

community-based prevention-education programs to clinical treatment settings. Harm reduction and medical treatment shouldn't be seen as binary, mutually exclusive options. Clinicians routinely fail to control signs and symptoms of disease, such as depressive thoughts, hyperglycemia, or high blood pressure, despite providing treatment. In these cases, we escalate treatment and provide education, including about additional approaches that could reduce harm. Similarly, ongoing substance use during treatment is often the norm, not the exception. For example, a patient may be engaged in treatment for opioid

 **An audio interview with Dr. Sue is available at NEJM.org**

use disorder with methadone and still receive sterile equipment for intermittent cocaine use to prevent hepatitis C transmission. Acknowledging this reality that not all patients will meet uniform treatment goals allows us to continue to engage with patients and to provide practical guidance that accepts the difficult realities they face.

As a new administration assumes control over federal policy, we believe that effective harm-reduction strategies should be articulated and implemented, and that other strategies should continue to be subjected to scientific evaluation in a transparent manner (see table). Previous federal policy approaches focused on reducing supply or demand haven't led to significant reductions in substance use or associated harms, including overdose deaths. The Biden administration may be signaling a change in strategy by explicitly naming harm reduction as a valid, evidence-based policy to improve the health of people who use drugs and by funding harm-reduction programs. The failure of the previous administrations to use the term harm reduction and to acknowledge the use of similar tools in medicine, while co-opting effective strategies based on this approach, was a disingenuous tactic. Embracing and implementing harm-reduction principles for substance use in medical practice and health policy could promote justice and compassion.

Disclosure forms provided by the authors are available at NEJM.org.

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The Number Needed to Prescribe What Would It Take to Expand Access to Buprenorphine?

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The day I graduated from medical school, I could have prescribed enough fentanyl to kill several people. Many of the patients I saw in the hospital during residency clearly had opioid use disorder (OUD), but I couldn't treat it. I didn't have an X waiver authorizing me to prescribe buprenorphine, and none of my preceptors were prescribers. With Massachusetts awash in the overdose crisis, I had little to offer patients requesting treatment. Methadone, an excellent option for many people with OUD, wasn't always available because of geographic limitations or because daily trips to the clinic were too burdensome

for many people with jobs or families. Although buprenorphine had been approved for use 10 years before I earned my medical degree, it remained out of reach for me.

When I graduated from residency, I vowed that things would be different. I completed the 8 hours of training needed to obtain my X waiver before entering primary care. I made many mistakes during my first year of practice—obsessing over the potential for diversion, demanding that patients cease using other substances if they were going to stay on buprenorphine treatment, and creating too many other hurdles for ongoing care

but I'm lucky to have seen firsthand what a miracle this medication can be.

My introduction to buprenorphine coincided with an institutional sea change. Within a year after I entered primary care, all my colleagues had obtained X waivers at the insistence of hospital leaders. Buprenorphine treatment became a central part of residency training. Each clinic at my medical center received funding for a nurse care manager with expertise in addiction. The number of patients I was able to treat with buprenorphine quadrupled, and so did the joy that I received from my practice.

More prescribers are about to get this chance. On April 27, 2021, the Department of Health and Human Services released guidelines that ease restrictions on buprenorphine prescribing.¹ This change would allow many clinicians—including nurse practitioners and physician assistants—to prescribe buprenorphine without certifying that they can provide counseling and other ancillary services and without completing extra training. But will they?

The exemption, as written, has important limitations. It restricts the number of patients a prescriber can treat to 30, a potentially substantial barrier for emergency and hospital-based physicians who treat many of the patients at highest risk for overdose. Clinicians would also have to submit a Notice of Intent to the Substance Abuse and Mental Health Services Administration and await approval before they could prescribe buprenorphine. This change, therefore, falls far short of X-ing the X waiver (i.e., treating buprenorphine like any other controlled substance), which has been a long-standing goal of harm-reduction advocates. A bill introduced in Congress in 2019 would have removed more obstacles to prescribing buprenorphine.² Nevertheless, by allowing more clinicians to prescribe buprenorphine, the new rule would remove a critical barrier to care. But a larger barrier to treatment expansion is cultural: physicians and health care institutions fail to treat substance use disorders as the chronic diseases they are.

I have heard from many physicians across the country that they don't know how to treat OUD, that they don't feel that providing such treatment is their job, or that treating OUD is best done with tough love. I've heard providers throughout my career say that patients with OUD are train wrecks anyway and that taking on the care

of these patients isn't what they signed up for.

Many of these physicians' minds are changed when they see what treatment can accomplish—for both them and the patient, since it can shift the tone of interactions from combative at times to collaborative. But changing minds is painstaking and slow at a time when the overdose crisis is becoming its own pandemic. Overdose deaths in the United States have risen to an all-time high in the past year. In Washington State, where I now practice, the number of synthetic-opioid overdose deaths was more than 50% higher between June 2019 and May 2020 than during the previous year; preliminary reports suggest that this trend hasn't reversed in recent months.³

In spite of this growing need for care, less than 10% of U.S. physicians have received waivers to prescribe buprenorphine, and an even smaller number actually prescribe it.⁴ The number of methadone clinics in the United States has also stayed relatively stagnant because of heavy regulation and a lack of political will for expansion. Meanwhile, the overdose crisis continues to worsen.

It's rare in medicine to actually be able to save a patient's life. When there's evidence that a new intervention allows us to perform such a miracle, we present it at our conferences, we emphasize it in our education, and we cover it breathlessly in medical journals. Prescribing buprenorphine is one of the most effective ways to save a life. In one study, buprenorphine treatment was associated with a 37% reduction in all-cause mortality during the year after a nonfatal overdose.⁵ This reduction is larger than the reduction in mortality associated with any blood-pressure medication, diabetic agent, or statin. It is larger than the reduction associated with aspirin after an ST-segment elevation myocardial infarction (STEMI).

But 20 years after buprenorphine became an approved treatment for OUD, more than 90% of physicians aren't prescribing it. Loosening restrictions will lead to some progress. But much of the effort to expand buprenorphine prescribing and access will depend on physicians believing that people with a substance use disorder aren't just addicts, but are people with a chronic medical disease that we can and should treat—and backing up this belief with our prescriptions.

The number needed to treat with buprenorphine to prevent one death in the year after overdose is 52.6—lower than the number needed to treat for nearly any medication that we have embraced without hesitation.⁵ But it will take a much more concerted effort by our schools, training programs, institutions, and medical societies to attain the number needed to prescribe.

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