Moving Addiction Care to the Mainstream — Improving the Quality of Buprenorphine Treatment

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More than 40,000 Americans died from opioid overdoses in 2016 — more than the number killed in motor vehicle accidents. The stunning increase in overdose deaths since the 1990s has revealed a pervasive lack of capability to meet the need for treatment in the 2.1 million Americans who have an opioid use disorder.[1] Since less than one fifth of people with opioid use disorder receive addiction treatment,[1] recent national initiatives have understandably focused on increasing access to care, and especially access to medications, for addiction treatment. Even when patients do obtain treatment, however, they often experience care as fragmented and difficult to navigate. These challenges exist worldwide but are particularly acute in the United States, given the magnitude of opioid-related injury and death rates in this country and the historical marginalization and underfunding of addiction care. Payers and health systems can help move treatment to the mainstream, and increase the proportion of patients who recover, by expanding the pool of clinicians who treat opioid use disorder, improving measurement of treatment quality, and linking payment to outcomes.

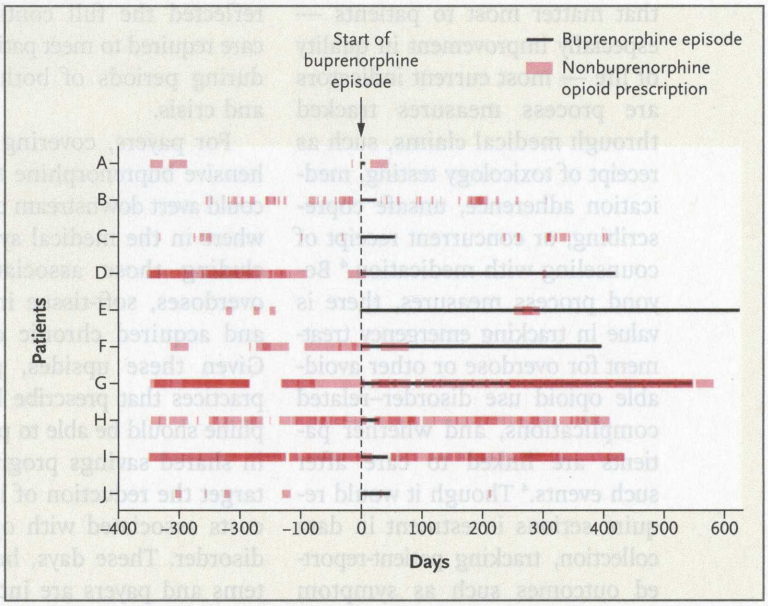
Like HIV/AIDS or diabetes, opioid use disorder is a chronic condition that can be managed using medication as a component of care. Medications reduce cravings and withdrawal in people habituated to opioid use, supporting remission of the core symptoms of opioid use disorder. Medicines can also blunt or block the euphoric effects of opioids should relapse occur. Each medication approved by the Food and Drug Administration (FDA) for opioid use disorder — buprenorphine, methadone, and naltrexone — addresses physiological and psychological changes associated with long-term opioid use, reducing illicit opioid use and overdose risk. Outside the United States, some patients with severe opioid use disorder are also successfully treated with injectable diacetylmorphine (heroin) or hydromorphone, treatments that are not approved by the FDA. Medications are optimally paired with counseling and social support to address the needs of people with co-occurring mental health and social problems.[1]

Although all three medications have important roles in treatment, buprenorphine currently presents the greatest opportunity for expanding treatment into the general medical system (see the Perspective article by Wakeman and Barnett, pages 1–4). In the United

States, methadone can be dispensed only at regulated opioid-treatment programs (see the Perspective article by Samet et al., pages 7–8), and naltrexone requires complete abstinence before treatment begins. Buprenorphine treatment, by contrast, can begin in a physician's office while a patient is in withdrawal.[1]

Expanding buprenorphine provision could have population-wide benefits, but as currently delivered, this treatment is not fully living up to its promise. Buprenorphine treatment is generally more effective with longer duration, yet many patients receive it for very short periods.[2] As illustrated by the experiences of 10 randomly sampled patients in a national database (see figure), treatment is often brief and poorly coordinated with the receipt of opioid analgesics. Some patients also simultaneously take benzodiazepines, which cause sedation or even dangerous potentiation of buprenorphine's effects. This problem underscores the real challenges involved in coordinating treatment with management of other conditions, including chronic pain and psychiatric disorders.

