

## KENTUCKY DEPARTMENT OF CORRECTIONS SUPPORTIVE ASSISTANCE WITH MEDICATION FOR ADDICTION TREATMENT (SAMAT) PILOT EXPANSION PROGRAM EVALUATION

### Final Evaluation Report

April 12, 2022

#### KORE SAMAT Pilot Expansion Overview

Since March 2016, individuals with an Opioid Use Disorder (OUD) or Alcohol Use Disorder (AUD) who have completed/are nearing completion of a Substance Abuse Program (SAP) operated or supervised by the Kentucky Department of Corrections (KYDOC) have had the opportunity to initiate extended-release naltrexone (Vivitrol®), a long-acting (30-day) injectable medication, prior to their release from incarceration. Currently, Vivitrol® is offered at all 14 prison locations, in addition to 19 jail SAP locations and numerous community providers partnering with the KYDOC.

Building on the success of the KYDOC’s Vivitrol® study, beginning in November 1, 2019, with funding from the SAMHSA-funded Kentucky Opioid Response Effort (KORE), the KYDOC expanded its offerings for Supportive Assistance with Medication for Addiction Treatment (SAMAT). SAMAT is the comprehensive protocol created by KYDOC that includes a multi-disciplinary approach to providing medications for addiction treatment. In addition, the SAMAT protocol includes psychosocial therapies, recovery management, and case management to provide a transitional plan after release to ensure continuity of care. The aims of this expansion were to increase and improve addiction treatment services, increase treatment participation, reduce recidivism related to substance use relapse, and decrease drug overdose morbidity and mortality. In particular, overdose prevention is a central priority of KORE and the KYDOC.

Through KORE funding between November 2019 and January 2020, three prison SAP locations began offering clients with OUD the opportunity to choose between Vivitrol® and buprenorphine (Suboxone®/Sublocade®; see Table 1 for institutions and dates of expansion implementation). Clients who opt for buprenorphine are inducted to the medication with a 14-30 day oral regimen of sublingual buprenorphine-naloxone (Suboxone®) for stabilization and transitioned to the long-acting (30-day) injectable formulation of buprenorphine (Sublocade®) immediately prior to release. The goal of the expansion is to facilitate transition of clients into an outpatient substance abuse treatment program, which employs a multi-faceted approach to treatment combining the use of FDA-approved extended-release Vivitrol® or Sublocade®, counseling, and referral to community-based providers upon release.

**Table 1. KYDOC Prison SAMAT Locations**

<b>Vivitrol® Only</b>		<b>Vivitrol® and Sublocade® Expansion</b>
Bell County Forestry Camp	Eastern Kentucky Correctional Comp.	Northpoint Training Center (11/1/19)
Green River Correctional Complex	Kentucky State Penitentiary	Kentucky Correctional Institution for Women (12/1/19)
Kentucky State Reformatory	Little Sandy Correctional Complex	
Luther Lockett Correctional Complex	Roederer Correctional Complex	Blackburn Correctional Complex (1/1/20)
Ross Cash Center	Southeast State Correctional Complex	
Western Kentucky Correctional Comp.		

The University of Kentucky Center on Drug and Alcohol Research was contracted to do the evaluation of the KYDOC SAMAT pilot program expansion between November 1, 2019 and December 31, 2021. A pre-/post-test design was used, including baseline data obtained through the Criminal Justice Kentucky Treatment Outcome Study (CJKTOS) as individuals enter SAP treatment in the targeted KORE SAMAT expansion sites, supplemented by Government Performance and Results Act (GPRA) measures completed once an individual had been assessed as eligible and interested in buprenorphine. All participants were consented for the follow-up evaluation study.

Follow-up interviews were completed by University of Kentucky research staff at 6 months post-baseline, including local and GPRA measures. Participants were eligible for a 6-month follow-up interview between 5 and 8 months post-baseline. Specifically, the evaluation aims were: (1) to describe client characteristics at treatment entry into MAT services; and (2) to examine longer-term outcomes at 6 months post-treatment entry. This report presents preliminary descriptive findings from the first group of individuals to engage in the KYDOC SAMAT pilot program expansion between November 1, 2019 and December 31, 2021.

