Development of a Desktop Reference for Medication Assisted Treatment (MAT)

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Development of a Desktop Reference for Medication Assisted Treatment

Andrew Darling, PhD

Berlin Family Practice

Preceptors: Dale Stafford, MD, Lise Kowalski, MD, Jose Lopez, MD, Brian Rodriguez, MD
2. Problem Identification

- In treatment of patients with substance use disorder, family medicine physicians can work closely with a multidisciplinary medication assisted treatment (MAT) team, providing recovery support alongside medical care. These teams have expertise in community resources, drug screening, withdrawal, and psychological counseling. Physicians often need to direct patients to MAT programs.

- Reference material on MAT can be widely distributed, with multiple sources often consulted for a patient with substance use disorders, including morphine equivalents, urine drug screening, and tapering strategies.

- Time is short in the clinic, and a single resource that could provide contact information for MAT resources alongside frequently cited medical information could expedite care. This would be doubly valuable for physicians new to the region.
3. Public Health Cost

- Opioid related fatalities in Vermont have nearly tripled since 2010, 110 deaths in 2018, driven in part by fentanyl fatality increases.
- 2.6% of Vermonters between 18 and 64 years old participated in MAT programs in 2018.
- MAT availability has increased such that supply has now met demand, without wait times prior to hub services. Focus is now on increasing entry points, such as emergency rooms, i.e. the Rapid Access to MAT (RAM) program.

Opioid Related Fatalities among Vermonters, February 2019
https://www.healthvermont.gov/

4. Community Perspective on Issue

- A design input solicitation email was sent to practitioners at Berlin Family Practice, seeking information they frequently reference for MAT patients, either medical information or community resources.
- Interviews were conducted with several stakeholders involved with MAT patients, specifically asking them about content and application of a single-sheet double sided Desktop Reference.
  - Laurie Hansen, MAT RN, CVMC – Provided substantial content for both the physician fact sheet side (Narcan dosages and acquisition, screening guides such as COWS for withdrawal screening and OBOT Stability Index) as well as detailed patient resources for where they can find aid. This included the hub procedures at facilities like BAART Program, Rapid Access to MAT (RAM) program at which patients can receive immediate assistance while in withdrawal, and Treatment Associates which “operates like something between a hub and a spoke.”
  - Jeremiah Eckhaus, MD, CVMC – Discussed how such a document could be used by family medicine physicians throughout the state, in either hardcopy or electronic format. He suggested that with the integration of more facilities into the UVM Health Network and the EMR, the resource document could be made available as a software add-on. “This is the sort of thing that if it was widely adopted could be added to Epic.”
5A. Intervention Provider Fact Sheet

• The drafted Vermont Medication Assisted Desk Reference is a single 2-sided sheet, intended to be laminated and available for everyday use.

• The greatest challenge was deciding what could be included in limited space.

• One side, the healthcare provider fact sheet has medical information often used by physicians:
  • Morphine equivalents
  • Urine detection timetables
  • Tapering rates
  • Severity indices
  • Appropriate links for comprehensive information
5B. Intervention Provider Fact Sheet

• The second side, the patient fact sheet includes a number of features relevant to the patient themselves:
  • Locations and contact numbers for MAT hubs throughout the state
  • Where one can go while currently in withdrawal, including a description of Rapid Access to MAT, an emergency room program available for actively withdrawing patients. This also includes the crisis text line.
  • Sources for naloxone, including a link to the online map service provided by the state, and recommendations for naloxone usage.
6A Results – Design Feedback

• An online design review was conducted, soliciting feedback from MAT stakeholders, with generally positive response and suggestions for future iterations:
  • “This is something which is going to be used. Even just the windows for detection of drugs in urine are very useful.” – Dale Stafford, Family Physician
  • “Good, short document. Easy to read and has useful information. The table with metabolites and half lives is clinically relevant.” – Jose Lopez, Family Physician
  • “I would also add induction protocols and how long the presence of illicit substances (such as cocaine) are in the urine.” – Anonymous, Vermont physician with MAT experience
  • “I think it is important to even briefly mention that the 2 part Hub and Spoke includes counseling and recovery support.” – Katina Cummings, MCP, Health Workforce Program Manager, Northern Vermont AHEC
6B Results – 2nd Design Iteration

- Drafts were distributed to contributors to the design process, and an early request was received to make a second version of the desktop reference focused on Central Vermont’s MAT resources, which is shown here.

