Published in final edited form as:

Ann Intern Med. 2018 September 04; 169(5): 335–336. doi:10.7326/M18-1203.

Integrating treatment at the intersection of opioid use disorder and infectious epidemics: A call to action following a National Academies of Sciences, Engineering and Medicine Workshop

Sandra A. Springer, MD[1,2], **P. Todd Korthuis, MD, MPH**[3], and **Carlos Del Rio, MD**[4]

[1]Department of Internal Medicine, Section of Infectious Diseases, AIDS Program, Yale School of Medicine, 135 College Street, Suite 323, New Haven, CT

[2]Yale University School of Public Health, Center for Interdisciplinary Research on AIDS, New Haven CT

[3]Department of Medicine, Section of Addition Medicine, Oregon Health and Science University, Portland, OR

[4]Hubert Department of Global Health, Rollins School of Public Health and Department of Medicine, Emory University School of Medicine, Atlanta, GA

Abstract

This is the prepublication, author-produced version of a manuscript accepted for publication in *Annals* of Internal Medicine. This version does not include post-acceptance editing and formatting. The American College of Physicians, the publisher of *Annals of Internal Medicine*, is not responsible for the content or presentation of the author-produced accepted version of the manuscript or any version that a third party derives from it. Readers who wish to access the definitive published version of this manuscript and any ancillary material related to this manuscript (e.g., correspondence, corrections, editorials, linked articles) should go to Annals.org or to the print issue in which the article appears. Those who cite this manuscript should cite the published version, as it is the official version of record.

Keywords

Opioid Use Disorder; Epidemic; Extended-release Naltrexone; Buprenorphine; Methadone; Medication Assisted Therapy; Infectious Disease; HIV; HCV

As a result of the opioid use disorder (OUD) epidemic,[1] new epidemics of Hepatitis C virus (HCV) and HIV infections, and hospital admissions due to bacteremia, endocarditis, skin and soft tissue infections, and osteomyelitis have increased.[2–4] Optimal treatment of these conditions is often impeded by untreated OUD resulting in long lengths of stay, frequent readmissions for lack of adherence to antibiotic regimens or reinfection, substantial morbidity, and a heavy financial toll on U.S. healthcare. Medical settings that manage these infections offer a potential ‘reachable moment’ to engage people in treatment for OUD

Contact: Sandra A. Springer, MD, Sandra.springer@yale.edu, Phone: 203-687-6680, Fax: 203-737-4051.

while managing their infection. Yet, few providers and hospitals managing such infections have that capacity.[5] There is thus an urgent need to implement and rapidly scale up capacity for effective OUD treatment in healthcare settings to address the intersecting epidemics of OUD and its infectious consequences.[6] The American College of Physicians,[7] Infectious Disease Society of America[8], the American Society of Addiction Medicine, and the National Institutes of Health[9] have issued an emergent call to action. Providers who treat the infectious complications of OUD, including infectious disease physicians, hospitalists, emergency medicine physicians, primary care providers, and surgeons, are on the forefront of these coalescing epidemics and are well positioned to integrate OUD treatment in the context of infectious disease management.

To address these intersecting epidemics, the Department of Health and Human Services requested that the National Academies of Sciences, Engineering, and Medicine (NASEM) convened a *Workshop on Integrating Infectious Disease Considerations with Response to the Opioid Epidemic* on March 12–13, 2019 in Washington, D.C. Participants included infectious disease physicians, hospitalists, primary care providers, nurses, health policy experts, epidemiologists, law enforcement personnel, and representatives from the Department of Health and Human Services and the Centers for Disease Control. Videos and slides of the presentations are available at: http://nationalacademies.org/hmd/Activities/PublicHealth/IntegratingInfectiousDiseaseConsiderationswithResponsetotheOpioidEpidemic/2018_MAR-12.aspx.

The workshop identified parallels between the current opioid epidemic and lessons learned from the early years of the HIV epidemic that benefited from development of a highly trained, interdisciplinary workforce and expanded access to treatment through the Ryan White Care Act and public health policies. Workshop participants agreed on the need for partnering across treatment settings and specialties, increasing access to healthcare and funding, and the need to improve addiction treatment expertise among providers who treat the infectious complications of OUD. Based on the workshop discussions, we identified **five specific action steps**:

Action Step 1:

Implement universal screening for OUD upon presentation to healthcare settings.

All persons admitted to the hospital for opioid overdose, endocarditis, bacteremia, skin abscesses, vertebral osteomyelitis, new HCV and HIV infections should be screened for OUD. Rapid OUD screening measures can quickly evaluate whether a person likely has an opioid use disorder. For example, the Rapid Opioid Dependency Screen[10] takes less than 5 minutes and allows immediate initiation of OUD medication treatment. Because infectious disease specialists are the most frequently consulted specialty in the hospital and likely to be consulted for anyone requiring long term antibiotics or new HIV and new HCV infections, OUD screening should be a standard part of infectious disease consult assessment and recommendations.

Action Step 2:

Immediately prescribe effective medication treatment for OUD and or for opioid withdrawal symptoms.

