

## Regulatory Interventions Can Reduce Inappropriate Prescribing of Monitored Drugs

Implementation of a legislative intervention and a prescription monitoring program resulted in 40%-60% reduction in the prevalence of potentially inappropriate prescribing of opioids and other controlled substances.

### What does this mean?

- In order to monitor inappropriate use of prescribed monitored drugs in Ontario, the Narcotics Safety and Awareness Act was introduced in November 2011, followed by the Narcotics Monitoring System (NMS) in May 2012.
- Overall, significant decreases in the prevalence of inappropriate prescriptions for opioids, benzodiazepines and stimulants were noted after the implementation of these initiatives.

### Policy Implications

- ✓ Although reductions in the prevalence of inappropriate prescriptions were noted, approximately 1% of opioid prescriptions dispensed in 2013 were still deemed potentially inappropriate.
- ✓ Policy-makers may want to consider how the NMS could be improved to further reduce inappropriate prescribing of prescription drugs prone to abuse.

### How do we know this?

The ODPRN conducted a time series analysis of publically-funded prescriptions for opioids, benzodiazepines and stimulants dispensed monthly from January 2007 to May 2013. In the primary analysis, a prescription was deemed potentially inappropriate if it was dispensed within 7 days of an earlier prescription for at least 30 tablets of a drug in the same class and originated from a different physician and different pharmacy. The prevalence of potentially inappropriate opioid prescriptions decreased 40.3% between October 2011 and the end of the study period. In particular, this prevalence fell by 13.2% after enactment of the new legislation (from 1.59% in October 2011 to 1.38% in April 2012;  $p=0.01$ ). No further significant change in trend was observed after the introduction of the narcotic monitoring system (NMS) ( $p=0.78$ ), however by May 2013, the prevalence of potentially inappropriate opioid prescriptions had dropped to 0.95%. Inappropriate benzodiazepine prescribing was significantly influenced by both the legislation ( $p<0.001$ ) and the NMS ( $p=0.05$ ), which together reduced potentially inappropriate prescribing by 57.5% between October 2011 and the end of the study period (from 0.40% to 0.17%). The prevalence of potentially inappropriate prescribing of stimulants was significantly influenced by the introduction of the NMS, falling from 0.68% in April 2012 to 0.27% in May 2013, following introduction of the NMS ( $p=0.02$ ).

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