Oregon Opioid Prescribing Guidelines for Acute Pain

DRAFT 7/30/18

Background

Despite a greater than 20% reduction in opioid prescribing in Oregon since 2012, prescribing rates in Oregon continue to far exceed the 1999 baseline rate; as of 2017, more than 20% of residents received an opioid prescription annually. Recent analysis by the CDC illustrates a linear association between the duration of an initial prescription and the risk of on-going opioid use demands prompt safety measures around acute prescribing. This statewide Oregon guideline is intended to improve patient safety while emphasizing compassionate and effective treatment of acute pain across three domains of practice:

- Post-procedure/post-surgical care,
- Dental care, and
- Primary care/emergency department.

These guidelines address: acute injury, post-operative, post-dental procedure pain, but exclude: cancer, chronic, and end of life pain.

Rationale for an Oregon Guideline

Several lines of evidence have recently emerged that makes addressing acute opioid prescribing an urgent matter. Most compelling is the 2017 analysis released by the CDC which demonstrated 'the likelihood of chronic opioid use increased with each additional day of medication supplied starting with the third day'. Among those receiving an initial 30 day prescription, more than 30% remained on opioids a year later. Another analysis among post-operative patients found that the majority did not use the quantities of opioids prescribed[1]. Finally, to avoid confusion, Oregon providers, healthcare systems, and payers would benefit from a single document that clarifies expectations around opioid prescribing for acute pain.

Oregon's Efforts to Promote Safe Prescribing

In 2016, Oregon's Opioid Prescribing Guidelines Task Force approved adoption of Oregon-specific opioid prescribing guidelines based on the *CDC Guideline for Prescribing Opioids for Chronic Pain*. The guideline includes recommendations to improve patient safety and care for those with chronic pain, and address the ongoing prescription opioid overdose epidemic. This guideline 'provides recommendations for the prescribing of opioid pain medication for patients 18 and older in primary care settings' but does not address prescribing for acute conditions in detail. In the absence of a national standard of care for acute opioid prescribing a variety of specialty-specific guidelines have emerged from the dental, emergency medicine, and surgical communities. All emphasize that clinicians should first use non-opioid medication then, if needed, judicious prescribing of opioids in small quantities, typically limited to less than a week.

[1]Hill MV, McMahon ML, Stucke RS, Barth RJ Jr. Wide variation and excessive dosage of opioid prescriptions for common general surgical procedures. *Ann Surg*. 2017;265(4):709-714.

Guideline Summary

1. Surgical Post-operative pain
    a. Follow procedure specific guidelines for post-surgery pain control (appendix A1 and A2). OR,
    b. Use Bree Collaborative tiered approach of <3, <7, <14 day supply for procedures of increasing complexity and anticipated duration of severe pain (appendix A3). OR
    c. For General Surgery patients discharged on or after post-operative day 2: if no opioid pills are taken the day before discharge, no opioid prescription is needed; if 1 to 3 opioid pills are taken the day before discharge, then a prescription for 15 opioid pills is given at discharge; and if 4 or more pills are taken the day before discharge, then a prescription for 30 opioid pills is given at discharge.[2]
    d. Eliminate opioids from Computerized Provider Order Entry at hospitals and surgery centers or limit quantities to <7 days.
2. Dental Pain and Dental Procedure Pain
    a. Follow OHA Oregon Dental Guideline recommendations(Appendix B1) AND
    b. Follow OHA Procedure specific dental opioid prescribing (Appendix B2)
    c. Maximum initial opioid prescription should be less than 12 tablets
3. Emergency Department (ED) and Primary Care Prescribing for Acute Pain
    a. Follow the most recent Oregon ACEP Opioid Prescribing Guidelines (Appendix D)
    b. Use opioids as a rescue medication after non-opioid alternatives have been tried
        i. Consider condition-specific alternative to opioid (ALTO) recommendations for acute pain control (Appendix E)
    c. Limit opioid prescribing for acute pain to < 3 days or < 12 pills in all but extenuating circumstances; for acute injuries, such as fractured bones, prescribe the amount that will last until the patient is reasonably able to receive follow up care for the injury. In most cases, this should not exceed thirty (30) tablets.
    d. Use only short-acting opioids for acute pain
    e. Eliminate pre-packaged opioids in Emergency Departments unless controls are in place to share information via PDMP or EDIE
    f. Eliminate opioids from routine Computerized Provider Order Entry in ED and Primary Care

