

# Office-Based Buprenorphine: Patient Selection, Induction, and Management

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## Context

- CSAM Webinar Series
  - 12 monthly webinars to support implementation of medication-assisted treatment in primary care
  - Survey sent out to HRSA MAT-grant recipient clinics in CA to solicit training needs
  - Upcoming Webinars
    - Check the website!
  - How to Register

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## By the end of this session...

- To be more confident in deciding between home- and office-based induction with buprenorphine for patients with opioid use disorders
- To understand best practices for conversion from methadone or long-acting opioids to buprenorphine
- To know how to “triage” a patient with an opioid use disorder: methadone maintenance v. office based outpatient treatment (OBOT)

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## Case 1

- MO is a 34yo Spanish-speaking F with a history of a prior motor vehicle accident leading to chronic back pain for which she was prescribed long-acting morphine and oxycodone. She continued taking opioid pain relievers for 4 years.
- She presents for a new primary care appointment and says, “I need to get off these” and puts a bottle of MS Contin 60mg pills on table.

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## Case 1 continued

- Patient describes that while she originally started using these for pain (Vicodin®), now she needs them to feel normal. She tried to stop using them after she lost primary care, but found that she couldn't. She continues to have intermittent back pain.
- She started purchasing pills off the street, taking 1-2 MS contin 60mg pills, depending on what she can find.
- She works as housekeeper. Lives with husband and 2 kids.
- She denies alcohol, benzodiazepine, heroin, stimulant, or tobacco use.
- She takes no other meds and has no allergies.
- Exam is normal. She has no evidence of opioid intoxication or withdrawal.

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## Question

- Which of the following represents the best approach to management for this patient?
  - A) Prescribe long-acting morphine for chronic pain
  - B) **Prescribe buprenorphine-naloxone for treatment of opioid use disorder**
  - C) Admit for detox
  - D) Taper down the long-acting morphine
  - E) Transition to XR-naltrexone

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## The New Epidemic

- Opioid Use Disorders
  - 2012 estimates (NSDUH)
    - 2.1 million rx pain relievers
    - 467,000 heroin

**Needles/heroin = addiction**

[goo.gl/NNpwxg](http://goo.gl/NNpwxg)

On Parenting By Jen Simon June 6 **The Washington Post**

**I'm a stay-at-home mom. I'm an addict.**

June 2015



## Patient Selection: When Should I Think Bupe?

- SAMHSA Guidelines (TIP 40)
  - **Diagnosis of moderate-severe opioid use disorder**
  - Interest in Treatment
  - Understand risks/benefits
  - No contra-indications (allergy)
  - Can follow safety precautions
  - Reasonably adherent
  - Pregnant or Child-bearing age
  - Liver Disease
  - Drug-drug interactions
  - Need detox first
  - Prior treatment experience
  - Psychiatric Stability
  - Psychosocial Circumstances
  - Co-morbid substance use disorder: alcohol and benzodiazepines
  - Readiness?

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<b>Buprenorphine Treatment Checklist</b>	
1.	Does the patient have a diagnosis of opioid dependence?
2.	Are there current signs of intoxication or withdrawal? Is there a risk for severe withdrawal?
3.	Is the patient interested in buprenorphine treatment?
4.	Does the patient understand the risks and benefits of buprenorphine treatment?
5.	Can the patient be expected to adhere to the treatment plan?
6.	Is the patient willing and able to follow safety procedures?
7.	Does the patient agree to treatment after a review of the options?
8.	Can the needed resources for the patient be provided (either on- or offsite)?
9.	Is the patient psychiatrically stable? Is the patient actively suicidal or homicidal; has he or she recently attempted suicide or homicide? Does the patient exhibit emotional, behavioral, or cognitive conditions that complicate treatment?
10.	Is the patient pregnant?
11.	Is the patient currently dependent on or abusing alcohol?
12.	Is the patient currently dependent on benzodiazepines, barbiturates, or other sedative-hypnotics?
13.	What is the patient's risk for continued use or continued problems? Does the patient have a history of multiple previous treatments or relapses, or is the patient at high risk for relapse to opioid use? Is the patient using other drugs?
14.	Has the patient had prior adverse reactions to buprenorphine?
15.	Is the patient taking other medications that may interact with buprenorphine?
16.	Does the patient have medical problems that are contraindications to buprenorphine treatment? Are there physical illnesses that complicate treatment?
17.	What kind of recovery environment does the patient have? Are the patient's psychosocial circumstances sufficiently stable and supportive?
18.	What is the patient's level of motivation? What stage of change characterizes this patient?

