UW Medicine / UNIVERSITY of WASHINGTON

# Treatment for Opioid Use Disorder in the era of Fentanyl

November 6, 2025

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# Learning Objectives

- Define OUD
- Fentanyl – why is it a problem?
- Medications for Opioid Use Disorder
- Narcan

# Definition of OUD

- Problematic opioid use causing significant impairment or distress.
- Impaired control
- Social impairment
- Risky use
- Pharmacologic Dependance

# DSM-5 criteria for substance use disorders[1]

## Use patterns

- **More/longer** use than intended
- **Unable** to stop or cut down
- **Excessive time** dealing with substance use
- **Craving**

## Continued use even when

- **Responsibilities** not fulfilled
- **Social** and interpersonal problems
- **Activities** reduced

- **Physical** hazards from use
- **Health problems** patient knows are caused by substance use

## Drug effects (only if not prescribed)

- **Increased tolerance,** requiring more to achieve effect
- **Withdrawal** symptoms if the substance is stopped

## SCORING

***Give 1 point*** *for each domain endorsed by the patient or observed by the clinician.*

**Mild SUD** = 2-3

**Moderate SUD** = 4-5

**Severe SUD** = 6 or more

Diagnosis made when criteria are met for ≥ 6 months.

Center for Innovative Academic Detailing on Opioids and Stimulants at the San Francisco Department of Public Health. Opioids and Stimulants: A Guide for Healthcare Providers. San Francisco, CA. April 2024.

# Fentanyl – Not a Friend

- Over the last decade, **illicitly manufactured fentanyl (IMF)** has overtaken heroin as the primary opioid in opioid use disorder (OUD) in the U.S.
- Primarily **IMF** was involved in nearly 70% of the more than 109,000 drug overdose deaths reported in 2022.
- In King County, the largest county in Washington, fentanyl was involved in 68% of the 1,021 overdose deaths in 2022, with an overall dramatic increase in the last 4 years.

Sources: SAMHSA, CDC, 2023 American Academy of Forensic Sciences

# Fentanyl is Strong

**Potency:** Fentanyl is **50–100x more potent than morphine**, ~30–50x more potent than heroin.
**Affinity:** Fentanyl binds μ-opioid receptors with extremely high affinity → strong & long-lasting receptor occupancy.
**Small doses** can be fatal; variability in street fentanyl concentrations increases risk.

| Opioid (IV) | Equianalgesic Dose to 10 mg IV Morphine | Relative Potency (vs. 10 mg IV Morphine) |
|---|---|---|
| Morphine | 10 mg | 1 |
| Hydromorphone | 1–1.3 mg | 7.7–10 |
| Oxymorphone | ~0.8 mg | ~12.5 |
| Oxycodone | 10 mg | 1 |
| Fentanyl | 0.1 mg (100 mcg) | 100 |
| Nalbuphine | 10 mg | 1 |
| Buprenorphine | 0.3 mg | ~33 |
| Meperidine | 75–100 mg | 0.1–0.13 |

# Fentanyl is Sneaky

- **High Lipophilicity and low molecular weight:** Quick distribution to highly perfused tissue like brain, late redistribution to adipose tissue and skeletal muscles.
- In patients with chronic use of fentanyl, it can be detected in urine for a median of 7 days, and sometimes up to 19 days, after cessation of use.
- This contributes to higher chance of precipitated withdrawal on starting buprenorphine upto 24-72 hours after last use of fentanyl – more on this later.

- **Severe Withdrawal Syndrome:** Research shows fentanyl withdrawal often has a later peak and is more severe and protracted than heroin withdrawal, making it difficult for patients to wait for induction.

*Sources: ASAM, Sharma et al. (2024)*

# MOUD (Medications for OUD)

- Methadone
- Buprenorphine Sublingual (Suboxone, Subutex, Zubsolv)
- Short-Acting Opioids (SAOs) (For bridging in addition and/or pain management)
- Long-Acting Injectable (LAI) Buprenorphine (Sublocade, Brixadi)
- Naltrexone IM

# Medications for OUD **Work**

- MOUD reduces illicit opioid use, promote retention in treatment, and decreases both fatal and nonfatal overdose rates
- Methadone and buprenorphine most effective for long-term outcomes.
- Naltrexone suitable for specific populations.
- Barriers include stigma and limited access.

