The opioid epidemic: A framework for action

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In the wake of Substance Abuse and Mental Health Services Administration (SAMHSA) grants by the U.S. Department of Health and Human Services (HHS) and President Trump's declaration that the opioid epidemic is a public health emergency, expectations are running high for increased federal funds to help combat the crisis.[1]

With the national spotlight shining more brightly than ever and the expectation of additional funding, states and local governments will have an opportunity to strengthen efforts that address both the root causes and the effects of the opioid epidemic.

The opioid epidemic represents an unprecedented public health crisis in both its complexity and breadth, and its causes and effects span multiple government levels, agencies, and jurisdictions. Time is of the essence, and it will be important to leverage leading practices, avoid duplication and identify gaps in the systems of prevention and response in order to effectively combat the epidemic. It is critical that governments, in concert with a range of stakeholders, employ a collaborative and coordinated approach that prevents new individuals from becoming addicted, while simultaneously providing treatment and recovery services to the millions of individuals currently addicted.

This issue brief provides an overview of:

— The nature of the crisis,

— The four action areas of the solution framework, and

— Final thoughts for state and local agencies to consider as they seek to address the opioid epidemic.

The nature of the crisis

The opioid epidemic has transcended geography, race, gender, age, and economic class on its path to developing into the type of public health crisis rarely experienced in America's history. From 1999 to 2015, more than 183,000 people died in the U.S. from overdoses related to prescription opioids.[2] In addition, the crisis shows no signs of slowing down. From 2000 – 2015, the rate of deaths from drug overdoses has increased 137 percent, including a 200 percent increase in the rate of overdose deaths involving opioids.[3]

Despite increased national attention and numerous initiatives targeted at the opioid epidemic, the Institute for Healthcare Improvement notes that most of the efforts have not demonstrated significant or widespread impact.[4] While there is no one reason for this, a key driver cited is the lack of effective implementation of promising practices. The evidence underscores the complexity of the opioid epidemic and the need for agencies to learn from their peers from across the country to address the challenges in front of them.

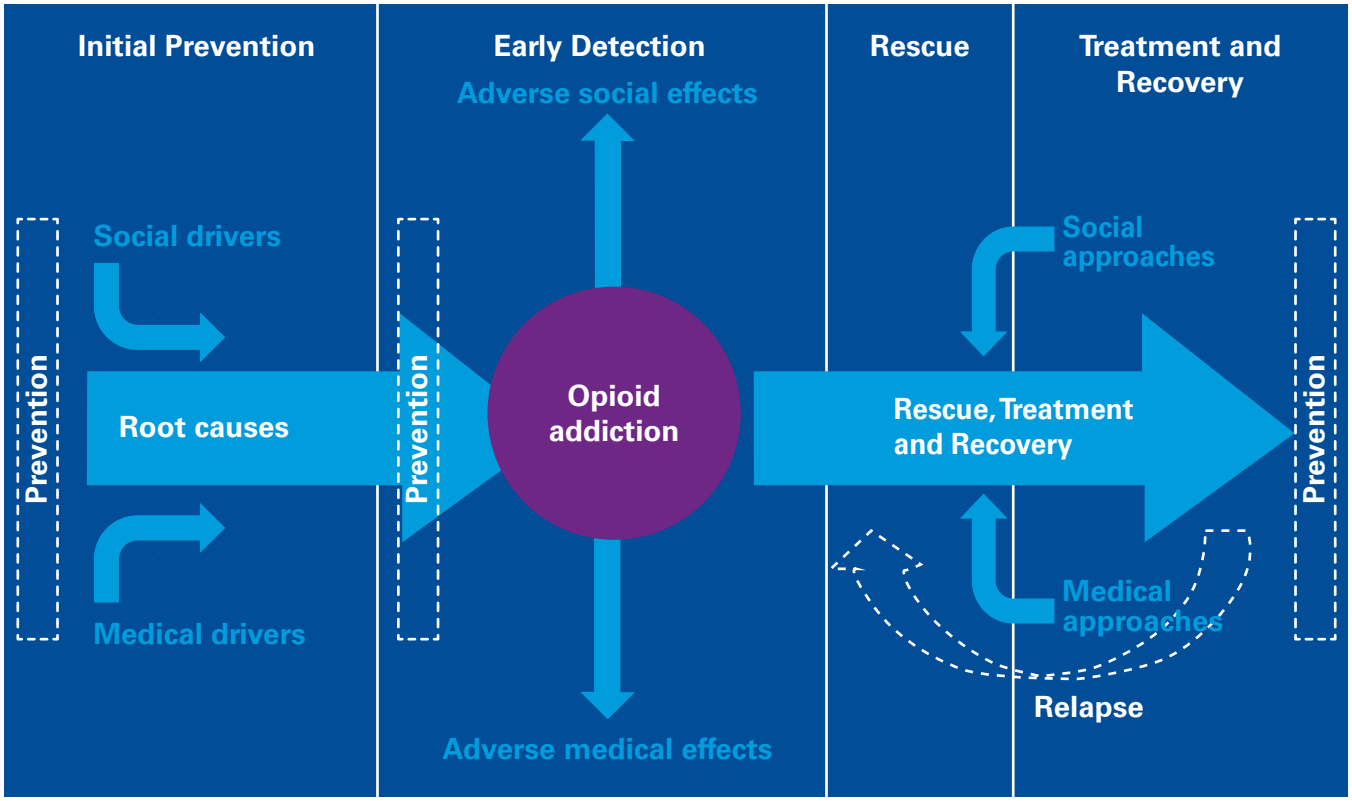
The four action areas of the solution framework

