

# Substance Abuse Medication Assisted Treatment (SAMAT): Preliminary Outcomes

In March 2016, the Kentucky Department of Corrections (DOC) began offering eligible DOC-based substance abuse program (SAP) participants the opportunity to initiate Vivitrol®, a long-acting (30-day) injectable medication-assisted treatment (MAT) for opioid use disorder and alcohol use disorder, prior to their release. Eligibility is defined through the SAMAT protocol as (1) CJKTOS intake assessment positive for a substance use disorder related to alcohol or opioids; (2) SAP completion; (3) Anticipated release on supervision; (4) Negative drug screen prior to tolerance trial; and (5) not currently pregnant. Prison participants receive 3 injections prior to release, which is unique to the Kentucky system with the idea that a longer engagement period will increase the likelihood of success in the community upon re-entry.

As part of the larger Criminal Justice Kentucky Treatment Outcome Study (CJKTOS), those who initiated Vivitrol® while in prison and were successfully located (N=64; 83% of all Vivitrol initiators tracked) were interviewed over the phone one-year post-release to assess outcomes. Sixty-one (n=61) participants had lived in Kentucky for the majority of the past 12 months and were included in the final sample. These participants represent the first cohort of Vivitrol initiators that have been out on the street for 12 months, offering valuable preliminary data.

Preliminary findings suggest that starting Vivitrol® therapy while incarcerated may be associated with lower rates of rearrest and relapse.

## Initiation

Table 1 includes descriptive data for individuals who met the criteria to initiate MAT (i.e., history of alcohol or opioid use, SAP completion) and either received an initial Vivitrol® dose while incarcerated, or did not. Compared to non-initiators in the larger CJKTOS study, Vivitrol® initiators were similar demographically, but showed slightly more positive outcomes at 12-months post-release for relapse and recidivism:

**Table 1. Profile and Outcomes of MAT-initiators and Non-initiators (N=131)**

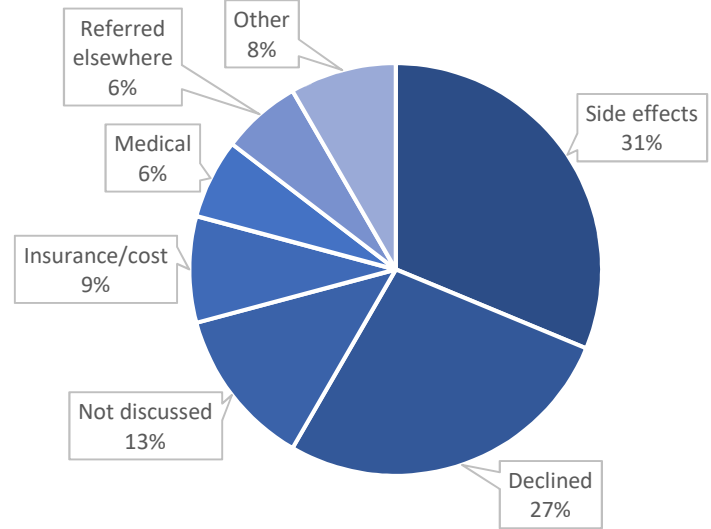
|   | Vivitrol®-Eligible Non-initiators<br>(N=70) | Vivitrol® Initiators<br>(N=61) |
|---|---|--------------------------------|
| <b>Demographics</b>                               |   |                                |
| Age   | 37.8  | 39.4                           |
| Gender (% male)                                   | 67.1%                                       | 63.9%                          |
| Race (% white)                                    | 82.9%                                       | 82.0%                          |
| <b>Recidivism</b>                                 |   |                                |
| Reincarcerated in 12-month follow-up window       | 48.6%                                       | 39.3%                          |
| Number of days out before reincarcerated          | 178.9 (n=34)                                | 219.8 (n=24)                   |
| <b>Substance Use in 12-month Follow-up Window</b> |   |                                |
| Any illegal drug use                              | 47.1%                                       | 42.6%                          |
| Any alcohol use                                   | 28.6%                                       | 26.2%                          |
| Any opiate use                                    | 25.7%                                       | 24.6%                          |

Results are preliminary and limited by small sample size, but those who were eligible and initiated Vivitrol® pre-release had lower rates of re-arrest (and, if arrested, spent more days on the street) and reported lower rates of alcohol and drug use.

## Continuation

Of the 61 participants who initiated Vivitrol® while in prison, 20 went on to receive at least one shot in the community, and 12 continued additional injections. Figure 1 shows reasons provided for not continuing injections in the community, which most commonly include side effects or discomfort (31%), declined with no specific reason (27%), or did not discuss the shots with their SSC (13%). Other participants reported difficulty obtaining insurance or covering the expense of shots (9%), while 6% reported a medical conflict that prevented them from continuing treatment. Few participants were referred to other programs (6%) or reported other reasons for discontinuing the shots (8%; including relapse, absconding from supervision, or unable to find providers in their area).

**Figure 1. Reasons Given for Stopping Treatment Within 3-months Post-release (n=48)**



Of participants who received at least one Vivitrol® shot in the community, outcomes for relapse were similar to those who initiated in prison but did not continue after their release, as shown in Table 2 below.

