



Telemedicine's Role in Addressing the Opioid Epidemic



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dverse health effects of the opioid epidemic continue to climb. Opioidrelated overdose deaths reached an all-time high of 42,249 in 2016, prompting President Trump to declare an opioid public health emergency in 2017. From July 2016 to September 2017, emergency department visits associated with opioid-related overdoses spiked about 30%.2 Those with opioid use disorders (OUDs) face dramatically increased risk of early death, typically from overdose. Provision of evidence-based medication-assisted treatment (MAT), which can involve methadone, buprenorphine, or naltrexone, to those with OUDs has been shown to reduce the risk of death by as much as 50%.3 Yet access to MAT remains severely inadequate—notably in rural America, particularly hard hit by the epidemic. Policymakers generally agree that more widespread access to MAT is desperately needed; the question remains: how?

Prominent among strategies proposed to ramp-up MAT access is providing it via telemedicine. Telemedicine, or the remote delivery of health care using telecommunications technology, has the potential to increase access to MAT medicines and concurrent therapy in underserved, remote rural areas by providing direct-to-patient or specialty consultation services from afar. Although telemedicine to treat patients with OUDs has been piloted favorably, scaling up its provision is not as simple as connecting a patient to a provider. Rather, stakeholders must surmount considerable regulatory, logistical, and quality hurdles before telemedicine can help to mitigate the opioid epidemic.

MAT VIA TELEMEDICINE

Programs capable of providing methadone to treat patients with OUD are concentrated in urban areas (91%-99% of rural counties lack any)

and often have extensive waiting lists. Such programs are heavily regulated, typically required to supervise methadone administration, and have not expanded noticeably in number in the past decades. Naltrexone's effectiveness is still being demonstrated, and the requirement that patients be opioidabstinent for 7 to 10 days before initiating treatment can limit the treatment's utility. In short, methadone and naltrexone are not presently the most viable candidates for MAT expansion via telemedicine in rural America.

Buprenorphine, which can be prescribed in office-based settings, is a more realistic option for telemedicine prescribing.⁶ Buprenorphine treatment has demonstrated effectiveness in increasing patient retention and in reducing opioid use, mortality, and transmission of HIV and hepatitis C.6 Although providers must obtain a federal waiver to prescribe buprenorphine, policy around these waivers has relaxed in recent years and the number of buprenorphine prescribers continues to expand. Nevertheless, rural communities still face a severe shortage in buprenorphine prescribers, and the average provider with a waiver to prescribe buprenorphine treats far fewer patients than allowed under law.

Pilot projects have demonstrated the clinical potential for prescribing buprenorphine via telemedicine.^{8,9} For example, an initiative in Maryland provided buprenorphine to more than 300 rural Marylanders.8 A chart review showed that 59% of patients remained in treatment after 3 months and 94% of those patients still engaged in treatment at 3 months no longer used opioids illicitly.⁸ In a West Virginia pilot study, a review of 2 years of clinic records revealed no significant statistical between face-to-face difference telemedicine buprenorphine MAT treatment programs across 3 outcomes: additional substance use, average time to achieve 30 and

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90 consecutive days of abstinence, and treatment retention rates at 90 and 365 days. An Ontario, Canada, study demonstrated that 1 year of buprenorphine or methadone therapy via telemedicine was strongly correlated with improved physical and mental health and reduced illicit drug use, relapse, hospitalization, mortality, and illegal activity. Telemedicine can allow patients with OUDs to stay in treatment and receive counseling to further recovery. Moreover, through enhanced convenience, reduced travel time, and cost savings, telemedicine offers additional benefits for patients, physicians, and the greater health care system.

BARRIERS

Despite its great potential, substantial barriers hinder widescale adoption of telemedicine for MAT. In 2008, Congress enacted the Ryan Haight Online Pharmacy Consumer Protection Act (Haight Act). The Haight Act prohibits providers from remotely prescribing any controlled substances through telemedicine unless they first conduct an in-person examination with the patient, or meet a "practice of telemedicine" exception—for instance, if the patient is treated by and is physically located at a Drug Enforcement Agency (DEA)-registered hospital or clinic. 11 Congress passed the law to curb rogue Internet pharmacies that proliferated in the late 1990s from selling controlled substances online.

Haight Act requirements now impede the ability of providers to prescribe buprenorphine, a controlled substance, via telemedicine. The DEA, acting on behalf of the US Attorney General, has failed to follow through on a Haight Act requirement that it pass regulations creating a "special registration" process for certain prescribers, potentially of buprenorphine, relating to the practice of telemedicine. Although the law allows remote prescribing of controlled substances during a public health emergency, both the Secretary of Health and Human Services and the Attorney General must agree on which controlled substances. No such agreement has been reached under the recently declared federal public health emergency, and even if it were, this exemption would need to be renewed every 90 days.

State laws also regularly pose an impediment to telemedicine providers seeking to prescribe controlled substances needed by their patients. However, at least 6 states currently allow telemedicine-controlled substance prescribing without an in-person examination, and thereby lower the barriers for providers to offer MAT and related care to their patients via telemedicine (see the Table). Indiana's telemedicine law is particularly thoughtful because it not only expands OUD treatment options by allowing the remote prescribing of buprenorphine (opioid partial agonist) but also attempts to address the opioid epidemic by limiting remote access to most prescription opioids. These 6 state laws directly conflict with Haight Act requirements, violations of which can carry penalties that include prison, fines, and temporary or permanent loss of the prescriber's DEA registration. The last documented case of enforcement of such a Haight Act violation against a physician occurred in July 2011, 18 although the threat remains as the DEA recently reiterated its strict interpretation of Haight Act requirements.19

Logistical barriers to telemedicine for MAT include substantial start-up costs for technologies to be Health Insurance Portability and Accountability Act—compliant for privacy and security, limited broadband access in rural areas, and state clinical licensure and prescribing requirements. Although coverage of MAT services by public and private payers has improved over time, health plans' utilization criteria and medication formularies pose persistent access and reimbursement hurdles associated with these medications and services.

