
Report to The Vermont Legislature

**Medication-Assisted Treatment for Inmates: Work
Group Evaluation Report and Recommendations**

**In Accordance with Act 195, 2014
An Act Relating to Pretrial Services, Risk Assessments, and
Criminal Justice Programs**

Submitted to: House Committee on Corrections and Institutions
House Committee on Human Services
House Committee on Judiciary
Senate Committee on Health and Welfare
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Executive Summary

This report evaluates and summarizes the findings of a demonstration project, previously established under Act 67 (2013), to test the provision of continuation medication assisted treatment (MAT) for inmates at two Vermont correctional facilities. Act 195 (2014), Section 12 (g), is follow-on legislation, requiring the Department of Corrections (DOC) and Department of Health (VDH), hereafter “the Departments,” to collaboratively continue the Medication-Assisted Treatment (MAT) Work Group created in 2013, and evaluate the legislatively mandated demonstration project. The following report fulfills this legislative mandate, and presents the major findings of the demonstration project. The report concludes with recommendations and a proposed schedule of expansion as specified by the legislation.

The major findings include:

1. The Demonstration Project was conducted in two Vermont facilities, Chittenden Regional Correction Facility (CRCF) and Northwest State Regional Correctional Facility (NWSCF). The project tested continuation MAT for inmates up to 90 days for both detainee and sentenced inmates who were receiving MAT treatment in communities *immediately prior to incarceration*.
2. There were 323 participants (involving 413 admissions) in the MAT demonstration project; 406 inmates (98.3%) completed the 90-day duration or continued MAT to release. Only 7 inmates (1.7%) were discontinued for some violation of the established MAT service guidelines.
3. There were four aims of the demonstration project: 1) increase access to MAT for inmates; 2) improve the health outcomes of inmates; 3) ensure parity of health care for inmates relative to services available through the community health care system; and 4) identify sustainable and satisfactory systems solutions for the delivery of MAT within correctional settings. While the demonstration project achieved aim #1, the other three aims proved more complex. The demonstration project revealed key lessons and challenges that would need to be addressed if implemented across the state, many of which are addressed in the recommendations.
4. The proposed schedule of expansion recommends continuation MAT up to 120 days based on medical necessity on a case-by-case basis, implemented statewide to all seven facilities on any designated start date, pending available funding. The budgetary estimates are calculated by projecting the average and maximum costs using the same contract and cost bases from the pilot.
5. The recommendations set out at the end of the report are identified as the most critical to successful implementation of a program to deliver continuation MAT in all seven correctional facilities.

Introduction

Act 195 (2014), *an act relating to pretrial services, risk assessments and criminal justice programs*, directs the Vermont Department of Corrections (DOC) to collaborate with the Vermont Department of Health's Division of Alcohol and Drug Abuse Programs (ADAP) to evaluate the demonstration project that provided medication assisted treatment (MAT) for inmates, including persons who were receiving treatment in the community *immediately prior to incarceration*. The demonstration project was previously legislated through Act 67, Sec. 11 (2013), and involved two key action steps as follows, and subsequently followed by Act 95 (2014):

- Step 1: Establish a MAT Work Group to examine medication-assisted treatment for justice-involved individuals in DOC facilities, including federal and state legal parameters, prioritization and time limits for treatment, and roles of providers of the Hub and Spoke system and DOC's medical services contractor in providing treatment.
 - Step 1 Summary: The Work Group was first convened in June of 2013, and met monthly to conduct the background research and design the demonstration project.
- Step 2: The Work Group would report its findings and recommendations regarding the demonstration project to the legislature.
 - Step 2 Summary: The final report, "Medication-Assisted Treatment for Inmates: Work Group Report", was submitted to the legislature December 4, 2013 in accordance to Act 67 (2013), and can be found at the following link:
<http://legislature.vermont.gov/assets/Documents/Reports/294966.PDF>
- Step 3: Per Act 195 (2014), the MAT Work Group was reconvened on January 13, 2016 to evaluate the demonstration project and report the findings, including a proposed schedule of expansion. This Evaluation Report fulfills this legislative requirement.

The Evaluation

This evaluation was conducted by the members of the MAT Work Group made up of representatives of the principle partners, the Departments, as well as representatives from the Department of Vermont Health Access (DVHA), the Howard Center, the Defender General's Office, and Centurion-VT, DOC's medical services contractor (See Appendix A). To conduct the evaluation, the Work Group held three meetings and carried out numerous communications outside of the formal meetings to share data on deliverables and outcomes relating to the demonstration project, confirm findings, and finalize the report.

While the evaluation report is mandated in Sec. 12 (g) of Act 195 (2014), all the elements in section 12 (a-g) pertain to the design and implementation of the one-year demonstration project. Therefore, the evaluation report is organized around each of the sub-section(s), with final recommendations of the MAT

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Work Group, together with a legislatively requested “proposed schedule of expansion” presented at the end of this report. The original language of the enacted legislation can be found on pages 15 and 16 at

<http://legislature.vermont.gov/assets/Documents/2014/Docs/ACTS/ACT195/ACT195%20As%20Enacted.pdf>

The Demonstration Project

Act 195, Subsection(s) a-c. A One Year Pilot

The DOC in consultation with the MAT Work Group shall (a) “develop and implement a one-year demonstration project to pilot continued use of medication-assisted treatment with Department facilities for detainees and sentenced inmates”; (b) offer continued MAT with methadone or buprenorphine; and (c) use a clinically “prescribed taper” as appropriate.

Pilot Design/Background: The one-year demonstration project was originally targeted to individuals who had been receiving MAT services *immediately prior to incarceration*, and proposed *initially*, to pilot the continued use of MAT within DOC facilities for detainees and sentenced inmates in the following manner:

1. **For detainee populations:** persons incarcerated on detainee status and taking MAT as prescribed in the community may be allowed to continue MAT up to 180 days. If the need for MAT discontinuation arises it will be done so through use of a prescribed taper per the prescribing physician’s or treatment provider’s protocols.
2. **For sentenced populations:** those persons sentenced to a minimum of 1 year and receiving MAT as prescribed in the community may be allowed to continue MAT up to one year of their sentence. Beyond that year, discontinuation will proceed per a prescribed taper per the prescribing physician’s or treatment provider’s protocols.

