

A composite image showing a close-up of a woman's smiling mouth with her teeth, overlaid with a semi-transparent dental X-ray of a human jaw.

OPIOIDS IN THE DENTAL PRACTICE

Dental providers routinely treat pain and manage dental emergencies as part of routine dental care. In the past, dental providers have been one of the top five prescribers of opioids, because opioids have been an important treatment option for both acute and chronic pain. However, in response to growing evidence of harm associated with over-use of opioids, dental providers have appropriately decreased their use of opioids, and have increased the use of non-opioid pain treatment options.

Opioid analgesics may be necessary for the relief of pain, but improper use of opioids poses a threat to the individual and to society. Providers have a responsibility to diagnose and treat pain using sound clinical judgment, and such treatment may include the prescribing of opioids. When opioids are prescribed, providers have a responsibility to minimize the potential for harm, including life-threatening adverse effects as well as opioid misuse, abuse and diversion. It is important to note that opioid-related harms occur in urban, suburban, and rural settings. Therefore, it is imperative that all dental providers incorporate proper opioid prescribing into patient care, which includes careful



consideration of when opioids should be prescribed, as well as proper prescribing methods.

These guidelines address the use of opioids for the treatment of dental pain. The original guideline on Opioids in Dental Practice was published in 2014. This update reflects changes in best practices that have been developed since the publication of the original guidelines. They are intended to help providers improve patient outcomes and to supplement, but not replace, the individual provider's clinical judgment. It is recommended that providers review other evidence-based guidelines and the Pennsylvania state guidelines on various medical subspecialties and patient populations, pharmacy guidelines, and dental guidelines, which may provide insight into treatment options for these populations.

EXCLUSIONS

These guidelines do not address the management of opioids for cancer pain, the treatment of pain at the end-of-life, or the treatment of pain associated with sickle cell disease. For guidelines related to the treatment of the pain associated with sickle cell disease, readers are referred to the NIH National Heart, Lung, and Blood Institute's Evidence Based Management of Sickle Cell Disease Expert Panel Report.

PRACTICE RECOMMENDATIONS

Treatment of Acute, Subacute, and Post-Operative Pain:

Dental providers should incorporate the following best practices into their care of the patient receiving opioids for the treatment of acute dental pain:

1. Before initiating pain therapy, providers should conduct and document a medical and dental history, including documentation and verification of current medications, and a physical examination. Appropriate diagnostic imaging and testing, if indicated, should be completed before starting therapy. If opioids are to be prescribed, the initial evaluation should include assessment and review of current and past medication history, current mental health status, and substance use history. Patients with a history of depression, anxiety, and any substance use disorder including tobacco use disorder are at increased risk for developing chronic opioid use when opioids are prescribed even for short periods of time. Likewise, patients with these conditions are at increased risk for aberrant drug-related behaviors when opioids are prescribed for the treatment of chronic non-cancer pain. While acute dental pain should be appropriately treated in patients who have these conditions, extreme care should be taken when opioids are used in patients at increased risk of harm.
2. Providers should administer non-steroidal anti-inflammatory drugs (NSAIDs), as first-line analgesic therapy, unless contraindicated. NSAIDs have been demonstrated to be very effective for the treatment of dental pain, and indeed are often more effective than opioids. Consideration should be given to initiating NSAID therapy immediately before the procedure, then continuing dosing on a scheduled basis immediately following the procedure.
 - A. Providers may wish to consider the administration of a COX-2 selective NSAID, such as celecoxib, to avoid an increased risk of bleeding.
 - B. Extreme caution should be used in patients taking any other anticoagulant, as the risk for bleeding is significantly increased when NSAIDs are used in combination with other anticoagulants, including aspirin.
 - C. Caution should be used in patients with a history of hepatic or renal impairment, who report a previous adverse reaction NSAIDs.



