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Injecting Opioid Use Disorder Treatment in Jails and Prisons: The Potential of Extended-Release Buprenorphine in the Carceral Setting

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Abstract

As the opioid overdose cases rise, policy-makers and researchers should target interventions to populations at highest risk. Incarceration serves as a risk factor for opioid overdose (Gan et al. *Addiction* 2021) and a large portion of recent overdose deaths have had encounters in the criminal justice system.

Medications for opioid use disorder (MOUD) in the criminal justice system can save lives, though unique administrative barriers in jails and prisons hinder access. As facilities expand MOUD access (due to new legislation and court rulings across states), extended-release buprenorphine offers an opportunity to overcome these barriers including logistics of administration, diversion concern, patient stigma, and an increased bridge of treatment during re-entry to the community.

As extended-release buprenorphine has practical advantages in correctional health delivery, future research and policy discussions should investigate its optimal role in treating opiate addiction in a carceral setting.

Opioid overdose deaths have reached record levels in the United States, following an upward trajectory exacerbated by the challenges of the Covid-19 pandemic. Many of these deaths are among individuals with exposure to the criminal justice system: a recent study identified nearly half of all fatal opioid overdoses occur in people with prior criminal justice involvement.¹ Incarceration serves as a major risk factor for overdose death²: upon release from prison, individuals have a 129 times greater risk of opioid overdose death than the general population.³

Providing medication for opioid use disorder (MOUD) is the standard of care for opioid use disorder (OUD). It is associated with lower rates of overdose and all-cause mortality, long term illicit opioid use, HIV transmission, violent crime, and recidivism.⁴ In the state of Rhode Island, initiation of MOUD while incarcerated was associated with a 61% reduction in post-release overdose deaths, with a number needed to treat of 11 to save one life.⁵ Based in part on this evidence, the National Academy of Medicine recommended that “states should fund high-quality, evidence-based reentry services for prisons and jails, including medications for opioid use disorder.”⁶

Despite the extraordinary risks of OUD for an already vulnerable population, most jails and prisons do not offer MOUD to the patients who need it.⁷ Administrative barriers hinder access, with correctional facilities citing cost, concerns about medication diversion, and logistical challenges.⁸ It is also likely that the societal stigma against use of MOUD contributes to these disincentives. As a result, individuals receiving community treatment often undergo forced withdrawal upon incarceration, a practice shown to decrease community treatment upon release and increase likelihood of overdose death.⁹ For individuals that are released without treatment initiation, less than 5% ultimately receive MOUD in the community, even with referrals.¹⁰

A novel treatment formulation—extended-release, monthly, injectable buprenorphine—offers a potential solution that can overcome traditional barriers in correctional facilities and increase access to a life-saving treatment among one of the populations most vulnerable to overdose death. Extended-release buprenorphine offers a feasible case for expanding MOUD accessibility to jails and prisons across the country. It has demonstrated efficacy and safety in the community and has tremendous potential for addressing opioid use disorder within correctional facilities and upon re-entry to the community. Compared to sublingual buprenorphine and methadone, extended-released buprenorphine offers potential feasibility benefits including: (1) near-zero likelihood of diversion, (2) fewer correctional staff hours needed, (3) fewer potentially stigmatizing encounters, and (4) a long-acting “bridge” of medication adherence at release to reduce incidence of relapse and overdose.

Many correctional administrators raise concern regarding MOUD diversion in a setting where contraband is prevalent. Preventing diversion requires additional staff time to observe the administration of medication, especially in the case of daily dosing. The need for such supervision goes away with a monthly injection. Once patients receive their injection, they are dosed for a month with no practical ability to divert the medication. This monthly process eliminates the daily logistical demands of an MOUD program, reducing the burden of an OUD treatment program on correctional staff.

Monthly injections also stand to reduce the stigma of OUD. Going through the “med line” in a prison may replicate the patient-reported stigmatizing effects of receiving medications at community opioid treatment programs. Monthly injections may overcome this daily stigmatization and minimize the chance of patients being the target of threats, harassment, intimidation, or financial incentives to engage in diversion.

