

# Navigating addiction treatment during COVID-19: policy insights from state health leaders

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## Abstract

To mitigate pandemic-related disruptions to addiction treatment, US federal and state governments made significant changes to policies regulating treatment delivery. State health agencies played a key role in implementing these policies, giving agency leaders a distinct vantage point on the feasibility and implications of post-pandemic policy sustainment. We interviewed 46 state health agency and other leaders responsible for implementing COVID-19 addiction treatment policies across 8 states with the highest COVID-19 death rate in their census region. Semi-structured interviews were conducted from April through October 2022. Transcripts were analyzed using summative content analysis to characterize policies that interviewees perceived would, if sustained, benefit addiction treatment delivery long-term. State policies were then characterized through legal database queries, internet searches, and analysis of existing policy databases. State leaders viewed multiple pandemic-era policies as useful for expanding addiction treatment access post-pandemic, including relaxing restrictions for telehealth, particularly for buprenorphine induction and audio-only treatment; take-home methadone allowances; mobile methadone clinics; and out-of-state licensing flexibilities. All states adopted at least 1 of these policies during the pandemic. Future research should evaluate these policies outside of the acute COVID-19 pandemic context.

**Key words:** COVID-19; addiction treatment; implementation research; qualitative.

## Introduction

The COVID-19 pandemic exacerbated substance use and overdose and disrupted addiction treatment in the United States.<sup>1–5</sup> Socioeconomic stressors and social isolation, both heightened during the pandemic, are well-established risk factors for substance use, addiction, and overdose.<sup>1,2,6</sup> The number of overdose deaths during the pandemic in the United States increased from 70 000 in 2019 to nearly 92 000 deaths in 2020 and over 109 000 in 2022.<sup>7,8</sup> Addiction treatment was disrupted during the pandemic due to system closures, transitions to telehealth, and exacerbation of provider shortages,<sup>3–5,9,10</sup> affecting care for people newly seeking treatment as well as clients seeking to continue treatment begun pre-pandemic. Even brief disruptions to treatment can be life-threatening, as interruptions can prompt a return to drug use and the attendant risk of overdose for people experiencing addiction.<sup>11</sup>

Addiction treatment in the United States is guided by a web of policies at the federal and state levels.<sup>12,13</sup> Federal policies provide the outline for addiction treatment through standards for federal treatment programs and prescribing practices, and state officials build upon this foundation to delineate specific rules shaping treatment in their state.<sup>14</sup> Historically, addiction treatment—particularly treatment with the opioid agonist medications for opioid use disorder (MOUD) buprenorphine and methadone—has been one of the most tightly regulated

health care sectors in the United States.<sup>15–17</sup> Leading up to the pandemic, there were growing calls among addiction treatment experts to loosen regulations to make MOUD easier to access,<sup>15,17,18</sup> with some success expanding office-based prescribing of buprenorphine.<sup>19</sup> However, under federal law at the onset of the pandemic, buprenorphine for opioid use disorder (OUD) could only be prescribed by office-based providers who completed additional training and obtained a Drug Enforcement Administration (DEA) waiver, and methadone could only be dispensed by specialty clinics that required most patients to visit every day for their doses.<sup>20,21</sup> State-level policies restricted telemedicine prescribing of MOUD and often allowed use of prior authorization for MOUD by insurers.<sup>14,22</sup>

To mitigate pandemic-related disruptions to addiction treatment, US federal and state governments made significant changes to policies governing the way treatment is delivered. These pandemic-response changes laid the groundwork for potentially permanent reforms to the addiction treatment sector.<sup>23–25</sup> Key federal policy changes—which set the stage for changes at the state level—included the Centers for Medicare and Medicaid Services (CMS) telehealth expansions (CMS Medicare rules often serve as the blueprint for other insurers), the Substance Abuse and Mental Health Services Administration (SAMHSA) rule allowing some patients to take home up to a 28-day supply of methadone, and the federal government's waiver of the Ryan Haight Act's

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requirement for in-person examination prior to prescription of a controlled substance, which allowed for buprenorphine induction via telehealth.<sup>26,27</sup>

States, which oversee and direct addiction treatment through governing bodies like addiction treatment agencies and licensing boards, played a central role in implementing federal pandemic response policies regarding addiction treatment. States also enacted and implemented their own policies, such as laws requiring fully insured commercial insurers operating in the state and/or state Medicaid programs to expand coverage of addiction treatment services delivered via telehealth.<sup>28</sup> Despite their focal role in the rapidly shifting addiction treatment landscape, the perspectives and experiences of state leaders implementing these policies over the course of the pandemic have not been examined via in-depth qualitative research. We addressed this gap with a qualitative study designed to characterize leaders' experiences implementing pandemic response policies and identify policies that leaders believed should be sustained long-term.

## Data and methods

We interviewed state policy implementation leaders from 8 states with the highest per-capita COVID-19 death rate between January 1, 2020, and September 22, 2021, as reported by the Centers for Disease Control and Prevention (CDC) COVID Data Tracker.<sup>29</sup> The 8 states (Arizona, Indiana, Louisiana, Mississippi, Nevada, New Jersey, New York, and South Dakota) encompassed 2 states in each of the 4 US Census regions (Northeast, Midwest, South, and West). Recruitment focused on individuals with professional experience related to implementation of policies affecting the delivery of addiction treatment services, including addiction-specific policies and broader policies affecting addiction treatment and other services (eg, emergency declarations pertaining to the entire health care sector). An initial set of experts were purposively recruited via email from the state health agencies tasked with implementing state policy changes related to addiction treatment services during the pandemic. We then asked state agency interviewees to identify additional leaders in their state with professional expertise related to implementation of state addiction treatment policies during the pandemic (snowball sampling).

The interview guide (see [Appendix S1](#)) was drafted based on a review of the literature and the study's aim to understand perspectives on the utility and implementation of addiction treatment policy changes during the pandemic. The domains of the guide were as follows: (1) policies that did and did not support the delivery of addiction treatment services, (2) facilitators and barriers to implementation of these policies, and (3) considerations on long-term sustainment of these policies. Constant comparisons were used to identify policy themes after each interview; interviews were conducted in each state until data saturation was reached, defined as the point when no new themes emerged from interviews and no additional interviewees were recommended for snowball sampling. Semi-structured interviews were conducted by a single study team member from April through October 2022. Interviews were conducted over the phone, lasting an average of 42 (21–59) minutes. Oral consent was obtained at the beginning of each interview. All interviews were audio-recorded and transcribed for analysis, with personally identifying information

removed from transcripts. No incentives or rewards were offered to study participants.

