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From the General Public to America's Jails: MAT Saves Lives

This report was funded by Indivior

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EXECUTIVE SUMMARY

The global opioid epidemic, which has proliferated over the past two decades, continues to persist. In the United States, a public health emergency was declared as hundreds of thousands of people have fallen victim to opioid-related overdose deaths in the past decade. Moreover, the transition from narcotic pain relievers to heroin, now often tainted with fentanyl and its analogs, has exacerbated this growing public health issue.

While the opioid epidemic greatly affects the general population of Americans (and globally), it is highly evident among people involved in the criminal justice system. Despite research indicating the efficacy of medications currently approved by the U.S. Food and Drug Administration (methadone, buprenorphine, naltrexone) in treating opioid use disorder (OUD), opioid-related overdose deaths continue to rise each year and access to treatment remains impeded. This is particularly the case for justice-involved people, and especially for those who find themselves in America's jails.

Jails present a critical opportunity to offer MOUD given the elevated risk and need of the population

Research demonstrates that these medications save lives, improve public safety, and promote public health. Yet, adoption of these medications for OUD (MOUD) treatment has been slow within the criminal justice system, even more so within our jails. Beyond a system operating on finite and limited resources, compounding the adoption of these medications are unique barriers, including stigma, medical coverage, and legal and regulatory issues. Some states and federal authorities, however, have begun making changes to the system in an effort to expand access to these medications for the treatment of OUD among justice-involved people. Jails, in particular, present a critical opportunity to offer MOUD given the elevated risk and need of the population and the "revolving door" of individuals entering and exiting our jails each year.

If policymakers and health care providers are truly interested in reducing recidivism, enhancing public safety, and promoting public health by way of reduced overdose, overdose deaths, and spread of infectious disease, more deliberate movements need to be made in expanding MOUD treatment to people in jail and those being released.

DETAILED REPORT

INTRODUCTION TO THE PROBLEM

We are in the midst of an opioid epidemic. Globally, the opioid overdose crisis is now considered a major public health challenge, associated with elevated rates of morbidity and mortality[1]. In a matter of two decades, between 1999 and 2018, more than 450,000 opioid-related overdose deaths occurred in the United States[2]. After nearly 50,000 opioid overdose deaths were reported in 2017, the United States declared a national public health emergency[3].

The majority of people with OUD will experience at least one episode of incarceration, typically in a county jail

In recent years, more than an estimated two million Americans met criteria for opioid use disorder, or OUD[4], as defined in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition. Furthermore, in 2018, an estimated 10.3 million people in the United States misused opioids, 800,000 of whom misused heroin and the remaining misusing narcotic pain relievers[5]. As a result, emergency room visits for suspected opioid overdoses have surged[6]. These numbers continue to rise, reaching an all-time high of more than 83,000 opioid overdose deaths in 2020[7] followed by nearly 97,000 opioid overdose deaths in 2021[8].

As those with OUD shift from prescription opioid narcotics to heroin, the opioid overdose epidemic has been exacerbated by contaminated heroin supplies[9] and by the proliferation of fentanyl. The Centers for Disease Control and Prevention has identified fentanyl as the deadliest drug in America; it is approximately 50 times more potent than heroin and 100 times more potent than morphine[10]. Several states have documented increases in fentanyl-related overdose deaths. From 2013 to 2014, law enforcement seizures of drugs containing fentanyl increased by 426% and, during that same time, fentanyl-involved overdose deaths increased by 80%[11]. Overdose deaths involving synthetic opioids, primarily fentanyl, have risen dramatically since, reaching more than 36,000 in 2019[12].

Compounding the already devastating problem facing the United States is that illicitly manufactured fentanyl analogs (e.g., acetylfentanyl, furanylfentanyl, and carfentanil) have been combined with or substituted for heroin since 2013[13]. While these analogs are similar to fentanyl in their chemical structure and range in potency, being either weaker or exponentially stronger, they are also more difficult to detect and require specialized toxicology testing[14].

Correctional Populations

The pervasive trends of the OUD and opioid-related overdose crisis found in the general population disproportionately affect those involved in the criminal justice system[15]. Globally, it has been reported that 10% of incarcerated individuals have used heroin at some point during their incarceration, with one third indicating past-month use while incarcerated[16]. The majority of people with OUD will experience at least one episode of incarceration, typically in a county jail[17]. In fact, an estimated 24% to 36% of opioid-dependent adults cycle through our jails annually[18].

