Reducing Opioid Exposure After Surgery

ENSURING YOUR EMPLOYEES HAVE ACCESS TO NEW NON-OPIOID SOLUTIONS

Employers: TAKE ACTION

Self-insured employers and commercial carriers must follow Medicare's lead to enable access to non-opioid therapies for post-surgical pain. Medicare has made certain non-opioids separately reimbursable, removing the cost burden to providers that would otherwise discourage their use. To ensure your covered population has similar access:

- Reimburse for innovative non-opioids outside the surgical bundle across all settings of care
- Promote facilities that utilize innovative non-opioid postoperative pain management treatments
- ▶ Educate care managers and care navigators about non-opioid options so they can inform patients prior to surgery
- ▶ Educate employees and their families about available non-opioid therapies and how to ask doctors to use them during surgery

MBGH is one of the nation's leading and largest non-profit employer coalitions. Members are represented by human resources and health benefit professionals for over 130 mid, large and jumbo self-insured public and private companies who provide health benefits for more than 4 million lives. Employer members spend over \$12 billion annually on healthcare. Since 1980, members have used their collective voice to serve as catalysts to improve the cost, quality and safety of health benefits.

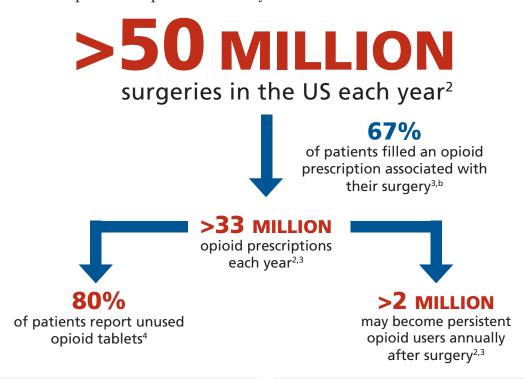
Find more resources in the MBGH Employer Toolkit, *Addressing Pain Management & Opioid Use/Abuse*: https://www.mbgh.org/resources/employertoolkits/painmanagement



Opioids After Surgery: A Doorway to Addiction

The opioid epidemic in the United States has reached a state of crisis. In 2020, drug overdoses were linked to more than 90,000 deaths, the highest number ever recorded in a single year.^{1,a}

The surgical setting introduces many people to opioids. Estimates suggest that greater than **2 million** surgical patients become persistent opioid users each year.^{2,3}



Unused opioid pills create risk:

- Up to 77% of opioid pills remain inside the home in unsecured locations⁴
- ▶ 51% of nonmedical users of opioids received them from friends and family⁵

Opioid dependence can happen quickly.

A study of cancer patients not previously exposed to opioids found⁶:

- Prescribed opioids can cause dependence after just 5 days of use
- Approximately 14% of patients who received a second opioid prescription were still using opioids 1 year later

Opioids Enter the Community Through Prescriptions After Common Surgeries

Average opioid pills prescribed following surgery, per patient^{7-12,c}:

Procedure	Average opioid pills prescribed
Total knee arthroplasty (TKA)	94
Total hip arthroplasty (THA)	87
Bunionectomy	46
Outpatient shoulder surgery	60
Cesarean delivery	40

Procedure	Average opioid pills prescribed
Laparoscopic inguinal hernia repair	30
Laparoscopic gall bladder removal	30
Laparoscopic appendectomy	30
Partial mastectomy	20

^aBased on the 12 months ending September 2020.

^bBetween 30 days before through 14 days after surgery.

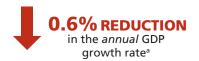
For more detail, see referenced studies. Averages for TKA, THA, and bunionectomy are calculated from study data.

The Cost of Opioid Dependence for Employers and Employees

Lost Productivity

Studies have found that **2 million** prime-age individuals (25 to 54 years old) were absent from the workforce due to opioids as of 2015. Between 1999 and 2015, this growing loss of labor accounted for 13:







To see how opioids impact the labor force in each state, see page 6.

