Guidelines for the Management of Acute Pain in Patients Prescribed Medication for Opioid Use Disorder (MOUD) or on Chronic Opioid Therapy

Purpose:

To provide a consistent approach to the management of adult patients with acute pain on MOUD or on chronic opioid therapy for chronic pain. Though acute pain is often perioperative, this guidance applies to acute pain in non-operative settings as well. Exceptions to this include palliative care patients who may have different considerations and goals of care when faced with acute pain.

These policies are meant to apply to the vast majority of patient encounters. When an individual situation requires exception, it is useful to proceed in conjunction with the outpatient treatment provider where possible.

General Approach:

Management of acute pain in the inpatient setting. The surgical team should continue to manage pain associated with surgical procedures during the post-operative period. Acute non-surgical pain in hospitalized patients should be managed by their hospitalist provider. For patients with unstable substance use disorder (SUD) or situations where pain control is typically complicated, consider consultation with psychiatry liaison services for adjunctive assistance with SUD management.

Establish pain expectations prior to given procedure or encounter. Facilitate discussions that will allow patients to express any concerns about opioid use, as many patients in recovery desire to avoid opioids when possible. Provide counseling on the typical pain course that is anticipated, given the type of procedure. This will allow patients to prepare and develop reasonable expectations regarding their perioperative pain experience. Before consideration of opioid treatment, maximize non-opioid analgesic modalities, including standing NSAIDS and acetaminophen if not precluded by the procedure or concurrent medical condition. Consider adjuncts such as alpha 2 agonists, gabapentinoids, SSRIs/SNRIs, TCAs, muscle relaxants and ketamine. In addition, where possible, consider the use of analgesic anesthetic techniques, including nerve blocks and peripheral nerve catheters to limit the need for opioids.

Coordinate care. For planned procedures whenever possible, coordinate care with the outpatient provider through chart messaging or phone conversation prior to the procedure. In some cases, for instance patients with unstable SUD or poorly controlled chronic pain, the outpatient maintenance medication provider can be consulted to make acute pain management decisions in the inpatient setting. This arrangement should be agreed upon collaboratively and all providers involved in care should be made aware. A sample communication form highlighting key information to address is provided in Appendix 2.
Supplemental opioids prescribed to inpatients

- It is preferable to use oral formulations (either in the form of oral solutions or tablets) when possible. When oral therapy is used, use products that are not combined with acetaminophen or ibuprofen, i.e., oxycodone, morphine, or hydromorphone.

- If IV medication is required, PCA use without a basal rate can be considered. Consider discontinuing oral opioids when IV opioids are utilized.

  Note that due to opioid tolerance and opioid-induced hyperalgesia, it is not uncommon for patients to require increased amounts of opioids to achieve the same clinical effect as a person who does not take opioids chronically. If a patient requires substantial escalations in opioids and pain control remains unachievable, consider consulting psychiatry liaison services for management recommendations.

Supplemental opioids prescribed to outpatients

- If indicated, prescribe opioids for acute pain for 3 days or less. If it is deemed necessary to prescribe opioids for a longer duration, limit prescriptions to a maximum of 7 days in accordance with CDC guidelines.

- If clinically appropriate, prescribe supplemental opioids PRN and do not start the use long-acting opioid medications for acute pain.

- Clearly communicate to patients before initiating pain medications that the goal of supplemental opioids for acute pain is to address limitations in function resulting from the immediate insult (surgery/injury) and that these supplemental opioids are temporary.

- Patients on chronic opioids and MOUD can experience pharmaceutical delays in dispensing supplemental opioids for acute pain, as opioid prescriptions exceeding state determined maximum MMEs are subject to verification processes. Providers should indicate the purpose for prescribing dual agonist therapy in the comments section of the prescription and include Exemption Code F (for acute pain) on prescription. Consider completing prior authorizations before surgery to avoid insurance-related delays.

