

# Six Tips to Effectively Treat Opioid Use Disorder in Rural Areas



## Overcome barriers to care by using telehealth, supporting home-based treatment, and partnering with local and state services.

The opioid crisis has been devastating for many rural communities. According to the Centers for Disease Control and Prevention (CDC), drug overdose deaths increased fourfold from 1999 to 2018,<sup>1</sup> and in 2018 nearly 70% of these deaths involved an opioid.<sup>2</sup> More than half — 62% — of the U.S. counties with the highest rates of opioid use disorder (OUD) are located in rural areas.<sup>3</sup> Unfortunately, these high-need, rural communities are much less likely to have access to OUD treatment services.<sup>3,4</sup>

In response to the alarming rate of opioid-related overdoses in rural communities, our practice successfully transitioned to offering medications for opioid use disorder (MOUD) to our patients. Lessons learned through our experience may be useful for other practices starting to offer MOUD. ►

### ABOUT THE AUTHORS

Dr. Landeck is an assistant professor at the University of Wisconsin (UW)-Madison Department of Family Medicine and Community Health, core residency faculty with the UW Family Medicine Residency Program, and director of the rural health equity track, which trains residents for rural practice and rural health advocacy. Dr. Zgierska is a professor at the Departments of Family and Community Medicine, Public Health Sciences, and Anesthesiology and Perioperative Medicine, and vice chair of research at the Department of Family and Community Medicine at Pennsylvania State University College of Medicine. She is board-certified in family medicine and addiction medicine, and a member of the board of directors for the American Society of Addiction Medicine. Author disclosures: no relevant financial affiliations disclosed.

## BARRIERS TO TREATMENT

The Food and Drug Administration has approved methadone, buprenorphine, and naltrexone for the treatment of opioid use disorder.<sup>5</sup> MOUD are proven to reduce OUD-related morbidity and mortality, with a recent meta-analysis indicating that

More than half — 62% — of the U.S. counties with the highest rates of opioid use disorder are located in rural areas.

treatment with the mu opioid receptor agonists methadone and buprenorphine is more beneficial than treatment with the mu opioid receptor antagonist naltrexone.<sup>6</sup>

Methadone is only available for treatment of OUD through federally licensed opioid treatment programs (OTPs), limiting its availability in rural areas. Buprenorphine can be prescribed by any waivered prescriber, including primary care physicians, and is currently the most accessible effective option.<sup>7</sup> However, 60% of rural areas lack waivered buprenorphine prescribers.<sup>3</sup> Even among those with a waiver, only a subgroup actively uses the waiver to prescribe buprenorphine and treat OUD.<sup>4</sup>

Urban practices typically have better access to services necessary for effective OUD care — including mental and behavioral health treatment, social workers, pharmacists, consults with psychiatrists and pain specialists, and specialized addiction medicine services across the spectrum of treatment settings (e.g., intensive outpatient programs, OTPs, and residential treatment).

## KEY POINTS

- Approximately 60% of the U.S. counties with the highest rates of opioid use disorder (OUD) are located in rural areas.
- Rural practices face barriers to implementing OUD treatment programs that their urban counterparts do not.
- To overcome these barriers, rural practices may benefit from utilizing telehealth services and establishing community partnerships.

However, many of these options do not exist in most rural areas.<sup>8</sup> Rural primary care physicians are often responsible for comprehensive management of higher-risk, more complex patients, with little, if any, assistance. Many feel underprepared to effectively address the needs of patients with OUD, particularly those with complex, active addiction.<sup>4</sup> They cite time constraints and a lack of workforce to support care delivery as major barriers to offering OUD treatment.<sup>4</sup>

## OUR EXPERIENCE

With support and leadership from the clinic director, the residency faculty at our family medicine clinic in rural Wisconsin decided to offer MOUD to the clinic's patients with OUD. Dr. Zgierska, an expert in this area, provided in-service education for clinicians and staff to build buy-in and improve their knowledge and comfort in diagnosing OUD and treating it with MOUD. She was also available for questions and support longitudinally on an as-needed basis.

We began offering extended-release, injectable naltrexone in January 2017, including outpatient initiation and maintenance treatment. In July 2018, we expanded MOUD services to include buprenorphine.

After we started offering buprenorphine, we strengthened our partnership with the county's addiction treatment program, which primarily offers behavioral treatment for OUD. Patients who receive MOUD from our clinicians can also receive specialty behavioral care through this local program.

To support our clinic's program, we requested and received approval for a lead registered nurse (RN) position for four hours per week to assist prescribers with clinic- and home-based management of patients with OUD, including MOUD inductions and panel management.

