Low Barrier Tele-Buprenorphine in the Time of COVID-19: A Case Report

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Background: To reduce the spread of coronavirus disease 2019 (COVID-19), many substance use disorder treatment programs have transitioned to telemedicine. Emergency regulatory changes allow buprenorphine initiation without an in-person visit. We describe the use of videoconferencing for buprenorphine initiation combined with street outreach to engage 2 patients experiencing homelessness with severe opioid use disorder (OUD).

Case Presentation: Patient 1 was a 30-year-old man with severe OUD who had relapsed to injection heroin/fentanyl after incarceration. A community drop-in center outreach harm reduction specialist facilitated a videoconference with an addiction specialist at an OUD bridge clinic. The patient completed a community buprenorphine/naloxone initiation and self-titrated to his prior dose, 8/2 mg twice daily. One week later, he reconnected with the outreach team for a follow-up videoconference visit. Patient 2, a 36-year-old man with severe OUD, connected to the addiction specialist via a syringe service program harm reduction specialist. He had been trying to connect to a community buprenorphine/naloxone provider, but access was limited due to COVID-19, so he was using diverted buprenorphine/naloxone to reduce opioid use. He was restarted on his previous dose of 12/3 mg daily which was continued via phone follow-up 16 days later.

Conclusions: COVID-19-related regulatory changes allow buprenorphine initiation via telemedicine. We describe 2 cases where telemedicine was combined with street outreach to connect patients experiencing homelessness with OUD to treatment. These cases highlight an important opportunity to provide access to life-saving OUD treatment for vulnerable patients in the setting of a pandemic that mandates reduced face-to-face clinical interactions.

Key Words: buprenorphine, COVID-19, homelessness, induction, social-distancing, substance use disorders, telemedicine

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The coronavirus disease 2019 (COVID-19) pandemic has reached all 54 US jurisdictions and threatens a catastrophic impact on people with substance use disorders (SUD). People with SUD may be at increased risk of COVID-19 mortality due to high rates of co-morbid respiratory disease, hypertension, and diabetes. They are also more likely to be unstably housed and those utilizing shelters and homeless services are at increased risk of infection due to crowding, a large number of transient clients, a lack of appropriate ventilation, and suboptimal access to healthcare. Additionally, people with SUD may now be at higher risk for overdose and HIV infection due to interruptions in addiction treatment and harm reduction services as programs enforce social distancing practices.

Many medical encounters have rapidly transitioned to telemedicine visits in order to comply with public health recommendations. While randomized trials of telemedicine (in non-SUD settings) have been underpowered, they have shown that video consultations are associated with high satisfaction without detecting differences in disease outcomes. In a systematic review, telemedicine for alcohol use disorder treatment was effective in reducing alcohol use and increasing access to health services. Prescribing buprenorphine via telemedicine in nonrandomized studies appears to be safe and likely increases access in rural communities.

On March 6, 2020, the Centers for Medicare and Medicaid Services agreed to pay for telemedicine encounters during the COVID-19 public health emergency. The Office for Civil Rights stipulated that providers who serve patients in good faith through everyday communication technologies,
such as FaceTime or Skype, during the COVID-19 pandemic are protected from Health Insurance Portability and Accountability Act (HIPAA) enforcement. Until the COVID-19 pandemic, telemedicine initiation of buprenorphine was not permitted due to Drug Enforcement and Administration (DEA) regulations, which predicated the prescribing of buprenorphine on an in-person medical evaluation. However, on January 31st a public health emergency was declared (an exemption in the Controlled Substances Act), and on March 31st the Acting DEA Administrator clarified that telemedicine could be used to initiate buprenorphine while the COVID-19 emergency remains in effect.

The use of telemedicine for buprenorphine initiation is novel in and of itself. However, without creative engagement of community services, traditional telemedicine may exclude the most vulnerable patients who do not have access to phones or private spaces to contact providers. Here, we describe a partnership between street outreach and a low-barrier addiction medicine bridge clinic at a safety-net hospital in Boston, MA that facilitated tele-buprenorphine initiations. The patients described below provided consent to publish these case reports.

**CASE PRESENTATION**

### #1. A 30-year-old man living on the street connected with a harm reduction specialist outside a hospital-operated community drop-in center. The center offers HIV/HCV/STI testing, SUD harm reduction services, treatment referrals, and street outreach. The harm reduction specialist brought the patient into a private space at the center and used their work phone to contact a bridge clinic addiction medicine specialist on their personal phone via FaceTime videoconferencing.

The patient reported using 2 g of heroin/fentanyl intravenously and non-prescribed benzodiazepines daily. His last use was one hour before the telemedicine encounter. He also endorsed occasional cocaine and methamphetamine use. He described estrangement from his family, homelessness, and multiple incarcerations due to heroin/fentanyl. He reported a history of severe opioid use disorder (OUD), severe stimulant and benzodiazepine use disorders, and multiple non-fatal overdoses. Previous treatment included methadone, naltrexone, and, most recently, buprenorphine/naloxone, which was interrupted by incarceration and subsequent relapse 2 months prior. He was concerned about forced withdrawal from heroin/fentanyl if lock-down policies were enacted to reduce COVID-19 transmission and therefore wanted to resume buprenorphine if lock-down policies were enacted to reduce COVID-19 transmission and therefore wanted to resume buprenorphine/naloxone.