- Prescribe naloxone (i.e., Narcan) for overdose rescue and educate patients and close contacts on how to use it. Please refer to: Maine Health How to Use Naloxone pamphlet. [https://mainehealth.org/-/media/main health/pdfs/opioids/how-to-use-naloxone.pdf?la=en](https://mainehealth.org/-/media/main health/pdfs/opioids/how-to-use-naloxone.pdf?la=en)

  If possible, identify a reliable person to help the patient manage and store supplemental prescribed opioids.
Acute Pain Management Medications Used for Opioid Use Disorder and Chronic Pain

1. Methadone (full opioid agonist)
   a. Methadone used for treatment of OUD is dispensed from a federal clinic and does not appear on the State PMP site. Call the prescribing provider or clinic for dosing verification. For those receiving methadone for pain (rare), the prescription will appear in the PMP. It is recommended to confirm the dose with the clinic and to verify whether any other controlled medications are being prescribed through review of the PMP.
   b. Usual dosing range: 50-150mg/day
   c. Maintain methadone dose identical to what the patient has been taking prior to encounter throughout the peri-operative period.
   d. Bioavailability of methadone is high (67-95%). If patient is strictly NPO, can give 50% of oral methadone dose IV, divided into 3 doses/day (e.g., if patient is on 60 mg methadone PO, can receive 10mg IV TID).
   e. Be mindful of the QT prolonging effect of this medication. It is recommended to obtain pharmacist consultation and/or EKG when starting new medications that potentially interact with methadone.
   f. Caution regarding concomitant benzodiazepine and/or barbiturate use. Monitor closely for sedation/respiratory depression if those are co-prescribed.

2. Buprenorphine products, with and without naloxone. (Partial mu opioid agonist, kappa receptor antagonist) Note: An X waiver is not required for inpatient buprenorphine prescription.
   a. Formulations include:
      - Sublingual buprenorphine “monoproduct” (brand name Subutex)
      - Sublingual and buccal combination products (buprenorphine/naloxone, brand names: Suboxone, Bunavail, Zubsolv)
      - Probuphine- monoproduct implanted every 6 months (equivalent to 8mg daily buprenorphine)
      - Sublocade- monoproduct injected monthly (equivalent to 24mg daily buprenorphine) For perioperative management with Sublocade, please consult with prescribing provider
      - Butrans and Belbuca are lower potency buprenorphine formulations used for chronic pain and are less likely to interfere with opioid agonists used to treat acute pain. These medications can be continued perioperatively without dose adjustments.
b. Pertinent formulation considerations

- Naloxone is minimally absorbed by sublingual/buccal routes and is clinically insignificant in antagonizing pain control (it is added to the formulation to deter illicit IV administration)

- Sublingual and buccal formulations of these medications are to be held and dissolved in the oral cavity over 15-20 minutes. If swallowed they are not well absorbed. They can be given to patients who are NPO. Patients should not be encouraged to swallow these formulations before they are dissolved.

- It is recommended to confirm the buprenorphine dose and to verify whether any other controlled medications are being prescribed through review of the state Prescription Monitoring Program (PMP) [https://maine.pmpAware.net/login](https://maine.pmpAware.net/login). The usual range of dosing for buprenorphine +/- naloxone in the state of Maine is 2mg-16mg daily.

c. Dosing

In patients where minimal pain is anticipated, maintain buprenorphine dose identical to what the patient was taking prior to encounter.

In patients where moderate to severe surgical pain is expected, consider dose reduction to 8-12 mg on the day of surgery (reduce to 5.7-8.6 mg for zubsolv, reduce to 4.2-6.3mg for bunavail). This reduction is based on receptor availability studies which have identified decreased effectiveness of opioid agonists at buprenorphine doses of 16mg or greater. Whereas, buprenorphine continuation at doses of 8mg-12mg have been shown to facilitate the effectiveness of opioid medications used in conjunction.