[2] Hill MV, Stucke RS, Billmeier SE, Kelly JL, Barth RJ Guideline for Discharge Opioid Prescriptions after Inpatient General Surgical Procedures J Am Coll Surg 2018;226:996-1003

Appendix A1

The tables below for selected procedures are from University of Michigan/Michigan Open (https://opioidprescribing.info/updated 3/12/18)

OPEN
OPIOID PRESCRIBING ENGAGEMENT NETWORK

MSQC
Michigan Surgical Quality Collaborative

Opioid Prescribing Recommendations for Opioid-naïve Patients

Procedure	Hydrocodone (Norco) 5 mg tablets Codeine (Tylenol #3) 30 mg tablets Tramadol 50 mg tablets	Oxycodone 5 mg tablets Hydromorphone (Dilaudid) 2 mg tablets
Laparoscopic Cholecystectomy	15	10
Laparoscopic Appendectomy	15	10
Inguinal/Femoral Hernia Repair (open/laparoscopic)	15	10
Open Incisional Hernia Repair	30	20
Laparoscopic Colectomy	30	20
Open Colectomy	30	20
Ileostomy/Colostomy Creation, Re-siting, or Closure	40	25
Open Small Bowel Resection or Enterolysis	30	20
Thyroidectomy	10	5
Hysterectomy		
Vaginal	20	10
Laparoscopic & Robotic	25	15
Abdominal	35	25
Breast Biopsy or Lumpectomy Alone	10	5
Lumpectomy + Sentinel Lymph Node Biopsy	15	10
Sentinel Lymph Node Biopsy Alone	15	10
Simple Mastectomy ± Sentinel Lymph Node Biopsy	30	20
Modified Radical Mastectomy or Axillary Lymph Node Dissection	45	30
Wide Local Excision ± Sentinel Lymph Node Biopsy	30	20

Additional procedures needed:

Appendix A2 Johns Hopkins Guidelines (updated 2/15/18)

All procedures include the following standard pain control interventions

Pre-op (1 hr. before surgery): 1g PO Acetaminophen / 300 mg PO Gabapentin

Intra-op: IV Ketorolac 15-30 mg one time (at conclusion of surgery)

<u>Post-op inpatient if admitted</u>

- ***Inpatient postop standing orders:***
  a) Acetaminophen 1g PO q8hrs
  b) Ketorolac 15-30 mg IV q6-8 hrs. Or Ibuprofen (NSAIDs) 400 mg q8 hrs.
  c) Lidoderm patch every 12 hrs. at the site of laparoscopic incision

- ***Inpatient Postop narcotics prn only:***
  a) Tramadol 50 mg q 6 hrs. Prn for mild to moderate pain.
  b) Oxycodone 5 mg PO q 4 hrs. Prn for moderate to severe pain.
  c) Fentanyl 25 mcg IV q3hrs. Prn for breakthrough pain

<u>Post-op discharge</u>

- ***Postop discharge standing orders:***
  a) Acetaminophen 1g PO q8hrs for first week/ 1g PO Acetaminophen Q12 hrs. For second week /1g PO Acetaminophen prn q8hrs for pain after second week.
  b) Ibuprofen (NSAIDs) 400 mg q8 hrs. For 3 days followed by q8 hrs. Prn for pain.
  c) Lidoderm patch every 12 hrs. at the site of laparoscopic incision