Given the wide-ranging spread of the opioid epidemic, any solution will have to focus on addressing both the root causes as well as providing compassionate, evidence-based approaches to recovery for the millions of individuals currently addicted. While there are a large number of potential strategies, this issue brief breaks these strategies down into a series of four action areas:

1. Initial prevention
2. Early detection
3. Rescue
4. Treatment and recovery

These action areas enable the grouping of both the medical and the social approaches to the opioid epidemic and provide a simple but comprehensive narrative that encompasses the key aspects of the epidemic (see Figure 1).

Figure 1: Overview of the action areas in the opioid epidemic. These action areas are used in this issue brief to group the different solution approaches.



Action Area 1: Initial Prevention

Preventing individuals from becoming addicted to opioids is a key step in combatting the opioid epidemic. This action area focuses on (1) limiting new opioid prescriptions, (2) increasing use of evidence-based, nonopioid treatments, and (3) improving public awareness of the dangers posed by opioids.

Update prescribing guidelines and policies to limit new opioid prescriptions

The amount of opioids prescribed in the United States in 2015 was approximately three times higher than the amount prescribed just six years earlier.[5] Safer prescribing and the associated prescribing guidelines are a fundamental step in ensuring that patients have access to safe and effective pain treatment, while simultaneously reducing the number of individuals who develop opioid-use disorder.

In 2016, the Centers for Disease Control and Prevention (CDC) published voluntary guidelines for primary care providers with recommendations on prescribing opioids for chronic pain.[6] Many states are in the process of, or have, adopted the CDC guidelines as part of their own approach. Currently, 23 states have enacted legislation that addresses the prescription of opioids, either through limits, guidance or requirements.[7] When guidelines are effectively implemented, they can be a powerful tool in supporting safer prescription behaviors, especially when combined with tools such as the Prescription Drug Monitoring Program (PDMPs) described later in this issue brief.

Practice Example: Washington

In 2007, the State of Washington's Agency Medical Directors' Group (AMDG) released the Interagency Guideline on Prescribing Opioids for Pain. The guidelines were updated in both 2010 and 2015 and largely served as a guide for the CDC's own guidelines. After the guidelines were introduced in 2007, prescription opioid-related overdose deaths among injured workers dropped by half.[8] The State of Washington provides a strong example of how to effectively work across various government agencies and achieve stakeholder buy-in through the formation of an interagency workgroup.

Increase use of evidence-based nonopioid treatments

Providers must strike a delicate balance between treating the pain of their patients while also reducing the risk of opioid misuse and abuse. With reductions in opioid-based treatments due to the adoption of prescribing guidelines, providers and patients need to fill the gap with alternatives to treat pain, such as nonopioid prescription drugs and pain management therapies. State and local agencies can help support the movement towards alternative pain management approaches by investing in training and alternative treatment options, where possible.

Practice Example: New Jersey

In January 2016, St. Joseph's Regional Medical Center launched the Alternatives to Opiates (ALTO) Program to reduce the use of opiates in the emergency department of the hospital. The program trains physicians to use a variety of nonopioid treatments to meet the pain management needs of their patients while avoiding the addictive risks. These treatments include a variety of different methods from targeted nonopioid medications and nitrous oxide to energy healing and music.
In addition to improving patient care and increasing the awareness among providers of the risks and benefits of prescribing opioids, in a five month period the hospital was able to reduce opioid use by 38 percent.[9]

Improve the public's awareness of the danger posed by opioids

Despite increased national attention, a lack of awareness about the dangers of opioids and treatment for opioid addiction continues to, in part, drive the epidemic. Many users of prescription opioids remain relatively unaware of the dangers of overdose as well as potential response strategies, such as the use of naloxone.[10] Compounding the problem is a lack of awareness among providers on how to prevent, identify, and treat opioid addiction.[11] Following the example of other effective public health campaigns, such as the CDC's campaign to increase the appropriate use of antibiotics, state and local governments should seek to implement multipronged informational campaigns to increase awareness and education among both providers and patients of the risks of opioid addiction as well as alternative treatment options.