Sources: JAMA Psychiatry 2019, NEJM 2019

# Why Methadone And Buprenorphine?

Why not heroin, fentanyl or other opioids?

# Long Acting

Once a day dosing

# Methadone

- Full agonist opioid with a long half-life
- Acts on mu-opioid receptors
- Treats withdrawal symptoms and opioid cravings
- Improves retention in treatment and social functioning
- Research supports reduced risk of overdose during maintenance treatment

Source: NEJM 2016

# Methadone

- In the US: dispensed at Methadone clinics (OTP)
- Prescribing Methadone for OUD to pickup in the pharmacy is not allowed, it can be prescribed for pain management however current utilization of this is little
- Titration: Start low, gradually increase to therapeutic levels.
- Fast titrations are being utilized in the hospital settings given the strength of fentanyl

# Methadone – New Start

Traditional outpatient initiation: 30mg + 10mg PRN Day 1; increase by 5-10mg every ~5 days to goal 60-120mg.

- Based on outpatient studies from the heroin era
- Takes >7 days to reach therapeutic doses

Emerging Evidence:

1. **Klaire, et al. (2023)**: n=168, ~40mg D1, ~50mg D2, ~60mg D5; 2 safety events, possibly from other drug use
2. **Casey, et al. (2023)**: n=112, ~30mg initial dose (range 10-90mg), mean max ~80mg in mean ~6 days; 4 safety events related to methadone
3. **Racha, et al. (2023)**: n=25, 30mg D1, 40mg D2, 50mg D3, 60mg D4. No adverse events in-hospital or 30d after
4. **Liu, et al. (2024)**: n=25, D1 ~50mg, D2 ~70mg, D3 ~75mg…D7 ~100mg; no adverse events
5. **Steiger, et al. (2024)**: outpatient n=93, D1 40mg, D2 60mg, D3-5 80mg; 70% completed; no sedation, nonfatal OD or death; 85% retention at 30d

Adapted from - Fentanyl Withdrawal: Buprenorphine, Methadone, and Short-Acting Opioids

UW SURE Unit | Ashish Thakrar apthakrar@pennmedicine.upenn.edu

# Methadone – Rapid Titration

JAMA Internal Medicine | Review

Caring for Hospitalized Adults With Opioid Use Disorder in the Era of Fentanyl
A Review

- Administer an initial dose of 30mg followed by 10mg q4-6 hours for ongoing withdrawal (up to 40-60mg D1-3)
- Re-assess between doses for ongoing withdrawal and sedation
- Pair with clonidine, non-opioid adjuvants, and short-acting opioids as necessary

Balance: control withdrawal on Days 1-3 & avoid (unmonitored) toxicity from dose-stacking

Englander, et al. *JAMA IM* (2024)

Adapted from: Fentanyl Withdrawal: Buprenorphine, Methadone, and Short-Acting Opioids

UW SURE Unit | Ashish Thakrar apthakrar@pennmedicine.upenn.edu

# Methadone – Our approach

- Start at 40mg day 1 with 10mg BID prn available for withdrawal (based on patient report and not COWS score), can hold for respiratory depression
- Increase the next morning dose to include all the prns received the day prior
- Give additional 20mg dose next day for symptoms of withdrawal and continue 10mg BID prn available

  - Fent (compared to non-fent) withdrawal: Sharma et al, *J Add Med* (2024)
    - Day 1: Similar peak
    - Days 2-3: More severe, with peak COWS ~3-4 points higher
    - Days 5-7+: Peak COWS still elevated around ~5