From SAMHSA: TIP 40  
Available free at  
SAMHSA.gov

## Diagnosis

– Opioid use disorder

- 4 Rs
  - Risk of bodily harm
  - Relationship trouble
  - Role failure
  - Repeated attempts to cut back
- 4 Cs
  - Loss of Control
  - Continued use despite harm
  - Compulsion (time & activities)
  - Craving
- Withdrawal and tolerance

Patient's Name:		Date of Birth:	
<b>Worksheet for DSM-V criteria for diagnosis of opiate use disorder</b>			
Diagnostic Criteria* (Opioid Use Disorder requires at least 2 within 12 month period)	Meets criteria		Notes/supporting information
	Yes	No	
1. Opioids are often taken in larger amounts or over a longer period of time than intended.			
2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use.			
3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.			
4. Craving, or a strong desire to use opioids.			
5. Recurrent opioid use resulting in failure to fulfill major role obligations at work, school or home.			
6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.			
7. Important social, occupational or recreational activities are given up or reduced because of opioid use.			
8. Recurrent opioid use in situations in which it is physically hazardous			
9. Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.			
10. *Tolerance, as defined by either of the following: (a) a need for markedly increased amounts of opioids to achieve intoxication or desired effect (b) markedly diminished effect with continued use of the same amount of an opioid			
11. *Withdrawal, as manifested by either of the following: (a) the characteristic opioid withdrawal syndrome (b) the same (or a closely related) substance are taken to relieve or avoid withdrawal symptoms			

\*This criterion is not considered to be met for those individuals taking opioids solely under appropriate medical supervision.

Severity: **Mild:** 2-3 symptoms, **Moderate:** 4-5 symptoms, **Severe:** 6 or more symptoms.

Signed \_\_\_\_\_ Date \_\_\_\_\_

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Criteria from American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Washington, DC: American Psychiatric Association page 541.

## Diagnosis

Patient's Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

**Worksheet for DSM-V criteria for diagnosis of opiate use disorder**

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— Opioid use disorder

- 4 Rs
  - Risk of bodily harm
  - Relationship trouble
  - Role failure
  - Repeated attempts to cut back *tried to stop*
- 4 Cs
  - Loss of Control *taking more*
  - Continued use despite harm
  - Compulsion *seeking street drug*
  - Craving *“can’t stop them”*
- Withdrawal and tolerance

## Case Continued

- You discuss with the patient your concern that she is opioid dependent. You explain to her about buprenorphine-naloxone, which could provide her with better treatment for pain and opioid dependence.

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## Patient Selection Continued: When Should I Think Bupe?

- SAMHSA Guidelines (TIP 40)
  - Dx of ~~moderate-severe~~ opioid use disorder
  - **Interest in Treatment**
  - **Understand risks/benefits**
  - **No contra-indications (allergy)**
  - Can follow safety precautions
  - Reasonably adherent
  - Pregnant or Child-bearing age
  - Liver Disease
  - Drug-drug interactions
  - Need detox first
  - Prior treatment experience
  - Psychiatric Stability
  - Psychosocial Circumstances
  - Co-morbid substance use disorder: alcohol and benzodiazepines
  - Readiness?

