


COVID-19 Adaptations in the Care of Patients with Opioid Use Disorder: a Survey of California Primary Care Clinics



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BACKGROUND: With the onset of the COVID-19 crisis, many federal agencies relaxed policies regulating opioid use disorder treatment. The impact of these changes has been minimally documented. The abrupt nature of these shifts provides a naturalistic opportunity to examine adaptations for opioid use disorder treatment in primary care.

OBJECTIVE: To examine change in medical and behavioral health appointment frequency, visit type, and management of patients with opioid use disorder in response to COVID-19.

DESIGN: A 14-item survey queried primary care practices that were enrolled in a medications for opioid use disorder statewide expansion project. Survey content focused on changes in service delivery because of COVID-19. The survey was open for 18 days.

PARTICIPANTS: We surveyed 338 clinicians from 57 primary care clinics located in California, including federally qualified health centers and look-alikes. A representative from all 57 clinics (100%) and 118 staff (34.8% of all staff clinicians) participated in the survey.

MAIN MEASURES: The survey consisted of seven dimensions of practice: medical visits, behavioral health visits, medication management, urine drug screenings, workflow, perceived patient demand, and staff experience.

KEY RESULTS: A total of 52 of 57 (91.2%) primary care clinics reported practice adaptations in response to COVID-19 regulatory changes. Many clinics indicated that both medical (40.4%) and behavioral health visits (53.8%) were now exclusively virtual. Two-thirds (65.4%) of clinics reported increased duration of buprenorphine prescriptions and reduced urine drug screenings (67.3%). The majority (56.1%) of clinics experienced an increase in patient demand for behavioral health services. Over half (56.2%) of clinics described having an easier or unchanged experience retaining patients in care.

CONCLUSIONS: Many adaptations in the primary care approach to patients with opioid use disorder may be

temporary reactions to COVID-19. Further evaluation of the impact of these adaptations on patient outcomes is needed to determine whether changes should be maintained post-COVID-19.

KEY WORDS: COVID-19; opioid use disorder (OUD); medications for opioid use disorder (MOUD); telehealth; office-based opioid treatment (OBOT).

J Gen Intern Med 36(4):998–1005

DOI: 10.1007/s11606-020-06436-3

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Patient access to medications for opioid use disorder (OUD)—including buprenorphine and methadone—remains one of the largest hurdles to opioid use disorder treatment. Despite robust evidence of these medications’ impact on reducing mortality and overdose, fewer than one-third of patients receive them in any care setting.^{1, 2} Many barriers limit access: prescriber waiver requirements, concerns about medication diversion and misuse, stigma toward and internalized by patients, transportation availability, and mandatory in-person induction visits.^{3–5} Given the effectiveness and safety of these medications for opioid use disorder treatment,^{1, 2} there has been a long-standing call to ease access and remove barriers.^{6–9}

The COVID-19 pandemic has caused major disruptions to the care of patients with opioid use disorder. California was among the first states with confirmed COVID-19 cases—with a daily average of 1678.4 new cases during the study period—and the first to employ a statewide shelter-in-place order.^{10, 11} State edicts prompted health care to move virtual and subsequent federal guidelines relaxed care restrictions. Though these changes present challenges for clinics, they also provide a naturalistic experiment on the removal of some barriers to OUD care delivery. Many treatment programs require in-person medication initiations, frequent visits, and negative urine drug screenings (UDS) before prescribing. These practices became challenging to maintain with the onset of COVID-19 restrictions.¹² It is important to maintain

Prior Presentations The information presented in the article have not been submitted to other journals or presented at any conferences.

Received July 27, 2020

Accepted December 9, 2020

Published online January 28, 2021

continuity of care for patients with opioid use disorder, and the risk of adverse health outcomes—such as overdose and use recurrence—increases significantly with medication discontinuation.¹³ With the knowledge that patient retention is essential for opioid use disorder treatment, the Drug Enforcement Administration (DEA) dropped the in-person exam requirement for buprenorphine initiations, allowing prescribers to use telemedicine in late March.¹⁴ The Substance Abuse and Mental Health Services Administration (SAMHSA) also confirmed these changes.^{15–17} The Department of Health and Human Services (HHS) relaxed HIPAA rules, permitting health care providers—across medical specialties—to use non-public facing communications technology for telehealth appointments.¹⁸ With no federal mandate for urine drug screenings or frequent visits, clinics adjusted their own protocols to address this urgent need. Agencies only designated these reforms for the duration of the COVID-19 crisis, with an eventual return to precedent.

