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

May 2020
Opioids After Surgery: A Doorway to Addiction

The opioid epidemic in the United States has reached a state of crisis. From 2000 to 2015, deaths from opioid overdoses more than tripled, and are likely underestimated.¹

The surgical setting introduces many people to opioids. Estimates suggest that 2.9 million surgical patients become persistent opioid users each year.

>50 MILLION

surgeries in the US each year²

90% of patients receive opioid prescriptions at discharge³

70% of pills go unused by the patient¹

45 MILLION

opioid prescriptions each year²

6.5% of patients may become persistent opioid users²,⁴

>1 BILLION

unused pills available for misuse each year²,³

2.9 MILLION

patients may become persistent opioid users each year²

Unused opioid pills create risk:

- 90% of unused pills remain in the home in unsecured locations⁴
- 32% of all opioid addicts report their first opioid exposure was through leftover pills⁵

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:³,⁷⁻¹¹

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Average opioid pills prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total knee arthroplasty</td>
<td>94</td>
</tr>
<tr>
<td>Total hip arthroplasty</td>
<td>87</td>
</tr>
<tr>
<td>Bunionectomy</td>
<td>46</td>
</tr>
<tr>
<td>Outpatient shoulder surgery</td>
<td>60</td>
</tr>
<tr>
<td>Cesarean delivery</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Average opioid pills prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laparoscopic inguinal hernia repair</td>
<td>30</td>
</tr>
<tr>
<td>Laparoscopic gall bladder removal</td>
<td>30</td>
</tr>
<tr>
<td>Laparoscopic appendectomy</td>
<td>30</td>
</tr>
<tr>
<td>Partial mastectomy</td>
<td>20</td>
</tr>
</tbody>
</table>

*Persistent opioid user defined as filling opioid prescriptions beyond 90 days after surgery.
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:

- 0.6% reduction in the annual GDP growth rate
- Nearly $1.6 trillion in lost economic output (GDP)

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 2004
- Most costs were incurred by people aged 18 to 34

Costs Specific to Postoperative Opioid Use

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

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

According to a medical claims analysis of 4 million surgical patients, those who filled a postoperative opioid prescription compared to those who did not:

- 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

$5,100 to $7,000
Average additional per patient cost associated with opioids prescribed post-surgery

*Observed GDP growth from 1999 to 2015 was 2% per year; research suggests that without the impact of opioids on the labor force GDP would have grown 2.6% each year, a 30% increase.*
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.\(^{20-22}\)

### The First 72 Hours After Surgery Are the Most Painful\(^{21}\)

[Diagram showing pain intensity over time with visual analog scale (VAS) ratings.

**Note:** 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.\(^{23}\) Even extended-release formulations and pumps do not consistently work beyond 24 hours.\(^{24-25}\)
- Inflammation is considered a reason these products do not address pain.\(^{26}\)

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
3. 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):

1. 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 ASCs²⁷
- 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 State

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.

Percentage Point Change in Prime-Age Labor Force Participation Rate Attributed to Opioids, 1999 to 2015

*There is not enough data available to perform the analysis for North Dakota.*
## New Treatments on the Horizon

New non-opioid options for postoperative pain are on the horizon. Products approved or expected to receive FDA\textsuperscript{a} decision in 2020 are listed below.

<table>
<thead>
<tr>
<th>Product</th>
<th>Manufacturer</th>
<th>Description</th>
<th>Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anjeso™ (meloxicam) injection\textsuperscript{30}</td>
<td>Baudax Bio, Inc</td>
<td>Anjeso is indicated for the management of moderate-to-severe pain, alone or in combination with non-NSAID analgesics. It is intended for once-daily intravenous (IV) dosing.</td>
<td>February 20, 2020</td>
</tr>
<tr>
<td>CR845/difelikefalin\textsuperscript{31}</td>
<td>Cara Therapeutics</td>
<td>CR845 is an investigational product being evaluated for the management of pruritus and acute postoperative pain.</td>
<td>TBD</td>
</tr>
<tr>
<td>HTX-011 (bupivacaine/meloxicam) extended-release solution\textsuperscript{32}</td>
<td>Heron Therapeutics, Inc</td>
<td>HTX-011 is an investigational product being evaluated for application into the surgical site to reduce postoperative pain for 72 hours and the need for opioids after surgery.</td>
<td>TBD</td>
</tr>
<tr>
<td>Posimir\textsuperscript{33} (bupivacaine extended-release solution)</td>
<td>Durect Corporation</td>
<td>Posimir is an investigational non-opioid analgesic being evaluated for its ability to provide 3 days of continuous local pain relief after surgery.</td>
<td>TBD</td>
</tr>
<tr>
<td>Xaracoll\textsuperscript{34}</td>
<td>Innocoll Pharmaceuticals</td>
<td>Xaracoll is an investigational collagen-matrix implant in development to deliver bupivacaine HCl to the surgical site.</td>
<td>TBD</td>
</tr>
</tbody>
</table>

\textsuperscript{a}FDA: Food and Drug Administration.

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### References