There are some instances where patients and providers will be reluctant to reduce buprenorphine doses perioperatively due to concerns for withdrawal, anxiety and relapse of OUD. Under these circumstances, patients can be maintained on buprenorphine doses of 16mg or less, in line with an increasing number of institutions that endorse buprenorphine continuation without dose reduction.

With any buprenorphine management strategy, pain expectations should be established prior to the procedure or encounter and the buprenorphine provider and inpatient teams should collaborate on care plans, including strategies for avoidance of opioids and management of refractory pain. Adjustments to maintenance buprenorphine doses should be in conjunction with the outpatient provider managing the maintenance prescription.

i) Once daily administration is preferred for buprenorphine. Though transition to TID dosing theoretically helps with pain control, it is not generally favored as it increases opportunities for missed doses and may negatively impact the psychological influences that impact substance use disorder treatment. However,
patients who routinely take buprenorphine twice a day should be permitted to continue dosing at that frequency.

ii) **If buprenorphine is reduced, resume the baseline buprenorphine dose as soon as possible.** The longer the patient is maintained at a reduced buprenorphine dose, the more chance for destabilization of their use disorder. This can also lead to significant challenges when discontinuing supplemental opioid use as acute pain resolves. The buprenorphine dose should be increased to full maintenance dose once supplemental opioids are no longer required. The goal should be for patients to be transitioned back to their full buprenorphine dose by 5-7 days following the initial dose reduction. Note that the patient can be transitioned to their full buprenorphine dose sooner than 5 days, whenever possible.

iii) **Caution** regarding concomitant benzodiazepine and/or barbiturate use. Monitor closely for sedation/respiratory depression if those are co-prescribed.

3. **Naltrexone – oral and IM extended release (opioid antagonist)**
   a. There are two forms of naltrexone, daily oral short acting (ReVia) and an IM long-acting monthly injection (Vivitrol). These are antagonists that block the action of opioids and do not confer opioid tolerance.
   b. For instances where acute pain can be anticipated, discontinue ReVia 2-3 days prior to the anticipated need for opioids. For Vivitrol, schedule any procedure where opioids are anticipated 4 weeks from the date of the last injection. (There are case reports of lack of analgesia when opioids administered 2 weeks post-injection).
   c. For situations where cessation of naltrexone is not possible prior to opioid need, higher doses of opioids maybe required to overcome mu-receptor blockade. Monitor closely for respiratory depression with attention to the half-life of the antagonist and declining levels over time. (ReVia half-life 4-13hrs; Vivitrol half-life 5-10 days)
   d. **Use caution** when giving opioids for postoperative pain in patients where naltrexone has been recently discontinued as recommended here. Increased sensitivity to opioids have been reported due to upregulation of opioid receptors.
   e. Resume naltrexone 7-10 days after the last opioid dose to avoid precipitated withdrawal.

4. **Opioids for Chronic pain**
   a. Includes patients on daily or near daily opioid use for greater than 3 months or with signs of physical dependence. Does not include patients taking prn opioids for breakthrough pain at lower frequencies.
   b. Continue usual home dose, including long acting formulations and PRN dosing as appropriate for patient’s level of pain on the day of surgery.
   c. If transitioning to IV formulations of a different opioid type, consider dose reduction due to incomplete cross tolerance between formulations.
d. Maximize non-opioid analgesic medications, including standing NSAIDS and acetaminophen if not precluded by the procedure or concurrent medical condition. Consider adjuncts such as alpha 2 agonists, gabapentinoids, SSRIs/SNRIs, TCAs, muscle relaxants and ketamine. In addition, where possible, consider the use analgesic anesthetic techniques, including nerve blocks and peripheral nerve catheters to limit the need for opioids.

e. Patients on chronic opioid therapy may require higher doses of supplemental opioids than opioid naïve patients due to opioid tolerance. If, a patient requires substantial escalations in opioids, consider seeking expert consultation (psychiatry liaison services, anesthesia pain management services).
GUIDELINES PREPARED BY
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REFERENCES

Alford, Daniel P. MPH; Compton, Peggy, RN, PhD; and Samet, Jeffrey H. MD, MA, MPH. Acute Pain Management for Patients Receiving Maintenance Methadone or Buprenorphine Therapy. *Annals of Internal Medicine*. January, 2006; Volume 144 (2): 127-133.