Among our incarcerated populations, opioid-related overdose is a leading cause of death, during or following incarceration[19]. In a study of formerly incarcerated people in Washington State between 2000 and 2009, opioids were involved in 14.8% of all deaths and nearly 60% of overdose deaths[20]. One study found that individuals leaving jails and prisons are between 10 and 40 times more likely to die of an opioid overdose than the general population, making them one of the groups at highest risk for opioid overdose[21]. Moreover, the risk for overdose death in the first few weeks postrelease is more than 120 times greater than in the general population[22]. This population's increased risk for overdose postrelease can be explained, at least in part, by decreased drug tolerance. For instance, with repeated drug use, a person becomes physiologically dependent on the drug, requiring more to reach the intended effect (i.e., increased tolerance). People with OUD, however, lose this increased tolerance while incarcerated due to presumed abstinence and thus are at high risk of overdose death in the weeks postrelease[23].

The majority of individuals held in jail who use opioids, including heroin, experience opioid withdrawal upon jail admission and face high rates of relapse, opioid overdose, and death following release[24], as well as increased likelihood of continued involvement in the criminal justice system[25]. By focusing more on public health interventions, such as opioid agonist therapy (OAT[26]), rather than our traditional societal response often centered on punishment and incarceration[27], we would likely see a reduction in overall mortality, overdose, HIV and hepatitis C risk behaviors, and recidivism[28].

AVAILABLE TREATMENT – GENERAL

Despite the alarming statistics centering on opioid misuse and overdose deaths in the United States, only about 20% of Americans with an OUD received treatment in the year prior[29]. This percentage has remained stable over the past several years, reflecting a disconnect between need, access, and uptake[30]. Recently, the U.S. Secretary of Health and Human Services noted that treating OUD without OAT was tantamount to treating an infection without antibiotics[31]. Among the general population with diagnosed OUD, OAT is highly effective[32]. Numerous studies demonstrate OAT's ability to dramatically reduce the risk for mortality among those with OUD[33]. It can reduce the risk for relapse, increase retention in treatment, reduce problematic opioid use, and decrease risk for HIV and hepatitis C[34]. It has also been associated with a broad range of personal and social gains, such as improvements in employment rates and improved family functioning[35].

Importantly, failing to provide OUD has direct and indirect costs. It is imperative we consider the costs associated with untreated opioid use disorders, including costs associated with criminal justice, health care, and public health. One analysis, for example, suggested that the total costs of prescription opioid use disorders and overdoses in the United States was $78 billion in 2013 alone. Of that, only about $2.8 billion was for treatment[36].

Medications for Treatment

OUD is a chronic, treatable illness and disability that is best treated in the community. It is similar to diabetes in that it has no cure but can be treated and managed. A wide range of treatments is available to manage the disease under a comprehensive care plan that includes medication and psychosocial services. Specifically, use of medications for opioid use disorder (MOUD) is considered the gold standard

of care for those with OUD[37]as scientific evidence has firmly established their ability to save lives[38]. MOUD treatment improves medical and mental health outcomes and reduces relapses and recidivism[39].

The American Society of Addiction Medicine finds that all three medications are cost-effective and clinically effective

The Food and Drug Administration (FDA) has approved three medications for the treatment of OUD: methadone, buprenorphine, and naltrexone[40]. The American Society of Addiction Medicine (ASAM) finds that all three medications are cost-effective and clinically effective in reducing opioid use and opioid-related withdrawal and craving symptoms, as well as reducing risk for infectious disease, overdose deaths, and criminal activity. All three are evidence-based, safe, and effective. They work by first managing withdrawal symptoms and then by controlling or eliminating the compulsive opioid use[41]. Importantly, all three medications work by targeting the mu opioid receptor in the endogenous opioid system, although each has a distinct mechanism for doing so. Due to their differing pharmacological, pharmacodynamic, and pharmacokinetic properties, the drugs' safety and efficacy also vary[42].

Methadone

First approved by the FDA in 1972 for the treatment of opioid addiction, methadone is a synthetic, long-acting full mu opioid agonist[43]. Methadone maintenance treatment, the combination of behavioral therapy, counseling, and methadone provision, is an effective, evidence-based approach to address OUD and overdose[44]. As a full mu opioid agonist, methadone fully activates the mu opioid receptors in the brain in the same way prescription or illicit opioids would[45]. In occupying these receptors, methadone is able to lessen the painful lows of withdrawal while, in therapeutic doses, attenuating the euphoric highs of shorter-acting opioids[46] (e.g., heroin, oxycodone).

One benefit of methadone initiation is that an individual need not go through opioid withdrawal because it is a full agonist; therefore, treatment can begin at any time. It can be used for withdrawal, to reduce cravings, and as a maintenance medication to reduce use[47]. Treatment must be individualized, however, and can take days to weeks to achieve a therapeutic dose[48]. This is highly important as failing to achieve a therapeutic dose could result in opioid overdose[49]. Because it sustains opioid tolerance and physical dependence, it cannot be discontinued without producing withdrawal symptoms[50].

