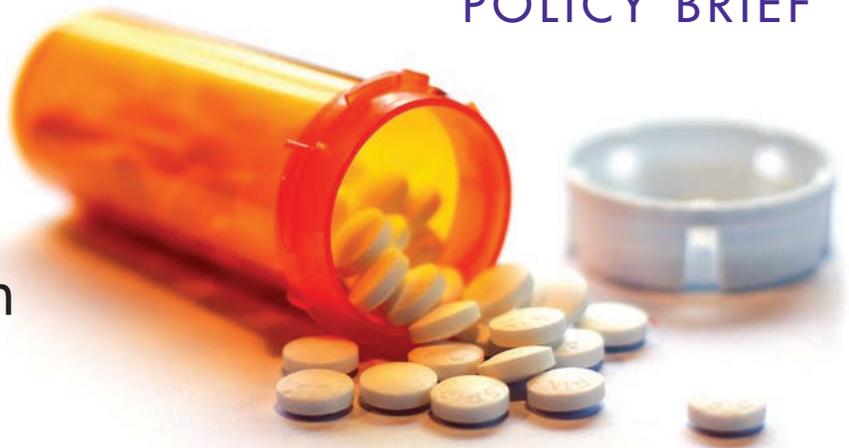


# Key Findings from RAND Health's Research on Opioid Policy



## Confronting the Dynamics of Opioid Misuse

THE OPIOID EPIDEMIC is a moving target. Individuals may start using opioids for medical or recreational purposes. The risk of dependence increases when opioids are used with other drugs, when opioids are prescribed at higher doses or for longer time frames than medically appropriate, or when opioids are used recreationally. There will always be some patients who legitimately benefit from opioids, and as long as those patients continue to receive opioids, there will always be a new supply of legitimate opioid users who are potentially at risk for misuse.

Opioid dependence increases the risk of multiple harms, including health problems, car accidents, and overdoses (both fatal and nonfatal). This policy brief highlights key findings from RAND research on opioid-related issues across a spectrum of policy areas including prevention, treatment, quality of care, and supply.

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## Preventing Opioid Misuse

- There are many non-opioid approaches to managing pain, ranging from high-tech options to over-the-counter medications. But physicians say that they do not have sufficient access to non-opioid alternatives, that alternatives increase their workload, and that they lack the training and leadership needed to make this shift in prescribing practice (Pacula et al., 2016; Giannitrapani et al., 2017). In addition, many non-opioid alternatives are not adequately covered by insurance, making them more costly to patients than opioids and more difficult to access (Pacula and Powell, 2018). When broad system support is provided within a health care system to promote non-opioid approaches to managing pain and when access to these approaches is provided, use of non-opioid options rises (Gellad, Good, and Shulkin, 2017).

- Practice guidelines often promote appropriate pain management, based on science and clinical opinion, but there is little evidence that guidelines alone are effective (Buttorff et al., 2017). Integrating guidelines with ready access to non-opioid pain medications and educating providers about how to use alternative therapies could make guidelines more effective (Pacula et al., 2016).
- Decreasing “high-risk” prescribing can likely decrease the negative outcomes associated with opioid misuse, including overdose (Heins et al., 2018). Overprescribing is widely viewed as a major reason for the continuous rise in opioid mortality through 2010. Studies suggest that as many as 40 percent of treatment episodes involve at least one measure of high-risk prescribing: prescribing a higher dose than medically appropriate. The types of high-risk prescribing vary considerably across states (Heins et al., 2018). Such prescribing is concentrated among a relatively small group of physicians (Stein, Mendelsohn, et al., 2016).

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## Increasing Access to Treatment

- Medication-assisted therapy, predominantly methadone and buprenorphine, is commonly viewed as the most effective treatment for opioid use disorder. To increase access to treatment, policymakers allowed physicians to get a waiver from the Drug Enforcement Administration to prescribe buprenorphine in their own practices (Stein et al., 2015). Initially, waived physicians were limited to treating only 30 patients simultaneously; subsequently, the limit rose to 100 and then to 275 patients.
- Increasing the number of physicians who could prescribe buprenorphine substantially increased potential

access to treatment, especially in rural areas where methadone clinics are scarce (Dick et al., 2015). Physicians with 100-patient waivers are largely responsible for the increased access and utilization (Thomas et al., 2017). But there is no evidence that allowing more clinicians to prescribe buprenorphine and raising patient limits will meaningfully increase effective use of buprenorphine because the majority of physicians do not come close to treating the number of patients allowed by their current waiver (Stein, Sorbero, et al., 2016; Thomas et al., 2017). It is not yet known why waived physicians are not treating near their patient limits. Insufficient reimbursement, inadequate access to therapists to provide counseling to individuals receiving buprenorphine, lack of confidence about using buprenorphine in clinically complex patients, and perceived stigma related to treating individuals who are drug dependent may all play a role.

- Treatment of opioid or alcohol use disorders (OAUD) could be integrated into primary care. A study of primary care patients who had OAUD showed that treatment for individuals with opioid use disorders could be effectively delivered within community health clinics by primary care physicians. This approach increased the proportion of primary care patients with OAUD receiving evidence-based treatment (Watkins, Ober, et al., 2017).

