

# EXPANDING ACCESS TO ADDICTION TREATMENT

Nicole Gastala, Harold Pollack, Basmattee Boodram, Mai Tuyet Pho, and Mary Beth Shapley

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# Executive summary

This paper explores practical strategies to expand access to addiction treatment for persons living with opioid use disorders (OUDs). Particular focus is placed on strategies to expand access to medications for opioid use disorder (MOUD), such as methadone and buprenorphine—the first-line, evidence-informed, recommended treatment modalities for most patients who live with OUD.

This paper begins by documenting the substantial OUD treatment gap.

It then discusses ways to make MOUD more accessible, attractive, and affordable. Important measures to accomplish these goals include improved reimbursement and coverage practices by Medicaid and other payors, as well as Medicaid waivers to expand coverage and service linkage to addiction services for key populations, such as persons leaving jails and prisons with addiction disorder.

The paper then discusses the barriers, challenges, and facilitators associated with practical OUD treatment access and the effectiveness of available treatments. Key challenges include changes in the illicit drug supply, which make patterns of use more lethal and more resistant to effective treatment and harm reduction interventions. These challenges also include stigmatizing attitudes toward addiction and medication treatments harbored by the general public and medical providers, and within the addiction treatment sector itself. Although the opioid epidemic is less politically polarized than prior drug epidemics, this paper cites survey data indicating strong and continuing partisan divides in addiction stigma and in support of evidence-informed interventions. It also cites surveys of medical providers themselves that indicate a far stronger stigma associated with opioid and stimulant use disorders than with HIV, depression, or diabetes.

The paper next discusses equally important but less well-known measures to improve treatment access. These include major and often surprisingly bipartisan efforts enacted under the past four U.S. presidential administrations. There are also lesser-known measures such as the Substance Abuse and Mental Health Administration's (SAMHSA) recent final rule, which seeks to make MOUD treatment more accessible and person-centric to precariously housed patients and others who are less likely to receive care in conventional clinics. Many of these measures build upon clinical and policy innovations enacted during the COVID-19 pandemic, when the requirements for social distancing spurred increased use of telehealth and other practices, such as allowing patients to take methadone doses home rather than requiring daily physical attendance at a clinic.

The paper makes seven principal recommendations:

- 1.** Make Medicaid the cornerstone of sustainable addiction treatment, particularly for the most vulnerable populations. Bolstering Medicaid's capacity to serve persons living with substance use disorder(s) is the central tool for providing effective, sustainable services at scale for millions of Americans.
- 2.** Ensure adequate, predictable, and sustained reimbursement for evidence-informed services across care settings.
- 3.** Expand methadone maintenance authority to board-certified addiction medicine physicians, addiction psychiatry physicians, and pharmacies.
- 4.** Improve public awareness of the value and availability of medication treatment.
- 5.** Improve monitoring and evaluation of programs and policy interventions, with particular attention to practical implementation.

6. Improve access to medications for opioid use disorder across care settings.
7. Expand syringe services and mobile treatment programs.

Alongside these recommendations, expanded coverage for social support services by Medicaid is warranted and critical for people who use drugs, as they face psychosocial (e.g., stigma), personal (e.g., basic needs), and other structural barriers to MOUD access and uptake. Other challenges remain widespread and must be addressed. These include (i) stigmatization of addiction and MOUD among treatment providers and staff, (ii) inconsistent access to MOUD across care and criminal justice settings (including problem-solving courts), and (iii) geographic treatment disparities. Finally, only 35 states have partially implemented SAMHSA's final rule, leaving much room for advocacy and policy development in states whose existing regulations may conflict with evidence-informed policies.

## Introduction

This paper explores strategies to expand practical access to evidence-informed addiction treatment interventions among persons living with substance use disorders—particularly persons living with opioid use disorder (OUD), who face remarkable risks of death in the shadow of an escalating overdose epidemic. Almost 100,000 Americans die every year from fatal overdoses. Despite recent declines, more than 70,000 of these deaths involve opioids.<sup>1</sup> Expanding practical access to effective treatments, particularly to medications for OUD (treatments denoted MOUD by addiction treatment providers and researchers), is a central challenge in addressing the overdose epidemic.

Effective and broad provision of MOUD, including methadone (known as an opioid agonist medication), buprenorphine (a partial agonist medication), and naltrexone (an opioid antagonist

medication), has the potential to save hundreds of thousands of lives over the next decade and beyond.

Expanding practical access to MOUD requires making these interventions more affordable, attractive, and accessible for patients living with substance use disorders. Meeting this challenge also requires engagement with various purchasers, gatekeepers, and facilitators—most notably, private insurers and other payors, state Medicaid programs, physicians and other medical providers, correctional system leaders, and others.

Addressing this challenge also necessitates a political and policy environment that supports the provision of evidence-informed treatment and harm reduction interventions. A wide range of promising strategies are now available to policymakers, treatment providers, health officials, and community advocates. Most prominent among these strategies are improving access to evidence-informed treatment, improving reimbursement practices by Medicaid and private payors, and implementing effective linkage services that connect people with interventions at key points (such as when individuals with substance use disorder intersect with institutions like the emergency department or the criminal justice system).<sup>2</sup>

Innovative approaches employed during the COVID-19 pandemic are showing promise as ways to expand access to MOUD. These include the broader use of telehealth services; the provision of mobile-based, evidence-informed treatment; harm reduction; community services that address barriers to access in brick-and-mortar settings (providing transportation and reducing stigma, for example); and curbing practices by public and private payors that hinder treatment access (e.g., requiring prior authorization before patients can receive evidence-informed treatment services).

Recent actions by both major U.S. political parties offer some optimism that pragmatic measures will be implemented. Largely in response to the opioid epidemic's escalating lethality, elected officials and policymakers have pursued important and surprisingly bipartisan efforts to implement coverage parity, expand treatment access, and provide other critical services to people who use drugs, their families, and their communities. In an era of pronounced partisan rancor, addiction policy has proceeded with greater bipartisanship and humanity than one might have expected, especially when compared to our nation's fractured response to COVID-19 and to previous syndemics, such as the intertwined crack, heroin, and HIV epidemics of 30 years ago.

Major initiatives enacted during the presidencies of George W. Bush, Barack Obama, Donald Trump, and Joe Biden include the Mental Health Parity and Addiction Equity Act, quiet support among Republicans for the Affordable Care Act's mental-health and addiction-parity components (including unanimous support among Republican Senate Finance Committee members<sup>3</sup>), bipartisan passage of the Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act, and more.<sup>4</sup>

This paper begins by describing barriers to and facilitators of evidence-informed OUD treatment in the context of an increasingly lethal opioid supply. It notes the persistence of an opioid use disorder treatment gap: the great majority of people who live with these disorders do not receive evidence-informed treatment (or, indeed, any treatment). It also notes key barriers to initial and sustained engagement with evidence-informed interventions among people who use drugs.

The paper then discusses Medicaid's role as the key policy tool and financial foundation for the sustained delivery of treatment services and care that addresses prevalent physical and mental health challenges among people who use drugs, and related social determinants. Subsequently, the paper discusses new Medicaid waivers that seek to improve services for those who face the dual challenges of criminal-justice-system involvement and opioid use disorder. Attention is paid to the importance of linkage interventions that connect people with treatment at key moments, such as when they are released from jail or prison. There is also a discussion of associated opportunities and challenges facing problem-solving courts, which often serve this dual-challenged population.

The paper then discusses regulatory lessons learned and policy innovations that arose from the COVID-19 pandemic and the overdose epidemic. It also reviews policy innovations that have not always captured public attention, such as the Substance Abuse and Mental Health Services Administration's (SAMHSA) final rule, which seeks to make opioid use disorder treatment more evidence-informed, more trauma-informed, and more patient-centered. As part of this discussion, the paper considers low-barrier approaches to engaging people with OUD who cannot be exclusively served through standard modalities within clinical settings.

Finally, the paper assesses accomplishments and challenges in expanding the authority to prescribe MOUD in primary care and other clinical settings.

The paper closes with accompanying recommendations.

# I. Challenges to treatment access and to the effectiveness of available treatments

Millions of people who live with substance use disorders encounter numerous barriers to receiving needed treatment and care.

This paper first describes the opioid use disorder treatment gap, whereby fewer than one in four people living with OUD receives evidence-informed medication treatment. The paper then describes key barriers and challenges that underlie this treatment gap and in other ways worsen the lethality of the overdose epidemic. These barriers and challenges include

- Changes in illicit drug markets that make illicit drug supplies increasingly lethal, and increasingly difficult to address through existing medication treatments and harm reduction interventions.
- Stigmatizing attitudes toward addiction and addiction treatment, particularly toward MOUD, harbored by policymakers, the general public, medical providers, and, at times, patients themselves, hindering treatment financing, provision, and engagement.
- Lack of proper infrastructure to provide evidence-informed treatment and harm reduction services.
- Aspects of addiction treatment that patients find logistically challenging, costly, forbidding, or demeaning, even when the service provided is an evidence-informed medication treatment.

## THE OPIOID USE DISORDER TREATMENT GAP

The majority of people who live with substance use disorders do not engage with evidence-informed treatment—or, indeed, with any treatment—to address their condition. In the case of opioids, this “treatment gap” partly reflects distinctive challenges, but it also reflects a historical reality that has applied to virtually every intoxicating substance throughout the history of American alcohol and drug policy.

In their work on the treatment gap, Christopher M. Jones and colleagues (2023) examined data from the 2021 National Survey on Drug Use and Health pertaining to adults who satisfied screening criteria for OUD in the previous year.<sup>5</sup> Only 35.6% of respondents living with OUD received any form of substance use treatment in the previous year. Fewer than one in four respondents living with these disorders (22.3%) received the first-line evidence-informed MOUD noted above.

Jones and colleagues also document large disparities by race/ethnicity, gender, and rurality. Non-Hispanic Black respondents and respondents who were female were markedly less likely to receive such medications than were non-Hispanic white male respondents. Medicaid recipients with a recent OUD diagnosis were significantly more likely than their privately insured or uninsured counterparts to have received medication treatment. The authors also found large differences by geography: residents of non-metropolitan areas were much less likely to receive such medications compared to residents of large metropolitan areas.

Large regions, particularly rural areas in the central United States, depend upon a single “critical-access provider” for OUD treatment. Many of these facilities do not appear to be taking new patients.<sup>6</sup> Thus, existing resources for patients, including the widely used SAMHSA online treatment locator, may overstate treatment access in many areas of the country.<sup>7</sup>

Practical access to MOUD requires that patients can readily access treatment providers, and that the treatment experience is designed to facilitate continued engagement. Methadone treatment has typically required daily or weekly visits to a methadone provider.<sup>8</sup> Yet more than 80% of U.S. counties (and, in the case of Wyoming, an entire state) do not have a single opioid treatment program for methadone provision.<sup>9</sup> Many states erect barriers to new program openings—barriers that reflect the stigma directed at behavioral health—thereby limiting local access to such services.<sup>10</sup> Because buprenorphine can be prescribed and provided remotely, expanded telemedicine modalities have been proposed to narrow the treatment gap in areas facing geographic barriers to care.<sup>11</sup>

## AN INCREASINGLY LETHAL OPIOID SUPPLY

As discussed elsewhere in this project, fentanyl and other synthetic opioids have become far more prevalent in the illicit drug supply in recent years.<sup>12</sup> The resulting increased potency of illicit opioids plays a visible and dramatic role in the increasing lethality of the opioid supply and poses additional challenges to both treatment and harm reduction interventions. Increased opioid potency may require higher doses of methadone or buprenorphine for effective treatment. Inadequate dosing or delays in treatment can lead to withdrawal symptoms, cravings, relapse, and increased risk of death.<sup>13</sup> Moreover, when overdoses occur, an increasingly potent opioid supply may require higher doses of naloxone (also known as Narcan) in overdose reversal.