Pilot Implementation Summary: The DOC, in consultation with the Criminal Justice Legislative Oversight Committee, implemented a 90-day MAT maintenance pilot for both detainees and sentenced individuals, as otherwise described above, with prescribed tapering if discontinued per the prescribing physician’s or treatment provider’s protocols.

Additional Pilot Implementation Guidelines: The MAT Work Group also proposed the following guidelines to apply to participants in the demonstration project:

- Individuals can continue MAT for as long as they continue to benefit from it up to 90 days, maintain interest in continuing treatment, and consistently meet the expectations set forth by the MAT clinical provider and DOC in collaboration with the DOC medical provider.
- An individual within DOC who is determined to have violated a condition or agreement related to MAT, including diversion or misuse/abuse of other substances, will be discontinued by taper upon notification of the community treatment provider.
- Discontinuation of MAT, if necessary, should be accomplished through a prescribed tapering protocol

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per the prescribing physician's or treatment provider's protocols.

- Protocols shall be established for smooth transitioning in and out of treatment settings, or in and out of DOC facilities to treatment services. See the sub-section below: Act 195, Subsection(s) d, Interim Revision Memorandum Directive 363.1.
- Treatment protocols involving transport of inmates to off-site care shall not disrupt DOC facility schedules nor should the implementation or use of the treatment protocols interfere with the orderly running of any DOC facility.

Act 195, Subsection(s) d, Interim Revision Memorandum Directive 363.1

The Commissioner of Corrections shall publish an interim revision memorandum to replace Directive 363.01 as recommended by the Medication-Assisted Treatment for Inmates Work Group.

Pilot Design/Background: The MAT Work Group concluded that to implement the demonstration project, the DOC would need to revise the **DOC Methadone Facilities Directive 363.01**. The memorandum would not be a clinical guideline. Local policy and procedures would need to be formulated appropriately and separately, and support clinical guidelines from DOC Health Services. It is noted that any change to this directive would not be binding for individuals placed in Vermont DOC facilities under the supervision of the Federal Justice System. A representative from VDH/ADAP would plan to discuss the feasibility and ability of extending this, or a similar, protocol to federally sentenced or detained inmates.

Pilot Implementation Summary: The Interim Revision Memorandum Directive 363.01 was signed by Andrew Pallito, then Commissioner of the Department of Corrections, on October 14, 2014. The link to the document is <http://doc.vermont.gov/about/policies/rpd/interim-revision-memo-363-01-methadone-facilitation/view>. This directive supports the Health Care Services Policy # 351, <http://doc.vermont.gov/about/policies/rpd/correctional-services-301-550/351-360-programs-health-care-services/351%20Health%20Care%20Services.pdf>, namely those elements pertaining to: 1) the continuity of MAT maintenance and/or discontinuation of MAT based upon diversion of medications (with notification to the community provider), and 2) the taper protocol. This directive enabled the implementation of the demonstration project, piloting MAT treatment maintenance for greater than 30 days, including the facilitation of the continuation of methadone treatment, if necessary, to treat inmates with opioid dependence having received such treatment in communities *immediately prior to incarceration*. There was no change to federally sentenced or detained individuals.

Act 195, Subsection(s) e. MOUs

DOC shall enter in to memoranda of understandings (MOU) with the Department of Health and with hub treatment providers regarding ongoing medication-assisted treatment for persons in the custody of the Department, ensuring no higher priority status over any other person on a waitlist.

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Pilot Design/Background: MOUs between the Departments were determined not to be legally required, however MOUs between hub providers and DOC facilities would need to be established to ensure the uniform administration of MAT for inmates and transitions to and from community-based services, especially for those treated with methadone. ADAP and DOC would facilitate this.

Pilot Implementation Summary:

Uniform Language

A standardized MOU was proposed between hub providers and DOC facilities to ensure a common protocol of care for delivering MAT treatment to inmates irrespective of correction facility, while also observing correction's scheduling, security and transportation protocols. Developing a uniform language to cover all the related complexities to the satisfaction of all parties proved very challenging. One of these complexities, for example, involved the use of telemedicine for individuals considered of moderate to high risk for elopement or other behavioral disruptions. Since each hub has different telehealth systems, and the DOC has its own technological security-related issues, it was very difficult to formalize common systems standards around this and other issues.

Implementation: Work on the uniform language MOU continued through the full duration of the demonstration project, relying on informal agreements and the principles contained in the evolving draft MOU to implement the demonstration project. In addition to telemedicine, guest dosing, transportation, and other program and system challenges were identified and addressed. Many of these challenges and associated solutions are detailed under "Pilot Outcomes" below. To supplement the uniform language MOU, a valid chain of custody agreement was used to ensure effective delivery of medications for methadone-maintained individuals per Federal regulations. For individuals receiving Buprenorphine, the DOC's medical contractor assumed prescriptive authority.

The common language MOU has now been finalized. It has been signed and put into use between the DOC and the two hub providers in Rutland and Chittenden counties where the pilot was implemented. In future, MOUs will be signed and put into use between the DOC and all remaining hub providers involved in roll out of the continuation MAT program to facilities statewide. Valid chain of custody agreements tracking movement of medications will also continue to be used.

Act 195, Subsection(s) f. Naloxone Overdose Prevention

The Departments shall collaborate to facilitate the provision of naloxone overdose prevention training and rescue kits for pilot project participants.

Pilot Design/Background: The VDH, through community-based partners, is distributing Overdose Rescue Kits with nasal naloxone (Narcan®), a medication that can reverse an opioid overdose. When sprayed into the nose of someone who has overdosed, naloxone blocks the opioids and restores normal breathing. The key is to administer it as quickly as possible after an overdose is recognized. Naloxone is safe, easy to

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administer, and has no potential for abuse.