- ***Post-op discharge narcotics prn only:***
  a) *Prescribe ONE only (choose number of pills based on your patients requirements in PACU and Floor)*
  b) *Choose tramadol if patient is older than 65 years old or sensitive to narcotics*

Johns Hopkins procedure specific recommendations

Category	Oxycodone 5 mg or Dilaudid 2 mg or Tramadol 50 mg Number of Pills or doses
General Surgery	
Lap chole	10
Lap inguinal hernia	10 to 15
Open inguinal hernia	10 to 15
Open umbilical hernia	10 to 15
Orthopedic	
Arthroscopic partial meniscectomy	5 to 10
Arthroscopic ACL/PCL repair	20
Arthroscopic rotator cuff repair of the shoulder	20
ORIF of the Ankle	20
Ob/Gyn	
Open Hysterectomy	15
MIS hysterectomy	10
Uncomplicated cesarean	10
Uncomplicated labor and delivery	5
Urology	
Robotic retro pubic prostatectomy	10 to 15
Breast	
Simple mastectomy or lumpectomy	5 to 10
Mastectomy with sentinel nodes / mastectomy with reconstruction	10 to 15
Thoracic	
VATS (video Assisted Thoracotomy)	10 to 15
Otolaryngology	
Thyroidectomy, partial or total	5 to 10
Cochlear implant	5
Spine	
Microdiscectomy (one level)	10 to 15

Additional procedures needed

Hopkins Additional Recomendations:

- In case of patient allergy to oxycodone, replace 5mg oxycodone with 2 mg hydromorphone (Dilaudid)
- All medications require a thorough evaluation for contraindications. Doses given are recommendations. Adjustments may be required for individual patients.
- Contraindications:
    1. Gabapentin: renal dosing in chronic kidney disease
    2. Acetaminophen : contraindicated with liver disease or elevated LFTs
    3. NSAIDS: contraindicated with bleeding risks, GI ulcers and chronic kidney disease
    4. Tramadol : contraindicated with patient on SSRI and those with history of seizure
- Patients 65 years old or older should be given Tramadol instead of oxycodone or dilaudid
- These guidelines should be customized based on patient's medical history and physical exam. Use sound clinical judgement to guide your prescribing practices.
- **COX-2 Selective Inhibitor, Celecoxib**
- Consider for patients who are unable to receive Ketorolac because they have a history of GI ulcers or bleeding. Usually give postoperatively. May use in orthopedic surgery patients who do not have any contraindications.
- <u>Dosing</u>: Give 200 mg 1-2 hours before surgery and every 12 hours for 5 days. Decrease daily dose by 50% in patients with hepatic impairment (Child-Pugh Class B).

Appendix A3

Dr Robert Bree Collaborative-Washington State

Table 1. Evidence-Based Duration of Opioid Prescriptions on Discharge Following Surgery (based on data showing that these opioid prescription durations are adequate to treat post-operative pain in >75% of patients without refills