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## Case Continued: Talking to Patients & Getting Buy-In

- Pros
  - Won't go into withdrawal; less hassle
  - Possibility of *improved pain control*
  - Safe/proven medication
  - Possible anti-depressant effect??
- Cons
  - dangerous if combined with alcohol or benzodiazepines
  - Have to go through withdrawal before starting the medicine (I will help you with this)
  - Liver toxicity (rare)
  - Can't get high

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## VA Experience: Co-occurring disorders clinic

- VA retrospective cohort of 143 pts with chronic pain and addiction induced on bupe-nal
  - 93/145 (**65%**) continued on the meds
    - Taken off if: uncontrolled pain >28mg, tox + 3+, miss 3+ visits, 3+ early refills
  - Pain scores modestly, but significantly improved
- Observational cohort: dec 2.3 points on bupe

	Patients	APS change	# (% retain)
Preferred opioid			
Heroin	16	-0.7	10 (63%)
Methadone	23	-0.3	17 (74%)
Oxycodone	63	-1	40 (63%)
Hydrocodone	18	-0.1	13 (72%)
Fentanyl	9	-1.1	3 (33%)
Morphine	12	-1.2	9 (75%)
Codeine	1	-7.8	1 (100%)
Hydromorphone	1	0.6	0 (0%)
Age group			
21-40 y	25	-1.1	15 (60%)
41-60 y	81	-0.7	51 (62%)
61-80 y	37	-0.9	27 (72%)

Pade PA et al. JSAT 2012;43(4):446-50. Daitch et al Pain Physician 2012; 15:Es59.

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## More Information

- [www.naabt.org](http://www.naabt.org)
  - Buprenorphine education → Patient stories
  - Online support communities
- SAMHSA ([samhsa.gov](http://samhsa.gov))
  - Info chinese, russian, spanish, & vietnamese



<http://www.samhsa.gov/medication-assisted-treatment/treatment/>

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## Alternatives for Opioid Use Disorder

- **Methadone maintenance program**
  - MOA: full agonist at mu opioid receptor
  - Part of comprehensive drug treatment program
    - Mandatory counseling
    - Daily attendance
    - Rules guiding take-home privileges and other allowances
  - Evidence-base:
    - Decreased illicit drug use, decreased criminal behavior, decreased mortality
  - Candidate patients:
    - Active MH disorders
    - High psychosocial chaos
    - Co-morbid substance use disorders
- **Naltrexone**
  - MOA: competitive antagonist at opioid receptor
  - Forms:
    - Oral
    - Intramuscular (XR-NTX; Vivitrol®)
  - Evidence-base:
    - Meta-analysis no difference between oral formulation and placebo
    - Reduced drug use with intramuscular formulation
  - Candidate Patients:
    - Highly motivated (high risk-high reward); committed to abstinence
    - Criminal justice setting (limited MAT options)
    - Intensive adherence support
    - No other illicit drug use, less severe use disorder
    - Abstinent but high risk relapse <sup>17</sup>

## Alternatives for Opioid Use Disorder

- **Methadone maintenance program**
  - Pros:
    - Structure/support
    - Observation & safety
  - Cons
    - “liquid handcuffs”
    - Inadequate pain coverage
    - Stigma; cultural fit
- **Naltrexone**
  - Pros:
    - Support full abstinence
  - Cons
    - Follows opioid detoxification
    - Cost/coverage
      - California Medical Coverage (TAR):
        - » Charged with, or convicted of, a felony or misdemeanor, AND
        - » Under county or state supervision, including substances abuse monitoring (AB 109)
        - » Must go through Specialty Pharmacy Network
    - Upfront cost to order product: \$1570/380mg



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## Patient Selection Continued: Our Patient

- SAMHSA Guidelines (TIP 40)
  - Dx of moderate-severe opioid use disorder
  - Interest in Treatment
  - Understand risks/benefits
  - No contra-indications (allergy)
  - Can follow safety precautions – **PLAN FOR SAFE STORAGE**
  - Reasonably adherent – **ATTENDS PRIMARY CARE APPOINTMENTS**
  - Pregnant or Child-bearing age – **YES. UPT NEGATIVE. USING CONDOMS W PARTNER**
  - Liver Disease – **LFTS NORMAL**
  - Drug-drug interactions – **NO DRUG-DRUG INTERACTIONS**
  - Need detox first – **CURRENTLY NO EVIDENCE OF WITHDRAWAL**
  - Prior treatment experience – **HAS FAILED DETOX ATTEMPTS**
  - Psychiatric Stability – **YES**
  - Psychosocial Circumstances – **STABLE**
  - Co-morbid substance use disorder: alcohol and benzodiazepines – **NO**
  - Readiness? – **YES**

