

These prescribing recommendations, developed by Michigan OPEN for patients with no preoperative opioid use, were informed by patient-reported data from our Collaborative Quality Initiative (CQI) partners, published studies and expert opinion.



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*No opioid use in the year prior to surgery

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Counseling

patients about **pain & opioid** use after surgery

- ❑ Set pain expectations in relation to procedure
- ❑ Focus on post-operative functional goals. Ability to:
 - eat
 - move
 - breathe deeply
 - sleep
- ❑ Focus on non-opioid pain management alternatives
 - NSAIDs, acetaminophen
 - physical therapy
 - acupuncture
 - meditation/mindful breathing
- ❑ Discuss appropriate use
 - only for acute surgical pain
- ❑ Discuss adverse effects
 - nausea, vomiting, constipation
 - risk of dependence
 - addiction
 - potential overdose
 - diversion
- ❑ Educate on safe storage and disposal
 - Find a local medication drop box at: Michigan-OPEN.org/takebackmap

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evidence-based
reasons
to change opioid
prescribing practices

OPEN
OPIOID PRESCRIBING ENGAGEMENT NETWORK

The **evidence** found

6-10%

of surgical patients become new persistent opioid users

(A significant surgical complication)



NO
correlation

between probability of refill and amount of opioid prescribed

Greater than

70% 
of prescribed opioids go unused



NO
correlation

between patient satisfaction scores and amount of opioid prescribed

Q: Why are prescribers being asked to change their opioid prescribing practices?

- Postoperative opioid prescribing varies significantly.¹
- Greater than 70% of prescribed pills went unused by patients.^{1,2}
- Patients who were prescribed fewer opioids reported using fewer opioids with no change in pain scores.³
- Evidence-based opioid prescribing guidelines for the perioperative period are needed to enable tailored prescribing and reduce the excess of opioid pills within patients' communities.⁴
- Prescription size was the strongest predictor of patient consumption.⁵

Q: Will patient satisfaction scores be impacted by prescribing fewer opioids?

- No correlation was found between HCAHPS pain measures and postoperative opioid prescribing.⁶
- Prescribers can feel empowered to reduce their initial opioid prescription without impacting patient satisfaction.⁶

Q: How likely is persistent opioid use after surgery?

- Approximately 6–10% of opioid naïve (before surgery) patients continue to use opioids more than three months after surgery.^{7,8,9}
- Many patients continue to use their opioids for reasons other than surgical pain.^{7,9}
- New persistent opioid use after surgery is an underappreciated surgical complication that warrants increased attention.^{7,8,9}

Q: Will patients request more prescription refills if initially prescribed fewer opioids?

- The probability of a patient refilling a postoperative opioid prescription was not correlated with their initial prescription amount.¹⁰
- Prescribers could prescribe smaller opioid prescriptions without influencing the probability of a refill request.¹⁰
- Implementation of evidence-based prescribing guidelines reduced post-laparoscopic cholecystectomy opioid prescribing by 63% without increasing the need for medication refills.³

references

1. Hill M, 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.
2. Bicket MC, Long JJ, Pronovost PJ, Alexander GC, Wu CL. Prescription opioid analgesics commonly unused after surgery: A systematic review. *JAMA Surg.* 2017;152(11):1066-1071.
3. Howard R, Waljee J, Brummett C, Englesbe M, Lee J. Reduction in opioid prescribing through evidence-based prescribing guidelines. *JAMA Surg.* 2018;153(3):285-287.
4. Waljee JF, Li L, Brummett CM, Englesbe MJ. Iatrogenic opioid dependence in the United States: Are surgeons the gatekeepers? *Ann Surg.* 2017;265(4):728-730.
5. Howard R, Fry B, Gunaseelan V, et al. Association of opioid prescribing with opioid consumption after surgery in Michigan. [Published online ahead of print November 7 2018]. *JAMA Surg.* 2018. e184234. DOI:10.1001/jamasurg.2018.4234.
6. Lee JS, Hu HM, Brummett CM, et al. Postoperative opioid prescribing and the pain scores on hospital consumer assessment of healthcare providers and systems survey. *JAMA Surg.* 2017;317(19):2013-2015.
7. Brummett CM, Waljee JF, Goesling J, Moser S, Lin PI, Englesbe MJ, Bohnert ASB, Kheterpal S, Nallamothu BK. New persistent opioid use after minor and major surgical procedures in US adults. *JAMA Surg.* 2017;152(6):e170504. DOI:10.1001/jamasurg.2017.0504.
8. 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.
9. Goesling J, Moser SE, Zaidi B, et al. Trends and predictors of opioid use after total knee and total hip arthroplasty. *Pain.* 2016;157(6):1259-1265.
10. Sekhri S, Arora NS, Cottrell H, et al. Probability of opioid prescription refilling after surgery: Does initial prescription dose matter? *Ann Surg.* 2018;268(2):271-276.