Appendix 1: Patient Information: Pain Medication and Suboxone/Buprenorphine

These are some questions that people who are taking Suboxone may have when they are prescribed a pain medication. If you have questions or concerns about taking your Suboxone or pain medication, it is very important to talk to your provider. When you are no longer in pain, please dispose of any unused pain medications by bringing them to a take-back location.

**Will I get “high” if I take pain medications while on Suboxone?**

No, taking Suboxone lowers the possibility that you will feel high when taking pain medications. It is very important that you take your Suboxone properly for it to work.

**Will I go into withdrawal if I take pain medications while on Suboxone?**

No, taking Suboxone will continue to treat your opioid use disorder and the pain medications will treat your pain. When both medications are taken properly, they can safely be used together without causing withdrawal.

**I am afraid my providers are going to think I am a drug seeker if I tell them I have pain?**

Your providers are here to help you. It is important to tell your providers if you are in pain so that they can treat you appropriately.

**Will I be at higher risk of relapse (return to using opioids) if I use pain medications after surgery?**

No, the risk of relapse may be higher if your pain is not treated properly.

**What if I am triggered by taking pain medications at home after surgery?**

Talk to a supportive family member, friend, or your provider about coming up with a plan to safely store and take your medications at home if you are worried about having pain medications in your home.
Appendix 2: Sample Coordination of Pain Management Form

PRACTICE NAME
Practice Address

PHONE: 207-xxx-xxx FAX: (207) xxx-xxxx

TODAY’S DATE:

RE: DOB:

TO: FROM:

LOCATION: LOCATION:

☐ For your records ☐ Please review & Respond

COMMENTS:

It is our understanding that _____ is scheduled for surgery on _____ and will require pain management post-surgery. I have attached a medication list and a release of information for us to communicate ahead of or post-surgery. Should you have questions about the patient’s treatment needs please contact [name] at (207) xxx-xxxx.

☐ [PRACTICE NAME] will plan to follow patient for pain management immediately post-surgery.

☐ [PRACTICE NAME] will plan to follow patient for pain management should patient require additional pain management beyond their initial prescription post-surgery.

☐ It is our understanding that ongoing pain management will not be required after surgery.

The following is the recommended daily dosing of buprenorphine for the patient.

<table>
<thead>
<tr>
<th>Total daily dose buprenorphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3 days prior to surgery</td>
</tr>
<tr>
<td>Day of surgery</td>
</tr>
<tr>
<td>Inpatient post-surgery</td>
</tr>
<tr>
<td>Outpatient post-surgery</td>
</tr>
</tbody>
</table>
### Appendix 3: Acute Pain Management for Patients on Chronic Opioids or Maintenance Therapy for Opioid Use Disorder (OUD)