Transcripts of interviews were analyzed using summative content analysis to create state-specific memos that aggregated the number of times that interviewees identified a policy that they perceived would, if sustained, benefit addiction treatment delivery long-term. While not the study's focus, for context, we also identified state policies that interviewees viewed as supporting addiction treatment during the pandemic but irrelevant outside the pandemic context. Generated memos summarized interviewees' perceptions of policy implementation strategies and challenges and considerations for long-term sustainment of policies. These state-specific memos were created by a single study team member and discussed among the entire study team to develop a thematic framework for a codebook that applied across states and focused on interviewees' perceptions of pandemic response policies. The final codes were applied across interview transcripts using Lumivero's NVivo 12.

Following qualitative interviews, we conducted legal research to characterize the presence of identified policies in all 50 US states, including, but not limited to, the 8 states in the qualitative sample. State policies were identified and retrieved using multiple legal research methods. Legislation and official regulations were available in legal research databases like Thomson Reuters Westlaw. However, because most COVID-era policies were temporary, states often implemented these policies through executive order or agency policy announcement. For these policies, state COVID websites were searched and systematically reviewed for relevant policies. Because these policies were atypical in format and shifted rapidly, we sought to validate our policy findings against other policy compilations where possible. Our policy findings were compared with datasets compiled by Manatt, Kaiser Family Foundation, the Center for Connected Health Policy, the National Academy for State Health Policy, the COVID-19 state policy database, the Alliance for Connected Care, and the Federation of State Medical Boards (see [Appendix S2](#)).<sup>27,30,31</sup> To validate which states had requested waivers from SAMHSA to provide take-home methadone, we filed a Freedom of Information Act (FOIA) request with the SAMHSA FOIA Officer. Some policies, including the policy allowing telehealth prescriptions for buprenorphine, were rooted in federal action, so many states that had this flexibility in place did not formally announce or adopt that policy. For these instances, we used secondary sources, news media, and government official actions to identify whether a state had a policy (see [Appendix S2](#)). This research was reviewed and approved by the Johns Hopkins Bloomberg School of Public Health Institutional Review Board.

## Results

Semi-structured interviews were conducted with 46 policy implementation leaders across state and local health agencies, treatment facilities, and other relevant organizations with expertise related to the implementation of the policies of interest ([Table 1](#)). Interviewees identified 4 types of state policies supporting access to addiction treatment during the pandemic that have the potential to enhance treatment access and quality long-term. These policies include the following: (1) the relaxing of telehealth restrictions, including on the induction of buprenorphine for OUD and use of audio-only appointments;

**Table 1.** Professional affiliation of the 46 interviewees.

	No. (%)
Professional affiliation and role	
State behavioral health agency (eg, Assistant Commissioner, Executive Director, State Opioid Treatment Authority)	26 (56.5%)
State or county health department (eg, Health Officer, Director)	11 (23.9%)
Behavioral health services organizations (eg, Manager, Assistant Vice President)	5 (10.9%)
Other (eg, academic research, Attorney General's office official)	4 (8.7%)
State	
Arizona	5 (10.9%)
Indiana	8 (17.4%)
Louisiana	11 (23.9%)
Mississippi	3 (6.5%)
Nevada	6 (13.0%)
New Jersey	4 (8.7%)
New York	6 (13.0%)
South Dakota	3 (6.5%)

(2) take-home medication allowances for methadone treatment of OUD; (3) mobile methadone clinic allowances; and (4) loosening out-of-state licensing restrictions. Interviewees' perceptions of these policies' utility and implementation strategies and challenges are summarized below. While not the focus of this study, interviewees identified 2 types of policies that they felt were helpful during the pandemic but not applicable outside the pandemic context: (1) COVID-19 mitigation policies, including requirements for social distancing, wearing face masks, and COVID-19 testing in addiction treatment facilities, and (2) COVID-19 facility operations policies, including policies for quarantining patients, maintaining substance use disorder treatment while patients were COVID-19 positive (eg, designating specific residential treatment centers for COVID-19–positive patients), and billing flexibilities during exposure protocols (eg, excluding quarantine/isolation time from reimbursable length of stay). Interviewees did not identify any pandemic response policies that they thought should be discontinued for reasons other than lack of applicability outside of a pandemic context.

### State policy review

Through our legal research, summarized in [Table 2](#), we found evidence that all 50 states and D.C. allowed providers to temporarily prescribe buprenorphine to new patients using telehealth. We identified policies establishing telehealth coverage parity in 27 states and Washington, DC (DC)—including 5 of our 8 study states (AZ, IN, NV, NJ, NY)—and telehealth reimbursement parity in 26 states and DC—also including 5 of our 8 study states (AZ, LA, NJ, NY, SD). We also found that 48 states and DC—including all our study states—permitted audio-only addiction treatment appointments. In most cases, these policies applied to all fully insured individuals (including people covered by Medicaid); however, the reimbursement parity for telehealth services in Louisiana and South Dakota was limited to Medicaid beneficiaries. In response to our FOIA request, SAMHSA reported that 43 states and DC requested blanket exceptions for patients in treatment programs to receive 28 days of take-home methadone, including all 8 of our study states. Finally, all 50 states allowed at least

some types of providers licensed in other states to provide care to state residents during at least 1 phase of the pandemic. Full legal mapping across all 50 states and DC is included in the Appendix (see [Appendix S2](#)).

### Expansion of telehealth allowances for addiction treatment delivery

Telehealth allowances were the most discussed policies among interviewees. Interviewees discussed the utility of state laws requiring fully insured and/or Medicaid programs to expand telehealth coverage and payment at parity with in-person services (eg, the same coverage and provider payment rate for an in-person vs telehealth service) and emphasized policies allowing induction of buprenorphine to treat OUD via telehealth and audio-only allowances as particularly useful ([Table 3](#)).