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## Case Continued

- You and the patient decide to proceed with a trial of buprenorphine-naloxone. Which of the following is true about **unobserved home inductions**?
  - A) During DEA inspection, it is mandatory to report whether home induction has occurred.
  - B) There is an increased risk of protracted withdrawal.
  - C) Evidence from academic settings and community-based clinics support the safety of home inductions

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## Case Continued

- You and the patient decide to proceed with a trial of buprenorphine-naloxone. Which of the following is true about **unobserved home inductions**?
  - A) During DEA inspection, it is mandatory to report whether home induction has occurred.
  - B) There is an increased risk of protracted withdrawal.
  - C) **Evidence from academic settings and community-based clinics support the safety of home inductions**

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## What About Induction? Your Options

- 3 Models
  1. In-office approach
  2. Specialty clinic approach
  3. Unobserved home induction

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## Buprenorphine-Naloxone



**Sublingual Film** =  
Suboxone®; 2/0.5, 4/1,  
8/2, and 12/3mg

**Sublingual Tablet** =  
generic (2/0.5mg and  
8/2mg) and brand  
Zubsolv®

**Buccal film** =  
Bunavail® **\*\*ONLY FOR  
MAINTENANCE**

**NOT DISCUSSING:**  
Buprenorphine formulations (Butrans®, Buprenex®, Probuphine®)

## In-office Induction

- About: Taught in 8hr waiver course;  
recommended in TIP 40, CSAT
- Steps:
  - Pre-visit & counseling to prepare pt
    - *Period of abstinence*: 12-16h for short-acting, 17-24h  
intermed-acting, and ~30-48hrs for methadone
    - Mild-moderate withdrawal (**COWS score of 12-16**)
  - Rx for bupe-naloxone (i.e., 2-0.5mg # 8, or 8-2mg #2)
  - Dose: 2-4mg initial, 16mg max on day 1
  - Monitor: 1+ hours
  - Follow-up: phone (day 2) + visit (day 3 or 4)

**Clinical Opiate Withdrawal Scale**

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name: \_\_\_\_\_ Date and Time \_\_\_\_/\_\_\_\_/\_\_\_\_:\_\_\_\_

Reason for this assessment: \_\_\_\_\_

<b>Resting Pulse Rate:</b> _____ beats/minute <i>Measured after patient is sitting or lying for one minute</i> 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120	<b>GI Upset:</b> <i>over last 1/2 hour</i> 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting
<b>Sweating:</b> <i>over past 1/2 hour not accounted for by room temperature or patient activity.</i> 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face	<b>Tremor:</b> <i>observation of outstretched hands</i> 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching
<b>Restlessness:</b> <i>Observation during assessment</i> 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds	<b>Yawning:</b> <i>Observation during assessment</i> 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute
<b>Pupil size:</b> 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible	<b>Anxiety or Irritability</b> 0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 patient so irritable or anxious that participation in the assessment is difficult
<b>Bone or Joint aches:</b> <i>If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored</i> 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort	<b>Gooseflesh skin</b> 0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection
<b>Runny nose or tearing:</b> <i>Not accounted for by cold symptoms or allergies</i> 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks	Total Score _____ The total score is the sum of all 11 items Initials of person completing assessment: _____

