Kimmel and colleagues conducted a retrospective cohort study using a large public health database to evaluate characteristics associated with receipt of medication for opioid use disorder (MOUD; buprenorphine, methadone, and extended-release naltrexone) in the 12-month posthospitalization period among adults with a prior diagnosis of opioid use disorder (OUD) who were hospitalized with a serious injection-related infection (SIRI). This unique, individual-level, linked dataset in Massachusetts resulted in a large, well-powered sample size of 8769 unique individuals aged 18 to 64 years with a diagnosis of OUD who survived a SIRI-related hospitalization event with evaluable data for the 12-month post-SIRI event follow-up period between 2015 and 2019. The study found that only 41% of patients received MOUD in the 12 months after the SIRI hospitalization period. The statistically significant characteristic associated with receipt of MOUD after SIRI hospitalization was receipt of MOUD in the preceding 6 months before SIRI hospitalization, with patients with prior methadone use having the largest adjusted odds of receiving MOUD followed by buprenorphine and extended-release naltrexone. The study also identified that longer time receiving MOUD was associated with prior methadone or buprenorphine treatment, whereas prior extended-release naltrexone was associated with lower retention on MOUD in the 12-month posthospitalization period.

The findings of this study underscore the national public health emergency directly related to the coalescing substance use and infectious disease epidemics related to fentanyl, leading to increasing overdose deaths and fueling new infectious disease epidemics, including new outbreaks of HIV and hepatitis C virus and SIRI-related hospitalizations. Kimmel et al specifically targeted SIRIs associated with injection of opioids in persons with OUD, although it is important to note that overdose deaths and associated infections also are increasing in those who use stimulants. Unlike stimulant use disorder, OUD has effective US Food and Drug Administration-approved forms of medication treatment that decrease opioid use, overdose, and death; reduce transmission of HIV and hepatitis C virus and injection drug use frequency; and improve HIV and hepatitis C virus treatment outcomes and management of SIRIs. Despite its effectiveness, only 1 in 5 persons with OUD in the US receive MOUD, which is in line with the findings from this study in which only 17.8% received MOUD treatment in the 6 months before hospitalization and only 1 in 4 received MOUD in the 12 months after hospitalization.

Although this study specifically addressed receipt of MOUD after the SIRI hospitalization, the hospitalization period is also a reachable moment to diagnose OUD and initiate MOUD, including while experiencing a SIRI. There has been a call for improving integrated infectious disease and OUD management to reduce the morbidity and mortality of these coalescing epidemics. Starting MOUD in a hospital setting for someone with OUD can alleviate opioid craving and withdrawal symptoms, reduce patient-directed discharges, and improve completion of antimicrobial treatment for a SIRI. Monthly long-acting buprenorphine, of which 2 formulations are now available, are options for treating OUD that can bridge care in the posthospitalization period to reduce interruptions of daily oral MOUD treatment, similar to potential benefits of long-acting injectable antimicrobial therapy, such as dalbavancin for Staphylococcus aureus infections. A multisite randomized clinical trial is evaluating an integrated care model of infectious disease and OUD management using long-acting buprenorphine with a nurse care management intervention among adults with OUD who are...
hospitalized with concurrent related infections compared with treatment as usual, with the primary outcome of MOUD receipt at 3 months.\(^5\) Kimmel et al\(^1\) identified that diagnoses of infectious endocarditis and septic arthritis were statistically significantly associated with receipt of MOUD in the 12 months after the hospital event, thus further identifying that hospitalization with these SIRIs should prompt consideration of OUD diagnosis and MOUD initiation.

This study also highlighted the unfortunate inequities in MOUD receipt in our health care system for persons with OUD. Older persons (aged 50-64 years) and those who were of non-Hispanic Black race were less likely to receive MOUD compared with those who were younger (aged 18-34 years) and of White race. Furthermore, those who were discharged to a skilled nursing facility or rehabilitation facility or with home services were also less likely to receive MOUD in the 12-month posthospitalization period. Stigma, ageism, and racism related to OUD exist across many health care settings, which impedes access to lifesaving MOUD. Adopting universal screening and diagnosis of OUD\(^6\) can lead to immediate initiation of MOUD, including in hospitals, and could reduce potential practitioners' bias in deciding who receives assessment and treatment. Hospitals should also ensure that the skilled nursing and rehabilitation facilities and home health agencies they refer to and/or contract with do accept and care for people who use drugs in the period after hospitalization and provide MOUD, including opioid agonist-based treatments of buprenorphine and methadone.

This study also identified the need to improve interventions to help persons with OUD continue MOUD once initiated. In this study, only 22.8% of individuals who received MOUD after a SIRI hospitalization event were treated for 80% of the 12-month posthospitalization period. The highest risk of opioid relapse and overdose is after cessation of MOUD, and relapse to opioid use also interferes with the ability of completing infectious disease management, thus increasing the likelihood of rehospitalization and death due to ongoing untreated infections. Almost 70% of the identified population in this study was rehospitalized in the 12-month period after SIRI hospitalization, and 11% died, with 2.2% of deaths directly associated with overdoses. There are many barriers to care for people who use drugs that can impede MOUD access and retention as well as postdischarge medical care plans in the period after hospitalization, including mental illness, comorbid substance use disorders, and risk of incarceration. In this study, 4.5% of persons were incarcerated within the 12 months after their hospital SIRI event, which is known to affect MOUD retention because many carceral systems do not provide MOUD. Furthermore, there were high rates of comorbid depression and anxiety disorders (67.6%) as well as alcohol and stimulant use disorders in this population, indicating the need for evaluation and treatment of OUD in those with these conditions. In addition, people who use drugs experience many social and economic barriers to care, including lack of transportation, housing, and insurance. Plans to address how to overcome these barriers need to occur early in the hospital stay. Such plans should include assistance with access to transportation, housing, insurance, telephones, and pharmacy and medication access, including MOUD, naloxone, and antimicrobials. Examples of interventions to help people who use drugs retain MOUD use and medical care include patient and peer navigators, community health workers, mobile health units, mobile pharmacy and MOUD services, visiting nurses, and telemedicine.\(^7\) Advocating for third-party payers to reimburse for such services could help this process because many states are now adopting community health workers as billable service providers. Incorporating these interventions could help improve treatment access and MOUD and medical care retention in the period after hospitalization and, as such, improve the lives of the most vulnerable.
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REFERENCES


