

Clinical Indications for Opioid Initiation

Patients who start opioids for postsurgical and musculoskeletal pain receive prescriptions that are of higher doses and longer durations, respectively

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Background

Why is this important?

- Opioids are a group of drugs used to relieve pain from various conditions including joint, back, post-surgical and dental pain. Yet, the use of opioids has been associated with an increased risk of adverse events including fatal and non-fatal overdoses, falls, fractures and injuries in motor vehicle accidents.
- In order to inform strategies around ways to reduce potentially inappropriate and high-dose prescriptions, it's important to understand the clinical reasons for why people are prescribed an opioid and how this may vary by medical condition.

What were we investigating?

- The type of clinical indications that lead individuals to start opioids for pain management, as well as the characteristics of both patients and the initial prescription.

Study Details

How was the study conducted?

- We conducted a population-based retrospective cohort study of all Ontarians who newly received an opioid for pain management between April 1, 2015 and March 31, 2016.
- We identified the apparent clinical indication for starting opioids by linking prescription drug claims to procedural and diagnostic information from recent health service records.
- Outcomes included initial opioid type, prescription duration and daily dose (in milligram morphine equivalents, MME), stratified either by indication or indication cluster.

What did we find?

- Among new opioids users (N=653,993), the vast majority (N=644,762, 98.6%) received an immediate-release prescription and the most common opioids prescribed were immediate-release codeine combination products (N=343,094; 53.2%).
- We were successfully able to identify the pain indications for 575,512 (88.0%) of people initiating opioids. Individuals were grouped into the following clinical indication clusters: dental (23.2%); postsurgical (17.4%); musculoskeletal (12.0%); trauma (11.2%); and cancer/palliative care (6.5%).
- 17.7% of new starts were for less frequent indications such as abdominal/pelvic pain (6.0%), infection (2.9%), kidney and gallstones (2.3%), non-surgical deliveries (0.9%), and headaches/migraines (0.8%).
- The majority of patients starting an opioid for dental pain received their prescription from a dentist (144,118, 94.9%) and received a low daily dose (median 30 MME, Q1-Q3 of 23-45) for a short duration (median three days, Q1-Q3 of 3-5).
- Individuals with postsurgical pain received the highest daily doses at initiation (40.5% with greater than 50 MME), and those with musculoskeletal pain received longer initial prescriptions (34.2% with a duration exceeding 7 days).



Key Points

- Dental pain accounted for nearly **1 in 4** of all new opioid prescriptions which were generally of short duration and low dose.
- **1 in 6** new opioid users were treated for postsurgical pain. These individuals generally received shorter initial prescriptions, but with a higher dose.
- **1 in 10** patients started opioids for musculoskeletal (back, joint, or muscle) pain. These patients generally received longer duration initial opioid prescriptions.

Recommendations

Policymakers

- Future efforts to address appropriate prescribing should consider observed differences in prescribing practices between clinical indications.
- These findings can be used to inform future resource allocation and improved access to non-drug alternatives for pain management.

Physicians

- As we aim to optimize prescribing, patients' first opioid prescriptions are critically important. Prescribers should carefully consider a patient's first opioid dose and duration.

Patients

- If you have recently been prescribed an opioid, talk to your doctor about your prescribed dose and when it might be safe and appropriate to discontinue your medication.

For more information

Pasricha S et al. Clinical indications associated with opioid initiation for pain management in Ontario, Canada: A population-based cohort study. PAIN, 2018.

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