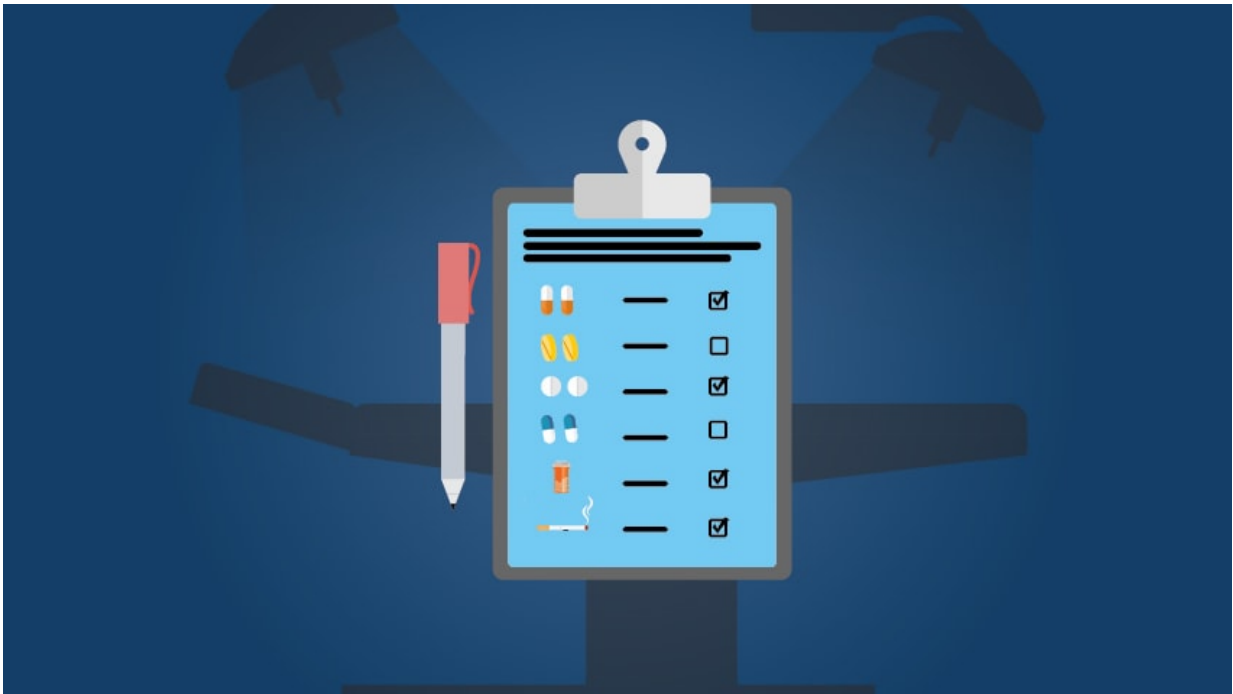


Opioids before surgery means higher costs, more problems afterward, study finds

March 9 2017



The study finds longer recovery and higher costs among surgery patients who were taking opioids before an elective operation. Credit: University of Michigan

Surgery patients often go home from the hospital with a prescription for painkillers to take as they recover.

But a new study suggests that doctors should also focus on patients who were taking such medicines before their operations.

People who received prescriptions for opioid painkillers in the months before elective abdominal operations had longer hospital stays, and a higher chance of needing follow-up care in a hospital or rehabilitation facility, than patients who weren't taking such medications before they had the same operations, the study finds.

The extra care translated into higher costs for their post-[surgery](#) care - double or triple the amount, with higher opioid doses associated with higher costs. The results are published in *Annals of Surgery* by a team from the University of Michigan Institute for Healthcare Policy and Innovation.

The new findings, and past research on the association between [opioids](#) and outcomes for other types of surgery, are enough to prompt the researchers to suggest that pre-operation opioid use should be considered a preoperative risk factor.

"We often pause when we are considering elective surgery with a patient, based on known risk factors such as smoking, anticoagulant use, and overall medical conditions. These findings suggest that perhaps preoperative opioid use warrants the same awareness," says Jennifer Waljee, M.D., M.S., lead author of the study and a plastic surgeon at Michigan Medicine, U-M's academic medical center.

Options such as tapering down opioid doses and alternative pain relief approaches could be options prior to surgery, she explains. But also, she says, "Physicians should make a plan to manage the patient's pain during the perioperative period that takes into account their past opioid use." Past research has suggested that chronic opioid use may lead to tolerance and can increase sensitivity to pain - leaving patients more vulnerable after an operation.

Waljee and her U-M colleagues have launched a massive effort to help

surgeons across Michigan prescribe opioids wisely - and understand the special needs of patients who come to them already taking opioids. Called Michigan-OPEN, it has funding from IHPI and the Michigan Department of Health and Human Services.

About the new study

Before doing the new national study, the authors identified similar trends in Michigan hospitals using data from the Michigan Surgical Quality Collaborative, led by medical student David Cron and published in July 2016. In that study, 21 percent of patients used opioids prior to surgery, according to their medical records. They had a substantially higher risk of complications, readmissions, and higher costs.

For the new study, the authors used national claims data drawn from private insurance companies, through IHPI's repository from Truven Health MarketScan. They studied more than 200,000 middle-class Americans who had common operations—hysterectomies, bariatric surgery, hernia repair and reflux surgery - over a 42-month period, and who spent at least one night in the hospital.

About nine percent of the patients had filled at least two opioid prescriptions within the 90 days before their operation—including at least one within a month before the operation. They tended to have more medical and psychological conditions than non-opioid patients.

The patients who had been prescribed opioids before surgery spent an average of an extra half a day in the hospital after their operations, the researchers found - even after they adjusted for a wide range of co-existing factors such as medical conditions and demographic characteristics.

They also were more likely to end up back in the hospital or to go to a

rehabilitation facility within 30 days of the operation—except for those taking the lowest-possible doses. These difference weren't huge - 4.5 percent of opioid users had a hospital readmission, compared with 3.6 percent of those who hadn't taken opioids. But they were enough to make a difference in cost.

In the first 90 days after surgery, those who had been taking opioids had medical costs three times higher than those who hadn't. The gap narrowed as time went on, but even at a year post-surgery, the pre-surgery [opioid users](#) had twice the medical costs - at about \$25,000—as those who hadn't been taking the drugs, who came in at an average of \$12,113.

These data add to a growing body of evidence that in general shows that patients who take opioid painkillers on an ongoing basis use more medical care, and have higher [medical costs](#), than those who don't.

"The bottom line is that preoperative opioid use is an important and potentially modifiable risk factor prior to surgery, and should be on surgeons' radar as well as the minds of primary care providers," says Waljee. "Coordinating care throughout the surgical period could improve clinical outcomes and the patient experience."

More information: Jennifer F. Waljee et al, Effect of Preoperative Opioid Exposure on Healthcare Utilization and Expenditures Following Elective Abdominal Surgery, *Annals of Surgery* (2017). [DOI: 10.1097/SLA.0000000000002117](#)

Provided by University of Michigan

Citation: Opioids before surgery means higher costs, more problems afterward, study finds

(2017, March 9) retrieved 8 May 2024 from <https://medicalxpress.com/news/2017-03-opioids-surgery-higher-problems-afterward.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.