OPIOID TRAINING MODULE 5
MEDICATION-ASSISTED TREATMENT AND RECOVERY (MAT-R)
This training is offered by the Florida Alcohol and Drug Abuse Association and JBS International. It is supported by funding from the Florida Department of Children and Families, Office of Substance Abuse and Mental Health (Contract #LD987) as part of its Substance Abuse and Mental Health Services Administration (SAMHSA) State Targeted Response to the Opioid Crisis (O-STR) grant efforts.
Through prevention, treatment, and recovery activities for opioid use disorder (OUD) including prescription opioids and illicit drugs (e.g., heroin), the grant aims to address the opioid crisis by:

- Increasing access to treatment;
- Reducing unmet treatment needs; and
- Reducing opioid overdose-related deaths.
MODULE 5 LEARNING OBJECTIVES

Participants will:

- Explain two ways that opioid use impacts the brain, thus affecting behavior.
- Name the three Food and Drug Administration (FDA)-approved opioid treatment medications, and at least one difference between them.
- Describe how medication can be used—in conjunction with counseling along with psychosocial and recovery support—as the most effective treatment for OUD.
WHAT IS MEDICATION-ASSISTED TREATMENT AND RECOVERY (MAT-R)?
WHAT IS MAT-R?

- Medication-Assisted Treatment and Recovery (MAT-R) is the combination of medications and psychosocial and recovery supports used to treat substance use disorders.
OPIOID USE DISORDER (OUD)

- OUD is a problematic pattern of opioid use leading to clinically significant impairment or distress.
- People with OUD typically experience a strong desire for opioids; have the inability to control or reduce use; continue use despite interference with major obligations or social functioning; use larger amounts over time; develop tolerance; spend a great deal of time to obtain and use opioids; and undergo withdrawal symptoms that occur after stopping or reducing use, such as negative mood, nausea or vomiting, muscle aches, diarrhea, fever, and insomnia.
OUD is a set of cognitive, behavioral, and physiological symptoms marked by an inability to stop opioid use despite negative consequences.

Approaching OUD as a chronic illness can help affected individuals stabilize, achieve remission of symptoms, and establish and maintain recovery.

Opioid pharmacotherapies are the first line of life-saving medications for those with moderate-to-severe OUD with physical dependence.

OUD should be accompanied by individually tailored medical management, and psychosocial and recovery support services as needed and wanted by patients, in order to support their remission and recovery.
Natural endorphins: A group of chemicals (e.g., dopamine) released within the brain and nervous system that have a number of physiological functions: provide the body’s natural opioids; promote feelings of wellbeing; make a person happy (such as when we eat, have sex, etc.); and reduce/eliminate pain.
OPIOID USE CONSEQUENCES

- Poor ability to regulate one’s own behaviors.
- Impaired memory.
- Decreased capacity for making decisions.
- Decreased ability to imagine future events and interactions.

- Poor executive functioning:
  - Diminished ability in being flexible with tasks.
  - Impaired reasoning skills.
  - Poor ability to problem-solve.
  - Poor planning skills.
Opioid dependence is a constant cycle of using more; with withdrawal starting much sooner.
OPIOID WITHDRAWAL:

- Excessive perspiration.
- Shaking and muscle spasms.
- Severe muscle and bone pain.
- Vomiting, nausea, and diarrhea.
- Irritability.
- Insomnia.
- Restlessness.
- Dilated pupils.
- Rapid heart rate/Anxiety.
- Death is not likely from opioid withdrawal, the person just feels like they are dying.
STAGES OF OPIOID USE

Initiation
- Genes
- Environment

Experimentation
- Availability
- Family/Peer Dynamics
- Stress

Regular Use

OUD
- Social Support

Overdose or death can occur at any stage
The journey to (and through) opioid use, misuse, and disorder stages and associated timeframes vary by person, and are based on a number of variables.
WHY MEDICATION?