Addiction specialists are calling for the sustainable expansion of these new avenues for low-barrier care.^{19–22} It is therefore important to document clinic modifications resulting from relaxed federal guidelines. These unprecedented care delivery trends may provide lessons on reforms in the care of patients with opioid use disorder.

This report is the first to present primary care data on COVID-19 changes to the care of patients with opioid use disorder. We surveyed a sample of 57 primary care, predominantly federally qualified health care center (FQHC), practices. The resulting insights on staff experience with and practitioners' preference for lower-barrier care may support re-evaluation of existing policies on the care of patients with opioid use disorder. Primary care practices may have the capacity and insight to lead the way.

METHODS

Participants

Participants included 338 staff members across 57 primary care clinics enrolled in an existing medication for opioid use disorder (MOUD) treatment expansion project. These primary care clinics include federally qualified health centers (FQHC), FQHC look-alikes, hospital-affiliated ambulatory care clinics, Indian Health Service, and rural health clinics. The clinics varied by number of employees, patient panel size, and stages of opioid use disorder care implementation (e.g., number of buprenorphine-waivered prescribers, number of patients prescribed buprenorphine). Clinic opioid use disorder care capability was determined in the previously mentioned study on opioid use disorder treatment expansion. Clinics were labeled *start-up* if they had a small number of x-waivered providers and few patients and *scale-up* if they were more established in their OUD care. These categorizations were developed by an expert team with qualifications in addiction medicine, addiction psychiatry, and primary care management and correspond

to Aarons et al. Exploration, Preparation, Implementation and Sustainment (EPIS) stages: Exploration and Preparation (start-up OUD practice) and Implementation and Sustainment (scale-up OUD practice).²³ Many clinics resided in rural and/or medically underserved areas. Study staff surveyed prescribers (medical director, physician, physician assistant, nurse practitioner), behavioral health personnel (social work, clinical psychologist, mental health therapist, substance use counselor, behavioral health manager), and others (nurse manager, nurses, medical assistant, clinical administrator, program coordinator).

Survey Development and Measures

The 14-item survey collected data on how primary care clinics have adapted their practices for patients with opioid use disorder since the COVID-19 pandemic. Initial survey items came from DEA and SAMHSA pandemic-specific modifications to existing medication and opioid use disorder care guidelines. We sourced additional items from recommendations presented in a 3-hour-long webinar. The Center for Care Innovations hosted the webinars that were designed to provide pandemic transition support. Important practice change topics emerged as themes from the interactive discussion among attendees. Through an iterative process, a team of subject matter experts—including an addiction psychiatrist, a clinical psychologist, and two quality improvement specialists—further refined and finalized the survey.²⁴

The final survey is composed of 14 items across seven domains: (i) medication visits, (ii) behavioral health visits, (iii) medication management, (iv) urine drug screenings, (v) workflow, (vi) patient demand, and (vii) staff experience. Each category assessed both frequency and delivery modalities. The survey had an open-ended textbox at the end of the survey for respondents to comment on their experiences with adaptations to their clinic practice. A sample domain with corresponding items is listed in Table 1.

Table 1 Sample Item from Participant Survey

Please indicate changes that have been made to medication visit type (in person = in clinics; virtual = phone or video)
[Check all that apply]

We have not made any changes to our in-person initial MOUD visits or follow-up MOUD visits
We do not offer any virtual visits for patients starting MOUD
Some visits for patients starting MOUD are in-person and some are virtual
All visits for patients starting MOUD are virtual
We do not do any virtual options for follow-up MOUD visits
Some follow-up MOUD visits are in-person and some are virtual
All follow-up MOUD visits are virtual
In-person follow-up MOUD visits are less frequent but no longer than one month apart
Follow-up MOUD visits are as frequent but a combination of in person and virtual
Follow-up MOUD visits are as frequent and all virtual
Follow-up MOUD visits are less frequent and all virtual

