Improving Rural Access to Opioid Treatment Programs

Quentin Johnson, Brian Mund, and Paul J. Joudrey

Introduction

In 2015, the rate of drug overdose deaths in rural areas surpassed the overdose death rate in urban areas.[1] A lack of medication-assisted therapy for individuals with opioid use disorder (OUD) in rural areas contributes to this trend. Treatment shortages in medication-assisted therapy (MAT) for OUD in rural areas leads to increased drive times and transportation barriers for individuals seeking treatment.

MAT for OUD (methadone, buprenorphine, and naltrexone) is central to evidence based treatment of OUD and is recommended by numerous professional organizations and guidelines.[2] Methadone and buprenorphine have been shown to extend retention in treatment programs, which reduces the risk of further illicit drug use, the spread of HIV, other criminal activity, and risk of accidental overdose.[3] While all three medications are effective treatments for OUD, they are not equivalent or interchangeable. Naltrexone requires detoxification prior to initiation, but is associated with reduced risk of relapse.[4] Buprenorphine suppresses illicit drug use and can be prescribed by some outpatient providers, but utilization remains low and the partial opioid agonist is not adequate for all patients.[5] While methadone prescription is heavily restricted, the opioid agonist effect does not have an upper ceiling and methadone is associated with improved treatment retention relative to buprenorphine.[6] Given the strengths and weaknesses of these three medications, patients benefit when all three are available to meet individual needs. Accordingly, the President's Commission on Combating Drug Addiction and the Opioid Crisis has recommended making all three medications available at licensed substance use treatment facilities.

Currently, methadone may only be prescribed through an Opioid Treatment Program (OTP) certified by the Substance Abuse and Mental Health Services Administration (SAMHSA) of DHHS. An OTP must undergo a series of lengthy and complex regulatory requirements for certification. A patchwork of state and local regulations often mandate further regulatory burdens. Methadone regulation requires new patients to be present in person for administration five or six days a week. These regulations limit the number and distribution of locations where patients may receive methadone and require new patients to travel to the OTP for each administration of treatment. In

Quentin Johnson, J.D., *is a 2018 graduate of Yale Law School.* **Brian Mund, J.D.**, *is a 2018 graduate of Yale Law School.* **Paul J. Joudrey, M.D., M.P.H.**, *teaches at Yale School of Medicine.*

The Journal of Law, Medicine & Ethics, 46 (2018): 437-439. © 2018 The Author(s)
DOI: 10.1177/1073110518782951
https://doi.org/10.1177/1073110518782951 Published online by Cambridge University Press

2002, the Food and Drug Administration approved buprenorphine for the treatment of OUD and the Drug Treatment Act of 2000 allowed physicians who receive a waiver to prescribe buprenorphine outside of OTP locations.

Despite the hope that buprenorphine availability would reduce the treatment shortage nationally, there remains a gap between the need for MAT for OUD and the capacity to deliver MAT. Treatment need exceeded capacity by over 100,000 people in 2012.[7] This gap in treatment capacity is more prevalent in rural versus metropolitan counties, with 5% of metropolitan and 60% of rural counties experiencing treatment shortages in 2011.[8] While the number of counties with a shortage of buprenorphine-waivered physicians is falling, the number of counties with a shortage of OTPs remained unchanged from 2002 to 2011. Additionally, when considering access to all forms of MAT, this gap is greater — only 2.7% of substance use treatment facilities offered all three forms of MAT in 2016, leaving a vast majority of counties across the country without such a facility.[9]

The national gap between MAT treatment need and MAT treatment capacity is greater in rural versus urban areas. Long travel times from rural homes to substance use treatment facilities may exist, disproportionately impacting rural areas. Previous research demonstrated disparities in travel time to healthcare services across urban and rural settings. Patients in rural settings travel two to three times farther to see medical and surgical specialists within the United States.[10] If treatment centers lie further than an hour's drive time or greater, then such a factor would pose a strong potential barrier to the utilization of evidence-based therapy among a high-risk population.

Previous research also demonstrates that geographical access is an important determinant of treatment utilization for the management of other chronic illnesses.[11] Rural HIV case managers in North Carolina were more likely to report travel time and lack of transportation as barriers patient healthcare access relative to their urban counterparts.[12] In Vermont, a survey of methadone clinic patients found that 23% of patients missed at least one clinic visit due to lack of transportation, 17% due to weather, and 8% due to transportation-cost.[13] Additionally, another 22% of those patients reported that travel time to their OTP interfered with their ability to maintain employment, which undermines the broader therapeutic aims of MAT.[14]

Long drive times from rural homes to substance use treatment facilities and urban-rural disparities in drive time and transportation access have important policy implications. Without regulatory changes or innovations in MAT delivery, drive time to the nearest substance use treatment facility may undermine efforts to utilize MAT among rural individuals. To improve utilization of methadone therapy within rural communities, rural counties need innovations in the outpatient delivery of MAT to reduce drive times and other transportation barriers.

