



Introduction

America's opioid abuse epidemic has forced patients, physicians and policymakers to reexamine how opioids and other pain treatments are being used. Meanwhile, the problem of pain constitutes a crisis of its own. More than 100 million Americans experience chronic pain, costing the nation approximately \$635 billion a year in treatment expenses and lost productivity.

These dual challenges pose a complex question:

How do we meet the needs of patients in pain without contributing to the national opioid abuse crisis?

The solution is twofold. First, health care providers and patients must identify comprehensive integrative pain management treatments and technologies that allow patients and their physicians to ease pain while minimizing the risk of addiction. Second, government and health insurers must make those treatments available.

This paper explores the issue of pain management in the face of one of America's biggest health epidemics, outlining how commonsense policy solutions can help stem the opioid crisis while also optimizing care for patients in pain.

The Opioid Epidemic

In the face of mounting opioid-related deaths, policymakers have attempted to curb the availability of prescription opioids. But their efforts have not had the intended effect.

Physicians are prescribing fewer opioids today than in the past. Prescriptions peaked in 2010.² Yet opioid-related deaths continue to rise. Between 2015 and 2016, the opioid overdose death rate increased by 28 percent.³

Meanwhile, deaths attributed to illicit forms of opioids such as fentanyl have eclipsed opioid pain pill deaths. Fatal drug overdoses involving fentanyl and fentanyl-like drugs doubled in 2016 alone.⁴

Drug-to-drug interactions are also a contributing factor. Overdose risks increase when multiple drugs are ingested. In 2013, 77 percent of U.S. prescription opioid overdose deaths also involved other drugs, such as alcohol or benzodiazepines.⁵

Data suggests that people of all ages and races can struggle with abuse and overdose,

but young people are especially vulnerable. Among 25- to 34-year-olds, mortality from drug overdoses spiked by 50 percent from 2014 to 2016.⁶

The heartbreaking toll in communities across the country has left policymakers scrambling for viable solutions. But for those solutions to work over the long term, they cannot overlook the needs of patients in pain. The National Institutes of Health reports that pain affects more Americans than cancer, diabetes and heart disease combined. Chronic pain is the most common cause of long-term disability.⁷

Opioids are still effective pain relievers in many situations, so eliminating them completely is not realistic. Solutions may include reconfigured prescription opioids that are harder to misuse, but policy responses must also allow patients and physicians to alleviate pain through other treatment methods.

There are several ways to go about this.



STRATEGY #1:

Improve Access to Abusedeterrent Technology

For many patients, opioids are still an effective and appropriate pain treatment.

In those cases, responsible use of prescription opioids that are abuse deterrent can minimize the risk and potential impacts on household and family members.

Abuse-deterrent opioids are manufactured in a way that makes them harder to crush or renders their effects less appealing for recreational use.⁸ This makes it less feasible for people to misuse the drugs by snorting, smoking or injecting them.

Abuse-deterrent opioids have been shown to reduce diversion, where opioids are used by people without a prescription, by almost 91 percent. Studies find they significantly curtail opioid abuse (by an average of 41 percent over 14 different studies), lessening indirect costs of abuse such as criminal justice system expenses and lost workplace productivity.⁹

They also provide an important benefit: allowing patients to treat their pain with less risk of opioid misuse of their medications by household visitors or even their own family members.



Abuse-deterrent opioids reduce diversion by 91%

STRATEGY #2:

Increase Availability of Balanced Pain Management

Opioids are far from the only effective treatment to alleviate pain.

Balanced pain management provides a comprehensive, integrative way to treat pain. It can also help keep medical practitioners and their patients, not insurance companies or other outside parties, in charge of treatment decisions.

The approach can include opioids, but also other pharmacological treatments such as over-the-counter analgesics or prescription non-opioid analgesics. Non-pharmacological treatment strategies range from physical therapy to psychological treatments, supported by complementary approaches like nutrition counseling, therapeutic massage, biofeedback and acupuncture.

