Office-Based Management of Opioid USE Disorder (OUD):

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Primary Care Physician
Learning Objectives

1. Which MAT for which patient?
2. Induction principles
3. Induction caveats
   - precipitated withdrawals
   - methadone to buprenorphine
4. Weaning
<table>
<thead>
<tr>
<th></th>
<th>METHADONE</th>
<th>BUPRENORPHINE</th>
<th>NALTREXONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFFICACY</td>
<td>Most proven</td>
<td>Close if not equal to methadone</td>
<td>Less but mostly due to dropouts during induction</td>
</tr>
</tbody>
</table>
| SIDE EFFECTS | Prolonged QT  
Constipation  
Low testosterone  
Respiratory depression  
Sweating | Constipation  
Low testosterone(less)  
Nausea, LE edema, HA  
Insomnia  
Sweating  
Blistering in mouth | Nausea  
LFTs |
| RISK OF OVERDOSE | +++ if dose is too high or patient mixes with sedatives | Very low, possible when mixed with sedatives but low | None |
| PAIN CONTROL | Yes                                | Yes                                  | No                                |
# WHICH MAT?

<table>
<thead>
<tr>
<th></th>
<th>METHADONE</th>
<th>BUPRENORPHINE</th>
<th>NALTREXONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDICATION INTERACTIONS</td>
<td>Yes (anticonvulsants, HIV meds, antidepressants...)</td>
<td>Few (less severe)</td>
<td>Opioids</td>
</tr>
<tr>
<td>REGULATION</td>
<td>VERY High</td>
<td>Moderate</td>
<td>Minimal</td>
</tr>
<tr>
<td>CONVENIENCE</td>
<td>Daily visits for at least 3 months</td>
<td>Monthly visits</td>
<td>Monthly visits</td>
</tr>
<tr>
<td></td>
<td>Limited number of clinics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COSTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WORK / MILITARY STATUS</td>
<td>Prohibited in certain job situations (CDL)</td>
<td>Less restrictive but often prohibited in CLD</td>
<td>None</td>
</tr>
<tr>
<td>DIVERSION RISK</td>
<td>Very low for 1st three months but higher after take homes are granted</td>
<td>Initially &gt; methadone but less dangerous when diverted</td>
<td>None</td>
</tr>
<tr>
<td>EASIEST TO WEAN FROM</td>
<td>Difficult</td>
<td>Less difficult but still difficult</td>
<td>Minimal</td>
</tr>
</tbody>
</table>
Buprenorphine vs Methadone vs XR-Naltrexone vs Abstinence

• Prior experience of patient (or friends) with MAT often drives the decision
• Prior use of diverted buprenorphine does not preclude OUD treatment with buprenorphine
• Opioid agonist therapy should not be denied to patients solely because they take benzodiazepines or other drugs
• Prior failure should not preclude another attempt
Office Based Induction

- educate the patient on proper way to take the medication
- visual verification of opioid withdrawal (COWS)
- ensure the lack of over sedation
- enhance therapeutic relationship
- advise pt to abstain from tobacco before dosing (vasoconstriction)
- no need to use buprenorphine without naloxone as induction medication
- pt returns next day for dose titration
- can patient drive after induction?
Office Based Induction

• Educate about precipitated withdrawal; timing varies
  • Advise to abstain for roughly: 6-8 hrs. for short-acting opioids, 24 hrs. for long-acting opioids, and 48-72 hrs. for methadone

• Patient should be in mild to moderate withdrawal

• Initial dose can be 2-4mg with repeat of 4mg first day, max 8-12mg on day 1

• Wait 2 hours before repeating dose

• Goal of induction is to reach stable dose that reduces or eliminated cravings and withdrawal

• Office-based vs home inductions are likely equivalent *

* Sohler NL | Subst Abuse Treat, 2010 Mar
Home Based Induction

- Experienced clinicians (and patients) probably better suited for unobserved approach
- Patient needs to understand withdrawal and when to take first dose (written instructions- teach back)
- Still requires initial face to face contact for evaluation and diagnosis
- Phone contact next day or two
- Titrations instructions
- Follow up visit within 2-7 days
- How much for the first prescription?
- Do not try with methadone conversions
Transferring from Methadone to Buprenorphine

- Reasons patients may want to convert to buprenorphine:
  - believe it is easier to come off buprenorphine
  - side effects of methadone
  - methadone “not holding”
  - want more flexibility in their dosing
  - toxicity: prolonged QT, constipation
  - discharged from a methadone program
Transferring from Methadone to Buprenorphine

• Strategies for conversion

A- abstinence from methadone long enough to make conversion

B- micro-inductions with buprenorphine (Bernese method)
Transferring from Methadone to Buprenorphine – abstinence method

• Clarify why patient is transferring

• Methadone is especially long-acting opioid; risk of precipitated withdrawal is higher and dose dependent.