Practice Example: Utah

Utah has implemented the "Use Only As Directed"[12] campaign to educate the public on appropriate use of opioids in order to prevent and reduce the misuse and abuse of pain medication. The campaign uses a three-pronged approach – "Speak Out, Opt Out, and Throw Out" – to educate the public on safe use, storage, and disposal of opioids. The state has also installed "drop box" locators where individuals can safely dispose of their medications.

Action Area 2: Early Detection

While state and local agencies will never be able to prevent all individuals from becoming addicted to opioids, the speed at which governments are able to predict and detect increases in opioid addiction and opioid-related deaths, the more successful treatment and recovery efforts will be. This action area of the opioid framework focuses on use of data and analytic tools to boost surveillance and early detection.

Leverage existing data and analytics tools to boost surveillance efforts

Studies have demonstrated variations in opioid-use and abuse across geographies, populations, and even times of the year.[13] Governments should leverage data and analytics to both understand the current state of the opioid problem in order to inform strategy design and to also monitor changes in the environment so that trends and can be identified and strategies can be adjusted. However, it can be difficult for governments to procure complex and expensive data and analytics solutions, not to mention that funds remain limited despite the increased attention on the epidemic. Forty-nine states, the District of Columbia, and Guam have enacted legislation authorizing the creation and operation of a prescription drug monitoring program (PDMP), and almost all are currently collecting data and reporting on it to authorized users. While not a full data analytics solution, agencies do have the option to expand the use of their PDMPs as a first step to creating a more comprehensive surveillance solution in addition to providing point-of-care support. Currently, prescribers in 29 states are required to check PDMP databases before prescribing certain controlled substances or in workers' compensation cases.

Practice Example: Ohio

The State of Ohio Board of Pharmacy has leveraged the power of predictive analytics to track the dispensing of prescription drugs and early detection of potential overdoses. The PDMP, known as the Ohio Automated Rx Reporting System (OARRS), collects information on all outpatient prescriptions dispensed by Ohio pharmacies, and is used as a "drug epidemic early warning system." In addition, in order to increase utilization of the PDMP, Ohio passed legislation requiring medical and pharmacy licensing boards to adopt rules mandating use of the PDMP.[14]

Action Area 3: Rescue

According to the CDC, there were 28,647 opioid-related drug overdose deaths in 2015. And the rate of drug overdose deaths continues to climb with preliminary numbers suggesting a nearly 60 percent rise in drug overdoses from 2015 -2016.[15] This action area focuses on strategies state and local agencies can employ to reduce the rate of overdose deaths through access to life-saving rescue medications.

Embrace harm reduction strategies and access to Naloxone

Given the urgency of the opioid epidemic, there is a need to try both the "traditional" as well as the less conventional strategies that target the engagement of nonmedical care givers, such as non-medical first responders and family members. Recognizing that family members are often in the best position to respond to an overdose, some states have embraced harm reduction strategies that train family members in emergency recovery procedures to increase the reach of initial harm reduction strategies.

Practice Example: North Carolina

In 2009, Wilkes County, NC experienced overdose deaths at quadruple the rate of the rest of the state. In response, North Carolina implemented Project Lazarus, a community-based overdose prevention program that included five components: community activation and coalition building, monitoring and surveillance data, prevention of overdoses, use of rescue medication, and evaluation.[16] The program encourages providers to prescribe the overdose medication, Naloxone, to patients deemed to have a high risk for overdose. In addition, those entering drug treatment or who voluntarily requested Naloxone received the rescue medication for free. As a result, the county saw a 42 percent decrease in overdose deaths from 2009 to 2010.

Action Area 4: Treatment and Recovery

According to SAMHSA, nearly 80 percent of individuals with opioid-use disorder do not receive treatment.[17] A key step in combatting the opioid epidemic will be ensuring that individuals with opioid-use disorder have access to the necessary treatment and recovery services. The focus in this action area of the framework is to (1) increase linkages to medication-assisted treatment and (2) expand access to peer recovery support services.

