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Ten Steps the Federal Government Should Take Now to Reverse the Opioid Addiction Epidemic

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he United States is in the midst of the worst drug addiction epidemic in its history.

Prescriptions for and deaths from opioids both quadrupled between 1995 and 2010. By 2015, an estimated 92 million individuals in the United States were prescribed an opioid and there were more than 33 000 deaths from an opioid-involved overdose.¹

There are no simple solutions to ending this epidemic. Effective programs need to address 2 separate priorities: (1) prevention of addiction among people not currently addicted, and (2) treatment and risk reduction to prevent overdose and death among the millions of individuals in the United States now addicted. In this Viewpoint, we suggest 10 steps that could accelerate progress; national declarations, state-specific emergency declarations, or both could potentially facilitate implementation of these steps.²

Preventing Opioid Addiction and Overdoses

1. Improve surveillance of possible opioid addiction. No current information systems enable realtime assessment of the numbers, patterns, or trends of new opioid addiction. This makes it impossible to determine the trajectory of the epidemic, identify areas in which opioid addiction is worsening and intervene, and learn lessons from areas in which incidence is decreasing. By using Prescription Drug Monitoring Program (PDMP) and other data systems to identify trends and patterns of possible new addiction (eg, newly filled prescriptions for ≥30 days), aggregate data could be used in real time to identify factors associated with addiction. New cases of opioid use disorder may be declining, while deaths among heroin users may be increasing due to spread of illicitly synthesized fentanyl; however, it is not possible to know until the incidence of opioid addiction is tracked.

2. Improve reporting of and response to opioid-related overdoses and fatalities. Real-time data on overdoses from syndromic and other surveillance systems can enable rapid response to changing patterns of opioid use. The timeliness and specificity of testing for drugs involved in opioid-related fatality reports differ from state to state. More reliable information on the specific drugs involved in deaths would better inform public health and law enforcement interventions. Substantial improvements in the quality and timeliness of medical examiner and coroner work, including access to data from PDMPs, could greatly improve data timeliness and completeness. Improved training and increased funding of coroners and medical examiners could facilitate more accurate and timely identification of drugs involved in overdose deaths. Fatal and nonfatal overdoses involving prescribed medications should trigger an automatic report to the patient's health care professionals to facilitate appropriate medical response and to state medical boards, and people who have survived an overdose could be linked to treatment. This feedback could foster more cautious prescribing and improve regulation of prescribing practices.

3. Promote more cautious prescribing for acute pain. Opioids are essential medicines to treat severe pain after surgery or serious injury, but they are too frequently prescribed for pain that could be treated with nonsteroidal anti-inflammatory medications (eg, molar extractions in adolescents). When opioid use is unavoidable, dosage should be as low and duration as brief as possible³; physiological dependence on and tolerance to opioids can develop in as little as 1 week. Patients taking short courses of opioid medication may experience withdrawal symptoms, including worsening of pain upon discontinuation; this may lead to continued use. According to a recent study, 1 in 5 patients who had been prescribed opioids for 10 days became long-term users.⁴ Another study found that the quantity of pills prescribed for postsurgical acute pain could be reduced 53% and that less than 1% of patients required refills.⁵ The Centers for Disease Control and Prevention (CDC) recommends that when opioids are prescribed for acute pain, "[t]hree days or less will often be sufficient; more than 7 days will rarely be needed."³ The US Food and Drug Administration (FDA) should revise opioid labels to be consistent with the CDC recommendation. Adding duration of use to opioid labels would send a clear message to prescribers and patients that risks increase when opioid use continues past 3 days.

4. Change labeling for chronic pain and greatly restrict or eliminate marketing of opioids for this indication. The risks of opioids are likely greater than the benefits for common chronic conditions (eg, low back pain, fibromyalgia). However, patients with chronic non-cancer-related pain have been the target market for opioid manufacturers and account for much of the increase in opioid consumption in the United States during the past 20 years. The FDA should narrow on-label indications and halt marketing of opioids for low back pain and other conditions for which risks of use outweigh potential benefit. This could help to discourage clinicians from initiating long-term opioids, but would not prohibit clinicians from continuing off-label prescribing of opioids to stable patients with chronic pain. Compassionate care for patients with chronic pain is not jeopardized by more cautious prescribing.

5. Increase insurance coverage of and access to nonopioid and nonpharmacological management of pain. Chronic pain is a serious and potentially disabling problem for millions of people in the United States. Opioids are likely less effective and certainly more dangerous than other modalities of chronic pain management. The Centers for Medicare & Medicaid Services should ensure full reimbursement for nonprescription analgesics, such as acetaminophen and nonsteroidal anti-inflammatory drugs, for Medicare Part D and Medicaid beneficiaries. This

would remove a financial disincentive for patients to use these medications. Easier access to and low or no copayments for physical therapy and other nonpharmacological pain management modalities could potentially reduce medication use and improve patient functionality and outcomes.

6. Interrupt the supply of heroin and illicitly produced synthetic opioids and improve coordination between legal and public health authorities. Interdiction is critically important to increase the cost and reduce accessibility of opioids. As with tobacco and alcohol, if heroin and illicitly produced synthetic opioids such as fentanyl are more expensive and more difficult to obtain, use should decrease.^{6,7} The legal system can also implement programs such as treatment as an alternative to incarceration, and correctional facilities can provide opioid agonist treatment for addicted inmates during detention and linkage to treatment services on release. These interventions are more likely than criminal sentences for low-level drug users to reduce both illicit opioid use and related crime.