# Methadone – Continuing Inpatient

- Continue methadone without interruption
- Confirm dose with OTP – pharmacy can do this , some OTPs have 24hr lines just for dose confirmations

| Days Missed | Recommended Restart Dose | Key Considerations |
|---|---|---|
| **1–2 days** | **Resume previous dose if no signs of sedation or intoxication** | Assess for withdrawal or oversedation; monitor closely; consider interim opioid use |
| **3 days** | **Consider reducing dose by 25–30% and titrate based on clinical assessment** | Monitor for sedation and withdrawal; assess interim opioid use; individualized approach may be warranted |
| **4 days** | **Reduce dose by 30–50% or use individualized assessment (consider interim opioid use/tolerance)** | Patient-centered protocols may allow higher restart doses if tolerance is maintained; close monitoring required |
| **5 days** | **Treat as potentially opioid-naïve; restart at initial induction dose (20–30 mg, max 40 mg first day), can titrate up rapidly** | High risk of loss of tolerance; monitor for sedation/overdose; titrate per standard induction protocol |

Christine, P. J., Blum, J., Tillman, A. R., et al. (2025). Evaluation of a novel patient-centered methadone restart protocol. *JAMA Network Open*, *8*(8), e2529393.

# Methadone: 72-hour Rule and Legal Updates

- Non-OTP providers can prescribe 3 days worth of methadone carries to bridge to an intake at an OTP
- Primarily Utilized in the ER or discharge from hospital
- Changes were made to the take home doses during COVID, however recent changes in rules allow easier escalation to more take home doses
- Split dosing has been made more accessible

# Methadone – Continuing Outpatient

- CCN can help make an intake appointment with Methadone clinic(OTP) prior to discharge
- Recent DEA exceptions now allow dispensing up to a **3-day take home supply at discharge** to bridge to intake appointment at an OTP
- Methadone can be continued at the discharge dose if patient is able to connect with OTP within 3 days of discharge

Bowman LA, Berger O, Nesbit S, Stoller KB, Buresh M, Stewart R. Operationalizing the new DEA exception: A novel process for dispensing of methadone for opioid use disorder at discharge from acute care settings. Am J Health Syst Pharm. 2024 Mar 7;81(6):204-218. doi: 10.1093/ajhp/zxad288. PMID: 38091380.

# Buprenorphine

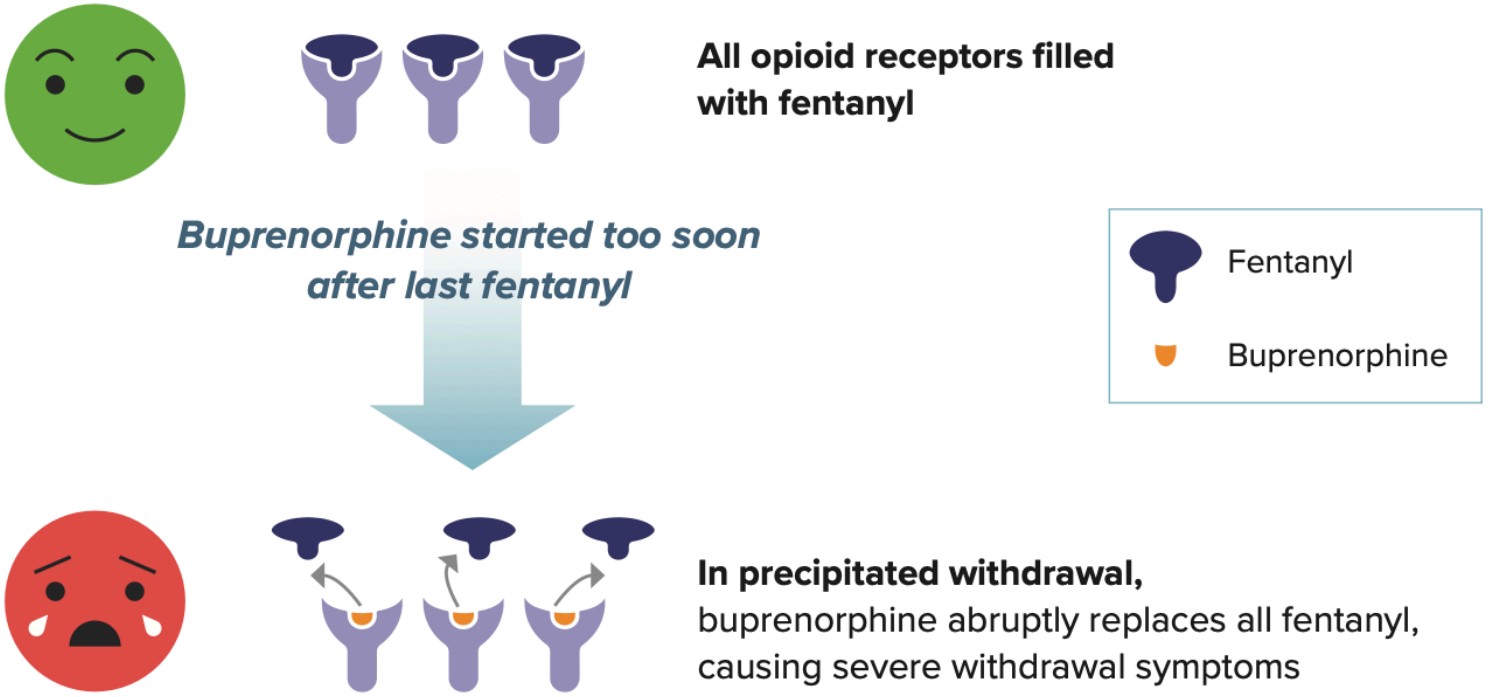
- Partial agonist at mu-opioid receptors, antagonist at kappa receptors
- Long acting
- Safer to prescribe outpatient
- Lower overdose risk compared to full agonists
- No Waiver requirement for physicians (removed in 2023)