Type I – Expected rapid recovery	
Dental procedures such as extractions or simple oral surgery (e.g., graft, implant).	Prescribe a nonsteroidal anti-inflammatory drug (NSAID) or combination of NSAID and acetaminophen for mild to moderate pain as first-line therapy. If opioids are necessary, prescribe ≤3 days (e.g., 8 to 12 pills) of short-acting opioids in combination with an NSAID or acetaminophen for severe pain. For more specific guidance, see the Bree Collaborative Dental Guideline on Prescribing Opioids for Acute Pain Management.
Procedures such as hernia repair, laparoscopic appendectomy, inguinal hernia repair, carpal tunnel release, thyroidectomy, laparoscopic cholecystectomy, breast biopsy/lumpectomy, meniscectomy, lymph node biopsy, vaginal hysterectomy.	Prescribe non-opioid analgesics (e.g., NSAIDs, acetaminophen) and non-pharmacologic therapies as first-line therapy. If opioids are necessary, prescribe ≤3 days (e.g., 8 to 12 pills) of short-acting opioids in combination with an NSAID or acetaminophen for severe pain.
Type II – Expected medium term recovery	
Procedures such as anterior cruciate ligament (ACL) repair, rotator cuff repair, discectomy, laminectomy, open or laparoscopic colectomy, open incisional hernia repair, open small bowel resection or enterolysis, wide local excision, laparoscopic hysterectomy, simple mastectomy, cesarean section.	Prescribe non-opioid analgesics (e.g., NSAIDs, acetaminophen) and non-pharmacologic therapies as first-line therapy. Prescribe ≤7 days (e.g., up to 42 pills) of short-acting opioids for severe pain. For those exceptional cases that warrant more than 7 days of opioid treatment, the surgeon should re-evaluate the patient before a second refill and taper off opioids within 6 weeks after surgery.
Type III – Expected longer term recovery	
Procedures such as lumbar fusion, knee replacement, hip replacement, abdominal hysterectomy, axillary lymph node resection, modified radical mastectomy, ileostomy/colostomy creation or closure, thoracotomy.	Prescribe non-opioid analgesics (e.g., NSAIDs, acetaminophen) and non-pharmacologic therapies as first-line therapy.

	Prescribe ≤14 days of short-acting opioids for severe pain. For those exceptional cases that warrant more than 14 days of opioid treatment, the surgeon should re-evaluate the patient before refilling opioids and taper off opioids within 6 weeks after surgery.
Patients on Chronic Opioid Analgesic Therapy	
Elective surgery in patients on chronic opioid therapy	Prescribe non-opioid analgesics (e.g., NSAIDs, acetaminophen) and non-pharmacologic therapies as first-line therapy. Resume chronic opioid regimen if patients are expected to continue postoperatively. Follow the recommendation above for prescribing the duration of short acting opioids following a particular surgery (e.g., 3, 7, or 14 days). An increased number of pills per day may be expected compared to an opioid naïve patient. Patients on chronic opioid therapy should have a similar tapering period as opioid naïve patients postoperatively. For those exceptional cases that warrant more than 14 days of opioid treatment after hospital discharge, the surgeon should re-evaluate the patient before refilling opioids and taper off opioids within 6 weeks after surgery to no higher total daily dose than was present pre-operatively.

Appendix B1

Opioid Prescribing Guidelines for Dentists

https://www.oregon.gov/oha/ph/PreventionWellness/SubstanceUse/Opioids/Documents/oregon-recommended-opioid-guidelines-dentists.pdf

1. Be aware of patients' substance abuse history.
   - Use the Prescription Drug Monitoring Program (PDMP).
   - Consult patients' other providers as needed.
2. You are discouraged from prescribing by phone. This is especially true for patients you have not met.
3. If you prescribe an opioid, prescribe only in small dosages. Usually, the dosage should not exceed three days or 10 tablets.
4. Be cautious with refills. Assess the patient in the clinic before prescribing again for a narcotic.
5. Use guidelines for acute pain management. (Recommended in Principles of Pain Management in Dentistry in ADA Practical Guide to Substance Use Disorders and Safe Prescribing, 2015 (http://ebusiness.ada.org/productcatalog/product.aspx?ID=8349)):
   - Mild to moderate pain: ibuprofen
   - Moderate to severe pain: ibuprofen and acetyl-para-aminophenol (APAP)
   - Severe pain: ibuprofen and hydrocodone/APAP
6. Use combination opioids (e.g., hydrocodone/APAP, rather than plain hydrocodone) when an opioid is necessary.
7. The patient's primary care provider should manage or coordinate prolonged pain management (while they await specialty care).
8. Tell patients how to secure medication against diversion. Also, let them know how to dispose of leftover medication safely. You may use the Drug Enforcement Administration's (DEA) website to find out where to dispose of medications safely.

