Over the past 25 years, the United States has experienced a dramatic increase in deaths from opioid overdose, opioid use disorder, and other harms related to the prescribing of opioid medications for pain management. Drug overdose—mostly involving opioids—is now the leading cause of unintentional injury death in the United States, an epidemic affecting individuals, families, communities, and society at large.

This opioid crisis lies at the intersection of two substantial public health challenges: containing the rising toll of opioid-related harms, and reducing the burden of suffering for the tens of millions of people suffering from pain. Finding the ideal balance is a challenging task.

A report from the National Academies of Sciences, Engineering, and Medicine outlines strategies for addressing the opioid epidemic, offering a constellation of policies, interventions, and tools to help reduce or contain opioid-related harms while meeting the needs of people with pain.

These strategies include improving education in pain management, influencing provider prescribing practices, increasing treatment for people with opioid use disorder (OUD), and reducing harm. Each strategy entails costs and trade-offs but leaves adequate space for responsible prescribing and reasonable access for patients and providers who believe an opioid is medically necessary.

**Preventing Opioid Misuse and Opioid Use Disorder**

**Establish comprehensive pain education materials and curricula for health care providers.**

**RECOMMENDATION 5-2**

**Why?**
Any meaningful effort to improve pain management will require a fundamental shift in the nation’s approach to mandating pain-related education for all health professionals who provide care to individuals with pain. Current efforts to improve pain education and knowledge about prescription opioid misuse and OUD among prescribers are inadequate.

**How?**
State medical schools and other health professional schools should coordinate with their state licensing boards for health professionals (e.g., physicians, nurses, dentists, pharmacists), the National Institutes of Health’s Pain Consortium, the U.S. Food and Drug Administration (FDA), the U.S. Centers for Disease Control and Prevention, and the U.S. Drug Enforcement Administration to develop an evidence-based national approach to pain education encompassing pharmacologic and nonpharmacologic treatments and educational materials on opioid prescribing.
Improve the use of prescription drug monitoring program data for surveillance and intervention.

RECOMMENDATION 5-4

Why?
Prescription drug monitoring programs, or PDMPs, can help address the opioid epidemic by allowing prescribers, dispensers, and other stakeholders to track prescribing and dispensing information. Yet state laws differ widely in who has access to the data, with some states denying access to certain stakeholders, like substance use and mental health professionals, who could use the information to monitor opioid use and related harms. Some states do not require prescribers and/or dispensers to check PDMP information, and still others do not permit access to PDMP data to public health departments or for research purposes. As a result, these data are not being used to their full potential.

How?
The U.S. Department of Health and Human Services (HHS), in concert with state organizations that administer prescription drug monitoring programs, should conduct or sponsor research on how data from these programs can best be leveraged for patient safety (e.g., data on drug–drug interactions), for surveillance of policy and other interventions focused on controlled substances (e.g., data on trends in opioid prescribing, effects of prescriber guidelines), for health service planning (e.g., data on discrepancies in dispensing of medications for treatment of opioid use disorder), and for use in clinical care (i.e., in clinical decision making and patient–provider communication).

Improve access to drug take-back programs.

RECOMMENDATION 5-1

Why?
Drug take-back programs are shown to raise awareness about the safe disposal or return of many unused drugs, even though the effects of these programs on downstream outcomes like diversion and overdose are unknown. Many drug take-back programs in the United States are once-a-year events, and the patchwork of state, local, and pharmacy-specific programs may confuse the public.

How?
States should convene a public–private partnership to implement drug take-back programs, allowing people to return drugs to any pharmacy on any day of the year rather than relying on occasional take-back events.

“The enormity of the opioid crisis requires an immediate, massive expansion of treatment capacity to provide evidence-based treatment and recovery to millions of individuals.”
**Treating Opioid Use Disorder**

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**Expand treatment for opioid use disorder.**

**RECOMMENDATION 5-6**

**Why?**

The enormity of the opioid crisis requires an immediate, massive expansion of treatment capacity to provide evidence-based treatment and recovery to millions of individuals.

Aside from its immediate benefits to people with OUD, a strategy of increasing access to and use of treatment for OUD can help lower the number of people misusing opioids and thus lower the risk of public health harms. State and local governments are well positioned to take responsibility for ensuring universal access to treatment of OUD, using whatever financial and technical assistance is available from the federal government.

**How?**

States, with assistance from relevant federal agencies, particularly the Substance Abuse and Mental Health Services Administration (SAMHSA), should provide universal access to evidence-based treatment for OUD, including use of medication, in a variety of settings, including hospitals, criminal justice settings, and substance use treatment programs. Efforts to this end should be carried out with particular intensity in communities with a high burden of OUD. State licensing bodies should require training in treatment for OUD for all licensed substance use disorder treatment facilities and providers.

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**Remove barriers to coverage of approved medications for treatment of opioid use disorder.**

**RECOMMENDATION 5-8**

**Why?**

Medication-assisted treatment, or MAT, is the central component of evidence-based treatment for OUD. FDA-approved medications for addiction treatment include methadone, buprenorphine, and naltrexone.

MAT can be delivered effectively in a number of care models and settings. Yet it is greatly underused because of a combination of factors, including policies related to insurance coverage, payment, and approval and reimbursement limitations; lack of availability of eligible providers; negative attitudes toward treatment with medication among providers, patients, and the general public; insufficient training in OUD and its treatment among medical providers; and disparities in access and utilization.