Some of the treatment strategies that comprise balanced pain management may be more expensive than opioids initially, leading to problems with coverage by insurers and other third-party payers looking to reduce costs.

Comprehensive, integrative programs are also often available only at major medical centers. In 2016, it was estimated that only about 200,000 patients received this kind of pain therapy.¹⁰

In the long run, however, balanced pain management can be the more impactful, more cost-effective approach. For instance, one study found that opioid-related adverse events following surgery can lengthen patients' hospital stays by 55 percent and increase the risk of readmission by 36 percent. They drive up total cost of care by 47 percent and, most alarmingly, result in a risk of death 3.4 times greater than that for patients who do not experience such an adverse event.¹¹

Offering pain treatment options outside of opioids can help patients and health care providers avoid such events—and it can help insurers avoid the associated costs.

INTEGRATED CARE

Includes physical therapy and rehabilitation, psychological counseling and social support instead of, or in addition to, medications

BALANCED PAIN MANAGEMENT

MULTIMODAL ANALGESIA

Combines two or more agents or techniques that use different mechanisms to reduce pain using fewer opioids

STRATEGY #3:

ENABLE TECHNOLOGY-BASED SOLUTIONS

Technology-based solutions also play a role in combating opioid abuse and overdose.

The Food and Drug Administration has approved more than 200 medical devices that can help treat pain. More are being developed all the time. Examples include:



Continuous Peripheral Nerve Block

A small catheter implanted at the surgical site during the procedure allows continuous infusion of fast-acting anesthetics using an ambulatory pump.¹²



Cryotherapy (Cold Therapy) Treatment

One of the oldest forms of pain treatment, cold can be applied with traditional ice or gel packs, or with portable, handheld mechanical delivery systems.¹³



Peripheral Nerve Stimulation

A surgically implanted electrode delivers rapid electrical pulses to the peripheral nerves. A small generator implanted in the patient's body, controllable by turning the device on and off, PNS can also be used to address chronic pain.¹⁴



Implantable Intraspinal Drug Infusion Pumps

Pumps deliver pain medication directly to the fluid surrounding the spinal cord, controlling pain using only about one percent of the amount of an opioid medication required when administered orally.¹⁵



Radiofrequency Neuroablation

Heats up small areas of nerve or tissues, blocking pain signals. Is effective against chronic back and neck pain, and arthritis of the knee and hip.¹⁶



Neurostimulation

Uses a surgically implanted device about the size of a stopwatch that delivers mild electrical signals to the epidural space near the spine. These disrupt pain signals between the spinal cord and the brain.¹⁷

Some technologies monitor pain medication, helping physicians determine which ones are appropriate for individual patients, and identifying patients who are abusing and diverting prescription drugs. Others help patients manage daily medications, reducing drug diversion and encouraging responsible stewardship.

Coverage for technology-based pain treatments is not a given, however. To make these advances more readily available to patients, federal policymakers might consider how Medicare and Medicaid coverage policies in particular impact the accessibility of these solutions.

STRATEGY #4:

Encourage Innovation on Non-addictive Pain Treatments

Public policies can further encourage the research and development of non-opioid approaches to pain.

The U.S. Department of Health and Human Services unveiled a **five-point Opioid Strategy** in 2017. Among its goals are:

- Supporting cutting-edge research on pain and addiction, including the development of new treatments
- Enabling access to high-quality, evidence-based pain care that reduces the inappropriate use of opioids and opioid-related harms.¹⁸

Pain Care Policy Congress. The event drew 75 leaders from 50 organizations, representing the full scope of licensed and certified health care professionals involved in pain care, along with insurers, people with pain, researchers, policymakers and policy experts. Gathered in San Diego, participants committed to advancing individualized care for people with pain. They also agreed on a universal definition of comprehensive integrative pain management, an integral step toward implementing key solutions for the opioid overdose epidemic.