### Telehealth coverage and payment expansions

Agency leaders reported that implementation of telehealth coverage policies required the development of a host of inter-related state regulations such as telehealth billing rules—which evolved over time as telehealth-specific billing modifiers were developed—and delineating which types of providers were eligible to deliver addiction treatment to patients via telehealth. At the treatment facility level, early implementation focused on procurement of computers and software. Interviewees noted that, for Federally Qualified Health Centers, grant funding to support this transition was critical as they lacked needed technology at the pandemic outset. Most interviewees viewed the permanent expansion of telehealth as likely to lower barriers to addiction treatment, given its potential to reduce the need for patients to obtain transportation and childcare to attend treatment. While interviewees were enthusiastic about the continued use of telehealth, they commonly noted the importance of finding a balance of in-person and virtual treatment services that maximized value to patients.

### Policies allowing telehealth induction of buprenorphine for OUD

Interviewees specifically emphasized the value of state policies allowing the induction of buprenorphine to treat OUD via telehealth. Interviewees viewed this DEA policy as beneficial in overcoming access barriers during the pandemic and supported sustainment long-term, although they reported that it would be beneficial to expand this policy to also allow for the induction of methadone via telehealth. Importantly, while interviewees supported policy sustainment, they perceived that many providers in their state preferred in-person induction of buprenorphine.

### Audio-only allowances

The leaders interviewed also emphasized the value of policies allowing the delivery of addiction treatment via audio-only technology, which was viewed as an important tool for reaching patients with limited technology and/or internet access, including low-income individuals and people in rural areas. Leaders noted that coverage of audio-only services was particularly useful for the delivery of crisis response and care management services. Interviewees also viewed audio-only coverage as beneficial for care engagement and continuity

**Table 2.** State addiction treatment policies implemented in response to the COVID-19 pandemic.

Policy	Relevant federal policies	States with a relevant policy
Telehealth coverage parity	Among other relevant waivers, federal telehealth flexibilities included expansions in who could provide telehealth services to Medicare beneficiaries, whether a pre-existing patient-provider relationship was required, where telehealth could occur, and what technology could be used.	AK, AZ, <sup>a</sup> AR, CA, CO, CT, DE, DC, IL, IN, <sup>a</sup> IA, KY, ME, MD, MN, MO, MT, NV, <sup>a</sup> NH, NJ, <sup>a</sup> NM, NY, <sup>a</sup> NC, OH, OR, TN, TX, VT (27 states and DC)
Telehealth reimbursement parity	Among other relevant waivers, federal telehealth flexibilities allowed providers to waive cost-sharing for certain telehealth services and required all Medicare services to be reimbursed at the same rate as in-person services.	AK, AZ, <sup>a</sup> AR, CA, CO, CT, DE, DC, GA, HI, ID, IL, KY, LA, <sup>a</sup> ME, MA, MN, MO, MY, NE, NH, NJ, <sup>a</sup> NM, NY, <sup>a</sup> NC, ND, OK, PA, RI, SC, SD, <sup>a</sup> TN, TX, UT, VT, VA, WA (36 states and DC)
Telehealth buprenorphine prescription	The DEA allowed controlled substances (eg, buprenorphine) to be prescribed through telehealth without an in-person visit.	All 50 states and DC allowed some telehealth buprenorphine prescribing during at least 1 phase of the COVID-19 pandemic, either with an official announcement of policy or by defaulting to the DEA guidance.
Audio-only addiction treatment appointments	Among other relevant waivers, federal flexibilities included expansions in who was eligible for audio-only addiction treatment services and required all Medicare services to be reimbursed at the same rate as in-person services.	AL, AK, AZ, <sup>a</sup> AR, CA, CO, CT, DE, DC, GA, HI, ID, IL, IN, <sup>a</sup> IA, KS, KY, LA, <sup>a</sup> ME, MD, MA, MI, MN, MS, <sup>a</sup> MO, MT, NE, NV, <sup>a</sup> NH, NJ, <sup>a</sup> NM, NY, <sup>a</sup> NC, ND, OH, OK, OR, PA, RI, SC, SD, <sup>a</sup> TN, TX, UT, VT, VA, WA, WV, WI (48 states and DC)
Take-home methadone	SAMHSA allowed states to request blanket exceptions for patients in an opioid treatment program to receive 28 days of take-home doses of medication.	AL, AK, AZ, <sup>a</sup> AR, CA, CO, CT, DE, DC, FL, GA, ID, IL, IN, <sup>a</sup> IA, KS, KY, LA, <sup>a</sup> ME, MD, MA, MI, MN, MS, <sup>a</sup> MO, NE, NV, <sup>a</sup> NH, NJ, <sup>a</sup> NM, NY, <sup>a</sup> NC, ND, OH, OK, OR, PA, RI, SD, <sup>a</sup> TN, UT, VA, WA, WV (43 states and DC)
Allowing mobile methadone clinics	DEA issued a rule allowing operation of mobile methadone clinics by registered opioid treatment programs	—
Allowing providers licensed in another state to provide services to state residents	CMS waived the requirement that out-of-state providers enrolled in Medicare must be licensed in the state where they are providing services. CMS also told states they could use 1135 waivers to allow out-of-state providers to care for Medicaid patients.	All 50 states and DC allowed at least some providers licensed in other states to provide care to state residents during at least 1 phase of the COVID-19 pandemic.

Abbreviations: CMS, Centers for Medicare and Medicaid Services; DC, Washington, DC; DEA, Drug Enforcement Administration; SAMHSA, Substance Abuse and Mental Health Services Administration.

<sup>a</sup>States that were 1 of our 8 study states.

because they allowed providers to bill for audio check-ins with patients. Interviewees reported that many providers in their states preferred audio-visual delivery of addiction services and perceived that the audio-only allowance was often used by providers to supplement, as opposed to replace, care delivered in person.

## Non-telehealth COVID-era policy changes

### Take-home allowances for methadone

Interviewees highlighted take-home methadone allowances put in place during the pandemic as important to sustain (Table 4). To implement this policy, interviewees discussed developing procedures for determining patient eligibility for extended take-home allowances based on risk of overdose and during periods of increased community transmission of the COVID-19 virus. The leaders interviewed noted challenges in standardizing and communicating these policies across facilities and reported that some patients perceived bias in who received take-home allowances. Leaders reported that opioid treatment programs (OTPs) initially struggled to extend take-home methadone due to low stocks of medication and take-home bottles, but these supply issues resolved over time. Importantly, interviewees noted that OTPs were permitted—not required—to extend take-home allowances if their

state adopted the federal waiver, which interviewees perceived as contributing to disparities in patients' access to take-home methadone to manage OUD. Overall, extended take-home allowances were viewed by interviewees as critical for COVID-19 mitigation and useful to increase access to treatment long-term.