The emergence of novel substances in the drug supply creates additional challenges to addiction treatment and harm reduction interventions. Xylazine (also known as “tranq”) is a powerful sedative frequently used in veterinary settings. The compound, often mixed with fentanyl or other opioids, can produce severe skin wounds and ulcers. Naloxone does not reverse xylazine overdose.<sup>14</sup>

The OUD treatment gap takes on particular urgency given the overdose epidemic’s lethality and the availability of effective, evidence-informed MOUD treatments that have been demonstrated to prevent fatal overdoses, reduce HIV and viral hepatitis transmission, and improve other critical social and health outcomes for persons living with OUD and related addiction disorders.<sup>15</sup>

MOUD may play a particularly important protective role for persons living with opioid use disorder who experience sporadic periods of abstinence followed by a return to illicit drug use. MOUD provision has also been associated with reduced mortality among persons who experience nonfatal overdose.<sup>16</sup> In qualitative interviews presented by Pryce Michener, respondents noted that their receipt of MOUD—in this case, Suboxone, a specific form of MOUD that combines buprenorphine and naloxone—while experiencing spells of incarceration in Massachusetts jails was protective against tolerance loss and post-release overdose. As one respondent explained,

“ Every time I’ve ever had an experience if I’d gotten home, and I didn’t do any Suboxone, or have any Suboxone in my system before I went home, I went home and [overdosed] ... but if I went home, and I had Suboxone in my system ... when I did that heroin and that Suboxone, it saved my life... It never let me OD).”<sup>17</sup>



## **ADDICTION (AND ADDICTION-TREATMENT) STIGMA**

The perceptions, attitudes, and capacities of key gatekeepers and facilitators are also essential to patients' practical treatment access and service engagement. Medical providers, private insurers, Medicare, state Medicaid programs, correctional system leaders, and others play critical roles as purchasers, gatekeepers, and facilitators of these critical services. Often, these actors create barriers to treatment. Public policies, professional training, and organizational practices must identify ways to mobilize providers, payors, and leaders to improve access to critical services.

## **AMBIVALENT AND POLITICALLY POLARIZED PUBLIC REACTIONS TO ADDICTION POLICY CONCERNS**

Attitudes regarding addiction held by ordinary citizens, policymakers, clinicians, and other stakeholders play key roles in shaping the policy and service environments within which challenges related to addiction are addressed.

By some measures, attitudes held by policymakers and the public at large regarding the opioid epidemic appear to be less shaped by addiction stigma, and potentially less racialized and less intertwined with social cleavages, than was observed in earlier drug epidemics. For example, Julie Netherland and Helena B. Hansen performed a content analysis of 100 articles published between 2001 and 2011 related to opioid misuse. They find "a consistent contrast between criminalized urban black and Latino heroin injectors with sympathetic portrayals of suburban white prescription opioid users."<sup>18</sup> Carmel Shachar and colleagues reported similar findings in a 2020 comparison.<sup>19</sup> These authors compared explicitly medicalized media keywords and framing from the 2016-2017 prescription opioid epidemic with more punitive, more racialized, less medicalized media keywords and framings applied to other drug-use epidemics, such as those involving crack cocaine, methamphetamine, and heroin. Public perceptions of the opioid

epidemic as arising from pharmaceutical industry misconduct and as disproportionately affecting non-Hispanic whites appear to have promoted a more compassionate, less punitive response.<sup>20</sup>

Such responses were salient in stakeholder interviews conducted by Colleen M. Grogan and colleagues in 2016. These identified ways that Republican legislators in states such as Ohio, Kentucky, and New Hampshire voiced support for Medicaid expansion as a mechanism to address the opioid epidemic:

“ Stakeholders in these Republican-led states discussed how it was viewed as irresponsible not to adopt the Medicaid expansion in light of the severity of the epidemic. Because “people are dying” and Medicaid is “one, if not the biggest funders for treating that issue, we can’t afford frankly to not pay for services that work for people.” (OH stakeholder no. 5, state agency representative). ... An MCO [managed care organization] representative said, “The guys in Ohio ... that frankly ran and won, on the very, very right side of John Boehner, still support substance abuse and opioid treatment.” (OH stakeholder no. 2). They primarily wanted to support treatment for OUD, but realized that the Medicaid expansion was the easiest way to do that.”<sup>21</sup>

Many legislative leaders and stakeholders described their personal connections to friends and loved ones who had overdosed or were otherwise harmed by the opioid epidemic. For numerous stakeholders, the opioid epidemic was a crisis because its agonies touched people close to them.

The opioid epidemic's perceived “whiteness” and painful impact on Americans of every economic and educational category produced vastly different media imagery, public discourse, and policy responses from those that accompanied prior opioid epidemics, or those accompanying other drug-use epidemics today, such as the escalating challenges associated with methamphetamines and other stimulant use.<sup>22</sup>

Ironically, the perception of the opioid epidemic as affecting mostly white people is increasingly inaccurate. While non-Hispanic whites experience high overdose mortality,<sup>23</sup> recent epidemiological data indicate particularly sharp increases among African Americans and Native Americans, a trend that has not garnered sufficient policy attention.<sup>24</sup>

Although such data and anecdotes indicate that public animosity toward people who use drugs is a lower barrier to evidence-informed policies and service provision than it was in earlier drug-use epidemics, surveys conducted by Maria Pyra and colleagues in 2022 showed that sharp differences remain and are correlated with political party identification and attitudes about race.<sup>25</sup> Among respondents in the nationally representative AmeriSpeak survey, those who identified as Republican, and those who reported more conservative attitudes concerning racism directed at African Americans, were markedly less likely than others to support (i) public funding of addiction treatment for low-income people, (ii) expanded Medicaid-funded addiction services, and (iii) evidence-informed harm reduction interventions, including syringe services programs and community distribution of naloxone overdose reversal resources.

These same AmeriSpeak surveys also revealed continued ambivalence among African American respondents regarding MOUD and harm reduction interventions—a pattern of distrust that shows certain similarities to community responses to vaccination during the COVID-19 pandemic.<sup>26</sup> Recent analyses of state policies indicate sharp partisan divides in the generosity of Medicaid coverage.<sup>27</sup> Republican-controlled states also impose greater requirements for prior authorization of evidence-informed treatment.<sup>28</sup>

## **ADDICTION STIGMA AND TREATMENT PESSIMISM AMONG HEALTH CARE PROVIDERS**

Addiction stigma and treatment pessimism among health care providers constitute particularly concerning barriers to treatment access and engagement across a wide range of clinical settings.<sup>29</sup> 2023 survey research by Carrigan L. Parish and colleagues underscores challenges related to provider stigma.<sup>30</sup> Responding primary care and emergency physicians exhibited significantly greater stigmatization and treatment pessimism regarding OUD and MOUD than HIV, depression, or diabetes. More than 30% of surveyed providers reported that they prefer not to work with patients with OUD or stimulant use disorders, compared to those with diabetes (2%), HIV (9%), and depression (9%). Twenty-two percent of respondents reported “there is little I can do to help patients like this” regarding stimulant disorders. More than 50% of respondents agreed with the statement “I feel especially compassionate” toward patients with diabetes (51.5%), HIV (57.6%), and depression (57.6%). The comparable figures for alcohol (37.6%), opioid (33.4%), and stimulant use disorders (27.7%) were roughly twenty percentage points lower.

## **ATTITUDES REGARDING ADDICTION AND ADDICTION TREATMENT AMONG CORRECTIONAL LEADERS AND STAFF**

Leaders and staff in correctional settings play vital roles in providing in-facility treatment access and in facilitating transitions to evidence-informed treatment when persons living with OUD exit carceral settings. Intervention research in Massachusetts underscores the promise of culturally competent measures to address addiction stigma and other concerns among correctional leaders and staff. Studies by Elizabeth A. Evans, Peter D. Friedmann, Michener, and colleagues address the understandable fear of medication diversion in prison and jail settings.<sup>31</sup> These authors note that diversion is readily



managed in jail settings, and that persons who receive MOUD during incarceration experience lower post-release recidivism and mortality.<sup>32</sup>

## **MOUD STIGMA WITHIN THE SPECIALTY ADDICTION TREATMENT SYSTEM**

Policymakers, patients, and clinicians face one additional, particularly concerning obstacle: continuing resistance to MOUD within the specialty addiction field itself. Prior research indicated that addiction-treatment professionals who strongly endorsed 12-step (abstinence-based) programs and expressed skepticism toward harm reduction were most likely to provide below-optimal methadone doses.<sup>33</sup>

An extensive 2020 review by Katherine Cioe and colleagues underscores the prevalence of MOUD stigma among both patients and providers.<sup>34</sup> Cioe and colleagues note that many providers feel inadequately trained to provide methadone services, that methadone patients are particularly difficult to treat in clinical settings, and that abstinence-based recovery is medically, socially, and morally preferable to continued methadone maintenance treatment. Such attitudes and perceptions encourage some OUD treatment providers to discourage or refuse to offer MOUD.

Several states now require programs to offer MOUD as a condition of program licensure. Alene Kennedy-Hendricks and colleagues discussed the implications of these patterns in a 2024 review. These authors conducted qualitative interviews with policy officials and treatment providers regarding licensure requirements as one potentially promising tool to bring treatment practices into closer alignment with existing research.<sup>35</sup> Many, but not all, respondents endorsed such a regulatory approach. Some expressed skepticism regarding MOUD efficacy or worried that providing MOUD would disrupt program operations.

Reflecting the continuing role of MOUD stigma, respondents expressed concerns that MOUD provision would alienate a significant group of their own staff members—for example, those who have lived experiences with addiction and drug use and whose own recoveries did not involve medication use. Some treatment professionals who personally embraced MOUD worried that such policies would unduly prioritize medications over other services, such as counseling or therapy, or that patients would embrace MOUD while avoiding other services that may be required to address social and health challenges in their lives. Kennedy-Hendricks and colleagues also note significant operational challenges of such state regulations, including non-enforcement. None of the interviewed state officials reported a single facility losing its licensure due to noncompliance with the MOUD requirements.

## **BARRIERS TO METHADONE CARE IN ADDICTION CARE AND OTHER SETTINGS**

Methadone maintenance therapy offers key advantages over non-pharmaceutical OUD treatments and other medication treatments for many patients. Despite these advantages, only 200 out of 3,400 non-hospital-based residential addiction treatment programs, only 150 out of 1,900 partial-hospitalization addiction treatment programs, and only 550 out of 6,200 addiction treatment facilities with intensive outpatient programs offer methadone to their patients.<sup>36</sup> As discussed above, the institutional care settings through which methadone maintenance actually is provided often deter patients from engaging in or maintaining methadone treatment.

## II. Facilitators of treatment access and sustained patient engagement

In the face of the above challenges, several tools facilitate sustained and effective delivery of MOUD treatment to persons living with an OUD.

### MEDICAID IS THE KEY POLICY TOOL AND FINANCIAL FOUNDATION FOR THE SUSTAINED DELIVERY OF TREATMENT SERVICES

A treatment system that reliably engages new patients and promotes sustained engagement requires sufficient, credibly sustained financing infrastructure that addresses four interconnected challenges:

1. Assuring persons living with OUD that they have practical and equitable access to pertinent services without risk of severe financial harm.
2. Assuring treatment providers that they can accept low-income patients and make long-term institutional investments while knowing that they will receive secure and predictable reimbursement for accompanying services provided.
3. Assuring state and local governments that they have secure and predictable support from the federal government to make sustained investments in behavioral health services.
4. Ensuring proper interventions to address social determinants and physical- and mental health challenges that frequently co-occur with an opioid use disorder.