Adaptation to Routine Medication Practices. To examine how clinics made adaptations to medication practice, respondents checked statements ranging from no adaptation (e.g., no changes) to complete adaptation (e.g., fully virtual telehealth for medications for opioid use disorder). Five practice adaptation categories were assessed: medical visits, behavioral health counseling visits, medication management, urine drug screenings (UDS), and clinic workflow. Respondents selected which statement reflected their current practice. Frequency (increase, decrease, no change) and modality (all virtual, all in-person, and combination) questions were asked for medication visits, behavioral health visits, urine drug screening questions (Table 1). Medication management and clinic workflow questions focused on duration, dose, and presence/absence of specified changes. The survey also requested a breakdown of percent of virtual visits, patients on buprenorphine injectable/implants, and patients on injectable naltrexone before and since April 2020. They could select multiple response options in each set of questions, marking all that apply.

Staff Perception of Patient Response and Staff Experience. For the sixth domain, respondents were asked to select items corresponding to their perception of COVID-19-related changes to patient care. These statements surveyed both patient demand for medication and counseling visits and staff perception of patient preference for delivery modality. The seventh domain evaluated staff experience during COVID-19. Respondents were asked to select wellness statements that apply to them. These statements describe staff experience with clinic staffing, work location, personal wellness, and clinic support.

Procedure

The survey was administered between April 20 and May 8, 2020. An anonymous Qualtrics link was emailed to 338 staff members within the 57 primary care clinics. Program leadership sent three reminder emails, each spaced a week apart, to ensure timely response from staff members. The datasets analyzed during the current study are available from the corresponding author upon request.

Ethics

Prior to survey distribution, a waiver of consent was obtained from the Stanford Institutional Review Board. An anonymous survey link was used to ensure the anonymity and confidentiality of participant data. No identifiable information was collected from participants.

Statistical Analysis

Descriptive statistics depict respondent characteristics at the clinic and the staff level. To aggregate data at the clinic level,

cases of discordant response (i.e., disagreement between the respondents from the same clinic) were resolved by selecting the response of the prescriber; if no prescriber response was present for a clinic, then the response of the leadership role (e.g., substance use director, nurse manager) was used. The study deferred to clinic leadership and prescriber responses given their clinical and administrative responsibilities. These roles likely had the most familiarity with the clinic's opioid use disorder practice adaptations.

Aggregated response percentages assessed clinic-level and medication-specific adaptations since the pandemic. Chi-square tests were performed to examine differences in *start-up* versus *scale-up* clinic responses and in staff wellness comparison of leadership versus other staff members. All analyses were performed using SPSS Version 25 and R Version 4.0.1.

RESULTS

At least one staff member from all 57 clinics completed the survey. Response rate for clinics was therefore 100% and that of individual staff members was 34.8% (118 out of 338 surveyed individuals). Respondents were evenly distributed across role category: prescribers (32.2%), behavioral health staff (27.1%), and others (33.9%). Prescribers include physicians, nurse practitioners, and physician assistants. The "Other" category is comprised of nurse manager, nurses, medical assistant, clinical administrator, and program coordinator. Fifty-one percent of clinics were *scale-up* in terms of opioid use disorder care capability. Forty-nine percent were *start-up* and in the early stages of integrating opioid use disorder care into their practice. Characteristics of participating clinics are presented in Table 2.

Medication and Behavioral Health Visits. A majority (52/57, 91.2%) of clinics made adaptations to their opioid use disorder care practices in response to COVID-19. The majority of clinics reported that changes were made to both their medication and behavioral health visits (Fig. 1). Most notably, appointments transitioned to a virtual format. Remaining in-person visits tended to be for medication induction although some did occur virtually. Frequency of visits appears to remain unchanged.