Pilot Implementation Summary: The VDH trained a select group of DOC staff in the proper storage and deployment of naloxone. In turn, DOC staff continued to train other staff at the two pilot sites. Furthermore, several field officers asked to be trained in the deployment of naloxone and now voluntarily carry the vials when working in the field. Both pilot sites were provided with an initial number of kits. In the future, the DOC would like to add the ability to order kits as needed. During reentry planning case managers provided naloxone counseling and recommendations on its use to inmates. Only four pilot project participants accepted a kit upon release (3 in CRCF, and 1 in NWSCF), reflecting a low acceptance rate relative to the outside population. Since the conclusion of the pilot, additional kits continue to be issued to inmates upon release (to date, 42 at CRCF, and 4 at NWSCF) reflecting a positive increase in acceptance rates as best practice supports the availability of naloxone to prevent overdose. Some continued barriers may include low staff familiarity with the kits, inmate concerns about signaling to DOC staff and parole/probation officers an intention for future substance abuse, noted they could get naloxone in the community, and inmate determination to remain abstinent. Methods to continue to improve acceptance rates among inmates upon release will need to be identified with a focus on overcoming some of these barriers. For example, the development of a standard script for case managers to orientate inmates on the availability and use of naloxone might be considered, and wider training on the value of the kits to not only DOC staff, but parole/probation officers and the individuals themselves, might be considered. After the completion of the pilot and in anticipation of roll-out statewide, CRCF has made naloxone available to all released inmates, and by December 1, 2016, all seven facilities will have naloxone available for participants at release.

Act 195, Subsection(s) g. MAT Work Group and Evaluation

The VDH shall continue the Medication-Assisted Treatment for Inmates Work Group to inform and monitor implementation of the demonstration project, evaluate the project, and report the findings, including a proposed schedule of expansion.

Summary: In addition to the meetings under the first phase that focused on designing the pilot, the Work Group reconvened on January 13, 2016 to plan a process for evaluating the demonstration project and for preparing the required evaluation report. Three meetings were held in this second phase focused on evaluation, as well as numerous other communications to share data on demonstration project implementation, review and confirm findings, complete calculations for the proposed schedule of expansion, and consolidate the MAT Work Group's final recommendations. The following reflect the MAT Work Group's findings relating to pilot outcomes and subsequent recommendations.

Pilot Outcomes

Two pilot sites were implemented, with Chittenden Regional Correction Facility (CRCF) initiated October 7, 2014 and Northwest State Regional Correctional Facility (NWSCF) on October 24, 2014 to test extending “continuation MAT treatment” from 30 days to 90 days during a one-year demonstration project period.

The following chart provides a data summary by pilot site.

Pilot Data Summary

<u>PILOT SITE</u>	<u>NUMBER OF ADMISSIONS ON MAT</u>	<u>NUMBER OF UNIQUE INDIVIDUALS ON MAT</u>	<u>% OF ADMISSIONS DISCONTINUED FROM MAT DUE TO MISUSE OR DIVERSION</u>	<u>% of ADMISSIONS COMPLETING 90 DAYS MAT AND/OR RELEASED</u>
CHITTENDEN REGIONAL CORRECTIONAL FACILITY	276	217	1.5% (4)	98.5% (272)
NORTHWEST REGIONAL CORRECTIONAL FACILITY	137	106	2.2% (3)	97.8% (134)
TOTAL	413	323	1.7% (7)	98.3% (406)

NOTES:

- NWSCF has a relatively smaller portion of beds at the facility dedicated to serving individuals that would qualify for MAT services, which would have impacted the MAT pilot size..
- Of all eligible admissions to CRCF, 52.5% were continued on Suboxone, and approximately 45% were continued on methadone. About 98.5% were continued to 90-day completion or release, and only 1.5% were discontinued from MAT due to misuse and/or diversion. Of all eligible admissions to NWSCF, approximately 65% were continued on Suboxone and 32.8% were continued on methadone. About 97.8% were continued to 90-day completion, and only 2% were discontinued from MAT due to misuse and/or diversion.

Four Aims

The one-year demonstration project was designed to pilot an approach to meet the following four aims:

- Improve access to MAT for opioid dependent inmates;
- Improve inmate health outcomes, including smoother transitions to and from communities;
- Ensure parity of health care for inmates within correctional facilities is in parity with health care in communities per the Affordable Care Act; and
- Identify systems solutions for the delivery of MAT to inmates that are viewed as both sustainable and satisfactory among all service delivery stakeholders, including the Departments, corrections facilities, and health care providers.

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1) Improve Access to MAT for Inmates

Access to MAT within facilities was already being provided to inmates with an opioid dependence diagnosis across all facilities for up to 30 days, for individuals who had been receiving MAT services *immediately prior to incarceration*, and medically determined that continuation was necessary (see

<http://doc.vermont.gov/about/policies/rpd/correctional-services-301-550/361-370-programs-treatment-programs/363.01%20Methadone%20Facilitation.pdf>). Discontinuation of MAT for having violated a

condition or agreement related to MAT, including diversion or misuse/abuse of other substances, would be carried out through a clinically-prescribed taper as appropriate.

- Standard Treatment Duration Extended: Under the demonstration project, the treatment period was extended from a standard 30 days up to 90 days within the two pilot sites. This was achieved through the DOC Methadone Facilities Directive 363.01, methadone facilitation for both methadone and buprenorphine for individuals remaining eligible per the Directive for MAT treatment. The 90-day duration was selected based on determination of the average incarceration period for inmates prior to release with the goal of ensuring continuation MAT for the majority, so that through incarceration and upon release back into their communities these individuals could continue their previously initiated MAT treatment without interruption.ⁱ This time frame also corresponded to longer term sentencing, at which point inmates sentenced beyond 90 days, would be tapered through a prescribed tapering protocol.ⁱⁱ
- Pilot Participation: There were 323 inmates (with 413 admissions) who participated in the MAT demonstration project, with 406 (98.3%) completing the 90-day treatment duration or continuing MAT to release. Only 7 inmates (1.7%) were discontinued through a clinically prescribed taper for violation of certain DOC MAT program conditions or agreements within those guidelines.

Access to MAT Findings: - the demonstration project met its aim to increase access to MAT for inmates, in terms of:

- increased standard duration from 30 days to 90 days,
- maintaining high completion rates among participants,
- seeing fewer individuals discontinued through prescribed taper, and
- ensuring smoother continuation of treatment through transitions in and out of incarceration.

2) Improve Inmate Health Outcomes

Another aim of the pilot was to improve inmate health outcomes, including smoother transitions to and from communities. The following are some of the observations and related research findings.

