

# Review of Coroner Inquest Recommendations into Opioid Prescribing Practices in Ontario: Ongoing Health Policy Gaps

Examen des recommandations issues de l'enquête du  
coroner sur les pratiques de prescriptions d'opioïdes en  
Ontario : lacunes dans les politiques de santé



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## Abstract

The rate at which opioids are being prescribed and the safety of prescription opioid use are serious and ongoing problems for individuals, communities and health systems across Canada. In 2011, a coroner's inquest was held in Brockville, Ontario, Canada, to examine the issue of prescription opioid diversion and abuse. Following the inquest, the jury provided 48 recommendations pertaining to prescribing and monitoring of opioids. The ensuing discussion highlights health policy gaps that remain to be addressed seven years after the inquest, in educational resource-sharing, high-dose prescribing, development and use of abuse-resistant formulations and coordination and monitoring of policy interventions.

## Résumé

Le taux de prescription d'opioïdes et la sécurité liée à l'utilisation d'opioïdes d'ordonnance constituent de sérieux problèmes pour les personnes, les communautés et les systèmes de santé du Canada. En 2011, une enquête du coroner a été effectuée à Brockville, en Ontario (Canada), afin d'examiner la question du détournement et de l'abus des opioïdes d'ordonnance. Suite à cette enquête, le jury a formulé 48 recommandations concernant la prescription et la surveillance des opioïdes. La présente discussion met en relief les lacunes des politiques de santé auxquelles il faut remédier sept ans après la tenue de l'enquête, notamment dans le partage des ressources didactiques, dans la prescription de fortes doses, dans le développement et l'usage de formules prévenant une utilisation abusive ainsi que dans la coordination et la surveillance des interventions stratégiques.

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## Introduction

The rate at which opioids are being prescribed and the safety of prescription opioid use are serious and ongoing problems for individuals, communities and health systems across Canada. In 2011, a coroner's inquest was held in Brockville, Ontario, Canada, to examine the issue of prescription opioid diversion and abuse (Ministry of Community Safety and Correctional Services [MCSCS] 2011). Following the inquest, the jury provided 48 recommendations involving 18 agencies at federal and provincial levels. These recommendations pertain to the prescribing and monitoring of opioids and demonstrate the need for a comprehensive chronic non-cancer pain management strategy in Ontario. The jury recommendations have created an opportunity for policy intervention in the opioid epidemic that Ontario has been facing over the past two decades.

## Background

When measured in milligrams of morphine or equivalent (MME) dispensed, Canada has the highest rate of opioid prescribing in the world (Busse 2017). In 2016, an estimated 21.5 million prescription opioids were dispensed, or 595 opioid prescriptions per 1,000 population (Canadian Institute for Health Information [CIHI] 2017). As the highest

dispensing province in Canada, an estimated one in seven people in Ontario received a prescription opioid in 2015/2016 (Gomes et al. 2017a).

This is concerning, as the rate of opioid prescribing in Ontario has been found to be positively correlated with opioid-related mortality (Fischer et al. 2014; King et al. 2014). The number of annual opioid-related deaths in Ontario increased from 127 in 1991 to 1,265 in 2017 (Gomes et al. 2017b; Public Health Ontario [PHO] 2018). The impact of problematic opioid use is most impactful among vulnerable populations including youth, seniors and First Nations and those living in poverty (Dhalla et al. 2011).

A main issue identified by the inquest was the increasing rate of high-dose opioid prescriptions for chronic non-cancer pain and the associated diversion and abuse of prescribed opioids leading to high levels of opioid-related mortality. The recommendations resulting from the inquest provided an opportunity for Ontario to develop an integrated health policy framework for chronic non-cancer pain management and opioid use. The inquest called for the use of a variety of policy instruments, including legislation, regulation and guidelines to address issues of problematic prescribing, monitoring and diversion of opioids. Despite expert-driven policy recommendations to address the epidemic, prescribing habits in Ontario have not changed significantly. In fact, opioid-related morbidity and mortality rates have increased (PHO 2018), and the ongoing epidemic demonstrates the failure to implement effective health policy in a timely fashion.