### SAMAT Expansion Evaluation Enrollment and Follow-up

During the SAMAT project period, 51 clients at the three prison pilot locations were assessed as eligible and interested in initiating buprenorphine. While all 51 were eligible and expressed interest in buprenorphine, only 28 provided consent to participate in the follow-up outcome study and completed a GPRA interview with a SAP clinician. This determined point of entry into the KORE SAMHSA evaluation. A demographic profile of KORE SAMHSA evaluation participants is presented in Table 2.

**Table 2. Demographic Profile of Consenting Evaluation Participants (N=28)**

	M (SD) or %
Age	36.2 (6.8)
Gender (% male)	78.6%
Race (% white)	100%
HS diploma/GED or higher	78.6%

As shown in Table 3, of the 28 clients who were eligible and interested in buprenorphine and enrolled in the evaluation study, 82.1% initiated the medication while incarcerated, and 60.7% received an injection of Sublocade® prior to their release. At program discharge (release from prison), 100% of clients had received relapse prevention, peer support or recovery coaching, and self-help and support groups. All clients had also been offered assistance with recovery housing and continuing care in the community.

**Table 3. SAMAT Initiation Among Consenting Evaluation Participants (N=28)**

	%	N
Initiated buprenorphine	82.1%	23
Began oral Suboxone®, withdrew before injection	14.3%	4
Began oral Suboxone®, terminated from program before injection	7.1%	2
Began oral Suboxone®, received Sublocade® injection	60.7%	17
Did not initiate	17.9%	5
Opted for Vivitrol	10.7%	3
Signed abstinence agreement	3.6%	1
Deferred for 12 months (no longer eligible)	3.6%	1

Of the 28 clients enrolled in the evaluation, 23 were eligible to complete a follow-up interview 6 months post baseline/intake for the evaluation study. The remaining five clients did not reach the 5 months post-baseline eligibility window for the follow-up interview before the end of the evaluation period, 12/31/2021 (i.e., baselines were entered after 7/31/2021). In total, 15 clients completed a 6-month follow-up interview, for a follow-up rate of 65.2% (two clients refused and six clients were unable to be located). The following section presents preliminary comparisons of information reported by clients at SAP or SAMAT program intake (describing behaviors prior to their current incarceration), and information reported at the follow-up interview, 6 months after SAMAT program intake.

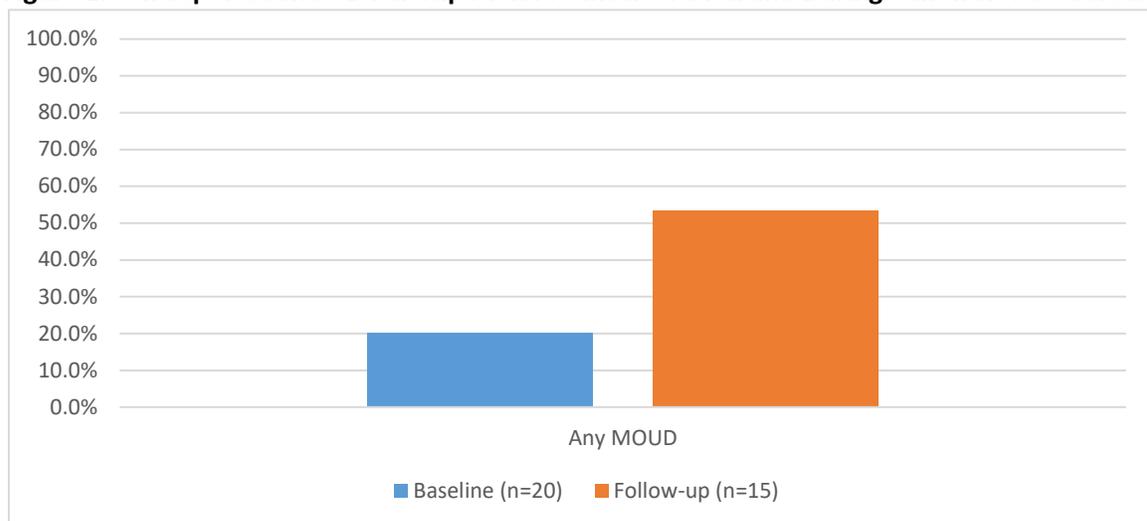
### 6-MONTH FOLLOW-UP OUTCOME HIGHLIGHTS