- Continuation Treatment Irrespective of Compliance: National research has shown that patient compliance or non-compliance with treatment protocols does not change the facts about the positive

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effectiveness of MAT, and inmates continued on MAT through incarceration have higher rates of return to outpatient care upon release irrespective of compliance. For this reason, policies favoring treatment termination for patients who use substances negate a fundamental principle—that longer retention in treatment is correlated highly with increased treatment success (Hubbard et al. 1997, 2003).ⁱⁱⁱ For these and other reasons, federal recommendations^{iv} state that access to treatment with methadone and other FDA approved medications for opioid addiction be increased for people who are incarcerated, on parole, or on probation. The Work Group will need to reevaluate program guidelines regarding discontinuation in light of best practice.

- **Reduced Risk of Overdose:** National research data shows that the risk of overdose for individuals previously on MAT and then tapered, are at a higher risk of overdose if those individuals again use or misuse opioids. This is also true of previously incarcerated individuals previously on MAT, tapered, and then released into communities. Furthermore, the risk of relapse associated with opioid dependence, in general, is very high. As such, continuation MAT extended to 90 days under this demonstration project may have reduced the risk of overdose for more inmates (compared to the number treated with 30-days continuation) by bridging the time to reentry into their communities for more individuals.^v Additionally, inmates upon release were counseled and offered access to naloxone as another means to reduce risk of an overdose.
- **Treatment Continuity and Smoother Transitions:** The DOC and hub providers worked hard to ensure minimal disruption to treatment for MAT pilot participants released back into the community within the 90-day continuation MAT time frame even when complicated by little to no advance notice of release, or need to confirm a previously held hub slot. For now, hub providers have agreed to hold continuation slots for up to one year from incarceration to ensure a smooth transition upon release from a clinical perspective for as many opioid dependent inmates as possible.^{vi} Individuals reentering communities beyond one year would go into the standard pool and be given treatment slots upon availability. It is expected that as system capacity expands so too will the ability to absorb all patients as needed (and as medically appropriate) with minimal or no waitlist and treatment interruption.
- **Inmate complaints:** It was generally observed by a representative of the Office of Defender General that there had been fewer complaints to Prisoner’s Rights investigators because of the extended period to 90 days of MAT maintenance. The DOC reported a few complaints thought to be associated with non-compliant participants being dropped from the program.
- **Return to Incarceration:** Of all the eligible admissions to one of the two pilot programs, and released while active in MAT, 62 individuals, or an average of 28%, returned to incarceration. Of these individuals, 43 (70%) returned to incarceration once during the pilot period, and 19 (30%) returned 2 to 3 times after initial release during the pilot period. The breakdown by correctional facility has at NWSCF 15 individuals returned to incarceration once, 5 individuals returned to incarceration two times,

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and one individual returned to incarceration 3 times. For CRCF, 28 individuals returned one time, 9 individuals returned two times, and 5 individuals returned 3 times. There is no known causal link between rate of return to incarceration and MAT other than perhaps opioid dependent individuals involved with the criminal justice system may have complex, re-occurring challenges.

- Inmate security: The DOC reports that there have been several incidents of injury and violence among MAT patients believed to result from other inmates pressuring MAT patients to divert their medications. There is concern that the existing dosing procedure and process makes MAT inmates highly visible to non-MAT inmates, and thereby, might potentially increase the vulnerability and security risk for these inmates. Prisoner rights' advocates, on the other hand, have expressed concern for the health and safety of inmates who *do not* receive MAT stating that such individuals are more vulnerable to use of illicit drugs or other risky behavior to try to acquire those substances if not receiving treatment. They also express additional concern for medical privacy protections of inmates receiving MAT. The Work Group will need to identify procedural or other recommendations to ensure the highest security for inmates as well as staff involved in the MAT program, and protect the medical privacy for inmates.

Health Outcomes Findings: While not definitive, the pilot may have improved health outcomes for the 98.3% participants continuing the program to completion or release. The benefits would have included:

- continuity of treatment,
- smoother transitions in and out of incarceration,
- decreased risk of overdose upon release, and
- reduced inmate grievances.

The potential risks relating to inmate security due to violence and/or vulnerabilities to succumb to pressures to divert medications is of significant concern. The Work Group will need to, at the very least, identify measures to ensure the safety and security of MAT inmates as well as staff, and ensure medical privacy protections of inmates, as it makes its recommendations.

3) Better Ensure Parity of Health Care for Inmates

The one-year demonstration project also aimed to ensure that drug treatment is provided in parity with other health care, and that the health care within facilities is in parity with health care in the community per the Mental Health Parity and Addiction Equity Act (MHPAEA). The challenge to fulfill parity within correctional facilities is to find the best solution possible to match the “community standard” available throughout Vermont.

- Current Community Standard: The current “community standard” for the general population is for individuals with opioid dependence having no community access to MAT to be tapered through a clinically-prescribed tapering protocol. Despite recent system expansions in the substance abuse treatment system, ensuring access to MAT for all opioid dependent Vermonters in the general

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population is still hampered in some areas by system capacity limits, including waitlists, and/or other access issues, e.g., transportation limitations for families and rural communities, such that some opioid dependent individuals need to be tapered. This tapering protocol varies by provider and is as few as five to seven days with some withdrawal symptomology as is carried out in hospitals or some residential facilities. At minimum, however, meeting current “community standards” of care for opioid dependence for individuals in the general population is taken to mean that all individuals having received *prior determination of medical necessity for MAT maintenance* would be continued (for as long as possible).

For inmates relying on buprenorphine treatment delivery, the DOC uses a medical contractor, so is not hindered by the same system shortages of community doctors able to provide that form of MAT. For inmates relying on methadone treatment delivery, however, system capacity might be constrained due to high community need and few resources, no hub connection with the DOC, and low hub capacity to serve inmate patients while also maintaining its general population patient load, thus requiring inmates in these areas to also need to be tapered. Meeting minimum current “community standards” of care for opioid dependent inmates is taken to mean continuation MAT for all individuals who had been receiving MAT services *immediately prior to incarceration*, and should be done as is for individuals in the general population, and without undue delay and/or interruption (for as long as possible).