Though there has been progress in several drug policy areas, the opioid epidemic continues and shows no signs of abating. Since the time of the inquest in 2011, the rate of opioid-related deaths in Ontario has continued to rise; from 4.2 deaths per 100,000 in 2011 to 8.9 deaths per 100,000 in 2017 (PHO 2018). This pattern suggests that interventions have not been effective at reducing mortality, and further policy development is required to prevent additional harm. Indeed, no agency can tackle the opioid epidemic alone, and this process will involve ongoing teamwork and coordination across all levels of the government. This article highlights some major initiatives that have occurred since the inquest, as well as policy gaps that remain to be addressed including gaps in educational resource-sharing, dosing guidelines, development and use of abuse-resistant formulations and coordination and monitoring of the effectiveness of interventions. Policy gaps as discussed in this paper are defined as the lack, or ineffectiveness, of current policies. It should be noted that policy recommendations discussed here address opioid prescribing for chronic non-cancer pain management specifically, as one of several important contributors to the opioid epidemic.

### Summary of major initiatives

Since completion of the inquest, several major initiatives have been implemented in Ontario to mitigate some of the potential harmful risks associated with opioid use and assist in surveillance and monitoring of opioid prescribing. In 2012, the Narcotics Monitoring System (NMS) was implemented to collect information from dispensers about all prescribed monitored drugs dispensed to people in Ontario. In 2016, a province-wide opioid strategy was

launched, which included publicly funded naloxone distribution programs, needle exchange programs and fentanyl patch-for-patch return program. In 2018, the Ministry of Health and Long-Term Care (MOHLTC) began accepting applications for overdose prevention sites to support harm reduction services, and the Ontario Drug Policy Research Network (ODPRN) launched the Ontario Prescription Opioid Tool, which collects data from the NMS to assist in monitoring opioid prescriptions across Ontario. Health Quality Ontario (HQO) has launched an opioid strategy that includes evidence-based quality standards, increased capacity for quality improvement, measurement and reporting on variations in quality while engaging with partners. Other provinces in Canada have developed and implemented similar initiatives.

### Education and resource-sharing

Several recommendations from the 2011 inquest relate to mandating education on safe opioid prescribing and dispensing. To date, educational interventions for physicians have been provided in the form of in-person sessions and sharing of online resources and tools. A report by the ODPRN found that voluntary education programs are not as effective as physician-directed interventions for prescribing habits. Upon assessing the effect of a two-day course designed to promote appropriate opioid prescribing habits, the ODPRN found that “voluntary enrolment in the course was not shown to decrease opioid prescribing rates during the two-year period following course attendance.” The report further stated that “if a physician was referred to attend the course by the College of Physicians and Surgeons of Ontario (CPSO) (e.g., following a complaint), there was a marked decrease in opioid prescribing following referral by the CPSO, but prior to the prescriber completing the course” (ODPRN 2016: 16).

Although continuing education is essential, this finding suggests voluntary education alone, without monitoring and regulation, may fail to achieve the intended outcomes. To address the current policy gap, a mentorship-style educational plan could be implemented in consideration of the new Canadian Guidelines for physicians and pharmacists to receive consistent educational programming surrounding the prescription, dispensing and utilization of opioids. To complement education efforts, HQO has made it possible for primary care physicians to access confidential *MyPractice* reports to compare their opioid prescribing patterns to their peers across the province. These include measurement on several indicators such as opioids dispensed, opioids and benzodiazepines dispensed and high-dose opioids dispensed.

### High-dose prescribing

Several recommendations pertain to mandated limits on the volume of MME per day that can be prescribed based on evidence from the Canadian Guidelines around a “watchful dose” (Busse 2017). The Centre for Disease Control and Prevention (CDC) guidelines report that higher opioid doses are associated with increased risks for motor vehicle injury, opioid use disorder and overdose resulting in death (Dowell et al. 2016). Overall, there is evidence

to suggest that high-dose opioid dispensing has continued to decline since 2013 (ODPRN 2018). However, there has been reluctance to mandate dosing limits by physician regulatory bodies, suggesting physicians should use their best judgment on a per-patient basis.