- Typically, the changes in the brain caused by opioid dependence will not correct themselves right away, even though the opioid use has stopped.
- These changes can trigger cravings for the drug months and even years after a patient has stopped using opioids.
- Overcoming opioid dependence is not simply a matter of eliminating narcotic drugs from the body.
- Unless restorative, rebalancing treatment is provided, these functional brain derangements can result in worsening or sabotage of recovery attempts.
Opioid medications work in a variety of ways:

- Some reduce or eliminate cravings and physical withdrawal symptoms.
- Other medications prevent the pleasurable effects of the substance from occurring, or introduce unpleasant effects when the substance is used.
Although no medications cure opioid dependence, some can play a significant and lifesaving role in helping people begin and sustain recovery. The FDA-approved opioid treatment medications can:

- Treat the survival/pleasure system abnormalities with medications to facilitate abstinence and prevent return to use.
- Treat the brain’s executive functioning/decision-making system with counseling and therapies.
Support abstinence (programmatically and through mutual aid and peer support):
- Can help heal the brain, and tones down the “drive” of the pleasure-reward pathway.

Retrain the brain:
- Reduce stress and impulse control, and provide healthier structure and rituals (including soothing rituals).
- Offer specific suggestions on a new way of living (e.g., cognitive behavioral therapy).

Retool the emotional brain:
- Provides safe structure for emotional expression, and can address underlying trauma and co-occurring mental disorders (treat co-morbidity).
- Support healthy connections with others.
- Modulate emotions.
Importance of Recovery Support

Recovery support can take many shapes and forms:

- Having someone (including a person in recovery who has “been there”) listen and share information (this can be someone providing an extra boost during difficult times, or a daily “touch base”)
- Participating in peer support groups to connect with people who do not use and can help
- Receiving help with practical things like rides, safe housing, employment, and childcare
- The greater the person’s network of support, the better their chances of staying in recovery.
FDA-APPROVED MEDICATIONS
There are three FDA-approved meds:

- Methadone (pictured left).
- Buprenorphine – Suboxone® and Subutex®
- Extended release Naltrexone – Vivitrol® (also used to treat alcohol use disorders).
<table>
<thead>
<tr>
<th>Opioid Medications/Associated Property</th>
<th>Methadone</th>
<th>Buprenorphine (Subutex® and Suboxone®)</th>
<th>Naltrexone (Vivitrol®)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method/Frequency</td>
<td>Orally, daily, usually liquid</td>
<td>Daily (film or pill), and must be dissolved under the tongue/in the mouth</td>
<td>Long-acting injection or pill</td>
</tr>
<tr>
<td>Medication locations/process</td>
<td>Dispensed only at licensed, federally-regulated opioid treatment programs (OTPs); limited take-home dosing may be permitted/more frequent if doing well</td>
<td>OTPs, or certified physicians/physician assistants and nurse practitioners (w/waiver) in an office-based treatment (OBT) or other settings; Usually frequent appts., referred to counseling, are monitored to ensure that they are making satisfactory progress, then may receive a prescription to take at home</td>
<td>Any prescriber can prescribe tablets (daily) or give injections (monthly). Outpatient programs may offer the injection.</td>
</tr>
<tr>
<td>Normal life functioning with proper dose</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
# Opioid Medication Comparisons

<table>
<thead>
<tr>
<th>Opioid Medications/Associated Property</th>
<th>Methadone</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Reduces or eliminates withdrawal symptoms</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Blunts or blocks the effects of illicit opioids</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Reduces or eliminates cravings to use opioids</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cost if not insurance covered or STR-covered*</td>
<td>$</td>
<td>$$</td>
<td>$$$</td>
</tr>
</tbody>
</table>