# Buprenorphine: Formulations

- Buprenorphine +Naloxone s/l tabs and films (Suboxone, Zubsolv)
- Buprenorphine mono product s/l tabs and films (Subutex)

- Long Acting Injectables (Sublocade, Brixadi)

# Precipitated Withdrawal






Center for Innovative Academic Detailing on Opioids and Stimulants at the San Francisco Department of Public Health. Opioids and Stimulants: A Guide for Healthcare Providers. San Francisco, CA. April 2024.

# Buprenorphine: Misconceptions about Naloxone

- Naloxone in Suboxone prevents misuse via injection.
- Does not cause withdrawal when used as prescribed.
- Enhances safety without reducing treatment efficacy.

# Bupe – New Start

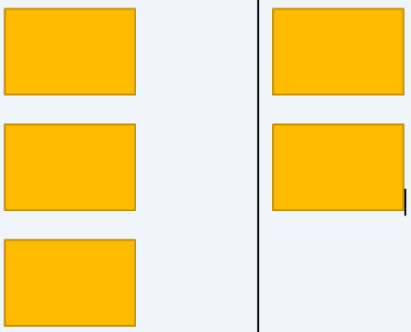
- Low-dose start (Up titrate over 7 days)
- High-dose start

  - 24-48 hrs after Fentanyl Use. >= 2 withdrawal signs

| | Microdosing | | Traditional | Macrodosing |
|---|---|---|---|---|
| | Difficulty tolerating withdrawal<br>Stop drug of choice more slowly | | | Able to tolerate withdrawal<br>Stop drug of choice quickly |
| **Protocol** | **7 day:**<br>Day 1: 0.5 mg once<br>Day 2: 0.5 mg BID<br>Day 3: 1 mg QAM, 0.5 mg Q noon, 1 mg QHS<br>Day 4: 2 mg BID<br>Day 5: 3 mg BID<br>Day 6: 4 mg BID<br>Day 7: Option to do 4 or 8 mg tab or films Q 1-4 hrs NTE 32 mg/day | **4 day:**<br>Day 1: 0.5 mg QID<br>Day 2: 1 mg QID<br>Day 3: 2 mg QID<br>Day 4: Option to do 4 or 8 mg tab or films Q 1-4 hrs NTE 32 mg/day | In withdrawal with ≥ 2 signs, take 4 mg SL, then 4 mg Q 1-2 hrs PRN withdrawal NTE final dose after 2-3 days of 32 mg/day | **Day 1:** 16 mg SL PRN withdrawal with ≥ 2 signs, then 8 mg Q 1-2 hours PRN withdrawal symptoms NTE 32 mg<br>**Days 2-7:** 8 mg TID (in some scenarios may be up to 32 mg/day) |
| **What to do if it goes wrong** | If withdrawal during overlap period, use other opioid and ancillary meds. | | If worsening withdrawal after 1st dose, take additional 16 mg SL ASAP or other opioid. | If worse withdrawal after 1st dose, take an additional 16 mg SL ASAP or other opioid. |
| **Notes** | 4 day protocol requires Q 6 hr dosing; adherence can be difficult.<br>Bubble packing can assist with adherence (best to use SL tablets for ease of dividing pills but films can also work). | | Works well with heroin. For fentanyl, due to lipophilicity, moderate-to-severe withdrawal (12 to 48 hours) may be needed to avoid precipitated withdrawal. Use ancillary meds for comfort. | Moderate-to-severe withdrawal (12 to 48 hours) may be needed to avoid precipitated withdrawal. Use ancillary meds for comfort. Avoid other street drugs. |

