

Confronting Pain Management and the Opioid Epidemic

Strategies for Research Sponsors

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.

Invest in research to better understand pain and opioid use disorder.

RECOMMENDATION 3-1

Why?

Chronic pain and opioid use disorder (OUD) affect millions of Americans and cause untold disability and loss of function. Yet despite the prevalence of pain and OUD and related costs to society and repeated calls to action, research on pain remains poorly resourced.

Significant progress has been made on understanding the basic mechanisms of pain and its treatment, but more remains to be done. Many opioid alternatives—including nonopioid medications and nondrug interventions and techniques—can successfully manage pain. However, further research is needed to better understand how current therapies work as well as the optimal frequency and intensity to provide effective pain relief for a variety of patients with pain conditions.

Identifying those at risk of OUD means better characterization of the neurobiological interaction between chronic pain and opioid use. In particular, research on the interactions among pain, emotional distress, and reward would help in understanding and reducing the misuse potential of opioids.

How?

The National Institutes of Health (NIH), the Substance Abuse and Mental Health Services Administration (SAMHSA), the U.S. Department of Veterans Affairs, industry, and other relevant research sponsors should consider greater investment in research on pain and OUD, including but not limited to research aimed at

- improving understanding of the neurobiology of pain;
- developing the evidence on promising pain treatment modalities and supporting the discovery of innovative treatments, including nonaddictive analgesics and nonpharmacologic approaches at the level of the individual patient; and
- improving understanding of the intersection between pain and OUD, including the relationships among use and misuse of opioids, pain, emotional distress, and the brain reward pathway; vulnerability to and assessment of risk for OUD; and how to properly manage pain in individuals with and at risk for OUD.

Improve reporting of data on pain and opioid use disorder and invest in data and research to better characterize the opioid epidemic.

RECOMMENDATION 4-2

RECOMMENDATION 4-3

Why?

Gaps exist in the data describing the epidemiology of pain, OUD, and other opioid-related harms in the United States, including how these conditions relate to one another and how often they co-occur. Closing these data gaps through improved reporting of data on pain and OUD and investing in data and research would improve understanding and enable more effective and measurable policy interventions.

How?

SAMHSA, the U.S. Food and Drug Administration, NIH, and the U.S. Centers for Disease Control and Prevention (CDC) should collaborate to identify best practices and reporting formats that portray the epidemiology of both pain and OUD accurately, objectively, and in relation to one another.

The National Institute on Drug Abuse and the CDC should invest in data collection and research relating to population-level opioid use patterns and consequences, especially nonmedical use of prescription opioids and use of illicit opioids, such as heroin and illicitly manufactured fentanyl.

Evaluate the impact of patient and public education about opioids on promoting safe and effective pain management.

RECOMMENDATION 5-5

Why?

A major change is needed in patient expectations in the treatment and management of chronic pain. Patients may expect to experience little or no pain once a provider has been informed of pain, and providers may feel pressured to provide opioids for fear of poor performance evaluation. Patients lack information about opioids, suggesting the need for education. Information about the risks and benefits of opioids and alternative strategies for managing pain is being provided by several organizations, but because these efforts have not been evaluated, their impact is unclear.

How?

The nation's public health leadership, including the surgeon general, the CDC, and heads of major foundations and professional organizations, should convene a body of experts in communication and in pain and OUD to evaluate the likely impact (and cost) of an education program designed to raise awareness among patients with pain and the general public about the risks and benefits of prescription opioids and to promote safe and effective pain management.

To read the full report and view related resources, please visit
nationalacademies.org/OpioidStudy

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. The **organizations and agencies that sponsor research** have a crucial role to play in these efforts.