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

*This version may be copied and used clinically.*

Max Score = 48

5-12 = Mild withdrawal

13-24 = Moderate

25-36 = Severe

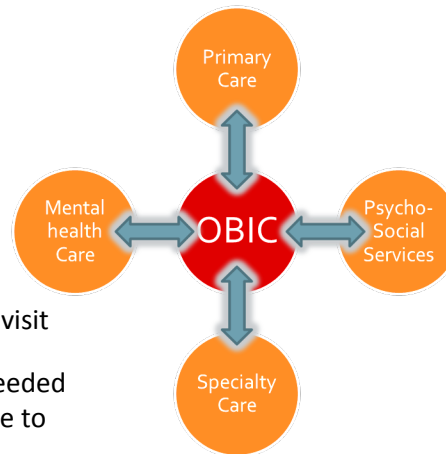
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## In-office Induction

- Pros:
  - Structured – observed dosing; low complication rate
- Cons
  - Labor, resource and time intensive
  - Staff/provider education
  - Patient may not be “ready”
  - Not particularly patient centered

## Specialty Clinic

- Outpatient Buprenorphine Induction Clinic (OBIC) – San Francisco Model
  - Outpatient clinic staffed by addiction psychiatry and nurse practitioners
  - Patients seen on walk-in and appointment basis
  - Initial Intake visit → Induction visit → Stabilization
  - Allows for daily follow-up, if needed
  - Affiliated with pharmacy on site to pick up meds
  - Free for patients in SF
  - Transfer to primary care once stabilized



Courtesy of Matt Tierney

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## Specialty Clinic Induction

- Pros:
  - convenient for primary care providers 😊
  - Structure, support
  - Greater expertise
- Cons:
  - Cost, resources, institutional investment
  - Siloed
  - Communication and care coordination challenges
  - Capacity

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### 3. Home Induction

- Basic Procedure:
  - See patient in primary care visit & describe the home induction process
  - Provide patient education materials
  - Patient induces her/himself at home
  - Close follow-up by phone and/or office, typically within 1 week

NYU School of Medicine Division of General Internal Medicine. Contact: joshua.lee@med.nyu.edu 1 of 4






#### Buprenorphine - Beginning Treatment

**Day One:** Before taking a buprenorphine tablet you want to feel lousy from your withdrawal symptoms. Very lousy. It should be at least 12 hours since you used heroin or pain pills (oxycontin, vicodin, etc.) and at least 24 hours since you used methadone.

Wait it out as long as you can. The worse you feel when you begin the medication, the better it will make you feel and the more satisfied you will be with the whole experience.

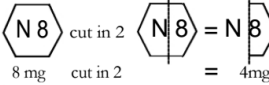
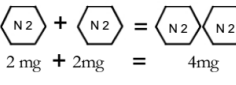
**You should have a least 3 of the following feelings:**

- twitching, tremors or shaking
- joint and bone aches
- bad chills or sweating
- anxious or irritable
- goose pimples








• very restless, can't sit still    • heavy yawning    • enlarged pupils    • runny nose, tears in eyes    • stomach cramps, nausea, vomiting, or diarrhea

**First Dose:** 4 mg of Buprenorphine (Bup) under the tongue.  
This is one half of an 8 mg tablet or two 2 mg tablets:

8 mg cut in 2 = 4mg    2 mg + 2mg = 4mg



Put the tablet (one half tablet of 8mg tabs, or two tablets if 2mg tabs) under your tongue. Keep it there. If you swallow Bup tablets they will not work the medicine is best absorbed through the thin skin on the bottom of your tongue.

It takes 20-45 minutes for the medication to be absorbed and have an effect. Feel better? Good, the medicine is working. Still feel lousy after 45 minutes? Don't worry, you just need more medication. 29

At 1-3 hours (60-180 minutes) after your first dose, see how you feel. If you feel fine after the first 4 mg,

### Home Induction

- Pros
  - Patient-centered
  - Provider-centered
- Cons
  - Less structure and oversight (think about patient selection)
  - Requires more robust patient self-management skills
  - Allotment and reimbursement for provider time (i.e., phone visits)
  - Provider experience