- D. NSAID administration can be on a scheduled basis for a specific period of time. As NSAID-induced adverse effects are related to dose and duration of therapy, it is critical to provide patients with specific instructions on when to discontinue the prescribed medication.
3. Acetaminophen has been shown to be synergistic with NSAIDs with analgesic efficacy comparable to low or moderate dose opioids. When providers administer acetaminophen, it should be on a scheduled basis unless contraindicated. The maximum daily dose should not exceed 4,000 mg daily (McNeil, the major manufacturer of Tylenol, recommends limiting dosage to 6 pills per day or 3,000 mg⁸). When prescribing scheduled acetaminophen, opioid products also containing acetaminophen should not be used. Providers should be aware of all medications, including over-the-counter preparations that the patient is taking and advise the patient to not take more than 4,000 mg acetaminophen from all sources.
 4. Providers should consider the use of local anesthetic techniques, including local infiltration of dental anesthetics and regional nerve blocks, whenever possible, to assist in pain management and reduce the requirement for opioid analgesia. Long-acting local anesthetics (e.g., bupivacaine) may delay onset and severity of postoperative pain, reducing or eliminating the need for opioid analgesics.
 5. A perioperative corticosteroid, such as dexamethasone or Medrol dose pack may limit swelling and decrease postoperative discomfort for surgical or endodontic procedures. However, systemic steroids should not be used in combination with NSAIDs, as the combined use is not likely to improve pain control and increases the risk of life-threatening bleeding including upper gastrointestinal bleeding, by a factor of five¹².
 6. If an opioid is to be administered, the dose and duration of therapy should be for a short period of time, and for conditions that typically are expected to be associated with more severe pain. The Centers for Disease Control and Prevention guidelines suggest that most patients will not need to take opioids for longer than 72 hours following most surgical procedures⁹.
 - A. Long-acting opioids or extended-release preparations are contraindicated for the treatment of acute procedural pain and should not be prescribed.
 - B. Address exacerbations of chronic or recurrent pain conditions with non-opioid analgesics, non-pharmacological therapies and/or referral to specialists for follow-up, as clinically appropriate.
 - C. Providers should be aware of concurrent medications and the potential for drug interactions. Interactions with other medications the patient is taking can either increase or decrease the potency of certain analgesics. The provider should assess the risk for drug-drug interactions before prescribing analgesics.
 - i. Some concurrent medications such as antidepressants can interfere with the metabolism of some prescribed opioids and can increase the risk of adverse events.
 - ii. Opioids should not be administered concurrently with benzodiazepines and



other CNS depressants except in rare cases where the risk of harm is outweighed by the benefits of administering both medications. Concurrent use is associated with a significant increased risk of serious adverse events, including death. When used in combination, justification for this use should be clearly documented.

- iii. Prescription of acetaminophen with codeine to treat pain in children younger than 12 is contraindicated.
- D. Care should be used when prescribing opioid combination product medications (such as hydrocodone and acetaminophen or oxycodone and acetaminophen), to ensure that the total dose of acetaminophen does not exceed 4,000 mg a day for adults.
- E. Care should be used when administering opioids to individuals with significant pulmonary illness, including obstructive sleep apnea, as these patients are at increased risk for opioid-induced adverse events.
- F. Pennsylvania state law requires providers to obtain and review a report from the Prescription Drug Monitoring Program (PDMP) before prescribing all controlled substances. Care should be taken to obtain PDMP data from all relevant states, which usually can be accomplished through the Pennsylvania PDMP program¹⁰.
- G. Before issuing any opioid to a minor, a prescriber should do the following¹¹:
 - i. Assess whether the minor has or is currently taking prescription drugs for treatment of a substance use disorder.
 - ii. Discuss with the minor and the minor's parent/guardian, or authorized adult, all the following:
 - a. The risks of addiction and overdose associated with the controlled substance containing an opioid.
 - b. The increased risk of addiction to controlled substances to individuals suffering from mental or substance use disorders.
 - c. The dangers of taking a controlled substance containing an opioid with benzodiazepines, alcohol or other central nervous system depressants.
 - d. Any other information specifically related to the use of controlled substances containing an opioid that is required by product labeling and/or Federal law.
 - iii. The prescriber must obtain written consent from the minor's parent, guardian, or authorized adult (an adult who has a valid health care



proxy to consent to the minor's medical treatment) for the prescriber's records.

H. When prescribing to a minor, providers may not prescribe more than a 7-day supply upon obtaining written consent from a parent or guardian.