Currently, our clinic's primary care physicians — eight faculty and 12 residents — as well as one advanced practice provider are waivered to prescribe buprenorphine, and we continue to offer both buprenorphine and naltrexone (oral and injectable) to our patients with OUD. Through August 2020, we had treated 16 patients with injectable naltrexone and 52 with buprenorphine.

## SIX TIPS FOR OFFERING MOUD

The following tips can help family

physicians increase their comfort level with the management of MOUD and minimize the need for additional clinic time or resources, making these services more accessible and sustainable in rural areas.

**1. Recruit multiple clinicians in your practice to obtain waivers for MOUD, and designate staff to assist them.** Being the sole MOUD prescriber in a practice or region is difficult. Having a colleague who can provide backup when you are out of the office, or who can serve as a sounding board for informal consultations, is important. As of April 28, 2021, new federal guidelines (<https://bit.ly/33szuX3>) no longer require physicians or advanced practice providers (APPs) to complete a waiver training to treat up to 30 patients at one time with buprenorphine. Providers are still required to submit an application designated as a "Notice of Intent" to obtain a waiver to prescribe buprenorphine for the treatment of OUD. If a provider completes an approved waiver training, a waivered prescriber (physician or APP) may treat up to 100 MOUD patients at one time.<sup>9</sup> After one year, the prescriber can apply to increase the limit to 275 patients.<sup>9</sup> Having a local champion who can serve as a mentor to other clinicians can increase buy-in and the likelihood that other clinicians will decide to offer MOUD and other OUD-related care. In a residency clinic, it is best to have all faculty who precept residents obtain waivers, rather than restricting patients (and residents who wish to learn about MOUD) to days that waivered faculty are available. Residents should receive education about the diagnosis and treatment of OUD early in their residency training. Having a waiver is not a prerequisite to seeing patients. Residents can complete the waiver training prior to having their DEA number, then apply for the waiver after they have their own DEA number in place. In the meantime, they can work collaboratively with their waivered, precepting faculty when caring for patients with OUD they see jointly.

We found it helpful to have an RN or medical assistant champion who could manage intake calls and scheduling, train other staff to room these patients, facilitate clinic-based inductions, help manage home-based inductions by phone, and coordinate care between the clinic and off-site services and facilities, such as mental health and addiction

medicine professionals, peer support services (e.g., recovery coaches or certified peer specialists), or local correctional facilities. Patients appreciate having a clinical staff member who is knowledgeable and readily available by phone to discuss concerns and offer support during their recovery journey.

Practices should develop workflows within the electronic health record (EHR) for scheduling and rooming patients so that clinical support staff can gather components of the relevant patient history prior to an initial visit (e.g., last opioid use, withdrawal symptoms, and current or past OUD treatment history). New patients should be seen within a week of calling for an appointment, if not sooner. Support staff can assist with reviewing patient records in the Prescription Drug Monitoring Program (PDMP) during visits and at the time of prescription refill. Additionally, initiating OUD care will be easier if your EHR order sets include clinician note templates with components for initial and follow-up visits, patient education materials, laboratory test orders, and medications commonly prescribed for patients with OUD (e.g., MOUD and medications for managing opioid withdrawal). Standardizing workflows for nursing staff and clinicians within the EHR will help streamline data retrieval for future quality improvement and research purposes.

**2. Recognize the potential stigma of**

**Being the sole MOUD prescriber in a practice or region is difficult. Having a colleague who can provide backup or serve as a sounding board is important.**

**addiction, and take steps to reduce it.** Our experience suggests that, by routinely providing MOUD, staff members (including front-desk staff, lab technicians, nurses, and clinicians) are better able to address addiction-related issues with a non-judgmental attitude. In turn, patients and their families are more receptive and open to these discussions, resulting in improved treatment of OUD. We have been deliberate about promoting non-stigmatizing

language when discussing addiction and its treatment and “mainstreaming” addiction care as a part of routine primary care.

**3. Offer home-based inductions of buprenorphine when appropriate.** Home-based inductions of buprenorphine have been shown to be feasible and safe, and have equivalent rates of adverse events and retention compared with clinic-based inductions.<sup>10,11</sup> While clinic-based inductions can take up to three hours and typically

**Home-based inductions have been shown to be feasible and safe, and have equivalent rates of adverse events and retention compared with clinic-based inductions.**

involve repeated assessments by a clinician to monitor symptoms and repeat dosages, home-based inductions are manageable for many patients — and often preferable.

Home-based induction can be self-led using detailed instructions or supported virtually by a trained RN using phone or video telemedicine. The Subjective Opioid Withdrawal Scale (SOWS)<sup>12</sup> can be administered during virtual encounters to assess the presence and severity of patients’ opioid withdrawal symptoms and help guide virtually delivered management.