Methadone can be provided only within opioid treatment programs (OTPs) regulated by SAMHSA and the Drug Enforcement Administration[51] (DEA). So long as the given state allows, no special training is required to prescribe methadone for providers working in an OTP[52]. It can be offered in liquid, powder, and wafer forms and is taken daily[53]. For those who meet certain criteria, such as having a stable period of good functioning and no illicit use, methadone may be prescribed in take-home doses[54]. Assuming daily visits, the estimated cost of methadone treatment, including medication and integrated psychosocial and medical support services offered in a certified OTP, is $126 per week or $6,552 per year[55]. For context, it costs approximately $3,500 per year to treat an individual with diabetes[56].

Buprenorphine

The FDA approved buprenorphine in 2002[57]. As a partial agonist, it does not fully substitute for other opioids (like heroin and oxycodone). It also blocks the effects of opioids if used concurrently[58], reduces cravings and withdrawal symptoms, and reduces overdose potential due to its reduced effect on respiratory depression compared to methadone[59]. Arguably, when used appropriately, buprenorphine is safer and more convenient than methadone; however, it can be used inappropriately – crushed and snorted or injected to produce a high similar to other opioids [60]. Achieving a therapeutic dose for this agonist is typically achieved in just a few days [61]. Similar to methadone, buprenorphine also sustains opioid tolerance and physical dependence, which can lead to withdrawal upon discontinuation; the severity of symptoms may be less than that of methadone[62]. The biggest risk in buprenorphine initiation is the threat of nonfatal opioid withdrawal with the first dose, but the risk for overdose death immediately declines upon its initiation[63].

Buprenorphine is most commonly prescribed in an office setting but can also be prescribed in an OTP. A patient can fill the prescription at a regular pharmacy[64]. Traditionally, to treat using buprenorphine, medical providers (i.e., physicians, nurse practitioners, and physician assistants) must possess a federal waiver from the DEA, which requires special training. For those working under the supervision of a waivered practitioner, no special requirements exist[65]. Unfortunately, few providers are waivered to prescribe buprenorphine and those who are typically are located in urban areas. Among those who are waivered, most do not prescribe to their maximum patient limit[66] (275). Regulations regarding the prescription of buprenorphine, however, are being loosened (see *Legal and Regulatory Barriers* section).

Administration of buprenorphine can be daily for those receiving it in oral tablet or sublingual film form, monthly for those receiving injections, or every six months for those receiving the subdermal buprenorphine implant[67] (i.e., Probuphine). Assuming it is being provided to a stable individual in a certified OTP, estimated costs for the provision of buprenorphine and twice-weekly visits is $115 per week or $5,980 per year[68]. This is similar in cost to methadone.

Naltrexone

Although methadone and buprenorphine are opioids and can be misused, naltrexone is not. It is a long-acting full antagonist, meaning it completely blocks the euphoric and analgesic effects of all opioids[69]. It does this by binding to the opioid receptors and making them unavailable for stimulation of opioids[70]. This means that it not only eliminates the risk for physical dependence, but also does not produce the "highs" of opioid use. Importantly, withdrawal from opioids must be complete prior to naltrexone initiation; if opioids are in a person's body upon naltrexone ingestion, the combination could produce immediate withdrawal. Extended-release naltrexone is recommended for preventing relapse for those no longer physically dependent on opioids [71]. Following sustained use, cravings decline[72].

Naltrexone can be prescribed by any provider otherwise licensed to prescribe medication[73]; no special training or waiver is required. It may be administered daily in oral form or monthly via intramuscular injection. Only the extended-release form has been approved by the FDA for OUD treatment. This is because the oral formulation lacks efficacy for increasing treatment retention and decreasing opioid use[74], while increasing risk of overdose compared to methadone[75]. Assuming an individual receives

naltrexone in an OTP, including drug, drug administration, and related services, the estimated costs are $1,176 per month, or $14,112 per year. Costs and the requirement of medically supervised withdrawal prior to initiation present substantial barriers to its adoption.

Effectiveness of MOUD

While studies show that all three FDA-approved medications for OUD are effective in reducing return to illicit opioid use, some medications are more effective than others[76]. The evidence is clear that the safest option for treating OUD is through effective use of agonist medication over an indefinite period[77]. The strongest evidence of efficacy in reducing both opioid use and treatment dropout rests with agonist medications[78]. Methadone is the most used and studied medication for OUD worldwide and clinical trials have demonstrated that it reduces illicit opioid use, treats OUD, and retains patients in treatment better than placebo or no medication[79]. It has also been associated with reduced criminality[80].

