



# IHPI BRIEF: Understanding Opioid Prescribing After Surgery



Opioids are commonly prescribed after both minor and major surgeries for pain management, and many patients receive their first exposure to opioids following surgery.

Prescribers have little guidance available on opioids, and overprescribing is a widespread problem that contributes to the opioid epidemic currently claiming

**130 American lives every day.\***

With **up to 92% of patients having leftover opioids after common operations**, millions of pills are left vulnerable to diversion into communities.\*\*

## Takeaways from our research **on opioid prescribing after surgery**



**1** **Becoming a new chronic opioid user is the most common post-surgical complication**



**2** **Prescribing often far exceeds pain management needs**



**3** **Prescription size is the strongest predictor of how much opioid a person will use**

### Ways to reduce risk associated with opioid prescribing after surgery



**Prescribing Recommendations**  
Implementing evidence-based, operation-specific opioid prescribing recommendations can help to eliminate overprescribing.



**Transitions of Care**  
Improving care coordination between surgeons and primary care providers could lead to earlier identification of patients at risk for new chronic use.



**Disposal**  
Having a variety of methods for patients to dispose of leftover opioids can decrease opportunities for diversion and misuse.

### Evidence-based policies are needed to improve opioid prescribing after surgery

**Our research indicates that hospitals should develop protocols for opioid prescribing and disposal that include:**

- Adopting evidence-based, operation-specific opioid prescribing recommendations.
- Standardizing the procedure for communication between surgeons and primary care providers to coordinate patients' pain management and better identify patients at risk for new persistent opioid use.
- Registering with the Drug Enforcement Administration to accept opioids for disposal to provide patients with more accessible methods for disposing of their unused medications.



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## Studies on opioid prescribing after surgery by IHPI members

### Association of opioid prescribing with opioid consumption after surgery in Michigan

Howard, R., Fry, B., Gunaseelan, V., Lee, J., Waljee, J., Brummett, C., Campbell, D., Seese, E., Englesbe, M., & Vu, J. (2018).

*JAMA Surgery*. PMID: 30422239 [doi:10.1001/jamasurg.2018.4234](https://doi.org/10.1001/jamasurg.2018.4234)

### Spillover effect of evidence-based postoperative opioid prescribing

Howard, R., Alameddine, M., Klueh, M., Englesbe, M., Brummett, C., Waljee, J., Lee, J. (2018).

*Journal of the American College of Surgeons*, 227(3), 374-381. PMID: 30056059 [doi:10.1016/j.jamcollsurg.2018.06.007](https://doi.org/10.1016/j.jamcollsurg.2018.06.007)

### Patterns of initial opioid prescribing to opioid-naive patients

Larach, D.B., Waljee, J.F., Hu, H.M., Lee, J.S., Nalliah, R., Englesbe, M.J., Brummett, C.M. (2018).

*Annals of Surgery*. PMID: 30048311 [doi:10.1097/SLA.0000000000002969](https://doi.org/10.1097/SLA.0000000000002969) [Epub ahead of print]

### Transitions of care for postoperative opioid prescribing in previously opioid-naive patients in the USA: A retrospective review

Klueh, M.P., Hu, H.M., Howard, R.A., Vu, J.V., Harbaugh, C.M., Lagisetty, P.A., Brummett, C.M., Englesbe, M.J., Waljee, J.F., & Lee, J.S. (2018).

*Journal of General Internal Medicine*, 33(10), 1685-1691. PMID: 29948809 [doi:10.1007/s11606-018-4463-1](https://doi.org/10.1007/s11606-018-4463-1)

### Reduction in opioid prescribing through evidence-based prescribing guidelines

Howard, R., Waljee, J., Brummett, C., Englesbe, M.J., & Lee, J.S. (2018).

*JAMA Surgery*, 153(3), 285-287. PMID: 29214318 [doi:10.1001/jamasurg.2017.4436](https://doi.org/10.1001/jamasurg.2017.4436)

### New persistent opioid use after minor and major surgical procedures in US adults

Brummett, C.M., Waljee, J.F., Goesling, J., Moser, S., Lin, P., Englesbe, M.J., Bohnert, A.S.B., & Nallamothu, B.K. (2017).

*JAMA Surgery*, 152(6):e170504. PMID: 28403427 [doi:10.1001/jamasurg.2017.0504](https://doi.org/10.1001/jamasurg.2017.0504)

## Other Studies

### \* Opioid Overdose: Drug Overdose Deaths

Centers for Disease Control and Prevention. [updated 2018 Dec 19; cited 2019 Feb. 13].

Available from: [www.cdc.gov/drugoverdose/data/statedeaths.html](http://www.cdc.gov/drugoverdose/data/statedeaths.html)

### \*\* Prescription opioid analgesics commonly unused after surgery: a systematic review

Bicket, M.C., Long, J.J., Pronovost, P.J., Alexander, G.C., Wu, C.L. (2017).

*JAMA Surgery*, 152(11), 1066-1071. PMID: 28768328 [doi:10.1001/jamasurg.2017.0831](https://doi.org/10.1001/jamasurg.2017.0831)

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