Addressing the Opioid Epidemic Among Under-Resourced Populations: Development of a Team-Based Medication Assisted Treatment Program

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Objectives

1) Identify the epidemiology of the opioid epidemic in the U.S.
2) Define Medication Assisted Treatment (MAT)
3) Describe MAT program implementation outcomes: Phase 1
4) Describe MAT Group-based Opioid Treatment (GBOT) implementation outcomes: Phase 2
5) Describe client perception of recovery support descriptive study preliminary results: Phase 3

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The Opioid Epidemic

RISE IN OPIOID OVERDOSE DEATHS IN AMERICA

A Multi-Layered Problem in Three Distinct Waves

399,000 people died from an opioid overdose (1999-2017)

1990s mark a rise in prescription opioid overdose deaths
2010 marks a rise in heroin overdose deaths
2013 marks a rise in synthetic opioid overdose deaths

• Natural opioids (including morphine and codeine) and semi-synthetic opioids (drugs like oxycodone, hydrocodone, hydromorphone, and oxymorphone)
• Methadone, a synthetic opioid
• Synthetic opioids other than methadone (drugs like tramadol and fentanyl)
• Heroin, an illicit (illegally made) opioid synthesized from morphine that can be a white or brown powder, or a black sticky substance.
Epidemiology of Opioid Overdose in the U.S.²

3 Waves of the Rise in Opioid Overdose Deaths

1. Wave 1: Rise in Prescription Opioid Overdose Deaths
2. Wave 2: Rise in Heroin Overdose Deaths
3. Wave 3: Rise in Synthetic Opioid Overdose Deaths

Other Synthetic Opioids
e.g., Tramadol and Fentanyl, prescribed or illicitly manufactured

Commonly Prescribed Opioids
Natural & Semi-Synthetic Opioids and Methadone

Medication-Assisted Treatment for Opioid Use Disorder

- Refers to treatment programs for OUD that include any of the three opioid agonist or antagonist medications
  - Methadone, Buprenorphine (Buprenorphine/Naloxone), Naltrexone

- Medication Assisted Treatment (MAT); Medication-based Treatment (MBT); Medications for Opioid Use Disorder (MOUD)
  - change in terminology reflects a shift in the conceptual framework viewing OUD as a chronic disorder and medications 1st line treatments
MAT for OUD$^{4-7}$

- MAT is an evidence-based, effective treatment option for medically eligible and motivated patients.

- Agonist maintenance programs such as methadone and buprenorphine decrease mortality by up to 50%, decrease transmission of disease (e.g. HIV and hepatitis), decrease crime, and improve social functioning.

- Buprenorphine is the only agonist option available in office-based settings.
Medication Assisted Treatment

Theoretical Framework—Ecological Model

- Opioid use disorder is a chronic, relapsing condition.

- Applying an ecological model for health promotion in this patient population addresses both individual and social environmental factors allowing for more comprehensive interventions and treatment modalities.
Medication-Assisted Treatment for Opioid Use Disorder
Team-based Care\textsuperscript{9,10}

- Medical Coordinator
- Medical Director
- Nurse Practitioner
- Physician Assistant
- Substance Use Disorder Counselor
- Behavioral Health Therapists
- Medical Assistants
- Nurse Practitioner student
Best Practices is MAT Retention $^{10-11}$

1) Team-based care
2) Nurse Managed Care Model
   - Patient intake
   - Patient education
   - Supervised induction
   - Manage stabilization and maintenance
   - Case management with frequent contact
   - Referral management
   - Data collection
The California MAT Expansion Project

In an effort to address the opioid epidemic throughout the state, the California Department of Health Care Services (DHCS) is implementing the California Medication Assisted Treatment (MAT) Expansion Project. The California MAT Expansion Project aims to increase access to MAT, reduce unmet treatment need, and reduce opioid overdose related deaths through the provision of prevention, treatment, and recovery activities. The California MAT Expansion Project focuses on populations with limited MAT access, including rural areas and American Indian & Alaska Native tribal communities.