The evidence is clear that the safest option for treating OUD is through effective use of agonist medication over an indefinite period

Studies assessing buprenorphine show that it is effective in retaining patients in treatment and reducing illicit opioid use[81]. Generally, treatment using methadone and/or buprenorphine has been linked to substantially decreased risks of both all-cause and overdose-related mortality[82], lower rates of other opioid use[83], improved social functioning[84], decreased injection drug use[85], reduced HIV transmission risk behaviors[86], reduced risk of HIV diagnosis[87], reduced risk of hepatitis C virus infection[88], and better quality of life compared to individuals with OUD not in treatment [89].

Though the evidence is far more limited, extended-release injectable naltrexone has demonstrated efficacy in reducing return to illicit opioid use[90], reducing opioid craving[91], reducing likelihood of rearrest[92], increasing treatment retention[93], reducing overdoses[94], and reducing hospital admissions[95]. However, research suggests it is more difficult to initiate patients onto naltrexone, compared to buprenorphine, and is associated with greater risk of return to opioid use[96].

Although medication alone is effective for the treatment of OUD, a combination of appropriate behavioral interventions that address underlying psychological contributors of OUD increases the efficacy of MOUD. Even when counseling is not available, the provision of these medications independently is still recommended[97].

OUD TREATMENT IN CORRECTIONS

OUD prevalence is high among people in prisons and jails, and thus correctional facilities have important roles to play in ensuring appropriate treatment for people with this chronic illness[98]. Jails process more drug withdrawals than any other single institution but often do not have the medical resources necessary to manage severe withdrawal. As jails are often considered the gateway to the correctional system, they are the most likely to encounter acute withdrawal among opioid-dependent people[99]. The incarceration of opioid-dependent adults often results in opioid withdrawal syndrome, which, at a minimum, should be treated humanely[100]. When MOUD is not provided in the correctional setting, individuals who are addicted to opioids may experience withdrawal symptoms. This can include severe

physical discomfort, psychological distress, and risk of suicide, and, if left untreated, death. It also leads to loss of opioid tolerance, thereby increasing risk of fatal and nonfatal overdose postrelease[101].

Formerly incarcerated people are at increased risk for death, particularly from drug-related causes[102], including elevated risk for opioid-related mortality among those with OUD[103]. In fact, in a study of formerly incarcerated people in Washington State, opioids were involved in 14.8% of all deaths and nearly 60% of all overdose deaths between 2000 and 2009[104]. This risk for overdose and overdose death is particularly the case in the first few weeks following release when riskier patterns of substance use are adopted, combined with reduced tolerance, and in the absence of proper OAT or with medication discontinuation[105]. Given this risk, incarcerated people should be a priority population for OUD medications.

Availability of MOUD in Jails

Alternatives to withdrawal need to be supported in correctional facilities. The American Correctional Association/National Governors Association[106], ASAM[107], the National Academies[108], and the National Commission on Correctional Health Care (NCCHC)[109] recommend that all three FDA-approved MOUD be available in corrections. Access to MOUD in jails and prisons is one targeted approach that can help decrease risk for overdose deaths. At minimum, either methadone or buprenorphine should be available for maintenance treatment and opioid withdrawal. If resources are available, naltrexone should also be available[110]. Opioid agonist therapies (i.e., methadone, buprenorphine) are effective reentry interventions and are the most commonly prescribed MOUD treatments in the community[111].

The policy landscape on MOUD in jails and prisons is rapidly evolving

Despite the established benefits and feasibility of providing MOUD in custody, available evidence shows that many correctional facilities do not provide access to MOUD, in some cases do not even continue community-initiated MOUD, or provide MOUD only in limited circumstances[112]. Jails have been slow to adopt initiation of MAT for those not already receiving it in the community[113]. However, the policy landscape on MOUD in jails and prisons is rapidly evolving[114]. For example, some states have taken legislative or executive action to encourage or mandate that facilities provide access to MOUD.

Litigation by affected individuals has also helped increase access to MOUD in correctional facilities. Moreover, a number of states that had enacted restrictive rules governing MOUD access only a few years ago have since updated their policies to apply to more (or all) prison facilities, to provide broader MOUD treatment options, and to allow for MOUD for a longer term[115]. Providers in correctional facilities should follow ASAM guidelines when treating people with OUD. From a legal perspective, OUD is a protected disability under federal law. Recent court rulings have affirmed the right of people with OUD in jails and prisons to receive MOUD[116].

Effectiveness of Jail-Based MOUD

Generally, research has supported the use of MOUD for incarcerated populations with OUD. Evidence shows several important benefits postincarceration, including increased treatment retention[117] and reduced illicit opioid use[118], reduced criminal behavior and recidivism[119], reduced mortality and

overdose risk[120], and reduced HIV/hepatitis C risk behaviors[121]. These improved postrelease outcomes are particularly true for those initiated on opioid agonist medications during incarceration compared to those forced to undergo withdrawal[122].