### Mobile methadone clinic allowances

Interviewees also discussed the expansion of federal allowances for mobile methadone clinics as particularly helpful during the COVID-19 pandemic for increasing treatment access. Interviewees discussed 2 DEA policies. First, in March 2020, the DEA extended allowances for home delivery of methadone to patients enrolled in OTPs if they were quarantined due to COVID-19 or at high risk of serious illness from COVID-19 exposure.<sup>32</sup> State leaders reported that this policy change led to the development of mobile teams to deliver methadone to patients at their home or other locations (eg, virus isolation hotels). Additionally, state leaders highlighted the range of patients “at high-risk of serious illness” from COVID-19, including elderly patients and those with compromised immune systems, eligible for medication delivery. The strategies developed for medication delivery to congregate-living settings were held up by interviewees as priorities for long-term

**Table 3.** Qualitative interview quotes on expansion of telehealth allowances for addiction treatment delivery.**Telehealth coverage and payment expansions**

Participant A: “We left it to the providers that had professional licenses to make the decision whether or not they could safely provide telehealth, and then we told them that, ‘If you can, and the patient agreed to the telehealth, that they would just have to bill for that service as if they provided it face to face.’ So that saved us a lot of programming time and delays if we were to try and change everything in our system. And we did make changes that changed the place of service and all, but we allowed the providers to list their office when they were providing services via telehealth because of the expedience, right? That we wanted to get them out there, and we wanted them to be providing those services quickly. So that was probably a big help.”

Participant B: “Well, we had 2 shifts. I mean, just us as an organization, the shift to have to doing less groups and more individual work. So that was a little bit different for us. We had to ensure that we had appropriate—the actual hardware and system capability for clinicians to do their work. We had to ensure that we had secure logins that folks could work remotely. We had to revise, not really revise, but ensure that we were using proper billing codes that had all the modifiers related to telehealth, things along those lines.”

Participant C: “Teletherapy and telemedicine is definitely around to stay. We have some clients and practitioners who really like this treatment model. So, we certainly want them to have the opportunity to engage in that fashion if they would like to do so. So, we definitely know that’s staying around.... It’s generalizable in that—Here’s the thing about disasters, in Louisiana, we face so many of them from hurricanes to the pandemic to whatever and I think every disaster kind of has a unique set of circumstances that have to be considered. But in terms of something that we could really take away and use to continue services, I think telehealth would have lots of different applications assuming that people have power and access to an internet connection.”

Participant D: “I think part of the struggle with telehealth is you don’t have the person in front of you, and so we’ve heard time and time again telehealth is great for a lot of things, but telehealth isn’t the end-all, be-all solution and there has to be in-person components. Obviously, as we open back up, that became a lot easier to ensure that people were being seen in person. There’s just a lot of things you can tell, especially around substance use disorder, there’s a lot of things you can tell when you put your eyes on an individual. And then, frankly, there were some individuals who didn’t care for telehealth, liked that one-on-one interaction with their provider and they struggled during this time. And I know there were a number of individuals who relapsed. I’m not sure that telehealth was the only reason, but it definitely—that isolation, it was definitely a factor for many individuals.”

**Policies allowing telehealth induction of buprenorphine for OUD**

Participant A: “Really, it was more the waiver of the federal policies that was very helpful during COVID. So, the one that jumps out to me was where they allowed us to do telehealth for individuals that were getting a controlled substance, and even down to the first visit where the medication was began, that they were able to do that via telehealth. So, I think that was a very big help. They didn’t have to have that face-to-face visit first. So, we were able to get a lot more people started quickly when they were ready on to buprenorphine.”

Participant E: “But every presentation I’ve done and every opportunity I have I say one of the biggest challenges—still—was individuals who are getting inducted on methadone still had to do the face-to-face [visit]. So, you could do induction for buprenorphine, but methadone still had to be face-to-face. And so that was definitely a challenge.”

**Audio-only allowances**

Participant C: “I just want to say that the Centers for Medicaid and Medicare, when they made it possible for us to use the telephone—because that saying there is a digital divide. Some people don’t have internet. Some people don’t have the ability to teleconference or the know-how to do it. So, when they made it okay and legitimate for us to use the telephone and use telephonic consultation with the doctors, with our prescribers where they can be reimbursed for the work that they did with our clients needing help over the phone, that was a big help. So that’s a state and/or a federal thing that happened where we could use the telephone to be able to provide services to clients as well.... And I will say that that’s one that we don’t use a lot anyway. We do use it, but it has to be for a specific client profile. Some of the levels of acuity that are really severe in those who have to have specific testing.”

Participant F: “So we’re allowing for audio-only services for crisis intervention as well as targeted case management. Otherwise, we would really encourage providers to utilize that audiovisual component for behavioral health service delivery, or face-to-face. Really work with whatever is medically necessary and again, clinically appropriate for that individual.”

Abbreviation: OUD, opioid use disorder.

sustainment, as medication delivery was often accompanied by the delivery of other wraparound services, such as connections to housing or social services.

Following the initial growth in mobile delivery, the DEA released new rules for mobile methadone delivery in June 2021, which allowed OTPs to use mobile methadone units without requiring a separate DEA registration for each unit.<sup>33</sup> When interviews were conducted in mid-2022, interviewees were at varied stages of implementation, ranging from distributing grant funding for clinic vehicle purchases to operating mobile units. Interviewees noted that, while the federal policy allowance was necessary to expand this service, the vans remain cost-prohibitive to adopt on a wider scale. Interviewees nonetheless expressed optimism about the long-term potential of mobile delivery to reduce access barriers to care, particularly in rural communities.

