

Canadian Medication Incident Reporting and Prevention System

The Canadian Medication Incident Reporting and Prevention System (CMIRPS) has been developed through the collaborative efforts of Health Canada, the Institute for Safe Medication Practices Canada (ISMP Canada), and the Canadian Institute for Health Information (CIHI), with input from stakeholders across Canada. Discussions continue with the Canadian Patient Safety Institute to help ensure that CMIRPS is coordinated with other patient safety initiatives.

The aim of CMIRPS is to strengthen Canada's capacity to reduce and prevent harmful medication incidents and to manage and share information about voluntarily reported medication incidents. The term "medication incident" is widely used to refer to the preventable subset of potential and actual adverse drug events. It is also recognized as an alternative term for "medication error".¹ This bulletin provides a brief update on CMIRPS.

Scope and Features of CMIRPS

CMIRPS collects and analyzes reports on potential and actual incidents, both critical and noncritical, related to any medication and occurring at any stage of the medication use system, including prescribing, order communication, product labelling, packaging and nomenclature, compounding, dispensing, distribution, administration, and monitoring. The reporting of near misses and hazardous situations is considered as important as collecting information on actual adverse events, since this allows latent conditions to be corrected in a proactive manner.

The features of CMIRPS include the capacity for both *hospital-based* and *individual practitioner* reporting. These two reporting features are complementary and have been developed to enhance the reporting of medication incidents by healthcare practitioners across the continuum of care. Recognizing the interest of consumers in sharing information about medication incidents, a strategy to enhance reporting capability and the associated medication safety learning from consumers is currently under development.

Hospital-Based Reporting

The expertise of CIHI has been instrumental to the development of the hospital-based reporting system. This component includes an analytical tool that will allow participating institutions to conduct individualized analyses using their own data as well as de-identified aggregate data from across Canada. A 4-month national pilot test of a

secure web-based reporting system was launched in November 2008, and there are plans for wider release of the system in 2009.

In addition to the ongoing management and support of the hospital-based reporting feature, CIHI will conduct analytical studies, respond to ad hoc requests for information, and provide stakeholders with comprehensive reports on the data.

Individual Practitioner Reporting

Individual practitioners can report medication incidents to CMIRPS through ISMP Canada. Individual practitioner reporting complements hospital-based reporting and allows for the timely collection and processing of medication incident reports submitted by individuals working in any healthcare setting. Any healthcare practitioner may submit a report, including physicians, nurses, pharmacists, pharmacy technicians, dentists, respiratory therapists, paramedics, and risk managers. Consumers may also submit incident reports directly to ISMP Canada through this component of CMIRPS.

A variety of reporting mechanisms are available to individual practitioners and consumers, including telephone or web portal (electronic) submission. Reports may be submitted anonymously if desired. Processes for reporting are available in both official languages.

Learning, Analysis, and Prevention

Learning, analysis, and prevention are integral to the success of any reporting program. Working collaboratively with a variety of stakeholders, ISMP Canada has a key role in analyzing and disseminating the information collected through CMIRPS. Activities include conducting follow-up of incident reports, providing support for the development and implementation of preventive measures, developing and disseminating information bulletins and alerts, and conducting analytical studies.

Since the inception of CMIRPS, more than 40 issues of the *ISMP Canada Safety Bulletin* have been published reporting the findings of incident analyses to CMIRPS stakeholders. These bulletins, developed in collaboration with practitioners and other stakeholders, are available at the ISMP Canada website (<http://www.ismp-canada.org/ISMPCSafetyBulletins.htm>). The majority of the ISMP Canada Safety Bulletins include recommendations for

preventive measures that can be used to guide system-based improvements.

The Marketed Health Products Directorate within the Health Products and Food Branch has led Health Canada's contribution to the development of CMIRPS. As the regulator, Health Canada has both shared and primary responsibilities related to the management of medication-related risks. Although professional practice issues arising from medication incidents often fall under provincial and territorial jurisdiction, issues relating to the naming, packaging, and labelling of health products fall under

federal jurisdiction. Health Canada and ISMP Canada have been working with stakeholders and the pharmaceutical industry to address issues in these areas when reports and incident analyses indicate that such efforts are warranted.

This bulletin provides an opportunity to express sincere appreciation to the many healthcare professionals, administrators, risk managers, and other individuals in the Canadian healthcare community for their initiative, efforts, and demonstrated support for a culture of safety, exemplified by their sharing of information about medication incidents and related findings.

Reference

1. Definition of terms [Internet]. Toronto (ON): Institute for Safe Medication Practices Canada; c2000-2008 [cited 2008 Nov 3]. Available from: <http://www.ismp-canada.org/definitions.htm>

Canadian Failure Mode and Effects Analysis Framework Proactively Assessing Risk in Healthcare

ISMP Canada has developed the *Canadian Failure Mode and Effects Analysis Framework — Proactively Assessing Risk in Healthcare* with support from Health Canada, through the Canadian Medication Incident Reporting and Prevention System, and with assistance from healthcare and human factors engineering consultants.

Failure Mode and Effects Analysis (FMEA) is a proactive safety technique that helps to identify process and product problems before they occur. It is one of several methods of proactive risk assessment that can be used in the healthcare setting, and it is also widely used as an integral aspect of improving quality and safety in a variety of other industries, e.g., automotive, aviation, and nuclear power.

Workshops on FMEA are provided by ISMP Canada; attendees participate in a simulated FMEA, which can be customized to meet the needs of the participants or of individual organizations. According to the feedback we have received from our workshops, the 8 steps for conducting an FMEA described in the Framework constitute a straightforward and understandable technique that users can readily apply to their own practice settings.

ISMP Canada also offers facilitation of site-specific FMEA projects.

For more information, contact ISMP Canada at fmea@ismp-canada.org or 1-866-54-ISMPC (1-866-544-7672).

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ISMP Canada is a national voluntary medication incident and 'near miss' reporting program founded for the purpose of sharing the learning experiences from medication errors. Implementation of preventative strategies and system safeguards to decrease the risk for error-induced injury and thereby promote medication safety in healthcare is our collaborative goal.

Medication Incidents (including near misses) can be reported to ISMP Canada:

(i) through the website: http://www.ismp-canada.org/err_report.htm or (ii) by phone: 416-733-3131 or toll free: 1-866-544-7672.

ISMP Canada can also be contacted by e-mail: cmirps@ismp-canada.org. ISMP Canada guarantees confidentiality and security of information received, and respects the wishes of the reporter as to the level of detail to be included in publications.

A Key Partner in the Canadian Medication Incident Reporting and Prevention System