Incarcerated people with OUD should not be forced into withdrawal

Importantly, incarcerated people with OUD should not be forced into withdrawal, nor should they be forced onto MOUD if they decline or otherwise do not meet the criteria. Forced withdrawal has several negative outcomes: It discourages engagement in community treatment, increases the risk for substance use while incarcerated, and increases risk for postrelease death[123]. Should an incarcerated person choose to decline MOUD and undergo withdrawal, this should be accomplished using tapered doses of buprenorphine[124]. In particular, pregnant individuals should have timely access to MOUD and avoid withdrawal to reduce maternal and fetal risks of opioid withdrawal[125].

Overdose

It is known that those released from jails and prisons are one of the most at-risk groups for overdose and overdose death. MOUD significantly reduces overdose deaths postrelease[126]. For example, after the Rhode Island Department of Corrections[127] began offering a choice of all FDA-approved medications to those screening positive for OUD[128], postrelease deaths decreased 61% compared to the year prior. In fact, this reduction accounted for much of the state's 12% overall reduction in overdose deaths[129]. In a recent study, Macmadu and colleagues[130] found that expanding access to all three MOUDs in prisons and jails could reduce overdose deaths by nearly 32% in certain circumstances.

Treatment Retention

Overwhelmingly, the evidence suggests that incarcerated people with OUD initiated on MOUD and counseling while incarcerated are more likely to engage in treatment postrelease than those who do not receive medication while incarcerated[131]. Providing treatment in custody promotes engagement in and continuity of community-based treatment postrelease, especially when facilitation of community services exists[132]. This also presents an opportunity to assess and possibly treat any underlying mental health issues that may be exacerbating an individual's opioid use. Importantly, although relapse is often expected, the risk for death for those with OUD is mitigated by remaining in treatment[133].

Illicit Use

Demonstrating a reduced risk to public health, one study of people initiated on methadone in prison found reduced illicit use of opioids by injection (i.e., heroin) postrelease compared to those who were put through forced withdrawal[134]. Additionally, compared to those who received either prison-based counseling only or counseling with a referral for methadone treatment upon release, those who received counseling and methadone while in prison were less likely to have a positive drug screen for opioids in the year following release[135].

Criminal Justice Outcomes

Several studies have shown improved criminal justice outcomes. In fact, lower rearrest and reincarceration rates have been reported among those who receive methadone or buprenorphine treatment for OUD[136]. Specifically, one study has shown that individuals released from jail and continued on methadone in the community were less likely to be rebooked and had longer periods of time in the community prior to rebooking compared to those who did not receive methadone in the community[137]. Furthermore, people initiated on MOUD in jail experienced significantly fewer days of reincarceration compared to those who did not receive medications while incarcerated; on average; jail-based MOUD reduced recidivism nearly 25 days[138].

More research is needed on the effect MOUD has on criminal justice outcomes

Still, more research is needed on the MOUD effect has on criminal justice outcomes, such as rearrest, reincarceration, and general criminal activity. While some studies have shown improved outcomes, others have shown no effect[139]. Research is ramping up, however. For example, Scott and colleagues[140] and Gordon and colleagues[141] are conducting studies on the effects (e.g., relapse, overdose deaths, reincarceration) of MOUD on those incarcerated in jails in Illinois and Maryland.

Costs

Focusing on corrections-based substance abuse treatment generally[142] and MOUD efforts specifically can result in a meaningful return on investment through reduced or offset costs to the health system[143]. For example, the state of Kentucky estimated that for every $1 spent on corrections-based substance abuse treatment, there was a return on investment of over $4 in offset costs in fiscal year 2017[144]. Prescription opioid misuse, addiction, and overdose are estimated to cost $78 billion annually in health care, criminal justice, and lost productivity[145]. Studies have, however, found that access to MOUD treatment can reduce overall health care costs, mainly due to avoided emergency room department visits and inpatient stays[146]. More specifically, offering MOUD to intravenous drug users helps to lower incidence of expensive complications that are the result of their use, including endocarditis, abscesses, and infectious disease[147]. MOUD can also save insurers costs in the long run[148].

Research indicates that those treated with buprenorphine had less use of general medical services, including lower outpatient, inpatient, and emergency department utilization, as well as lower total health care costs compared to those who received little to no addiction treatment[149]. Studies estimate that annual health care costs for those treated with buprenorphine were between $13,578 and $28,458 compared to $31,000 to $49,051 for similarly situated individuals who received no treatment[150]. Finally, while few studies explore the economic benefits of providing MOUD in jails, Horn and colleagues found that it costs substantially less to provide jail-based MOUD ($23.49/day) than incarceration alone ($116.49/day). This is due to reduced recidivism and resulting decrease in days of incarceration[151].