- “Interim Maintenance Treatment” Maximums: Federal standards for MAT involving “interim maintenance treatment” (continuation methadone treatment without counseling as is allowed in correction facilities) sets a maximum duration not to exceed 120 days in a 12-month period.^{vii} The Work Group will need to determine what duration to recommend for statewide roll-out, and how that duration will be identified, i.e., either as a standardized period (e.g., the 30-days current DOC practice, the 90 days piloted duration), or a period determined by medical necessity up to the federal maximum of 120 days for methadone patients (with the caveat that MAT patients treated outside the Opioid Treatment Program (OTP) authority (and therefore treated with buprenorphine) would likely also be capped to the same maximum of 120 days for program consistency). The Work Group agreed that for future statewide roll-out continuation MAT based on medical determination with variable time frames on a case-by-case basis was preferable to a programmatic determination with a standard duration as was used in the pilot, and duration would continue as long as possible for all qualifying opioid dependent inmates.

Parity Findings: The demonstration project did work to fulfill the aim of parity for inmates per the above described “community standard” (and federal best practice standards), whereby individuals (in the piloted correctional facilities) who have received *prior determination of medical necessity for MAT maintenance* are continued, and those who had not previously initiated MAT, like other Vermonters with opioid dependence in communities and/or regions with waitlists or other access constraints, would be clinically tapered. The

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duration of treatment was extended from 30 days to 90 days, but the bar “for as long as possible” was not met, as the federal maximum allows for up to 120 days for methadone patients (and, if similarly applied to buprenorphine patients, 120 days for those inmates as well). Under conditions of future resource shortages, maintaining parity for inmates compared with the general population standards of care may involve triaging inmates along with other Vermonters based on clinical considerations, to ensure the constraints on community medical resources, availability of MAT services, treatment slots, medications, were fairly and impartially managed irrespective of incarcerated status.

4) Sustainable Systems Solutions and Outcomes

The last stated aim of the one-year demonstration project was to identify systems-solutions for the continued provision of MAT services to inmates seen as sustainable and satisfactory among all service delivery stakeholders, including the Departments (particularly DOC staff at corrections facilities), DOC’s health services contractor, and health care providers.

- MOUs: A standardized MOU that included uniform language to cover all the related complexities of providing continuation MAT treatment for inmates was needed, addressing telemedicine technology, guest dosing, transportation, and other security requirements. The uniform language MOU was finalized, signed, and put into use in Rutland and Chittenden. With the roll-out to all correctional facilities, an MOU will be signed between each hub provider and the DOC to ensure consistency statewide.
- Guest Dosing: When a patient is unable to report to an OTP as usually required, a responsible third-party person(s) is(are) allowed to obtain and take charge of the medication, as for example, in a nursing home or correctional institution.^{viii} It was determined that the pre-existing guest dosing policies in use across all hub providers could be extended to incarcerated individuals. ADAP planned to convene a group of physicians and prescribers to discuss how to shift responsibilities for prescribing guest dosing between the hub and correctional facility, and to define coordination and communication for consistent patient care. Guest dosing fees would be continued unabated from a prior MOU between the DOC and hub providers.

Guest dosing was implemented throughout the pilot, but proved very cumbersome for the DOC, with the greatest difficulty faced in acquiring exemption requests particularly for weekend and holiday arrests.^{ix} The delays associated with weekend and holiday approval processes, transportation delays, hand-offs to hubs, bringing medications into facilities, and any other factors that impact the timing of exemption requests, can all in turn delay the continuation of the inmates’ treatment putting inmates at risk. A solution that ensures the smooth transition and continuation of MAT for individuals once incarcerated is critical.^x

- Chain of custody agreements: Through a chain-of-custody record the third-party person(s) can place the medication under safe storage at an offsite location until administered to the patient. This holds true for

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incarceration facilities and nursing homes that do not have methadone in stock.^{xi}

<http://store.samhsa.gov/shin/content/PEP15-FEDGUIDEOTP/PEP15-FEDGUIDEOTP.pdf>, p. 58. The demonstration project used this chain-of-custody mechanism to reduce the frequency of transportation of inmates to hubs by also transporting additional doses for storage and later administration to the patient per clinical prescribing procedures.

- **Transportation Issues:** As stated above, medication chain of custody agreements between DOC and hub providers were established such that medications could be transported *together with the inmate*, with future doses stored and eventually administered to the patient per clinical prescribed procedures. While permissible under the Substance Abuse Mental Health Services Administration (SAMHSA), transporting medications *in the absence of the inmate* is not yet allowed by the Drug Enforcement Administration (DEA). Discussions are underway with the DEA to clarify (or if needed, modify) the federal laws and regulations that govern opiate replacement medication chain of custody to allow for the transport of medications *in the absence of the inmate*. This would significantly reduce the transportation and security challenges, and other associated costs, of providing MAT to opioid dependent inmates. The frequency of medication transportation (together with inmate) was negotiated between each hub provider and correction facility on a case-by-case/per patient basis, and predominately limited to either medical request by the hub provider or at the request of the DOC contracted medical provider.

The pilot demonstrated some reduction in transportation and associated security costs for DOC facilities (i.e., transportation, staff time, and risks associated with transporting inmates). However, while there was a reduction in staff security time otherwise required to get inmates to a hub and a reduction in transport overall, there was an increase in staff time to monitor inmates throughout dosing, as well as subsequently to prevent against diversion within the correctional facilities. Dosing and other observation time increased for both security and health care staff.

- **Dose Monitoring** - The nursing resources required to monitor the dissolving of Suboxone® to prevent diversion was an additional concern that would need to be addressed more fully if the program is continued and/or extended to other facilities. In addition to the nursing resources, this period of dose monitoring also impacts DOC staffing resources above and beyond the current medical resources.
- **Secure Storage of Medications** - There are outstanding concerns among DOC contracted medical staff around the safe and secure storage of opioid replacement medications. It may be necessary to provide for additional secure storage for anticipated quantities of medications at each facility, as well as to further develop associated chain of custody procedures to mitigate these concerns.
- **MAT Initiation vs. Continuation:** The Work Group reviewed the topic of initiation as an alternative to continuation of opioid dependent inmates on MAT, for thoroughness, but the federal recommendation for incarcerated individuals is that opioid pharmacotherapy maintenance regardless of which medication is used be made available during incarceration for patients who are already in MAT when incarcerated.