Home-based induction is a patient-centered approach that allows patients to start treatment, which often is associated with unpleasant acute opioid withdrawal, in the comfort of their own home. For patients in rural areas, the home-based induction model also reduces barriers to treatment, including transportation, childcare, and time off work. For patients who do not have prior experience taking buprenorphine, RN- or clinician-provided coaching is especially useful, as it leads to more accurate dosing and reduces patient anxiety and fear. A prescribing clinician is available to the RN and the patient if any concerns or questions arise during the home-based induction.

One model for RN-supported home-based inductions involves the following:

- Patients are first assessed by a waivered clinician to evaluate the best approach for OUD treatment.

- If patients are appropriate candidates for and agree to buprenorphine MOUD and home-based induction, they either call the clinic when they start their opioid withdrawal or receive a call from the RN when they are expected to be in withdrawal. The SOWS is completed by phone. Video can be offered in lieu of the phone call. If patients’ SOWS scores indicate moderate to severe opioid withdrawal, they are advised to take 2 mg to 4 mg of buprenorphine.

- Patients call back (or are called back) in approximately one to two hours and repeat the SOWS. If opioid withdrawal symptoms are still present, another 2 mg to 4 mg of buprenorphine is recommended. This scenario is repeated until withdrawal symptoms substantially improve or resolve, or it is after clinic hours. The patient is advised to take additional 2 mg to 4 mg doses every few hours if withdrawal symptoms return, up to a maximum of 16 mg for the initial induction day.

- The following morning, patients are instructed to take the total buprenorphine dose they took during the initial day, and check in with the RN or waivered clinician.

- A follow-up appointment with the prescribing clinician is scheduled within one week from the induction to assess the treatment response and adjust treatment recommendations as appropriate. The daily dose of buprenorphine is typically adjusted during this assessment, but it can also be adjusted earlier, if needed, based on the regular virtual encounters. Following the American Society of Addiction Medicine guidelines for buprenorphine dosing, the dose is limited to 24 mg per day at that point. When this maximum daily dose does not seem to sufficiently address symptoms (e.g., substantial withdrawal-like symptoms continue), we recommend reevaluation to consider other underlying, unaddressed problems (e.g., untreated or undertreated anxiety disorder) and, if possible, a referral to specialty care for additional assessment and treatment.

While our clinic has had success with RN-supported home-based inductions, this model does require significant staff time and may not be feasible for some clinics.

Self-led, home-based inductions have

also been found to be safe and effective.<sup>13</sup> In this model, the patient should be given detailed instructions regarding symptom evaluation and dosing prior to the home-based induction. If needed due to urgent problems, the patient can seek advice and medical help after hours, following the health system's urgent and emergency care pathways. To date in our clinic, we have not experienced any after-hour requests related to home-based induction.

**4. Consider offering shared medical appointments or medical group visits.** If professional, specialized mental health or addiction medicine services or organized peer support services are not available in your area, group visits can serve as a built-in way to provide both MOUD and peer support. Some models consist of only a waivered clinician and group of patients, while others may also include recovery coaches, addiction or mental health professionals, RN care coordinators, or social workers. A model used by one of the authors includes separate OUD management groups for patients stabilized on MOUD who were in early remission versus those in sustained remission. The two groups had different attendance requirements — monthly meetings for the former and quarterly meetings for the latter.<sup>14</sup> In addition to offering peer support, group visits that include specialized, professional services can also help reduce barriers to treatment, such as transportation and scheduling problems associated with visiting multiple facilities.

**5. Partner with local peer support groups, substance use disorder treatment services, and behavioral health services.** Familiarize yourself with the existing resources in your community, including outpatient, intensive outpatient, residential, and inpatient treatment services. Many county public health and human services departments provide addiction counseling services, which may or may not be limited to the drug court system. By partnering with public county offices, you may find opportunities to expand services, and they may be able to provide referrals for patients in need of MOUD.

Many states also have networks of recovery coaches or peer support specialists

who may be able to support your patients' recovery. For example, the Wisconsin Voices for Recovery program is a statewide, peer-run network of recovery advocates that supports individuals seeking or in recovery, their family members, professionals, and allies. Peer support groups such as Narcotics Anonymous and Smart Recovery are also valuable resources.

Family physicians can also play an important role in educating child welfare agencies, social services agencies, substance use disorder treatment agencies, and public health and mental health agencies about MOUD. Building a relationship with these agencies will help physicians become more informed advocates for patients who are in need of these important social services.

