POSTOPERATIVE OPIOID PRESCRIBING GUIDELINES

In the past, surgeons and other physicians were strongly encouraged to treat pain aggressively with opioids. It is now clear that the prescribing of opioids leads too often to side effects, dependence and addiction. At the same time, studies have shown that NSAIDS are as effective as opioids for treating many forms of pain, including acute postoperative pain. These guidelines, which are based on studies of analgesic needs postoperatively, attempt to balance the benefits and risks of opioids.

They recommend:

- Managing patient expectations about pain after surgery
- Maximizing the use of non-opioid pain treatments pre- and postoperatively
- Avoiding the use of opioids for minor surgical procedures
- Sharply limiting the duration of opioid use following major surgical procedures

MANAGING PATIENT EXPECTATIONS

Before surgery, discuss with patients the pain they may expect to have after the procedure.

Patients should be counseled that:

- Pain immediately after surgery is normal and an expected part of the healing process.
- Pain is worst in the first 1-2 days after surgery, but improves over time.
- Most pain can be effectively managed with medicines other than opioids, such as NSAIDS, acetaminophen, gabapentin and topicals.

If opioids are being prescribed:

- Opioids should be used only when other medicines have not adequately treated severe pain, and should be stopped when the pain is manageable with non-opioid pain medications or alternative strategies.
- Opioids should be taken in addition to, not in place of, non-opioid pain medications in order to minimize the amount of opioids taken.
- Opioids carry a high risk of physical dependence, addiction and overdose.
- Unused opioids should be disposed of safely to prevent misuse or diversion.

Preoperative and Intraoperative Management of Pain

Unless contraindicated, patients should take analgesic medications (such as NSAIDS, acetaminophen, gabapentin) on a scheduled basis preoperatively.

Consideration should be given to the applicability of following intraoperative medications and techniques, all of which have been shown to reduce the requirement for opioids[1]:

- Neuraxial or peripheral nerve blocks
- Ketamine
- Clonidine
- Dexmedetomidine
- Dexamethasone

Non-Opioid Treatments for Pain

There are many effective – and far safer – alternatives to opioids for treating pain. In the absence of contraindications, the following treatments should be first-line for patients following all surgeries:

Non-opioid Pharmacologic Treatments	Non-Pharmacologic Treatments
NSAIDS	Physical therapy
Acetaminophen	Cognitive behavioral therapy
Antidepressants	Acupuncture
Topical medications	TENS units
Neuromodulating medications	Ice, elevation, compression

Postoperatively, oral medications should be initially taken on a scheduled basis in order to maximize pain relief.

Refills and E-Prescribing

Surgeons may be concerned about under-treatment of pain, leading to requests for refills of opioid prescriptions.

However, a study of over 25,000 patients has shown that requests for opioid refills do not differ between patients prescribed between 8 and 60 pills.[2]

If opioid prescription refills are needed, they are more easily done through e-prescribing. These guidelines presume e-prescribing availability. E-prescribing of controlled substances will be required in Pennsylvania in 2019.[3]

GUIDELINES FOR OPIOID-NAÏVE PATIENTS

Specialty	Number of Pills* Recommended for Opioid-Naive Patients at Discharge (minimum – maximum)	
	Minor procedure	Major procedure†
General, Colorectal, Gynecologic Oncology, Plastic	0	6 (0–13)[4]
Orthopedic, Neurosurgery	0	9 (0–18)[4,5]
Cardiothoracic, Vascular	0	9 (0–18)[4]
OB/Gyn	0	6 (0–12)[6]
Urologic	0	4 (0–8)[7]
OMFS, ENT	0	5 (0–9)[8]

* pill = 1 tab of 5mg oxycodone or equivalent MME in short-acting opioid

† For patients discharged after post-op day 1, use of opioids in the 24 hours before discharge can further guide the amount prescribed. For patients requiring no opioids the day before discharge, no prescription is likely needed.

EXAMPLES OF MINOR AND MAJOR PROCEDURES[9]

All outpatient procedures should be considered minor procedures.

	Minor procedure	Major procedure
ENT and Oral Surgery	• Tooth extraction • Tonsillectomy • Thyroidectomy	• Maxillary or mandibular osteotomy • Resection of large benign or malignant mass requiring overnight hospital stay
General Surgery	• Breast lumpectomy or mastectomy with or without LN biopsy or axillary dissection • Laparoscopic cholecystectomy • Inguinal herina repair • Soft tissue mass removal • Hemorrhoidectomy	• Mastectomy with immediate tissue reconstruction • Open repair or resection of stomach, small bowel, colon, liver, pancreas, adrenal or liver • Open cholecystectomy
Gynecology	• Dilation and curettage • Tubal ligation • Laparoscopy – limited endometriosis	• Hysteroscopic resection or ablation • Abdominal or transvaginal pelvic floor surgery
Urology	• Cystoscopy, ureteroscopy • Vasectomy	• Resection of bladder or prostate tumor
Neurosurgery and Spine Surgery	• Discectomy	• Intracranial surgery • Spinal laminectomy and/or fusion
Orthopedic Surgery	• Shoulder arthroscopy • Knee arthroscopy • Tendon repair • Hardware removal	• Arthroplasty (knee, hip, shoulder) • ORIF of long bones • Bunionectomy
Plastic Surgery	• Carpal tunnel release • Lipoma excision • Cosmetic breast surgery	• Free flap reconstruction • Panniculectomy
Cardiothoracic Surgery	• Mediastinoscopy	• Resection of lung, esophagus, or mediastinal mass
Vascular Surgery	• Varicose vein excision	• Aortic aneurysm repair

GUIDANCE FOR PATIENTS WITH CHRONIC OPIOID USE

- Do not increase opioids above preoperative levels.
- Before surgery, set expectations for anticipated pain, healing time and postoperative opioid use.
- Consult patient's pain management or pain medication prescriber prior to surgery to establish a postoperative plan.
- If surgery was performed to address chronic pain (such as arthroplasty for end-stage osteoarthritis), consider taper as soon as acute pain is expected to resolve.
- If surgery did not address cause of chronic pain, consider slow taper and discuss with patient's prescribing physician.

See Philadelphia Department of Public Health's Tapering Guidelines for guidance.[10]

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Department of Public Health
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