Medication-Assisted Treatment

What Is It and Why Do We Use It?
addiction
What is addiction, really?

- The four C’s of addiction:
  - Craving.
  - Loss of Control of amount or frequency of use.
  - Compulsion to use.
  - Use despite Consequences.

- Addiction is defined as a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences. It is considered a brain disease because drugs change the brain—they change its structure and how it works. These brain changes can be long-lasting, and can lead to the harmful behaviors seen in people who abuse drugs.
Cocaine Abuse and Brain Glucose Metabolism

Normal subject

Cocaine abuser (10 days post)

Cocaine abuser (100 days post)
Effect of Cocaine Abuse on Dopamine D2 Receptors

normal subject

cocaine abuser (1 month post)

cocaine abuser (4 months post)
Treating Substance-Use Disorders

• Addiction IS a treatable disease.

• Treatment MUST address the whole person and must be multifaceted.

• Simply stopping the use of substances does not equate to recovery.

• MAT is an extremely valuable tool in the treatment of addiction and produces better, long-term outcomes for individuals, families, and communities.
Treating Substance-Use Disorders

- Harm reduction / abstinence.
- Behavioral therapies.
- Self help / Support groups.
- Stable support system.

- Finding meaning/purpose in life.
- Addressing co-occurring mental health issues and other psychosocial stressors.
- Addressing physical health concerns.
- Medication-Assisted Treatment.
- And more...
What is **Medication-Assisted Treatment?**

• The use of medication to assist in the treatment of various aspects of the addiction process. It is only one tool in the tool box of treatment & recovery.

• **MAT** uses FDA approved medications for several different substance-use disorders, notably *alcohol* and *opiates*. 
What is **Medication-Assisted Treatment**?

- **MAT** can be used to help **withdraw** people from addictive drugs.

- **MAT** can be used to help prevent people from returning to specific drug use (**relapse**).
  - Decreasing cravings for the drug.
  - Blocking reinforcing effect of the drug when used.
MAT for Alcohol

• For *alcohol* withdrawal:
  • Benzodiazepines to ease symptoms and prevent delirium tremens (DTs).
    • Valium, Librium, Ativan

For *relapse prevention*:
• Disulfuram
• Acamprosate
• Naltrexone
Why use **MAT** for alcohol?

**For alcohol withdrawal:**
- Decreased morbidity and mortality.
- Increased odds person will progress to treatment.
- Increased therapeutic rapport and thus compliance.

**For alcohol relapse prevention:**
- Increased time to first drink.
- Decreased number of drinks per drinking episode.
- Increased time to full relapse.
MAT for Opiates

• For opiate withdrawal:
  - Clonidine (ok, NOT FDA approved)
  - Methadone
  - Buprenorphine

For relapse prevention:
  - Methadone
  - Buprenorphine
  - Naltrexone
Why Use MAT for opiates?

• For opiate withdrawal
  • Decreased morbidity and mortality.
  • Increased number of people completing Detox. (methadone>buprenorphine>clonidine> “cold turkey”)

• For relapse prevention:
  • Decrease in return to illicit/uncontrolled opiate use.

• “How can you relapse if you never stopped using opiates?”
The Case for Using Opiates to Treat Opiate Use disorder

- Standard treatments have poor outcomes for many with opiate use disorder.
  - Harm reduction approach for the individual.
  - Public Health issue for society.
  - Public Safety.

- When used to treat opioid addiction, MAT stabilizes brain chemistry, blocks the euphoric effects of opioids (the “high”), relieves physiological cravings, and normalizes body functions.

- Numerous studies have shown that MAT reduces illicit drug use, disease rates, overdose, mortality, and criminal behavior.

- The use of MAT allows time for the person to develop the skills needed to become sober before expecting them to be able to maintain abstinence.
Some Important Numbers:

- 42,249 opiate overdose deaths in 2016.
- 2.1 million people with opiate use disorders in 2016.
- 40-60% of people with alcohol and MOST drug use disorders remained abstinent one year after treatment.
Medication Assisted Treatment

• **Can** employ both potentially addicting as well as non-addictive medications.