In 2018, Congress introduced legislation, the **Advancing Cutting-Edge Research Act**,

which would give the National Institutes of Health more tools and flexibility to support research on non-addictive treatments.

During hearings on the bill, NIH Director Dr. Francis Collins urged that the agency be given other transaction authority. This authority would allow them to better partner with innovative companies and more quickly support research on non-addictive pain medications and technologies that can impact the opioid epidemic.¹⁹



Some states are taking action as well. A 2016 survey found that 12 states had implemented policies that encouraged their Medicaid recipients to use alternative therapies to manage pain and limit reliance on opioids. Those treatments included acupuncture, massage and yoga.²⁰

STRATEGY #5:

Ensure Stronger Coverage Policies

To benefit patients and public health, balanced pain management strategies need more favorable coverage by government health care programs, insurers and pharmacy benefit managers.

Current coverage patterns do not encourage access to balanced pain management. For example, in 2017 The New York Times and ProPublica analyzed Medicare prescription drug plans covering 35.7 million people. They found that only one-third of those covered had access to a painkilling skin patch containing buprenorphine, which can treat pain as well as opioid addiction. Moreover, every plan that covered non-addictive, but more expensive, lidocaine patches required patients to get prior approval for them.²¹

Cost-driven policies that deny patients access to balanced pain management and non-opioid medications often overlook not only what is best for the patient but also the total cost of treatment over time. Short-term savings that insurers realize by relying on low-cost opioids are frequently wiped out by the higher long-term costs of addiction and less effective pain management.²²

Many states have advocated for payment coverage policies that make it more feasible for health care providers to prescribe non-opioid approaches to pain relief. In

September 2017 attorneys general from 37 states sent a letter to America's Health Insurance Plans urging them to provide coverage for effective non-opioid treatments, writing that.

of All else being equal, providers will often favor those treatment options that are most likely to be compensated."

They also noted that, because non-opioid medications and treatments such as physical therapy, acupuncture, massage and chiropractic care have proven to be more effective at managing chronic pain, adopting policies that encourage their use will "benefit patients, society and insurers alike."²³

Policymakers must focus on making sure insurers realize the value of, and provide coverage for, technologies that can help treat pain. As more research and innovation takes place in this field, technological alternatives to opioid medications will become an even more important part of pain management.



Conclusion

Leaving pain untreated isn't the way to end the opioid epidemic. Effective policy solutions are those that offer viable, accessible alternatives for safely treating pain.

Commonsense strategies ensuring the availability and affordability of abuse-deterrent or non-opioid pain management medications and alternative pain treatments can help provide optimal care to patients while helping bring the opioid epidemic under control. Patients, physicians, policymakers and insurers, working together, can implement new standards and practices that will help shield patients from opioid abuse while also allowing them to manage their pain.