The California MAT Expansion Project is composed of two parts: MAT Expansion 1.0 & MAT Expansion 2.0. MAT Expansion 1.0 is funded by the SAMHSA State Targeted Response (STR) grant. MAT Expansion 2.0 is funded by the SAMHSA State Opioid Response (SOR) grant. To learn more about 1.0 & 2.0 implementation efforts, please review the resources below:

- MAT Expansion 1.0 Overview Flyer
- MAT Expansion 2.0 Overview Flyer
- MAT Expansion 2.0 Project Grid

For questions regarding California’s MAT Expansion Project, email DHCSMATExpansion@dhcs.ca.gov.

If you think you are having an emergency for an unexpected medical condition, including a psychiatric emergency medical condition, call 911 or go to the nearest emergency room for help.

If you or someone you know is in crisis, please call 911 or the National Suicide Prevention Lifeline at 1-800-273-TALK (8265).

https://www.dhcs.ca.gov/individuals/Pages/State-Targeted-Response-to-Opioid-Crisis-Grant.aspx
In California, Treatment Starts Here

MAT Expansion Project

Juvenile Justice
Courts/Probation
Prisons
Jails

Justice-Involved

DUI Treatment Programs

Drug Medi-Cal Organized Delivery System
Residential Treatment

Inpatient
Outpatient

SUD Treatment

Narcotic Treatment Programs
Youth
Alcohol and Drug Counselors
Supportive Housing

Hub & Spoke

Statewide Programs

MAT Access Grants
MAT Toolkits
Transitions of Care
Fentanyl Monitoring

MAT Access Grants
Media Campaign

Prescriber Education
Naloxone

CURES
Drug Take Back

Prevention

Primary Care
Behavioral Health
Tribal Health

Clinical Services

EDs/Hospitals
Emergency Department

Physician Residency Programs
CA Substance Use Line

Perinatal and Neonatal

CaliforniaMAT.org
## MAT Program Implementation Outcomes: Phase 1 (N=42)

### Gender

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Male</td>
<td>26 (62%)</td>
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<tr>
<td>Female</td>
<td>16 (38%)</td>
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### Race/Ethnicity

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<tbody>
<tr>
<td>White non-Hispanic</td>
<td>41 (98%)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (2%)</td>
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### Age

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<tbody>
<tr>
<td>18-25</td>
<td>9 (21%)</td>
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<tr>
<td>26-34</td>
<td>18 (43%)</td>
</tr>
<tr>
<td>35-55</td>
<td>13 (31%)</td>
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<tr>
<td>55 or older</td>
<td>2 (5%)</td>
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### Medi-Cal Eligible

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<tbody>
<tr>
<td>Yes</td>
<td>27 (64%)</td>
</tr>
<tr>
<td>No</td>
<td>15 (36%)</td>
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March 2018 – August 2018
MAT Program Implementation Outcomes: Phase 1 (N=42)

- 79% 3 month retention in recovery services
- 74% 3 month retention within the MAT program at CoRR
- 84% responded that buprenorphine/naloxone is “greatly helpful” to recovery
- 92% responded that MAT access at CoRR in Grass Valley is “greatly helpful” to recovery.

Retention success was benchmarked at 60%. Data supports that retention in services is associated with improved outcomes.\(^{10}\)
MAT Program Implementation Outcomes: Phase 1 (N=42)

“What has been the most helpful aspect of the program other than the medication”

- support from the nurse care manager
- counseling services
- financial support to purchase the medication
- MAT group
- the MAT staff overall
Group-based Opioid Treatment (GBOT) Implementation\textsuperscript{12-14}

- Group psychotherapy asynchronous prescribing

- Shared medical appointment model with synchronous prescribing

“In a patient population with complex social and mental health histories, buprenorphine treatment via a shared medical appointment had high retention rates. Findings can help guide the development of unique delivery systems to serve real-world complex patients with opioid dependence.”\textsuperscript{13}
MAT small group implementation outcomes: Phase 2

**Q1:** Would you rate the quality of service you have received on the Wednesday MAT group as "excellent"?

- Yes: 17
- No: 0
- Improvement: 2
MAT small group implementation outcomes: Phase 2

Q2: Has the MAT program at CoRR met your needs?

