

Background

Why is this important?

- In response to the evolving evidence about the safety of prescription opioids, national guidelines and quality standards were developed and released in 2017 to support safe and appropriate opioid use.
- An important recommendation from these documents was that **people starting opioids to manage pain** should not be given an **initial** opioid dose higher than 50 milligrams of morphine equivalents (MME) per day because higher doses are associated with increased risks of continued opioid use, opioid use disorder and opioid overdose.
- Guidance also suggests that individuals starting opioids should not be prescribed more than a 1 week supply for acute pain treatment.

What did we investigate?

- How well opioid initiation practices aligned with opioid prescribing recommendations before and following the release of a national guideline.

How was the study conducted?

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- *Design:* Population-based study.
- *Population:* Ontarians starting opioids prior to (April 2015 – March 2016) and after (January – December 2019) the release of national guidelines.
- *Inclusion criteria:* Linked administrative healthcare databases at ICES were used to determine an individual's indication for opioid therapy, the initial daily dose, and initial prescription duration.

What did we find?

- In Fiscal Year 2015, a total of 653,885 individuals started opioids, compared to 571,652 in 2019. Over time, there were small overall reductions in the prevalence of initial daily doses exceeding 50 MME (23.9% vs. 20.1%) and durations exceeding 7 days (17.4% vs. 14.8%); but the magnitude of the reductions varied widely by indication.
- The prevalence of high dose (>50 MME) initial prescriptions reduced significantly across all indications, with the exception of dentist-prescribed opioids (13.6% vs. 12.1% above 50 MME).
- In contrast, there was little change in initial durations exceeding 7 days across most indications, with the exception of some surgical indications (e.g. common excision; 9.3% vs. 6.2%) and among those in palliative care (35.2% vs. 29.2%).



Key Points

- Although the number of people starting prescription opioids to manage pain declined across Ontario between 2015 and 2019, there have been few changes in opioid prescribing practices at time of initiation.
- In 2019, among people newly starting opioids:
 - 1 in 5 people were prescribed a daily dose that exceeded 50 MME
 - 1 in 7 people received more than a week supply at initiation

Recommendations

Healthcare professionals

- Current clinical practice often does not align with recommendations for opioid initiation from national clinical guidelines. Given the variation observed between pain indications, messaging should be tailored within clinical specialties, with focused efforts in the areas of dental and post-surgical pain likely being most impactful.
- It is important to emphasize that these findings are describing opioid prescribing patterns among people previously not taking these medications. The appropriateness and safety of large dose adjustments for people already being treated with opioids is more complex and was outside the scope of this study.

Patients

- When starting opioids to manage pain, it is important to understand the dose and intended duration of treatment. These are questions that you can raise with your doctor or pharmacist to help make informed decisions about your pain management plan.

For more information

Gomes T, Men S, Campbell T, Tadrous M, Mamdani M, Paterson JM, Juurlink D. (2022). [Changing patterns of opioid initiation for pain management in Ontario, Canada: A population-based cross-sectional study. PLOS One.](#)

