A Medications for Addiction Treatment (MAT) Release Program in the CDOC

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BACKGROUND

The Colorado Department of Corrections (CDOC) seeks to help incarcerated patients lead safe and healthy lives, both while in custody and through transition back into the community.

Community re-entry represents a vulnerable time for incarcerated patients. High mortality rates after release from prison are well documented,[1,2,3] with overdose as the leading cause of death. In the first two weeks after release from prison, incarcerated patients are 129 times more likely to die of a drug overdose than other state residents.[1]

Opioids remain the largest driver of overdose deaths.[3]

Access to medications for addiction treatment (MAT) within the correctional system can have profound implications: after the Rhode Island Department of Corrections (RIDOC) implemented its MAT program, post-incarceration overdose deaths decreased by 61%, contributing to a 12% reduction in state overdose deaths that year.[4]

Unfortunately, implementation of full-scale MAT programs in the correctional setting remains slow, particularly in larger states, due to stigma and structural/operational challenges.

As the CDOC continues to work towards its own full-scale MAT program, we prioritized this high risk population. We recently implemented a MAT Release Program, to provide incarcerated patients with opioid use disorder (OUD) access to MAT services prior to release.

OBJECTIVE

To describe outcomes of the MAT Release Program.

METHODS

The MAT Release Program began in 9/2022 and remained operational through study completion, in 12/2023. Funds were obtained internally and through a Comprehensive, Opioid, Stimulant, and Substance Use Program (COSSUP) grant.

Incarcerated patients with opioid use disorder (OUD) were first identified and sorted by facility and release date, using an internal data analytics software platform.

About 3-6 months prior to release, patients met with a MAT Provider and were continued on medication or offered either an in-house sublingual buprenorphine induction or a one-time IM naltrexone injection prior to release. Due to funding availability, from 9/2022-4/2023, patients were offered a one-month induction; from 4/2023-12/2023, patients were offered a three-month induction.

In addition, about 1 month prior to release, patients were also offered a telemedicine visit to establish care with a community MAT Provider. Patients who completed these appointments were also scheduled for follow-up within ~1 week of release.

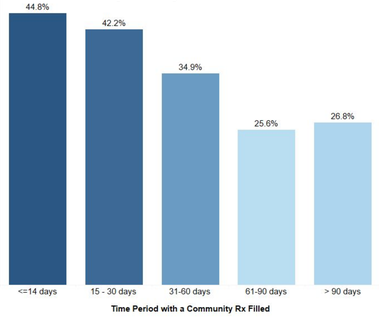
Community follow-up and prescription refill data was obtained as part of normal program operations, inputted manually, and validated twice before data analysis. Post-incarceration opioid overdose fatalities were obtained for quality improvement, through an interagency agreement with the Colorado Department of Public Health and Environment (CDPHE).

RESULTS

Table 1. MAT Release Program - Patient Demographics (n=1224)

Age	19 to 67 years old 35.4 ± 8.10 years
Gender	910 Male (74.35%) 314 Female (25.65 %)
Race	676 Caucasian (55.23%) 403 Hispanic (32.92%) 72 African American (5.88%) 62 Native American (5.07%) 11 Other (0.90%)
Custody Level	61 Minimum (4.98%) 596 Minimum Restrictive (48.69%) 422 Medium (34.48%) 139 Close (11.36%) 6 Unclassified (0.49%)
Substance Use Disorders	1224 Opioid Use Disorder (100%) 777 Methamphetamine Use Disorder (63.48%) 367 Alcohol Use Disorder (29.98%) 70 Sedative Use Disorder (5.72%)
Release Medication Type	930 Buprenorphine/naloxone (75.98%) 267 IM Naltrexone (21.81%) 20 Methadone (1.63%) 5 SL Buprenorphine (0.41%) 2 SQ Buprenorphine (0.16%)
Duration of Buprenorphine/naloxone Treatment Prior to Release	128 7 days or less (13.76%) 319 8 to 30 days (34.30%) 115 31 to 60 days (12.37%) 113 61 to 90 days (12.15%) 255 More than 90 days (27.42%)

Figure 1. Buprenorphine/naloxone retention rates (n=930)



