Rapid low dose buprenorphine initiation in a detox setting
Cross-Tapering with methadone and buprenorphine

Background: Buprenorphine is a mu opioid receptor partial agonist that is indicated for pain management and the treatment of opioid use disorder (OUD). Traditional induction for patients with OUD requires a patient to experience opioid withdrawal (measured via COWS scores) prior to buprenorphine initiation. This is necessary in order to prevent the experience of precipitated withdrawal due to the partial agonist effects displacing the full opioid agonist when using traditional (4-8mg) doses of buprenorphine . Micro-dosing of buprenorphine uses the buprenorphine buccal films (Belbuca®), which are dosed in micrograms, allowing for the induction of buprenorphine without the need to first experience withdrawal or the risk of precipitated withdrawal since the lower doses do not displace the full agonist opioid with the same intensity as the 10-20x higher doses usually initiated.

When starting with the lower dose approach in the detox setting, dosing can be repeated q 2-6 hours and can be gradually increased over 3-4 days to achieve full maintenance dosing while maintaining the methadone at 30mg. Case reports and case series support this approach in hospital as well as outpatient settings, and we have successfully completed buprenorphine induction using this approach in several patients in our health system and is supported by published literature (see references at end)

Intent: For use as an alternative to standard or higher-dose buprenorphine induction strategies in patients admitted for detoxification “detox” or medically managed withdrawal. In order to bridge patients safely to buprenorphine during a rapid inpatient admission with the goals of discharging on MOUD (buprenorphine).
The literature supports the use of MOUD (buprenorphine) rather than an abstinence based treatment with methadone tapering to no medications at discharge.
Intended Patient Population: Detox or rehab setting

1. Patients requesting buprenorphine treatment for OUD who have had a history of opioid use (fentanyl) disorder -
AND
Who wish to avoid the need for moderate withdrawal symptoms prior to induction with higher doses of buprenorphine.

• For example: any or all of the below conditions:
o Patients wishing to transition from methadone to buprenorphine
o Patients with chronic, heavy use of either intravenous or intranasal fentanyl.
o Patients who have experienced prior precipitated withdrawal

Procedure:
Microdosing regimen using Belbuca® and Suboxone® (Buprenorphine/naloxone):

Day 1 - 150 mcg buccal film q3h (can be given in the absence of withdrawal symptoms)
Day 1 –methadone 30mg initial dose

Day 2 - 450 mcg buccal film q6h x 2 doses followed by 900mcg belbucca (2 x 450mcg) q 6 hours x 2 doses.
Day 2 -methadone 30mg

Day 3 – Buprenorphine/naloxone 2 mg SL q6h
Day 3 – methadone 30mg

Day 4 Discharge RX bupe 8mg BID or TID or 16-24mg, no full agonist

Day	Total Daily Dose	How to take		Methadone or full agonist
1	1200 mcg	150mcg belbucca q 3 hours	1 film q 3h x 8 doses	Full dose
2	2700 mcg	450 mcg belbucca x 2 doses q6 then 450 x 2 (900mcg) q6	1 film q 6 x 2 2 films q 6 x 2	Full dose
3	8mg	2mg q 6 x 4 doses	1 film q 6	Full dose
4 Rx	16 or 24mg	8 mg BID or TID	1 8mg film BID or TID	Discontinue

Other considerations:

• Use comfort medications aggressively
- Acetaminophen, Ibuprofen or other NSAIDs for aches/pains
  - ibuprofen 600 q6, MDD 2400, max 7 days
  - acetaminophen 1000 mg PO q6h
- Clonidine – withdrawal symptoms
  - 0.1-0.2 q4h
  - hold if dizzy, BP< 100 systolic; taper if given for >7 days
- Hydroxyzine – anxiety symptoms, withdrawal symptoms
  - 50-100 mg 4xd (mdd 200/d)
- Dicyclomine – abdominal cramping
  - 10 mg PO q6h PRN
- Trazodone – insomnia, depressive symptoms
  - 50-200 mg 1 h before sleep, MDD 200 mg
  - Consider benzos – can use clonazepam
  - 0.5 mg bid
- Loperamide
  - 2-4mg q 2 hours prn diarrhea

Discharge Considerations:
- Provide Narcan on discharge – preferably filled and handed to patient prior to leaving
- Close outpatient follow-up

References
Antoine D, Huhn AS, Strain EC, Turner G, Jardot J, et al. Method for successfully inducting individuals

who use illicit fentanyl onto buprenorphine/naloxone. Am J Addict. 2020, 00:00-00.
Brar R, Fairbairn N, Sutherland C, Nolan S. Use of a novel prescribing approach for the treatment of opioid use disorder: Buprenorphine/naloxone micro-dosing – a case series. Drug Alcohol Rev 2020;39:588-594.
Klaire S, Zivanovic R, Barbic SP, Sandhu R, Mathew N, Asar P. Rapid micro-induction of buprenorphine/naloxone for opioid use disorder in an inpatient setting: A case series. Am J Addict 2019;28:262-265.
Rozylo J, Mitchell K, Nikoo M, Durante SE, Barbic SP, et al. Case report: Successful induction of buprenorphine/naloxone using microdosing schedule and assertive outreach. Addict Sci Clin Pract. 2020;15:2: https://doi.org/10.1186/s13722-020-0177-x.
Weimer MB, Guerra M, Morrow G, Adams K. Hospital-based Buprenorphine Micro-dose Initiation. J Addict Med. 2020; 00:00-00: 10.1097/ADM.0000000000000745.