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Universal Precautions for People at Risk of Opioid Overdose

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VIEWPOINT

North America is experiencing an unprecedented opioid overdose epidemic now driven by illicitly manufactured fentanyl, which has largely displaced prescription opioids and heroin in most drug markets. In the context of high and rising overdose deaths, four proven clinical interventions should constitute a set of "universal precautions" that clinicians and health systems could implement to reduce opioid overdose deaths among at-risk patients including all patients who use opioids or who may be inadvertently exposed to fentanyl (Table).

The concept of universal precautions originally emerged as a standard approach to prevent infectious-disease transmission in healthcare settings, and the concept has often been extended to other areas of clinical care. While failure to adopt universal precautions with opioid prescribing may provide important lessons,[1] a success story is the progress in addressing the human immunodeficiency virus epidemic among people who inject drugs. Such progress was made possible through recommendations for the universal delivery of a well-defined suite of interventions including sterile syringe provision, addiction treatment, and antiretroviral therapy.[2]

A universal-precautions framework is overdue for people at risk of opioid overdose. Individuals who present to care with consequences of opioid use have extremely high rates of recurrent overdose and subsequent mortality.[3] Critically, they may also have frequent contact with healthcare settings, presenting to primary and subspecialty care (e.g., infectious-disease clinics), mental health facilities, and emergency departments. Rather than demonstrating a positive impact of these contacts on health outcomes, studies show that people who use drugs often experience entrenched stigma and rarely receive potentially lifesaving interventions.[4]

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We view four clinical interventions as highly suited for inclusion in a universal suite of overdose prevention interventions. First, for individuals with opioid use disorder (OUD), timely provision of buprenorphine, methadone, or extended-release naltrexone should be offered as a first-line intervention for individuals who wish to receive medications for OUD.[5] Presently, as few as one in five eligible patients receives medication, and despite clear evidence supporting buprenorphine initiation as a service provided by clinicians in emergency departments—where many individuals at risk of overdose present to receive care for drug use-related complications—this intervention is unavailable in most hospitals. US policymakers, including leadership of the White House Office of National Drug Control Policy, recently called for scaling up routine access to OUD medications, and highlighted systems-level changes that are needed, including improving addiction education for clinicians, creating new and compassionate “low-threshold” clinic models that offer same-day treatment initiation and flexible scheduling, and reducing stigma.[5] This remains an urgent medical priority in need of a comprehensive yet simple guiding framework.

Second, clinicians and health systems should routinely distribute the overdose reversal medication naloxone to people at risk of overdose. Despite naloxone being remarkably effective at reversing opioid toxicity, recent investigations have shown dismally low health-system provision. In a recent US study of commercially-insured people with OUD who experienced an overdose, fewer than one in 20 individuals were prescribed naloxone.[6] Naloxone is typically covered by insurance and in many settings can be distributed directly to at-risk patients without a prescription using supplies from local health departments and community organizations. Clinical and social support services for people at risk of opioid overdose must begin to view providing naloxone—alongside brief education on its correct use—as the standard of care.

Third, while medico-legal remedies to drug-paraphernalia laws may be required in some jurisdictions, clinicians and health systems should offer take-home fentanyl test strips.[7] Many overdose deaths result from inadvertent fentanyl exposure fentanyl among individuals not intending to use potent opioids, including those who believe that they are using a different drug (e.g., cocaine), prescription pills, or heroin that in fact contains fentanyl. Test strips, which can assess for the presence of fentanyl in drugs, are inexpensive and increasingly provided free-of-charge through local health departments. While educational efforts to support clinician understanding of the value of harm reduction programming will be essential, front-line clinicians are well-positioned to provide this simple intervention to those at risk of overdose.

Fourth, clinicians should offer brief education to increase awareness of underused overdose prevention strategies. Even though injecting alone is one of the most prevalent modifiable risk factors for overdose mortality, many people who use fentanyl do so alone. Clinicians should counsel people who use drugs to avoid using alone so someone is available to administer naloxone and call emergency services if needed, and suggest other strategies to reduce fatal overdose, including starting with only a small amount of a drug to assess its potency and avoiding mixing opioids and other sedatives such as benzodiazepines and alcohol.

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To implement and scale overdose prevention interventions across North America's healthcare settings, clinical support tools (e.g., standardized order sets) as well as culture change will be needed. Specifically, clinicians and health systems must address stigma against people who use drugs, recognize opioid use disorder as a medical illness, and view offering overdose prevention as central to care for people who use drugs. Applying a universal-precautions framework would help drive this culture change by clearly and simply stating what standard interventions every clinician should offer in every interaction with a person at risk of overdose.[4]

To be sure, the above suite of overdose prevention strategies are not the only interventions clinicians should offer to people at risk of overdose. Nevertheless, in the context of rising mortality and risk of overdose among people who use opioids, we propose that messaging on universal precautions initially focus on routinely offering interventions clearly poised to impact upon ongoing high rates of overdose death. Additionally, clinicians should prevent the onset of iatrogenic OUD by avoiding inappropriate opioid prescribing (e.g., for mild acute pain and many types of chronic pain).

As two addiction medicine physicians and a person in recovery, we believe that, given the remarkable ongoing discordance between overdose-prevention interventions and service delivery, it is long past due that a suite of evidence-based interventions be defined and that education in support of clinical culture change be prioritized so that health systems apply these universal precautions to close the implementation gap for overdose prevention.

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Table:

Universal Precautions to Prevent Overdose

Universal Precautions to Prevent Overdose
Offer medications to individuals with opioid use disorder interested in reducing their use or managing overdose risk
Provide naloxone to people who use drugs and ensure training on its proper use
Offer take-home fentanyl test strips to people who use opioids or other drugs that may be fentanyl-contaminated (e.g., cocaine, methamphetamine, or pills purchased in the illicit market)
Counsel people who use drugs on how to reduce their risk of fatal overdose: • Never use alone • Start with only a small amount of a drug to assess its potency • Avoid mixing opioids and other sedatives (e.g., benzodiazepines, alcohol)