

# MAT: Update on available products

WVU ECHO 7.9.18

# Medication Assisted Treatment

- In 2015 ~2.4 million Americans had Opioid Use Disorder.<sup>1</sup>  
~80% did not receive treatment!<sup>2</sup>
- MAT is a safe and effective strategy for decreasing the frequency and quantity of opioid use and reducing the risk of overdose and death.<sup>3,4</sup>
- Although MAT has significant evidence to support it as an effective treatment, it remains highly underutilized.<sup>5</sup>

1. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. (2016). *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health* (HHS Publication No. SMA 16-4984, NSDUH Series H-51). Rockville, MD

2. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. (2016). *Prescription drug use and misuse in the United States: Results from the 2015 National Survey on Drug Use and Health*. Rockville, MD.

3. Kresina TF, Lubran RL. Improving public health through access to and utilization of medication assisted treatment. *Int J Environ Res Public Health*. 2011;8:4102-4117

4. National Institutes on Drug Abuse. Cost effectiveness of drug treatment. Retrieved from: <http://www.drugabuse.gov/publications/teaching-packets/understanding-drug-abuse-addiction/sectioniv/6-costeffectiveness-drug-treatment>

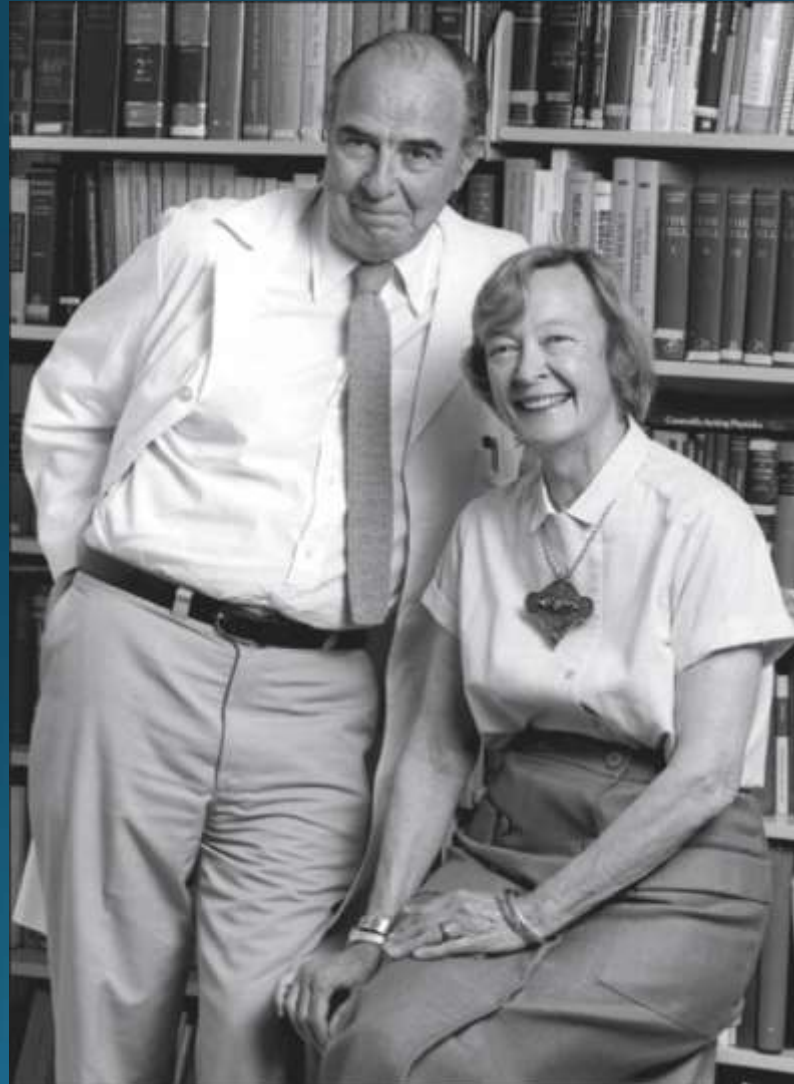
5. Volkow ND<sup>1</sup>, Frieden TR, Hyde PS, Cha SS. Medication-assisted therapies--tackling the opioid-overdose epidemic. *N Engl J Med*. 2014 May 29;370(22):2063-6. doi: 10.1056/NEJMp1402780. Epub 2014 Apr 23.