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^{xii} Initiation of MAT for individuals not previously receiving MAT services immediately prior to incarceration would not be included in the recommendations.

- Discontinuation of MAT: If an individual is to be discontinued, medically supervised withdrawal (via tapering) is preferable to sudden discontinuation of the medication.^{xiii} Furthermore, best practice establishes that MAT continuation produces better outcomes irrespective of patient compliance or non-compliance with treatment protocols.
- Interim Maintenance Treatment vs. Comprehensive Treatment: The “gold standard” for opioid dependent individuals not under legal supervision is to receive comprehensive treatment of MAT together with psychosocial behavioral counseling. “Interim maintenance treatment” is the federal exemption allowing the provision of MAT without treatment counseling, and has been demonstrated to be an evidence-based practice with positive results for inmates.^{xiv} National research shows that opioid pharmacotherapy alone produces positive results for inmates (and released individuals) in both health and risk of overdose, as well as indicated reductions in suicide risk and criminal activity.^{xv} For a correctional facility to provide comprehensive treatment in addition to MAT would require it to become certified as an Opioid Treatment Program (OTP), at a minimum approximate cost of \$15,000 dollars per site just for certification,^{xvi} let alone the staffing, expertise and mission changes that would be required for a correctional facility to become an OTP which simply is not realistic^{xvii}. The demonstration project supplied solely medication for addiction treatment based on the evidence-based practice of “interim dosing”, and this measure would need to be continued in the future.
- Duration of MAT: Federal standard establishes “interim maintenance treatment” to a maximum of 120 days, compared to the current procedure of continuation MAT for 30 days, or the pilot of 90 days, all involving criteria for discontinuation. There is strong consensus that duration of treatment in future ideally be tied to determination of medical necessity on a case-by-case basis, sentence duration, and compliance with conditions or agreements of the MAT services, not just a standard duration apart from these other considerations.
- Inmate Safety and Other Risks – As described under Health Outcomes above, there is a concern that inmates who receive MAT services may be exposed to increased security risks associated with their treatment. These additional risks might include pressures by other inmates to divert their medications, the compounded vulnerability if another inmate overdoses resulting from succumbing to pressure or voluntarily diverting medications. These concerns are addressed in the recommendations.
- Selected vs. Universal MAT Services: The question of whether to designate certain correctional facilities substance abuse specialty treatment facilities was raised. The advantages would be to potentially create a “recovery” culture in the facility, reduce security vulnerability of MAT patients, better ensure availability of substance abuse expertise, and provide facility-wide substance abuse treatment services and recovery programs. The disadvantages and barriers would include increased

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rates of relocation of inmates, increased hardship for families, increased regional stress on the opioid treatment system near designated facilities, lack of available substance abuse treatment professionals in Vermont, and separation of the inmate from their own local community providers. The Workgroup calculated that the disadvantages outweighed the advantages of supporting MAT services in all seven correctional facilities.

- MAT Delivery Protocols: The demonstration project highlighted the importance of having detailed protocols and agreements within and between the DOC and hub providers to ensure smooth functioning of the DOC facilities, safety of the inmates, and ability of individuals to continue with MAT upon release. Fluid and committed troubleshooting and problem solving to fine tune the delivery model was required. Furthermore, the pilot revealed key pressure points where sufficient staffing and other resources would need to be put into place for successful implementation of the proposed MAT expansion to all seven facilities. The most important of these are addressed in the recommendations below.

System Outcomes Findings: This final aim of the demonstration project proved to be one of the most difficult to satisfy, given all the complex elements and variety of stakeholders involved. However, there were several successful adaptations that proved sufficient and effective for carrying out the demonstration project, and inform key factors of success for a statewide roll-out to all seven facilities. The key elements included:

- An MOU between the DOC and each hub treatment provider, formalized with uniform language and agreements relating to transportation, guest dosing, and other critical procedures (and while not completely finalized during the pilot the principles of the MOU did guide implementation); and
- The evidence based practice of “interim maintenance dosing” involving pharmacological therapy without counseling, as is appropriate for inmates.

The Work Group also identified that additional system solutions were still needed, with the most important including:

- continuity and smooth transitions in treatment,
- safety and security of inmates and staff (corrections, medical, provider),
- parity with community standard to provide continuation MAT “for as long as possible”,
- adequate resources to implement the program properly per the recommendations,
- a mechanism or contingency plan to troubleshoot and problem solve, especially in the early stages of roll out to all seven facilities, and
- a process for updating policies and procedures that are developed along the way.

The essential elements and issues to ensure successful future roll-out statewide are addressed in the recommendations section below.

Recommendations

Based on the evaluation findings and observations of the one-year demonstration project, the following are the formal recommendations by the Work Group:

- Continuation MAT, while not required, is a best practice for opioid dependent inmates producing the best outcomes for health and recovery, and can involve getting either methadone or Suboxone/buprenorphine. Therefore, continuation MAT is recommended for both detained and sentenced individuals who have been actively engaged in receiving MAT treatment services *immediately prior to incarceration*.
- It is recommended that continuation MAT maintenance be based on medical determination up to the maximum of 120 days^{xviii} irrespective of medication, through either guest dosing (methadone) or via DOC assuming prescriptive authority (buprenorphine).
- If MAT is to be discontinued it will be done so using medically prescribed tapering. Discontinuation may occur when an individual receives a sentence longer than the 120 days, no longer benefits or maintains interest in continuing treatment, fails to consistently meet the expectations set forth by the MAT clinical provider and DOC, or by medical determination. As stated above, however, national research has shown that patient compliance or non-compliance with their treatment protocols does not change the facts about the positive effectiveness of MAT.
- Assuming adequate resources and funding, it is recommended that continuation MAT treatment services for opioid dependent individuals be expanded to all seven corrections facilities. The legislatively mandated “proposed expansion schedule” reflected below, presents the anticipated cost structure of such a roll-out, derived by projecting the contract and other cost bases of the demonstration project.
- Update all existing protocols and procedures to guide the roll-out and implementation in all correctional facilities, and reflect solutions to the above-mentioned lessons and challenges, namely:
 - Chain-of-custody procedures and secure storage for anticipated quantities of medications;
 - DOC transportation scheduling, especially of inmates from DOC facilities to hub sites for dosing (and/or medication pick-up), ensuring timing is varied and not predictable for security purposes;
 - Procedures that protect patient medical privacy and ensure the safety of inmates and staff;
 - Dosing procedures and processes, including observation and monitoring for diversion;
 - Dosing exemptions, including weekend and holiday exemptions;
 - Inmate security and grievances;
 - Inmate education on the unique risks and benefits of MAT participation;
 - Inmate education related to the benefits of naloxone;
 - “Exceptions protocol(s)” and/or contingency plan(s) for troubleshooting and problem-solving, including specifying roles and responsibilities, and functions of any clinical and/or quality