## Evidence-Base for Home Inductions

- Academic centers
  - Montefiore:
    - No difference in 30d retention in treatment (~78%), or adverse events
  - NYU: Intake visit, labs/urine → rec 4/1mg, followed by 1-2 additional doses (max 12mg). F/U: call clinic coordinate d1-3, f/u at 1 week. Typically #14 of 8/2mg tablets
    - 73% retention, no cases of severe precipitated withdrawal
- Community primary care
  - 2006-2010: 228 patients home-induced
    - 1/228 experienced precipitated withdrawal
    - Convenience sample: 82% negative UDT, 88% pos for bupe

Doolittle & Becker. Substance Abuse 2011. Lee J et al. JGIM 2009.  
Sohler N et al. J Sub Abus Tx 2009..

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## Who Didn't Do Well?

- Study of office- (56%) and home-based (43%) inductions of patients at Montefiore (n=107)
  - 16% “complicated” inductions
    - 55% precipitated withdrawal, 44% protracted withdrawal
  - Characteristics
    - Methadone use
    - BZD use
    - Low initial dose of bupe-nal (2-0.5mg)
    - Start of program
    - Hadn't used bupe in the past
  - Lower 30d retention in treatment

Whitley et al. J Subst Abuse Treat. 2010

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## Back to Our Patient

- You talk about doing the home induction.
- She can describe that she starts to get sick about 12 hours after taking an MS contin. First she feels anxious and nauseous, then she gets back and leg pain. By then she's usually found another pill.

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## Home Induction: the Details

- Time: she will have to go ~24-30 hours without morphine (longer is better)
  - Patient handout from NYU
  - SOWS
- Ancillary Meds:
  - Zofran 4-8mg po TID PRN nausea
  - Prochlorperazine 10mg po TID PRN nausea/vomiting
  - Clonidine 0.1mg po bid-tid PRN agitation (caution hypotension)
  - Hydroxyzine 25-50mg po q bedtime PRN insomnia

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## Home Induction: the Details

- Pharmacy Preparation:
  - Call in or write prescription
  - Make sure medication is covered
    - If managed Medical, bill FFS Medical (carve-out)
    - If Medicare, be prepared to do PA
    - Dx: F11.20 (opioid use disorder); not taking other opioids
- Timing
  - Day patient will induce;
  - Phone call on day 1 after induction +/- day 2
  - Day 3-5: appointment in clinic
    - Check symptoms, dose
    - Urine drug screen, urine buprenorphine

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## Home Induction: the Details

- Dose
  - Day 1: 4-16mg; NTE 16mg
    - Formulations:
      - 2/0.5, 4/1, 8/2, and 12/3mg SL strip
      - 2/0.5, 8/2 SL tab
      - Buccal film NOT FDA approved for induction
    - Schedule 3 medication
    - Pro-tips: no talking for 15min, tweezers, candy
  - Expected dose: 16-24mg daily; may need to split dose
  - Half-life = 36 hours

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## Case

- Patient decides that she will start the medicine on Tuesday since she is off work. She can teach back how she will start the med and how long she needs to wait.
- You call her Tuesday afternoon after her first dose (2/0.5mg film)
  - Feeling “ok,” not really sick, but still having pain
  - You advise an additional 2/0.5mg film & then ask her to take 4mg tomorrow AM or 2/0.5 BID

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## Case

- Day 2 (phone): took 2/0.5mg film this AM and planning to take another film later in the day
- Day 4 (clinic): taking 1-3 of 2/0.5mg films per day. Feeling “better” with less pain and more energy. Denies any morphine use or craving for morphine.
  - Urine drug screen and urine buprenorphine sent
  - Rx for 1 week supply of meds
- Day 11 (clinic): most days only requiring 2 films per day, but after hard day of work, will take 3.
  - Urine drug screen & urine bupe sent
  - Warm handoff to behavioral health
  - Agreement signed
  - F/u in 2 weeks