Medicaid is the central financing tool to address all four challenges, as it is now a dominant payor for addiction treatment across the United States, particularly for economically disadvantaged patients.

A burgeoning literature documents the specific and real, albeit imperfect, progress induced by Medicaid expansion toward closing the treatment gap. This literature also documents accompanying financial and non-financial barriers, including personal ambivalence about halting substance use and stigma associated with both addiction and MOUD.<sup>37</sup>

Medicaid reimbursement provides stable and predictable financial support for MOUD and related services and is thus far more likely to produce organizational and system changes than any time-limited legislation or short-term grant-funded intervention.<sup>38</sup> Existing studies show that the Affordable Care Act's Medicaid expansion broadened treatment access, albeit with important gaps in coverage and implementation caused by, among other things, administrative burdens and reimbursement.<sup>39</sup> Measures to strengthen Medicaid linkages to criminal justice settings—for example, state waivers to provide linkage services for persons exiting jails and prisons—hold promise to improve continuity of care, though the current research base is limited regarding recent Medicaid waivers in this domain.<sup>40</sup>

Recent research indicates that state Medicaid programs now offer more comprehensive coverage and are less likely to require prior authorization of needed services and take other steps shown to constrain access to care.<sup>41</sup> Reducing prior-authorization practices is particularly vital in light of evidence that such policies, including prior-authorization requirements tied to arbitrary dose thresholds for buprenorphine, are often barriers to sustained delivery of clinically appropriate treatment.<sup>42</sup>

Angela Shoulders and colleagues' 2023 survey of state Medicaid directors offers the most extensive analysis of benefit design in Medicaid fee-for-service programs.<sup>43</sup> These authors document substantial improvements, alongside substantial existing barriers. By 2021, 92% of responding states covered methadone maintenance treatment. Every responding state covered individual outpatient, group outpatient, buprenorphine, and injectable naltrexone treatment. Much of this progress reflected mandated coverage expansions for opioid use disorder treatment required under the 2018 Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act, which requires plans to cover medications approved by the Food and Drug Administration (FDA) for opioid use disorder.<sup>44</sup>

States are still permitted to implement prior-authorization requirements, dosing limitations, and other utilization controls associated with reduced MOUD use. However, the prevalence of prior-authorization requirements has declined for most forms of medication treatment. For example, the number of responding states requiring prior authorization for methadone maintenance declined from 15 in 2014 to five in 2021. More concerning is the number of responding states that still required prior authorization for buprenorphine. Although the number declined from 35 to 13 between 2014 and 2021, roughly one-third of responding states still required prior authorization for this evidence-informed treatment.

Long-term residential services were the only exception to the pattern. Seventeen of the 26 responding states that covered these services in 2021 reported some requirement for pre-authorization. Given the expense—and potential harms, such as heightened overdose risk—associated with such services, and the scientific consensus that less-intensive outpatient modalities are the preferred first-line treatment for OUD, some prior-authorization requirements may be consistent with the provision of evidence-informed care.

## **THE ROLE OF MEDICAID IN ADDRESSING CO-OCCURRING PHYSICAL AND MENTAL HEALTH CONDITIONS**

As noted above, persons living with OUD experience co-occurring physical and mental health disorders, each of which is harmful in its own right. Together, these complications magnify harms associated with substance use disorders. As noted by Keith Humphreys, Christina Andrews, and Richard G. Frank, these co-occurring health challenges are particularly difficult to address in the 10 states that continue to reject the Affordable Care Act's Medicaid expansion and where many of the most vulnerable residents are left uninsured.<sup>45</sup>

## **THE PROMISE OF MEDICAID TO ADDRESS BROADER SOCIAL DETERMINANTS**

Many people living with OUD face additional social and economic obstacles, such as housing precarity, which are worsened by the ways that OUD can undermine social connections and access to instrumental supports.<sup>46</sup> Housing First and related interventions are likely essential in addressing the needs of persons with OUD and other substance use disorders (SUDs), though there are limited existing evaluations of such interventions' impact on a range of important outcomes.<sup>47</sup> An active area of research and policy innovation focuses on how Medicaid might be a more effective tool to address these challenges—for example, through the financing of Housing First interventions.<sup>48</sup>

## **THE IMPORTANCE OF LINKAGE INTERVENTIONS**

Many interventions deploy recovery support workers, who often have lived experience with substance use disorders themselves, to address practical barriers to treatment access and to work with ambivalent patients to facilitate trust and strengthen and sustain their motivation to engage in treatment. The National Institutes of Health and other funders increasingly emphasize



the importance of linkage interventions to assist patients in accessing and engaging in addiction treatment in key moments of opportunity and vulnerability, such as the periods immediately following arrest or release from carceral settings.<sup>49</sup> Linkage interventions can similarly be applied in other settings (e.g., emergency departments, primary and mental health care, syringe services programs, or HIV and viral hepatitis testing and treatment). Expanded Medicaid coverage for peer-supported recovery services may facilitate their sustained deployment.<sup>50</sup>

Measures to strengthen Medicaid linkages to criminal justice settings offer a particularly important channel to improving treatment access within carceral settings and following release. State waivers to provide linkage services for persons exiting jails and prisons hold particular promise to improve continuity of care, though the current research base regarding such waivers is nascent.<sup>51</sup>

California's recent waiver to expand Medicaid pre-release services for incarcerated populations offers a leading model for other states. As described in a valuable 2023 summary by Sweta Haldar and Madeline Guth, an estimated 200,000 people will be eligible for services under this waiver. These services are available to eligible persons beginning 90 days prior to their expected date of release, with a central focus on behavioral health conditions. Covered services include MOUD, case management, and recovery supports.<sup>52</sup>

Another, lesser-known provision of the California waiver is no less significant. California is required to increase Medicaid reimbursement rates for services provided to formerly incarcerated persons to at least 80% of Medicare rates for primary care, behavioral health, and obstetrics—addressing a central access barrier facing the broader population of Medicaid recipients. However, even this reimbursement increase might prove insufficient given the already low reimbursement provided by Medicare and private payors. Emma E. McGinty and colleagues

recently conducted surveys and qualitative interviews with experts on MOUD policy and payment. As these authors report:

“90%, 83%, and 83% of experts reported that Medicare, Medicaid, and private insurers should increase payment for office-based MOUD, relative to current rates; 79%, 72%, and 90% reported that these insurers should increase payment rates for delivery of MOUD in OTPs [Opioid Treatment Programs].”<sup>53</sup>

## **GRADUALLY REDUCED BARRIERS TO MOUD CARE THROUGH DRUG COURTS AND OTHER PROBLEM-SOLVING COURTS**

Problem-solving courts—most prominently drug courts—play a distinctively important facilitative and gatekeeping role in linking people who use drugs to evidence-informed treatment when they face the dual challenge of addiction and criminal-justice-system involvement. This linkage is particularly important for persons whose substance use motivates retail theft and other acquisitive “survival crimes,” which are widespread within subpopulations of persons with severe OUD and other SUDs.

In 2019, Carrie M. Mintz and colleagues examined self-reported illegal behaviors among respondents in the 2014 National Survey of Drug Use and Health (NSDUH) who reported prescription drug use disorders.<sup>54</sup> For reasons discussed by Peter Reuter, Jonathan Caulkins, and Greg Midgette, NSDUH estimates likely understate illegal behaviors and criminal-justice involvement due to selective non-response, sample frame omissions, and underreporting.<sup>55</sup> These lower-bound figures are nonetheless informative.

In the analyses conducted by Mintz and colleagues, 21% of respondents living with prescription drug disorders reported being arrested in the past year, 27% reported selling illicit drugs, 15% reported theft of at least \$50, and 11% reported attacking someone with the intent to do harm.<sup>56</sup> Analyses of 2016 NSDUH data yielded similar findings: one-fifth of indi-

viduals with OUD reported an arrest, parole, or probation within the past year.<sup>57</sup> (Roughly one-quarter of arrests in this group were for violent offenses, rendering many of these respondents ineligible for problem-solving courts in much of the United States.)

Analyses of the 2022 NSDUH sample, the most recent available for public use, showed slightly lower self-reported prevalence of illegal behaviors and criminal-justice-system involvement among persons with prescription drug disorders. Fifteen percent of those with prescription drug disorders reported being arrested or booked in the past year, 18.9% reported selling illicit drugs, 11.8% reported theft of at least \$50, and 7.9% reported that they “attacked someone with intent to seriously hurt them.”<sup>58</sup>

In this same 2022 NSDUH sample, self-reported illegal behaviors and criminal-justice system involvement were markedly higher among those living with heroin use disorders—the most likely population to require MOUD in the context of problem-solving courts. Twenty-three percent reported being arrested or booked in the past year. Twenty-nine percent reported selling illicit drugs; 26.8% reported theft of at least \$50, and 14.6% reported attacking someone with intent to do harm. All of these groups could potentially be involved with problem-solving courts.

The existing research base remains limited regarding the provision of MOUD in the context of problem-solving courts. Paul J. Joudrey and colleagues reviewed the evaluation literature regarding problem-solving courts in 2021. Although more than 75% of such evaluations included criminal justice measures such as program graduation and participant recidivism, Joudrey and colleagues found that “less than 10% of evaluations reported substance use quality measures related to service utilization, overdose, and mortality.”<sup>59</sup>

As detailed by Douglas B. Marlowe and colleagues in 2022, problem-solving courts do appear to have made progress in expanding

MOUD access over the course of the current opioid epidemic.<sup>60</sup> In a 2012 national survey, Harlan Matusow and colleagues found that half of American drug courts imposed blanket prohibitions against the provision of methadone or buprenorphine.<sup>61</sup> Nine years later, 73% of surveyed drug-court programs reported that they provided access to all FDA-approved medications.

Some of this progress reflects federal policy changes. The Bureau of Justice Assistance imposes as a requirement for federal drug-court funding that no eligible client will be denied access because of their use of FDA-approved medications for opioid use disorder. Moreover, clients must be permitted to continue MOUD use for as long as a licensed clinician-prescriber determines it is medically beneficial.<sup>62</sup>

Despite these improvements, MOUD coverage remains limited during incarceration and periods of criminal-justice-system supervision. As described by Marlowe and colleagues, “only about one-quarter to one-half of clients with OUD received the medications in most programs, and respondents offered few explanations for this disconnect between policy and practice.”<sup>63</sup>

Exploring practical obstacles to MOUD provision, Fanni Farago and colleagues surveyed 42 state-wide problem-solving-court coordinators and 849 local problem-solving-court coordinators.<sup>64</sup> The authors found county-level measures of MOUD availability were highly predictive of whether local courts allowed methadone and buprenorphine. In part for this reason, these authors also found that methadone and buprenorphine were also far more likely to be offered in Medicaid-expansion states. Reflecting the continued role of MOUD stigma, courts were markedly less likely to offer medications when respondents endorsed the position that MOUD substitutes one addiction for another.

Exploring strategies to address such barriers, Andra-Christou and colleagues (2022) surveyed state laws that seek to influence

problem-solving courts' MOUD policies and actual MOUD provision. These authors suggest model state legislation to facilitate MOUD provision, including laws that would (i) prohibit problem-solving courts from excluding clients due to MOUD use, (ii) require problem-solving courts to offer MOUD to all clients likely to clinically benefit, (iii) prohibit problem-solving courts from limiting MOUD dosage or treatment duration, and (iv) prohibit problem-solving courts from considering MOUD receipt a violation of program rules.<sup>65</sup>

## LOW-BARRIER AND LOW-THRESHOLD TREATMENT INTERVENTIONS

One of the most difficult challenges facing treatment providers concerns how to engage and serve ambivalent people with substance use disorders—people who do not engage in the standard services offered within the four walls of a traditional clinic.<sup>66</sup> Low-barrier and team-based approaches are particularly important to engage people with OUD and related comorbidities out in the community.