• **Can** be used to help with various phases of the addiction cycle.

• **Can** be useful for substance-use disorders which are exceptionally difficult to treat.

• **Cannot** serve as a substitute for other modalities of treatment.

• **Cannot** be used as “stand alone” treatment (medications).
MAT and the Criminal Justice System

- Many justice-involved individuals need treatment for opioid and alcohol dependence.
  - It is estimated that up to 45% of people who are incarcerated have both substance use and mental disorders.

- We know from multiple studies that addiction treatment programs, especially when combined with MAT, reduce recidivism and re-incarceration.
  - One study found that every $1 spent on treatment saved $5.60 in terms of fewer arrests and incarceration costs.

- Specialty courts are having a major impact:
  - Nationwide, 75% of Drug Court graduates remain arrest-free at least two years after leaving the program.
  - Rigorous studies examining long-term outcomes of individual Drug Courts have found that reductions in crime lasts at least 3 years.
Methadone

• Methadone is the most widely used medication for this purpose in the world (it has been in use a long time).

• Methadone both reduces cravings for illicit opioids and prevents withdrawal symptoms.

• Methadone must be dispensed by opioid treatment programs (OTPs) that are regulated at federal and state levels. Has limited side effects and contraindications.

• Methadone is sometimes preferred for individuals who have been abusing high doses of opioids for long periods of time.
Buprenorphine

• Approved for clinical use in October 2002 by the Food and Drug Administration (FDA), buprenorphine represents the latest advance in medication-assisted treatment.

• Reduces cravings for and withdrawal symptoms from opioids.

• Has limited side effects and contraindications.

• Has less abuse potential than methadone and is less likely to result in medically significant harm if misused.
Buprenorphine

• Unlike Methadone, Buprenorphine can be prescribed by outpatient providers who have completed special training and have obtained their “DATA 2000 waiver”.

• Buprenorphine/Naloxone combination:
  • Naloxone is an antagonist. It is added to block any euphoric effects of buprenorphine that would occur if a person were to abuse the medication by injecting it, thus decreasing the desirability of the medication for abuse/misuse.
    • Bunavail (buprenorphine and naloxone) buccal film
    • Suboxone (buprenorphine and naloxone) film
    • Zubsolv (buprenorphine and naloxone) sublingual tablets
    • Cassipa (buprenorphine and naloxone) Brand new product, film, higher dose
Buprenorphine

Ideal Candidates for Buprenorphine:

• Have been objectively diagnosed with an opioid dependency.
• Are willing to follow safety precautions for the treatment.
• Have been cleared of any health conflicts with using buprenorphine.
• Have reviewed other treatment options before agreeing to buprenorphine treatment.
• Have a reasonable level of stability and support.
• Are willing to engage in other behaviorally-based therapies.
Buprenorphine

• **The Induction Phase**:  
  - Medically monitored by a qualified physician’s office or certified OTP using approved buprenorphine products.  
  - Buprenorphine can bring on acute withdrawal for patients who are not in the early stages of withdrawal and who have other opioids in their bloodstream; patients should have a minimum of 12-24 hours from their last use.

• **The Stabilization Phase**:  
  - Patient has discontinued or greatly reduced their misuse of the problem drug, no longer has cravings, and experiences few, if any, side effects.  
  - The buprenorphine dose may need to be adjusted during this phase.

• **The Maintenance Phase**:  
  - Patient is doing well on a steady dose of buprenorphine.  
  - The length of time of the maintenance phase is tailored to each patient and *could be indefinite*.

• **Titration and Discontinuation Phase**:  
  - Once an individual is stabilized and it is clinically appropriate, they can begin a medically supervised titration and discontinuation.  
  - Patients are encouraged to continue rehabilitation—with or without MAT—to prevent a possible relapse.
Naltrexone

• Naltrexone is used for both alcohol and opiate dependence.

• Naltrexone is an opioid antagonist; it fully blocks the effects of opioids such as heroin and oxycodone.
  • There is a risk of overdose when opioids are used while on Naltrexone.

