Leveraging Telehealth in the United States to Increase Access to Opioid Use Disorder Treatment in Pregnancy and Postpartum During the COVID-19 Pandemic

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At the time of initial presentation to a virtual reproductive psychiatry clinic in April 2020, Ms. A was a 29-year-old single woman at approximately 21 weeks' gestation with her third pregnancy. She presented to treatment through a virtual care platform and indicated that she had problems with daily opioid use. Ms. A was introduced to opioid analgesics after the birth of her second child via emergent cesarean section in 2017. During her hospital stay after the cesarean section, she experienced significant postoperative pain, described as a constant, severe throbbing, and aching pain in her pelvis and lower back, and she was treated with oxycodone, with increasing dosages until her pain was adequately controlled. At hospital discharge, she was taking 60 mg/day of oxycodone and was given a 1-month supply of the medication. Ms. A continued the medication as prescribed, 15 mg every 6 hours. At 2 weeks postpartum, she attempted on her own to reduce the dose, but experienced significant pain that interfered with her ability to perform activities of daily living, including being the primary caregiver for her newborn and her other child. She resumed the prescribed dosage of medication, which was refilled at the same dosage at her subsequent obstetric follow-up appointment. She again attempted on her own to cut back on the dose, but she had returned to work at 5 weeks postpartum out of financial necessity, and, she reported, "I couldn't manage the pain and [the stress of] work during the day, being up all night with my daughter, and taking care of my son, and going through withdrawal. The pills made it all work somehow."

At 3 months postpartum, she requested another refill of the prescribed medication, which was denied by her obstetrician because he believed she was "addicted." She was told that if she was not able to stop taking the medication she would need "addiction treatment." She was instead provided with oxycodone 5 mg, a total of 20 tablets, and told to taper her medication. Ms. A began to experience significant withdrawal symptoms while trying to taper her medication but did not reach out for help because of her prior experience of being accused of "being addicted" and fear of being reported to the state's department of child welfare and social services. Ms. A began borrowing oxycodone tablets from a family member and continued to try to taper her medication. She reported feeling significant craving, symptoms of depression, and being unable to keep up with the demands of home and work while trying to reduce her opioid medication use.

At approximately 1 year postpartum, Ms. A began purchasing oxycodone tablets from a friend. She stated, "I knew at that point, I had a problem." Since 2018, she had made two attempts to get treatment, but was without health insurance and could not afford the cost. She was referred to a program that offered comprehensive services through a State Opioid Response grant, but the program was over an hour's drive from her home and required that she first attend an intensive outpatient program, which would have prevented her from working. While an evening intensive outpatient program was also offered for working clients, she was not able to afford the cost of additional childcare needed for attending the program in the evenings.

When she was unable to afford buying pills, she was offered heroin, which was significantly less expensive. She first began snorting heroin, and within a couple of months progressed to daily use and injection.

On presentation for treatment, Ms. A was using heroin daily, predominantly intravenously. "This became the focus of my every day—making sure I had what I needed [to not go into withdrawal] and making sure no one knew [that I was using]." Despite her attempts to conceal her use, her siblings were aware of it, which created significant relationship and family tension. When she learned that *continued* she was pregnant, she attempted to cut down her use but was unsuccessful because of the return of significant depressive and withdrawal symptoms as well as a lack of instrumental supports to care for her children long enough "so I could just get through this [withdrawal]."

When she learned of her third pregnancy, she knew she needed to see an obstetric provider but was afraid that child welfare services would get involved and remove her children from her physical custody. She also feared seeking obstetric services given the threat of COVID-19 and because her city was currently on a stay-at-home order. She began looking online and accessed a virtual care platform for pregnant or postpartum women with mental health or substance use problems and completed an online screen. She was contacted by telephone that same day by a care coordinator, who scheduled her for an appointment with a reproductive psychiatrist with addiction training the following morning via home-video visit. At that appointment, Ms. A was evaluated via videoconferencing and a treatment plan was initiated, including starting buprenorphine and relapse prevention therapy, as well as connecting her with a trusted obstetrician.