Low-threshold treatment can include same-day initiation of MOUD, maintenance of medication without the arbitrary tapering of dosages and related practices, offering but not requiring individualized psychosocial services, offering flexibility in proper medication dosages in collaboration with patients, continuing medication when patients are not fully abstinent from substance use, and increasing the availability of settings to access services, including telehealth, syringe services programs, primary care, and inpatient/emergency care. These low-threshold strategies promise to increase treatment access, engagement, and retention, and, thus, to reduce overdose risk.<sup>67</sup>

Although the existing literature is limited, recent studies, including contributions by Miriam Komaromy and colleagues, suggest the promise of such approaches.<sup>68</sup> Recent data indicate that 45% of single state agencies support mobile provision, and 70% support buprenorphine provision in emergency department settings.<sup>69</sup>

Efforts such as the recent STAMINA trial underscore the promise of syringe services programs as platforms for program-based telemedicine linkages of MOUD treatment and represent evidence-informed efforts to more effectively link traditionally segmented treatment and harm reduction interventions.<sup>70</sup>

In a 2024 study, Avik Chatterjee and colleagues describe facilitators to effective implementation of mobile OUD treatment, including offering same-day or next-day MOUD in community settings. Combining mobile clinics with direct, in-person outreach and other approaches (such as frequent contacts) foregrounds strategies known to be effective for engaging ambivalent persons living with OUD and augments the provision of treatment or harm reduction interventions to hard-to-reach persons who reside in low-access areas, ranging from tent encampments to suburbs.<sup>71</sup>

These authors and others identify key barriers and facilitators to the effective provision of mobile treatment, including federal rule compliance and measures to establish and strengthen relationships with police and other community stakeholders—particularly those who may embrace MOUD but may be less supportive of syringe services programs and other harm reduction approaches.<sup>72</sup>

Such care approaches challenge the mindset through which addiction treatment is commonly delivered. For decades, traditional substance use disorder treatment relied heavily on an abstinence-based model, which spurns MOUD approaches or harm reduction models of addiction services and care. Many of these models include barriers to service access such as abstinence-only policies and multistage or appointment-based entry into treatment. Low-threshold treatment seeks to address such barriers to treatment access by focusing on patient health and safety through a “medication-first” and harm reduction lens.



## INCREASED PROVISION OF TAKE-HOME MEDICATIONS FOR ADDICTION TREATMENT

Myriad challenges posed by the COVID-19 pandemic hindered SUD treatment services. Measures undertaken to address these challenges offer correspondingly valuable lessons to expand treatment access and have produced important policy changes, including substantial revisions to federal regulations. SAMHSA's 42 CFR Part 8 Final Rule is likely the most prominent and consequential of these policy changes.<sup>73</sup>

SAMHSA's final rule governs OUD treatment standards and opioid treatment program (OTP) accreditation and certification. Its 2024 modifications addressed two connected challenges in the provision of OUD treatment. First, it sought to make care provided through OTPs more trauma-informed and person-centered. SAMHSA pursued this goal by encouraging cultural shifts in treatment provision. For example, it recommended that OTPs not use counseling attendance as a prerequisite to receiving MOUD and not recommend administrative tapers. The final rule also sought to make patients less dependent upon OTPs themselves to receive evidence-informed care.

In several ways, SAMHSA's final rule increased the flexibility of OTPs to offer person-centered care: it (i) enabled providers to admit and start a patient on methadone via audio-visual telehealth services, (ii) continued to allow initiation of buprenorphine through audio or audio-visual telehealth services, and (iii) offered patients a chance to qualify for immediate and extended take-homes. These take-homes could apply to the first 14 days after treatment (up to seven days of medication), to day 15 through day 30 (up to 14 days of medication), and to day 31 and onward (up to 28 days of medication), so that patients would not have to return to the clinic every day to receive care.

Implementation of the final rule was influenced by research examining the impact of the SAMHSA regulations that were implemented in March 2020 to maintain treatment access under the stringent restrictions imposed in response to COVID-19. SAMHSA allowed states to request blanket exemptions for immediate and extended take-home methadone to treat stable and less stable patients.<sup>74</sup>

In their efforts to investigate the possibilities for unintended harms associated with such policies, Christopher M. Jones and colleagues performed an interrupted time-series analysis to explore whether a modest observed increase in methadone-involved overdose deaths in March 2020, at the beginning of COVID-19 restrictions, was causally related to changing OTP methadone take-home policies. They found that this increase was likely due to a spike in all opioid-related overdose deaths associated with increased fentanyl supply rather than changes in OTP take-home policies. After March 2020, the incidence of fatal overdoses not involving methadone continued to increase, while the incidence of methadone-involved fatal overdoses actually declined.<sup>75</sup>

SAMHSA materials also cite Ofer Amran and colleagues, who examined the impact of more flexible methadone take-home policies within a convenience sample of 183 patients receiving care at a methadone clinic in Spokane, Washington.<sup>76</sup> Studied outcomes included opioid-related and non-opioid-related emergency department visits and methadone treatment non-adherence, as captured by at least one negative urine drug test for either methadone or its metabolite. Patients received a substantial increase in methadone take-home doses with no significant increase in any measure of poor treatment outcomes.

Center for Substance Abuse Treatment Director Yngvild Olsen described the final rule's key policy changes in a recent podcast:

“ No longer do people have to come into the clinic every day to get their medicine. People [can] actually take anywhere between 14 to 28 days of medication home. ... This expansion of access to methadone take-homes was met with positive responses, both from patients and providers. And it was not associated with significant increases in diversion, misuse, or methadone-related mortality, as had been feared. ... So in that final rule that we released in February, we made those flexibilities permanent. So now people don't have to go to the clinic every single day to get their medication.”<sup>77</sup>

Existing state-level regulations may remain in conflict with the final rule, requiring local change to align with the new evidence-informed standards.<sup>78</sup> Some of the final rule's most important guidelines only apply to OTPs within the 35 states that choose to embrace these rules.<sup>79</sup> Eight jurisdictions (Delaware, the District of Columbia, Florida, Illinois, Maine, New Hampshire, Oklahoma, and Washington State) concurred only with the new methadone take-home rules; one state (Arizona) concurred only with the new flexibility regarding telehealth buprenorphine induction; and seven jurisdictions (Hawaii, Indiana, Michigan, Montana, Puerto Rico, Virginia, and Wisconsin) did not concur with either.<sup>80</sup>

Mitchell and colleagues explored the successes and accompanying challenges of several policies and practices encouraged by the SAMHSA final rule. The authors performed semi-structured, qualitative interviews with OTP staff members and the state opioid treatment authorities responsible for overseeing federal regulatory compliance.<sup>81</sup>

Respondents interviewed by Shannon G. Mitchell and colleagues underscored the benefits of loosened regulatory barriers while noting important implementation challenges. Respondents noted the value of blanket take-home exemptions and supported the use of telehealth counseling. At the same time, respondents noted COVID-19-related changes were most beneficial for

established patients, who could more readily obtain take-home medications and attend remote individual counseling.

Mitchell and colleagues also noted sociodemographic disparities. Patients with limited resources experienced greater difficulty accessing remote counseling and faced additional barriers to telehealth, such as physical exam requirements tied to admission. Rural areas may also face disparate access to cellular and broadband coverage, further limiting equitable access to telehealth.<sup>82</sup> Rules discouraging OTPs from withholding MOUD from patients who decline counseling also challenged the business models of some OTPs, which derive important revenues from reimbursed counseling services.

## REMOVAL OF THE BUPRENORPHINE X-WAIVER

Until the end of 2022, health care providers required additional training and an X-waiver provided by the Drug Enforcement Administration (DEA) and SAHMSA to prescribe buprenorphine in the United States. That requirement has now been removed, which may further increase MOUD treatment access in clinical settings, including primary care, emergency medicine, hospital-based medicine, and telemedicine. Existing data are limited regarding the practical impact of removing the X-waiver. Studies of the Rhode Island Prescription Drug Monitoring Program and national pharmaceutical databases show relatively modest effects of relaxing X-waiver requirements, underscoring the need to address broader barriers to care.<sup>83</sup>

Surveys conducted by Christopher Jones and colleagues indicate that removal of the X-waiver has attracted new prescribing clinicians, but that this expansion is largely concentrated in emergency and urgent-care settings.<sup>84</sup> Additional barriers that impact buprenorphine access include the availability of psychosocial care and other services, lack of screening for and identification of patients with OUD, and organizational and policy barriers that hinder clinicians' ability to incorporate buprenorphine prescribing into their practice.<sup>85</sup>

## III. Recommendations

**Make Medicaid the cornerstone of sustainable addiction treatment, particularly for the most vulnerable populations.** Medicaid expansion to all states is an essential tool to address the full range of physical and mental health challenges experienced by persons who live with substance use disorders, and to create opportunities in primary care for treatment using buprenorphine and other medications. Medicaid policy innovations can also more effectively serve persons who are incarcerated or who are returning from jails and prisons to their local communities. Current 1115(b) waivers provide one platform for such innovations; as noted below, these require rigorous implementation evaluation. Bolstering Medicaid's capacity to serve persons living with substance use disorder is the central tool to providing effective, sustainable services at scale for millions of Americans.

**Ensure adequate, predictable, and sustained reimbursement for evidence-informed services across care settings.** Persons who live with substance use disorder raise particular care challenges for many providers. Ensuring adequate reimbursements is essential to ensuring proper access to care. This a particularly important challenge for Medicaid, which serves so many vulnerable patients, and which imposes daunting reimbursement challenges for service providers. Payors must also reimburse the range of evidence-informed services required for proficient care in different settings. Hospital-based addiction consult services, for example, are valuable in providing MOUD for patients in emergency departments, in inpatient settings, and at discharge, including those admitted or treated following an overdose or following other OUD-related complications. One study found that an addiction consult service could prevent one drug-related death for every 73 treated patients.<sup>86</sup>

**Expand methadone maintenance authority to board-certified addiction medicine physicians, addiction psychiatry physicians, and pharmacists.** Policymakers and clinicians have proposed expanding the authority of board-certified addiction medicine and addiction psychiatry physicians to prescribe methadone treatment for stabilized patients.<sup>87</sup> The handful of existing studies on this topic suggests that expanding the population of clinical providers eligible to prescribe methadone would greatly reduce geographic barriers to MOUD care.<sup>88</sup>

Senate Bill S. 644, the Modernized Opioid Treatment Access Act, offers one useful model for expanding methadone prescribing authority. As described in the Congressional summary, the bill:

- “ (1) waives provisions of the Controlled Substances Act that require qualified practitioners to obtain a separate registration from the Drug Enforcement Administration (DEA) to prescribe and dispense methadone to treat OUD, and (2) requires Substance Abuse and Mental Health Services Administration and the DEA to jointly report on the waiver.
- “ Additionally, the bill directs the DEA to register certain practitioners to prescribe methadone that is dispensed through a pharmacy for an individual's unsupervised use. Qualified practitioners must be licensed or authorized to prescribe controlled substances, and they must either work for an opioid treatment program or be a physician or psychiatrist with a specialty certification in addiction medicine. ...
- “ [T]he bill also requires the exclusive use of electronic prescribing, establishes prescription limits, and sets out requirements for informed consent. Further, the bill permits the use of telehealth to provide methadone treatment and related services if the state and the Department of Health and Human Services jointly determine the use is feasible and appropriate.”<sup>89</sup>



Allowing board-certified addiction medicine and addiction psychiatry physicians to prescribe methadone to a pharmacy for dispensing could help to address key gaps in the existing addiction treatment system, most especially the need to create stand-alone OTPs in rural areas and in states that limit the number and location of such facilities.