We have increased telehealth visits for established and stable patients. However, it is too high-risk and liability is involved with new patients. We do not establish care or take new patients by telehealth or virtual visits. The risk does outweigh the reward in this case in our professional assessment and observation. We will provide follow up counseling, behavioral health, and

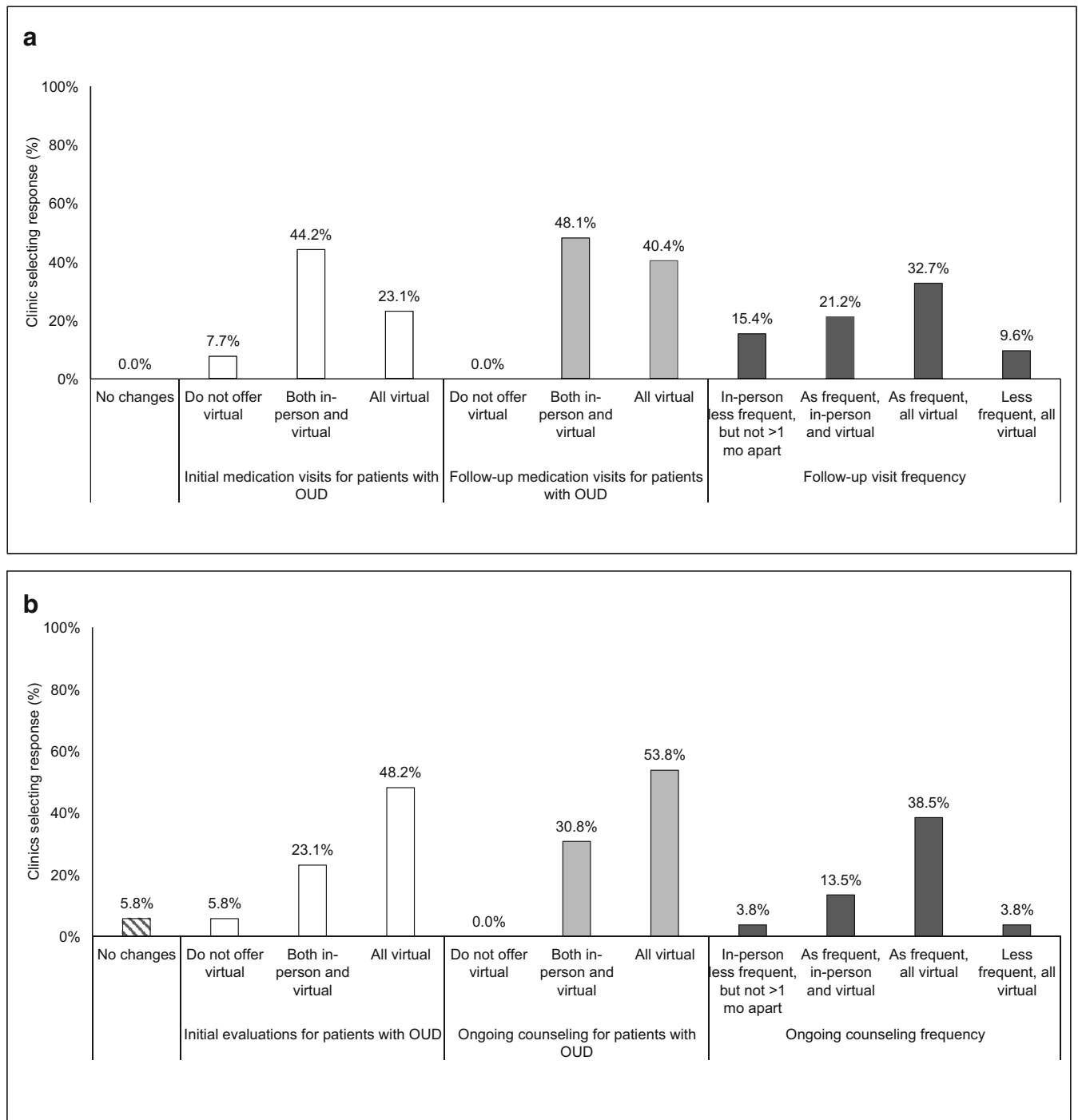


Figure 1 Adaptations for initial and ongoing visits, by medication and behavioral/counseling services (n = 57). a Reported adaptations for medication visits. b Reported adaptations for behavioral health and/or counseling visits. Note: Clinics could select multiple response options; percentages may not add to 100%. All opioid use disorder (OUD) references are in acronym form.