Increase linkages to medication-assisted treatment

Medication-assisted treatment (MAT) has been shown to be more effective than either behavioral interventions or medication alone.[18] However, access to MAT interventions remains out of reach for many individuals with opioid-use disorder. Only 23 percent of publicly funded treatment programs report offering any FDA-approved medications to treat substance use disorders, and less than half of private-sector treatment programs reported that their physicians prescribed FDA-approved medication.[19] A major barrier to the implementation of MAT is a lack of trained providers and funding for treatment programs. This provides government health agencies the opportunity to help address the crisis by allocating funding to increase utilization of MAT for patients with opioid-use disorder. Six states were recently awarded[20] a combined $35 million by HHS to expand access to MAT for persons with opioid-use disorder, a promising sign that additional federal funding may be similarly made available in the near future.

Practice Example: Massachusetts

In 2007, the Massachusetts Bureau of Substance Abuse Services[21] (BSAS) implemented the office-based opioid treatment with buprenorphine (OBOT-B) Massachusetts Model at 14 community health centers. The model leverages physicians and nurses at community health centers to administer opioid agonist therapy with buprenorphine. The program resulted in a 375 percent increase in physicians enabled to prescribe buprenorphine.

Expand access to peer recovery support services

Recently, several states have developed and implemented peer recovery support services to boost the social support provided to individuals with opioid-use disorder.[22] These services are delivered by people who have experienced opioid-use disorder and recovery. Based on their own experience, peer providers are in a unique position to develop relationships with individuals battling addiction and can provide a form of treatment in the patient's environment that extends beyond the reach of clinical staff. Governments should consider increasing funding for peer recovery support services in both the inpatient and outpatient settings.

Practice Example: Rhode Island

AnchorED, Rhode Island's peer recovery support program, has become a leading example of how peer recovery services can be an effective tool to combatting opioid addiction. The program places peer recovery coaches in the hospital who connect with individuals in the emergency department who have experienced nonfatal opioid overdoses. Peer recovery coaches build relationships with patients based on shared experience and connect patients to treatment and recovery resources and provide education and mentoring. In the first 29 months of the program, 1,400 patients met with a peer recovery coach and 80 percent engaged in recovery support services upon discharge from the emergency department.[23]

Final Thoughts

While there are additional strategies that could be included within the four action areas of the framework presented in this issue brief, ultimately the success of these strategies will depend on the effectiveness of implementation. In addition, given the multifactorial challenge of the opioid epidemic, no one strategy may be successful if implemented in isolation. Any strategy to address the crisis will typically need to be paired with additional strategies that address both the root causes and symptoms of the epidemic. The following final thoughts should be considered to drive effective implementation:

— **Goal setting:** Given the numerous government agencies and nongovernment organizations, such as medical providers and non-for-profit entities, that will need to be involved to effectively address the opioid epidemic, developing a shared vision and goals will be critical to aligning all key stakeholders. These goals should be informed by data analysis and specific to each of the strategies government agencies and stakeholders seek to implement. The action plan developed by the Rhode Island Overdose and Prevention and Intervention Task force provides a strong example of how to develop an action plan with clear goals, actions, and metrics to evaluate the impact of selected strategies.[24]

— **Data analysis and sharing:** Research has demonstrated that there is significant variation in the opioid epidemic based on geography, populations, and time of year. A robust data and analytics operation will first allow government agencies to better understand the unique nature of the opioid epidemic within their state and locality. These insights can form the basis for effective policy and strategy decisions. However, once those strategies are identified, continual data sharing between key stakeholders will be critical to helping enable a coordinated and cost effective implementation.

In 2015, the State of Maryland demonstrated the power of data sharing to increase collaboration and develop more effective prevention and intervention efforts. Spurred on by an Executive Order from the Governor, Maryland formed a multiagency Overdose Prevention Council. Participation included the Department of Health and Mental Hygiene, Maryland Institute for Emergency Medical Services Systems, Maryland State Police, Department of Juvenile Services, and Department of Public Safety and Correctional Services, as well as staff members from other state agencies and the Office of the Governor.[25] All participating agencies were asked to provide medical and nonmedical datasets relevant to heroin intoxication, abuse, addiction, and overdose. The council was able to break down traditional operational and legal barriers to establish a leading interagency data sharing process that used data sharing and analysis to detect overdose trends and target prevention efforts.

— **Community Engagement:** Finally, the opioid epidemic is a community-wide issue that will require a community-wide response. While there is much to be learned from leading practices elsewhere, it is important that strategies are adapted to the local context and that community-based stakeholders are engaged early and often.

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