BARRIERS

Despite the strong evidence for the effectiveness of MOUD in improving and saving lives for those with OUD, numerous barriers limit access to medication-based treatment. These barriers exist in the general

public and are exacerbated in correctional populations. These barriers include stigma, risk and perception of diversion, legal and regulatory issues, and health care coverage and costs.

Stigma

A great deal of stigma exists toward those with OUD and the medications used to treat OUD. For example, national public opinion polls routinely indicate high levels of negative attitudes toward the individual and MOUD, among both the general public and professionals who are often involved with affected populations. One national opinion poll found high levels of negative attitudes toward OUD compared to other medical conditions, including mental illness[152]. In another national survey, three-quarters of respondents a felt those with OUD were to blame for their use; three-quarters also indicated that those with OUD simply lacked self-discipline. Two-thirds of these respondents said they would not allow an individual with OUD to marry into their family, and a majority supported discrimination of those with OUD, including the denial of employment. This held true even for individuals with personal experience with OUD[153]. This stigma is also present among medical professionals, including physicians[154], and public safety and criminal justice professionals[155]. These rates of stigma are as high or higher than in the general public[156].

A great deal of stigma exists toward those with OUD and the medications used to treat OUD

Stigma also exists toward the medications used to treat OUD, particularly opioid agonist medications. Interestingly, half of American adults believe no evidence base for MOUD exists[157]. Among drug court personnel[158] and those working in the prison system, high levels of misinformation and stigma have been identified related to methadone and buprenorphine. Misperceptions of drug substitution – the belief that MOUD simply replaces one drug for another – are also common[159]. In reality, when provided according to clinical guidelines, these medications relieve withdrawal symptoms and cravings and can support recovery. Evidence indicates that at proper doses, MOUD has no adverse effects on mental capability or physical functioning, or important occupational functioning such as employability[160].

This stigma is important to understand and confront as it lends itself to greater support for punitive policy responses, such as increased arrests and harsher sentencing of those with OUD. It also undermines support for public health approaches, including the provision of MOUD[161]. Further research must be done on correctional, community, and individual attitudes toward MOUD and findings used to develop effective training and strategies to reduce the stigma associated with this treatment. This includes educating criminal justice practitioners about the relevant health and criminal justice-related benefits[162] (e.g., reduced recidivism).

Diversion

Concerns about the misuse and diversion of MOUD may impact providers' willingness to prescribe these medications. This arises from stigma and misunderstanding over motivation for use of diverted medication[163]. Prescribers often cite concerns of diversion as a barrier to treating those with OUD[164]. In fact, about one third of those prescribing buprenorphine indicated diversion as a significant or very significant concern[165]. However, only 10% of buprenorphine-waivered providers shared this concern compared with 26% of nonwaivered providers[166]; this may suggest that the additional training required

to receive a waiver lessens concern about diversion. Importantly, methadone diversion rates have declined by 13% annually since 2011[167], resulting in a diversion rate lower than that of buprenorphine. In addition, buprenorphine misuse and diversion tend to decline as its availability increases[168].

While both methadone and buprenorphine treatment pose some risk for diversion … overall rates of illicit drug use decline

It is important to understand why buprenorphine may be misused or diverted. These reasons include peer pressure, a desire to help a close associate, for economic gain, and lack of access to buprenorphine treatment[169]. In fact, it is more likely that an individual misuses buprenorphine to relieve withdrawal symptoms than to achieve any euphoric effect[170]. Finally, while both methadone and buprenorphine treatment pose some risk for diversion in prisons and jails, evidence suggests that overall rates of illicit drug use decline following the introduction of MOUD and reduce disciplinary problems[171].

Legal and Regulatory Barriers

Even within the mainstream medical care system, legal and regulatory barriers prevent broad access to MOUD. The most stringently regulated of the three FDA-approved medications is methadone as it can be dispensed only by an OTP that is certified by SAMHSA and registered with the DEA. Similarly, buprenorphine, traditionally, can be prescribed only by a medical provider[172] who has received training and certification from the DEA. If the given state allows, a provider may prescribe buprenorphine without a waiver but to a reduced patient capacity. Naltrexone, however, can be prescribed by any provider otherwise able to prescribe medication in general[173]. In fact, a significant factor contributing to treatment barriers is the scarcity of providers willing and able to prescribe MOUD[174].