I. When deviating from these prescribing recommendations - or those required by state laws or institutions - the provider should document the justification for doing so.

7. Extreme caution should be exercised when responding to requests for opioid analgesics, especially from patients who are new to the practice or who have not been recently seen and evaluated. In general, it is not proper to prescribe opioids absent a face-to-face patient evaluation.

8. Providers should provide patients with instructions on safe disposal of unused medications, including opioids, to ensure these medications are not available for possible diversion or misuse.

Treatment of Chronic Pain:

1. Before initiating chronic opioid therapy, providers should conduct and document a comprehensive patient history that includes a detailed review of the patient's pain experience.

2. Unless the provider has training and experience in the use of opioids for the treatment of non-cancer pain or chronic facial pain, long acting or extended-release opioids should not be prescribed.

A. Patients reporting unexpectedly prolonged pain, especially those patients who do not have clear evidence of ongoing pathology,

should not be prescribed opioids. The provider should consider patient referral to appropriate dental or chronic pain specialists in patients who request continuation of opioids beyond the normal, expected recovery period.

B. Patients with symptoms of substance use disorder, including opioid use disorder, should have a facilitated referral for addiction specialty evaluation and treatment. These patients should not be discharged from the practice without proper referral. A provider can refer the patient to their insurance carrier or local county drug and alcohol program if the patient is uninsured or underinsured. Contact information for making a referral to the local county drug and alcohol program can be found [here](#).

9. Chronic opioid therapy should be provided by a health care provider, who has the clinical expertise to provide appropriate monitoring. Consideration should be given for referral to a specialist as indicated by the patient's clinical needs, who may assist the prescribing physician in proper administration of opioids.

10. Providers should be aware of and understand current federal and state laws, regulatory guidelines, and policy statements that govern the prescribing of controlled substances.



RESOURCES

1 American Society of Anesthesiologists Task Force on Acute Pain M. Practice guidelines for acute pain management in the perioperative setting: an updated report by the American Society of Anesthesiologists Task Force on Acute Pain Management. *Anesthesiology* 2012; 116:248-73.

2 Becker DE. Pain management: Part 1: Managing acute and postoperative dental pain. *Anesthesia progress* 2010; 57:67-78; quiz 9-80.

3 Moore PA, Hersh EV. Combining ibuprofen and acetaminophen for acute pain management after third-molar extractions: translating clinical research to dental practice. *J AM Dent Assoc.* 2013; 144(8):898-908.

4 Hersh EV, Saraghi M, Moore PA. The prescription opioid abuse crisis and our role in it. *Gen Dent.* 2018;66(4):10-13.

5 Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain--United States, 2016. *JAMA.* 2016;315(15):1624-1645.

6 Pennsylvania Medical Society. Opioid crisis CME: <https://www.pamedsoc.org/learn-and-lead/online-cme/medications-pain-management-opioids>

7 Commonwealth of Pennsylvania. Treating Chronic Non-Cancer Pain, 2018: <https://www.health.pa.gov/topics/Documents/Opioids/Non-cancer%20Pain%20Guidelines%20Final.pdf>

8 Johnson & Johnson Consumer Inc. 2016. Tylenol® Dosage for adults. Retrieved February 13, 2019, from <https://www.tylenol.com/safety-dosing/usage/dosage-for-adults>

9 Centers for Disease Control and Prevention. 2017. CDC guideline for prescribing opioids for chronic pain. Retrieved from <https://www.cdc.gov/drugoverdose/prescribing/guideline.html>

10 Pennsylvania Act 126 of 2016- Safe opioid prescription, patient voluntary nonopioid directive and imposing powers and duties: <https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2016&sessInd=0&act=126>

11 Pennsylvania Act 125 of 2016- Prescribing Opioids to Minors:

<https://www.dos.pa.gov/ProfessionalLicensing/BoardsCommissions/Documents/FAQs%20-%20Act%20125%20-%20Prescribing%20Opioids%20to%20Minors.pdf>

12 Aminoshariae A, Kulid JC, Donaldson M, Hersh EV. Evidence-based recommendations for analgesic efficacy to treat pain of endodontic origin: A systemic review of randomized controlled trials. *JADA* 2016;147(10):826-839.

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