Because the patient had his own phone and had already prescribed a 2-week supply of 12/3 mg daily. A follow-up visit was scheduled for two weeks. He was also prescribed naloxone and counselled on safer injection practices, HIV prevention, and COVID-19 prevention strategies.

The time from visit request to buprenorphine initiation was approximately 1 hour. Because the patient did not have a phone, he, the prescriber, and harm reduction specialist planned for him to connect through the same community drop-in center or at the local syringe service program by videoconference for his refill. One week later, through a street outreach harm reduction specialist, he reconnected and reported his last heroin/fentanyl use was 6 days prior. He was prescribed a 2-week refill. In his fourth follow-up visit, he expressed readiness to stop benzodiazepines and started outpatient medically managed benzodiazepine withdrawal.

### #2. The second patient, a 36-year-old man also living on the street and couch surfing, presented to a local syringe service program. A harm reduction specialist contacted the bridge clinic and facilitated a telemedicine visit using FaceTime between the harm reduction specialist’s phone and the bridge clinic addiction specialist’s personal phone.

He reported a history of severe OUD complicated by past overdoses, cocaine use disorder, and mood disorder, which were confirmed by medical record review. That morning, he had been seen in the Emergency Department seeking medical clearance for inpatient medically managed withdrawal treatment, but he left for unclear reasons without linkage to a facility.

He reported prior sustained recovery on buprenorphine/naloxone 12/3 mg daily. His medical record showed no history of methadone or naltrexone treatment. He had been attempting to reconnect with a community buprenorphine prescriber, but due to COVID-19, the clinic was closed. He had therefore been buying diverted buprenorphine/naloxone to manage withdrawal and decrease injection opioid use. He reported his last heroin/fentanyl use was “a few days ago” and his last street buprenorphine/naloxone was earlier that morning. Over videoconference, he was alert, oriented, and anxious appearing. UDT from the Emergency Department was positive for cocaine and buprenorphine.

He was experienced in managing the transition from heroin/fentanyl to buprenorphine/naloxone and reported no precipitated withdrawal with that morning’s diverted dose. Because the patient had his own phone and had already initiated buprenorphine/naloxone, he was electronically prescribed a 2-week supply of 12/3 mg daily. A follow-up telemedicine visit was scheduled for two weeks. He was also prescribed naloxone, encouraged to seek HIV testing, and counselled on strategies to reduce COVID-19 risk.

Prescription monitoring program search confirmed that he successfully picked up his prescription. He lost cell phone access temporarily but was able to reconnect by phone on day 16. He reported doing well on 12/3 mg daily, which was refilled for an additional 2 weeks.

Improvements in the bridge clinic’s telemedicine infrastructure since these initial tele-buprenorphine/naloxone
inductions include webcams and tablets that facilitate access to HIPAA-compliant videoconferencing platforms. DEA guidance has clarified that both telephone and video-conference-based buprenorphine initiations are permissible.15

**DISCUSSION AND CONCLUSIONS**

The shift to telemedicine to reduce COVID-19 transmission has allowed many patients to continue OUD treatment. However, limitations on walk-in and traditional in-person treatment risk increasing barriers for vulnerable patients experiencing homelessness or unstable housing who may have limited access to private spaces and technologies required for telemedicine. Here we describe how partnerships between addiction specialists and harm reduction outreach teams allowed patients experiencing homelessness to access buprenorphine through telemedicine.

There is limited evidence for telemedicine in people with SUD who are also experiencing homelessness. One cross-sectional study from Connecticut found that 70% of people experiencing homelessness had a cell phone compared to 86% of those with stable housing, and only 38% had unlimited minutes versus 50% of those with housing.16 This highlights the potential to exacerbate access disparities with the shift to telemedicine. On the other hand, a qualitative study among people experiencing homelessness found participants believed that engagement, navigation, and access to care could be enhanced through expanded cell phone communication.17 Tailored care, including outreach services, for homeless and unstably housed populations has been shown to improve perceptions of treatment18 and increase housing stability, mental health, and SUD treatment access.20 The combined approach of pairing street outreach with telemedicine promises to extend addiction specialists’ reach at a time when interest in treatment may increase due to changes in local drug supply and treatment access.

Tele-buprenorphine initiation is an innovation that developed in response to a public health crisis. This innovation offers an important opportunity to lower barriers to OUD treatment, particularly when delivered in partnership with harm reduction outreach teams who are connected with the highest risk individuals. Tele-buprenorphine initiation warrants further evaluation to inform optimal addiction care during the COVID-19 pandemic and beyond.

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