<table>
<thead>
<tr>
<th>Patient Category</th>
<th>Pre-operative Pain Recommendations</th>
<th>Post-operative Pain Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chronic Pain on Chronic Opioid Therapy</strong></td>
<td>Set pain expectations and coordinate care.</td>
<td>Continue equivalent chronic opioid dose with hold parameters for sedation.</td>
</tr>
<tr>
<td><strong>Inclusion:</strong> Daily or near daily opioid use for greater than 3 months or with signs of physical dependence. Does not include patients taking occasional or PRN opioids for breakthrough pain.</td>
<td>Continue standing opioid dose the day of surgery.</td>
<td>For acute postoperative pain, maximize multimodal pain management with non-opioid medications (NSAIDs, acetaminophen, epidural/spinal analgesia, nerve blocks, ketamine) as indicated.</td>
</tr>
<tr>
<td></td>
<td>Continue PRN dosing as appropriate for patient’s level of pain on the day of surgery.</td>
<td>If opioids are required for breakthrough pain, patients with history of chronic opioid use may require higher than usual doses due to opioid tolerance and increased pain sensitivity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If IV medication is required, PCA use without a basal rate can be considered. Discontinue oral opioids when IV opioids are utilized.</td>
</tr>
<tr>
<td>Patient Category</td>
<td>Pre-operative Pain Recommendations</td>
<td>Post-operative Pain Recommendations</td>
</tr>
<tr>
<td>----------------------------------</td>
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</tr>
<tr>
<td>Methadone Maintenance Therapy</td>
<td>Set pain expectations and coordinate care. Confirm methadone dose with patient’s methadone maintenance treatment program (MMTP). Methadone should be administered on the day of surgery if the patient has not yet taken their daily dose of methadone. Confirm that patient did not receive day of surgery methadone dose to avoid duplicate administration.</td>
<td>Continue usual daily methadone dose. If the patient is strict NPO, their usual PO dose can be given IV with a 50% dose reduction, divided into 3 doses/day (e.g. if usual dose is 60 mg PO daily, appropriate IV dose would be 10 mg IV TID). For acute postoperative pain, utilize multimodal pain management with non-opioid medications (NSAID, acetaminophen, epidural/spinal analgesia, nerve blocks, ketamine) as indicated. If opioids are required for breakthrough pain, patients with history of opioid use disorder may require higher than usual doses due to opioid tolerance and increased pain sensitivity. If IV medication is required, PCA use without a basal rate can be considered. Discontinue oral opioids when IV opioids are utilized. On discharge, ensure communication with MMTP including information about last methadone dose (a letter may be helpful if unable to have verbal communication). For patients physically unable to go to the MMTP on the days following hospital discharge, the Surgical/Primary Team should coordinate with MMTP directly, as soon as possible, to arrange for home doses of methadone (“medical take home doses”) for the time period when patient is unable to travel to the clinic.</td>
</tr>
</tbody>
</table>
### Patient Category

<table>
<thead>
<tr>
<th>Pre-operative Pain Recommendations</th>
<th>Post-operative Pain Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buprenorphine Maintenance Therapy</strong> <em>(subutex and suboxone)</em></td>
<td>Continue buprenorphine pre-operative recommendations post-operatively.</td>
</tr>
<tr>
<td>Set pain expectations and coordinate care.</td>
<td>If buprenorphine dose reduced, resume maintenance buprenorphine dose as soon as opioids are no longer</td>
</tr>
<tr>
<td><em>In patients where minimal pain is expected, continue full buprenorphine dose on day of surgery.</em></td>
<td>required in standing doses.</td>
</tr>
<tr>
<td>In patients where moderate to severe pain is expected, consider dose reduction to 8-12mg on day</td>
<td>For acute postoperative pain, utilize multimodal pain management with non-opioid medications</td>
</tr>
<tr>
<td>of surgery.</td>
<td>(NSAID, acetaminophen, epidural/spinal analgesia, nerve blocks, ketamine) as indicated.</td>
</tr>
<tr>
<td>If patient and provider are reluctant to reduce buprenorphine, continue full buprenorphine</td>
<td>If opioids are required for breakthrough pain, patients with history of opioid use disorder may</td>
</tr>
<tr>
<td>dose (up to 16mg) on day of surgery in procedures where moderate-severe pain expected.</td>
<td>require higher than usual doses due to opioid tolerance and increased pain sensitivity.</td>
</tr>
<tr>
<td><em>Refer to guidelines for recommendations for other buprenorphine formulations</em></td>
<td>If IV medication is required, PCA use without a basal rate can be considered.</td>
</tr>
<tr>
<td></td>
<td>Discontinue oral opioids when IV opioids are utilized.</td>
</tr>
</tbody>
</table>

Adapted from Boston Medical Center, April 2019