Appendix B2

DRAFT Dental Opioid Prescribing Recommendations and Initial Limits **DRAFT**

June 2018

Procedure	Recommended Pain Treatment
Type 0 Routine restorative treatment (fillings), cleaning, prosthodontic care, exams/xrays, orthodontics,	None needed before or after
Type 1 Simple Extraction Deep cleaning (SRP) with heavy subgingival calculus, Endodontics	● During Procedure: Use long-acting local anesthesia such as bupivacaine/epinephrine for anticipated pain unless contraindicated ● Post-procedure: NSAID or NSAID in combination with acetaminophen

Type II
 	
Complex (surgical) Extraction
 	
E.g. 3rd molar, impacted teeth,
 	
Endodontics presenting with acutely infected tooth, exceptionally 'hot' tooth, meaning acute apical abscess, dry socket from difficult extractions, multiple exos in one visit
	● Pre-procedure: consider Non-steroidal anti-inflammatory (NSAID) one hour before procedure
	● During Procedure: Use long-acting local anesthesia such as bupivacaine w epinephrine for anticipated pain unless contraindicated
	● Post-procedure:
	  ○ 1st Line NSAID or NSAID in combination with acetaminophen
	  ○ 2nd line: 1st line plus maximum of 6 tablets of short-acting opioid such as hydrocodone or oxycodone

Type III
 	
Oral Surgical procedures other than surgical extractions,
 	
Periodontal surgery (i.e. grafting)
	● Pre-procedure: consider Non-steroidal anti-inflammatory (NSAID) one hour before procedure
	● During Procedure: Use long-acting local anesthesia such as bupivacaine w epinephrine for anticipated pain unless contraindicated
	● Post-procedure:
	  ○ 1st Line NSAID or NSAID in combination with acetaminophen
	  ○ 2nd line: 1st line plus maximum of 12 tablets

If opioids are prescribed

1. Check Prescription Drug Monitoring Program Database
2. Avoid excessive prescribing of acetaminophen
    a. Do not combine 1st line acetaminophen with a 2nd line treatment that also contains acetaminophen
3. Review with patient the dangers of opioid prescribing
4. Provide opioid safety handout to reviewed with patient before prescribing
5. No opioid refills
6. Patient return visit required for additional tablets
7. Opioids should not be prescribed for anyone under the age of 15
8. Counsel patient w/ details on what type of pain/duration to expect

Appendix C1

Oregon Emergency Department (ED) Opioid Prescribing Guidelines

Oregon Chapter of the American College of Emergency Physicians oregonacep.org

1. One medical provider should provide all opioids to treat a patient's chronic pain, to the extent possible.

2. The administration of intravenous and intramuscular opioids in the ED for the relief of acute exacerbations of chronic pain is discouraged.

3. Emergency medical providers (EMPs) should not provide replacement prescriptions for controlled substances that were lost, destroyed or stolen.

4. EMPs should not provide replacement doses of methadone for patients in a methadone treatment program.

5. Long-acting or controlled-release opioids (e.g., OxyContin®, fentanyl patches and methadone) should not be prescribed from the ED.

6. EMPs are strongly encouraged to register for the online Oregon Prescription Drug Monitoring Program (PDMP), and access the PDMP when considering prescribing opioids to any patient.

7. EMPs should exercise caution when considering prescribing opioids for patients who present to the ED without a government issued photo ID.

8. Primary care and pain management physicians should make patient pain agreements accessible to local EDs and work to include a plan for pain treatment in the ED.

9. EDs should coordinate the care of patients who frequently visit the ED using an ED care coordination program, to the extent possible.

10. EDs should maintain a list of clinics that provide primary care for patients of all payer types, and should refer patients with chronic pain to primary care.

11. EDs should perform screening, brief interventions and treatment referrals for patients with suspected prescription opiate abuse.

12. The administration of Demerol® (Meperidine) in the ED is discouraged.

13. For exacerbations of chronic pain, the EMP should contact the patient's primary opioid prescriber or pharmacy, if possible. If prescribing, the EMP should only prescribe enough pills to last until the patient is reasonably able to follow up with his or her primary opioid prescriber.