**Improve public awareness of the value and availability of medication treatment.** Public and patient perceptions constitute an understudied challenge to the delivery of buprenorphine treatment in primary care settings. In one recent nationally representative survey, U.S. adults were asked whether a primary care provider could “treat people with [OUD] by prescribing them a medication for this disorder.” Sixty-one percent of respondents did not know that providers could do so, and an additional 13% incorrectly believed providers were not permitted to do so.<sup>90</sup> Such patient perceptions are likely reflected in findings such as those of Jones and colleagues, in which clinicians report lack of demand as the most common reason for not prescribing buprenorphine since receiving pertinent waivers.<sup>91</sup>

**Improve the monitoring and evaluation of programs and policy interventions, with particular attention to practical implementation.** Analyses cited in this paper, such as the work of Christopher J. Miller and colleagues, underscore the growing appreciation among researchers, practitioners, and policymakers of well-structured implementation analyses of measures to improve addiction services.<sup>92</sup> Guided by the Consolidated Framework for Implementation Research and related frameworks, such analyses scrutinize barriers and facilitators to effective program implementation, identify facilitating and hindering factors in sustained and effective program delivery, and seek to understand how and when one can generalize favorable (or unfavorable) evaluations of a particular intervention to other organizations, patient populations, and community settings.<sup>93</sup>

Research remains limited regarding the effective and scaled implementation of the many policies and interventions that have been proposed. For example, Medicaid policy innovations to serve persons with opioid use disorder command broad support across ideological lines. Many questions remain regarding how such measures can be effectively implemented at scale. Implementation evaluations of measures such as state 1115(b) waivers to serve persons leaving carceral settings would be especially valuable.

In several domains, such analyses are essential to understanding how policymakers can strengthen the organizational capacity of addiction service providers and others to effectively engage and retain patients; provide proficient, evidence-informed care; and support the skilled workforce required to provide such services and care.

**Improve access to medications for opioid use disorder across care settings.** Persons with an opioid use disorder require access to evidence-informed treatment. Measures must be taken across addiction treatment care settings to expand and ensure such access. Efforts must also be made to facilitate MOUD access in other settings—including those where addiction treatment has not traditionally been provided. Particularly as the population of Americans living with addiction disorders ages, many will experience physical and mental health challenges that may require residential services or long-term care. Research such as that by Patience Moyo and colleagues underscores important opportunities to expand MOUD provision and to reduce disparities, across care settings, in serving older adults living with addiction disorders.<sup>94</sup>

**Expand syringe services and mobile treatment programs.** Such programs are especially valuable in delivering medication treatments to persons who are precariously housed, or who for other reasons are unlikely to present for traditional addiction treatment and clinical care.

## IV. Conclusion

Under any feasible policy, the United States will endure tens of thousands of opioid overdose deaths every year, for the foreseeable future.<sup>95</sup> While no single intervention, or package of interventions, will dramatically or quickly reduce these public health harms, SAMHSA's final rule and the other strategies outlined in this paper are promising measures that can help.

Voters, policymakers, and elected officials from both parties agree with many treatment providers about the importance of expanded access to and uptake of MOUD among those who use drugs. Effective, methodical, sustained, and equitable implementation of MOUD can save thousands of lives every year, as we seek to address the most lethal and widespread drug epidemic, and downstream syndemics of HIV and viral hepatitis, in American history.

By far the most important set of measures concerns the expansion and quality of Medicaid coverage, including increased provider reimbursement and innovations in state waivers. Sustained implementation of these measures will allow state governments, jails and prisons, and MOUD providers to make correspond-

ingly sustained investments in expanding access and providing effective care linkages, in turn promoting successful engagement with evidence-informed treatment, medical care, and other harm reduction and clinical services. Medicaid's engagement with Housing First and other models is equally critical to addressing homelessness and other social and economic challenges that remain prevalent among persons with substance use disorder.

Alongside these measures, expanded coverage for social support services by Medicaid is warranted. Such expansion is critical to people who use drugs and who face psychosocial barriers (e.g., addiction stigma), personal barriers (e.g., lack of resources for basic needs), and other structural barriers to MOUD access and uptake. Other challenges remain prevalent and in need of interventions. Strategies that address these challenges would seek to (i) reduce addiction and MOUD stigma among treatment providers and staff, (ii) improve access to MOUD across care and criminal justice settings (e.g., problem-solving courts), and (iii) address geographic treatment disparities. Finally, only 35 states have partially implemented SAMHSA's final rule, leaving much room for advocacy and policy development in states whose existing regulations may conflict with evidence-informed policies.

# Endnotes

- 1 Farida Ahmad, Lauren Rossen, and P. Sutton, "Provisional drug overdose death counts," National Center for Health Statistics, 2024, <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>.
- 2 Christine E. Grella et al., "Scoping review of interventions to link individuals to substance use services at discharge from jail," *Journal of Substance Abuse Treatment* 138 (July 2022), <https://doi.org/10.1016/j.jsat.2021.108718>; Mai Pho et al., "Reducing Opioid Mortality in Illinois (ROMI): A case management/peer recovery coaching critical time intervention clinical trial protocol," *Journal of Substance Abuse Treatment* 128 (Sept. 2021), <https://doi.org/10.1016/j.jsat.2021.108348>; Kathryn Hawk et al., "Consensus Recommendations on the Treatment of Opioid Use Disorder in the Emergency Department," *Annals of Emergency Medicine* 78, no. 3 (Sept. 2021): 434-442, <https://doi.org/10.1016/j.annemergmed.2021.04.023>.
- 3 "Results of Executive Session: America's Healthy Future Act of 2009, United States Senate Committee on Finance, September 22, 2009, <https://www.finance.senate.gov/imo/media/doc/102009%20America's%20Healthy%20Future%20Act%20Markup%20Results1.pdf>.
- 4 Colleen M. Grogan et al., "Are Policy Strategies for Addressing the Opioid Epidemic Partisan? A View from the States," *Journal of Health Politics, Policy and Law* 45, no. 2 (April 2020): 277-309, <https://doi.org/10.1215/03616878-8004886>.
- 5 Christopher M. Jones et al., "Use of Medication for Opioid Use Disorder Among Adults With Past-Year Opioid Use Disorder in the US, 2021," *JAMA Network Open* 6, no. 8 (Aug. 1, 2023), <https://doi.org/10.1001/jamanetworkopen.2023.27488>.
- 6 Danielle Rudes et al., "No help finding help: The search for MAT/MOUD in critical access areas" (presentation for the Justice Community Opioid Innovation Network Steering Committee, Bethesda, MD, 2024).
- 7 Harold A. Pollack et al. "Critical access medication for opioid use disorder (MOUD) treatment facilities in the continental United States," *Drug and Alcohol Dependence Reports* 6 (March 2023), <https://doi.org/10.1016/j.dadr.2022.100130>.
- 8 Eric Tatara et al., "Spatial inequities in access to medications for treatment of opioid use disorder highlight scarcity of methadone providers under counterfactual scenarios," *PLOS Computational Biology* (July 26, 2024), <https://doi.org/10.1371/journal.pcbi.1012307>; Marynia A. Kolak et al., "Rural risk environments, opioid-related overdose, and infectious diseases: A multidimensional, spatial perspective," *International Journal of Drug Policy* 85 (Nov. 2020), <https://doi.org/10.1016/j.drugpo.2020.102727>; Qinyun Lin et al., "Individual, interpersonal, and neighborhood measures associated with opioid use stigma: Evidence from a nationally representative survey," *Social Science & Medicine* 305 (Jul 2022), <https://doi.org/10.1016/j.socscimed.2022.115034>; Colleen McLuckie et al., "Identifying Areas with Disproportionate Local Health Department Services Relative to Opioid Overdose, HIV and Hepatitis C Diagnosis Rates: A Study of Rural Illinois," *International Journal of Environmental Research and Public Health* 16, no. 6 (March 19, 2019), <https://doi.org/10.3390/ijerph16060989>. See the below discussion of SAMHSA's final rule for ways current policymakers have sought to relax these requirements.

- 9** “Opioid Treatment Program (OTP) Accreditation Fact Sheet,” The Joint Commission, [https://www.jointcommission.org/resources/news-and-multimedia/fact-sheets/facts-about-opioid-treatment-program-accreditation/#:~:text=An%20opioid%20treatment%20program%20\(OTP,with%20an%20opioid%20agonist%20medication.%22](https://www.jointcommission.org/resources/news-and-multimedia/fact-sheets/facts-about-opioid-treatment-program-accreditation/#:~:text=An%20opioid%20treatment%20program%20(OTP,with%20an%20opioid%20agonist%20medication.%22).
- 10** Y. L. Irene Wong and Victoria Stanhope, “Conceptualizing community: A comparison of neighborhood characteristics of supportive housing for persons with psychiatric and developmental disabilities,” *Social Science & Medicine* 68, no. 8 (April 2009): 1376-1387, <https://doi.org/10.1016/j.socscimed.2009.01.046>.
- 11** Christopher M. Jones et al., “Use of Medication for Opioid Use Disorder Among Adults With Past-Year Opioid Use Disorder in the US, 2021”; “Opioid Treatment Program (OTP) Accreditation Fact Sheet.”
- 12** Joseph J. Palamar, et al., “Trends in seizures of powders and pills containing illicit fentanyl in the United States, 2018 through 2021,” *Drug and Alcohol Dependence* 234 (May 1, 2022), <https://doi.org/10.1016/j.drugalcdep.2022.109398>.
- 13** A 2023 review of the clinical research on the daily dose of sublingual buprenorphine for OUD treatment indicates that buprenorphine’s dose-dependent benefits for treating OUD can safely extend up to and potentially beyond 32 mg/day, particularly in individuals in high metabolic states such as pregnancy; see Lucinda A. Grande et al., “Evidence on Buprenorphine Dose Limits: A Review,” *Journal of Addiction Medicine* 17, no. 5 (Sept.-Oct. 2023): 509-516, <https://doi.org/10.1097/ADM.0000000000001189>. See also Thomas D’Aunno and Harold Pollack, “Changes in methadone treatment practices: Results from a national panel study, 1988-2000,” *JAMA: Journal of the American Medical Association* 288, no. 7 (Aug. 21, 2002): 850-856; Harold Pollack and Thomas D’Aunno, “Dosage Patterns in Methadone Treatment: Results from a National Survey, 1988-2005,” *Health Services Research* 43, no. 6 (2008): 2143-2163, <https://doi.org/10.1111/j.1475-6773.2008.00870.x>.
- 14** Although naloxone does not reverse xylazine overdose, it may still be required in xylazine-involved overdoses when opioids are also present.
- 15** “What is the impact of medication for opioid use disorder treatment on HIV/HCV outcomes? 2021” (Bethesda: National Institute on Drug Use, 2021), <https://nida.nih.gov/publications/research-reports/medications-to-treat-opioid-addiction/what-impact-medication-opioid-use-disorder-treatment-hivhcv-outcomes>; NASEM, *Methadone Treatment for Opioid Use Disorder: Improving Access Through Regulatory and Legal Change* (Washington, DC: National Academies Press, 2022).
- 16** For example, see Hillary Samples et al., “Buprenorphine After Nonfatal Opioid Overdose: Reduced Mortality Risk in Medicare Disability Beneficiaries,” *American Journal of Preventive Medicine* 65, Issue 1 (July 2023): 19-29, <https://doi.org/10.1016/j.amepre.2023.01.037>, and Molly A. Nowels et al., “Suicide within 1 year of non-fatal overdose: Risk factors and risk reduction with medications for opioid use disorder,” *General Hospital Psychiatry* 86 (Jan-Feb 2024): 24-32, <https://doi.org/10.1016/j.genhosppsych.2023.11.003>.
- 17** Pryce Michener, “Implementation of Medications for Opioid Use Disorder in Jail Settings and the Post-release Risk Environment,” MD/Ph.D. in Population Health Sciences, University of Massachusetts Chan Medical School, 2024, 108.



