

# Pain Control Optimization Pathway - POP

**Rationale:** The overprescribing of opioids post-operatively places patients at risk of becoming new persistent users, a significant surgical complication. Among opioid-naïve patients undergoing common surgical procedures, 6-10% continue filling opioid prescriptions 3-6 months after surgery.<sup>1,2</sup> Surgeons overprescribe opioids for many common surgical procedures with 72% of opioids prescribed to surgical patients going unused.<sup>3</sup> Excessive, unused prescription opioids have devastated our communities by creating an opportunity for misuse and diversion. Among patients who misused prescription opioids, over 50% obtained them for free from a friend or relative.<sup>4</sup> Implementation of a pain control optimization pathway, leveraging multi-modal analgesic management<sup>5</sup> and patient education and engagement, can potentially transform post-operative surgical care.

## The Care Processes

### Patient selection:

- **Patient Inclusions:**

- o Uncomplicated, elective surgery
- o Opioid naïve patients (i.e., No opioid use within one year of procedure).
- o Patients in active recovery from Opiate Use Disorder (OUD) and intermittent opioid users **may be considered**, upon surgeon's discretion.

- **Patient Exclusions:**

- o History of multiple comorbidities, in whom surgery is not straightforward.
- o Patients currently utilizing opioids for chronic pain or with a Controlled Substance Agreement from their pain specialist or usual prescriber.
- o Those with allergies, medical conditions, or personal reservations contraindicating acetaminophen and/or ibuprofen use.

**Preoperative optimization:** Discuss risks/benefits of the Pain Control Optimization Pathway (POP) ideally at the surgical consult, or preoperative screening thus informing shared decision-making.

- **Patients receive education regarding:**

- o Post-operative pain expectations including usual opioid consumption
- o Non-opioid pain medication instructions
- o Opioid safe use and disposal instructions

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**Operative management:** The perioperative pain management plan should be reinforced with the patient, attending anesthesiologist, CRNA, RNs and surgeon.

- o Anesthesia will maintain standard intraoperative analgesia to ensure safe and optimal anesthetic management.
- o Post Anesthesia Care Unit (PACU) RNs will maintain ASPAN standards, however nursing is encouraged to administer oral opioids sparingly with appropriate rationale to patients.

## **Discharge post-operative pain management:**

- **All patients should receive:**

- o Clear messaging regarding normal pain expectations specific to their surgery.
- o Communication options (e.g., patient portal, phone numbers) for any unforeseen pain questions or concerns, including during off hours.
- o Instructions for **scheduled** acetaminophen and ibuprofen to be taken around-the-clock, while awake for at least the first 72 hours postop, or until pain subsides.
  - o Education regarding the efficacy and use of non-opioid pain management options (i.e., acetaminophen and ibuprofen) and other adjuncts (e.g., splinting, elevating, ice or heat packs prn, ambulation) for optimal pain management. Visit [painpathway.info](http://painpathway.info) for supporting patient education materials.
- o If opioids are prescribed, a prescription for a limited number of opioids (See medication chart pg. 3.)
- o Explicit instructions on reserving the opioids **only** for breakthrough pain and **only** during the first 24-48 hours postop.<sup>6</sup>
- o Education on safe opioid storage while in use and safe disposal instructions for any unused opioids.
  - Consider providing an in-home drug disposal product
  - Minimally, provide printed information on local authorized collectors, in their community.  
Visit: <http://michigan-open.org/takebackmap/>
  - As a last resort, provide instructions on safe disposal of excess opioids using household trash. <http://michigan-open.org/patient-resources/>

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## Opioid Medication Summary Michigan OPEN Recommendations

<b>Pre-op</b>	Acetaminophen 1gm p.o.^
<b>Intra-op</b>	Infiltrate all laparoscopic port sites with local anesthetic. Ketorolac 30mg IVP^ at closing.
<b>Post-op</b>	Ketorolac 30mg IVP^ prn if not given intra-op .

^Unless contra-indicated

PROCEDURE	RX: OXYCODONE 5mg TABLETS
Adrenalectomy	0-12
Appendectomy – Adult	0-4
Appendectomy – Pediatric	0
Carotid Endarterectomy (CEA)	0-4
Carpal Tunnel Release	0-4
Cesarean Delivery	0-15
Colectomy – Laparoscopic	0-8
Colectomy – Open	0-10
Endovascular Aneurysm Repair (EVAR)	0-4
Hernia Repair – Inguinal	0-8
Hernia Repair – Umbilical	0-8
Hernia Repair – Ventral	0-8
Hysterectomy – Laparoscopic	0-5
Hysterectomy – Open	0-10
Parathyroidectomy	0-5
Prostatectomy	0
Sleeve Gastrectomy	0-10
Thyroidectomy	0-5
Ureteroscopy	0
Vasectomy	0

\*May substitute (5) Tramadol 50mg tablets, per surgeon's discretion.

**NOTE:** Oxycodone allows the adjuvant use of IBU/APAP while eliminating concerns of exceeding APAP's maximum daily dose.

### Over-the-counter medication discharge instructions:

Acetaminophen 650mg q 6h, alternating with ibuprofen 600mg q 6h.

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- Emphasize this is scheduled dosing of OTC
- Ensures pain meds q 3h, while maintaining 6 hours between each dose of APAP and IBU.
- CONSIDER a prescription for IBU 600mg to decrease confusion.

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## References:

1. Lee JS, Hu HM, Edelman AL, et al. New Persistent Opioid Use Among Patients With Cancer After Curative-Intent Surgery. *J Clin Oncol*. 2017;35(36):4042-4049.
2. Brummett CM, Waljee JF, Goesling J, et al. New Persistent Opioid Use After Minor and Major Surgical Procedures in US Adults. *JAMA Surg*. 2017;152(6):e170504.
3. 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.
4. Jones CM, Paulozzi LJ, Mack KA. Sources of prescription opioid pain relievers by frequency of past-year nonmedical use in the United States, 2008-2011. *JAMA Intern Med*. 2014;174(5):802-803.
5. Elia N, Lysakowski C, Tramèr MR. Does Multimodal Analgesia with Acetaminophen, Nonsteroidal Anti-inflammatory Drugs, or Selective Cyclooxygenase-2 Inhibitors and Patient-controlled Analgesia Morphine Offer Advantages over Morphine Alone? Meta-analyses of Randomized Trials. *Anesthesiology*. 2005 Dec;103(6):1296-304.
6. Chou R, Gordon DB, de Leon-Casasola OA, et al. Management of Postoperative Pain: A Clinical Practice Guideline from the American Pain Society, the American Society of Regional Anesthesia and Pain Medicine, and the American Society of Anesthesiologists' Committee on Regional Anesthesia, Executive Committee, and Administrative Council. *J Pain*. 2016;17(2):131-157.