I feel like I am working harder at home, being paid less, being pushed by management to increase productivity, and trying to balance home life with children who are largely being left to fend on their own during clinic hours.—Anonymous

DISCUSSION

Summary of Findings

Given the federal relaxation of practice guidelines in the care of patients with opioid use disorder during the COVID-19 era, changes to delivery were expected. This study documents the

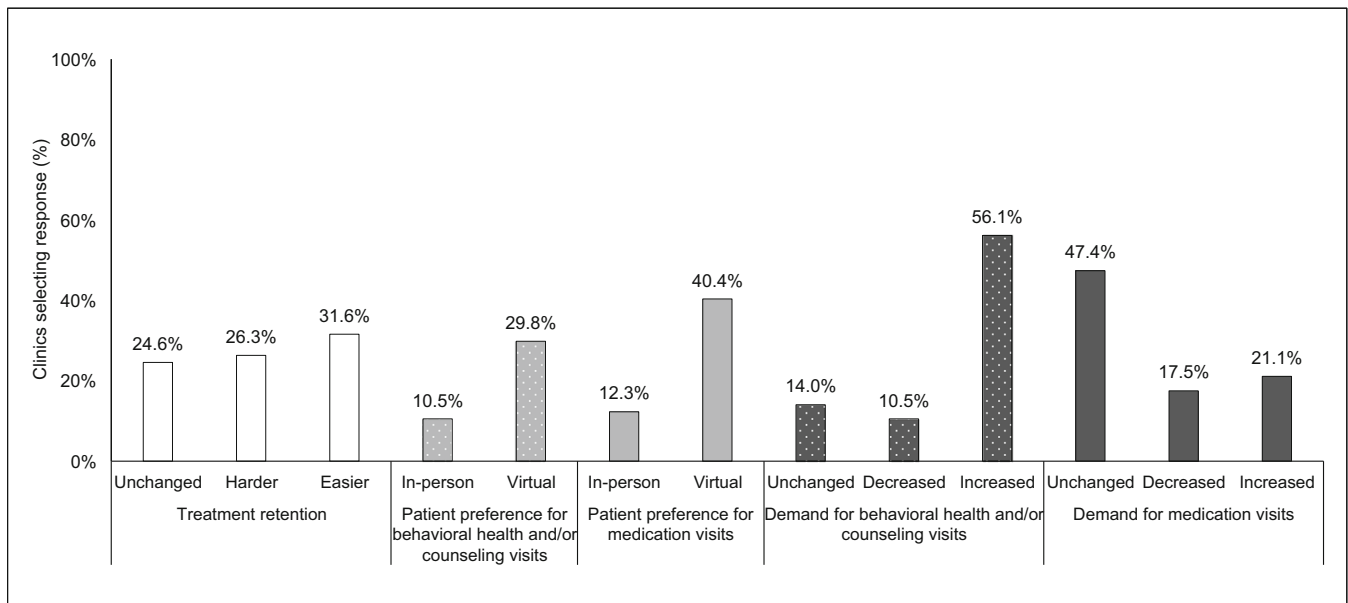


Figure 2 Adaptations for patient retention, preference, and demand, by visit type (n = 57). Note: Clinics could select multiple response options; percentages may not add to 100%.

nature of these changes for a small subset of primary care practices. Almost all clinics, 91.2%, reported adaptations since April. Almost half of all medication and behavioral health visits moved to virtual formats with similar reported frequency. Demand for behavioral health and counseling services increased, while demand for medication-specific care remained largely unchanged and stable. Over half of practices report unchanged or easier experiences retaining and engaging patients in care. Practices reported prescribing longer doses of buprenorphine and reduced frequency of urine drug screenings.