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# METHADONE



# METHADONE

- Schedule II
- Use for addiction is restricted to non-residential treatment facilities: Opioid Treatment Programs (OTP) *aka* “Methadone Clinics”
- May be prescribed for pain in traditional medical setting
- Tricky to start and stop
- Stigma
- Inconvenient

# Naltrexone



## Implants

(Not FDA approved)



Naltrexone 50mg Tablets

## Tablets

(No better than placebo)



## Injection

Extended Release Naltrexone

# XR-NTX

- 2006 – approved for ETOH
- 2010 – approved for OUD
- 380mg IM q 4 weeks
  - Mix refrigerated microspheres and diluent; keep room temp for 45min
  - 1.5 or 2 inch needle in gluteal muscle
- Wait 7-14 days after last use of opioids before induction
  - negative opioid UDS
- Liver and kidney metabolism (no CYP450)
- Little research in pregnancy
- Risk of OD
- Monitor LFTs, depression

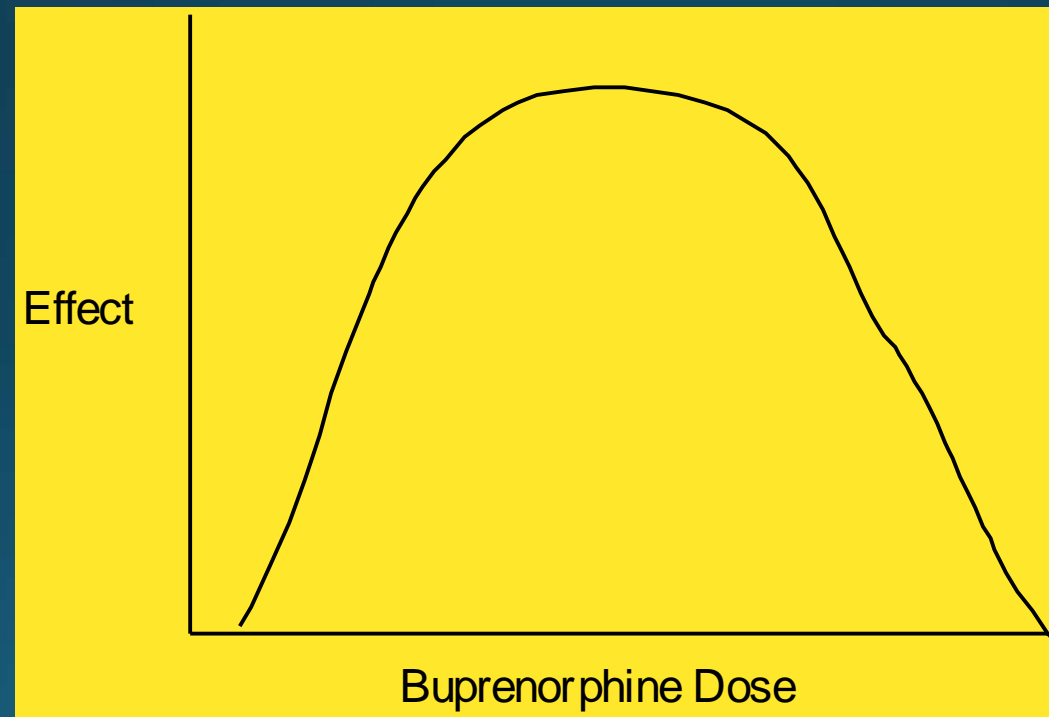
# BUPRENORPHINE

- DATA 2000-



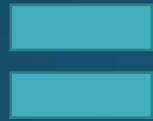
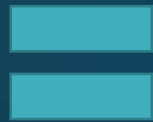
# Buprenorphine Pharmacology

## Bell-Shaped Dose Response Curve



*Drug and Alcohol Dependence, 2003;70:S61*

# Buprenorphine/Naloxone



# BUPRENORPHINE



## BUP + NALOXONE

Zubsolv

Generic



## BUP

"Subutex" (generic)

Probuphine (6m implant)

Sublocade (1m injection)



## FILM (Bup + Naloxone)

Suboxone

Bunavail

# SUBLOCADE

- Approved November 2017
- Extended Release subcutaneous injectable buprenorphine
- Stabilized on transmucosal bup for  $\geq 7$  days
- First 2 monthly doses 300mg/ 1.5 mL followed by 100mg/0.5 mL maintenance doses
- Only available via REMS program
  - Should never be dispensed directly to a patient
- Wait at least 15 mins after refrigeration (must discard after 7 days)
- Abdominal

# MAT

## Methadone (Full Agonist)

### Pros:

Long lasting  
Decades of evidence  
Helps with pain

### Cons:

Diverted  
Inconvenient  
Lethal in overdose  
Withdrawal  
Stigma

## Buprenorphine (Partial Agonist)

### Pros:

Doctor's office  
Less risk of overdose  
Less risk of IV use  
Helps with pain

### Cons:

Diverted  
Withdrawal

## Naltrexone (Antagonist)

### Pros

Not diverted  
No risk of overdose

### Cons:

Compliance  
Pain