Ms. A successfully completed a buprenorphine home induction without side effects or precipitated withdrawal.

She tolerated buprenorphine well and stabilized on a dosage of 16 mg/day. In addition to weekly medication management, she began weekly relapse prevention therapy via videoconferencing from home. Further evaluation of her mental health history revealed a significant history of major depressive disorder beginning in her early twenties. The patient was monitored for depressive symptoms, which were minimal and could be addressed with weekly psychotherapy.

The clinician provided reassurance regarding child welfare involvement and addressed the patient's concerns. The clinician explained the South Carolina statemandated reporting requirements (each state its own legislation related to substance use in pregnancy and the postpartum period). Given her engagement in treatment for opioid use disorder, her response to it, and her ability to care for herself and her children, there was no concern about potential endangerment of her children, and therefore no report to the state child welfare agency was necessary. With reassurance, she was willing to establish care with an obstetrician whom the addiction provider had previously worked with. The patient attended prenatal care both in-person and via telemedicine when appropriate.

Ms. A's presentation is consistent with opioid use disorder (OUD), severe, as evidenced by escalating amounts of opioid use over time, unsuccessful attempts to quit or cut down use, craving, continued use despite persistent interpersonal problems and health consequences, and spending an excessive amount of time obtaining opioids. Numerous factors predisposed Ms. A to developing OUD and perpetuating her continued use as well as preventing her from receiving treatment. Medical professional, psychosocial, and economic factors included overprescribing of opioids at the time of hospital discharge without a clear plan for cessation; lack of medical providers' knowledge about addiction and how to safely taper prescription opioids; lack of social and instrumental support in the postpartum period; nonpaid maternity leave and early return to work; availability of opioids through friends and family members; emergence of depressive symptoms while attempting to taper opioids; lack of health insurance and its many implications, including lack of access to contraceptive care; and other gender-specific barriers to care, such as childcare responsibilities and legal consequences specific to substance use in pregnancy, including child welfare services involvement.

The standard of care for the treatment of perinatal OUD includes medication for OUD, with either methadone or buprenorphine (1), as part of a comprehensive treatment program including prenatal care, psychological interventions for relapse prevention, treatment of comorbid mental health conditions, and addressing psychosocial needs of women and the mother-infant dyad. Medication for OUD is a critical component of care. Continuation of medication treatment is associated with lower rates of relapse, longer duration of treatment, and improved maternal and obstetric outcomes, compared with discontinuation of treatment (2–4). Barriers to receiving the standard of care for OUD are numerous, including a paucity of available and accessible comprehensive treatment programs. The use of telehealth technology has the potential to increase access to and availability of comprehensive specialty services; however, federal and state laws and lack of health insurance coverage for critical components of this care have prohibited widespread adoption. Out of necessity to respond to the COVID-19 public health crisis, our health systems have been forced to reconsider and leverage telemedicine to deliver health services.

EPIDEMIOLOGY OF OUD IN PREGNANCY

Use and misuse of opioids among pregnant women has increased fivefold over the past decade (5–7), and more than 20,000 opioid-exposed births occur annually (8). From 1999 to 2014, the number of pregnant women with OUD in the United States more than quadrupled, increasing from 1.5 to 6.5 cases per 1,000 hospital births (9). The increasing prevalence of perinatal OUD and its effects on pregnant women and infants are of increasing public health concern, given the significant morbidity and mortality associated with this chronic disease (10, 11). Rates of relapse are extremely high

in the early postpartum period (12), and drug overdose is a leading cause of death during the postpartum year (13).