# Bupe – High Dose start

| Day 0 | Day 1 | Day 2 | Days 3-7 |
|---|---|---|---|
| -Stop all opioids<br><br>-**Wait** for 2 or more withdrawal symptoms (this may take 24-48 hours)<br><br>-Take comfort medications as needed<br><br>-Get rest and stay hydrated | -Take one film (8/2mg) under the tongue. Wait 1-2 hours and then take another film.<br><br>-May repeat up to a total of 4 films (32/8mg) on Day 1 | -Take one film (8/2mg) under the tongue. Wait 1-2 hours and then take another film.<br><br>-May repeat up to a total of 3 films (24/6mg) on Day 2 | -Take two films (16/4mg) under the tongue daily. |





JAMA Network | Open

Special Communication | Substance Use and Addiction

**High-Dose Buprenorphine Treatment in the Setting of Fentanyl**

Judith I. Tsui, MD, MPH; Elenore P. Bhatraju, MD, MPH; Kevin A. Hallgren, PhD; Isaac C. Rhew, PhD, MPH; Jeffrey H. Samet, MD, MA, MPH

# Bupe – Inpatient

- Continue at the current dose if taken within the last 24-48hrs
- Low dose start over 3, 5 or 7 days
- High dose start if last fentanyl use 24-48hrs ago and patient with >= 2 withdrawal signs

# Bupe – Low Dose Start Orderset

▼ Medications

▼ Buprenorphine-Naloxone

Guidelines:

1. All patients with active untreated opioid use disorder should be assessed early in their hospital stay for interest in outpatient treatment with buprenorphine or methadone.
2. For interested patients, discuss options with discharge planning team as soon as possible.
3. Usual initial dose of buprenorphine-naloxone is 0.5 mg of buprenorphine.
4. The buprenorphine-naloxone dose will increase each day over 3,5 or 7 days until the patient is on a therapeutic dose (16 mg of buprenorphine or higher)
5. Continue full opioid agonists through day 3,5 or 7 of the initiation process; they can be discontinued or tapered depending on the clinical scenario.
6. Consider increasing buprenorphine-naloxone further after day 3,5 or 7 for ongoing withdrawal symptoms or cravings, or for uncontrolled pain.

**Modify the start date/time on the buprenorphine-naloxone order as needed (all will be pre-checked)**

- ○ 7-day Low Dose Induction Titration
- ○ 5-Day Low Dose Induction Titration
- ○ 3-Day Low Dose Induction Titration

# Bupe – 7 day low dose start

7-day Low Dose Induction Titration

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.25 film
0.25 film, Sublingual, Daily, First dose today at 0900, For 1 dose
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

Followed By

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.25 film
0.25 film, Sublingual, 2 times daily, First dose tomorrow at 0900, For 2 doses
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

Followed By

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.5 film
0.5 film, Sublingual, 2 times daily, First dose on Sun 10/5 at 0900, For 2 doses
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

Followed By

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL tablet 1 tablet
1 tablet, Sublingual, 2 times daily, First dose on Mon 10/6 at 0900, For 2 doses
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

Followed By

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL tablet 2 tablet
2 tablet, Sublingual, 2 times daily, First dose on Tue 10/7 at 0900, For 2 doses
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

Followed By

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL tablet 3 tablet
3 tablet, Sublingual, 2 times daily, First dose on Wed 10/8 at 0900, For 2 doses
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