- None: 0
- Few: 0
- Most: 4
- Almost All: 13
Q3: Have the services you received at CoRR helped you to deal more productively with your drug and/or alcohol program?

- Helped Great Deal: 15
- Helped Somewhat: 2
- Did not Help: 0
- Made Things Worse: 0

MAT small group implementation outcomes: Phase 2
MAT small group implementation outcomes: Phase 2

Q4: How satisfied are you with the amount of help you have received?

- Very Satisfied
- Mostly Satisfied
- Indifferent / Mildly Dissatisfied
- Very Dissatisfied
MAT GBOT implementation outcomes: Phase 2

• Do you have any suggestions for how the MAT program at CoRR can improve? What do you like about the program or think has been successful thus far?
  • Thankful for staff—”feel like they really care”
  • Thankful for “getting my life back”
  • Amount of support
  • Lessened cravings/kept sober
  • Patient centered/need based
  • Like interacting with people also on Suboxone
  • More group time offerings
  • More information on Suboxone
MAT Retention Data March 2018 – May 2019 (N=168)

- 56 % Retention March 2018 – August 2018
- 49 % Retention January 2019 – May 2019
  - 56% Retention February 2019 – May 2019
- 53 % Retention March 2018 – May 2019

- This data includes only **new starts** on buprenorphine not transfers from other programs
- Data not available on how many have transitioned off buprenorphine and stayed in recovery
- Data not available on how many transferred to another program
Prescription Opioid Addictions Treatment Study (POATS)\textsuperscript{16}

Multi-site randomized Clinical trial (N=653)

**Results:** No difference in OUD treatment outcomes between patients who received standard medical management (SMM) with buprenorphine-naloxone and patients who received SMM with opioid dependence counseling (ODC).

# Client Perception of Recovery Support Descriptive Study: Preliminary Results (N=37)

<table>
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<th>Demographics: N=37</th>
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<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Medical eligible</strong></td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
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<tr>
<td>White/Caucasian</td>
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<tr>
<td>Hispanic</td>
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<tr>
<td>Asian</td>
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<tr>
<td>Declined to Respond</td>
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<tr>
<td><strong>Average Age Range</strong></td>
</tr>
<tr>
<td>Average Age</td>
</tr>
<tr>
<td><strong>Days in Recovery Range</strong></td>
</tr>
<tr>
<td>Average Days in Recovery*</td>
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</tbody>
</table>

- Average Days in Recovery excluded the participant with 5 years.
Client Perception of Recovery Support Descriptive Study: Preliminary Results (N= 37)

1. How important has suboxone been to your recovery?
   - 36 (97%) Very important or essential
   - 1 (3%) Average importance

2. How confident are you of maintaining your recovery without individual counseling, 12 step or MAT group support?
   - 18 (49%) Confident or very confident
   - 19 (51%) Not at all confident, limited confidence, unsure or neutral
3. How important is routine drug testing to your addiction recovery?
  - 16 (43%) Very important or essential
  - 14 (38%) Average importance/neutral
  - 7 (19%) Little or no importance
Limitations

1) Self report data
2) Literacy barriers
3) Length of recovery varied greatly; data was not analyzed by length of recovery
4) Meeting attendance varied
5) Group and counseling quality and fidelity
Summary and Next Steps

- **Phase I: MAT program implementation**
  - Successful launch of a team-based, nurse care model MAT program in a rural community that captured under-resourced populations

- **Phase II: MAT Group-based Opioid Treatment (GBOT) implementation**
  - Successful launch of a GBOT
  - More examination of retention data needed
Summary and Next Steps

- **Phase III**: Describe client perception of recovery support descriptive study preliminary results
  - Balanced perspective on need for ODC among clients
  - Further data collection planned, 2 different sites
  - Further data analysis

- See you next year !
- Questions ??

- Contact: accruits@usfca.edu
References

9) California MAT Expansion Project. Accessed at CaliforniaMAT.org
References