Extended-release buprenorphine can also improve patient care. Previous research demonstrates individuals with opioid use disorder prefer flexibility in respect to MOUD¹¹ and, indeed, matching patient preference to treatment is associated with improved health outcomes.¹² A recent study showed greater patient treatment satisfaction with extended-release buprenorphine than daily sublingual buprenorphine.¹³ Thus, this treatment modality may improve treatment delivery for both the system and incarcerated patients.

Extended-release buprenorphine presents an opportunity to study different approaches to the coordination of care upon release from incarceration. It is not only a period of stress and uncertainty for released individuals—as they often contend with concerns about housing and employment as well as stigma—but also a one of extraordinary risk of fatal overdose. Extended-release formulations allow researchers to ascertain if release from incarceration with up to a month of buprenorphine in a depot offers protective and stabilizing effects upon community re-entry. The possibility deserves further study, as does the concern that a depot injection may delay connection with providers at a time when establishing connection to care is critical and developing a sustainable routine may be of benefit. Preliminary evidence does suggest that extended-release buprenorphine is comparatively effective, acceptable, and feasible in a jail setting compared to daily sublingual buprenorphine.¹⁴

Still, some cite the cost of the extended-release formulation as the most formidable disincentive to implement this form of treatment. For many institutions, the medication serves to be cost-prohibitive. This view, however, may be shortsighted, or at least limited in scope. True, the cost of the injection is much greater than the sublingual formulation, but if it increases retention, eliminates diversion, and makes the logistical process appealing enough to implement it in a wide range of correctional facilities, the resulting population-level reduction in overdose and adverse OUD-related events could offer considerable net savings. The problem, however, is that the costs would be levied on correctional budgets while the savings would accrue to other entities. The accounting problem is therefore not genuinely one of costs and benefits, but that the costs are entered into one ledger, the savings are entered into another. The distribution of XR-B does require additional adherence to the Risk Evaluation and Mitigation Strategy (REMS) program; any robust healthcare system within correctional justice settings or contracted vendors should qualify, although studies have not yet identified this as a significant barrier.

Ultimately, implementing MOUD in jails and prisons may no longer be an option in many jurisdictions, but a requirement. Many court rulings have now supported the right to MOUD access while incarcerated¹⁵ and a new policy landscape will require more correctional facilities to offer MOUD. In addition to a growing body of court mandates, legislation in at least 6 states will imminently require correctional facilities to offer MOUD. As MOUD becomes a standard of care according to verdicts and the law, extended-release buprenorphine as a once-a-month shot holds appeal to quickly comply with policy requirements with minimal disruption to existing operations.

In response to the challenges of offering MOUD in carceral settings, and in a policy landscape where correctional facilities will be mandated to offer medication, extended-release buprenorphine could offer a low-hanging fruit solution to increasing access to

MOUD among one of the highest-risk populations, at one of the highest risk times. XR-B should serve as one MOUD option to enhance patient choice. Individuals with OUD prefer flexibility in respect to MOUD¹¹ and, indeed, matching patient preference to treatment is associated with improved health outcomes.¹² Thus, offering XR-B can facilitate optimal patient care.

Challenges persist in XR-B implementation. While the medication may serve to “bridge” patients upon release, a critical component is adequate provider capacity on the other end of such as to bridge, to the availability of the patient’s desired medication. Medicaid coverage of extended release formulations may vary drastically by state and/or may require prior authorization, leaving some patients to revert to suboptimal daily dosing on the outside if there is not sufficient coverage for the long acting preparation.¹⁶

In addressing the opioid overdose crisis, researchers, administrators, and policymakers should continue to look for solutions to target high-risk individuals with innovative solutions. As extended-release buprenorphine has practical advantages in correctional health delivery, future research and policy discussions should investigate its optimal role in treating opioid addiction in a carceral setting. XR-B will certainly gain prevalence in community treatment programs and this acceptance must carry over to jails and prisons to serve patients most in need. Correctional administrators can work with policymakers to advocate for the implementation of this type of evidence-based solution that offers substantial benefit to patients and correctional officers alike.

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