*STR-covered = Suboxone®-Tongue.
### Opioid Medication Comparisons

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</tr>
</thead>
<tbody>
<tr>
<td><strong>When to start MAT?</strong></td>
<td>Immediately</td>
<td>12-24 hrs. after last use</td>
<td>After detox or 7-10 days after last use</td>
</tr>
<tr>
<td><strong>How long to stay on MAT?</strong></td>
<td>Most effective 1-year/more</td>
<td>Most effective 9-months/more</td>
<td>Most effective 5-months/more</td>
</tr>
<tr>
<td><strong>Side effects</strong></td>
<td>More common: constipation, sleepiness, and sweating; Less common: sexual side effects and heart problems (screened for heart health)</td>
<td>More common: headache, nausea, and constipation; Less common: sexual side effects or liver problems</td>
<td>More common: Nausea or vomiting, diarrhea, headache, anxiety, joint pain, muscle cramps, or injection site discomfort</td>
</tr>
<tr>
<td><strong>What happens if I stop?</strong></td>
<td>Methadone withdrawal symptoms/dose can be gradually reduced instead</td>
<td>Withdrawal, less intense but unpleasant; even when gradually decrease dose, some unpleasant withdrawal</td>
<td>High risk of overdose if opioid use is resumed due to lower tolerance. See **</td>
</tr>
</tbody>
</table>

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**Notes:**

- **Methadone:**
  - More common side effects include constipation, sleepiness, and sweating. Less common include sexual side effects and heart problems.

- **Buprenorphine (Subutex® and Suboxone®):**
  - More common side effects include headache, nausea, and constipation. Less common include sexual side effects or liver problems.

- **Naltrexone (Vivitrol®):**
  - More common side effects include nausea or vomiting, diarrhea, headache, anxiety, joint pain, muscle cramps, or injection site discomfort.
### OPIOID MEDICATION COMPARISONS: PREGNANCY

<table>
<thead>
<tr>
<th>Opioid Medications/Associated Property</th>
<th>Methadone</th>
<th>Buprenorphine Subutex® ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research support it is safe for pregnancy</td>
<td>Effectively controls withdrawal symptoms, and maternal and fetal functions (many years of research)</td>
<td>Effectively controls withdrawal symptoms, and stabilizes maternal and fetal functions (fewer years of research)</td>
</tr>
<tr>
<td>Withdrawal/NAS</td>
<td>Safe to use during pregnancy. Withdrawal symptoms for the baby may be more severe than for buprenorphine, and hospital stays may be a bit longer</td>
<td>Withdrawal symptoms are milder for infants, less likely to require treatment with medications, and more likely to have shorter hospital stays</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>Research has deemed it to be safe (outweighs non-breastfeeding risks)</td>
<td>Research has deemed it to be safe (outweighs non-breastfeeding risks)- Discuss breastfeeding with Subutex and Naloxone w/physician*</td>
</tr>
</tbody>
</table>

*Naltrexone and Suboxone are NOT currently deemed safe for pregnant women.*
### MAT Decisions in Recovery

#### Who it works for?

<table>
<thead>
<tr>
<th>Methadone</th>
<th>Buprenorphine</th>
<th>Naltrexone</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Able to get to an approved program</td>
<td>• Are best treated in doctors’ offices</td>
<td>• Able to stop using for 7–10 days</td>
</tr>
<tr>
<td>• Pregnant and post-partum women</td>
<td>• Pregnant and postpartum women</td>
<td>• Mandated by court or employer</td>
</tr>
<tr>
<td>• Have severe or chronic pain</td>
<td>• People being treated for HIV/AIDS</td>
<td>• People with alcohol problems</td>
</tr>
<tr>
<td>• People being treated for HIV/AIDS</td>
<td>• Able to follow a treatment plan</td>
<td>• Motivated to eliminate all opioids now</td>
</tr>
<tr>
<td>• People who do best with structured programs</td>
<td>• Motivated to try buprenorphine for MAT</td>
<td>• Re-entering from prison or jail</td>
</tr>
</tbody>
</table>

[Learn more](#)

Source: SAMHSA’s Decisions in Recovery
WHAT IS NALOXONE (NARCAN®)?

- Counteracts the life-threatening effects of opioid overdose.
- Blocks the impact of the opioids, and reverses an overdose (it cannot be used to get high).
- Can be administered nasally or via injection.
- Carried by First Responders. All opioid users and their families should carry it.
- Can be purchased at pharmacies without a prescription (e.g., CVS).
Non-profit organizations willing to hand out naloxone kits directly to people at risk of overdose and their friends/families can contact Amanda Muller at DCF to obtain kits at no cost. Her contact information is:

Amanda Muller
DCF Overdose Prevention Coordinator
Amanda.Muller@myFLfamilies.com
850-717-4431
MAT-R BENEFITS AND MYTH BUSTING
Abundant evidence shows that methadone, buprenorphine, and naltrexone all reduce opioid use and OUD-related symptoms. They have also been shown to reduce the risk of infectious disease transmission, as well as criminal behavior associated with drug use.