**6. Use telehealth to partner with addiction medicine specialists to manage complex or high-risk patients.** Many states and health care systems have developed telehealth resources to support rural primary care clinicians in caring for patients with substance use disorders. In response to the COVID-19 pandemic, there has been rapidly expanding support for the use of telehealth for individual patient visits, behavioral health, and peer support services. Telehealth can also be used to provide addiction medicine consultation or education. For example, in Wisconsin, clinicians have access to a state-funded addiction medicine hotline staffed by addiction medicine specialists, which they can call to obtain feedback and advice on specific addiction medicine clinical care issues.

Following the hub-and-spoke model for addiction care,<sup>15</sup> establishing communication, consultation, and referral pathways between primary care and specialty care offers support for primary care clinicians and facilitates efficient and timely hand-offs — from primary to specialty care for patients who need a higher level of care, and from specialty to primary care for stable patients who require stepped-down care.

## PURSUING INNOVATIVE SOLUTIONS

Innovative solutions are needed to improve the availability of MOUD in rural areas, and family physicians are uniquely positioned

Send comments to [fpmedit@aafp.org](mailto:fpmedit@aafp.org), or add your comments to the article online.

to do this work. Building partnerships with existing peer support and addiction treatment programs, using home-based inductions of buprenorphine when appropriate, and integrating telehealth services are important aspects of successful rural primary care-based MOUD programs. **FPM**

1. Centers for Disease Control and Prevention. Wide-ranging online data for epidemiologic research (WONDER). Updated Dec. 22, 2020. Accessed April 5, 2021. <https://wonder.cdc.gov>
2. Wilson N, Kariisa M, Seth P, Smith H, Davis NL. Drug and opioid-involved overdose deaths — United States, 2017–2018. *MMWR Morb Mortal Wkly Rep.* 2020;69(11):290-297.
3. Grimm CA. Geographic disparities affect access to buprenorphine services for opioid use disorder. U.S. Department of Health and Human Services Office of the Inspector General. January 2020. Accessed April 16, 2021. <https://oig.hhs.gov/oei/reports/oei-12-17-00240.asp>
4. Andrilla CHA, Coulthard C, Larson EH. Barriers rural physicians face prescribing buprenorphine for opioid use disorder. *Ann Fam Med.* 2017;15(4):359-362.
5. American Society of Addiction Medicine. The ASAM national practice guideline for the treatment of opioid use disorder: 2020 focused update. *J Addict Med.* 2020; 14(2S Suppl 1):1-91.
6. Wakeman SE, Larochelle MR, Ameli O, et al. Comparative effectiveness of different treatment pathways for opioid use disorder. *JAMA Netw Open.* 2020;3(2):e1920622.
7. Thomas CP, Fullerton CA, Kim M, et al. Medication-assisted treatment with buprenorphine: assessing the evidence. *Psychiatr Serv.* 2014;65(2):158-170.
8. Peterson LE, Morgan ZJ, Borders TF. Practice predictors of buprenorphine prescribing by family physicians. *J Am Board Fam Med.* 2020;33(1):118-123.
9. Substance Abuse and Mental Health Services Administration (SAMHSA). Statutes, regulations, and guidelines. Updated Oct. 7, 2020. Accessed April 16, 2021. <https://www.samhsa.gov/medication-assisted-treatment/statutes-regulations-guidelines>
10. Cunningham CO, Giovannicello A, Li X, Kunins HV, Roose RJ, Sohler NL. A comparison of buprenorphine induction strategies: patient-centered home-based inductions versus standard-of-care office-based inductions. *J Subst Abuse Treat.* 2011;40(4):349-356.
11. Lee JD, Grossman E, DiRocco D, Gourevitch MN. Home buprenorphine/naloxone induction in primary care. *J Gen Intern Med.* 2009;24(2):226-232.
12. Handelsman L, Cochrane KJ, Aronson MJ, Ness R, Rubinstein KJ, Kanof PD. Two new rating scales for opiate withdrawal. *Am J Drug Alcohol Abuse.* 1987;13(3):293-308.
13. Lee JD, Voccio F, Fiellin DA. Unobserved "home" induction onto buprenorphine. *J Addict Med.* 2014;8(5): 299-308.
14. Sokol R, LaVertu AE, Morrill D, Albanese C, Schuman-Olivier Z. Group-based treatment of opioid use disorder with buprenorphine: a systematic review. *J Subst Abuse Treat.* 2018;84:78-87.
15. Brooklyn JR, Sigmon SC. Vermont hub-and-spoke model of care for opioid use disorder: development, implementation, and impact. *J Addict Med.* 2017;11(4):286-292.

**You care for your patients.**

**We care for you.**

Gain access to exclusive resources  
created specifically for family physicians.

**Become an AAFP  
member today**

[aafp.org/bestpatientcare](https://aafp.org/bestpatientcare)

**AAFP**  
AMERICAN ACADEMY OF FAMILY PHYSICIANS