Treatment and Harm Reduction for Current Users

7. Identify possible opioid addiction early and link individuals to treatment. Early identification and treatment of opioid-addicted individuals reduces the risk of overdose, psychosocial deterioration, transition to injection opioid use, and medical complications. Medically assisted treatment (eg, methadone, buprenorphine) should be routinely offered in primary care, emergency departments, and hospital inpatient services to increase treatment uptake, as well as in the criminal justice system, with careful attention to continuity on discharge. States receiving federal funding for their PDMPs should be incentivized or required to mandate prescriber checking of and timely data provision to PDMPs for all opioid prescriptions of more than 3 days' duration, and state health officials should identify opioid-addicted patients as early as possible and facilitate referral to treatment. The federal privacy law known as 42 CFR Part 2 (Confidentiality of Substance Use Disorder Patient Records) should be amended so that opioid addiction can be treated like other medical conditions, improving patient safety and continuity of care.

8. Expand low-threshold access to opioid agonist treatment, particularly with methadone and buprenorphine. A substantial proportion of patients who would benefit from buprenorphine or methadone treatment will receive this treatment only if it becomes more attractive and accessible than either prescription or illicit opioids. In France, opioid overdose deaths decreased 79% six years after widespread prescribing of buprenorphine.⁸ Barriers to accessing buprenorphine in the United States include federal limits on the number of patients a clinician can treat, a required 8-hour training course, and inadequate integration of buprenorphine into primary care treatment. Access to buprenorphine could be expanded if the federal government removed regulatory barriers and required all federally qualified health centers to offer buprenorphine treatment. It seems illogical and perhaps ironic that buprenorphine, the one opioid that appears to be safer than commonly prescribed opioid analgesics and heroin, is the only one with such barriers to prescription.

9. Implement harm reduction measures for current users, including access to clean syringes and naloxone. Access to clean syringes can prevent injection-related infectious diseases, and access to naloxone can reduce fatal overdoses. The federal government should continue to assist state and county efforts to make naloxone and clean syringes more widely available, and the FDA should accelerate its efforts to help drug manufacturers pursue approval of an overthe-counter naloxone product.

10. Consider removing ultra-high-dosage-unit opioid analgesics from the market. Formulations of opioids that exceed 90 morphine milligram equivalents per day when taken as directed are dangerous and should be removed from the market. For example, a patient directed to take 1 oxycodone 80-mg tablet twice a day is consuming the equivalent of 240 mg of morphine, far exceeding a dosage associated with a greatly increased risk of death. Because only 1 pill is taken at a time, the patient and prescriber may not appreciate that this is an extremely high dose. An individual who takes a single pill that is unused or diverted from a prescription supply could experience a fatal overdose. Opioids are available in liquid preparations, patches, sublingual forms, and suppositories for patients who have difficulty swallowing extra pills.

The opioid addiction epidemic has worsened over the course of a generation and will not end overnight. Rapid implementation of the 10 steps outlined here could enable tracking and reduction of both new opioid addiction and fatal overdoses. The opioid epidemic is largely iatrogenic, and the health care system has a responsibility to support actions such as those outlined here that could prevent addiction and save lives.

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References

1.

Han B, Compton WM, Blanco C, Crane E, Lee J, Jones CM. Prescription opioid use, misuse, and use disorders in U.S. adults: 2015 National Survey on Drug Use and Health. *Ann Intern Med*. 2017;167(5):293-301.PubMedGoogle ScholarCrossref

2.

Gostin LO, Hodge JG Jr, Noe SA. Reframing the opioid epidemic as a national emergency [published online August 23, 2017]. *JAMA*. doi:10.1001/jama.2017.13358PubMedGoogle Scholar

3.

Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain— United States, 2016. *JAMA*. 2016;315(15):1624-1645.PubMedGoogle ScholarCrossref

4.

Shah A, Hayes CJ, Martin BC. Characteristics of initial prescription episodes and likelihood of long-term opioid use—United States, 2006-2015. *MMWR Morb Mortal Wkly Rep.* 2017;66(10):265-269.PubMedGoogle ScholarCrossref

5.

Hill MV, McMahon ML, Stucke RS, Barth RJ Jr. Wide variation and excessive dosage of opioid prescriptions for common general surgical procedures. *Ann Surg.* 2017;265(4):709-714.PubMedGoogle ScholarCrossref

6.

Jha P, Chaloupka FJ, Moore J, et al. Tobacco addiction. In: Jamison DT, Breman JG, Measham AR, et al, eds. *Disease Control Priorities in Developing Countries*. 2nd ed. New York, NY: Oxford University Press, World Bank; 2006:869-885.Crossref

7.

Lantz PM. Youth smoking prevention policy: lessons learned and continuing challenges. In: Bonnie RJ, O'Connell ME, eds. *Reducing Underage Drinking: A Collective Responsibility*. Washington, DC: National Academies Press; 2004:716-742.

8.

Auriacombe M, Fatséas M, Dubernet J, Daulouède JP, Tignol J. French field experience with buprenorphine. *Am J Addict*. 2004;13(suppl 1):S17-S28.PubMedGoogle ScholarCrossref