Compass SHARP

Perioperative Management of Patients on Opioids *(Including MOUD)*

Optimal pain management for surgical patients receiving opioid therapy, including medications for opioid use disorder (MOUD), requires a multidisciplinary approach. Surgeons, anesthesiologists, pain specialists, addiction specialists, pharmacists, and primary care physicians must collaborate closely to ensure safe and effective care. This guideline provides evidence-based recommendations for perioperative opioid management. Institutions should integrate these recommendations with their established pre-procedure screening, pain management, and addiction consultation/referral processes.

Categories of Patients Receiving Preoperative Opioid Medications

- Patients with complex chronic pain history, who are currently taking high enough doses of opioid pain medications daily to be considered opioid-tolerant (>60 MME daily).
- Patients with a history of opioid use disorder (OUD) are currently being treated with methadone or buprenorphine.
- Patients currently taking naltrexone for treatment of alcohol or OUD, or for weight loss.

Recommendations for the Perioperative Management of Home Opioid Medications

For the patients listed above, providers should follow the recommendations below for perioperative management of home pain medications, and instruct patients on the steps that need to be taken, where appropriate:

***Note:** due to the different formulations of buprenorphine, brand names for the buprenorphine products are listed in Tables 1, 2, and 3; see Appendix for corresponding generic names.*

Table 1. Recommendations for perioperative management of home opioid medications

Medication	Recommendation
All non-opioid adjuvant pain medications (gabapentin, pregabalin, TCAs, muscle relaxers, acetaminophen, etc.)	• Should be continued. • Use of NSAIDs (including COX-2 inhibitors), per surgeon's discretion.
Fentanyl transdermal patch	• Continue the patient's home dose schedule. • Inform the patient to notify their clinician of the physical location of the patch and time of placement on the day of surgery.
Methadone (maintenance program with a methadone clinic)	• Document the name and contact information of the patient's methadone clinic in the patient's chart. • Continue daily methadone with the patient's methadone clinic up until the day of surgery. • On the day of surgery, a patient's daily methadone will be given either PO or IV by the operating room (OR) anesthesiologist if the patient is unable to receive a daily dose from his/her methadone clinic. • After surgery, continue methadone, preferably with the same once-daily home dose and schedule. **It is important to note that the patient's regular dose of methadone is not expected to treat any acute pain.**

Medication	Recommendation
Naltrexone	● Coordinate management with naltrexone prescriber before and after surgery. ● Ensure a plan is in place for additional support prior to surgery to prevent a recurrence of the condition naltrexone is being used to treat. For patients with a history of opioid use disorder, discuss with an addiction treatment provider (if applicable) or addiction specialist (if available) in advance of planned surgery. ● **Oral naltrexone:** hold 72 hours prior to surgery. ● **Extended-release injectable naltrexone:** for elective surgery, allow 21 days between the last injection and surgery date (may need oral "bridge" pending surgical date).
Opioid therapy for chronic pain	● Document in the patient's chart the name and contact information of the chronic opioid medication prescriber. ● Check/verify the Prescription Drug Monitoring Program (PDMP) ● Continue home dose of pain medications, both long-acting opioid medication and PRN short-acting medications. ● **Oral long-acting opioid medication (Oxycontin, MS Contin, Methadone for pain):** take the morning dose on the day of surgery. ● A **patient-specific plan** may also be considered.
Buprenorphine and buprenorphine/naloxone for OUD treatment *Based on available evidence in the literature, that uses Suboxone, the recommendation is to convert to Suboxone, where possible.*	● If a patient buprenorphine 24 hour dose > 16 mg, coordinate care: ○ Provide the name and contact information of the buprenorphine prescriber, and addiction treatment team (if applicable) to identify resources and support available postoperatively. ○ The perioperative team should establish contact with the patient's Suboxone prescriber and reach a consensus on management plan. ○ Consider transitioning extended-release buprenorphine at an equivalent dose of >16 mg/day to sublingual Suboxone and postponing elective surgery until the end of the dosing interval. ○ Consider a pre-operative pain or addiction consult (if available) to guide pain management strategies. ● Check/verify the PDMP. ● See Figure 1 for perioperative management recommendations. ● Any pre-operative dose adjustments or decreases should be a shared decision between the patient, prescriber, perioperative team, and specialists. ● Consider a pre-operative pain or addiction consult (if available) to guide pain management strategies. ● Convert Zubsolv to Suboxone dose (see dose conversion table 2) and follow the Suboxone management algorithm.* ● Convert Bunavil to the Suboxone dose (see dose conversion table 3) and follow the Suboxone management algorithm.** ● Probuphine: Continue home dose schedule. ● Subutex: Consider using the same regimen as those for Suboxone. ● Sublocade: Continue home dose schedule, if doses are equivalent to ≤8 mg/day.