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- improvement sub-group;
- Processes for the regular updating of protocols; and
- Quality improvement standards and monitoring procedures.
- **MAT Work Group:** It is recommended that the previous role of the MAT Work Group be transferred to the principle partners, namely the Department of Corrections (DOC) and the Department of Health's Division of Alcohol and Drug Abuse Programs (VDH/ADAP). Specialty hub MAT treatment providers will work in collaboration with the principle partners per the terms established in signed MOUs and the administrative authority of the Department of Health, Division of Alcohol and Drug Abuse Programs (VDH/ADAP), to deliver clinically-appropriate MAT for detainees and sentenced inmates in the DOC system. The role of the principle partners would remain the same as the previous MAT Work Group -- to inform and monitor the provision of medication-assisted treatment to persons who are incarcerated in Vermont, including persons who were receiving treatment in the community immediately prior to incarceration.
- **MAT Clinical Sub-Group:** It is recommended that a clinical sub-group be convened to support the Departments in guiding the roll-out of the statewide program, including assisting developing and updating the protocols described above, supporting any trouble-shooting processes, and ensuring the successful implementation of a common program statewide for continuation MAT in all correctional facilities. The members would be made up, for example, by VDH/ADAP, DOC, DOC's medical contractor, hub providers, and the DVHA medical officer. They will support the principle partners to also ensure the same aims of the pilot project are achieved in the statewide program of continuation MAT for inmates – increased access to MAT for inmates, improved health outcomes, parity with health care, and system solutions that are satisfactory to all partners and sustainable.

Proposed Schedule of Expansion

This section is in response to the legislative request contained in Act 195 (2014) 12 (g) to provide a proposed schedule of expansion for the roll-out of a program for continuation MAT for inmates at all seven correctional facilities across Vermont.

- **Cost Calculations:**

The costs presented below are for both continuation MAT for the standard duration of 90-days tested in the demonstration pilot, and continuation MAT per the Work Group's recommendation based on medical determination up to a maximum of 120-days. The average daily cost of the 90-day MAT program as piloted during the one-year demonstration project was \$510.43/day per facility, and included:

- 1) the nursing time required to administer the medications (meds), log the medications into the facility, complete urine screens, etc.;
- 2) the provider time required for re-ordering medications;

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- 3) DOC time involved with transports, and
- 4) the costs of the medications and transportation.

Assuming similar contract and cost bases of the demonstration pilot projected to all seven facilities, the estimated annual cost for a 90-day MAT program at all facilities would be \$186,306.60 (\$510.43 x 365 days). However, the Work Group has recommended moving from a standard duration 90-day continuation MAT to one based on medical determination of up to 120-days on case-by-case basis. Therefore, assuming the same costs projected proportionately to all facilities for 120-days, the estimated annual costs would be \$248,408.80 (\$186,306.60 x 1.33 to get to 120 days).

- Start Date

Implementation of a program per the recommendations described above is dependent on the availability of sufficient resources and funds. Once resources are confirmed and in place, program initiation at all seven facilities could begin simultaneously given any reasonably specified start date.

- Average Annual Cost of Continuation MAT

The table below reflects the details of the annual estimated costs for both the standard 90-day duration as well as the recommended 120-day duration using a case-by-case medical determination extending continuation MAT treatment services to all seven correctional facilities (assuming relative population sizes needing MAT as in the demonstration project):

Table: Average Annual Cost of Continuation MAT up to 120 days at All Correctional Facilities

Costs and Time	CRCF Hrs/Wk	NW Hrs/Wk	Average/Week	90-day Cost	Total Annual
Med Verification including UDS, calling the Hubs and UHC	10.5	4.5			
Medication administration	15	15.28			
Logging meds into the facility from the clinic	2.5	2.5			
Nursing calling Hub upon discharge writing last dose letter	1	1			
Random required UDSs	1.5	1.5			
	30.5	24.78	27.64		
Hours x 28.00 average hourly rate	\$854.00	\$693.84	\$773.92	\$9,950.40	
Administrative Time					
Daily update MAT list, HSMR, update to DOC of tapers, release dates	5	3			
Hours x 20.00 average hourly rate	\$100.00	\$60.00	\$80.00	\$1,028.57	
Provider Time					
Calling community providers, ordering med and reorders	2	2			

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Costs and Time	CRCF Hrs/Wk	NW Hrs/Wk	Average/ Week	90-day Cost	Total Annual
Hours x \$80.00 average hourly	\$160.00	\$160.00	\$160.00	\$2,057.14	
DOC Time					
CO DOT (direct observation therapy) (data from previous report)	24.5	14			
CO transport ¹	21	21			
TOTAL	45.5	35	40.25		
Hours x \$23.00 average hourly	\$1,046.50	\$805.00	\$925.75	\$11,902.50	
Weekly cost of MAT program					
90-day cost of MAT program	\$2,160.50	\$1,718.84			
Cost of the actual medication	\$27,777.86	\$22,099.37			
Total Average Cost of 90-day MAT program, including medications	\$25,000	\$17,000			
Average Daily Cost per Correctional Facility	\$52,777.86	\$39,099.37	\$45,938.61		
<u>Estimated Annual Cost for 90-day MAT program at 7 Correctional Facilities</u>			\$510.43		
<u>Estimated (based on Proportion) Annual Cost for 120-day MAT program at 7 Correctional Facilities</u>					\$186,306.60

NOTE: not included is nursing and provider time involved with diversions, grievances, or injuries related to MAT delivery.

¹This line item is subject to overtime costs not included in the current calculations.