Increased Healthcare Costs

\$2.6 billion

spent by large employers in 2016 on treating opioid addiction and overdoses

- ▶ 9x higher spending vs 2004¹⁴
- Most costs were incurred by people aged 18 to 34¹⁴

Costs Specific to Postoperative Opioid Use

The opioid crisis creates significant costs for employers. Specifically, the use of postoperative opioids is associated with 15-19:

- Higher direct healthcare costs
- Greater utilization of medical services
- Increased length of stay and readmissions due to opioid-related adverse events (ORAEs)

\$5,100 to \$7,000

Average additional per patient cost associated with opioids prescribed post-surgery

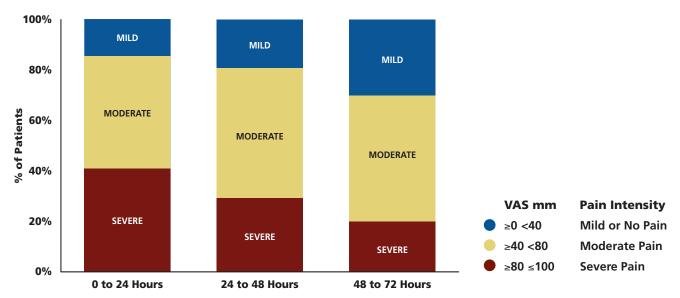
According to a medical claims analysis of 4 million surgical patients, those who filled a postoperative opioid prescription compared to those who did not²⁰:

- ▶ Had over **50% higher** total healthcare costs
- Were up to 1.8x more likely to be hospitalized and up to 1.6x more likely to visit an emergency department

Gaps in Postoperative Pain Management

The goal of postoperative pain management is to reduce the pain and discomfort after surgery while minimizing side effects. The first 72 hours following surgery—when pain is most severe and inflammation is highest—are critical in successfully treating postoperative pain.²¹⁻²³

The First 72 Hours After Surgery Are the Most Painful²²



Note: Figure adapted from Svensson 2000.²² The visual analog scale (VAS; range, 0-100 mm) was used for pain intensity ratings at 4, 24, 48, and 72 hours after surgery.

Why Don't Most Local Anesthetics Control Pain for 72 Hours?

- ▶ Most local anesthetics do not consistently work beyond 12 hours.²⁴ Even extended-release formulations and pumps do not consistently work beyond 24 hours.^{25,26}
- ▶ Inflammation is considered a reason these products do not address pain²⁷

When pain remains after a surgical procedure, opioids are often prescribed. Reducing severe pain is key to reducing opioid consumption. New and emerging treatments may help address the gap in postoperative pain management.

Ensure Access to Innovative Non-Opioids

New non-opioid postoperative pain management drugs are available and in development. Current payment structures could stand in the way of patient access.

Employers: TAKE ACTION

To ensure your covered population can access non-opioid pain management drugs in the surgical setting:

- 1. Reimburse for innovative non-opioids outside the surgical bundle across all settings of care
- **2.** Promote facilities that utilize innovative non-opioid postoperative pain management treatments
- **g.** Educate care managers and care navigators about non-opioid options so they can inform patients prior to surgery
- 4. Educate employees and their families about available non-opioid therapies and how to ask doctors to use them during surgery

Questions to Ask Your Carrier/Third-Party Administrator (TPA):

- **5.** What are you doing today to keep patients off opioids following surgery?
- 2. What new innovative non-opioid pain management drugs are covered outside the surgical bundle?
 - **a.** If response is "none" or "we don't know," ask:
 - i. If opioid use after surgery costs my plan an additional \$5,000 to \$7,000 per patient, what can we do to ensure innovative non-opioid drugs are paid for outside the surgical bundle?
 - ii. Are you willing and able to follow Medicare's example for our plan?
- **3.** How will you let providers and patients seeking care know that these innovative non-opioid pain management drugs are available?

Medicare Enables Access to Non-Opioids for Postoperative Pain Management

By following the precedent set by Medicare regarding separate payment for non-opioid postoperative pain management drugs, employers, TPAs, and carriers can be good stewards for employees and their communities. Recently, Medicare changed its payment structure to separately reimburse for non-opioids outside the surgical bundle in the ambulatory surgery center (ASC) setting. In addition, Medicare pays for new, innovative drugs outside the surgical bundle in the hospital outpatient setting for a defined period (3 years). These policies remove the cost burden to providers that would otherwise discourage use of these products.

One forward-thinking commercial carrier is encouraging the use of non-opioids by:

- ▶ Piloting an effort to incentivize the use of non-opioid therapies in select ASCs²⁸
- ▶ Providing separate reimbursement for non-opioids for certain procedures²⁸
- ▶ Helping patients find providers trained in non-opioids and alternative pain management methods²⁹