REFERENCES

- 1. The Forum: Harvard P.H. Chan School of Public Health. "The Chronic Pain Epidemic: What's to be Done?" Nov. 10, 2016. Available from: https://theforum.sph.harvard.edu/events/ the-chronic-pain-epidemic/
- 2. CDC Morbidity and Weekly Report. "Vital Signs: Changes in Opioid Prescribing in the United States, 2006-2015", , July 7, 2017. Available from: https://www. cdc.gov/mmwr/ volumes/66/wr/mm6626a4.htm
- National Center for Health Statistics. "Drug Overdose Deaths in the United States, 1999-2016." December 2017. Available from: https://www.cdc.gov/nchs/data/ databriefs/db294.pdf
- 4. Talking Points Memo. "CDC: Life Expectancy in US Declines for Second Year in a Row." December 21, 2017. Available from: https://talkingpointsmemo.com/ livewire/cdc-us-population-life-expectancy-declinessecond-year-in-a-row
- 5. Harm Reduction for Alcohol. "The Polydrug Poisoning Epidemic and the Killer Heroin Meme" Available from: http:// hams.cc/polydrug.pdf
- 6. The Economist. "Life expectancy in America has declined for two years in a row." January 4, 2018. Available from: https://www.economist.com/news/ united-states/21733980- thats-not-really-meanthappen-developed-countries-life-expectancy-americahas
- U.S. Department of Health and Human Services. "Pain Management." March 29, 2013. Available from: https://report.nih.gov/nihfactsheets/ViewFactSheet. aspx?csid=57
- 8. Medscape. "Abuse-Deterrent Opioids: What You Need to Know." August 25, 2016. Available from: https://www.medscape.com/viewarticle/867679
- 9. Institute for Patient Access. "What's Missing from ICER's Assessment of Abuse-Deterrent Opioids." Available from: http://lyh21u3cjptv3xjder1dco9mx5s.wpengine. netdna-cdn. com/wp-content/uploads/2013/08/IfPA_ ICER_ADF-One- Pager_June-2017.pdf
- National Center for Biotechnology Information. "The Ongoing Opioid Prescription Epidemic: Historical Context." August 2016. Available from: https://www. ncbi.nlm.nih.gov/pmc/articles/PMC4940677/
- 11. National Center for Biotechnology Information. "Cost and quality implications of opioid-based postsurgical pain control using administrative claims data from a large health system: opioid-related adverse events and their impact on clinical and economic outcomes." Pharmacotherapy.2013;33(4):383-91. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23553809

- 12. Life Changing Innovation. "Managing Pain." Available from: https://www.lifechanginginnovation.org/medical-technology-facts/disease-areas/managing-pain
- 13. Ibid.
- 14. International Neuromodulation Society. "Peripheral Nerve Stimulation." July 24, 2012. Available from: http://www.neuromodulation.com/PNS
- 15. Life Changing Innovation. "Managing Pain." Available from: https://www.lifechanginginnovation.org/medical-technology-facts/disease-areas/managing-pain
- 16. Ibid.
- 17. Medtronic. "What is a Neurostimulator?" Available from: http://www.medtronic.com/uk-en/patients/treatments-therapies/drug-pump-chronic-pain/neurostimulators-what-is-it.html
- 18. U.S. Department of Health and Human Services.

 "Advancing the Practice of Pain Management Under the HHS Opioid Strategy." November 1, 2017. Available from: https://www. hhs.gov/blog/2017/11/01/advancing-the-practice-of-pain-management-under-the-hhs-opioid-strategy.html
- 19. "Dingell, Upton Introduce Bipartisan Bill to Address Opioid Epidemic, Spur Development of Non-Addictive Pain Medication." February 15, 2018. Available from: https:// debbiedingell.house.gov/media-center/pressreleases/ dingell-upton-introduce-bipartisan-bill-address-opioid-epidemic-spur
- 20. National Academy for State Health Policy. "Chronic Pain Management Therapies in Medicaid." August 2016. Available from: https://nashp.org/wp-content/ uploads/2016/09/Pain-Brief.pdf
- 21. New York Times. "Amid Opioid Crisis, Insurers Restrict Pricey, Less Addictive Painkillers." September 17, 2017. Available from: https://www.nytimes.com/2017/09/17/health/opioid-painkillers-insurance-companies.html
- 22. Alliance for Balanced Pain Management. "A
 Call for Understanding and Greater Access to
 Balanced Pain Management." Available from:
 http://2ytnj2s6ht0stmed3qshl41b.wpengine.netdnacdn.com/wp-content/uploads/2016/05/A-Call-forUnderstanding-and-Greater-Access-to-Balanced-PainManagement_AfBPM_May-2016.pdf
- 23. American Physical Therapy Association. "AGs From 37 States Call for Better Insurance Coverage for Nonopioid Pain Treatment." September 27, 2017. Available from: http://www.apta.org/PTinMotion/News/2017/9/27



- AllianceBPM.org
- facebook.com/Alliance-for-Balanced-Pain-Management
- @afbpm