**Loosening out-of-state licensing restrictions**

Another policy commonly discussed by interviewees was out-of-state licensing allowances allowing providers to

practice across state lines. Interviewees noted that this policy was particularly useful for patients who lived near state borders, giving them flexibility to seek care via telehealth or in person in the neighboring state. Leaders viewed this policy as critical to supporting addiction treatment access during the pandemic, particularly when localized COVID-19 surges strained health care staffing. State leaders noted that, when local providers lacked capacity to induce new patients on buprenorphine in a timely manner, out-of-state licensing allowances supported induction by out-of-state providers who could subsequently hand patients off to local providers for maintenance treatment. State leaders perceived interstate licensing as potentially useful in easing workforce shortages, particularly for buprenorphine prescribing. However, multiple leaders noted that they did not think the broad interstate licensing allowances in place during COVID-19 would be sustained due to limited support from state licensing boards. Interviewees noted that state licensing boards have standing processes in place for multistate licensing, although they viewed the decreased administrative burden (eg, streamlined application processes,

**Table 4.** Qualitative interview quotes related to non-telehealth COVID-era policy changes.**Take-home allowances for methadone**

Participant E: “For take-homes—when we got it internally, we came up with some criteria as far as what that would look like. We looked at high-risk, low-risk—not necessarily risk for overdose, knowing that that’s an important piece of it—but looking at people’s medical histories and those who’re more high risk for negative interactions with Covid. If they have pulmonary issues, issues with immune systems, anything of the sort, those were the ones we typically would deem more high-risk—so high-risk medical and high-risk drug use kind of interactions. We increased our naloxone to make sure it was in the hands of every single person. And if people were coming in, we typically would give them maybe a week’s worth of medication, but there were guidelines for that. If people were very unstable, we wouldn’t; that was a handful of people as well as some new to treatment. But our big thing was just trying to reduce the amount of foot traffic for daily interactions with people coming into the clinic. Because we serve a lot of people, but have a lot of people with compromised immune systems and a lot of medical complications.... But, people felt definitely a sense of—are they being favored over me? So just making sure we’re fair and equitable. But also, it’s not always fair and equitable if someone has more significant health problems, you might not always see that. And obviously, I’m not going to disclose that, ‘Hey guys, she has really bad asthma. That’s why she’s going to go come in in less frequently.’ Versus, ‘She’s really healthy and doesn’t have any other past complications’ or anything else like that.”

Participant D: “Some of our clinics, our opioid treatment programs, are larger. We have 2 that are close to over 1500 patients. And I would say that those clinics had a much more difficult time getting the self-administered medication bottles filled for the extended take-homes. So there was a lot of work with our clinics with making sure they had enough take-home bottles and then making sure they had enough methadone on hand because that’s something that you only order like a couple days out, so to speak. And so there was a lot of work, and the rollout of the extended take-homes at our clinics really varied on the number of patients they had and on their resource capacity to actually fill the bottles and see the patients.”

Participant H: “The OTPs, we implemented the 14 to 28 days of take-home doses, contingent upon how stable the patient was.... It’s something that I would be comfortable in keeping, but there has not been any discussion about whether or not that will remain in place. But, I will tell you that last year Louisiana got 8 hurricanes. And I do disaster response and I told providers, ‘Look, the hurricane is coming. We still have these Covid allowances in place.’ And I just kept quoting it like, ‘Okay, for stable patients you can give them 14 days. Stable patients, they can be given 28 days. And you need to call your patients in to get medicine as soon as they declared a state of emergency.’ I pitched forward with them implementing their emergency action plans.... And I said it’s based on your individualized patient assessment as to who you’re able to offer that to. Of course, you can’t do that with new admits. But it does help a whole lot when you’re doing disaster planning. It really does. It makes a huge difference.”

**Mobile methadone clinic allowances**

Participant I: “The other good thing that happened was methadone delivery service in New York City. So that also decreased the volume of individuals on the daily basis to the OTPs. The methadone was delivered to people either in quarantine or isolation, which were if they did not have a place to do that at home, they were put into hotels to do that by DOHMH. And so the deliveries were either to those locations where people were being quarantined or isolated or there was delivery to people’s homes or curbside delivery. And it was also provided individuals who were at risk high risk for COVID-19 due to comorbidities. So it wasn’t just limited to people in quarantine or isolation. So that was very innovative as well.”

Participant J: “And then we also had mobile crisis, mobile Covid team, that if somebody couldn’t get into the clinic because of some Covid-related issue, whether it was transportation wasn’t available or they had Covid themselves or a member of their family had Covid or they were in their quarantine period because they’d been exposed before the vaccine. Then we sent out our mobile Covid team and they would do all of those services so that there was no disruption in care.”

Participant K: “The other thing that was allowed, at the federal level, is the DEA-approved mobile opioid units. So, we were able to bring in a mobile unit, in fact, they borrowed it from one of their other properties, I think in Virginia, drove the mobile unit to Louisiana because the OTP was just devastated, and they couldn’t provide services there any longer. So, we were able to implement that approved policy through the federal government to operationalize a methadone mobile unit.... And I’m hoping at the federal level, the policy relative to having methadone mobile units stays the same. Because that would greatly add to our ability to reach the rural community in our state. So, I’m hoping that one is sustained.”

**Loosening out-of-state licensing restrictions**

Participant D: “We also use telehealth and out-of-state prescribers for buprenorphine intake. So, our [office-based addiction treatment] providers were able to supplement their workforce by using out-of-state prescribers to do that initial intake and then hand them off post the intake.”

Participant L: “Probably the biggest barrier we still have, at least in South Dakota in the counseling world, is we get the state lines issue that you have to have the license within whatever state the patient exists in. So, I have to be licensed in multiple states. We just happen to be 15 miles from Iowa and 15 miles from Minnesota where we sit. But if I’m not licensed in those states, that I can’t do a virtual visit with the patient in their home state, they would have to come someplace in South Dakota. So, it does create a pretty significant barrier for ongoing care in that manner unless we get licenses in multiple states or there’s some kind of federal legislation that allows counselors to practice beyond the state lines.”

Participant M: “Given that there is, I’m hearing, a much larger need for substance abuse counselors across the state—and substance abuse services in general—I think any policy that essentially cracks down on the drug and alcohol board, the licensing board, that needs to happen. Because we’re experiencing such a shortage of providers, we can’t afford to let good people go by the wayside. And I think that if somehow the, I don’t know if the governor could do it, but just kind of instilling [the out-of-state licensing allowance] as law and practice, I think, could have saved a lot of people, a lot of headache.”

Abbreviations: DEA, Drug Enforcement Administration; DOHMH, Department of Health and Mental Hygiene; OTP, opioid treatment program.

waived fees) of the pandemic response policy as facilitating provider participation in interstate licensing efforts.

