Initial Management of Withdrawal and Pain in Hospitalized Patients with Opioid Use Disorder (OUD) Using Fentanyl

- *Patients using >3 bags of fentanyl daily: use this approach with these doses, even if patient received higher doses during a recent hospitalization.*
- *Patients using ≤2 bags fentanyl or who have critical illness, older age, frailty, or significant renal/hepatic impairment: reduce doses by 50%.*

Please reach out for expert guidance:
PPMC: *Addiction Consult Team*, *Psych CL*
HUP: *Psych CL, MEND*, *Pain Pharmacy HUP*
HUP OB: *Penn Family Medicine*
PAH: *Psych CL*

1. Assess & Diagnose OUD

- Diagnose OUD using DSM-5 criteria & document current substance use: drugs, quantity, route, & amount
- Ask patient about goals and history of treatment: medications, psychosocial, residential, or other
- Obtain urine drug test when feasible; do not wait for results to initiate treatment

2. Stabilize & Engage

Many patients have overlapping withdrawal and pain. Partner with patients to develop a supportive regimen that aligns patient goals for comfort with our responsibility to provide a safe environment.

Continue outpatient OUD treatment: if stable on methadone/buprenorphine, confirm dose (PDMP for buprenorphine, call opioid treatment program for methadone) and continue home dose if no interruptions have occurred in treatment

Start a long-acting opioid (methadone or buprenorphine preferred) while hospitalized

Patient interested in methadone on discharge → Start methadone, then increase daily to 60mg/day if no discharge barriers
Patient interested in buprenorphine on discharge → Start buprenorphine, use traditional or low-dose initiation
Patient undecided about methadone/buprenorphine on discharge → Use methadone (or oxycodone ER) while deciding
Patient declines methadone/buprenorphine on discharge → Use methadone (or oxycodone ER) while hospitalized

- **Methadone**: 30mg AM + 10mg PM daily PO, can order without Psych consult. If patient declines or is undecided about methadone on discharge, use shared decision-making to either continue 30+10mg daily or increase daily to 60mg/day (per "New methadone maintenance" below). If refractory vomiting, use IV with 50% dose reduction.
- **Buprenorphine**: traditional induction as monotherapy for withdrawal or low-dose induction with overlapping opioids
- **Oxycodone ER (limited evidence)**: if methadone & buprenorphine contra-indicated, use oxycodone ER 40-60mg q8h

Treat withdrawal

(1) Use non-opioid adjuvants for opioid and possible xylazine withdrawal: consider scheduled clonidine & other medications PRN or scheduled per *Opioid Withdrawal Order-Set* and *Xylazine Withdrawal Guidelines.*

(2) Consider oral short-acting opioids for withdrawal as a supplement to long-acting opioids

- Set expectations: goal is to treat withdrawal/pain without excess sedation; administered medications may not achieve the same effect as drug use; short-acting opioids will not be continued for withdrawal on discharge.
- Dosing: oxycodone IR 20mg (or hydromorphone 8mg) q4h scheduled, hold for sedation. Can increase oxycodone IR by 10mg (4mg for hydromorphone) q4h during the first 24 hours until COWS <6.
- Timing: goal is to cross-taper short-acting opioids with a long-acting opioid (methadone/buprenorphine preferred) within ~72h. Longer periods might be necessary for acute pain or craving, based on expert guidance.

Treat acute pain

(1) Use non-opioids: scheduled acetaminophen, NSAIDs (ketorolac or ibuprofen), topicals, and ice/heat. Consider ketamine – see formulary for PO (on general units at HUP only) or IV (in ICU), requires specialist approval

(2) Consider opioids for analgesia: patients with OUD have high tolerance and require higher opioid doses for analgesia.

- Oral short-acting opioids: Use doses per opioid withdrawal dosing guidance above.
- IV opioids and PCAs: Use IV formulations and/or PCA for the same indications as you would in patients without OUD (eg. post-op, NPO). Typical PCA starting dose for patients using fentanyl: hydromorphone 2mg load; 0.5mg basal, 0.5mg demand q15 min, no lockout. Can escalate demand by 0.5mg up to 2mg. Beyond this, seek expert guidance.
- Offer to split methadone/buprenorphine into 3-4x daily doses for increased analgesic effect.

3. Transition to Maintenance OUD Treatment & Plan for Discharge

Encourage all patients to transition to methadone/buprenorphine. Counsel about benefits, risks, and requirements (eg., daily visits to OTP for methadone). Consider clinical trajectory and discharge planning (eg., see below for DC to SNF).

- **New methadone maintenance**: See *Methadone Induction Pathway.* Increase AM methadone by 10mg/day up to 60mg total daily dose while reducing short-acting opioids by ~10-25%/day. Seek expert guidance beyond 60mg/day.
- **New buprenorphine maintenance**: See *Buprenorphine Induction Pathway.* Can use traditional or low-dose induction.
- **Declined methadone/buprenorphine**: Either (1) abruptly stop opioids on discharge (preferred because tapering reduces tolerance and increases risk of post-hospitalization overdose) or (2) taper opioids by 25% every 1-3 days.

- **Narcan**: On admission, order take-home Narcan nasal spray and have MyPennPharmacy deliver to patient
- **DC to home or community**: Set up linkage to OUD care (bridge prescription & appointment for buprenorphine; next-day OTP intake for methadone). In general, short-acting opioids should not be prescribed on discharge.
- **DC to SNF/rehab**: New methadone starts may not be compatible with discharge to SNF. Ask for expert guidance.