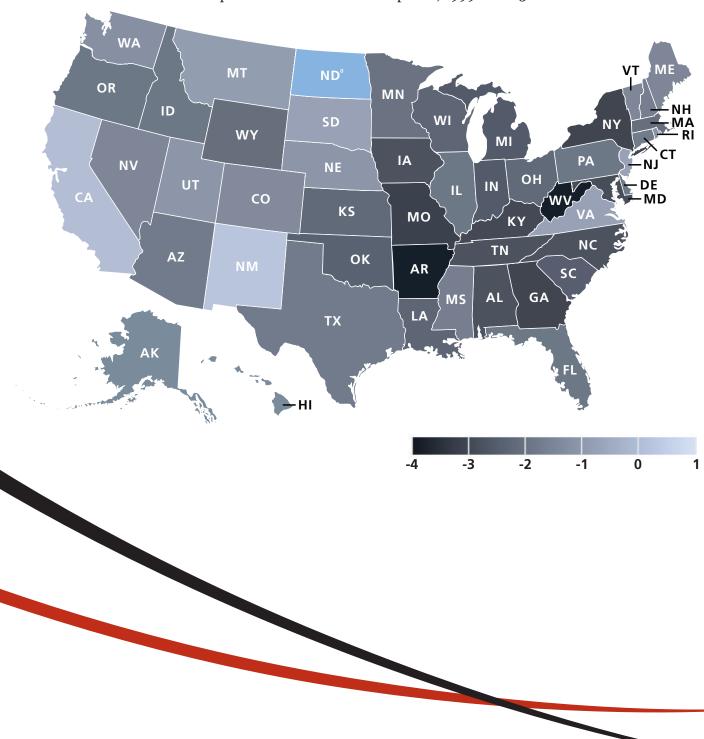
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Appendix

Impact of the Opioid Crisis on the Labor Force by State¹³

A recent study examined the decline in labor force participation due to opioids in each state between 1999 and 2015. Opioids had the largest negative labor market effects in West Virginia and Arkansas, reducing the labor force participation rate by 3.8% among individuals 25 to 54 years old. The figure below shows how the impact varied by state, with darker shading indicating a greater decline in labor force participation.





^aThere is not enough data available to perform the analysis for North Dakota.