**Discussion**

State leaders whose professional roles involved implementing federal and state policies designed to mitigate the impact of the COVID-19 pandemic viewed multiple pandemic-era policies as useful for expanding addiction treatment access post-pandemic. Leaders highlighted policy allowances related to telehealth, take-home methadone allowances, mobile methadone clinics, and out-of-state licensing flexibilities. State

leaders’ endorsement of sustaining pandemic-era telehealth flexibilities was consistent with qualitative and survey research with clinicians.<sup>34-36</sup> Evidence from the pandemic shows that telehealth expansions supported the continuation of addiction treatment,<sup>5,37,38</sup> and treatment via telehealth was associated with improved MOUD retention, lower odds of overdose,<sup>39</sup> and care quality on par with in-person delivery.<sup>40</sup>

As of September 2023, some of the policies identified by state leaders as worthy of sustainment have been made permanent. At the federal level, these include Medicare’s permanent expansion of telehealth coverage parity and expansion of audio-only coverage. Under current rules, addiction services

delivered via telehealth will be paid at a lower rate than in-person services beginning in 2024, but proposed rules, if adopted, would permanently extend telehealth payment parity for addiction treatment.<sup>41</sup> The DEA has proposed a permanent rule that would continue to allow buprenorphine induction via telehealth, with the added requirement that patients have an in-person visit within 30 days of induction. This proposed added requirement for an in-person visit within 30 days of induction faces widespread opposition from addiction treatment leaders, including the American Society of Addiction Medicine and the American Psychiatric Association, who assert that it impedes care access.<sup>42,43</sup> At the time of manuscript publication, the DEA is continuing current telehealth permissions through 2024 and is working on new proposed regulations in response to the feedback received. State telehealth rules governing Medicaid and fully insured commercial plans are still evolving as automatic policy extensions tied to the end of federal and state public health emergencies (eg, extending policies for 6 months post-emergency) wind down. Forty-three state Medicaid programs continue to reimburse providers for audio-only treatment and each state's ability to sustain buprenorphine induction via telehealth without an in-person visit will depend on the final DEA rule.<sup>44</sup>

The SAMHSA has extended take-home allowances for 1 year following the end of the federal public health emergency on May 11, 2023, and made mobile methadone expansions permanent.<sup>45,46</sup> Implementation of these changes requires a cascade of additional actions at the state and treatment program levels, including development of Medicaid and other state insurance billing policies for take-home methadone<sup>47</sup> and treatment program policies regarding who is eligible for take-home or mobile methadone.<sup>48</sup> Interviewees in our study noted that states and clinics were not required to implement federal take-home methadone allowances, and research on MOUD patient experience during the pandemic has shown large variation in receipt of take-home methadone during the pandemic.<sup>10,49</sup> In parallel, some clinicians and patient advocates are calling to lift federal rules restricting methadone treatment delivery to specialty outpatient treatment programs and allow prescribing of methadone as MOUD by office-based providers,<sup>18</sup> a model used in multiple other countries and under consideration in the United States through the Modernizing Opioid Treatment Access Act.<sup>50</sup>

The state leaders interviewed in this study noted the utility of interstate licensing flexibilities in the pandemic context. Growth in the number of states joining interstate licensure compacts, such as the Interstate Medical Licensure Compact for physicians, may support these flexibilities longer-term, particularly in the context of telehealth expansions. Research is needed to understand how compact participation influences care delivery across state lines and whether and how these compacts can support care in areas with provider shortages.

### Limitations

This study should be considered in the context of several limitations. First, interviews were conducted across 8 states and may not be generalizable across the entire United States. We interviewed a relatively limited number of experts within states, and it is possible that not all viewpoints were captured. Additionally, we are unable to examine variation across states

with different combinations of policies due to our sample size. Second, interviews may have been subject to response bias due to self-selection of individuals who were willing to participate, or to social desirability bias from interviewees' desire to present their state's response in a positive light. To minimize this issue, the informed-consent process included confidentiality assurances and recruitment strategies targeting diverse organizations across each state. Finally, although we aimed to be comprehensive in our legal mapping, it is possible that a state policy was unintentionally omitted. We minimized this risk by comparing our results with other data sources and, where there was disagreement, discussing the policy with the study team to reach a resolution. Further, we were unable to determine how many states created mobile methadone programs in response to the DEA rule.

### Conclusion

State leaders responsible for implementing policies designed to mitigate access to addiction treatment during the COVID-19 pandemic perceived multiple policies as having the potential, if sustained long-term, to improve access to addiction treatment. While some of these policies have already been made permanent, the landscape is still evolving. Future research should examine the effectiveness and implementation of these policies outside of the acute COVID-19 pandemic context.

### Supplementary material

Supplementary material is available at *Health Affairs Scholar* online.

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### Conflicts of interest

Please see ICMJE form(s) for author conflicts of interest. These have been provided as [supplementary materials](#).

### Notes

1. Friedman J, Akre S. COVID-19 and the drug overdose crisis: uncovering the deadliest months in the United States, January–July 2020. *Am J Public Health*. 2021;111(7):1284–1291. <https://doi.org/10.2105/AJPH.2021.306256>
2. Friedman JR, Hansen H. Evaluation of increases in drug overdose mortality rates in the US by race and ethnicity before and during the COVID-19 pandemic. *JAMA Psychiatry*. 2022;79(4):379–381. <https://doi.org/10.1001/jamapsychiatry.2022.0004>
3. Mellis AM, Potenza MN, Hulsey JN. COVID-19-related treatment service disruptions among people with single- and polysubstance use concerns. *J Subst Abuse Treat*. 2021;121:108180. <https://doi.org/10.1016/j.jsat.2020.108180>
4. McNeely J, Schatz D, Olsson M, Appleton N, Williams AR. How physician workforce shortages are hampering the response to the opioid crisis. *Psychiatr Serv*. 2022;73(5):547–554. <https://doi.org/10.1176/appi.ps.202000565>
5. Tilhou AS, Dague L, Saloner B, Beemon D, Burns M. Trends in engagement with opioid use disorder treatment among Medicaid beneficiaries during the COVID-19 pandemic. *JAMA Health Forum*. 2022;3(3):e220093. <https://doi.org/10.1001/jamahealthforum.2022.0093>
6. McGinty EE, Presskreischer R, Anderson KE, Han H, Barry CL. Psychological distress and COVID-19-related stressors reported