Calls have been increasing to allow the prescription of methadone in a wider range of medical settings

Both methadone and buprenorphine come with their own legal and regulatory barriers. With methadone, OTPs face limitations in tailoring treatment plans to individual needs as well as limitations related to take-home medications, the supervision of medication consumption, and mandated drug testing and counseling[175]. These requirements may discourage providers from opening new OTPs[176]. Clients are typically required to visit the OTP daily for their medication, which can diminish their quality of life, including impeding employment seeking and obligations as well as negatively impacting their relationships. Calls have been increasing to allow the prescription of methadone in a wider range of medical settings, including primary care offices[177].

Though less stringently regulated than methadone, buprenorphine presents its own challenges. While a provider traditionally must have received training and certification by the DEA, provider capacity is limited due to federal regulations on certification as well as state regulations. For example, waivered providers are limited to treating 275 patients[178]. While 56% of counties in the United States have at least one waivered provider[179], most providers have a list of patients far below allowable limits. A study by Moran and colleagues[180] found that less than 30% of waivered providers were prescribing buprenorphine and less than 50% elected to be listed on SAMHSA's physician and treatment locator site. Furthermore, half of all waivered providers were treating five or fewer patients and one third were

treating only a single patient. Even if all waivered providers were treating at capacity, treatment coverage for everyone with OUD would still be inadequate; studies indicate that only about half of all in need of OUD treatment would receive it[181]. Calls have been made to eliminate this patient limit due to a lack of evidence supporting it[182].

Finally, while there are no legal or regulatory barriers related to naltrexone, the most common barrier is cost at about $1,200 per monthly dose[183].

Jails, in particular, face challenges to providing evidence-based medical care to those with OUD. Jails face uncertainty about the duration of a person's stay and whether they will be released to the community or sent to prison, both of which can complicate treatment initiation and planning. Some larger correctional facilities have become licensed OTPs or contract with waivered providers to prescribe buprenorphine, but others rely on transporting individuals to off-site clinics or do not provide services beyond withdrawal management with supportive medications. The latter two approaches can increase pressure on staff who must arrange transportation or otherwise deal with people who are physically ill due to inadequate treatment of OUD[184].

Some solutions are in development, however. Importantly, in mid-2021 SAMHSA sent a letter to OTP directors, State Opioid Treatment Authorities, and state directors indicating a change to guidelines for the provision of MOUD. Now, SAMSHA-certified OTPs, assuming compliance with all applicable federal, state, and local laws, may add a mobile component to their existing registration. This eliminates the requirement of a separate registration for mobile units. Presenting an opportunity for MOUD expansion, especially in remote or underserved areas, this allows OTPs, both mobile and not, to administer and dispense medications for OUD treatment, including take-home medications.

In April 2021, the Department of Health and Human Services announced a new practice guideline that removes barriers to obtaining waivers to prescribe buprenorphine. Eligible medical personnel, including physicians, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and certified nurse midwives, are now exempt from federal certification requirements related to training, counseling, and other ancillary services that are part of the process for obtaining a waiver. This exemption allows those without certification to treat up to 30 patients. If required by state law, these individuals must still be supervised or work in collaboration with a DEA-registered provider[185]. This policy change will allow correctional providers who hold DEA licenses to prescribe buprenorphine for patients currently receiving it, to initiate it for maintenance, or to use it to withdraw patients from opioids[186].

Additionally, many states have enacted legislation or taken executive action to implement specific policies governing the provision of at least one form of MOUD treatment in some of their correctional facilities. In the 2020-21 legislative session alone, nine bills addressing MOUD access in correctional facilities were introduced. In recent years, several bills have established or expanded access to MOUD in jails, prisons, or all correctional facilities statewide. While some statutes allow any patient in need of MOUD during incarceration to start or continue treatment, others limit MOUD to pregnant individuals, those who were receiving MOUD prior to incarceration, or those with upcoming release dates. Similarly, while a few statutes require uniform access to all FDA-approved MOUD, many limit methadone

treatment to certain facilities or individuals, and some offer only naltrexone. Bills from the most recent legislative session have common features including expansion of participant eligibility, access to a broader range of MOUD, integration with other clinical and behavioral treatments, and a greater focus on community reentry and continuity of care[187].

While correctional facilities' provision of MOUD and behavioral treatment based on national standards can reduce deaths, improve long-term health outcomes, and interrupt the cycle of recidivism, NCCHC[188] adds that it may even mitigate litigation. Federal courts have repeatedly found that inflexible policies that deny access to medically necessary treatment, including methadone and buprenorphine, to people with OUD during incarceration violate the Americans with Disabilities Act (ADA) and the Eighth Amendment's prohibition of cruel and unusual punishment[189]. Incarcerated individuals with OUD have turned to the courts in response to their lack of access to MOUD. In these lawsuits, many plaintiffs made claims of Eighth and 14th Amendment violations, as well as claims under the ADA and the Rehabilitation Act of 1973. Some plaintiffs were awarded monetary compensations for the correctional facility's failure to provide MOUD and some secured settlement agreements or injunctive relief that required the correctional facility to continue the plaintiff's MOUD treatment for the duration of their incarceration. Some settlement agreements even required the correctional facility to adopt new policies applicable to all people incarcerated in a facility[190].

