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Telemedicine works for treating substance use disorder: The STAR clinic experience during COVID-19



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ARTICLE INFO	A B S T R A C T
<i>Keywords:</i> Substance use disorder Opioid use disorder Telemedicine Virtual health Outpatient addiction treatment	The coronavirus disease 2019 has exposed many opportunities for improvement in treatment for substance use disorders. Regulators can ensure higher quality treatment for addiction when acknowledging telemedicine as a necessary treatment option and amending regulations to allow for telehealth parity across the United States.

The rapid spread of the coronavirus disease 2019 (COVID-19) has exposed many opportunities for improvement in the U.S. health care system, including treatment for substance use disorders (SUD). Regulators have moved at an unprecedented speed to grant providers the flexibility to safely treat patients with SUD under COVID-19 conditions by lifting restrictions on take-home doses of methadone and buprenorphine (SAMHSA, 2020) and relaxing requirements for in-person medical evaluations for controlled substance prescribing (Drug Enforcement Administration, 2020). Advocates and providers have been quick to praise these relaxed regulations (Becker & Fiellin, 2020), calling attention to concerns over an increasingly challenging environment for those affected by addiction (Clay & Parker, 2020; Mokri et al., 2020; Volkow, 2020).

Usage of telehealth platforms has become increasingly common for maintaining outpatient treatment and recovery services (Becker & Fiellin, 2020; Jain et al., 2020; Mokri et al., 2020; Volkow, 2020), for which public and private insurers have granted temporary payment parity (Hollander & Carr, 2020). Previously, usage of telemedicine for treating SUD remained low compared to the use of telemedicine in other fields (Huskamp et al., 2018), with a dearth of literature on the topic of telemedicine for SUD treatment, despite the increased interest in broader telehealth literature. The relaxed regulations and temporary payment parity for telemedicine has allowed providers to push ahead, transforming their practices to a virtual space and accomplishing work in a matter of weeks that would otherwise have taken years to implement. The Substance Treatment and Recovery (STAR) clinic at the University of North Carolina is one of these practices. Within three weeks, the STAR clinic converted all patient care to telemedicine platforms. Since transitioning, clinic logistic and staffing limitations have eased, resulting in substantial changes to the services offered. For the first time, the clinic now offers hospital e-consultation services and direct connections to primary care, while also adding virtual group therapy and virtual individual therapy to the list of services that it provides. Patients have benefited from increased flexibility in appointment times and virtual medication management, including buprenorphine induction for new patients.

The integration of telemedicine has lowered the traditional patient barriers to treatment, such as lack of transportation or physical distance, which ceases to be an issue in a virtual setting. Treatment barriers related to stigma and privacy are also reduced. Further, patients being treated for opioid use disorders may now do buprenorphine inductions from the comfort of their homes.

While it is too early to draw conclusions on the effects of the STAR clinic's transition to a low-barrier, virtual treatment setting, data are promising. Appointment no show rates for returning patients have stabilized to pre-telemedicine trends, while new patient no show rates decreased drastically, dropping to zero in May (Fig. 1). The clinic's referral rate has remained linear, suggesting that changes to the no show rate are, in part, due to altered clinic settings and services. These pre-liminary data support a growing body of literature on the effectiveness of low-barrier treatment for SUD, including the use of telemedicine (Eibl

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Fig. 1. STAR clinic monthly no show rates, 2020.

The STAR clinic transitioned to telemedicine on March 12, 2020. No show rates are calculated by dividing the total number of no shows by the total number of scheduled appointments.

et al., 2017).

What the data do not show is the strengthened patient-provider relationships resulting from the transition to telemedicine. Virtual patient flows have reduced the number of staff with whom patients interact, providing a more personalized care setting. For example, the same clinic support staff who assist patients with onboarding to telemedicine platforms are also facilitating virtual group meetings and individual therapy sessions—interactions that were not happening in the physical clinic space.

While the transition to telemedicine has been promising, it has not been easy or equitable. The STAR clinic has faced complications with internal patient assistance programs, whose structures are not equipped to process patients within a virtual setting. In addition, some patients with very limited resources do not have access to a cell phone or Internet services, making virtual visits almost impossible. Fortunately, a vast majority of patients either have direct access or are able to obtain access to a cell phone for virtual encounters, resulting in only a small number of patients who require in-person visits. In response, the STAR clinic has opened its doors to in-person visits for patients who cannot access telemedicine platforms and have developed protocols that minimize face-to-face interactions to obtain necessary screening forms and signatures from patients.

As the STAR clinic begins to transition back to in-person services, telemedicine has allowed providers to think critically about which patients are being seen in-person, encouraging the prioritization of highacuity patients in the limited clinic space. Once stabilized, these patients will benefit greatly from increased services that the STAR clinic can now offer.

While limited, evidence from existing telemedicine SUD programs shows patients who engage virtually are more likely to be retained for in-person follow-up appointments (Huskamp et al., 2018) and have higher retention rates in medication-assisted treatment (Eibl et al., 2017). STAR clinic patients have also shown more engagement with primary care providers through newly established virtual partnerships that allow the clinic to offer more all-inclusive services, like HepC treatment, birth control planning, and management of non-SUD medications. Combined with greater psychosocial services, like group and individual therapy, telemedicine has significantly increased the quality of care that the STAR clinic can offer.

The challenge of uncertainty will continue to weigh on providers during the COVID-19 pandemic, but a clear path has been laid for the future of SUD treatment in the use of telemedicine. Regulators can ensure continued quality, flexibility, and dignity in SUD treatment by extending the relaxation of regulations past this national emergency and by requiring telehealth parity across all 50 states. There should be no option of returning to operating as normal for the U.S. health care system or the field of addiction treatment. To do so would be to ignore the great strides for SUD treatment that this pandemic has offered.

CRediT authorship contribution statement

Leah Fiacco: conceptualization; writing – original draft; writing – review & editing.

Brenda L. Pearson: conceptualization; project administration; resources; writing – review & editing.

Robyn Jordan*: conceptualization; resources; writing – review & editing.

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