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Reimagining patient-centered care in opioid treatment programs: Lessons from the Bronx during COVID-19

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A B S T R A C T

Opioid treatment programs (OTPs) operate within a rigid set of clinical guidelines and regulations that specify the number of required OTP visits for supervised administration of methadone. To ensure physical distancing in light of COVID-19, the federal government loosened regulations to allow for additional flexibility. As OTP providers in the Bronx, NY, caring for more than 3600 patients in the epicenter of both the overdose and COVID-19 pandemics, we describe how our clinical practice changed with COVID-19. We halted toxicology testing, and to promote physical distancing and prevent interruptions in access to treatment for medications for opioid use disorder (MOUD), we drastically increased unsupervised take-home doses of MOUD. Within two weeks, we reduced the proportion of patients with 5–6 OTP visits per week from 47.2% to 9.4%. To guide treatment decision-making, we shifted focus from toxicology tests to other patient-centered measures, such as engagement in care and patient goals. In the initial three months, our patients experienced six nonfatal overdoses, no fatal overdoses, and 20 deaths attributable to COVID-19. This experience provides an opportunity to re-imagine care in OTPs going forward. We advocate that OTPs rely less on toxicology testing and more on the other patient-centered measures to guide decisions about distribution of take-home doses of MOUD. To minimize financial risk to OTPs and facilitate their transition to a more flexible model of care, we advocate for the reassessment of OTP reimbursement models.

Introduction

The COVID-19 pandemic has upended the delivery of opioid use disorder (OUD) treatment. Opioid treatment programs (OTPs) operate within a rigid set of clinical practices and rules established in the 1970s (Substance Abuse and Mental Health Services Administration, 2015). Originally designed to prevent overdose, diversion and misuse of methadone, state and federal regulations govern toxicology testing, frequency of required OTP visits for supervised methadone administration, and the number of allowed unsupervised take-home doses. When COVID-19 hit New York City (NYC) in early March 2020, like others (Peavy et al., 2020), we acted immediately to minimize the risk of SARS-CoV-2 infection to our patients. Within weeks, the Bronx would lead NYC in COVID-19-related mortality.

As Bronx, NY, physicians with a collective 55 years of experience treating OUD, we struggled to balance our patients’ access to medication for OUD (MOUD), their risk of SARS-CoV-2 exposure, and their risk of MOUD misuse and overdose. Our OTPs have provided OUD treatment since 1968, and now serve more than 3600 patients in the epicenter of the overdose epidemic. Of all NYC boroughs, the Bronx has the highest rates of overdose death (Nolan et al., 2019). Our patients also face intersecting challenges of structural racism, concentrated urban poverty, and chronic illness (O’Toole et al., 2014); 65% identify as Latinx and 17% as non-Hispanic Black, and 94% are insured by Medicaid. Although we were concerned about the potential risks of medication diversion, loss, theft, misuse, or overdose associated with increasing take-home doses, we prioritized maintaining consistent access to OUD treatment and reducing daily clinic population density by markedly increasing distribution of unsupervised take-home doses of MOUD.

Federal guidelines, clinical practice patterns, and reimbursement structures contribute to the rigidity of MOUD dispensing in OTPs. Federal guidelines delineate requirements for dispensing unsupervised take-home doses of MOUD to minimize the risk of diversion and misuse (Substance Abuse and Mental Health Services Administration, 2015). At the start of treatment, patients are required to attend OTPs 6 times a week and may receive a single unsupervised take-home dose of methadone weekly. Provided that patients meet other treatment requirements, OTP attendance may be decreased by one day weekly every 90 days, such that after 180 days, a patient can be considered for three take-home doses weekly. Federal guidelines specify 8-point criteria for consideration of unsupervised take-home methadone doses. These markers of treatment stability include recent drug use, stability of social relationships, and ability to safely store MOUD (Substance Abuse and Mental Health Services Administration, 2015).

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Mental Health Services Administration, 2015). However, in our clinical practice, abstinence is often weighted more heavily than other criterion, and active drug use is a common cause of a change in take-home dose schedules. Reimbursement to providers may also drive take-home dosing practice. Because New York State Medicaid, the largest payor in our OTP system, reimburses with every dosing visit, increasing take-home medication doses can result in a decrease in revenue. Though OTP daily attendance has benefits for patients who require a structured setting, increasing required OTP attendance can interrupt daily routines and serve as a barrier to treatment engagement (Tofight et al., 2019).

On March 16, 2020, in response to the COVID-19 pandemic, the Substance Abuse and Mental Health Services Administration (SAMHSA) issued an OTP guidance, allowing states to request exceptions to the usual criteria for take-home doses of MOUD: 1) up to 28 days for stable patients, and 2) up to 14 days for less stable patients able to safely handle medication (Substance Abuse and Mental Health Services Administration, 2020b). This was a stark contrast to the usual rigid guidelines. With support from the New York State Office of Addiction Services and Supports (OASAS), our OTPs halted toxicology testing on established patients and scaled up the dispensing of take-home MOUD.

We initially reduced OTP visits for patients at highest-risk for complications and death due to COVID-19. In the absence of concerns regarding patient ability to safely manage medication at home (e.g., history of dementia, not returning take-home bottles, or not taking take-home doses as prescribed), we reduced required OTP attendance to once every one to two weeks for patients over age 65, or with one of more of the following diagnoses: diabetes, cardiac disease, pulmonary disease, or immunosuppression. We similarly scheduled patients with diagnoses of OUD in early or sustained remission up to once monthly. Those with an active OUD diagnosis had their OTP visits reduced from five or six visits to as few as three visits weekly. Between March 9 and 22, 2020, we reduced the proportion of patients who came five or six days weekly from 47.2% to 9.4%. Our determination of a safe number of take-home doses was guided by interdisciplinary OTP clinicians’ assessment of patients’ ability to safely store and self-administer medication. In many cases we were not able to provide the fullest extent of take-home doses allowed under SAMHSA’s waiver due to concerns for patient safety.

