



The Canadian Medication Incident Reporting and Prevention System: What it means to patient safety

By David U

As health-care providers, we know that efforts to improve medication safety can play a significant role in improving overall patient safety in the Canadian health-care system. But we need better information on the types, sources, causes, and outcomes of medication incidents and more importantly we need a coordinated strategy. One outcome of a workshop on medication safety hosted by Health Canada in the year 2000 was the proposal to create the Canadian Medication Incident Reporting and Prevention System (CMIRPS). This national reporting system is being developed to help health-care professionals, health-care organizations, community-based pharmacies, governments, and others to design and implement preventative actions and processes.

This column describes the goals of the CMIRPS and provides some information about how it will operate. The system is being implemented over the next few years and should be fully functional by 2008.

The overall purpose of CMIRPS is to coordinate the capture, analysis, dissemination of information on medication incidents, and to develop safer practices for Canadians. The important principles and attributes of the CMIRPS are:

- Be national in scope.
- Be compatible with an overall patient safety system and relevant patient safety initiatives such as those offered through the Canadian Patient Safety Institute.



- Encourage extensive voluntary participation.
- Support a nonpunitive approach with respect to those who report medication incidents.
- Safeguard data integrity, privacy, and confidentiality.
- Encourage organizations and individual practitioners to report all medication incidents.
- Allow for selected follow-up to facilitate root cause analysis and quality assurance of the data.
- Allow organizations to access their own data to assist with their own patient safety efforts.
- Be dynamic, to allow for the continued relevancy and utility of the system.

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CMIRPS will operate under three key collaborating organizations: Health Canada, the Institute for Safe Medication Practices Canada (ISMP Canada), and the Canadian Institute for Health Information (CIHI). The roles of each are described below:

Health Canada

- Provide funding for the development of CMIRPS.
- Provide secretariat support for the CMIRPS Operations Committee and the CMIRPS Advisory Committee.
- Define Health Canada's role in managing the postmarket response for identified patient safety issues related to naming,

packaging, and/or labelling of drug products.

- Investigate avenues by which it can work with the pharmaceutical industry, health-care professionals, and related organizations in responding to identified postmarketing safety issues arising from medication incidents, with the goals of preventing such incidents and improving patient safety.

ISMP Canada

- Continue to take the lead in collecting and processing data from individual practitioners.
- Conduct root cause analysis for selected medication incidents.
- Develop and disseminate timely information bulletins (e.g., alerts).

- Conduct analytical studies (e.g., aggregate root cause analysis based on standardized data submitted to CMIRPS from health service organizations, as well as events reported by coroners' offices, professional regulatory agencies, and health-care insurers).
- Provide support for the development and implementation of preventive measures.

CIHI

- Take the lead in collecting and processing standardized data from health service organizations.
- Develop a system capable of query and analysis.
- Conduct analytical studies and respond to ad hoc requests.

One of the key elements for CMIRPS' success is reporting. CMIRPS will accept incident

reports from both individual reporters and health service organizations. Reporting to CMIRPS by individual practitioners will be an expansion of ISMP Canada's existing voluntary practitioner reporting program, which offers confidential (or anonymous, when preferred) reporting of an individual incident and does not collect personal information about patients. Reports are accepted from anyone working within the health-care system, including risk managers, regulatory colleges, coroners' offices, and insurance providers, as well as health-care professionals such as physicians, nurses, pharmacists, technicians, and paramedics. A variety of reporting mechanisms are offered: telephone, regular mail, e-mail, Web portal, or electronic submission.

At the organizational level, reporting to CMIRPS will initially be limited to hospitals, including general hospitals, specialty hospitals, cancer treatment centres, psychiatric hospitals and extended care hospitals. CMIRPS will try to accommodate and build on reporting programs that already exist within organizations. Privacy-compliant, anonymous, secure submission of standardized data will be accomplished by direct data entry (through a Web interface) or by batch data transfer. Submitting organizations will have access to their own data and data from other submitting organizations to allow local patient safety strategies. Data will also be used to support trend analysis and aggregate reporting.

The CMIRPS will be available to individual and organizational reporters working in either of Canada's official languages.

In conclusion, I can only say that the collaborative model for CMIRPS is unique in the world and will contribute substantially to the patient safety directions. While this elaborate reporting system is being developed, ISMP Canada continues its mandate to receive medication incidents from practitioners and hospitals. Health-care workers in hospitals, with their first-hand knowledge of systems issues and their understanding of the need for integrated medication system safeguards, do have a significant role to play in this new initiative. Your support through reporting of medication incidents to ISMP Canada will be critical to overall enhancement of patient safety in Canada.

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