Federal courts have repeatedly found that inflexible policies that deny access to medically necessary treatment, including methadone and buprenorphine … violate the Americans with Disabilities Act and the Eighth Amendment

At the local level, political will may restrict widespread implementation of MOUD and overdose programs for criminal justice populations. Therefore, guidance on how to gradually adopt OUD-related programs in challenging criminal justice environments should be developed[191]. Policymakers should provide resources and introduce policy changes to help jails and prisons offer medication and counseling for OUD and help people transition to community-based care as they leave incarceration.

Health Care Coverage and Costs

An additional barrier to MOUD rests with health care coverage and costs. The single most important source of insurance coverage for those with OUD is Medicaid[192]. In 2016, Medicaid paid more than $9 billion for OUD treatment alone[193]. Medicaid eligibility and enrollment has been associated with treatment retention[194] and relapse[195]. States that opted for Medicaid expansion under the Patient Protection and Affordable Care Act have seen increased use of buprenorphine treatment[196]. Medicaid expansion has created unprecedented opportunities for addressing the low rates of insurance coverage among those returning from jail and prison. In Medicaid-expansion states, nearly all justice-involved individuals are eligible for coverage upon release[197].

Medicaid, however, is prohibited by federal law from paying for health care during terms of incarceration during which coverage must be terminated or suspended[198]. For those incarcerated with OUD, this can have devastating impacts during and following incarceration as reenrolling in coverage can cause lengthy delays that disrupt care[199]. Commercial health insurance plans also commonly exclude

coverage and payment of medical care during incarceration[200]. As a result, the correctional health care system is underresourced, isolated from mainstream medicine, and not subject to standardized accreditation or quality reporting requirements[201]. Nonetheless, given that buprenorphine and methadone have been shown to save lives, it is critical that people with OUD have access to these medications[202].

Health care costs in the criminal justice system are already high because of the disproportionately high burden of disease among those who are or have been incarcerated. To ensure access to OAT and other support services, appropriate resources and funding need to be allocated to all criminal justice-related agencies and community-based treatment providers who serve justice-involved people. Funding allocations, however, can be unpredictable and change annually. What is possible in a rural county with few resources is not always comparable to what can be implemented in some big, urban environments. It is imperative to consider community and regional contexts in the adoption of OAT[203]. While the 21st Century Cures Act of 2016 showcased Congress' commitment to funding OAT for OUD, more resources need to be directed specifically to institutions and agencies within the criminal justice system. These entities interact with a higher proportion of those with OUD and can have a robust impact on treating OUD and preventing opioid overdose mortality[204].

Appropriate resources and funding need to be allocated to all criminal justice-related agencies and community-based providers who serve justice-involved people

CONCLUSION

Jails present a critical and crucial opportunity to treat to a severely at-risk and high-need population. Jails are the gateway to further criminal justice involvement. Nearly all of those who enter our nation's jails will eventually be released and, without treatment, are likely to return. For those returning to jail, an often-cited reason is a relapse to drug use as they tend to return to the same environments – persons, places, and things – conducive to their use in the first place. Failing to provide MOUD to those with OUD, given the wealth of research in support of its use as treatment, is unacceptable. If policymakers and providers are truly interested in reducing recidivism, enhancing public safety, and promoting public health by way of reduced overdose, overdose deaths, and spread of infectious disease, more deliberate movements need to be made in expanding MOUD treatment to those in jail and those being released.

Failing to provide MOUD to those with OUD, given the wealth of research in support of its use as treatment, is unacceptable

ABOUT THE NCCHC FOUNDATION

The NCCHC Foundation's mission is to champion the correctional health care field and serve the public by supporting research, professional education, scholarships, and patient reentry into the community.

For over 40 years, the National Commission on Correctional Health Care has been at the forefront of leading dramatic improvements in patient care in corrections. Now, the NCCHC Foundation accelerates the Commission's work to meet the increasingly complex needs of today's incarcerated populations.

The NCCHC Foundation leverages donations and industry partnerships to lead research initiatives, share best practices, expand education for correctional health care professionals, and improve support for patients during reentry into the community.

Gifts enable the Foundation to:

- Support clinical research that identifies best practices and leads to better outcomes in correctional settings
- Gather, analyze, and disseminate data to support high quality correctional health care
- Encourage health care efficacy and efficiency through support for evidence-based medicine
- Mentor the next generation of correctional health professionals and support their continuing education needs
- Provide resources to incarcerated individuals on supporting their own health

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