At a time when almost all ambulatory care delivery shifted to telehealth, OTPs were among the few exceptions where in-person care continued. SAMHSA suspended mandates for in-person assessments prior to the initiation of MOUD for buprenorphine treatment, but not for methadone (Substance Abuse and Mental Health Services Administration, 2020a). Due to travel via public transportation, and OTP size, layout and patient volume, patients attending OTPs for MOUD dispensing were unable to maintain physical distancing while traveling to, and waiting in lines at, the OTPs. With COVID-19-related mortality disproportionately concentrated among Bronx residents, it became clear that we needed to do more to protect our patients and minimize their time in the OTPs (Fig. 1).

This approach to MOUD dosing was flexible and patient-centered. The elimination of toxicology testing facilitated a shift from including abstinence to guide MOUD dosing schedules to focusing more on patient-centered measures, such as treatment engagement and other patient goals. We were also able to adjust in real-time in response to incidents of potential misuse or diversion (e.g., patients not returning take-home bottles, or presenting for MOUD earlier than would be expected). In these cases, we adjusted take-home schedules to allow for the most take-home doses possible while maintaining patient safety.

Our early outcomes support the safety of this approach. To ascertain outcomes, a physician reviewed the events reported to OTP physicians and nurses during hospital verification of MOUD doses, inpatient admission notes and discharge summaries, family reports, and counselor notes. Between March 16 and May 31, 2020, among the 3600+ receiving MOUD across our five OTPs, six experienced nonfatal overdoses, and none experienced a fatal overdose. This is in comparison to the two nonfatal overdoses and one fatal overdose that patients experienced between January 1 and March 15, 2020. The lack of SARS-CoV-2 PCR tests during this period precludes meaningful assessment of confirmed infection rates. Through May 31, we have had 20 patient deaths attributable to COVID-19.

What will the future of OUD care in OTPs hold? In the short-term, we must continue to mitigate the risks of COVID-19 to OTP patients. We need to formally evaluate outcomes associated with dosing schedule changes, including quality of life, substance use, treatment engagement, diversion, and overdose—both during surge periods when more people remain at home, and when social distancing measures are loosened and fear of infection abates. We need to use these data to guide clinical practice and national and state policy. As COVID-19 cases decline, and health systems and states strategize to “go back to normal,” we advocate that the lessons we have learned during the COVID-19 pandemic be a catalyst for permanent change to OTP practice and policy.

Fig. 1. Change in Bronx, NY OTP visit schedules during COVID-19 pandemic.
Note. Solid black line indicates cumulative Bronx, NY COVID-positive deaths based on New York City Department of Health and Mental Hygiene data (New York City Department of Health and Mental Hygiene, 2020).
1. We advocate for flexible, patient-centered care in opioid treatment programs

We know that many people benefit from the structure, support, and services that OTPs offer; others may not require that structure, or may find regular visits to OTPs burdensome. We know that active drug use poses challenges with medication adherence, and that provision of directly observed therapy can improve medication adherence and clinical outcomes. And, as we have observed among the people living with HIV and other chronic diseases who are in our care, the majority of people who use drugs can skillfully and safely self-manage medication taking. OTPs must balance structure and flexibility in ways that are aligned with patients’ treatment goals and needs.

2. Clinical decision-making should focus on a range of meaningful patient-centered measures

Instead of prioritizing abstinence to guide take-home dosing schedules, clinicians should weigh participation in medical and mental health care, family engagement, peer work, vocational training, and employment. Toxicology testing can serve as an objective measure of drug use and as a clinical tool to guide discussions of patients’ substance use disorder treatment, but should not receive disproportionate weight as a criterion for unsupervised dosing. During COVID-19, having halted toxicology screening on established patients, we have had the opportunity to put these principles into practice and successfully individualize treatment while maintaining patient safety and engagement.

3. Payment to OTPs should be reimagined to allow programs to provide patient-centered care

In NY State, Medicaid reimbursement of OTP care is contingent upon delivering discrete services including supervised MOUD dosing visits with no reimbursement available for unsupervised take-home doses. This incentivizes OTPs to conduct more MOUD dosing visits regardless of clinical stability, rather than provide multiple take-home doses of MOUD to clinically stable patients, and risk losing reimbursement. This model has temporarily shifted to a more patient-centered, bundled payment model during the pandemic. We recommend reassessment of state Medicaid OTP reimbursement models to ensure adequate reimbursement for services provided to patients with fewer required OTP visits. This could be accomplished by reimbursing for take-home doses of MOUD or by continuing the modified bundled payment.

By sustaining these changes in a post-COVID-19 era, we imagine the future of OUD care in OTPs as less burdensome and more flexible for our patients. We submit that this new treatment paradigm will be better suited to foster patient engagement through patient-centered approaches.

CRediT authorship contribution statement

Giliane Joseph: Conceptualization, Writing – original draft, Data curation, Writing – Reviewing and Editing; Kristine Torres-Lockhart: Conceptualization, Writing – original draft, Data curation, Writing – Reviewing and Editing; Melissa Stein: Conceptualization, Writing – original draft, Investigation, Writing – Reviewing and Editing; Pamela Mund: Writing – original draft, Investigation, Writing – Reviewing and Editing; Shadi Nahvi: Conceptualization, Writing – original draft, Writing – Reviewing and Editing, Supervision.

Declaration of competing interest

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