Quality-of-care concerns also warrant careful consideration, even though telemedicine has been shown to increase treatment and improve outcomes for patients with OUD in many cases. Where telemedicine infrastructure is inadequate, quality and continuity of care may suffer. Because MAT typically involves therapy and other supports, a lack of ability to maintain and share certain patient substance use treatment records under 42 Code of Federal Regulations Part 2 for auxiliary services could in certain cases hamper timely, integrated care. Moreover, given the level of alleged fraud currently plaguing

State	Remote prescribing	Effective date
Delaware ¹²	Treatment and consultation recommendations made in an online setting, including issuing a prescription via electronic means, are held to the same standards of appropriate practice as those in traditional in-person settings. Without a previous and proper doctor-patient relationship, providers are prohibited from issuing prescriptions solely in response to an Internet questionnaire, an Internet consult, or a telephone consult. Prescriptions made through telemedicine under a valid doctor-patient relationship may include controlled substances subject to any limitations as set by the Board of Medicine	July 7, 2015
Florida ¹³	Controlled substances shall not be prescribed through the use of telemedicine except for the treatment of psychiatric disorders, including addiction	March 7, 2016
Indiana ¹⁴	An Indiana provider may prescribe controlled substances via telemedicine, without an in-person examination, if the prescriber satisfies the conditions outlined and the following conditions are met: The prescription is not for an opioid, unless the opioid is a partial agonist that is used to treat or manage opioid dependence The prescriber maintains a valid controlled substance registration The patient has been examined in-person by a licensed Indiana health care provider and the licensed health care provider has established a treatment plan to assist the prescriber in the diagnosis of the patient The prescriber has reviewed and approved that treatment plan and is prescribing for the patient pursuant to that treatment plan The prescriber complies with Indiana's prescription drug monitoring program The prescription for a controlled substance is prescribed and dispensed in accordance with Code 35-48-7	July 1, 2017
Michigan ¹⁵	A health care professional treating a patient via telehealth may prescribe a drug if both requirements are met: The health professional is a prescriber acting within the scope of his or her practice in prescribing the drug; and If the health professional is prescribing a controlled substance, he or she meets the requirements applicable to that health professional for prescribing a controlled substance	March 31, 201
Ohio ¹⁶	An Ohio physician may prescribe controlled substances via telemedicine, without an in-person examination, if the physician satisfies the steps outlined and when one of the listed situations exists (largely mirror exceptions under the federal Ryan Haight Act)	March 23, 2017
West Virginia ¹⁷	Remote prescribing without a previous in-person examination is permitted, including prescriptions for controlled substances, subject to certain limitations A physician who practices medicine to a patient solely through the utilization of telemedicine technologies may not prescribe to that patient any Schedule II controlled substances A physician may not prescribe any pain-relieving controlled substance listed in Schedules II through V as part of a course of treatment for chronic nonmalignant pain solely on the basis of a telemedicine encounter	June 11, 2016

addiction treatment, it is possible that some providers could enter the telemedicine space for financial gains rather than to serve the best interests of their patients. Monitoring of patient outcomes and a commitment to continuous quality improvement can help ensure that providers follow best and evolving evidence-based practices for buprenorphine treatment via telemedicine.

POLICY RECOMMENDATIONS FOR EXPANDING MAT VIA TELEMEDICINE

Telemedicine represents an integral component to comprehensively tackling the opioid crisis. For this modality to become a powerful tool, however, serious obstacles must be overcome. Congress must update the Haight Act to allow addiction treatment centers and

community mental health centers to register with the DEA as clinics, enabling them to prescribe controlled substances via telemedicine without a previous in-person examination. The DEA should activate the "special registration" provision, authorizing qualifying providers to use telemedicine without a required in-person examination and without the need for the patient to be present in a clinic. Several currently proposed bills attempt to tackle these issues.

Prominent among them is the Opioid Crisis Response Act of 2018, advanced by the Senate Health Education, Labor & Pensions Committee. This proposed legislation addresses a key issue with Haight Act implementation, by proposing to require the Attorney General to initiate this special registration process. Some

stakeholders remain concerned as to whether it goes far enough in light of the magnitude and complexity of the crisis.²² In addition, the US House's "Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act" passed the full House on June 22, 2018. Although the Congress is galvanized to act to mitigate the opioid crisis, it is actively considering dozens of bills²³ in this space, any of which requires considerable reconciliation to resolve differences and approval from both houses despite broad bipartisan support, as well as signature by the president, before becoming law; therefore, it is unclear that legislation to facilitate telemedicine for MAT will be enacted soon. Nevertheless, these initiatives in the Congress are to be strongly applauded and their expeditious enactment broadly supported: such enactment into law would address many of the challenges and barriers impeding alleviation of the opioid epidemic, and which we have delineated in the present commentary.

States should also authorize buprenorphine prescribing by approved providers through telemedicine without in-person examination. In addition, the Substance Abuse and Mental Health Services Administration should train providers with a waiver to prescribe buprenorphine in best telemedicine practices for MAT, as these standards evolve, to ensure both quality and continuity of care in this unique setting. These changes, in combination with a coordinated national strategy and intelligent funding, could help to expand OUD treatment in a meaningful way at the height of the opioid epidemic.

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- 12. Del. Code tit. 24, §1769D.
- 13. Fla. Stat. §64B8-9.0141.
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