- 18** Julie Netherland and Helena B. Hansen, "The War on Drugs That Wasn't: Wasted Whiteness, 'Dirty Doctors,' and Race in Media Coverage of Prescription Opioid Misuse," *Culture, Medicine, and Psychiatry* 40, no. 4 (December 2016): 664-686, <https://doi.org/10.1007/s11013-016-9496-5>.
- 19** Carmel Shachar et al., "Criminal Justice or Public Health: A Comparison of the Representation of the Crack Cocaine and Opioid Epidemics in the Media," *Journal of Health Politics, Policy and Law* 45, no. 2 (April 1, 2020): 211-239, <https://doi.org/10.1215/03616878-8004862>.
- 20** Julie Netherland and Helena B. Hansen, "The War on Drugs That Wasn't"; Sonia Mendoza, Allyssa S. Rivera, and Helena B. Hansen, "Re-racialization of Addiction and the Redistribution of Blame in the White Opioid Epidemic," *Medical Anthropology Quarterly* 33, no. 2 (June 2019): 242-262, <https://doi.org/10.1111/maq.12449>; Sonia Mendoza, Allyssa S. Rivera-Cabrero, and Helena Hansen, "Shifting blame: Buprenorphine prescribers, addiction treatment, and prescription monitoring in middle-class America," *Transcultural Psychiatry* 53, no. 4 (Aug. 2016): 465-487, <https://doi.org/10.1177/1363461516660884>.
- 21** Colleen M. Grogan et al., "Are Policy Strategies for Addressing the Opioid Epidemic Partisan?"
- 22** Jeffrey C. Peterson, Aline Gubrium, and Alice Fiddian-Green. "Meth Mouth, White Trash, and the Pseudo-Racialization of Methamphetamine Use in the U.S.," *Health Communication* 34, no. 10 (Sep 2019): 1173-1182, <https://doi.org/10.1080/10410236.2018.1471333>; Celine Gounder, "Opioids are a bipartisan issue because they've become a mainstream, white one," *The Guardian*, June 9, 2016, <https://www.theguardian.com/us-news/commentis-free/2016/jun/09/opioids-bipartisan-issue-now-white-people-use-epidemic>.
- 23** Rachel A. Hoopsick, Gregory G. Homish, and Kenneth E. Leonard, "Differences in Opioid Overdose Mortality Rates Among Middle-Aged Adults by Race/Ethnicity and Sex, 1999-2018," *Public Health Reports* 136, no. 2 (2021): 192-200, <https://doi.org/10.1177/0033354920968806>; Kumiko Lippold and Bina Ali, "Racial/ethnic differences in opioid-involved overdose deaths across metropolitan and non-metropolitan areas in the United States, 1999-2017," *Drug Alcohol Dependence* 212 (Jul. 1, 2020), <https://doi.org/10.1016/j.drugalcdep.2020.108059>.
- 24** "Overdose death rates increased significantly for Black, American Indian/Alaska Native people in 2020" (Atlanta: Centers for Disease Control and Prevention, 2022), <https://www.cdc.gov/media/releases/2022/s0719-overdose-rates-vs.html>.
- 25** Maria Pyra et al., "Support for evidence-informed opioid policies and interventions: The role of racial attitudes, political affiliation, and opioid stigma," *Preventive Medicine* 158 (May 2022), <https://doi.org/10.1016/j.ypmed.2022.107034>.
- 26** Carl A. Latkin et al., "An Assessment of the Rapid Decline of Trust in US Sources of Public Information about COVID-19," *Journal of Health Communication* 25, no. 10 (Oct. 2, 2020): 764-773, <https://doi.org/10.1080/10810730.2020.1865487>; Carl A. Latkin et al., "A longitudinal study of vaccine hesitancy attitudes and social influence as predictors of COVID-19 vaccine uptake in the US," *Human Vaccines & Immunotherapeutics* 18, no. 5 (Nov. 30, 2022), <https://doi.org/10.1080/21645515.2022.2043102>.
- 27** Colleen M. Grogan et al., "Are Policy Strategies for Addressing the Opioid Epidemic Partisan?"; Christina M. Andrews et al., "Medicaid Managed Care Prior Authorization For Buprenorphine Tied To State Partisanship And Health Plan Profit Status, 2018," *Health Affairs (Millwood)*

- 43, no. 1 (Jan. 2024): 55-63, <https://doi.org/10.1377/hlthaff.2023.00288>; Allie F. Silverman et al., "Substance use disorder treatment carve outs in Medicaid managed care," *Journal of Substance Use & Addiction Treatment* 161 (March 28, 2024), <https://doi.org/10.1016/j.josat.2024.209357>.
- 28** Christina M. Andrews et al., "Medicaid Managed Care Prior Authorization For Buprenorphine."
- 29** Yngvild Olsen and Joshua M. Sharfstein. "Confronting the stigma of opioid use disorder—and its treatment," *JAMA* 311, no. 14 (Apr. 9, 2014): 1393-1394, <https://doi.org/10.1001/jama.2014.2147>.
- 30** Carrigan L. Parish et al., "Health Care Provider Stigma Toward Patients With Substance Use Disorders: Protocol for a Nationally Representative Survey," *JMIR Research Protocols* 12 (Sept. 26, 2023), <https://doi.org/10.2196/47548>; Carrigan L. Parish et al., "Healthcare Provider Stigma Towards Patients with Substance Use Disorders (Clinical Trials Network-0104)," 2024 (under review).
- 31** Benjamin J. Bovell-Ammon et al., "Prison Buprenorphine Implementation and Postrelease Opioid Use Disorder Outcomes," *JAMA Network Open* 7, no. 3 (Mar 4, 2024), <https://doi.org/10.1001/jamanetworkopen.2024.2732>; Elizabeth A. Evans, Donna Wilson, and Peter D. Friedmann, "Recidivism and mortality after in-jail buprenorphine treatment for opioid use disorder," *Drug and Alcohol Dependence* 231 (Feb. 1, 2022), <https://doi.org/10.1016/j.drugalcdep.2021.109254>; Elizabeth A. Evans et al., "Uncommon and preventable: Perceptions of diversion of medication for opioid use disorder in jail," *Journal of Substance Abuse Treatment* 138 (Jul. 2022), <https://doi.org/10.1016/j.josat.2022.108746>; Elizabeth A. Evans et al., "Diversion of medications to treat opioid use disorder: Qualitative findings from formerly incarcerated adults in Massachusetts," *International Journal of Drug Policy* 122 (Dec. 2023), <https://doi.org/10.1016/j.drugpo.2023.104252>; Atsushi Matsumoto et al., "Jail-based reentry programming to support continued treatment with medications for opioid use disorder: Qualitative perspectives and experiences among jail staff in Massachusetts," *International Journal of Drug Policy* 109 (Nov. 2022), <https://doi.org/10.1016/j.drugpo.2022.103823>; Pryce S. Michener et al., "Diffusion of medications for opioid use disorder treatment in jail settings: A convergent mixed methods study of jail staff perspectives," *Addiction Science and Clinical Practice* 19, no. 1 (Feb. 12, 2024): 10, <https://doi.org/10.1186/s13722-024-00440-2>; Shannon G. Mitchell et al., "Community correctional agents' views of medication-assisted treatment: Examining their influence on treatment referrals and community supervision practices," *Substance Abuse* 37, no. 1 (2016): 127-133, <https://doi.org/10.1080/08897077.2015.1129389>; Ekaterina Pivovarovva et al., "Legislatively mandated implementation of medications for opioid use disorders in jails: A qualitative study of clinical, correctional, and jail administrator perspectives," *Drug and Alcohol Dependence* 234 (May 1, 2022), <https://doi.org/10.1016/j.drugalcdep.2022.109394>; Ekaterina Pivovarovva et al., "Facilitators and barriers to collaboration between drug courts and community-based medication for opioid use disorder providers," *Journal of Substance Use & Addiction Treatment* 147 (Apr. 2023), <https://doi.org/10.1016/j.josat.2022.208950>; Thomas J. Stopka et al., "Medication for opioid use disorder treatment continuity post-release from jail: A qualitative study with community-based treatment providers," *International Journal of Drug Policy* 110 (Dec. 2022), <https://doi.org/10.1016/j.drugpo.2022.103803>.

- 32** Benjamin J. Bovell-Ammon et al., "Prison Buprenorphine Implementation and Postrelease Opioid Use Disorder Outcomes"; Elizabeth A. Evans et al., "Recidivism and mortality after in-jail buprenorphine treatment for opioid use disorder"; Elizabeth A. Evans et al., "Uncommon and preventable: Perceptions of diversion of medication for opioid use disorder in jail"; Elizabeth A. Evans et al., "Diversion of medications to treat opioid use disorder."
- 33** Alene Kennedy-Hendricks et al., "Licensure Policies May Help States Ensure Access to Opioid Use Disorder Medication in Specialty Addiction Treatment," *Health Affairs (Millwood)* 43, no. 5 (May 2024): 732-739, <https://doi.org/10.1377/hlthaff.2023.01306>.
- 34** Katherine Cioe et al., "A systematic review of patients' and providers' perspectives of medications for treatment of opioid use disorder," *Journal of Substance Abuse Treatment* 119 (Dec. 2020), <https://doi.org/10.1016/j.jsat.2020.108146>.
- 35** Alene Kennedy-Hendricks et al., "Licensure Policies May Help States Ensure Access to Opioid Use Disorder Medication in Specialty Addiction Treatment," *Health Affairs (Millwood)* 43, no. 5 (May 2024): 732-739, <https://doi.org/10.1377/hlthaff.2023.01306>.
- 36** "National Substance Use and Mental Health Services Survey (N-SUMHSS), 2021: Annual Detailed Tables," (Rockville: Substance Abuse and Mental Health Services Administration, 2023), [https://www.samhsa.gov/data/sites/default/files/reports/rpt39450/2021%20N-SUMHSS%20Annual%20Detailed%20Tables\\_508\\_Compliant\\_2\\_8\\_2023.pdf](https://www.samhsa.gov/data/sites/default/files/reports/rpt39450/2021%20N-SUMHSS%20Annual%20Detailed%20Tables_508_Compliant_2_8_2023.pdf); "A 50-Year-Old Law Limits Many Americans' Access to Addiction Treatment That Is Right for Them," (Chevy Chase: American Society of Addiction Medicine, 2024), [https://downloads.asam.org/sitefinity-production-blobs/docs/default-source/advocacy/letters-and-comments/methadone-resources/program-infographic-\(1\).pdf?s-fvrsn=1948b0ad\\_1](https://downloads.asam.org/sitefinity-production-blobs/docs/default-source/advocacy/letters-and-comments/methadone-resources/program-infographic-(1).pdf?s-fvrsn=1948b0ad_1).
- 37** Noa Krawczyk et al., "Has the treatment gap for opioid use disorder narrowed in the U.S.: A yearly assessment from 2010 to 2019," *International Journal of Drug Policy* 110 (Dec. 2022), <https://doi.org/10.1016/j.drugpo.2022.103786>; Christina M. Andrews et al., "Medicaid Benefits For Addiction Treatment Expanded after Implementation of The Affordable Care Act," *Health Affairs (Millwood)* 37, no. 8 (Aug. 2018): 1216-1222, <https://doi.org/10.1377/hlthaff.2018.0272>; Ethan Sahker et al., "Evaluating the substance use disorder treatment gap in the United States, 2016-2019: A population health observational study," *The American Journal on Addictions* 33, no. 1 (Jan. 2024): 36-47, <https://doi.org/10.1111/ajad.13465>; Jannat Saini, Breah Johnson, and Danya M. Qato, "Self-Reported Treatment Need and Barriers to Care for Adults With Opioid Use Disorder: The US National Survey on Drug Use and Health, 2015 to 2019," *American Journal of Public Health* 112, no. 2 (Feb. 2022): 284-295, <https://doi.org/10.2105/AJPH.2021.306577>; Catherine Tomko, Mark Olsson, and Ramine Mojtabai, "Gaps and barriers in drug and alcohol treatment following implementation of the affordable care act," *Drug and Alcohol Dependence Reports* 5 (Dec 2022), <https://doi.org/10.1016/j.dadr.2022.100115>.
- 38** Richard G. Frank, Keith Humphreys, and Harold Pollack, "Our Other Epidemic: Addiction," *JAMA Health Forum* 2, no. 3 (Mar 1, 2021), <https://doi.org/10.1001/jama-healthforum.2021.0273>; Richard G. Frank, Keith N. Humphreys, and Harold A. Pollack, "Policy Responses to the Addiction Crisis," *Journal of Health Politics, Policy and Law* 46, no. 4 (Aug 1, 2021): 585-597, <https://doi.org/10.1215/03616878-8970796>.