These medications also increase the likelihood that a person will remain in treatment (treatment retention), which itself is associated with lower risk of overdose mortality; reduced risk of HIV and HCV transmission; reduced criminal justice involvement; and greater likelihood of employment.
MAKING THE CASE FOR OPIOID MEDICATIONS AS PART OF TREATMENT

- While detoxification is an option some prefer, it is short-term, and many people return to use if they do not have long-term follow-up treatment and support. Detoxification alone is not considered treatment.

- Involuntary cessation of these prescribed medications for opioid addiction would significantly increase the risk of relapse, overdose, and even death.
IT’S EFFECTIVE

Medications combined with behavioral counseling and recovery support:

- Decreased opioid use, deaths, criminal activity, and infectious disease transmission.
- Increased social function and retention in treatment.
- IMPROVED CHILD PERMANENCY OUTCOMES.
Parents who use opioids and are involved in the child welfare system are less likely to retain custody of their children than parents who use other drugs.

Of the 596 individuals that were part of a “first of its kind” child welfare study of MAT-utilization and child permanency outcomes for this population, only 9.2% of the parents with a history of opioid use received MAT.

Compared to parents who received no MAT, a year of MAT increased the odds of parents retaining custody of their children by 120%.

This outcome is consistent with previous studies showing other positive outcomes that are associated with the increased duration of MAT.
Parental drug treatment is important, but won’t typically address the harms to young children.

Most parents will need an evidence-based parenting program.

When an evidence-based parenting program is not enough, intervention may be needed to heal the infant-or child-parent relationship.

Child-Parent Psychotherapy.
LET'S PLAY …

TEST YOUR OPIOID KNOWLEDGE
TEST YOUR OPIOID KNOWLEDGE…TRUE OR FALSE?

- Using medications like methadone and buprenorphine is simply replacing one drug addiction with another.
- A lower dose of methadone and buprenorphine is preferable to a higher dose.
- Medications used as part of MAT typically create a pleasurable or euphoric feeling in the user.
- Treatment programs, and child welfare and judicial systems should consider limiting MAT to 12 months or less to reduce enabling addiction.
- Pregnant opioid-using women should receive medically supervised withdrawal to prevent fetal distress.
DON’T BE A PINOCCHIO…THESE COMMON BELIEFS ARE NOT TRUE

- In our knowledge checks…all these statements were false.
- The FACTUAL answers will be explained on the slides that follow.
DO MEDICATIONS LIKE METHADONE AND BUPRENORPHINE SIMPLY REPLACE ONE DRUG ADDICTION WITH ANOTHER? NO!

- No – as used in maintenance treatment, buprenorphine and methadone are not heroin/opioid substitutes. They are prescribed or administered under monitored, controlled conditions, and are safe and effective for the treatment of opioid addiction when used as directed.
IS A LOWER DOSE OF METHADONE AND BUPRENORPHINE PREFERABLE TO A HIGHER DOSE? NO!

- The key is to prescribe the appropriate “effective” dosage based on the presenting needs of the individual. The use of substandard dosages is countertherapeutic, since the patient will continue to use opioids if the maintenance dosage is too low.

- Dosing is an individualized medical decision. Most patients require a methadone dose of 60-120 milligrams per day.

- Studies show that patients on higher doses stay in treatment longer, and use less heroin and other drugs than those on lower doses.
DO MEDICATIONS USED AS PART OF MAT TYPICALLY CREATE A PLEASURABLE OR EUPHORIC FEELING IN THE USER? NO!

- Heroin/opioid pain meds go right to the brain, often causing pleasurable or euphoric feelings. They can narcotize the individual, causing sedation.