The latest CDC guidelines, released in March 2016, recommend that “when opioids are started, clinicians should prescribe the lowest effective dosage” (Dowell et al. 2016). Evidence suggests that harms associated with doses of >200 MME outweigh the benefits and increase the risk of opioid-related mortality (Gomes et al. 2011). Both the CDC and the Canadian Guideline for Opioid Therapy and Chronic Non-Cancer Pain clearly indicate that clinicians should use caution when prescribing opioids at any dosage and should carefully reassess evidence of individual benefits and risks when increasing dosage to  $\geq 50$  MME/day and avoid increasing dosage to  $\geq 90$  MME/day without careful justification (Busse 2017; Dowell et al. 2016). The College of Physicians and Surgeons of British Columbia and Nova Scotia have adopted the CDC guidelines as far as the dose recommendation is concerned (College of Physicians and Surgeons of British Columbia [CPSBC] 2016; College of Physicians and Surgeons of Nova Scotia [CPSNV] 2017).

To encourage appropriate prescribing, resources have been shared to educate physicians on safe dosing practices. However, as previously mentioned, voluntary education may not change behaviours, especially for those whose prescribing practices fall outside what is recommended by guidelines. An alternative could include a regulation whereby physicians are required to submit a referral to a pain specialist before prescribing a dose beyond what is recommended by the guideline. Limits to quantities prescribed must be made gradually, and with caution, to prevent unintended negative consequences.

### **Abuse-resistant formulations**

Policy changes have been made to formulations of certain opioids to limit abuse and increase safety. For example, OxyContin was delisted from the Ontario Drug Benefits Formulary in 2011 and replaced with a tamper-resistant formulation called OxyNeo. Since this change, overall prescription rates and opioid-related mortality have continued to increase, likely as a result of dependence on oxycodone simply substituted by other potent medically prescribed and illicit drugs such as heroin (Hedegaard et al. 2015). Indeed, there is a temporal link between the decrease in oxycodone-related mortality following its removal from the formulary and the rise in fentanyl- and hydromorphone-related mortality (PHO 2018). This finding most likely reflects the transition of OxyContin users to other powerful opioids.

Abuse-deterrent formulations (ADF) of opioids have not been proven to reduce the harmful effects of opioid abuse. It has been reported that “ADFs represent a ‘gimmick’ of primary benefit to the pharmaceutical industry and that undue focus on them may undermine more meaningful policy measures” (Gomes and Juurlink 2016; Leece et al. 2015). This highlights the importance of policy evaluation and aligning the change or shift in policy instruments to predetermined health indicators and measurable outcomes.

## Coordination and monitoring

Although the jury recommendations set out action items for specific agencies, there is a need for a collaborative structure to help coordinate efforts at national, provincial and local levels. Given the complexity of the opioid epidemic, collaborative efforts between agencies could be streamlined through a central stakeholder. Regional health organizations, in collaboration with local public health agencies, are well positioned within communities to lead collaborations. The Southeastern Ontario region can be used as an example, having formed a mentorship and support network that acts as a resource and provides physicians a platform to seek second opinions and troubleshoot various opioid-related scenarios they may face in practice. This model can be replicated in other local public health agencies or at a minimum in those communities with high rates of opioid prescribing and opioid-related morbidity and mortality (Moore et al. 2017).

The provincial governments could implement a centralized secretariat to coordinate a consistent, evidence-based response across all levels of the government. The secretariat should be given the mandate, staffing, budget and required data outlets or surveillance dashboard to enable them to accomplish a decrease in the overall community opiate load and a subsequent decrease in opioid-related morbidity and mortality. In addition, a dashboard could help monitor the effect of various interventions and could integrate numbers of intravenous drug use and related infections, the NMS prescribing data and the maps and analysis provided in the Ontario Narcotics Atlas. Such mechanisms could provide a greater ability to collect, analyze and report on the prescribing and dispensing of narcotics, and assist in identifying and addressing the systemic challenges that may lead to addiction and death.