Buprenorphine for chronic pain (Belbuca and Butrans)	• Belbuca: Continue home dose schedule. • Butrans: Continue the home dose schedule and inform the patient to tell the clinician of the physical location of the patch and time of placement on the day of surgery.

** Zubsolv 5.7 mg/1.4 mg tablets result in equivalent plasma concentration as Suboxone 8 mg/2 mg tablets*
*** Bunavil 4.2 mg/0.7 mg dose provides equivalent buprenorphine exposure to Suboxone 8 mg/2 mg*
For non-formulary medications, follow institution-specific policy on home medications

Table 2. Conversion of Zubsolv to Suboxone

Zubsolv sublingual tablets dosage strength	Corresponding Suboxone sublingual tablet dosage strength
1.4 mg/0.36 mg	2 mg/0.5 mg
5.7 mg/1.4 mg	8 mg/2 mg
8.6 mg/2.1 mg	12 mg/3 mg
11.4 mg/2.9 mg	16 mg/4 mg

Table 3. Conversion of Bunavil to Suboxone

Bunavil buccal film dosage strength	Corresponding Suboxone sublingual tablet dosage strength
2.1 mg/0.3 mg	4 mg/1 mg
4.2 mg/0.7 mg	8 mg/2 mg
6.3 mg/1 mg	12 mg/3 mg

Unanticipated Acute Pain and NPO

If the acute pain is unanticipated (e.g., accident, emergent surgery) and the patient will be NPO for an extended period, see Table 4 for recommendations.

Table 4. Recommendations of home medications for unanticipated acute pain and NPO

Medication	Recommendation
Methadone (maintenance program with a methadone clinic)	• Convert oral daily methadone dose to IV (2:1 ratio) and divide into two to four equal doses a day. • **It is important to note that the patient's regular dose of methadone is not expected to treat any acute pain.**
Naltrexone	• Based on the timing of their last naltrexone dose, patients may remain refractory to opioids (recent dose) or more sensitive to opioids (greater than 24-72h since last dose). • Contact anesthesia to inform that the patient is on naltrexone PO or IM. • Optimize the use of nonopioid analgesics, such as acetaminophen, ketamine, regional analgesic techniques, when indicated, and NSAIDs, unless contraindicated. • Do not restart naltrexone sooner than 24 hours after the last opioid dose. Recommend 24 hours to 7 days based on the patient, comorbidities, and post-surgical opioid doses/ranges. If long-acting opioid agents are used, consider waiting 3-7 days; consider the involvement of addiction or pain management specialists, if available, to guide the timing of naltrexone re-initiation.
Buprenorphine	• Continue sublingual buprenorphine if the patient is able to take sublingual medications. • If daily buprenorphine dose ≤8 mg, use standard dose as needed (PRN) opioid for acute pain. Higher doses are sometimes, but not usually, needed. • If daily buprenorphine dose > 8 mg, will likely need higher dose as needed (PRN) opioid for acute pain. • May also consider additional buprenorphine 2-4 mg SL TID for acute pain control.
Opioid therapy for chronic pain	• Convert home dose of opioid (if known by contacting prescriber or checking the PDMP) to a scheduled dose of IV opioid to avoid withdrawal symptoms and ensure as needed (PRN) IV opioid is available for acute pain.

Additional Recommendations

- Initiation/re-initiation of buprenorphine while patients are on opioid agonists: Consider micro-dosing induction of buprenorphine.
- All patients with a history of OUD should be discharged with a prescription for intranasal naloxone.