14. Prescriptions for opioid pain medication from the ED for acute injuries, such as fractured bones, should be in an amount that will last until the patient is reasonably able to receive follow up care for the injury. In most cases, this should not exceed thirty (30) tablets.

15. ED patients should be asked about a history of or current substance abuse prior to the EMP prescribing opioid medication for acute pain. Opiates should be prescribed with great caution in the context of substance abuse.

16. EMPs should avoid prescribing opioids and benzodiazepenes simultaneously, as this combination can lead to greater risk of adverse events.

17. EMPs are required by law to evaluate an ED patient who reports pain, and determine whether an emergency medical condition is present. If an emergency medical condition is present, the EMP is required to stabilize the patient's condition. The law allows the EMP to use his or her clinical judgment when treating pain, and does not require the use of opioids.

Note: EMPs should be supported and should not be subject to adverse consideration when respectfully adhering to these guidelines.

Disclaimer: *This document should not be used to establish any standard of care. No legal proceeding, including medical malpractice proceedings or disciplinary hearings, should reference a deviation from any part of this document as constituting a breach of professional conduct. These guidelines are only an educational tool. Clinicians should use their own clinical judgment and not base clinical decisions solely on this document. The following recommendations are not founded in evidence-based research but are based on promising interventions and expert opinion. Additional research is needed to understand the impact of these interventions on decreasing unintentional drug poisoning and on health care costs. All of the following recommendations should be implemented in concert and collaboration with public health entities and other relevant stakeholders.*

Appendix C2 Colorado ALTO Protocol

http://coacep.org/docs/COACEP_Opioid_Guidelines-Final.pdf

Condition	Non-opioid treatment
Migraine	Sumatriptan 100 mg PO • Acetaminophen/aspirin/caffeine (Excedrin Migraine) PO every 6 hours ***OR*** acetaminophen 1,000 mg every 6 hours • Dihydroergotamine mesylate 2 mg nasal spray • Naproxen 500-550 mg 2x/day ***OR*** ibuprofen 600 mg PO every 6 hours • Metoclopramide 10 mg PO every 6 hours FOR PREVENTION • Propranolol 40 mg PO 2x/day • Divalproex DR 250 mg PO 2x/day ***OR*** extended release 500 mg PO daily • Topiramate 25 mg PO at bedtime • Magnesium supplementation 600 mg PO daily
Sore throat	• Ibuprofen 600 mg PO every 6 hours • Acetaminophen 1,000 mg PO every 6 hours • Dexamethasone 10 mg PO once • Viscous lidocaine
Uncomplicated Neck Pain	• Acetaminophen 1,000 mg PO every 6 hours • Ibuprofen 600 mg PO every 6 hours • Cyclobenzaprine 5 mg PO every 8 hours • Physical therapy • Lidocaine 5% transdermal patch every 24 hours (remove after 12 hours)
Uncomplicated Back Pain	• Acetaminophen 1,000 mg PO every 6 hours • Ibuprofen 600 mg PO every 6 hours Lidocaine 5% transdermal patch every 24 hours (remove after 12 hours) • Diclofenac 1.3% transdermal patch 2x/day ***OR*** diclofenac 1% gel 4 g 4x/day as needed • Cyclobenzaprine 5 mg PO 3x/day • Heat • Physical therapy • Exercise program
Sprains	• Immobilization • Ice • Ibuprofen 600 mg PO every 6 hours

