MEDICATION INCIDENT REPORTING IN CANADA: A WHITE PAPER

Executive Summary

EXECUTIVE SUMMARY

The Medication Safety Summit, co-hosted by the Canadian Patient Safety Institute (CPSI) and the Institute for Safe Medication Practices Canada (ISMP Canada) on June 18, 2014, confirmed the need for this white paper as part of the Summit's Medication Safety Action Plan. The primary goal was to define the current landscape of medication incident reporting in Canada, as a first step towards the development of a national cohesive sharing and learning strategy. CPSI agreed to fund ISMP Canada to co-lead the project with the Canadian Institute for Health Information (CIHI).

This report describes findings and makes recommendations stemming from each of three phases of the project: a literature scan, a survey, and a series of stakeholder interviews. Recommendations are directed toward a proposed Medication Safety Advisory Group to further sharing and learning from medication incidents.

Literature Scan Findings

Canadian literature published since 2005 was reviewed and assimilated into a summary of Canadian reporting systems, using pre-defined strata (Appendix A). Thirteen specific reporting systems were identified, including the several reporting portals of the Canadian Medication Incident Reporting and Prevention System (CMIRPS), as well as six general 'types' of reporting systems, such as hospital- and community pharmacy-based systems.

Analysis of the literature yielded several themes, namely: standalone systems with limited access to data beyond the reporting system, varied levels of reporter anonymity, imbalance in types of reporters, patient populations reflective of practice sites, and lack of a single data standard and taxonomy. It became apparent that optimizing existing reporting systems for sharing and learning may require optional reporter anonymity, input from all types of reporters, consensus on a data standard and taxonomy, and aggregation and assimilation of data for analysis.

Survey Findings

A survey (Appendix B) was jointly designed by CIHI and ISMP Canada to complement the literature scan on the current state of medication incident reporting in Canada. The survey was distributed to 81 individuals across the country, of whom 22 responded (27.2% response rate). Although not fully demonstrative of the Canadian landscape, these respondents represented 21 organizations, primarily from health service organizations/regional health authorities (50%) and government (22.7%).

Analysis of the survey results yielded several themes, namely: prevalence of standalone reporting systems; mandated reporting linked to more severe outcomes; and an imbalance in types of reporters. Fewer than 30% of respondents share some or all of their incident reports with a larger database (e.g., at a provincial/territorial or national level), thus nationwide sharing and learning for error prevention will be a challenge. Mandated reporting is more frequent for more serious and/or harmful outcomes, but reporting any incident, irrespective of the outcome severity, provides a learning opportunity. Respondents noted that healthcare providers most often generated incident reports, highlighting a gap in reporting by patients/families/clients/consumers, whose added

perspectives may be invaluable.

Stakeholder Interview Findings

Sixteen stakeholder interviews validated many of the findings from the literature scan and the survey, and added considerable perspective on the strengths, overlaps, gaps, and challenges inherent in Canada's currrent medication incident reporting landscape. In addition, stakeholders provided recommendations for improvement, and pointed to specific models to be considered to optimize reporting systems.

Information is collected from healthcare providers, healthcare institutions, and the public in national databases such as ISMP Canada's three reporting portals (Individual Practitioner Reporting [IPR], Community Pharmacy Incident Reporting [CPhIR], SafeMedicationUse.ca) and CIHI's National System for Incident Reporting (NSIR), thus the structures are in place to facilitate sharing and learning across Canada.

Interviewees concurred that medication incident reports might be overlapped at local levels as well as in the sharing of reports beyond individual reporters and institutions, but that the clinical or patient safety significance of this overlap is limited. Duplicated effort of reporting into multiple systems, however, poses a barrier to reporters.

In addition to overlaps, numerous gaps exist in Canada's medication incident reporting systems. The main gaps were: lack of linkages within and across organizations and regions, long term care (LTC) homes, transitions of care, community practice sites, and non-direct patient care sites; untapped repositories of medication incident reports; and under-reporting by physicians and patients/families/clients/consumers.

Interviewees also described barriers to completing incident reports, namely the cumbersome process, unclear relevance to patient safety, reporting culture, lack of awareness, and lack of clear definitions and distinctions (e.g., medication incidents vs. adverse drug events).

In addition to the barriers to completing individual medication incident reports, interviewees pointed to many barriers to sharing medication incident reports: lack of linkages across systems, poor patient safety culture, concern for patient privacy, risk aversion, lack of incentive, lack of mandate to share, and inconsistent nomenclature.

The interviewees' recommendations for the improvement of medication incident reporting systems in Canada involved three key areas – leadership, awareness, and technology.

- Leadership initiatives could include incorporating medication incident reporting in organizations' scorecards/dashboards; strategic investment in a pilot initiative to improve linkages across Canada; and the creation of a network to link representative data holders.

- Awareness campaigns of existing reporting portals and their importance could be targeted at all audiences, including patients/families/clients/consumers and healthcare professionals.

- Technological advances could be leveraged to create harmonized taxonomies and data standards; embed reporting within clinical processes; provide autocomplete and auto-upload options for incident reports; and flag reports for periodic analysis.

Summary of Recommendations

Recommendations to address the findings and potential implications of all three phases of the project are summarized below, and fall within two broad categories to enhance sharing and learning – improving the quantity and quality of reporting, and improving the linkages among reporting systems.

Improving the quantity and quality of reporting

- Expand awareness of reporting systems and portals available to all types of reporters, especially outside of acute care, with particular attention to the value and importance of the reporting process to patient safety.

- Highlight available reporting portals to under-represented groups, such as patients/families/clients/consumers, physicians from all care settings, community pharmacists, clinic nurses, and other healthcare providers. Input should be sought from all participants in the medication use process to enhance the quantity and quality of data obtained for sharing and learning.

- Encourage electronically embedding error-reporting systems within clinical processes to make reporting streamlined and efficient. The inclusion of an error reporting option within the patient's electronic health record may allow an automatic upload of certain information (e.g. current medications) to minimize the time and resources required of healthcare providers, particularly physicians.

- Promote the value of reporter anonymity to minimize fears of repercussion. These fears are based on individual perception, and may exist whether or not the organization intends to use identification for follow-up and analysis and/or performance review.

Improving the linkage of reporting systems

- Promote the use of a single data standard and taxonomy across reporting systems to facilitate easier use and understanding from the reporter's perspective, and easier aggregation and analysis from the assessor's perspective.

- Encourage all healthcare organizations across Canada to participate in NSIR to facilitate a single repository of all acute care incidents for sharing and learning.

- Promote development of a network of medication incident repositories that shares reported information. This cohesive network of reports would provide a larger pool of data within which error patterns and prevalence may be more easily recognized for corrective measures.