• Confirm patient is in withdrawal prior to induction – the timeline will vary amongst patients (72 or longer hours typically)

• Ideally patient should be stable around 30-35mg for one week, success has been shown for pts up to 100 mg, higher conversions seek expertise and hospitalization

• Use small test dose, i.e. 2 mg, repeat, but if no PW then escalate dose the 1st day

• Patients need lots of support – ok to go back to methadone if buprenorphine fails
Micro dosing conversion

• Allows conversion from methadone to buprenorphine without stopping the methadone

• Literature:
  - case report of 2 patients 2016 (Vogel M et al., 2016)
  - case report of 2 patients on heroin (Hamming R et al., 2016)
  - case report of 3 hospitalized patients (Terasaki et al., 2019)
  - case report of 2 hospitalized patients (Sukhpreet et al., 2019)
**Micro dosing conversion**

- Allows conversion from methadone to buprenorphine without stopping the methadone or high dose pain meds in hospitalized patient (Burnese method)

<table>
<thead>
<tr>
<th>Day</th>
<th>Order</th>
<th>Number of tablet(s) per dose when using buprenorphine-naloxone 2 mg – 0.5 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>buprenorphine 0.5 mg – naloxone 0.125 mg sublingual BID</td>
<td>One quarter tablet</td>
</tr>
<tr>
<td>2</td>
<td>buprenorphine 0.5 mg – naloxone 0.125 mg sublingual TID</td>
<td>One quarter tablet</td>
</tr>
<tr>
<td>3</td>
<td>buprenorphine 1 mg – naloxone 0.25 mg sublingual BID</td>
<td>One half tablet</td>
</tr>
<tr>
<td>4</td>
<td>buprenorphine 2 mg – naloxone 0.5 mg sublingual BID</td>
<td>1 tablet</td>
</tr>
<tr>
<td>5</td>
<td>buprenorphine 2 mg – naloxone 0.5 mg sublingual QID</td>
<td>1 tablet</td>
</tr>
<tr>
<td>6</td>
<td>buprenorphine 4 mg – naloxone 1 mg sublingual TID</td>
<td>2 tablets</td>
</tr>
<tr>
<td>7</td>
<td>buprenorphine 12 mg – naloxone 3 mg sublingual daily</td>
<td>Refer to MAR for directions</td>
</tr>
</tbody>
</table>
Precipitated opioid withdrawal

1- Administration of naloxone or buprenorphine while pure mu agonist are present

2- It is more severe than typical opioid withdrawal (naltrexone > buprenorphine)

3- Unlike withdrawals from stopping these withdrawals can manifest with
   - delirium
   - autonomic hyperactivity (severe hypertension)
   - supportive management in ER or hospital

4- If not severe can be managed with clonidine, Imodium,

5- Overriding with pure mu agonists not recommended (risk of rebound respiratory depression)

6- If in doubt consider Naloxone (0.1mg SQ/IV) challenge first to avoid precipitated withdrawal
### Table 2

Comparison of urine results by taper group and time-point (*n* = 516).

<table>
<thead>
<tr>
<th>Time-point</th>
<th>Percentage of participants with drug-free UA (n)</th>
<th>( \chi^2 ) value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7-day (n = 255)</td>
<td>28-day (n = 261)</td>
<td></td>
</tr>
<tr>
<td><strong>Opiates</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of taper</td>
<td>44.31 (113)</td>
<td>29.89 (78)</td>
<td>11.52</td>
</tr>
<tr>
<td>1-month follow-up</td>
<td>17.65 (45)</td>
<td>17.62 (46)</td>
<td>0.00</td>
</tr>
<tr>
<td>3-month follow-up</td>
<td>12.16 (31)</td>
<td>13.41 (35)</td>
<td>0.18</td>
</tr>
<tr>
<td><strong>All drugs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of taper</td>
<td>24.71 (63)</td>
<td>18.77 (49)</td>
<td>2.67</td>
</tr>
<tr>
<td>1-month follow-up</td>
<td>10.98 (28)</td>
<td>11.49 (30)</td>
<td>0.03</td>
</tr>
<tr>
<td>3-month follow-up</td>
<td>6.67 (17)</td>
<td>9.20 (24)</td>
<td>1.13</td>
</tr>
</tbody>
</table>
Zoe W, et al., Tapering off and returning to buprenorphine maintenance in a primary care Office Based Addiction Treatment (OBAT) program. Drug and Alcohol Dependence, 2018-08-01, Volume 189, 166-171

- 12 year retrospective study
- 1308 patients with median follow up of 316 days
- 48 patients tapered with a median of 490 days in treatment
- 13/48 reengaged at a later time
WEANING

- Not recommended as the goal
- Some patients will eventually inquire and pursue an attempt
- No evidence based strategy that is more effective
- Most experts recommend slow weans (months to years)
- Initial dose reductions can be larger
- Once daily dosing if tolerated
- Allow patient to stop at any point
- Protracted withdrawal after stopping
- 1-2 mg doses still induce significant withdrawal
- Supplement taper with behavioral support
Resources

SAMHSA publications TIP 63: Medications for Opioid Use Disorder- Introduction to Medications for Opioid Use Disorder Treatment


COWS for opioid withdrawal:

Resources

- Vogel M et al., Use of microdoses for induction of buprenorphine treatment with overlapping full opioid agonist use: the Bernese method. Substance Abuse and Rehabilitation, 2016:7, 98-105
- Sukhpreet K et al., Rapid Micro-induction of Buprenorphine/Naloxone for Opioid Use Disorder in an Inpatient Setting: A case series. The American Journal of Addictions (28)issue
- Transitioning Hospitalized Patients with Opioid Use Disorder from Methadone to Buprenorphine without a Period of Opioid Abstinence Using a Microdosing Protocol. Pharmacotherapy: The J of Human Pharm and Drug Therapy 2019
OBOT Patient Agreement

Please review below and initial each line.