## Limited scope of the coroner jury recommendations

We must acknowledge the limitations in the process of coroner jury recommendations in and of themselves. Though well intentioned and based on expert advice, the recommendations provided by the jury may not be possible to implement or be within the mandate of the organization to which they were directed. There are also organizations not mentioned in the jury recommendations that make important contributions to mitigate risks associated with prescription opioids (i.e., street health centres and overdose prevention sites). Despite this, the process of the coroner jury recommendations was integral in identifying key issues relating to prescription opioids and setting clear goals. Agencies can work to achieve the overall intent of the recommendations, even if done through alternate means than specifically suggested.

The recommendations from the inquest relate specifically to the safe prescribing and dispensing of opioids. However, the opioid epidemic has many other causes and presents many other challenges, such as the entry of illicit fentanyl to the drug supply. Efforts should also focus on primary prevention to address underlying causes of the opioid epidemic. For example, we must advocate for, and improve, equitable access to addiction and mental health

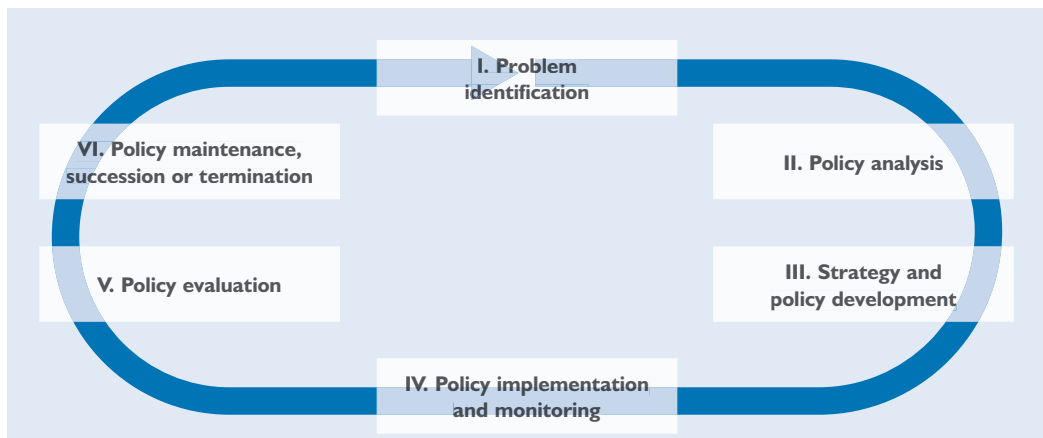
services, non-pharmaceutical treatment of chronic pain and the integration of trauma-informed care, among other upstream interventions. Addressing social determinants of health on a population basis must be integral to any approach.

Canada has faced years of opioid overprescribing that has contributed significantly to the harms caused by the opioid epidemic. Sensible reductions in amounts of opioids prescribed and provision of substitution therapy are needed to decrease the levels of opioids circulating in our communities and thereby reduce morbidity and mortality. Still, we must look for unintended harms in reducing medical supply of opioids. Such changes could result in the increased use of illicit drugs as those dependent on opioids try to avoid withdrawal, including use of illicit heroin and fentanyl. If suddenly cut off from their medical supply, those with existing opioid use disorders could lose tolerance and be at risk of overdose.

## Conclusion

Several challenges may inhibit the implementation of the jury recommendations including a lack of central coordination between agencies necessary to adopt, implement, evaluate and continuously improve policy measures. This may result in delayed and disjointed efforts to bring the opioid epidemic under control. There is an urgent need for decisive action and implementation of evidence-based health policy. As with any policy intervention, the policy cycle (Figure 1) should be followed – from problem identification, to policy evaluation and improvement – to monitor and measure policy outcomes using indicators for performance management and continuous quality improvement principles.

FIGURE 1. Health policy process adapted from the heuristic policy cycle (Cairney 2013)



A public health crisis of this magnitude calls for a robust response from federal, provincial and territorial governments with focused, integrated, long-term intervention plans. All organizations and agencies involved have a responsibility to acknowledge their role and prevent further opioid-related harm.



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