Long drive times from rural homes to substance use treatment facilities and urban-rural disparities in drive time and transportation access have important policy implications. Without regulatory changes or innovations in MAT delivery, drive time to the nearest substance use treatment facility may undermine efforts to utilize MAT among rural individuals. To improve utilization of methadone therapy within rural communities, rural counties need innovations in the outpatient delivery of MAT to reduce drive times and other transportation barriers.

Note

The authors have no conflicts to report.

References

1. K. A. Mack, C. M. Jones, and M. F. Ballesteros, "Illicit Drug Use, Illicit Drug Use Disorders, and Drug Overdose Deaths in Metropolitan and Nonmetropolitan Areas—United States," *American Journal of Transplantation* 17 (2017), 3241-3252.
2. World Health Organization, *Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence* (2009), *available at* <http://www.who.int/substance_abuse/publications/opioid_dependence_guidelines.pdf> (last visited January 26, 2018).
3. B. Nosyk, M.D. Anglin, S. Brissette, T. Kerr, D.C. Marsh, B.R. Shackman, E. Wood, and J.S. Montaner, "A Call for Evidence-Based Medical Treatment of Opioid Dependence in the

The Journal of Law, Medicine & Ethics, 46 (2018): 437-439. © 2018 The Author(s)

https://doi.org/10.1177/1073110518782951 Published online by Cambridge University Press

United States and Canada," *Health Affairs* 32, no. 8 (2013): 1462-1469, at 1462-1463.
4. J. D. Lee, P. D. Friedmann, T. W. Kinlock, E. V. Nunes, T. Y. Boney, R. A. Hoskinson Jr., and M. Gordon, "Extended-Release Naltrexone to Prevent Opioid Relapse in Criminal Justice Offenders," *New England Journal of Medicine* 374 (2016): 1232-1242.
5. R. P. Mattick, R. Ali, J. M. White, S. O'brien, S. Wolk, and C. Danz, "Buprenorphine versus Methadone Maintenance Therapy: A Randomized Double-Blind Trial with 405 Opioid-Dependent Patients," *Addiction* 98, no. 4 (2003): 441-452. See also B. Mund and K. Stith, "Buprenorphine MAT as an Imperfect Fix," *The Journal of Law, Medicine & Ethics* 46, no. 2 (2018): 279-291.
6. R. P. Mattick, J. Kimber, C. Breen, and M. Davoli, "Buprenorphine Maintenance versus Placebo or Methadone Maintenance for Opioid Dependence," *Cochrane Database System Review* 2, no. 2 (2008).
7. C. M. Jones, M. Campopiano, G. Baldwin, and E. McCance-Katz, "National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment," *American Journal of Public Health* 105, no. 8 (2015): e55-e63.
8. A. W. Dick, R. L. Pacula, A. J. Gordon, M. Sorbero, R. M. Burns, D. Leslie, and B. D. Stein, "Growth in Buprenorphine Waivers for Physicians Increased Potential Access to Opioid Agonist Treatment, 2002–11," *Health Affairs* 34, no. 6 (2015): 1028-1034.
9. A. Jones, B. Honermann, A. Sharp, and G. Millett, "Where Multiple Modes Of Medication-Assisted Treatment Are Available," *Health Affairs Blog*, *available at* <https://www.healthaffairs.org/do/10.1377/hblog20180104.835958/full/> (last visited February 27, 2018).
10. L. Chan, L. G. Hart, and D. C. Goodman, "Geographic Access to Health Care for Rural Medicare Beneficiaries," *The Journal of Rural Health* 22, no. 2 (2006): 140-146.
11. J. E. Billi, C. W. Pai, and D. A. Spahlinger, "The Effect of Distance to Primary Care Physician on Health Care Utilization and Disease Burden," *Health Care Management Review* 32, no. 1 (2007): 22-29.
12. S. Reif, C. E. Golin, and S. R. Smith, "Barriers to Accessing HIV/AIDS Care in North Carolina: Rural and Urban Differences," *AIDS Care* 17, no. 5, (2005): 558-565.
13. S.C. Sigmon, "Access to Treatment for Opioid Dependence in Rural America: Challenges and Future Directions," *JAMA Psychiatry* 71, no. 4 (2014): 359-360, at 359.
14. *Id.*

The Journal of Law, Medicine & Ethics, 46 (2018): 437-439. © 2018 The Author(s)

https://doi.org/10.1177/1073110518782951 Published online by Cambridge University Press