- Over half of participants (53.3%) continued to receive MOUD after release from prison, and the majority of those (75.0%) were still receiving MOUD at the time of follow-up
- No participants reported having experienced an overdose since their initial interview
- Only one participant reported having been arrested since release

### MOUD Participation

As shown in Figure 1, at SAP treatment intake, 20.0% of participants reported having participated in any type of MOUD during the 12 months before current incarceration. All 20.0% reported having been prescribed oral buprenorphine (e.g., Suboxone or Subutex); no participants reported receiving any other type of MOUD. At 6-month follow-up, however, over half (53.3%) of participants reported engaging in MOUD, including oral buprenorphine (46.7%) and/or injectable buprenorphine (Sublocade®; 20.0%). Furthermore, of the eight participants who engaged in MOUD post-release, six (75.0%) were still actively receiving MOUD at the time of their six-month follow-up. These results indicate that participants continue to engage in treatment post-release, and that linkages with systems of care and support have been successful.

**Figure 1. Self-reported MOUD Participation Pre-incarceration and During 6 Months Post-release**



*Note: MOUD participation pre-incarceration only asked in the larger SAP evaluation CIKTOS interviews completed 9/19/2019 and later; data missing for n=8.*

## Substance Use

A central objective of the KYDOC SAMAT pilot expansion program has been to increase the number of participants not using illicit opioids, other illicit drugs, or misusing prescription opioids. As shown in Table 4, at treatment intake, 82.1% of participants reported using opioids during the 30 days prior to their current incarceration, primarily prescription opioids (50.0%) or heroin (42.9%). By the time of 6-month follow-up, only one participant (6.7%) reported use of opioids in the past 30 days, and no participants reported having experienced an overdose in the past six months.

	<b>Baseline (N=28)</b>	<b>6-M Follow-up (N=15)</b>
<b>Substance Use (last 30 days [on the street])</b>		
Any Opioids	82.1%	6.7%
Prescription Opioids	50.0%	6.7%
Heroin	42.9%	0.0%
Diverted MOUD (Suboxone/Subutex/methadone)	25.0%	0.0%
Fentanyl	17.9%	0.6%
Marijuana	53.6%	13.3%
Methamphetamine	46.4%	20.0%
Alcohol	21.4%	13.3%
Benzodiazepines	17.9%	0.0%
Hallucinogens	14.3%	0.0%
Cocaine/Crack	10.7%	0.0%
Synthetics	3.6%	0.0%
Inhalants	3.6%	0.0%

## Other Health Outcomes

Clients' mental and physical health are also important factors that may impact client's MOUD treatment engagement and overall success post-release. As shown in Table 6, from baseline to 6-month follow-up, decreases were noted for average days experiencing mental health symptoms, including anxiety (16.7 to 12.5), depression (13.4 to 7.1), cognitive impairment (11.8 to 8.8), and trouble controlling violent behavior (4.5 to 0.7). Furthermore, no participants at follow-up reported having experienced physical abuse in the past 30 days, compared to 25.0% at baseline.