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## Case 2

- LE is a 56yo M with a history of an opioid use disorder (~25 years), in methadone maintenance stable on a dose of 80mg daily. He has been doing well in program with no further illicit opioid use (previous heroin & opioid pills).
- He is working as a security guard on the night shift and this is making it difficult to get to methadone clinic. He has had some absences because of this and has lost his take-home privileges. He has no active MH conditions. He is housed with his wife.
- He is wondering if you can prescribe him buprenorphine-naloxone. He really wants to stay clean but it's been too difficult to get to clinic. He has had to buy street methadone on the days he misses.
- Exam: normal (no tracks). Labs: UDT + methadone. LFTs normal, hep, HIV neg

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## Question

- Which is the best management plan for this patient?
  - A) **Sign release of information to talk with methadone clinic providers**
  - B) Home induction with buprenorphine-naloxone with patient abstinent of methadone for 48-72 hours before starting
  - C) Taper patient down by 40% prior to induction

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## Methadone versus Buprenorphine-Naloxone for MAT

- Factors to Consider
  - Doing well? Why rock the boat?...
  - Recovery supports
  - Co-morbid substance use (especially etoh and BZDs)
  - Mental health disorder
- Best Practice
  - Sign release of information & talk to methadone clinic counselor and/or provider
    - Absent records, utox results, BA results, functional recovery
  - Taper methadone dose down to ~30mg x1 week prior to induction

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## Case 2

- LE is a 56yo M with a history of an opioid use disorder, in methadone maintenance stable on a dose of 80mg daily. He has been doing well in program with no further illicit opioid use (previous heroin & opioid pills).
- He is working as a security guard on the night shift and this is making it difficult to get to methadone clinic. He has had some absences because of this and **has lost his take-home privileges**. He has no active MH conditions. He is housed with his wife.
- He is wondering if you can prescribe him buprenorphine-naloxone. He really wants to stay clean but it's been too difficult to get to clinic. He has had to **buy street methadone** on the days he misses.
- Exam: normal (no tracks). Labs: UDT + methadone only. LFTs normal, hep, HIV neg

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## Case continued

- Patient signs release of information. You talk to the patient's counselor and learn that the patient has been doing very well.
  - Absent ~2-4 days per month
  - UDT 1/6 with morphine
  - Working with counselor
  - Not going to additional recovery programs (i.e., meetings); wife is source of support
- Patient is frustrated and really “wants to start” the bupe-nal. Says he knows someone who did it and has liked it.

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## Case continued

- You advise the patient that you want him to have the best possible outcome and to maintain his recovery. You advise that he taper with the support of his methadone clinic.
- The patient is frustrated and leaves your office angry.

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## Case continued

- One week later you get call from your patient. He says he only went to methadone clinic once in the past week (80mg, 2 days ago) and is in withdrawal. He's wondering if you will give him buprenorphine-naloxone?

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## Question

- Which of the following is the best management plan?
    - A) **Bring patient in for in-office induction** Always want to support recovery
    - B) Instruct patient to return to methadone clinic
    - C) Refer patient to an acute detox facility Patient's goals v. your goals
- Patient unlikely to have success with detox given long hx of disease

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## Case continued

- Patient comes into clinic. He is having runny nose, watery eyes, agitation, and nasal stuffiness. HR is 90. You calculate his COWS score as 12.
- Patient picks up prescription for buprenorphine-naloxone 8-2mg films and returns to your office.
- You give him a ½ of a film (4mg) → he feels worse after 30 minutes.

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## Precipitated Withdrawal

- Assess
  - Did patient swallow bupe instead of let it dissolve?
  - Did he take another opioid he forget to tell you about?
- Reassure
  - **You warned him of this risk.** There is treatment & he will get through this.
- How to Manage:
  - Stop induction, or
  - Continue induction (typically favored)
    - Give additional 2/0.5mg q 30m – 1hr until patient feeling more comfortable
    - Some patients may require up to 32mg to alleviate withdrawal symptoms (would seek consultation & support)
    - Ancillary agents for symptom control
    - Anticipatory guidance: may not feel \*well\* for several days & may have dysphoria up to 2 weeks

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## Case continued

- Patient continued the buprenorphine and got 16mg on day 1. He took 24mg the next day. By day 5 he was starting to feel better.
- Came to follow-up apt one week later on 24mg daily, splitting his dose. Urine drug screen neg for opioids and other illicits, pos for buprenorphine.
- Still working as security guard. Having mild headache from bupe-naloxone, but happy to not be going to methadone clinic.