References

- Ahmad FB, Rossen LM, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics, Centers for Disease Control and Prevention. April 14, 2021. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm. Accessed May 10, 2021.
- 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. doi:10.1001/jamasurg.2017.0504.
- Santosa KB, Hu HM, Brummett CM, et al. New persistent opioid use among older patients following surgery: a medicare claims analysis. Surgery. 2020;167(4):732-742. doi:10.1016/j.surg.2019.04.016.
- 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. doi:10.1001/jamasurg.2017.0831.
- 5. Substance Abuse and Mental Health Services Administration, US Department of Health and Human Services. Key Substance Use and Mental Health Indicators in the United States: Results From the 2018 National Survey on Drug Use and Health. HHS publication PEP19-5068. https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf. Published August 20, 2019. Accessed May 10, 2021.
- 6. Shah A, Hayes CJ, Martin BC. Characteristics of initial prescription episodes and likelihood of long-term opioid use—United States, 2006-2015. MMWR Morb Mortal Wkly Rep. 2017;66(10):265-269. doi:10.15585/mmwr.mm6610a1.
- 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. doi:10.1097/SLA.000000000001993.
- Finney FT, Gossett TD, Hu MH, et al. New persistent opioid use following common forefoot procedures for the treatment of hallux valgus. J Bone Joint Surg Am. 2019;101(8):722-729. doi:10.2106/JBJS.18.00793.
- Cook DJ, Kaskovich SW, Pirkle SC, Mica MAC, Shi LL, Lee MJ. Benchmarks of duration and magnitude of opioid consumption after total hip and knee arthroplasty: a database analysis of 69,368 patients. J Arthroplasty. 2019;34(4):638-644. doi:10.1016/j.arth.2018.12.023.
- Bateman BT, Cole NM, Maeda A, et al. Patterns of opioid prescription and use after cesarean delivery. Obstet Gynecol. 2017;130(1):29-35. doi:10.1097/AOG.000000000000000033.
- 11. Kumar K, Gulotta LV, Dines JS, et al. Unused opioid pills after outpatient shoulder surgeries given current perioperative prescribing habits. *Am J Sports Med.* 2017;45(3):636-641. doi:10.1177/0363546517693665.
- 12. Howard R, Fry B, Gunaseelan V, et al. Association of opioid prescribing with opioid consumption after surgery in Michigan. JAMA Surg. 2019;154(1):e184234. doi:10.1001/jamasurg.2018.4234.
- 13. Gitis B. State-by-state: the labor force and economic effects of the opioid crisis. American Action Forum website. https://www.americanactionforum.org/project/opioid-state-summary/. Published September 12, 2018. Accessed April 15, 2021.
- 14. Cox C, Rae M, Sawyer B. A look at how the opioid crisis has affected people with employer coverage. Peterson-KFF Health System Tracker website. https://www.healthsystemtracker.org/brief/a-look-at-how-the-opioid-crisis-has-affected-people-with-employer-coverage/. Published April 5, 2018. Accessed April 15, 2021.
- 15. Kessler ER, Shah M, Gruschkus SK, Raju A. Cost and quality implications of opioid-based postsurgical pain control using administrative claims data from a large health system: opioid-related adverse events and their impact on clinical and economic outcomes. *Pharmacotherapy*. 2013;33(4):383-391. doi:10.1002/phar.1223.
- 16. Oderda GM, Said Q, Evans RS, et al. Opioid-related adverse drug events in surgical hospitalizations: impact on costs and length of stay. *Ann Pharmacother*. 2007;41(3):400-406. doi:10.1345/aph.1H386.
- 17. Oderda GM, Gan TJ, Johnson BH, Robinson SB. Effect of opioid-related adverse events on outcomes in selected surgical patients. *J Pain Palliat Care Pharmacother*. 2013;27(1):62-70. doi:10.3109/15360288.2012.751956.
- 18. Minkowitz HS, Gruschkus SK, Shah M, Raju A. Adverse drug events among patients receiving postsurgical opioids in a large health system: risk factors and outcomes. Am J Health Syst Pharm. 2014;71(18):1556-1565. doi:10.2146/ajhp130031.
- 19. Shafi S, Collinsworth AW, Copeland LA, et al. Association of opioid-related adverse drug events with clinical and cost outcomes among surgical patients in a large integrated health care delivery system. JAMA Surg. 2018;153(8):757-763. doi:10.1001/jamasurg.2018.1039.
- 20. Brummett CM et al. Health care burden associated with outpatient opioid use following inpatient or outpatient surgery. J Manag Care Spec Pharm. 2019;25(9):973-983. doi:10.18553/jmcp.2019.19055.
- Woolf CJ. Pain: moving from symptom control toward mechanism-specific pharmacologic management. Ann Intern Med. 2004;140(6):441-451. doi:10.7326/0003-4819-140-8-200404200-00010.
- 22. Svensson I, Sjöström B, Haljamäe H. Assessment of pain experiences after elective surgery. J Pain Symptom Manage. 2000;20(3):193-201. doi:10.1016/S0885-3924(00)00174-3.
- $\textbf{23.} \ \ \text{Enoch S, Leaper DJ. Basic science of wound healing.} \ \ \textit{Surgery (Oxford)}. \ \ 2007; 26(2): 31-37. \ \ doi: 10.1016/j.mpsur. 2007. 11.005. 1$
- 24. Berde CB, Strichartz GR. Local anesthetics. In: Miller RD, Cohen NH, Eriksson LI, Fleisher LA, Wiener-Kronish JP, Young WL, eds. Miller's Anesthesia. Vol 1. 8th ed. Philadelphia, PA: Saunders; 2015:1028-1054.e4.
- 25. Ali A, Sundberg M, Hansson U, Malmvik J, Flivik G. Doubtful effect of continuous intraarticular analgesia after total knee arthroplasty: a randomized, double-blind study of 200 patients. Acta Orthop. 2015;86(3):373-377. doi:10.3109/17453674.2014.991629.
- 26. Kim J, Burke SM, Kryzanski JT, et al. The role of liposomal bupivacaine in reduction of postoperative pain after transforaminal lumbar interbody fusion: a clinical study. World Neurosurg. 2016;91:460-467. doi:10.1016/j.wneu.2016.04.058.
- $\textbf{27.} \ \ \text{Becker DE, Reed KL. Essentials of local anesthetic pharmacology.} \ Anesth \textit{Prog.} \ 2006; 53 (3): 98-109. \ doi: 10.2344/0003\ 3006 (2006)53 [98:EOLAP] 2.0.CO; 2.0.C$
- 28. Aetna offers expanded coverage for Exparel® in select ambulatory surgical centers [news release]. Parsippany, NJ: GlobeNewswire; October 30, 2018. https://www.globenewswire.com/news-release/2018/10/30/1638985/0/en/Aetna-Offers-Expanded-Coverage-for-EXPAREL-in-Select-Ambulatory-Surgical-Centers.html. Accessed April 15, 2021.
- 29. Members facing surgery now can search for doctors offering opioid alternatives. CVS Health website. https://cvshealth.com/news-and-insights/press-releases/members-facing-surgery-now-can-search-for-doctors-offering-opioid. Published July 19, 2018. Accessed April 20, 2021.