	<b>Baseline (N=28)</b>	<b>6-M Follow-up (N=15)</b>
<b>Mental Health (avg. # of days out of last 30 [on the street])</b>		
Anxiety	16.7	12.5
Depression	13.4	7.1
Trouble understanding/concentrating	11.8	8.8
Trouble controlling violent behavior	4.5	0.7
Prescribed psychiatric medication (%)	32.1%	20.0%

## Housing, Health Insurance, and Employment

Stable housing, insurance coverage, and financial stability are also critical to support positive health outcomes for clients and continuity of MOUD treatment post-release. As shown in Table 5, 75.0% of participants reported stable housing prior to incarceration, 67.9% were covered by some type of health insurance, and almost a third (35.7%) were employed at least part-time. At the time of the 6-month follow-up, a greater proportion of participants reported being stably housed (86.7%), insured (93.3%), and employed (60.0%).

**Table 5. Housing, Insurance, and Employment at Baseline (Pre-incarceration) and 6-month Follow-up**

	Baseline (N=28)	6-M Follow-up (N=15)
<b>Living Arrangements</b>		
Housed	75.0%	86.7%
Shelter or Street/Outdoors	21.5%	0.0%
Institution	3.6%	13.3%
<b>Covered by health insurance</b>	67.9%	93.3%
<b>Employed (full- or part-time)</b>	35.7%	60.0%

## Recidivism

Lastly, the current grant aimed to reduce participants' recidivism due to substance use relapse. At program intake, all participants were incarcerated while receiving services. By the time of 6-month follow-up, however, only one participant (6.7%) self-reported having been arrested since their release, although almost all participants (86.7%) were on supervision (i.e., parole or probation) at the time of their interview.

## Conclusions

Findings in this report should be interpreted with caution given the small number of individuals who opted to participate in the KYDOC SAMAT pilot program expansion and consented to be contacted as part of the evaluation study. However, results suggest that the expansion of KYDOC SAMAT services to include both extended-release injectable formulations of naltrexone (Vivitrol®) and buprenorphine (Sublocade®) may be associated with positive outcomes for clients with OUD. Acknowledging the potential risk associated with the SAMAT expansion program for contraband or violence in facilities – a common concern and barrier to MOUD expansion in correctional settings (Grella et al., 2020) – the KYDOC has continued to monitor rates of adverse incidents closely and respond proactively, to ensure safety for program staff, clients, and other incarcerated individuals. However, supporting the present preliminary program evaluation findings, previous research has demonstrated that providing MOUD in correctional settings reduces overdose deaths, decreases substance use after release, and increases continuity of care in the community (NCCHC, 2021). Although overdose fatality risk may be up to 40 times higher for individuals released from incarceration compared to the general public (Ranapurwala et al., 2018), access to MOUD during release can reduce overdose deaths by almost a third (31.6%; Macmadu et al., 2021). Furthermore, offering a menu of MOUD options for clients may better accommodate treatment preferences and support sustained treatment engagement after release (Kaplowitz et al., 2021). This aligns with the

KYDOC's aims for continuity of care, made possible through ongoing collaborations between the Divisions of Addictions Services, Probation and Parole, and Reentry Services to facilitate continued treatment participation as clients reenter their communities.

## Next Steps

Building on the preliminary successes described in the present report, the KYDOC has continued to update and adapt SAMAT protocols to support initiation, engagement, and continuity of MOUD for clients. For example, clinical screening criteria for MOUD eligibility has been modified, including changes to the urine drug screen process, to allow for additional time for clients to initiate medications prior to release. Standard SAMAT education (including MOUD and MAUD) for incarcerated clients has been updated across all KYDOC facilities, and clients are now provided with a brochure to keep with SAMAT information and common myths. Annual training for all DOC staff has also been updated to include more extensive MOUD education, and staff at MOUD facilities have received additional training related to implicit bias, transference, and countertransference to identify and address subconscious beliefs and opinions about MOUD. Furthermore, KYDOC continues to review rates of program enrollment across all SAMAT sites to identify facilities or programs where additional education and support for participation may be needed. Cumulatively, these efforts have contributed to a culture of full support for all FDA-approved forms of SAMAT among all levels of KYDOC staff, recognizing the value of these medications to support clients' health and well-being during the process of reentry and recovery and to prevent future overdose deaths.

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