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### Measuring the Quality of Care

- The quality of treatment for opioid use disorder affects health outcomes. For example, RAND researchers assessed the quality of treatment for more than 32,400 patients who received care in the Veterans Affairs health system in 2007 and whose medical records indicated that they had an opioid use disorder. Researchers examined the records to see whether receiving recommended medical care for the disorder was associated with a lower risk of death for these patients in the year following treatment.
- Deaths were as much as one-third lower among these patients if their care met three quality measures: (1) They were not prescribed opioids or common types of anxiety medications, (2) they received psychosocial counseling, and (3) they had quarterly visits with a physician. This study is one of the first to assess how quality of care affects patient outcomes (Watkins, Paddock, et al., 2017).

- Quality of care may also be an issue if waived physicians are unprepared to provide the comprehensive care required to treat opioid use disorder effectively. Quality may be especially important for improving outcomes for racial/ethnic minorities, who may not be receiving effective treatment for opioid use disorders at the same rate as nonminorities (Stein et al., 2018).

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### Managing the Supply of Opioids

- Prescription drug monitoring programs (PDMPs) are state-specific databases that track the prescribing and dispensing of controlled prescription medications. Providers can use this information to learn about a patient's prescribing history in order to prevent doctor shopping or to guide their own decisions about initial dosages. All 50 states have these programs, but programs differ—for example, they may monitor different drugs or have different reporting requirements (Moyo et al., 2017; Powell and Pacula, 2017). Evidence of program effectiveness is neither consistent nor strong (Moyo et al., 2017), and effectiveness varies by PDMP characteristics. But states with more complete and timely opioid monitoring have achieved greater reductions in overdoses when compared with states that have less comprehensive programs.
- Disrupting the supply of opioids is intended to reduce abuse by making opioids harder to get. But disruptions can have unintended consequences (Pacula and Powell, 2018). For example, when OxyContin was reformulated in 2010 to make it harder to abuse, OxyContin overdoses fell. However, dependent users switched to other drugs, including heroin and fentanyl. As much as 80 percent of the increase in heroin mortality in the years since 2010 may be due to the reformulation (Alpert, Powell, and Pacula, 2017).
- Better ways to monitor and track illegal drugs could help intervene in the black market. A large group of *new* dependent consumers has also shifted to the black market. Budget cuts eliminated key agencies responsible for monitoring these markets (such as the National Drug Intelligence Center) as well as important systems covering them (such as the Arrestee Drug Abuse Monitoring Program and Drug Abuse Warning Network). Investments are needed to improve surveillance and data collection (Pacula and Powell, 2018).

## THE OPIOID CRISIS IS AN ECOSYSTEM

Many thoughtful policies have been implemented to reduce access to opioids, enhance effective treatment for addiction, and reduce opioid-related harms, but experience teaches us that the opioid crisis functions much like an ecosystem. Policies targeting one part of the system can have unintended consequences, affecting system dimensions that they were not intended to target. For example, the reformulation of OxyContin, which reduced OxyContin-related overdoses—its intended goal—also spurred fatal overdoses from heroin—an unintended consequence—when many dependent users unable to get OxyContin switched to heroin and fentanyl. To effectively combat the crisis, decisionmakers will need to weigh potential policy outcomes—whether targeting prevention, treatment, measurement, or supply—across the entire opioid ecosystem.

### This policy brief summarizes RAND Health research reported in the following publications:

Alpert, Abby, David Powell, and Rosalie Liccardo Pacula, *Supply-Side Drug Policy in the Presence of Substitutes: Evidence from the Introduction of Abuse-Deterrent Opioids*, Cambridge, Mass.: National Bureau of Economic Research, NBER Working Paper No. 23031, January 2017 (EP-67579, [www.rand.org/t/EP67579](http://www.rand.org/t/EP67579)).

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Pacula, Rosalie Liccardo, and David Powell, "A Supply-Side Perspective on the Opioid Crisis," *Journal of Policy Analysis and Management*, Vol. 37, No. 2, February 2018, pp. 438–446 (EP-67511, [www.rand.org/t/EP67511](http://www.rand.org/t/EP67511)).

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Stein, Bradley D., Andrew W. Dick, Mark Sorbero, Adam J. Gordon, Rachel M. Burns, Douglas L. Leslie, and Rosalie Liccardo Pacula, "A Population-Based Examination of Trends and Disparities in Medication Treatment for Opioid Use Disorders Among Medicaid Enrollees," *Substance Abuse*, published online June 22, 2018 (EP-67629, [www.rand.org/t/EP67629](http://www.rand.org/t/EP67629)).

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Abstracts of all RAND Health publications and full text of many research documents can be found on the RAND Health website at [www.rand.org/health](http://www.rand.org/health). To view this policy brief online, visit [www.rand.org/t/RB10018](http://www.rand.org/t/RB10018). For more RAND research on opioids, visit [www.rand.org/opioid-policy](http://www.rand.org/opioid-policy).

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