	• Acetaminophen 1,000 mg PO every 6 hours • Diclofenac 1.3% transdermal patch 2x/day ***OR*** diclofenac 1% gel 4 g 4x/day as needed
Contusions	• Compression • Ice • Ibuprofen 600 mg PO every 6 hours • Acetaminophen 1,000 mg PO every 6 hours • Lidoderm 5% patch transdermal patch every 24 hours (remove after 12 hours)
Tooth Pain	• Ibuprofen 600 mg PO every 6 hours ***PLUS*** acetaminophen 1,000 mg PO every 6 hours
Osteoarthritis	• Diclofenac 50 mg PO every 8 hours ***OR*** naproxen 500 mg PO 2x/day ***OR c***elecoxib 200 mg daily • Diclofenac 1.3% transdermal patch 2x/day ***OR*** diclofenac 1% gel 4 g 4x/day as needed
Undifferentiated Abdominal Pain	• Dicyclomine 20 mg PO every 6 hours • Ibuprofen 600 mg PO every 6 hours • Acetaminophen 1,000 mg PO every 6 hours • Metoclopramide 10 mg PO every 6 hours • Prochlorperazine 10 mg PO every 6 hours
Neuropathic Pain	• Gabapentin 300 mg PO at bedtime • Amitriptyline 25 mg PO at bedtime • Pregabalin 75 mg PO 2x/day

Supporting Material

Existing Guidelines

Post-operative Pain

Dr Robert Bree Collaborative, Washington State 2018 Draft

http://www.breecollaborative.org/wp-content/uploads/Supplemental-Bree-AMDG-Postop-pain-Draft-Final.pdf

This guideline classifies procedures based on the anticipated duration of recovery into three categories and a maximum duration of short-acting opioid supply: rapid recovery(< 3 day supply), medium term recovery(< 7 day supply), longer term recovery)(<14 day supply). For patients on chronic opioid treatment pre operatively, the group recommends the same durations of short-acting opioids in addition to previously prescribed opioids. Finally, the guideline recommends that pain in children be treated with special attention to adequate pain control in neonates and young infants.

Johns Hopkins University, 2018 (https://www.solvethecrisis.org/best-practices)

Provides pre, intra, and post operative recommendations for General Surgery, Orthopedic, OB/Gyn, Urology, Breast Surgery, Thoracic, ENT, and spine procedures. All have a common theme of inpatient ketorolac and judicious oral opioids and discharge instructions that include both acetaminophen and ibuprofen and limited out-patient opiods (5-20 pills of oxycodone, dilaudid, or tramadol to be used over 2 days).

Michigan OPEN, 2018 https://opioidprescribing.info/

Options for post-operative opioid treatment after a variety of procedures is provided in a table. Quantities vary from 5 doses for thyroidectomy or breast biopsy to 40-45 doses for radical mastectomy or ileostomy. The recommendations are based on a literature review and on the Michigan Surgical Quality Collaborative, and are intended to meet or exceed self-reported use of 75% of patients.

Emergency Department Prescribing

Oregon ACEP (undated)
https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Documents/oracep-ed-opioid-prescribing-guidelines.pdf

Colorado College of Emergency Physicians, 2017

http://coacep.org/docs/COACEP_Opioid_Guidelines-Final.pdf

This extensive guideline and background document includes data on opioid misuse in Colorado, recommendations to limit ED opioid use, non-opioid pain treatment alternatives, harm

reduction for people who inject drugs, and the treatment of opioid addiction. The document emphasizes using alternative short term agents for pain such as ketorolac, ketamine, nitrous oxide and perineural lidocaine infiltration for joint/extremity trauma. It also includes an extensive list of non-opioid discharge medications for a wide variety of conditions including headache, renal colic, strains, contusions, neuropathic and abdominal pain. If opioids are used then only short-acting agents for less than 3 days are recommended. They also recommend removing all opioids from computerized provider order entry systems and eliminating all pre-packaged opioid prescriptions from the ED if pharmacy services are available.

Dental Prescribing

Opioid Prescribing, Guideline for Dentists, Oregon 2017

Ibuprofen and acetaminophen are recommended for mild to moderate pain. If opioids are used for severe pain, then small doses not to exceed 3 days or 10 tablets are recommended; no refills unless reassessed.

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