• It can be given in pill form, or as an extended release injection (Vivitrol) that last approximately 28 days.
Naltrexone

- Naltrexone is not a controlled substance and has no abuse or diversion potential, offering an alternative to methadone or buprenorphine as well as expanding access to MAT.

- Naltrexone is ideal for individuals who have already detoxed from alcohol and/or opioids or have high level of motivation to remain clean and sober.

- Naltrexone (Vivtrol) can be utilized for individuals exiting incarceration or treatment programs to help prevent relapse.
Does MAT “substitute one drug for another”?  

NO.

• Though two of the three MAT medications (methadone and buprenorphine) are opioid-based, they are fundamentally different from short-acting opioids such as heroin and prescription painkillers.
  
  • Short-acting opioids travel directly to the brain and narcotize the individual, causing sedation and the euphoria known as a “high.”
  
  • In contrast, methadone and buprenorphine, when properly prescribed and utilized, reduce drug cravings and prevent relapse without causing a “high.”
  
  • Naltrexone is not opioid based and does not result in physical dependence.

• MAT medications help patients disengage from drug seeking and related criminal behavior and become more receptive to behavioral treatments.
How do we identify the MAT appropriate patient?

• Assessing for readiness:
  • Screening tools

• Determining level of care:
  • ASAM evaluation
  • Clinical determination based on 6 biopsychosocial dimensions.

• Voluntary vs. mandated patients.
Screening Tools

PMQ: Pain Medication Questionnaire

COMM: Current Opioid Misuse Measure

PDUQ: Prescription Drug Use Questionnaire

CAGE-AID: Cut Down, Annoyed, Guilty, Eye-Opener tool, adjusted to include drugs

RAFFT: Relax, Alone, Friends, Family, Trouble

DAST: Drug Abuse Screening Test

SBIRT: Screening, Brief Intervention & Referral to Treatment

ASAM Criteria: American Society of Addiction Medicine

COWS: Clinical Opiate Withdrawal Scale
## AT A GLANCE: THE SIX DIMENSIONS OF MULTIDIMENSIONAL ASSESSMENT

ASAM’s criteria uses six dimensions to create a holistic, biopsychosocial assessment of an individual to be used for service planning and treatment across all services and levels of care. The six dimensions are:

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<th>Dimension</th>
<th>Description</th>
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| **1**     | Acute Intoxication and/or Withdrawal Potential  
Exploring an individual’s past and current experiences of substance use and withdrawal |
| **2**     | Biomedical Conditions and Complications  
Exploring an individual’s health history and current physical condition |
| **3**     | Emotional, Behavioral, or Cognitive Conditions and Complications  
Exploring an individual’s thoughts, emotions, and mental health issues |
| **4**     | Readiness to Change  
Exploring an individual’s readiness and interest in changing |
| **5**     | Relapse, Continued Use, or Continued Problem Potential  
Exploring an individual’s unique relationship with relapse or continued use or problems |
| **6**     | Recovery/Living Environment  
Exploring an individual’s recovery or living situation, and the surrounding people, places, and things |
Naloxone (Narcan)

- Naloxone is a medication that can be used to treat an opioid overdose in an emergency situation.
In Summary...

• Medication-assisted treatment (MAT) is the use of medications **in combination with counseling and behavioral therapies** to provide a “whole-patient” approach to treatment of substance use disorders.

• **MAT** is primarily used for the treatment of addiction to **opioids** such as heroin and prescription pain relievers, as well as, **alcohol**.

• The prescribed medication operates to normalize brain chemistry, block the euphoric effects of alcohol and opioids, relieve physiological cravings, and normalize body functions without the negative effects of the abused drug.
In Summary...

• **MAT** is not replacing one addiction for another. It is a safe, effective, medically-monitored, evidenced-based treatment for the neurobiological disease of addiction.

• **MAT** improves outcomes for individuals, families, and communities.

• **Naloxone** is a life-saving medication that continues to be dispersed throughout our state.
Questions, Comments, Concerns, Complaints?