



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 waived 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



Products	Formulations	Strength (mg)	Buprenorphine Equivalent Maintenance Range
Buprenorphine/Naloxone	Sublingual Tablet Sublingual Film (approved June 2018)	2/0.5 8/2	4-24 mg/d 16 mg/d*
Suboxone®	Sublingual Film	2/0.5 4/1 8/2 12/3	4-24 mg/d 16 mg/d*
Zubsolv®	Sublingual Tablet	0.7/0.18 1.4/0.36 2.9/0.71 5.7/1.4 8.6/2.1 11.4/2.9	2.9-17.2 mg/d 11.4 mg/d*
Bunavail®	Buccal Film	2.1/0.3 4.2/0.7 6.3/1	2.1-12.6 mg/d 8.4 mg/d*
Probuphine® (bup only)	Implant	74.2 (4 implants x 6mo)	8mg/d
Sublocade® (bup only)	Monthly LAI	100 mg/0.5 mL 300 mg/1.5 mL	100-300 mg/mo



Buprenorphine Side Effects

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



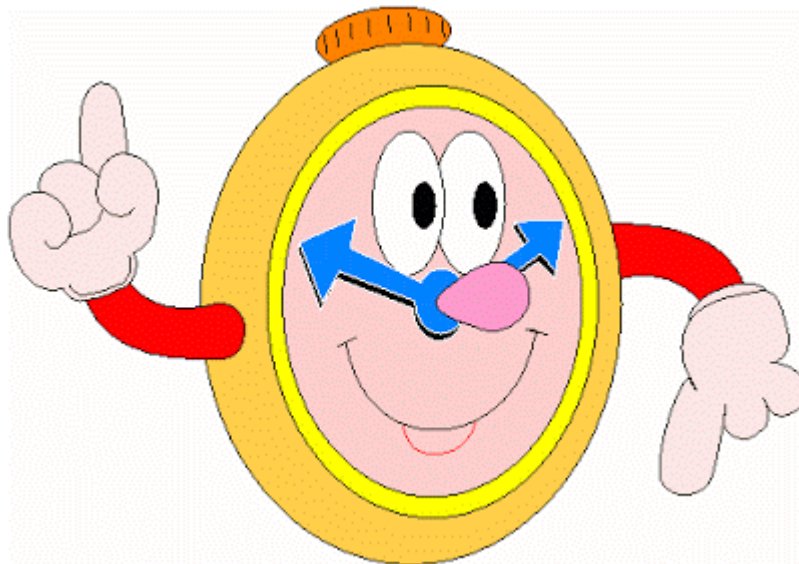
Monitoring

- 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



Question

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



NDC: 65757-303-02 Rx Only

Vivitrol[®] microspheres, 380 mg/vial
(naltrexone for extended-release injectable suspension)

SAMPLE - NOT FOR SALE

Single-Use Vial. Discard unused portion. For gluteal intramuscular injection only. Must be diluted with the enclosed diluent prior to administration. Upon reconstitution with 3.4 mL diluent, each mL will contain 95 mg of naltrexone.
Storage: Refrigerate at 2-8 °C (36-46 °F).

LOT XXX-XXXXX
EXP MMMYYY

9001558-08

Manufactured and marketed by:
Aikermes, Inc., Waltham, MA
02451. See Package Insert
for dose preparation and
administration.



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

Lee, JD. Lancet 2017. Online November 14, 2017;17:1-10.

Lott, DC. www.lancet.com. Online November 14, 2017. [http://dx.doi.org/10.1016/S0140-6736\(17\)32872-6](http://dx.doi.org/10.1016/S0140-6736(17)32872-6)



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

Vivitrol product information. <https://www.vivitrol.com/content/pdfs/prescribing-information.pdf>. Accessed 12/11/2017.



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