- However, these medications do not create a pleasurable or euphoric feeling, instead, they relieve physiological opioid cravings…and normalize the body’s metabolic and hormonal functioning that was impaired by the use of heroin or other opioids (SAMHSA, 2003).
It is generally accepted that a minimum of 12 months is required for methadone maintenance to be effective, and 9 and 5 months for buprenorphine and naltrexone respectively.

Longer treatment is typically recommended.

The detrimental consequences of leaving MAT are dramatically indicated by greatly increased death rates following discharge. Until more is learned about how to improve post-detoxification outcomes for MAT patients, treatment providers and regulatory/funding agencies should be very cautious about imposing disincentives and structural barriers that discourage or impede long term opioid replacement therapy (Magura & Rosenblum, 2001).
Pregnant women with an opioid use disorder should be offered MAT (consisting of pharmacotherapy with methadone or buprenorphine) and evidence-based behavioral interventions.

This approach is preferable to medically supervised withdrawal because withdrawal is associated with high recurrence of use rates, which lead to worse maternal and fetal outcomes.
OTHER COMMON MISPERCEPTIONS

- MAT is not real recovery.
- MAT patients aren’t welcome in 12-step groups.
- Opioid treatment medications cause aggressive tooth decay and bone “rot”.
- Opioid treatment medications burn holes in your brain.
- Opioid treatment medications are not FDA approved.
DON’T THROW THE BABY OUT WITH THE BATH WATER

- Yes, there is some diversion and misuse.
- Yes, some people sell it on the street.
- Yes, some people will use it with illegal opiates.
- Yes, some will crush and snort and inject medications.
- Yes, buprenorphine strips can be dissolved and snorted.
- Yes, these medications do not safeguard against the use of other drugs.
ETHICALLY, WE MUST FOCUS ON FACTS…LIVES ARE AT STAKE

- Pre-conceived beliefs, without scientific basis, detract from the potential value of MAT (Center for Court Innovation/Legal Action Center – 2015).
- With so much at stake, let’s make sure science guides all of our efforts!
ORGANIZATIONS THAT RECOMMEND MAT

Sources:
There is no “one size fits all” approach to OUD treatment.

Many people with OUD benefit from treatment with medication for varying lengths of time (including lifelong treatment).

Ongoing outpatient medication treatment for OUD is linked to better retention and outcomes than treatment without medication.

Even so, some people stop using opioids on their own; and others recover through support groups or specialty treatment (with or without medication).
For additional opioid training modules:

- FADAA.org

For additional information about Florida’s opioid treatment options, or other DCF opioid information:

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Opioid STR Project Director
Office of Substance Abuse and Mental Health
Florida Department of Children and Families
1317 Winewood Blvd., Bldg. 6, Room 250
Tallahassee, FL 32399
Office: (850) 717-4277
Email: walter.castle@myflfamilies.com
REFERENCES

https://www.ncadd.org/about-addiction/support/medication-assisted-recovery

Slide 7: SAMHSA Substance Use Disorders; https://www.samhsa.gov/disorders/substance-use


Slide 9: Big Picture: Bringing cutting-edge science into the classroom and beyond.
https://bigpictureeducation.com/chemicals-brain
Slide 10: Heroin Effects on the Brain; https://heroin.net/heroin-effects/heroin-effects-sub-page-1/heroin-effects-on-the-brain/


Slide 20: SAMHSA Medication and Counseling Treatment; https://www.samhsa.gov/medication-assisted-treatment/treatment
References

Slide 21: Andrea Barthwell, MD, DFASAM, March 6, 2018 PTAC Conference


Slide 29: https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/efficacy-medications-opioid-use-disorder
REFERENCES


REFERENCES

Slide 42: https://www.recovery.org/can-methadone-and-suboxone-destroy-dental-health/

Slide 43: Getting from Jeri Cohen


REFERENCES


Slide 45: https://store.samhsa.gov/shin/content//SMA18-5063FULLDOC/SMA18-5063FULLDOC.pdf


Slide 47: https://store.samhsa.gov/shin/content//SMA18-5063FULLDOC/SMA18-5063FULLDOC.pdf


Slide 51-52: Judge Jeri Cohen’s Miami-Dade Drug Court program (provided 3/2018)