Appendix:

Table 5. Buprenorphine and buprenorphine/naloxone products

Brand	Generic
Belbuca	Buprenorphine buccal film
Bunavanil	Buprenorphine/naloxone buccal film
Butrans	Buprenorphine transdermal patch
Probuphine	Buprenorphine implants
Sublocade	Buprenorphine extended-release injection
Suboxone	Buprenorphine/naloxone sublingual films
Subutex	Buprenorphine sublingual tablets
Zubsolv	Buprenorphine/naloxone sublingual tablets

Table 6. Perioperative Management of Home Buprenorphine Algorithm

For all patients, continue sublingual buprenorphine (Subutex) or buprenorphine/naloxone. (Suboxone, Zubsolv) throughout the perioperative period, by following these steps:

Step 1: Determine the total 24-hour home dose of buprenorphine (regardless of any naloxone component):

- If the home dose is **≤ 8 mg per day: Continue the home dose** throughout the perioperative period. Do not discontinue prior to surgery; end at this step of algorithm.
- If the home dose is **> 8 mg per day,** proceed to step 2 (excludes obstetric patients)

Step 2: Determine anticipated opioid requirements/ pain after surgery:

<table>
<tr><th rowspan="2">Anticipated post-operative opioid requirements</th><th colspan="3">Timeframe</th></tr>
<tr><th>Before surgery</th><th>On the day of surgery and throughout hospital stay</th><th>Preparing for discharge</th></tr>
<tr><td rowspan="2">Moderate to High Opioid Requirements</td><td>If home dose >16 mg
Consider titrating dose down so that on the day before surgery, total buprenorphine dose is 16 mg daily (i.e. on day prior to surgery preferably drop down to 8 mg BID vs 16 mg as a single dose)
May consider continuing home dose if reliable continuous regional anesthesia techniques are available or based on patient and clinician preference.</td><td>If home dose >16 mg
Consider decreasing to buprenorphine 8 mg per day on day of surgery (preferably 4 mg BID vs. 8 mg daily)
Anticipate need for higher opioid agonist dose requirement, similar to opioid tolerant patients maintained on methadone.
Use additional opioid agonists as needed.</td><td>If home dose >16 mg
Provide a post-discharge taper plan for full agonist opioids.
Ideally, increase back to buprenorphine home dose at time of discharge.
Transition care back to patient's outpatient buprenorphine prescriber for ongoing care with plan to increase back to original home buprenorphine dose.</td></tr>
<tr><td colspan="3">If home dose ≤ 16 mg
Consider continuing home dose if reliable continuous regional anesthesia techniques are available and based on patient and clinician preference.</td></tr>
<tr><td>Low Opioid Requirements</td><td colspan="3">Continue home regimen
Do not discontinue prior to surgery and continue home dose throughout the perioperative period.</td></tr>
</table>

Step 3: Identify strategies for managing unanticipated acute pain and NPO status:

- When moderate to severe post-operative pain is expected, optimize multimodal approach, regional blocks, or neuraxial anesthesia if indicated, along with a **high affinity IV opioid**. **Higher doses** may be necessary to compete with buprenorphine for occupation of receptors.
- **Close post-operative monitoring will be required** as daily doses of opioids must be reassessed frequently.
- The half-life of buprenorphine varies depending on the dose and route it was last given. As levels decrease, a lower dose of opioid may be required.
- Continuing sublingual buprenorphine may be appropriate for some patients who are NPO. If they can hold the

sublingual buprenorphine under their tongue without swallowing, the dose will be absorbed.

- Different dosage forms of buprenorphine or buprenorphine/naloxone are NOT bioequivalent (see tables 1-3)

Additional considerations:

- The plan for dose reduction should be a **shared decision** made between the patient, anesthesiologist, and primary buprenorphine prescriber.
- A **patient-specific plan** that is different from the above recommendations may be considered per patient and buprenorphine prescriber preference.
    - Patient is encouraged to have a consultation and discussion with a **pain management provider.**
    - This may include the continuation of buprenorphine at the admitting dose throughout the perioperative period.
- For **obstetric patients, do NOT interrupt buprenorphine dosing in the perioperative period**, regardless of dose.
- **Low opioid requirements** refer to low/mild post-operative pain or procedures where historically less than five-day courses of low-dose oxycodone or hydrocodone are prescribed.
- Prior to titrating the buprenorphine dose down, **addiction/pain services should be consulted**- if available- and team discussion should occur with all members of the care team. Upon discharge, care team will **contact patient's buprenorphine prescriber and provide a handoff** of management course and post discharge plan.

References:

- Buprenorphine. UpToDate Lexidrug. Retrieved 25 February 2025 from https://www.uptodate.com/contents/buprenorphine-drug-information?search=buprenorphine&source=panel_search_result&selectedTitle=1%7E104&usage_type=panel&kp_tab=drug_general&display_rank=1
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Adapted from the Massachusetts General Hospital Perioperative Management of Patients on Opioids Guideline.