Module 6: Medication Assisted Treatment (MAT) in the Community Pharmacy
Learning Objectives

• The student should be able to:
  – Cite evidence based pharmacotherapy for the treatment of opioid use disorder
  – Identify important patient and pharmacy counseling points relevant to MAT
What is MAT?

• MAT=Medication Assisted Treatment
  – Pharmacotherapy to prevent relapse
  – Evidence based treatment for OUD

• Opioid Detoxification
  – Pharmacotherapy to relieve opioid withdrawal
  – Long-term retention rate in drug treatment is low for detoxification as monotherapy

MAT Alternatives

• Opioid Agonist Therapy
  – Methadone
  – Buprenorphine/Naloxone

• Opioid Antagonist Therapy
  – Naltrexone
Opioid Agonists
Methadone
Methadone

- Dispensed/Administered for OUD within licensed OTP
- Treatment guided by federal law
- Evidence based outcomes
  - ↓: illicit opioid use, psychosocial and general medical morbidity associated with drug use, mortality, criminal activity
  - ↑: overall health status, social functioning

Buprenorphine/Naloxone
Buprenorphine/Naloxone

- Mechanism: partial mu-agonist
  - In absence of full agonist produces agonist effects
  - When administered with a full agonist, displaces the full agonist from opioid receptors resulting in precipitated withdrawal symptoms
- Naloxone added to prevent diversion
DATA Waiver

- MD, NP, PA can apply for DATA waiver
- Must have
  - Valid DEA registration number
  - Addiction certification (MD) or completion of approved training (MD, NP, PA)
- “X license”: DEA number starts with “X”
- Buprenorphine prescribed in office based practice by DATA waivered prescriber
Dosing

• 3 phases: Induction, Stabilization, Maintenance
• Induction/Stabilization
  – Started with mild/moderate withdrawal
  – Titrate based on efficacy/tolerability (no withdrawal, craving, intoxication, side effects)
• Maintenance
  – Taper
• Maximum dose
  – 8 to 24 mg/d optimal dose; most managed on 16 mg/d
  – Brain mu receptors are 85-92% saturated at a dose of 16 mg/day demonstrated on neuroimaging


Question
When should buprenorphine/naloxone be started in a patient who is using opioids?

A. Start at any time
B. Must wait until patient is experiencing mild to moderate withdrawal symptoms
C. Must wait until patient has been experiencing withdrawal symptoms for at least 48 hours
D. Must wait a minimum of 7 to 10 days before initiating
<table>
<thead>
<tr>
<th>Products</th>
<th>Formulations</th>
<th>Strength (mg)</th>
<th>Buprenorphine Equivalent Maintenance Range</th>
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</thead>
<tbody>
<tr>
<td>Buprenorphine/Naloxone</td>
<td>Sublingual Tablet</td>
<td>2/0.5</td>
<td>4-24 mg/d</td>
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<tr>
<td></td>
<td>Sublingual Film</td>
<td>8/2</td>
<td>16 mg/d*</td>
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<td>(approved June 2018)</td>
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<tr>
<td>Suboxone®</td>
<td>Sublingual Film</td>
<td>2/0.5</td>
<td>4-24 mg/d</td>
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<td></td>
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<td>4/1</td>
<td>16 mg/d*</td>
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<td></td>
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<td>8/2</td>
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<td>12/3</td>
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<tr>
<td>Zubsolv®</td>
<td>Sublingual Tablet</td>
<td>0.7/0.18</td>
<td>2.9-17.2 mg/d</td>
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<td>1.4/0.36</td>
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<td>5.7/1.4</td>
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<td>8.6/2.1</td>
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<td>11.4/2.9</td>
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<tr>
<td>Bunavail®</td>
<td>Buccal Film</td>
<td>2.1/0.3</td>
<td>2.1-12.6 mg/d</td>
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<tr>
<td></td>
<td></td>
<td>4.2/0.7</td>
<td>8.4 mg/d*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.3/1</td>
<td></td>
</tr>
<tr>
<td>Probuphine® (bup only)</td>
<td>Implant</td>
<td>74.2 (4 implants x 6mo)</td>
<td>8mg/d</td>
</tr>
<tr>
<td>Sublocade® (bup only)</td>
<td>Monthly LAI</td>
<td>100 mg/0.5 mL</td>
<td>100-300 mg/mo</td>
</tr>
</tbody>
</table>
Buprenorphine Side Effects