Followed By

buprenorphine-naloxone (Suboxone) 8-2 MG per SL tablet 1 tablet
1 tablet, Sublingual, 2 times daily, First dose on Thu 10/9 at 0900
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

# Bupe – 5 day low dose start

5-Day Low Dose Induction Titration

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.25 film
0.25 film, Sublingual, Every 8 hours, First dose today at 0721, For 24 hours
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

**Followed By**

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.25 film
0.25 film, Sublingual, Every 4 hours, First dose tomorrow at 0721, For 24 hours
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

**Followed By**

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.5 film
0.5 film, Sublingual, Every 4 hours, First dose on Sun 10/5 at 0721, For 24 hours
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

**Followed By**

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL tablet 1 tablet
1 tablet, Sublingual, Every 4 hours, First dose on Mon 10/6 at 0721, For 24 hours
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

**Followed By**

buprenorphine-naloxone (Suboxone) 8-2 MG per SL tablet 1 tablet
1 tablet, Sublingual, 2 times daily, First dose on Tue 10/7 at 0900
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

# Bupe – 3 day low dose start

3-Day Low Dose Induction Titration

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.25 film
0.25 film, Sublingual, Every 3 hours, First dose today at 0721, For 24 hours
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

**Followed By**

buprenorphine-naloxone (Suboxone) 2-0.5 MG per SL film 0.5 film
0.5 film, Sublingual, Every 3 hours, First dose tomorrow at 0721, For 24 hours
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Do NOT chew, or swallow the film.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

**Followed By**

buprenorphine-naloxone (Suboxone) 8-2 MG per SL tablet 1 tablet
1 tablet, Sublingual, 2 times daily, First dose on Sun 10/5 at 0900
Patients should not eat, drink, or take other oral medications for 30 minutes to allow medication to dissolve. After 30 minutes, swish and swallow with a small sip of water.
Is this medication being used for opioid use disorder? Yes
Did you verify dose with clinic (opioid treatment program)? N/A

# Adjunct Medication for Withdrawal

**Supportive Medications (HMC/UWMC-ML)**

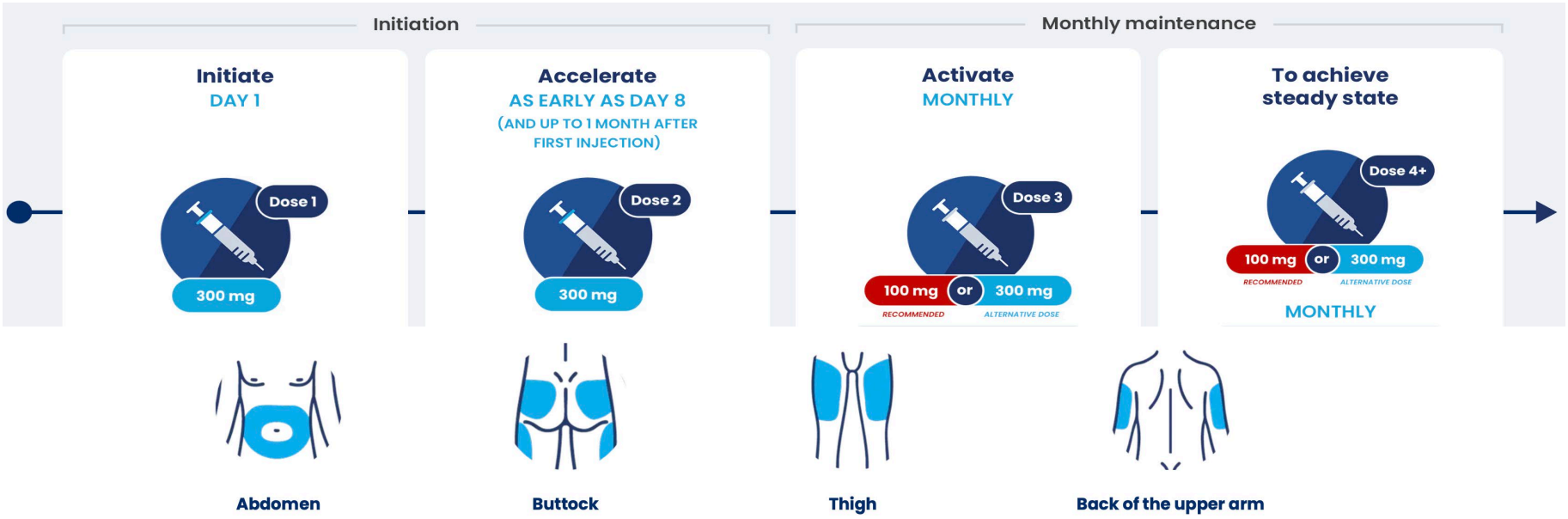
- ☐ cloNIDine (Catapres) tablet
  0.1 mg, Oral, Every 2 hours PRN, other, for anxiety, restlessness, insomnia, opioid withdrawal., Hold if BP < 110/60 or excessive sedation or orthostatic dizziness. Not to exceed 1.2 mg in the first 24 hours, 2 mg per 24 hours thereafter.
- ☐ gabapentin (Neurontin) capsule/tablet (AVOID USE IN OB PATIENTS)
  300 mg, Oral, Every 8 hours PRN, other, for insomnia, anxiety, restlessness, AVOID USE IN OB PATIENTS
- ☐ hydrOXYzine HCl (Atarax) tablet
  25-50 mg, Oral, Every 6 hours PRN, other, for anxiety, insomnia, restlessness
- ☐ loperamide (Imodium) capsule
  2 mg, Oral, Every 6 hours PRN, diarrhea
- ☐ melatonin tablet
  3 mg, Nightly PRN, sleep
- ☐ methocarbamol (Robaxin) tablet (AVOID USE IN OB PATIENTS)
  500 mg, Oral, Every 6 hours PRN, other, for muscle spasm, myalgia, AVOID USE IN OB PATIENTS
- ☐ ondansetron (Zofran) IV
  4 mg, Intravenous, Every 8 hours PRN, nausea/vomiting
- ☐ acetaminophen (Tylenol) tablet
  650 mg, Oral, Every 6 hours PRN, mild pain, moderate pain
- ☐ ibuprofen (Motrin) tablet (AVOID USE IN OB PATIENTS)
  600 mg, Oral, Every 6 hours PRN, mild pain, moderate pain, AVOID USE IN OB PATIENTS