- 39** Colleen M. Grogan et al., "Are Policy Strategies for Addressing the Opioid Epidemic Partisan?"; Christina M. Andrews et al., "Medicaid Benefits For Addiction Treatment Expanded after Implementation of The Affordable Care Act"; Christina Andrews et al., "Despite Resources From The ACA, Most States Do Little To Help Addiction Treatment Programs Implement Health Care Reform," *Health Affairs (Millwood)* 34, no. 5 (May 2015): 828-35, <https://doi.org/10.1377/hlthaff.2014.1330>; Christina M. Andrews et al., "Do benefits restrictions limit Medicaid acceptance in addiction treatment? Results from a national study," *Journal of Substance Abuse Treatment* 87 (Apr. 2018): 50-55, <https://doi.org/10.1016/j.jsat.2018.01.010>; Christina M. Andrews et al., "Impact of Medicaid Restrictions on Availability of Buprenorphine in Addiction Treatment Programs," *American Journal of Public Health* 109, no. 3 (March 2019): 434-436, <https://doi.org/10.2105/AJPH.2018.304856>; Christina M. Andrews et al., "Medicaid coverage in substance use disorder treatment after the Affordable Care Act," *Journal of Substance Abuse Treatment* 102 (July 2019): 1-7, <https://doi.org/10.1016/j.jsat.2019.04.002>.
- 40** Christine E. Grella et al., "Scoping review of interventions to link individuals to substance use services at discharge from jail"; Cashell D. Lewis et al., "State Medicaid Initiatives Targeting Substance Use Disorder in Criminal Legal Settings, 2021," *American Journal of Public Health* 114, no. 5 (May 2024): 527-530, <https://doi.org/10.2105/AJPH.2024.307604>.
- 41** Allie F. Silverman et al., "Substance use disorder treatment carve outs in Medicaid managed care"; Christina M. Andrews et al., "Medicaid Benefits For Addiction Treatment Expanded after Implementation of The Affordable Care Act"; Christina M. Andrews et al., "Impact of Medicaid Restrictions on Availability of Buprenorphine in Addiction Treatment Programs"; Christina M. Andrews et al., "Medicaid coverage in substance use disorder treatment after the Affordable Care Act"; Amanda J. Abraham et al., "The Affordable Care Act Transformation of Substance Use Disorder Treatment," *American Journal of Public Health* 107, no. 1 (Jan. 2017): 31-32, <https://doi.org/10.2105/AJPH.2016.303558>; Amanda J. Abraham et al., "Coverage and Prior Authorization Policies for Medications for Opioid Use Disorder in Medicaid Managed Care," *JAMA Health Forum* 3, no. 11 (Nov. 4, 2022), <https://doi.org/10.1001/jama-healthforum.2022.4001>; Miguel Antonio G. Estrada et al., "Statewide efforts to address the opioid epidemic: Results from a national survey of single state agencies." *Journal of Substance Use & Addiction Treatment* 160 (Feb. 8, 2024), <https://doi.org/10.1016/j.josat.2024.209309>; Angela Shoulders et al., "Changes in Medicaid Fee-for-Service Benefit Design for Substance Use Disorder Treatment During the Opioid Crisis, 2014 to 2021," *JAMA Health Forum* 4, no. 8 (Aug. 4, 2023), <https://doi.org/10.1001/jamahealthforum.2023.2502>.
- 42** Amanda J. Abraham et al., "Coverage and Prior Authorization Policies for Medications for Opioid Use Disorder in Medicaid Managed Care"; Emma E. McGinty et al., "US payment policy for medications to treat opioid use disorder: landscape and opportunities," *Health Affairs Scholar* 2, no. 3 (February 2024): qxae024, <https://doi.org/10.1093/haschl/qxae024>; Barbara Andraka-Christou et al., "Prior authorization restrictions on medications for opioid use disorder: Trends in state laws from 2005 to 2019," *Annals of Medicine* 55, no. 1 (Dec. 2023): 514-520, <https://doi.org/10.1080/07853890.2023.2171107>; Rachel K. Landis et al., "Buprenorphine treatment episode duration, dosage, and concurrent prescribing of benzodiazepines and opioid analgesics: The effects of Medicaid prior authorization policies," *Drug and Alcohol*



- Dependence* 241 (Dec. 1, 2022), <https://doi.org/10.1016/j.drugalcdep.2022.109669>;
- Peter D. Friedmann et al., "Duration of nonmethadone outpatient treatment: results from a national survey," *Substance Abuse* 27, no. 3 (Sept. 2006): 47-53, [https://doi.org/10.1300/J465v27n03\\_07](https://doi.org/10.1300/J465v27n03_07).
- 43** Angela Shoulders et al., "Changes in Medicaid Fee-for-Service Benefit Design."
- 44** Ibid.
- 45** Keith Humphreys, Christina Andrews, and Richard G. Frank, "Progress and challenges in Medicaid-financed care of substance use disorder," *American Journal of Psychiatry* 181, no. 5 (2024): 359-361, <https://doi.org/10.1176/appi.ajp.20230804>.
- 46** Amelia Bailey et al., "Gender identity, stimulant drug use, and criminal justice history on internalized stigma among a nationally representative sample of adults who misuse opioids," *Social Psychiatry Psychiatric Epidemiology* 59, no. 2 (Feb. 2024): 305-313, <https://doi.org/10.1007/s00127-023-02500-5>; M; Mai T. Pho et al., "Implementation strategies to support recovery support workers serving criminal legal involved people who use drugs," *Journal of Substance Use and Addiction Treatment* 169 (February 2025), <https://doi.org/10.1016/j.josat.2024.209583>; Harold A. Pollack, John A. Schneider, and Faye S. Taxman, "An Inclusive Approach to Addiction Care—Helping the Helpers," *JAMA Health Forum* 4, no. 5 (May 5, 2023), <https://doi.org/10.1001/jamahealthforum.2023.0981>; John Schneider et al., "A taxonomy of social support interventions for people experiencing syndics of substance use disorder, criminal legal involvement, HIV, or sexually transmitted infections" (manuscript under review, 2023).
- 47** Miriam T. Harris et al., "Outcomes of Ottawa, Canada's Managed Opioid Program (MOP) where supervised injectable hydromorphone was paired with assisted housing," *International Journal of Drug Policy* 98 (December 2021), <https://doi.org/10.1016/j.drugpo.2021.103400>.
- 48** Cheyenne Garcia, Kelly Doran, and Margot Kushel, "Homelessness And Health: Factors, Evidence, Innovations That Work, And Policy Recommendations," *Health Affairs (Millwood)* 43, no. 2 (Feb 2024): 164-171, <https://doi.org/10.1377/hlthaff.2023.01049>.
- 49** Christine E. Grella et al., "Scoping review of interventions to link individuals to substance use services at discharge from jail"; Mai Pho et al., "Reducing Opioid Mortality in Illinois (ROMI)"; Mai Pho et al., "Implementation strategies to support peer recovery coach and case management substance use treatment navigation for criminal legally-involved people who use drugs"; Christy K. Scott et al., "Improving retention across the OUD service cascade upon reentry from jail using Recovery Management Checkups-Adaptive (RMC-A) experiment," *Journal of Substance Abuse Treatment* 128 (Sept. 2021), <https://doi.org/10.1016/j.jsat.2020.108245>; Ali B. Abbasi et al., "Health Care Utilization of Opioid Overdose Decedents with No Opioid Analgesic Prescription History," *Journal of Urban Health* 96, no. 1 (Feb. 2019): 38-48, <https://doi.org/10.1007/s11524-018-00329-x>.
- 50** Angela Shoulders et al., "Changes in Medicaid Fee-for-Service Benefit Design."
- 51** Cashell D. Lewis et al., "State Medicaid Initiatives Targeting Substance Use Disorder in Criminal Legal Settings, 2021," *American Journal of Public Health* 114, no. 5 (May 2024): 527-530, <https://doi.org/10.2105/AJPH.2024.307604>.

- 52** Sweta Haldar and Madeline Guth, "Section 1115 Waiver Watch: How California Will Expand Medicaid Pre-Release Services for Incarcerated Populations" (San Francisco: Kaiser Family Foundation, February 7, 2023), <https://www.kff.org/policy-watch/section-1115-waiver-watch-how-california-will-expand-medicaid-pre-release-services-for-incarcerated-populations/>.
- 53** Emma E. McGinty et al., "US payment policy for medications to treat opioid use disorder."
- 54** Carrie M. Mintz et al., "Changes in associations of prescription opioid use disorder and illegal behaviors among adults in the United States from 2002 to 20," *Addiction* 114, no. 12 (Dec. 2019): 2150-2159, <https://doi.org/10.1111/add.14638>.
- 55** Peter Reuter, Jonathan P. Caulkins, and Greg Midgette, "Heroin use cannot be measured adequately with a general population survey," *Addiction* 116, no. 10 (Oct. 2021): 2600-2609, <https://doi.org/10.1111/add.15458>.
- 56** Carrie M. Mintz et al., "Changes in associations of prescription opioid use disorder."
- 57** Tyler N. A. Winkelman, Virginia W. Chang, and Ingrid A. Binswanger, "Health, Polysubstance Use, and Criminal Justice Involvement Among Adults With Varying Levels of Opioid Use," *JAMA Network Open* 1, no. 3 (Jul. 6, 2018), <https://doi.org/10.1001/jamanetworkopen.2018.0558>.
- 58** Authors' calculation, May 7, 2024.
- 59** Paul J. Joudrey et al., "Reporting of substance use treatment quality in United States adult drug courts," *International Journal of Drug Policy* 90 (Apr. 2021), <https://doi.org/10.1016/j.drugpo.2020.103050>.
- 60** Douglas B. Marlowe et al., "Drug court utilization of medications for opioid use disorder in high opioid mortality communities," *Journal of Substance Abuse Treatment* 141 (Oct. 2022), <https://doi.org/10.1016/j.jsat.2022.108850>.
- 61** Harlan Matusow et al., "Medication assisted treatment in US drug courts: Results from a nationwide survey of availability, barriers and attitudes," *Journal of Substance Abuse Treatment* 44, no. 5 (2013): 473-80, <https://doi.org/10.1016/j.jsat.2012.10.004>.
- 62** "Medication-Assisted Treatment: Frequently Asked Questions," (Washington, DC: Bureau of Justice Assistance, n.d.), <https://bja.ojp.gov/sites/g/files/xyckuh186/files/media/document/adc-faq-medication-assisted-treatment.pdf>.
- 63** Douglas B. Marlowe et al., "Drug court utilization of medications for opioid use disorder."
- 64** Fanni Farago et al., "Medication-Assisted Treatment in Problem-Solving Courts: A National Survey of State and Local Court Coordinators," *Journal of Drug Issues* 53, no. 2 (Apr. 2023):296-320, <https://doi.org/10.1177/00220426221109948>.
- 65** Barbara Andraka-Christou et al., "A national survey of state laws regarding medications for opioid use disorder in problem-solving courts," *Health Justice* 10, no 1. (Mar 31, 2022): 14, <https://doi.org/10.1186/s40352-022-00178-6>.
- 66** Mai Pho et al., "Reducing Opioid Mortality in Illinois (ROMI)"; Mai Pho et al. "Implementation strategies to support peer recovery"; Suzan M. Walters et al., "I Don't Believe a Person Has to Die When Trying to Get High: Overdose Prevention and Response Strategies in Rural Illinois," *International Journal of Environmental Research and Public Health* 20, no. 3 (Jan. 16, 2023): 1648, <https://doi.org/10.3390/ijerph20021648>.