Several of these changes were expected and may be explained, in part, by existing literature. Social supports and positive reinforcements that aid in recovery and prevent relapse may be absent for patients during “shelter-in-place” orders and social distancing requirements.²⁵ As such, recent commentary in the field warned of an increased need for behavioral health support during COVID-19, reflected in these survey results.^{20, 22} Practitioners in our survey reported prescribing longer doses of their medications, significantly higher for clinics with higher OUD capabilities. This, along with decreases in urine drug screenings, may indicate renewed patient trust and prescribers prioritizing patient safety before their concerns for diversion and misuse.³ The divergence in reported support between leadership and non-leadership staff is striking and should be remedied to support achievement of the quadruple health care aim and address possible pandemic burnout.²⁶ This aim emphasizes improvements to work-life of health care providers in addition to better health, better care, and lowest cost to patients.²⁷ Even in the advent of significant protocol adaptations, approximately two-thirds of clinics report unchanged or easier time retaining and engaging patients.

This is a key finding worth investigation as patient retention and care engagement are essential for reducing overdose and adverse health event risk.¹³

Limitations and Next Steps

Inherent in survey data, these results are largely descriptive and non-causal. The small, and predominantly FQHC makeup of the sample, limits generalizability beyond primary care. Clinics in the sample were already prescribing medications and enrolled in an opioid use disorder expansion program. This could indicate a bias in acceptability and willingness to prescribe medications for the care of patients with opioid use disorder compared to other practices. Patient preferences were reported by clinicians, which is an inadequate proxy for accurate measure of patient experience. Only 38 prescribers (32.2%) responded across the 57 clinics and respondent role (prescribers, nurse practitioners, and administrators) varied—though evenly distribution—between clinics. Differential access to information about clinic functionality and perspectives between leadership, prescribers, and non-prescribers may limit possible comparison between clinics. Given the lack of temporal markers, it is difficult to assign motivations (e.g., a desire to social distance or an inclination for ease of access) to reported preferences for virtual care. Future studies should explore if patients themselves prefer virtual opioid use disorder and behavioral health care, with and without the desire and pressure to social distance. The field should also explore the impact of relaxed regulations during the COVID-19 pandemic on opioid treatment programs (OTPs). These clinics face steeper restrictions, and required in-person appointments for schedule-II medications prior to COVID-19. The long-term impact of these changes in

relation to patient retention and outcomes is still unknown. The onset of the COVID-19 pandemic has provided a natural experiment on the removal of barriers to opioid use disorder care. Researchers should take advantage of these changes to advance our understanding of treatment access in the primary care and substance use treatment fields.

Both individuals with opioid use disorder and those at risk for COVID-19 share high rates of chronic health comorbidities, tenuous housing, and social risk factors.^{19, 20, 22} There is an immediate need to evaluate the intersection of these two crises. This study documents primary care opioid use disorder practice adaptations in response to COVID-19. It reveals a transition to virtual care for medications for opioid use disorder and significantly increased demand for behavioral health services. Telehealth may reduce transportation barriers and COVID-19 infection risks for patients and practitioners in the short term. Re-evaluating policies such as in-person appointments and medication dosage requirements may expand care access for patients with opioid use disorder in the long term. Calls to relax licensure requirements for prescribing, reduce prescribing requirements, and increase telemedicine predated the COVID-19 crisis.^{21, 28} Management of opioid use disorder should be treated like any other chronic health condition. The field should evaluate which protocols hinder or advance this outlook in order to tackle this complex illness.²⁹ It is unclear whether changes to treatments for patients with opioid use disorder will or should perpetuate after the COVID-19 crisis.²¹ As many of the pandemic-precipitated adaptations are not exclusive to opioid use disorder management, this reckoning of re-evaluation should extend across all transformations of medical practice.

Acknowledgments: This study would not have been possible without the staff, clinicians, and patients of the clinics involved. We are grateful to the staff of the Center for Care Innovations, for providing funding for the opioid use disorder treatment expansion study from which the clinics were surveyed. The authors would like to specifically thank the staff of the Center for Behavioral Health Services and Implementation Research for manuscript review and editing feedback.

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Funding Funding was provided by a medications for opioid use disorder (MOUD) expansion contract to the Center for Care Innovations from the State of California Department of Health Care Services through the US DHHS SAMHSA State Opioid Response mechanism and from the Cedars-Sinai Community Benefit Giving Office.

Data Availability: The datasets analyzed during the current study are available from the corresponding author upon request.

Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

Disclaimer: The views expressed in the submitted article are the authors' own and not an official position of the institutions or funders.

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