

COMMENTARY

Integrating Telemedicine for Medication Treatment for Opioid Use Disorder in Rural Primary Care: Beyond the COVID Pandemic

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Funding: Research reported in this publication was supported by the National Institute on Drug Abuse of the National Institutes of Health under Award Number UG1DA049435. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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doi: 10.1111/jrh.12489

Key words COVID-19, medication treatment for opioid use disorder, primary care, rural, telemedicine.

Even before the 2019 Novel Coronavirus (COVID for short) crisis, telemedicine (TM) enabled by digital health technologies was considered a key solution to the health care access problem in rural communities. However, use of TM to treat opioid use disorder (OUD) has been limited even during the recent opioid crisis in America, despite the high rates of opioid overdose and death rates in many rural areas. This limited use of TM-based medication treatment for OUD (MOUD) has been mostly attributed to restrictions imposed by federal and state regulations for TM (eg, licensing, reimbursement) and patient challenges (eg, accessing and using the technology). The current “collision of the COVID and addiction epidemics”¹ forces a drastically increased demand for remote care models for MOUD. We reflect on what virtual high-quality care entails and how access to these services can be expanded.

The opioid crisis has hit hard in many rural communities and has brought health care access issues to the forefront in these areas.² Opioid treatment programs that dispense methadone require frequent or daily visits which are difficult to adhere to given the long-distance travel often re-

quired in these areas. Primary care is at the core of rural health care systems. To expand MOUD access, national efforts have focused on primary care to promote office-based opioid treatment (OBOT), which allows clinicians to provide medication such as buprenorphine or naltrexone to treat OUD in their own clinical settings. Nevertheless, OBOT uptake has been slow in rural communities, with 29.8% of rural Americans compared with 2.2% of urban Americans living in a county without a buprenorphine provider.³

Studies using retrospective chart reviews have shown that MOUD delivered by TM is as effective as in-person delivery.^{4,5} In response to the COVID pandemic, Centers for Medicare & Medicaid Services and Drug Enforcement Administration have taken unprecedented steps to relax rules governing TM for MOUD with waivers for policies and restrictions on TM during this public health crisis (declared by the Secretary of Health and Human Services on January 31, 2020), and the Substance Abuse and Mental Health Services Administration has published clinical guidance in support of these measures.^{6,7} Many clinics

are rapidly adopting use of basic telehealth services (eg, telephone, video chat) to treat individuals with OUD. The development of MOUD capacity in primary care settings with comprehensive treatment services, while desirable, can be very challenging as health care providers in rural communities face limited economies of scale, heavy dependence on public payers, and low patient volume. To quickly expand treatment access in order to address the current urgent problems in rural communities, one strategy would be to bridge a collaborative relationship between primary care and an established TM provider that has developed relevant infrastructure to deliver comprehensive MOUD remotely. An example of such a remote model implemented in the Veterans Health Administration has been reported, using a hub (centralized prescribers teleprescribing buprenorphine) and spoke (rural clinics) model.⁸ There are also TM companies that have established infrastructure (delivering virtual MOUD by X-waivered prescribers and licensed clinicians for behavioral health with services available 24/7, and accepting diverse payment or reimbursement mechanisms) and can provide TM services in many states across the country. By collaborating and coordinating with an established TM provider or network, rural health centers can extend their reach quickly, which can lead to improved quality of patient care and healthier communities.

A high-quality TM-based program should not only use videoconferencing between patients and clinicians for medication prescription and management, but also be able to view remotely delivered saliva/urine drug screens and provide behavioral therapies. In clinics with no or limited number of X-waivered clinicians, referral to such an external TM program is a straightforward solution. For those clinics that already have some of the same services on-site or plan to establish their own TM, outside TM providers can duplicate some services already offered in primary care and thus some level of competition may be perceived. On the other hand, delivery of services with 24/7 on-call doctors via the Internet and supplementing hands-on care with technology should allow more flexibility for clinics with limited staff while providing greater access for patients. Collaboration and coordination with TM providers can offer solutions to problems that commonly affect rural areas. Often cited motivations to refer to TM include limited number of X-waivered clinicians, lack of behavioral health services, patients' logistic problems, and management of patients with clinical complexity. Clinics may consider TM referrals in accordance with clinic and patient needs. For example, clinics may refer their OUD patients to TM only for behavioral health if such services are not available in the clinic. They may also consider TM referrals for those patients with logistic barriers (eg, live far from

clinic or have transportation difficulties, need evening appointment options due to work or childcare barriers), patients with high clinical complexity or high relapse risk (which require greater support or time for adequate management), or patients with low clinical complexity (leaving more time for clinic staff to manage patients who are high risk). Of course, patients' preferences based on their conditions (logistic barriers) or concerns about stigma and anonymity are always a deciding factor.

Effective communication between primary care and TM providers is a key requirement for successful collaboration, as well as quality patient care. Warm handoff during the referral process is likely to facilitate transition of care. Regular communication is needed to update patients' clinical progress and status. Current technologies allowing presetting of types and frequency of clinical exchanges via electronic health records will avoid increased workload. Clinics and TM companies bill their clinical services directly to relevant insurance/coverage, allowing each organization to maintain their independence with separate finances and budgets.

Despite benefits of TM, there remain significant implementation challenges. Many rural residents do not have adequate access to Internet and smartphones (69.3% of rural areas have access to high-speed broadband Internet, and 71% of rural residents own a smartphone),⁹ which affects TM services that require Internet and/or a device. Clinics may offer space or equipment to assist patients who have such challenges. It is unknown if the TM regulations will go back to pre-COVID, as currently the telehealth waiver will be effective until the public health emergency ends. There is also mistrust of technology-based health care, and doubt in the quality of telehealth services; trust is integral to effective collaboration among providers or organizations and trust will take time to develop.

While much is still unknown regarding TM best practices in primary care (eg, which patients are appropriate for TM, whether and how remote therapeutic relationship are maintained), TM-based MOUD is likely to be expanded, particularly in rural areas with severe opioid problems. Scientific knowledge in these areas and technology advancement are needed to guide and support future development of efficient and effective remote care models in primary care for treating OUD.

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