- While having an identical physician fact sheet, the patient fact sheet of this version has local MAT induction information, including walk-in clinic hours most relevant for central Vermont.
7A. Evaluation of Effectiveness and Limitations

- As the MAT Desktop Reference is an easily distributable document, in either hardcopy or electronic format, an evaluation of its usefulness could be conducted through distribution to stakeholders through an online survey. This could include PCPs and MAT professionals.

- Information solicited in these surveys should include:
  - Assessment of perceived value of the medical information from the provider fact sheet (quantized for each section)
  - Assessment of perceived value of the patient fact sheet (quantized for each section)
  - Suggestions for information that should be added
  - Suggestions for information that is not necessary
8. Opportunities for Future Interventions

• Distribution of this, or an abridged MAT reference, to school health professionals, such as school nurses, to improve treatment for youth opioid use disorder.
• Augmented references focused on individual counties and their particular needs.
• Alternative desk references in a similar style produced for other community health issues, such as medical supply availability or home health services.
9. References


Diagnostic and Statistical Manual of Mental Disorders, 5th edition, 2013

“HHS Guide for Clinicians on the Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics,” US Department of Health and Human Services, October 2019


Medication Assisted Treatment for Opioid Use Disorder Trends, 2019, retrieved from https://www.healthvermont.gov


Opioid Related Fatalities Among Vermonters, February 2019, retrieved from https://www.healthvermont.gov

Rapid Access to MAT, retrieved from https://cvmc.org/our-services/emergency-department/rapid-access-mat-ram

“Vermont Substance Abuse Treatment & Recovery Directory,” Division of Alcohol & Drug Abuse Programs
**DSM-5 Criteria for Opioid Use Disorder**

A pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least 2 of the following within a 12-month period. Severity as follows:

- **Mild**: Presence of 2-3 symptoms
- **Moderate**: Presence of 4-5 symptoms
- **Severe**: Presence of 6 or more symptoms

1. Opioids are often taken in larger amounts or over a longer period than was intended.

2. Persistent desire or unsuccessful efforts to cut down or control opioid use.

3. A great deal of time is spent in activities necessary to obtain, use, or recover from the effects of opioids.

4. Craving, or a strong desire or urge to use opioids.

5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.

6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.

7. Important social, occupational, or recreational activities are given up or reduced because of opioid use.

8. Recurrent opioid use in situations in which it is physically hazardous.

9. Continued opioid use despite knowledge of a persistent/recurrent physical or psychological problem likely to have been caused or exacerbated by the substance.

10. Tolerance.


*abridged from Diagnostic and Statistical Manual of Mental Disorders, 5th edition, 2013*

**COWS**

The Clinical Opiate Withdrawal Scale is a pen and paper severity scale based on common withdrawal symptoms, obtainable through multiple sources, including the link below. 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

*American Society of Addiction Medicine
https://www.asam.org/*

**Tapering Guidelines**

- Common tapers - 5% to 20% reduction every 4 weeks
- Slower tapers - 10% per 4 weeks, better tolerated
- Fast tapers - 10% per week until 30% of original dose is reached, then 10% of remaining dose
- Rapid taper - Over 2-3 weeks, may be appropriate if risks of continued use outweigh risk of withdrawal
- Ultrarapid detox under anesthesia - high risk and should not be used
- Dysphoria, insomnia, and irritability may take weeks or months to resolve
- Alpha-2-agonists may be used for management of autonomic symptoms such as tachycardia.

*HHS Guide for Clinicians on the Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics, US Department of Health and Human Services, October 2019*

**Morphine Equivalent Units/Detection Timetable**

<table>
<thead>
<tr>
<th>Drug</th>
<th>MME</th>
<th>Urine Detectability/Analyte</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buprenorphine film/tab (mg)</td>
<td>30</td>
<td>• 11 days - metabolite norbuprenorphine</td>
</tr>
<tr>
<td>Codeine</td>
<td>0.15</td>
<td>• 1-2 days - hydromorphone and morphine</td>
</tr>
<tr>
<td>Fentanyl derm(mcg/hr)</td>
<td>2.4</td>
<td>• 2-3 days - norfentanyl</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>1</td>
<td>• 1-2 days - hydromorphone</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>4</td>
<td>• 1-2 days - hydromorphone</td>
</tr>
<tr>
<td>Methadone</td>
<td></td>
<td>• 3-4 days (as high as 14 days) - 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrroldine</td>
</tr>
<tr>
<td>• 1-20 mg/d</td>
<td>4</td>
<td>• 3 days - Codeine, hydromorphone, 6-MAM, morphine</td>
</tr>
<tr>
<td>• 21-40 mg/d</td>
<td>8</td>
<td>• 1-3 days - Noroxycodone, noroxymorphone, oxycodone, oxymorphone</td>
</tr>
<tr>
<td>• 41-60 mg/d</td>
<td>10</td>
<td>• 1.5-4 days - Noroxymorphone, oxymorphone</td>
</tr>
<tr>
<td>• ≥ 61-80 mg/d</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Morphine</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

VERMONT MEDICATION ASSISTED TREATMENT
STATEWIDE PATIENT FACT SHEET

Where can I begin MAT?
You can receive live help to find treatment programs by dialing 2-1-1 in Vermont or visiting Vermont211.org.