- in a longitudinal cohort of US adults in April and July 2020. *JAMA*. 2020;324(24):2555-2557. <https://doi.org/10.1001/jama.2020.21231>
7. National Institute on Drug Abuse. Drug overdose death rates 2023. Accessed February 1, 2023. <https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates>
  8. National Center for Health Statistics. Provisional drug overdose death counts 2023. Centers for Disease Control and Prevention. Accessed October 1, 2023. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>
  9. Eisenberg MD, Eddelbuettel JCP, McGinty EE. Employment in office-based and intensive behavioral health settings in the US, 2016-2021. *JAMA*. 2022;328(16):1642-1643. <https://doi.org/10.1001/jama.2022.17613>
  10. Saloner B, Krawczyk N, Solomon K, et al. Experiences with substance use disorder treatment during the COVID-19 pandemic: findings from a multistate survey. *Int J Drug Policy*. 2022;101:103537. <https://doi.org/10.1016/j.drugpo.2021.103537>
  11. National Academies of Sciences Engineering Medicine. *Medications for Opioid Use Disorder Save Lives*. The National Academies Press; 2019.
  12. Substance Abuse and Mental Health Services Administration. Statutes, regulations and guidelines 2023. Accessed August 15, 2023. <https://www.samhsa.gov/medications-substance-use-disorders/statutes-regulations-guidelines>
  13. Prescription Drug Abuse Policy System (PDAPS). Homepage. 2023. Accessed August 15, 2023. <https://pdaps.org>
  14. Barsky BA, Mehrotra A, Huskamp HA. State policies could impede new efforts to increase access to medications for opioid use disorder. *JAMA Health Forum*. 2023;4(3):e230071. <https://doi.org/10.1001/jamahealthforum.2023.0071>
  15. Fiscella K, Wakeman SE, Beletsky L. Buprenorphine deregulation and mainstreaming treatment for opioid use disorder: X the X waiver. *JAMA Psychiatry*. 2019;76(3):229-230. <https://doi.org/10.1001/jamapsychiatry.2018.3685>
  16. Krawczyk N, Fingerhood MI, Agus D. Lessons from COVID 19: are we finally ready to make opioid treatment accessible? *J Subst Abuse Treat*. 2020;117:108074. <https://doi.org/10.1016/j.jsat.2020.108074>
  17. D’Onofrio G, Melnick ER, Hawk KF. Improve access to care for opioid use disorder: a call to eliminate the X-waiver requirement now. *Ann Emerg Med*. 2021;78(2):220-222. <https://doi.org/10.1016/j.annemergmed.2021.03.023>
  18. Samet JH, Botticelli M, Bharel M. Methadone in primary care— one small step for congress, one giant leap for addiction treatment. *N Engl J Med*. 2018;379(1):7-8. <https://doi.org/10.1056/NEJMp1803982>
  19. Saloner B, Andracka Christou B, Gordon AJ, Stein BD. It will end in tiers: a strategy to include “dabblers” in the buprenorphine workforce after the X-waiver. *Subst Abus*. 2021;42(2):153-157. <https://doi.org/10.1080/08897077.2021.1903659>
  20. Stein BD, Gordon AJ, Dick AW, et al. Supply of buprenorphine waived physicians: the influence of state policies. *J Subst Abuse Treat*. 2015;48(1):104-111. <https://doi.org/10.1016/j.jsat.2014.07.010>
  21. Substance Abuse and Mental Health Services Administration. Federal guidelines for opioid treatment programs. Rockville, MD; 2015. Accessed February 5, 2024. <https://store.samhsa.gov/sites/default/files/d7/priv/pep15-fedguideotp.pdf>
  22. Andracka-Christou B, Golan O, Totaram R, et al. Prior authorization restrictions on medications for opioid use disorder: trends in state laws from 2005 to 2019. *Ann Med*. 2023;55(1):514-520. <https://doi.org/10.1080/07853890.2023.2171107>
  23. Green TC, Bratberg J, Finnell DS. Opioid use disorder and the COVID 19 pandemic: a call to sustain regulatory easements and further expand access to treatment. *Subst Abus*. 2020;41(2):147-149. <https://doi.org/10.1080/08897077.2020.1752351>
  24. Stringer KL, Langdon KJ, McKenzie M, Brockmann B, Marotta P. Leveraging COVID-19 to sustain regulatory flexibility in the treatment of opioid use disorder. *J Subst Abuse Treat*. 2021;123:108263. <https://doi.org/10.1016/j.jsat.2020.108263>
  25. Samuels EA, Clark SA, Wunsch C, et al. Innovation during COVID-19: improving addiction treatment access. *J Addict Med*. 2020;14(4):e8-e9. <https://doi.org/10.1097/ADM.0000000000000685>
  26. Davis CS, Lieberman AJ. Access to treatment for individuals with opioid use disorder. In: Burris S, de Guia S, Gable L, Levin DE, Parmet WE, Terry NP, (ed.), *COVID-19 Policy Playbook: Legal Recommendations for a Safer, More Equitable Future*: Public Health Law Watch; 2021:120-126.
  27. Manatt on Health. Tracking telehealth changes state-by-state in response to COVID-19 2022. Accessed December 16, 2022. <https://www.manatt.com/insights/newsletters/covid-19-update/executive-summary-tracking-telehealth-changes-stat>
  28. Lipton BJ, Pesko MF. State Medicaid and private telemedicine coverage requirements and telemedicine use, 2013-2019. *Health Serv Res*. 2023;58(5):988-998. <https://doi.org/10.1111/1475-6773.14173>
  29. Centers for Disease Control and Prevention. COVID Data Tracker 2023. Accessed August 16, 2023. <https://covid.cdc.gov/covid-data-tracker>
  30. Kaiser Family Foundation. State actions to mitigate the spread of COVID-19 2021. Accessed September 1, 2023. <https://www.kff.org/other/state-indicator/state-actions-to-mitigate-the-spread-of-covid-19/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
  31. National Academy for State Health Policy. States’ COVID-19 public health emergency declarations 2023. Accessed September 1, 2023. <https://nashp.org/states-covid-19-public-health-emergency-declarations/>
  32. Drug Enforcement Administration. Response letter SAMHSA assistant secretary 2020. Accessed August 15, 2023. [https://www.deadiversion.usdoj.gov/GDP/\(DEA-DC-015\)%20SAMHSA%20Exemption%20NTP%20Deliveries%20\(CoronaVirus\).pdf](https://www.deadiversion.usdoj.gov/GDP/(DEA-DC-015)%20SAMHSA%20Exemption%20NTP%20Deliveries%20(CoronaVirus).pdf)
  33. El-Sabawi T, Baney M, Canzater SL, Weizman SR. The new mobile methadone rules and what they mean for treatment access. *Health Affairs blog*. Updated August 4, 2021. Accessed February 5, 2024. <https://doi.org/10.1377/hblog20210727.942168>
  34. Beetham T, Fiellin DA, Busch SH. Physician response to COVID-19-driven telehealth flexibility for opioid use disorder. *Am J Manag Care*. 2022;28(9):456-463. <https://doi.org/10.37765/ajmc.2022.89221>
  35. Huskamp HA, Riedel L, Campa I, et al. Long-term prospects for telemedicine in opioid use disorder (OUD) treatment: results from a longitudinal survey of OUD clinicians. *J Gen Intern Med*. 2023;38(9):2139-2146. <https://doi.org/10.1007/s11606-023-08165-9>
  36. Treitler PC, Bowden CF, Lloyd J, Enich M, Nyaku AN, Crystal S. Perspectives of opioid use disorder treatment providers during COVID-19: adapting to flexibilities and sustaining reforms. *J Subst Abuse Treat*. 2022;132:108514. <https://doi.org/10.1016/j.jsat.2021.108514>
  37. Huskamp HA, Busch AB, Uscher-Pines L, Barnett ML, Riedel L, Mehrotra A. Treatment of opioid use disorder among commercially insured patients in the context of the COVID-19 pandemic. *JAMA*. 2020;324(23):2440-2442. <https://doi.org/10.1001/jama.2020.21512>
  38. Tormohlen KN, Eisenberg MD, Fingerhood MI, et al. Trends in opioid use disorder outpatient treatment and telehealth utilization before and during the COVID-19 pandemic. *Psychiatr Serv*. 2023;75(1):72-75. <https://doi.org/10.1176/appi.ps.20230102>
  39. Jones CM, Shoff C, Hodges K, et al. Receipt of telehealth services, receipt and retention of medications for opioid use disorder, and medically treated overdose among Medicare beneficiaries before and during the COVID-19 pandemic. *JAMA Psychiatry*. 2022;79(10):981-992. <https://doi.org/10.1001/jamapsychiatry.2022.2284>
  40. Hailu R, Mehrotra A, Huskamp HA, Busch AB, Barnett ML. Telemedicine use and quality of opioid use disorder treatment in