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## Summary

- Buprenorphine-naloxone is a highly effective treatment for patients with opioid use disorders.
- Careful attention should be paid to patient selection and education at the outset to ensure success.
- There are various models for induction onto buprenorphine – in-office, specialty clinic, and unobserved “home” induction.
- Home inductions are not associated with an increased risk of precipitated withdrawal or poor retention in treatment.

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## Summary continued

- Successful home induction is dependent on excellent patient education prior to starting.
- For patients wanting to transition from methadone to buprenorphine-naloxone, best practice is to wean dose to 30mg for 1 week and collaborate with methadone clinic during the transition.
- Methadone maintenance programs are highly effective for patients with severe opioid use disorders that require a higher level of addiction treatment, either related to psychiatric, medical, or social instability.
- If you haven't already, start prescribing bupe-naloxone. Best lessons will come from working with patients.
- Help is available:
  - Substance use warm line, UCSF: 1-855-300-3595. 10a-6pm EST
  - PCSS-B mentor: [pscsmat.org/mentoring](http://pscsmat.org/mentoring)
  - Local peers

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## Question

- Which of the following represents an optimal candidate for buprenorphine treatment?
  - A) an HIV positive patient, housed, psychiatrically stable, OUD taking efavirenz-emtricitabine-tenofovir (Atripla) EFV lowers bupe levels
  - B) a new patient to your clinic, homeless, frequently admitted to the hospital due to LE pain, using IV methamphetamine and heroin safe storage, poly-substance use, medical instability
  - C) 56yo M housed, IN heroin to treat pain, sporadic diazepam, prior MMT but led to problems w/his job
  - D) long-term primary care patient of yours with an alcohol and opioid use disorder, current CIWA score of 12 needs detox
  - E) young woman, housed, employed, on 160mg MME for chronic pain with no concerning behaviors no OUD

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<b>Partial List of Medications Metabolized by Cytochrome P450 3A4</b>			
<b>Inhibitors (potentially increasing blood levels of buprenorphine)</b>	<b>Substrates</b>		<b>Inducers (potentially decreasing blood levels of buprenorphine)</b>
Amiodarone Clarithromycin Delavirdine Erythromycin Fluconazole Fluoxetine Fluvoxamine Grapefruit Juice Indinavir Itraconazole Ketoconazole Metronidazole Miconazole Nefazadone Nelfinavir Nicardipine Norfloxacin Omeprozol Paroxetine Ritonavir Saquinavir Sertraline Verapamil Zafirlukast Zileuton	Alprazolam Amlodipine Astemizole Atorvastatin Carbamazepine Cisapride Clindamycin Clonazepam Cyclobenzaprine Cyclosporine Dapsone Delavirdine Dexamethasone Diazepam Diltiazem Disopyramide Doxorubicin Erythromycin Estrogens Etoposide Felodipine Fentanyl Fexofenadine Glyburide Ifosfamide Indinavir Ketoconazole Lansoprazole Lidocaine	Loratadine Losartan Lovastatin Miconazole Midazolam Navelbine Nefazadone Nelfinavir Nicardipine Nifedipine Nimodipine Ondansetron Oral Contraceptives Paclitaxel Prednisone Progestins Quinidine Rifampin Ritonavir R-Warfarin Saquinavir Sertraline Simvastatin Tacrolimus Tamoxifen Verapamil Vinblastine Zileuton	Carbamazepine Dexamethasone Efavirenz Ethosuximide Nevirapine Phenobarbital Phenytoin Primadone Rifampin

For a continuously updated list of cytochrome P450 3A4 drug interactions, visit <http://medicine.lupui.edu/Boekhart/table.htm>

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