Longer-duration and better-coordinated treatment can be achieved by supporting clinicians who prescribe buprenorphine. High-quality buprenorphine treatment can be delivered in primary care and community mental health settings and is typically straightforward after a patient's condition is stabilized on a maintenance dose. Moreover, providing buprenorphine in primary care settings creates opportunities to concurrently manage other chronic diseases such as depression and diabetes. At times, however, primary care clinicians can benefit



Buprenorphine Treatment Duration and Coprescribing with Opioid Analgesics among 10 Patients Randomly Selected from a Multistate Database.

Analysis of the 2010–2012 IQVIA Longitudinal (LRx) database created by Jia Liu, Ph.D., and provided to the authors with permission. Each row represents the medication use of a randomly sampled patient who filled at least one prescription for buprenorphine. The buprenorphine "episode" is the number of days a patient has a buprenorphine prescription filled (allowing for treatment gaps of up to 30 days).

from consulting with, or handing off patients to, a specialty care provider such as an opioid treatment program or outpatient clinic.[3]

One proven strategy is to create a conduit for patients to have their care comanaged within, or transition between, a specialty "hub" and office-based–provider "spokes."[3] Patients can begin their treatment with buprenorphine at a hub and then transition to an office-based prescriber when initial stabilization has been achieved. In the event that a patient has a relapse, medication provision can be transitioned back to the hub. Hub-and-spoke models have already been implemented in Vermont, Rhode Island, and other states. Even without statewide systems, partnerships between office-based providers and specialty programs can be created on the local level — for example, Collaborative Opioid Prescribing (CoOP) programs use an adaptive stepped-care approach to adjust both counseling intensity and medication provision on the basis of objective indicators of treatment response.[3] By supporting office-based–prescriber spokes, such models not only enhance the quality of care, but also increase access, encouraging more providers to obtain waivers from the Drug Enforcement Administration enabling them to prescribe buprenorphine and prompting prescribers who already have waivers to treat more patients.

Tracking patient outcomes across care settings would catalyze system-integration efforts, yet quality measurement for buprenorphine treatment is in its infancy. Although it would be most productive to evaluate the outcomes

that matter most to patients — especially improvement in quality of life — most current indicators are process measures tracked through medical claims, such as receipt of toxicology testing, medication adherence, unsafe coprescribing, or concurrent receipt of counseling with medication.[4] Beyond process measures, there is value in tracking emergency treatment for overdose or other avoidable opioid use disorder–related complications, and whether patients are linked to care after such events.[4] Though it would require serious investment in data collection, tracking patient-reported outcomes such as symptom remission, progress in obtaining housing, employment, and reductions in risky behaviors could better elucidate the goals of recovery and quantify the effectiveness of quality-improvement efforts.



An audio interview with Dr. Saloner is available at NEJM.org

Finally, improvement in the quality of buprenorphine treatment can be spurred with financial incentives. Public and private health insurance programs typically cover buprenorphine treatment but often limit the reimbursement available by keeping rates low or not covering comprehensive case management.[2] Requiring prior authorization is also a common practice that delays treatment initiation and disrupts continuity of treatment. Limited insurance coverage may lead some providers to accept only cash payment.[2] More prescribers would be encouraged to participate in insurance plans if payers set reimbursement rates that adequately reflected the full continuum of care required to meet patient needs during periods of both stability and crisis.

For payers, covering comprehensive buprenorphine treatment could avert downstream costs elsewhere in the medical system, including those associated with overdoses, soft-tissue infections, and acquired chronic diseases.[1] Given these upsides, physician practices that prescribe buprenorphine should be able to participate in shared savings programs that target the reduction of long-term costs associated with opioid use disorder. These days, health systems and payers are increasingly participating in accountable care organizations in which bundled payments allow primary and specialty care providers to share in the financial responsibility for managing chronic disease for patients with complex conditions.[5] Similarly, programs focused on reducing readmission rates have prompted hospitals to establish relationships with community medical practices in order to manage disease. These value-based payment models have shown promise for reducing readmissions for diseases such as heart failure and pneumonia,[5] and they could be extended to the treatment of opioid use disorder, in which patients often cycle through hospitals.

Transforming buprenorphine treatment is a realistic step toward helping all Americans with opioid use disorder to recover. The larger goal is reorienting care from simple medication prescribing to a wider focus on patients' long-term recovery needs. Community clinicians treating opioid use disorders should not face this challenge in isolation, but rather in partnership with other health care providers and recovery supports. A national quality strategy could improve the odds of recovery among people with opioid use disorder, normalize their treatment, and bring them into the mainstream of medicine — right where they belong.

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

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DOI: 10.1056/NEJMp1804059
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