# Bupe – Oupatient Continuation

- Continue with their PCP if they have one and PCP is willing to prescribe – no waiver needed
- Connect with Bupe clinic close to home

# LAI Buprenorphine - Sublocade

- Long-acting buprenorphine, injected subcutaneously monthly primarily in the abdomen, other sites now possible
- For patients already on Suboxone, at least 8mg daily
- Requires refrigeration however it can be stored at room temperature for 12 weeks




Injection sites should be rotated each month.

# LAI Buprenorphine - Brixadi

Long-acting buprenorphine, injected subcutaneously, lower volume, can be injected in buttock, thigh, abdomen and upper arm

Available in Weekly or Monthly dosing as follows:

| Daily Sublingual Buprenorphine Dose* | BRIXADI Weekly | BRIXADI Monthly |
|---|---|---|
| ≤6 mg | 8 mg | - |
| 8-10 mg | 16 mg | 64 mg |
| 12-16 mg | 24 mg | 96 mg |
| 18-24 mg | 32 mg | 128 mg |

Brixadihcp.com

# New Protocol to start LAI Buprenorphine

- Injectable-only low-dose crossover:
- - Day 1: Brixadi 8mg (no sublingual bup lead-in)
- - Day 2: Brixadi 16mg
- - Day 3: Sublocade 300mg
- Support Meds:
- - Clonidine, Hydroxyzine, Ondansetron
- - Supplemental SL bup: 8mg films (up to 32mg/day prn) after Sublocade
- - Supplemental Sublocade: 100mg at 2 weeks if needed & if struggling with films
- No monitoring after injection
- No withdrawal period
- - Start patients at COWS 0
- - Assumed that patients will continue using fentanyl during the transition

Formed by Dr Richard Waters

# LAI Buprenorphine

- Follow up in 1 week for possible booster
- Please give sublingual Bupe atleast 8mg TID, 1 week supply until their next clinic appointment as LAI Bupe can take time to get to therapeutic levels