Medication Assisted Treatment (MAT) uses a “hub-and-spoke” model and starts at an Opioid Treatment Hub, where you will be evaluated and begin receiving medications such as buprenorphine to prevent withdrawal and reduce cravings. Eventually, your medications will be managed at the “spoke” office that is most convenient for you. Please bring ID and be prepared to submit a urine sample - the screening evaluation takes 1-2 days. Hubs where you can begin treatment are listed below:

**Chittenden County**
- Howard Center, Burlington and South Burlington
  (802)488-6425

**Franklyn and Grand Isle Counties**
- BAART Behavioral Health Services, St. Albans
  (802)370-3545

**Orleans, Essex, & Caledonia County**
- BAART Behavioral Health Services, Newport
  (802)334-0110
- BAART Behavioral Health Services, St. Johnsbury
  (802)748-6166

**Rutland County**
- West Ridge Center for Addiction Recovery, Rutland
  (802)776-5800

**Washington County**
- Central Vermont Addiction Center, Berlin
  (802)223-2003

**Windham County**
- Brattleboro Retreat, Brattleboro
  (802)257-7785
- Habit OpCo, Brattleboro
  (802)349-1880

**New Hampshire**
- Habit OpCo, West Lebanon
  (603)298-2146

“Vermont Substance Abuse Treatment & Recovery Directory”
Division of Alcohol & Drug Abuse Programs

Where can I get Narcan®/naloxone?

**WARNING - You may need two or more doses available.** It’s advisable to have multiple naloxone doses on hand, due to the overdose potential of fentanyl and fentanyl-contaminated drugs. It is not uncommon for a person in overdose to respond to a first dose of naloxone only to lose consciousness once again and require a second dose.

**WARNING - Call 9-1-1 after administering a dose of Narcan to anyone.** The person may not be stable, and it’s state law to help keep them safe. You are immune from civil or criminal liability when giving naloxone, so long as you don’t act recklessly, with gross negligence, or intentional misconduct.

Where you can get naloxone:
- All pharmacies in Vermont are required to make naloxone available on request, but there may be some charge. Medicaid or insurance may apply.
- The Opioid Overdose Prevention and Reversal Project makes emergency overdose rescue kits and overdose response training available free of charge at a range of locations. A list and map of locations may be found at the web address below.

NARCAN/NALOXONE OVERDOSE RESCUE  

I’m in withdrawal right now. What can I do?
If you’re in crisis, you can reach the Vermont Crisis text line. Text VT to 741741.

Rapid Access to MAT (RAM) is a program available at many emergency departments across the state, including UVMMC, CVMC, and Rutland. RAM allows for same-day treatment with buprenorphine to control withdrawal, while you are referred to a MAT provider and connected with a Recovery Coach. Questions about RAM and whether it’s available in an emergency room near you can be answered by the confidential clinician’s line, (802)371-4190.

Rapid Access to MAT, https://cvmc.org/our-services/emergency-department/rapid-access-mat-ram

STUDENT PROJECT - UVM Larner College of Medicine 2019
## Where can I begin MAT?

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Specific options in Central Vermont can be seen below. For beginning MAT, known as induction, it is recommended to visit one of the walk-in clinics.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>617 Comstock Rd, Suite 5</td>
<td>73 Main Street, Suite 27</td>
<td>65 Portland Street, PO Box 1099</td>
<td>84 East View Lane, Suite 2</td>
<td>44 South Main Street</td>
</tr>
<tr>
<td>Berlin, VT 05602</td>
<td>Montpelier, VT 05602</td>
<td>Morrisville, VT 05661</td>
<td>Barre VT 05641</td>
<td>Randolph, VT 05060</td>
</tr>
<tr>
<td>(802)223-2003</td>
<td>(802)225-8355</td>
<td>(802)888-0079</td>
<td>(802)371-4875</td>
<td>(802)728-7000</td>
</tr>
</tbody>
</table>

**Walk-in Clinic Hours:**
- **Monday - Friday 7am - 8pm**
- **Tues & Thurs 1:30 - 2:30pm**
- **1:30 - 2:30pm**

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