Opioid withdrawal and pain syndromes should be addressed with opioid agonist therapies to facilitate infectious disease treatment and relieve pain. While complex pain syndromes may require initial management with short-acting full opioid agonists, treatment for OUD should begin as soon as possible during hospitalization. There are currently three forms of FDA-approved medications for treating OUD and preventing opioid relapse: methadone, buprenorphine, and extended-release naltrexone. Methadone and buprenorphine are opioid agonists/analgesics that can be used for pain control and also to treat opioid withdrawal symptoms and prevent relapse in hospitalized patients. Hospital-based treatment initiation of medication treatment for OUD can retain people in the hospital setting to complete antibiotic treatment instead of leaving against medical advice due to opioid cravings or withdrawal symptoms due to inadequate or untreated OUD.

Action Step 3:

Develop hospital-based protocols that facilitate OUD treatment initiation for hospitalized patients and link patients to community-based treatment upon discharge.

Most hospitals do not offer medication treatment for OUD during hospitalization and rely on passive referrals to community-based addiction treatment program, a strategy that is rarely effective. Hospital pharmacy and therapeutics committees should approve and stock FDA-approved medications for OUD treatment. Clinical protocols and technical assistance to support implementation could be adapted from current pilot programs that integrate addiction treatment for hospitalized patients. Innovative partnerships between hospitals and community-based addiction treatment programs and skilled nursing facilities should be developed to provide seamless transitions in care for people with OUD and serious infections.

Action Step 4:

Hospitals, medical schools, and residency programs should increase and provide training to identify and treat OUD.

Provision of DATA 2000 waiver training to prescribe buprenorphine should be given to students and clinicians, and hospitals should ensure a buprenorphine prescriber is available for hospitalized patients. Buprenorphine waiver training is available through the SAMHSA-funded Providers Clinical Support Service (https://pcssnow.org/). Clinicians should also be trained how to safely prescribe methadone and extended-release naltrexone prior to hospital discharge, when appropriate.

Action Step 5:

Increase access to healthcare and funding to states to provide effective medications to treat OUD.

While OUD affects people of all socioeconomic status, the majority of those hospitalized are treated through Medicaid. The most direct way to improve access to OUD treatment is to expand access to Medicaid and other insurance, and require that insurers cover FDA-approved treatments for OUD without cumbersome prior authorization barriers. Stopgap measures like the Ryan White Care Act that provides an additional safety net for underinsured persons with HIV may be a model for supporting OUD treatment in the absence of insurance.

All healthcare providers are needed to combat the OUD epidemic and its infectious consequences. Those who treat infectious complications of OUD are ideally suited to screen for OUD and begin treatment with effective FDA-approved medications. Integrating our collective skills may make the difference between life and death for patients living with OUD.

Acknowledgments:

The authors would like to thank Kathleen Stratton, PhD from the Board on Population Health and Public Health Practice, Health and Medicine Division within the National Academies of Sciences, Engineering, and Medicine, who was the Study Director and organized the workshop.

BIBLIOGRAPHY AND REFERENCES CITED

1. Rudd RA, Seth P, David F, Scholl L. Increases in Drug and Opioid-Involved Overdose Deaths - United States, 2010–2015. MMWR Morb Mortal Wkly Rep 2016;65(5051):1445–1452. [PubMed: 28033313]
2. Ronan MV, Herzig SJ. Hospitalizations Related To Opioid Abuse/Dependence And Associated Serious Infections Increased Sharply, 2002–12. Health Aff (Millwood) 2016;35(5):832–837. [PubMed: 27140989]
3. Zibbell JE, Asher AK, Patel RC, et al. Increases in Acute Hepatitis C Virus Infection Related to a Growing Opioid Epidemic and Associated Injection Drug Use, United States, 2004 to 2014. Am J Public Health 2018;108(2):175–181. [PubMed: 29267061]
4. Conrad C, Bradley HM, Broz D, et al. Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone--Indiana, 2015. Mmwr 2015;64(16):443–444. [PubMed: 25928470]
5. Madras BK. The Surge of Opioid Use, Addiction, and Overdoses: Responsibility and Response of the US Health Care System. JAMA Psychiatry 2017;74(5):441–442. [PubMed: 28355456]
6. Koh H Community Approaches to the Opioid Crisis. JAMA 2015;314(14):1437–1438. [PubMed: 26461987]
7. Crowley R, Kirschner N, Dunn AS, Bornstein SS, Health, Public Policy Committee of the American College of P. Health and Public Policy to Facilitate Effective Prevention and Treatment of Substance Use Disorders Involving Illicit and Prescription Drugs: An American College of Physicians Position Paper. Ann Intern Med 2017;166(10):733–736. [PubMed: 28346947]
8. Infectious Diseases Society of America, HIVMA. Infectious Diseases and Opioid Use Disorder (OUD) Policy Issues and Recommendations http://www.hivma.org/uploadedFiles/HIVMA/News_Announcements/IDandtheOpioidEpidemicPolicyBrief_3192018Updated.pdf?_ga=2.242547077.621951319.1525618821-163414743.1524499268 2018.
9. Kuehn B NIH Strategy to Combat Opioid Crisis. JAMA 2017;318(24):2418.

10. Wickersham JA, Azar MM, Cannon CM, Altice FL, Springer SA. Validation of a Brief Measure of Opioid Dependence: The Rapid Opioid Dependence Screen (RODS). J Correct Health Care 2015;21(1):12–26. [PubMed: 25559628]