Review MAT pathway for methadone vs buprenorphine use by clicking here

Opioid Use Disorder: Medication Assisted Treatment
Penn Medicine Formulary:
Methadone for Medication Assisted Therapy in the Hospital

Obtain pregnancy testing

Does the patient have any of the following contraindications to buprenorphine/naloxone?

- Receiving methadone maintenance
- Lethargy or somnolence
- GI obstruction or ileus
- Allergy to buprenorphine
- Pregnancy - buprenorphine WITHOUT naloxone should be utilized instead

Ensure the patient does not have activated opioid receptors. This can precipitate withdrawal with buprenorphine administration.

Confirm time since last opioid use

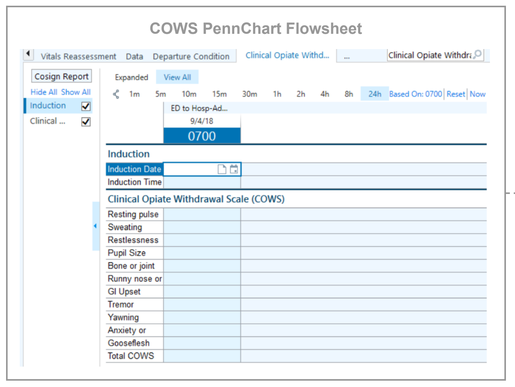
- IV fentanyl/heroin: >18 hours
- Short-acting oral opioids (morphine IR, oxycodone IR): >12 hours
- Extended release opioids (Morphine ER, Oxycodone ER): >24 hours
- Methadone: >72 hr

IR=immediate release
ER=extended release

Neither psychiatry consultation nor X-waiver required to order and administer buprenorphine in any hospital setting

During waiting period, begin discharge planning

- [HUP/PPMC/PAH only] Contact Certified Recovery Specialist - who can help in all aspects of patient engagement in possible treatment - CORE 267-809-5080
- Identify X-waivered provider to provide bridge script until outpatient follow-up (see final step)



Check for withdrawal using COWS score

COWS Score for Opiate Withdrawal
(available under PennChart flowsheets)

Dilated pupils and piloerection are objective signs of opioid withdrawal and more reliable than restlessness, nausea, myalgias

COWS <8

Reassess patient's symptoms and COWS score in 2 hr

Recurrence of patient reported withdrawal symptoms should prompt COWS re-scoring

COWS 8-11

Buprenorphine (Belbuca) 450 mcg SL film x1

Repeat COWS assessment 1 hr after initial dose

Improved COWS score

COWS ≥12

Dilated pupils -or- diaphoresis -or- vomiting? Precipitated withdrawal (PW) risk?

YES PW risk

NO PW risk

Precipitated withdrawal risk (e.g. recent fentanyl or methadone use)

- buprenorphine/naloxone **2/0.5** mg SL film X 1
  -OR-
  buprenorphine (Belbuca) 450 mcg SL film x1
  - This lower initial dose of buprenorphine is recommended to mitigate against risk of precipitated withdrawal
- For complicated cases
  - Dr. Jeanmarie Perrone
    Director, Penn Medicine Center for Addiction Medicine and Policy
    610-247-8998
  - Opioid Assistance Resource Line 267-426-5900

Buprenorphine microdosing protocol (see attachments)

1. Patients requesting buprenorphine treatment for OUD who have had a history of illicit opioid use (fentanyl) - UDS confirmation not necessary
-AND-
Who wish to avoid the need for moderate withdrawal symptoms prior to induction with higher doses of buprenorphine.
-OR-
2. On full opioid agonist for treatment of pain but also with OUD, as means to initiate buprenorphine for treatment of OUD while cross tapering full agonist therapy for pain control.

Initial dose buprenorphine/naloxone 8/2 mg sublingual (SL) film X1

Patient information for administration of buprenorphine/naloxone film

- Allow buprenorphine sublingual film to completely dissolve (5-10min)
- Not to swallow any saliva during for 5-10 min following during administration
- No eating or drinking 15 min before or after administering the film

Repeat COWS assessment 1 hr after initial dose in patients at risk for PW

Improved COWS score

Buprenorphine/naloxone 2/0.5 mg now and Q2h x 4 doses

Worsened COWS score

Buprenorphine/naloxone 2/0.5 mg next in 6 hours and Q6h x4 doses

Adjunct management for PW

- Treat nausea and vomiting with ondansetron (4-8 mg)
  - gaining IV access is helpful for more rapid titration
- For moderate to severe agitation, give 2 mg lorazepam IV or IM
- Other adjuncts: clonidine 0.1-0.2 mg oral (if BP >100 systolic), loperamide 2mg orally, diphenhydramine 25mg IV
- For refractory symptoms of PW: if able to tolerate orally, give 16mg buprenorphine (two 8mg strips simultaneously)
  - give buprenorphine only (without naloxone)

Reassess 30-45 min following previous dose

- Use patient's reported subjective symptoms, **repeat COWS assessment not required**
- Re-dosing may occur earlier if patient reports symptoms outside of set time intervals described in pathway

Improved but still with withdrawal symptoms

Next dose buprenorphine/naloxone 4/1 or 8/2 mg SL film X 1

Symptoms resolved

Patient reports recurrent symptoms

- May repeat 4 mg doses every 2 hours for **typical 16-18 mg total daily cumulative dose**
- Higher total doses (up to 24 mg) may be needed for ongoing symptoms of opioid withdrawal
- Utilize adjunctive medications for opioid withdrawal

Initial scheduled AM dose on day 2 = Total cumulative dose administered day 1

- This dose should **NOT** be based on ongoing withdrawal symptoms on day 2
- Dose should be ordered in multiples of 4/1 mg films for ease of dispensing (e.g. day 1 cumulative dose 18 mg → 16 mg on day 2 for maintenance)

During waiting period, begin discharge planning

- [HUP/PPMC/PAH only] Contact certified recovery specialist (CRS) at 267-809-5080 who can help in all aspects of patient engagement in possible treatment
- Identify X-waivered provider to provide bridge script until outpatient follow-up (see final step)

Do you have a DEA number -AND- an X-waiver?

NO, Do not have DEA license -OR- Do not have an X-waiver

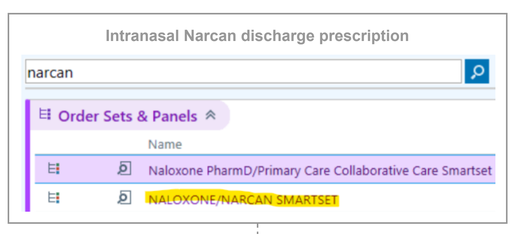
YES, Possess BOTH DEA license -AND- Possess an X-waiver

Bridge to outpatient treatment

- Consult X-waivered physician (ideally inpatient service attending) to e-prescribe bridging prescription - see attachments tab for list
- Remind patient that if a gap in transition of care occurs, they can return to ED for withdrawal management

Bridge to outpatient treatment

- E-prescribe buprenorphine/naloxone prescription sufficient until follow-up at local clinic - double click link for instructions
- Co-prescribe intranasal naloxone (Narcan) at discharge
- Instruct patient to return to ED if withdrawal recurs before patient follows-up



Support for this PennPathway was provided by the Penn Medicine Center for Evidence-based Practice

CENTER for EVIDENCE-BASED PRACTICE

Contact Nikhil Mull, MD or Emilia Flores, PhD, RN for more information on our PennPathways program.