TELEMEDICINE FOR MEDICATION TREATMENT OF OUD AND INTEGRATION WITH PRENATAL CARE

Traditional methods of identification and treatment of OUD in pregnancy occur through the obstetrician/clinician or self-identification. The rate of identification is very low, and the rate of treatment is even lower. Only about 25% of pregnant women with OUD receive treatment, and fewer receive medication for OUD, even though it is the goldstandard treatment for OUD (14). Even among women who initiate medication treatment for OUD, over half (56%) will discontinue their medication by 6 months postpartum (4). Given the limited access to care among pregnant and postpartum women with OUD, telehealth serves as an effective and plausible treatment, with data indicating that rates of retention in treatment and substance use did not differ between those receiving integrated OUD treatment via telemedicine compared with those receiving it in person (15). Fortunately, few adaptations are needed to ensure safe and appropriate prescribing of medications for OUD via telemedicine, including, for example, in-home salivary toxicology screens that can be collected and interpreted during a telehealth video visit. If necessary, samples can be sent to a laboratory for confirmatory testing.

Critical barriers to uptake and accessibility of medications for OUD, particularly for rural and low-resource populations, were recognized well before the COVID-19 pandemic. Buprenorphine treatment, with its lower overdose risk profile and ability to be prescribed beyond traditional opioid treatment program settings (i.e., in primary care settings by waivered physicians), has long been touted as a potential tool for increasing access and uptake of medication treatment for OUD. However, two key regulatory barriers have limited the potential impact of outpatient buprenorphine on the OUD treatment landscape: 1) the requirement for a Drug Addiction Treatment Act of 2000 prescribing waiver and associated limits to patient census (16), and 2) the requirement of initial in-person medical evaluation prior to initiation of buprenorphine (17). Various patient and health care advocacy organizations have been lobbying for changes to these requirements since 2015, culminating in the Mainstreaming Addiction Treatment Act, which was presented on the Senate floor in July 2019 but ultimately failed to gain sufficient support.

Given the nationwide impacts of the COVID-19 pandemic, on March 19, 2020, the Substance Abuse and Mental Health Services Administration (SAMHSA) exempted opioid treatment programs from the requirement that they perform an in-person evaluation prior to initiating buprenorphine treatment (18). On March 31, 2020, in a joint statement, the Drug Enforcement Administration and SAMHSA announced that controlled substance prescriptions could be issued to patients via telemedicine without first conducting an initial in-person evaluation (19). Since the implementation of these changes, various groups have called for them to extend in perpetuity beyond the COVID-19 public health emergency (20).

The aforementioned policy exemptions made the telemedicine services for Ms. A possible. These exemptions have greatly facilitated access to OUD treatment during pregnancy, but the postpartum period remains a critical gap when health insurance benefits lapse for many women, increasing their risk for relapse, overdose, and death (13). Permanent changes to telemedicine policies and the extension of health insurance for the postpartum year has great potential to reduce maternal and newborn morbidity and mortality associated with untreated OUD.

Evaluation data from telemedicine services during the COVID-19 pandemic has the potential to inform an evidencebased reconsideration of restrictions and limitations that have traditionally hampered access to medications for OUD while still ensuring the appropriate balance between benefit and risk to the patient. Key data points from programs such as the one described in this case study will be important guideposts for future decisions regarding lifting regulations. Examples of key data points that are currently being collected include changes in program access since transition to a full virtual platform; changes in referral rates from obstetric providers across the state; changes in adverse event counts potentially related to waiver of initial in-person evaluation; treatment engagement and retention rates; and qualitative patient and provider insights regarding their experience with the full telemedicine program.

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Examination Questions: Guille et al.

- 1. Which medication is considered best practice for the treatment of opioid use disorder (OUD) among pregnant women?
 - a. Buprenorphine.
 - b. Methadone.
 - c. Medication for OUD should not be prescribed to pregnant women.
 - d. Both a and b.
- 2. What is included in a comprehensive treatment program for pregnant and postpartum women with OUD?
 - a. Prenatal care.
 - b. Psychotherapy for relapse prevention.
 - c. Treatment of comorbid mental health conditions.
 - d. All of the above.
- 3. What factors were barriers to OUD treatment for the patient described in the case?
 - a. Lack of social and instrumental support in the postpartum period.
 - b. Lack of health insurance.
 - c. Childcare responsibilities.
 - d. All of the above.