- 67** “The Role of Low-Threshold Treatment for Patients with OUD in Primary Care (2023),” (Rockville: Agency for Healthcare Research and Quality, n.d.).
- 68** Miriam Komaromy et al., “Facilitating exit from encampments: Combining low-barrier transitional housing with stabilizing treatment for substance related problems,” *Addiction Science and Clinical Practice* 18, no. 1 (Oct. 26, 2023): 66, <https://doi.org/10.1186/s13722-023-00420-y>.
- 69** Miguel Antonio G. Estrada et al., “Statewide efforts to address the opioid epidemic.”
- 70** Dennis P. Watson et al., “Syringe service program-based telemedicine linkage to opioid use disorder treatment: protocol for the STAMINA randomized control trial,” *BMC Public Health* 21, no. 1 (Mar. 31, 2021): 630, <https://doi.org/10.1186/s12889-021-10669-0>; Harold A. Pollack, “Speaking and learning across disciplines in the harm reduction debate,” *International Journal of Drug Policy* 121 (Jun. 27, 2023), <https://doi.org/10.1016/j.drugpo.2023.104108>.
- 71** Avik Chatterjee et al., “Mobile treatment for opioid use disorder: Implementation of community-based, same-day medication access interventions,” *Journal of Substance Use & Addiction Treatment* 159 (Apr. 2024), <https://doi.org/10.1016/j.josat.2023.209272>.
- 72** Brian Chan et al., “Mobile methadone medication units: A brief history, scoping review and research opportunity,” *Journal of Substance Abuse and Addiction Treatment* 129 (Oct. 2021), <https://doi.org/10.1016/j.josat.2021.108483>.
- 73** “42 CFR Part 8 Final Rule - Frequently Asked Questions,” (Rockville: Substance Abuse and Mental Health Services Administration, n.d.), <https://www.samhsa.gov/medications-substance-use-disorders/statutes-regulations-guidelines/42-cfr-part-8/faqs>.
- 74** Christopher M. Jones et al., “Methadone-Involved Overdose Deaths in the US Before and After Federal Policy Changes Expanding Take-Home Methadone Doses From Opioid Treatment Programs,” *JAMA Psychiatry* 79, no. 9 (Sept. 1, 2022): 932-934, <https://doi.org/10.1001/jamapsychiatry.2022.1776>.
- 75** Ibid.
- 76** Ofer Amram et al., “The impact of relaxation of methadone take-home protocols on treatment outcomes in the COVID-19 era,” *American Journal Drug and Alcohol Abuse* 47, no. 6 (Nov. 2, 2021): 722-729, <https://doi.org/10.1080/00952990.2021.1979991>.
- 77** Yngvild Olsen, “The New Federal Regulations Aimed Making Methadone More Accessible—And Less Stigmatizing,” April 26, 2024, in Public Health on Call, podcast, 17:12, <https://johnshopkinssph.libsyn.com/751-the-new-federal-regulations-aimed-making-methadone-more-accessibleand-less-stigmatizing>.
- 78** Frances McGaffey, “New Federal Rules Cannot Improve Methadone Delivery Without State Actions,” Pew Charitable Trusts, May 9, 2024, <https://www.pewtrusts.org/en/research-and-analysis/articles/2024/02/21/new-federal-rules-cannot-improve-methadone-delivery-without-state-actions#:~:text=States%20must%20also%20act%20to,the%20new%20evidence%2Dbased%20standards..>
- 79** “42 CFR Part 8 Final Rule - Frequently Asked Questions,”; “Methadone Take-Home Flexibilities Extension Guidance,” (Rockville: Substance Abuse and Mental Health Services Administration, 2024), <https://www.samhsa.gov/medications-substance-use-disorders/statutes-regulations-guidelines/methadone-guidance>.

- 80** "42 CFR Part 8 Final Rule - Frequently Asked Questions."
- 81** Shannon G. Mitchell et al., "Impact of COVID-19-related methadone regulatory flexibilities: Views of state opioid treatment authorities and program staff," *Addiction Science & Clinical Practice* 18, no. 1 (Oct. 17, 2023): 61, <https://doi.org/10.1186/s13722-023-00417-7>.
- 82** Ching-Ching C. Lin et al., "Telehealth In Health Centers: Key Adoption Factors, Barriers, And Opportunities," *Health Affairs (Millwood)* 37, no. 12 (Dec. 2018): 1967-1974, <https://doi.org/10.1377/hlthaff.2018.05125>.
- 83** Taylor J. Paiva et al., "Buprenorphine prescribing and treatment accessibility in response to regulation changes due to the COVID-19 public health emergency," *Journal of Substance Use & Addiction Treatment* 162 (Apr. 25, 2024), <https://doi.org/10.1016/j.josat.2024.209382>; Payel J. Roy et al., "Buprenorphine dispensing before and after the April 2021 X-Waiver exemptions: An interrupted time series analysis," *International Journal of Drug Policy* 126 (Apr. 2024), <https://doi.org/10.1016/j.drugpo.2024.104381>.
- 84** Christopher M. Jones et al., "Characteristics and Prescribing Patterns of Clinicians Waivered to Prescribe Buprenorphine for Opioid Use Disorder Before and After Release of New Practice Guidelines," *JAMA Health Forum* 4, no. 7 (July 7, 2023), <https://doi.org/10.1001/jamahealthforum.2023.1982>.
- 85** Ibid.
- 86** Caroline A. King et al., "Simulating the impact of Addiction Consult Services in the context of drug supply contamination, hospitalizations, and drug-related mortality," *International Journal of Drug Policy* 100 (Feb. 2022), <https://doi.org/10.1016/j.drugpo.2021.103525>.
- 87** Joseph O. Merrill, "Policy progress for physician treatment of opiate addiction," *Journal of General Internal Medicine* 17, no. 5 (May 2002): 361-68, <https://doi.org/10.1046/j.1525-1497.2002.10628.x>.
- 88** Paul J. Joudrey et al., "Assessment of Community-Level Vulnerability and Access to Medications for Opioid Use Disorder," *JAMA Network Open* 5, no. 4 (Apr 1, 2022), <https://doi.org/10.1001/jamanetworkopen.2022.7028>; Paul J. Joudrey et al., "Methadone prescribing by addiction specialists likely to leave communities without available methadone treatment," *Health Affairs Scholar* 1, no. 5 (Nov. 2023), <https://doi.org/10.1093/haschl/qxad061>; Joseph O. Merrill, "Policy progress for physician treatment of opiate addiction."
- 89** "S.644 - Modernizing Opioid Treatment Access Act," 118th Congress, February 1, 2024, <https://www.congress.gov/bill/118th-congress/senate-bill/644>.
- 90** Brandon del Pozo et al., "Knowledge, Attitudes, and Beliefs About Opioid Use Disorder Treatment in Primary Care," *JAMA Network Open* 7, no. 6 (June 3, 2024): e2419094, <https://doi.org/10.1001/jamanetworkopen.2024.19094>.
- 91** Christopher M. Jones et al., "Characteristics and Prescribing Patterns of Clinicians."
- 92** Christopher J. Miller et al., "The FRAME-IS: a framework for documenting modifications to implementation strategies in healthcare," *Implementation Science* 16, no. 36 (2021). <https://doi.org/10.1186/s13012-021-01105-3>.
- 93** Mai Pho et al., "Implementation strategies to support peer recovery coach and case management substance use treatment navigation for criminal legally-involved people who use drugs"; Laura J. Damschroder et al., "Fostering implementation of health services research findings into practice: A consolidated



framework for advancing implementation science," *Implementation Science* 4 (Aug. 7, 2009): 50, <https://doi.org/10.1186/1748-5908-4-50>; Laura J. Damschroder et al., "The updated Consolidated Framework for Implementation Research based on user feedback," *Implementation Science* 17, no. 1 (Oct. 29, 2022): 75, <https://doi.org/10.1186/s13012-022-01245-0>; Harold Pollack, Alida Bouris, and Scott Cunningham, "Randomized trials in legal epidemiology," in *Legal Epidemiology: Theory and Methods*, eds. Alexander Wagenaar, Rosalie Pacula, and Scott Burris, 2nd ed. (Hoboken: Wiley, 2023), 253-282.

- 94** Patience Moyo et al., "Disparities in Access to Highly Rated Skilled Nursing Facilities Among Medicare Beneficiaries With Opioid Use Disorder," *Journal of the American Medical Directors Association* 25, no. 10 (Aug. 5, 2024), <https://doi.org/10.1016/j.jamda.2024.105190>; Patience Moyo et al., "Perspectives on Admissions and Care for Residents With Opioid Use Disorder in Skilled Nursing Facilities," *JAMA Network Open* 7, no. 2 (Feb. 5, 2024), <https://doi.org/10.1001/jamanetworkopen.2023.54746>.
- 95** Harold A. Pollack, "Speaking and learning across disciplines."

## About the authors

**Dr. Nicole Gastala** is a family medicine and addiction medicine physician at the University of Illinois Chicago and senior director of behavioral health, research and addiction at UI Health Mile Square Health Center. She is also the medical director of the Substance Use Prevention and Recovery Division of the Illinois Department of Human Services (joint first author).

**Harold Pollack** is the Helen Ross Distinguished Service Professor of Social Work, Policy, and Practice at the University of Chicago, where he codirects the Urban Health Lab (joint first author).

**Basmattee Boodram, Ph.D., MPH**, is a social and infectious disease epidemiologist and professor in the Division of Community Health Sciences in the School of Public Health at the University of Illinois Chicago.

**Dr. Mai Tuyet Pho, MPH**, is an associate professor in the Section of Infectious Diseases & Global Health and the director of health policy research at the Chicago Center for HIV Elimination at the University of Chicago.

**Mary Beth Shapley, M.A., LCSW**, is a portfolio director at the University of Chicago Health Lab. She manages a variety of research projects focusing on health disparities, especially for people involved in the criminal legal system.

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