APPENDIX I:

Work Group Members

- Barbara Cimaglio: Deputy Commissioner Department of Health
- Cheryl Elovirta: Deputy Commissioner, AHS (year 2)
- Dee Burroughs-Biron, MD CCHP: Health Services Director VTDOC (year 1)
- John Brooklyn, MD: Medical Director Howard Center/Chittenden Center
- Kim Bushey: Program Services Director VTDOC
- Karen Casper, PhD: Policy and Implementation Analyst, VDH/ADAP
- Ryan Lane: Director of Clinical Services (year 2)
- Connie Schutz, PhD: Blueprint for Health/DVHA
- Seth Lipschutz, JD: Office of Defender General/Prisoners' Rights (year 1)
- Emily Tredeau, JD: Office of Defender General/Prisoners' Rights
- Tom Dalton: Howard Center/Safe Recovery Program
- Tony Folland: VDH/ADAP
- Steven Fisher, Statewide Medical Director, Centurion of Vermont (year 2)
- Vivian Esparza, Addiction Medicine Physician, Centurion of Vermont (year 2)
- Sharon Butler, Statewide Director of Nursing, Centurion of Vermont (year 2)
- Mike Touchette, Corrections Director of Facilities Operations, AHS (year 2)
- Jacqueline Rose, DOC Health Services Operations Director (year 2)
- Ben Watts, DOC Health Services Director (year 2)

ENDNOTES

ⁱ The new 90-day proposed time limits for this ‘demonstration project’ are based on 2012 DOC F and F:Flow View of Full Population (page 68):

- 55% of population come and go in less than one (1) year
- > 33% come and go in less than one (1) month

ⁱⁱ While national best practice research demonstrates that longer retention in treatment is correlated highly with increased treatment success, some individuals need to be discontinued. The pilot established that patients facing extended incarceration beyond the 90-days would be discontinued through a clinically-prescribed taper as appropriate, and that humane medication-tapering procedures and medical safeguards are followed especially where treatment with methadone and other FDA approved medications for opioid addiction are being discontinued.

http://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf, p. 140.

ⁱⁱⁱ http://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf, p.186.

^{iv} See for example, the National Institutes of Health consensus panel that informs federal standard and the Treatment Improvement Protocols (TIPs) published by the Substance Abuse and Mental Health Services Administration (SAMHSA), page 24, and http://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf, p. 5.

^v It is assumed that the national research finding would confer a similar statistically significant reduction in risk of opioid related overdoses for individuals incarcerated and released in Vermont.

^{vi} The national consensus panel’s recommendations state that patients on release should be eligible for readmission to their OTP without having to demonstrate signs and symptoms of withdrawal, and should simply be reassessed to determine the appropriate treatment phase (42 CFR, Part 8 § 12(e)(3); CSAT 1999b).

http://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf, p. 140.

^{vii} These federal standards relate specifically to Opioid Treatment Programs (or hubs delivering methadone), and offers allowances for “interim maintenance treatment” involving pharmacological therapy with no counseling for individuals who cannot be placed in a public or non-profit comprehensive program, as is the case for inmates. 42 CFR, Part 8, Federal Opioid Treatment Standards. Federal Register, Volume 66, No. 11, January 17, 2001, Rules and Regulations, §8.12.j(1): Interim Maintenance Treatment.

^{viii} Federal Guidelines for Opioid Treatment Programs, p. 55: <http://store.samhsa.gov/shin/content/PEP15-FEDGUIDEOTP/PEP15-FEDGUIDEOTP.pdf>.

^{ix} Exemption requests are required for any variation from the federal opioid treatment standards by an Opioid Treatment Program (OTP), as is needed to provide guest dosing for inmates. Acquiring weekend and holiday exemptions are obviously problematic due to office closures, as are the difficulties in anticipating weekend or holiday arrests, dosage needs, and associated nursing schedules.

^x <http://store.samhsa.gov/shin/content/PEP15-FEDGUIDEOTP/PEP15-FEDGUIDEOTP.pdf>, p., 55. This would relate to all individuals throughout incarceration, with the arrest representing the most unpredictable (and therefore vulnerable) starting point in the process for the patient who may face critical delays in receiving the exemption.

^{xi} In such instances, programs are encouraged to develop a standard process to record chain-of-custody of dispensed take-home doses <http://store.samhsa.gov/shin/content/PEP15-FEDGUIDEOTP/PEP15-FEDGUIDEOTP.pdf>, p.55.

^{xii} http://buprenorphine.samhsa.gov/tip43_curriculum.pdf, slide 10, 4-7, page 64, states that “opioid pharmacotherapy be available during incarceration for patients who are in MAT when incarcerated.” See also, Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs; A Treatment Improvement Protocol Tip 43, page 81, at the following link: http://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf.

^{xiii} http://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf, p. 103.

^{xiv} Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs; A Treatment Improvement Protocol Tip 43 at the following link: http://www.ncbi.nlm.nih.gov/books/NBK64164/pdf/Bookshelf_NBK64164.pdf, slide 17.

^{xv} http://buprenorphine.samhsa.gov/tip43_curriculum.pdf, slide 23.

^{xvi} [http://www.ecfr.gov/cgi-bin/text-](http://www.ecfr.gov/cgi-bin/text-idx?SID=bbfd109b64c831119f65e1dc829b0e19&mc=true&node=sp42.1.8.b&rgn=div6)

[idx?SID=bbfd109b64c831119f65e1dc829b0e19&mc=true&node=sp42.1.8.b&rgn=div6](http://www.ecfr.gov/cgi-bin/text-idx?SID=bbfd109b64c831119f65e1dc829b0e19&mc=true&node=sp42.1.8.b&rgn=div6).

^{xvii} Furthermore, the National Institutes of Health consensus panel that informs federal standard and the Treatment Improvement Protocols (TIPs) published by the Substance Abuse and Mental Health Services Administration (SAMHSA) recommends that opioid pharmacotherapy (without counseling) be made available during incarceration, especially for continuation MAT, *ibid.*, p. 103, including considering the practicality of offsite dosing, p. 140. See also http://buprenorphine.samhsa.gov/tip43_curriculum.pdf, slide 10, 4-7, page 64.

^{xviii} Based on the federal standard for interim dosing under OTP oversight (methadone), and generalized here to all MAT irrespective of medication for program uniformity.