- GI: Nausea, Vomiting, Constipation
- Opioid withdrawal
- Headache
- Sweating
- Insomnia
- Sedation
- Dizziness
- Edema
Monitoring

• Weekly for 1st few weeks-months
• If good response, ↓ to q2wks
• If good response, ↓ to monthly
• Very rarely, provider may give 1 refill.
Most require monthly monitoring
Treatment Duration

• Individualized care
  – Generally no predetermined duration

• Dose tapered over weeks to months depending on patient outcomes and goals
Instructions for Use

• Moisten mouth before taking film
• Hold sublingual film/tablet under tongue (for 2 to 8 minutes) until completely dissolved
• Hold buccal film in cheek until completely dissolved
• Do not swallow
• If administering 2 films/tablets at the same time, place the second under the tongue on the opposite side. Try to avoid having the films/tablets touch as much as possible
• Avoid BZD and other potent CNS depressants
Facts for Maryland Pharmacies

• CIII Rx can be called in, faxed, e-prescribed, or written as a hard copy
• Routinely stock buprenorphine/naloxone
  – Missed doses puts patients at risk for withdrawal, relapse and/or overdose
• Make every attempt to ensure continuity of treatment
• Follow up on questions immediately
• Offer naloxone to buprenorphine patients
While counseling a patient on buprenorphine/naloxone, the patient asks how long they need to remain on this medication. The best response would be:

A. No more than 6 months
B. No more than 1 year
C. At least 2-5 years
D. Treatment is individualized and duration is based on your patient history and response
Opioid Antagonist Therapy
Naltrexone

- Mechanism: opioid antagonist
- Formulations/Dosing:
  - Oral naltrexone 25mg x1d, then 50mg/d
  - Long acting injectable naltrexone (Vivitrol®) 380mg once q4 wks
- Efficacy
  - Oral: adherence limits utility
  - Long Acting Injectable (XR-NTX): > efficacy than placebo
Naltrexone vs Buprenorphine

- **Efficacy**
  - Demonstrates comparable efficacy in those induced

- **Suggested**
  - BUP-NX might be safer for those not in controlled environment to complete induction
  - XR-NTX good alternative in those no longer opioid dependent

Naltrexone Induction

• Start 7-10 days after last opioid use
  – >14 days with long acting opioids (buprenorphine, methadone)
  – Can precipitate severe opioid withdrawal requiring hospitalization

• Can challenge with naloxone before administering XR-NTX
Naltrexone Side effects

• Common
  – GI upset, hepatic enzyme abnormalities, injection site pain, nasopharyngitis, insomnia

• Serious
  – severe injection site reactions, eosinophilic pneumonia, serious allergic reactions, opioid withdrawal, accidental opioid overdose, depression/suicidality

Naltrexone Patient Education

- Must be opioid-free for a minimum of 7-10 days before initiating
- Increased risk for overdose due to reduction in opioid tolerance
- Offer naloxone to naltrexone patients
Question
When should naltrexone be started in a patient who is using opioids?

A. Start at any time
B. Must wait until patient is experiencing mild to moderate withdrawal symptoms
C. Must wait until patient has been experiencing withdrawal symptoms for at least 48 hours
D. Must wait a minimum of 7 to 10 days before initiating
Key Points

• Medication assisted treatment (MAT) has evidence-based efficacy data for managing opioid use disorder and should be routinely stocked in the pharmacy
• Adherence should be reinforced
• Any issues with MAT prescriptions need to be resolved in a timely manner to preserve continuity
• Naloxone should be routinely offered to patients with OUD
Congratulations you have completed Module 6: MAT