- the US during the COVID-19 pandemic. *JAMA Netw Open*. 2023;6(1):e2252381. <https://doi.org/10.1001/jamanetworkopen.2022.52381>
41. Desai R, Kraus AD, Segal C. CMS proposes changes to Medicare telehealth policies, including increased payment rates 2023. Covington. Accessed October 1, 2023. <https://www.cov.com/en/news-and-insights/insights/2023/07/cms-proposes-changes-to-medicare-telehealth-policies-including-increased-payment-rates>
  42. D'Arrigo T. APA responds to DEA's proposed rules regarding telehealth, buprenorphine. American Psychiatric Association. *Psychiatric News* blog. Updated April 3, 2023. Accessed September 1, 2023. <https://psychnews.psychiatryonline.org/doi/full/10.1176/appi.pn.2023.05.5.47>
  43. American Society of Addiction Medicine. Re: RIN 1117-AB78/ Docket No. DEA-948 - Expansion of Induction of Buprenorphine via Telemedicine Encounter 2023. Accessed August 15, 2023. [https://downloads.asam.org/sitefinity-production-blobs/docs/default-source/advocacy/letters-and-comments/23.03.27-asam-comments-to-dea.pdf?sfvrsn=5ff7a99d\\_7%2023.03.27-ASAM-Comments-to-DEA.pdf](https://downloads.asam.org/sitefinity-production-blobs/docs/default-source/advocacy/letters-and-comments/23.03.27-asam-comments-to-dea.pdf?sfvrsn=5ff7a99d_7%2023.03.27-ASAM-Comments-to-DEA.pdf)
  44. Center for Connected Health Policy. State Telehealth Laws and Reimbursement Policies Report: Fall 2023. 2023. Accessed October 11, 2023. [https://www.cchpca.org/2023/10/Fall2023\\_ExecutiveSummaryfinal.pdf](https://www.cchpca.org/2023/10/Fall2023_ExecutiveSummaryfinal.pdf)
  45. Substance Abuse and Mental Health Services Administration. Methadone Take-Home Flexibilities Extension Guidance 2023. Accessed September 22, 2023. <https://www.samhsa.gov/medications-substance-use-disorders/statutes-regulations-guidelines/methadone-guidance>
  46. Drug Enforcement Administration. Registration requirements for narcotic treatment programs with mobile components, RIN 1117-AB43. Section 2021-13519 (2021). Accessed October 11, 2023. <https://www.federalregister.gov/documents/2021/06/28/2021-13519/registration-requirements-for-narcotic-treatment-programs-with-mobile-components>
  47. Bowser D, Bohler R, Davis MT, Hodgkin D, Frank RG, Horgan CM. New methadone treatment regulations should be complemented by payment and financing reform. *Health Affairs Forefront*. Updated June 1, 2023. Accessed October 11, 2023. <https://doi.org/10.1377/forefront.20230531.974690>
  48. Krawczyk N, Rivera BD, Levin E, Dooling BCE. Synthesising evidence of the effects of COVID-19 regulatory changes on methadone treatment for opioid use disorder: implications for policy. *Lancet Public Health*. 2023;8(3):e238-e246. [https://doi.org/10.1016/S2468-2667\(23\)00023-3](https://doi.org/10.1016/S2468-2667(23)00023-3)
  49. Alexander K, Pogorzelska-Maziarz M, Gerolamo A, Hassen N, Kelly EL, Rising KL. The impact of COVID-19 on healthcare delivery for people who use opioids: a scoping review. *Subst Abuse Treat Prev Policy*. 2021;16(1):60. <https://doi.org/10.1186/s13011-021-00395-6>
  50. Joudrey PJ, Edelman EJ, Wang EA. Methadone for opioid use disorder-decades of effectiveness but still miles away in the US. *JAMA Psychiatry*. 2020;77(11):1105-1106. <https://doi.org/10.1001/jamapsychiatry.2020.1511>