

# Impact of Changes in Opioid Funding and Clinical Policies on Rapid Tapering of Opioids in Ontario, Canada

## Background

- The use of high-dose opioids for chronic pain has raised concerns around opioid-related harms, including accidental overdose and death.
- Guidelines in the U.S and Canada, released in March 2016 and May 2017 respectively, now suggest that for the treatment of chronic non-cancer pain, clinicians should generally avoid prescribing doses above 90 milligrams of morphine or equivalent (MME) per day. For patients already receiving higher doses, guidelines also encourage gradual tapering of doses to the lowest effective dose.
- Numerous policies and programs have also been introduced over the past decade with the goals of reducing unsafe and inappropriate prescription opioid use and minimizing diversion.
- Concerns have been raised that some physicians may be tapering opioid doses too quickly in order to conform to prescribing guidelines and changing drug coverage policies. This practice is concerning as patients may experience withdrawal and unmanaged pain, which could cause patients to seek opioids from non-prescribed sources.

## What did we investigate?

The impact of the introduction of new clinical opioid guidelines and policies on the prevalence of potential rapid opioid dose tapering over time in Ontario, Canada.

## Key points

- Opioid-related policies and guidelines introduced in 2016 and 2017 were associated with temporary increases in the prevalence of rapid opioid dose tapering events in Ontario, Canada.
- These changes appear to be relatively rare and short-lived.
- Findings highlight the need for effective communication when new policy and guideline changes are being introduced to prevent interruptions in prescribed opioid therapy that could compromise patient safety.

## How was the study conducted?

- *Design:* Population-based, repeated cross-sectional study.
- *Population:* Individuals who received a very high-dose of prescription opioids ( $\geq 200$  MME) in Ontario, Canada between January 2014 and December 2018.
- *Outcomes:* Monthly rate of rapid opioid dose tapering sustained for 30 days or 90 days, defined as a  $\geq 50\%$  reduction in their opioid dose. A secondary analysis assessed an abrupt discontinuation (100% reduction) in their opioid dose.
- *Model:* Interventional autoregressive integrated moving average (ARIMA) models were used to test for significant changes in dose tapering following the key guidelines and drug policies.



## What did we find?

- Over the 5-year study period, we identified 58,233 individuals receiving long-term opioid therapy at very high doses. The number of very high dose opioid recipients declined over the study period, from 29,413 individuals in January 2014 to 15,730 individuals in December 2018.
- The monthly prevalence of rapid dose tapering was stable between January 2014 and September 2016 (average monthly prevalence of 1.4%), but increased by April 2017 (1.8%,  $p=0.001$ ), coincident with the introduction of Ontario's Fentanyl Patch-for-Patch Program in October 2016.
- There were temporary increases in the prevalence of rapid dose tapering following the delisting of publicly-funded high-strength opioids (2.3% in March 2017) and again two months following the release of the Canadian Opioid Guidelines (2.3% in July 2017), yet the prevalence was found to generally decline following these guidelines ( $p<.0001$ ).
- Similar trends were observed for the prevalence of abrupt opioid discontinuation.

## Recommendations

### Polymakers

- Effective communication and educational initiatives with prescribers are needed when new policy and guideline changes are introduced to prevent interruptions in prescribed opioid access that could put patient safety at risk.

### Healthcare professionals

- Any opioid dose tapering should be personalized to each patient, and undertaken in interdisciplinary settings that ensure patients are engaged in decision-making and are not harmed by dose reductions.

## For more information

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