- I will keep and be on time to all my scheduled appointments with my doctor and nurse. I understand that a missed appointment may mean I don’t get medication until the next scheduled visit.
- I will not sell, share or give away any of my medication to another person. I understand that would result in immediate discharge from the program.
- I agree that the medication I receive is my responsibility and that I will keep it in a safe secure place. I agree that lost medication may not be replaced regardless of the reason.
- I agree to take my medication as prescribed, and notify my doctor or nurse if I am having difficulties with the medication.
- I agree not to take medications that are not prescribed to me.
- I agree that if I obtain medication from any doctors, pharmacies, or other sources or if I have an upcoming procedure, that I will inform my doctor or nurse.
- I will not tamper with urine screens and if I do so, I understand this may result in immediate discharge.
- I understand that mixing buprenorphine with alcohol or other medications, especially benzodiazepines such as Xanax, Xanax, Valium, Xanax and other drugs can be dangerous.
- I agree to random urine drug screens and to bring in my remaining buprenorphine to each visit with my doctor or nurse when requested.
- I agree not to consume poppy seeds while in this treatment program. Poppy seed consumption will not be accepted as an excuse for a positive opiate screen.
- I understand that my treatment plan may change to random call back visits only and that I need to have a working telephone and updated contact numbers. When called for random call backs, I need to respond within 24 hours by telephone. Non-response to call backs will be considered the same as a positive urine.
- I understand that if I continue using opioids or other illicit substances, this issue will be addressed through changes in my treatment plan to help me. If I continue to struggle with ongoing drug use this may be grounds for transfer to other more intense treatment options.
- I understand that the DotHouse OBOT Program will not release the results of my urine drug screens to any other agency, program, or institution. The reason for this policy is that DotHouse does not have a chain of custody over the urines, the purpose of these tests are for my treatment at DotHouse only.

If at any time I am discharged from this program I may be reconsidered at a future time to see if office based treatment may be an option for me.

I understand that medication alone is not sufficient treatment for my disease, and I agree to participate in the patient education, substance abuse counseling and relapse prevention programs, to assist me in my treatment.

I understand that my records, course of treatment, and medical care will be kept in an electronic medical record under a confidential filing system. These notes will be visible to any healthcare professional involved in my care.

My signature below indicates that I have read and understand this treatment agreement.

Patient: Printed Name ___________________________ Signature ___________________________ Date ____________

Witness: ___________________________ Signature ___________________________ Date ____________
Consent for Treatment with Buprenorphine

Buprenorphine is a Food and Drug Administration (FDA) approved medication for treatment of opioid use disorder. Only qualified physicians can prescribe this medication. Buprenorphine can be used for detoxification or for maintenance therapy. Maintenance therapy can continue as long as medically necessary. We recommend for a minimum of six (6) months, but most patients will benefit from longer.

Buprenorphine treatment can result in physical dependence. Withdrawal from Buprenorphine is generally less intense than with heroin or methadone. If Buprenorphine is suddenly stopped, some patients have no withdrawal symptoms; others may have as muscle aches, stomach cramps, or diarrhea lasting several days. To minimize this risk, Buprenorphine should be discontinued gradually over several weeks or more under medical supervision.

If you are physically dependent on an opioid, you should be in as much withdrawal as possible when you take the first dose of Buprenorphine. If you are intoxicated with opioids, Buprenorphine can cause severe opioid withdrawal.

It may take several days to get used to the transition from the opioid that you had been taking to Buprenorphine. During this time any use of other opioids may cause an increase in symptoms. After becoming stabilized on Buprenorphine, the use of other opioids will have less effect. Attempts to override the Buprenorphine by taking more opioids could result in an opioid overdose.

You should not take any other medications without first discussing with your healthcare provider.

Combining Buprenorphine with alcohol or other medications may be hazardous. Combining Buprenorphine with medications such as Xanax, Valium, Haldol, Librium, Ativan, Xanax has resulted in deaths.

The form of Buprenorphine that you will be taking (Suboxone) is a combination of Buprenorphine with a short acting opioid blocker (Naloxone). If the Suboxone tablet were dissolved and injected by someone taking heroin or another strong opioid, it would cause severe opioid withdrawal.

Buprenorphine tablets or film must be held under the tongue until they completely dissolve. Buprenorphine will not be absorbed from the stomach if it is swallowed.

Additional Comments: ________________________________

<table>
<thead>
<tr>
<th>Patient: Print Name</th>
<th>Patient: Signature</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Physician: Print Name</th>
<th>Physician: Signature</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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