State Medicaid policies influence enrollees’ access to and use of MAT. Most states cover this treatment for Medicaid enrollees, but some do not cover all medications (e.g., both methadone and buprenorphine). Obstacles to using MAT can include prior authorization requirements, copayments, and requirements for concurrent counseling, which can be a barrier if it does not exist or is not accessible.

**How?**

HHS and state health financing agencies should remove impediments to full coverage of medications approved by the FDA for treatment of OUD.
Improve education in treatment of opioid use disorder for health care providers.

RECOMMENDATION 5-7

Why?

There are not enough providers for treatment of OUD, which contributes to the gap between the level of need for MAT and the capacity to provide that treatment.

To be able to prescribe buprenorphine for OUD, health care providers must obtain a waiver. Recent steps to expand the number of waivered providers include increasing the upper limit of patients that can be treated by waivered physicians, expanding the type of prescribers permitted to be waivered, and integrating the required training into the health care professional educational curriculum.

How?

State licensing boards, schools for health professional education, and professional societies should require and provide basic training in the treatment of opioid use disorder for health care providers, including but not limited to physicians, nurses, pharmacists, dentists, physician assistants, psychologists, and social workers.

Reducing Harm

The harm-reduction strategies below focus on minimizing the negative consequences of drug use instead of solely trying to reduce opioid use disorder. Both strategies also employ naloxone.

Naloxone is safe and effective for reversing overdoses and can easily be administered by bystanders. It is not a controlled substance and has no abuse potential. Yet a number of legal and regulatory barriers prevent it from being as widely used as it could be. For instance, in some states, naloxone requires a prescription. In addition, in some states a bystander who administers naloxone can face potential liability, or people who summon help for an overdose can face potential legal ramifications.

Most states have passed laws to address these various barriers. The adoption of naloxone access laws and Good Samaritan laws has been shown to be associated with a decrease in opioid-related deaths:

- **Naloxone access laws** include those that allow for layperson possession of naloxone without a prescription, give prescribers immunity from criminal prosecution and/or from civil liability, give laypersons who administer naloxone immunity from civil or criminal liability, allow prescriptions to third parties or by standing order.

- **Good Samaritan laws** provide varying levels of immunity from prosecution for those summoning emergency responders in the event of an overdose, including immunity from prosecution for possession of controlled substances and/or drug paraphernalia.
Leverage prescribers and pharmacists to help address opioid use disorder.

RECOMMENDATION 5-9

Why?
Overdoses can occur among all groups of opioid users—those who use illicit opioids, those who misuse prescription opioids, and those who use opioids to manage pain as prescribed by a doctor.

How?
State medical and pharmacy boards should educate and train their members in recognizing and counseling patients who are at risk for opioid use disorder and/or overdose, and encourage providers and pharmacists to offer naloxone when an opioid is prescribed to these patients or when a patient seeks treatment for overdose or other opioid-related issues.

Improve access to naloxone and safe injection equipment.

RECOMMENDATION 5-10

Why?
Needle exchange programs, whether in a community setting or through pharmacies, have been found to be effective for reducing the risk of infectious disease transmission.

In addition to providing clean injection equipment, these programs can facilitate a number of other services that are useful for people who use drugs, including helping them find treatment options, HIV testing and counseling, access to naloxone, and education about safer injection practices and safer drug use.

State laws can present significant barriers to access to safe injection equipment. They can affect access to safe injection equipment, for example, by allowing or prohibiting the sale or distribution of drug paraphernalia, regulating the retail sale of syringes, or authorizing syringe exchange. State laws that make it difficult to access clean syringe equipment make it more likely that a user will share or reuse equipment, leading to infectious disease transmission.

How?
To reduce the harms of opioid use, including death by overdose and transmission of infectious diseases, states should implement laws and policies that remove barriers to access to naloxone and safe injection equipment by

• permitting providers and pharmacists to prescribe, dispense, or distribute naloxone to laypersons, third parties, and first responders and by standing order or other mechanism;

• ensuring immunity from civil liability or criminal prosecution for prescribers for prescribing, dispensing, or distributing naloxone, and for laypersons for possessing or administering naloxone; and

• permitting the sale or distribution of syringes, exempting syringes from laws that prohibit the sale or distribution of drug paraphernalia, and explicitly authorizing syringe exchange.
Conclusion

Years of sustained and coordinated effort by multiple stakeholders and sectors will be required to contain the current opioid epidemic and ameliorate its harmful effects on society while balancing the needs of the millions of individuals suffering from pain. Actions at the state level are crucial to these efforts.

PRESCRIPTION AND ILLICIT OPIOID USE

The prescription and illicit opioid epidemics are intertwined. One of the consequences of increased prescribing of opioids has been increased use of illicit opioids, such as heroin. In addition to prescription opioids serving as a strong risk factor for heroin use, market forces and efforts designed to reduce prescription opioid-related harms, such as opioids with abuse-deterrent formulations, may be contributing to increased heroin use. The small but growing population of people who use heroin compared to the large population of people who use prescription opioids points to an unprecedented potential market for heroin as well as other illicit opioids.

Consider potential effects on illicit markets of policies and programs for prescription opioids.

RECOMMENDATION 4-1

How?

In designing and implementing policies and programs pertaining to prescribing of, access to, and use of prescription opioids, the FDA, other agencies within HHS, state agencies, and other stakeholders should consider the potential effects of these interventions on illicit markets—including both the diversion of prescription opioids from lawful sources and the effect of increased demand for illegal opioids such as heroin among users of prescription opioids—and take appropriate steps to mitigate those effects.