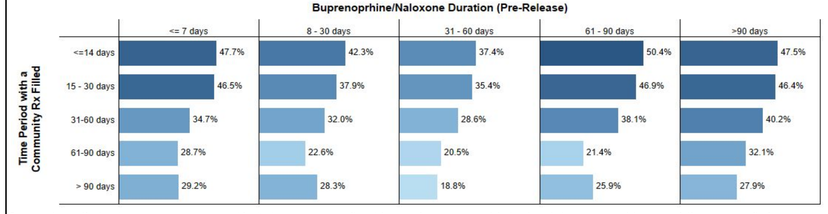
Among the 930 patients treated with buprenorphine/naloxone prior to release, 428 patients (44.8%) received a medication refill from a community provider within 14 days of release. This number remained constant over the month, with 401 patients (42.2%) receiving a medication fill within 30 days of release. Medication maintenance continued to decrease over time, with 34.9% of patients receiving a fill within 31 to 60 days post-release and furthermore to only 25.6% of patients receiving a fill within 61 to 90 days post-release. Patients were excluded from data analysis upon regress from parole and/or community corrections and return to CDOC custody.

Table 2. Post-incarceration fatal opioid overdoses (n=19)

	Number of Fatal Opioid Overdoses Post-Release		
Medication Group	≤30 days	> 30 days	Total Releases (n=2063)
Buprenorphine/ naloxone	1	8	921
No medication	4	6	1142

The rate of fatal opioid overdose deaths of patients receiving buprenorphine/naloxone and no medication upon release was 912.6 per 100,000 (n=19) during the study period. The rate for fatal opioid overdose in patients who received buprenorphine/naloxone was 48 per 100,000 (n=1) and the patients who received no medication was 192 per 100,000 (n = 4) within the first 30 days of release. This translates to a 75% reduction in overdose deaths when a patient is released on buprenorphine/naloxone.

Figure 2. Buprenorphine/naloxone retention rates by duration of treatment pre-release (n=930)



Incarcerated patients who released on buprenorphine/naloxone were monitored for ongoing engagement in treatment, through use of the prescription drug monitoring program (PDMP). We monitored patients' refills of buprenorphine/naloxone at various time intervals following release from prison, and stratified these community buprenorphine/naloxone fills by the duration of treatment patients experienced prior to release. There were no statistically significant differences in treatment retention among the various buprenorphine/naloxone durations prior to release.

DISCUSSION

Our work highlights the feasibility and importance of implementing a medications for addiction treatment (MAT) program in the correctional system.

Over the study period, from 9/2022-12/2023, with a total of two addiction medicine providers, over half (54.21%) of all patients with an opioid use disorder (n=2258) were on medications for addiction treatment (MAT) at time of release.

Medication engagement following release from prison paralleled existing trends seen in the community. Almost half of patients (44.8%) received a refill of buprenorphine/naloxone from a community provider within the first two weeks of release, but this number declined rapidly over time. At 90 days following release, only 25.6% of patients continued to receive buprenorphine/naloxone refills from a community provider.

Similar trends were observed among telehealth connections to community MAT providers. Less than half of patients (43.81%) attended their scheduled follow-up appointments within 7 days of release and a mere 12.38% were still enrolled at these clinics at 90 days following release.

We are always looking for ways to improve our program and increase medication and treatment retention. We believe this data highlights the superiority of and need for continuous medication and behavioral health treatment throughout incarceration, rather than a "release" program.

A total of 23 fatal opioid overdoses were observed during the study period. In line with the existing literature,[4] patients on buprenorphine/naloxone were significantly less likely to die from a fatal opioid overdose within 30-days post release (48 per 100,000) when compared to those on no medication (192 per 100,000).

Again, this highlights the life-saving nature of medications for addiction treatment (MAT).

Continued efforts are needed to expand MAT services within the correctional setting.

CONCLUSION

Patients on buprenorphine/naloxone were significantly less likely to die from a fatal opioid overdose within 30 days post-release, when compared to those on no medication.

DISCLOSURES & ACKNOWLEDGEMENTS

All authors have no conflicts of interest to disclose.

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