**Table 2. Profile and Outcomes of MAT Participants by Whether Vivitrol® Injections Were Received in Community Post-Release or Prison-Only (N=61)**

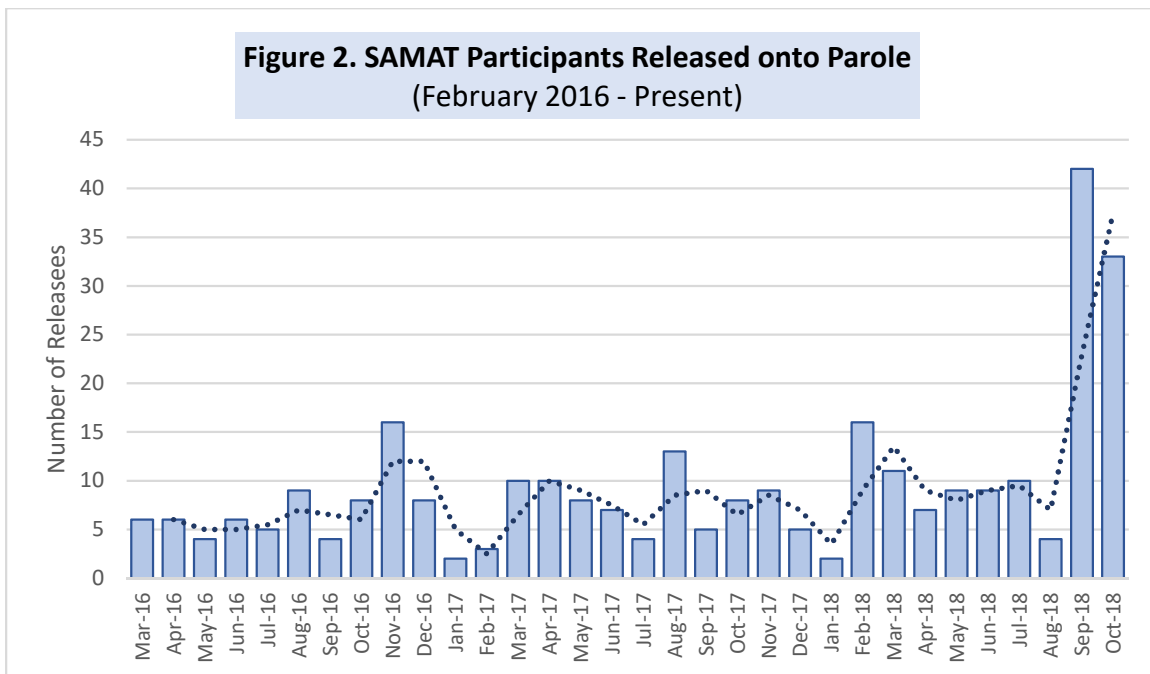
|   | Prison + Community Injection (n=20) | Prison Injection Only (n=41) |
|---|-------------------------------------|------------------------------|
| <b>Demographics</b>                               |                                     |                              |
| Age   | 37.00                               | 40.51                        |
| Gender (% male)                                   | 65.0%                               | 63.4%                        |
| Race (% white)                                    | 90.0%                               | 78.0%                        |
| <b>Recidivism</b>                                 |                                     |                              |
| Reincarcerated in 12-month follow-up window       | 40.0%                               | 39.0%                        |
| Number of days out before reincarcerated          | 241.88 (n=8)                        | 208.69 (n=16)                |
| Average number of days spent reincarcerated       | 35.35                               | 44.15                        |
| <b>Substance Use in 12-month Follow-up Window</b> |                                     |                              |
| Any illegal drug use                              | 45.0%                               | 41.5%                        |
| Any alcohol use                                   | 25.0%                               | 26.8%                        |
| Any opiate use                                    | 25.0%                               | 24.4%                        |

Although rates of recidivism also did not differ significantly, it should be noted that individuals who received Vivitrol® injections in the community were out longer before rearrested and spent fewer days incarcerated. Overall, the number of days incarcerated during the 12 month follow-up period was negatively correlated with number of shots received post-release, such that a greater number of shots was associated with fewer total days spent in jail or prison.

## Limitations & Future Directions

In tracking results from the first cohort of Vivitrol® initiators to be released on supervision, the present report offers a valuable first look at outcomes in the community. However, it is important to note that this preliminary analysis reflects a very small sample size and power may be low to detect statistical significance at this time. It is also important to note that not all the jail programs are operational as of December, 2018, so numbers may reflect programs which were implemented first. In addition, jail programs are not currently reporting numbers in KOMS, which may lead to underreporting of number of injections and ongoing care. Although differences reported are informative, it is possible that results will change as more data are collected.

Moving forward, the Kentucky DOC aims to increase the number of SAP graduates utilizing MAT in the community by offering 90 days of program credit to parolees under community supervision who receive 6 monthly Vivitrol® injections. Implemented in July, 2018, this change in policy has already been associated with an increase in MAT initiators released to parole, as shown in Figure 2 (below). As MAT uptake increases, the DOC will continue to track treatment adherence and outcomes in the community, reflecting the Department’s commitment to data-driven decision making.



For additional information about this report, please contact:

Erin McNees Winston, M.P.A.  
Center on Drug and Alcohol Research  
University of Kentucky  
643 Maxwellton Court  
Lexington, KY 40508  
E-mail: [ermcne0@uky.edu](mailto:ermcne0@uky.edu)  
Office: (859) 257-1720

Sarah Johnson, MSW  
Division Director, Substance Abuse Services  
Kentucky Department of Corrections  
2439 Lawrenceburg Rd.  
Frankfort, KY. 40602  
Email: [SarahG.Johnson@ky.gov](mailto:SarahG.Johnson@ky.gov)  
Office: 502-564-6490