# Short acting opioids (SAOs) for withdrawal/craving

- **Rationale:**
  1. Patient desires buprenorphine, but high concern for precipitated withdrawal (SAOs to bridge to standard/high-dose induction, or SAOs as part of LDI)
  2. Refractory opioid withdrawal despite highest methadone considered safe
  3. Patient declines buprenorphine & methadone for withdrawal and needs hospitalization
- **Concerns:**
  - Legal? Yes, as incidental adjunct to med/surg hospitalization (21 CFR 1306.07)
  - Missed opportunity for MOUD? Nuanced, depends on implementation
  - Permission for generalists/hospitals to navigate MOUD? An emerging concern for me…

Point/counterpoint: Should full agonist opioid medications be offered to hospitalized patients for management of opioid withdrawal?

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Safety and preliminary outcomes of short-acting opioid agonist treatment (sOAT) for hospitalized patients with opioid use disorder

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Conclusions:

- Can be done safely
- Did not grossly reduce MOUD initiation, might have increased
- Might help reduce PDDs

Adapted from - Fentanyl Withdrawal: Buprenorphine, Methadone, and Short-Acting Opioids

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Kleinman & Wakeman, *Annals of IM* (2021)
Thakrar, *JAMA IM* (2022)
Stern et al, *J Hosp Med* (2023)
Kleinman & Thakrar, *CMAJ* (2023)

# Naltrexone (Vivitrol)

- Opioid antagonist blocking opioid effects.
- Requires opioid abstinence of 7 days before initiation. This is the biggest barrier to starting Vivitrol for OUD
- Can be started inpatient for OUD
- Once started it has similar efficacy to Methadone and Buprenorphine

# Naloxone (Narcan)

- Naloxone reverses opioid overdoses
- Very short acting
- Available as intranasal spray or IM.

LINK TO FREE NARCAN
(NALOXONE)
phra.org/naloxone
Discreetly delivered to your home.
And more information about how to use
the life saving drug NARCAN.
OPEN YOUR CAMERA
AIM IT AT THE QR CODE
TAP THE BANNER
For more Community resources go to
extremelyhuman.org

# Emerging Treatments for OUD : Under Investigation

- Neuromodulation techniques (e.g., TMS, tDCS, DBS).
- Psychedelics (e.g., LSD, Ketamine, ibogaine, psilocybin).
- Vaccines targeting opioid molecules.

Looking beyond the opioid receptor: A desperate need for new treatments
for opioid use disorder
Yu Kyung Lee, Mark S. Gold, Brian S. Fuehrlein

# Innovative Interventions

- Provide stigma-free, flexible access to care
- Focus on harm reduction and patient empowerment.
- Effective in reaching underserved populations.

- Low barrier buprenorphine clinics
- Wide access to Naloxone
- Telemedicine

# Stigmatizing Language

| | ✗ Avoid this language | ✔ Say this instead |
|---|---|---|
| **Person-first language** | Drug user, drug abuser | Person who uses drugs |
| | Addict | Person with a substance use disorder |
| | Drug addicted baby | Infant born with neonatal opioid withdrawal syndrome, infant exposed to substances prenatally |
| **Medically-accurate terminology** | Your urine test was dirty/clean | Your urine test was positive/negative for __ substance |
| | The patient got clean | The patient is not currently using substances |
| **Shared decision-making** | You need to stop using drugs | How do you feel about your relationship with drugs? |
| | You relapsed, you need to see an addiction specialist | Return to use is very common and I am here to support you |
| **Strengths-based language:** Set realistic expectations and focus on strengths rather than deficits | This treatment isn't working for you, you're still using fentanyl | It's amazing that you've reduced your fentanyl use from 10 times a day to once a day |
| | The patient is rude and demanding | The patient is worried about their needs not being met |
| | The patient is noncompliant | The patient is facing barriers to adherence |



Center for Innovative Academic Detailing on Opioids and Stimulants at the San Francisco Department of Public Health. Opioids and Stimulants: A Guide for Healthcare Providers. San Francisco, CA. April 2024.

# Concluding Insights on OUD Treatment

Fentanyl is a major problem
Medications for Opioid use work
New Techniques have been helpful

# Thank you!

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