E fforts to improve medication safety can play a significant role in improving overall patient safety in the Canadian health-care system, but better information is needed on the types, sources, and causes of medication incidents. 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 preventive actions and processes. The system is being implemented over the next few years and should be fully functional by 2008. This article describes the goals of the CMIRPS and provides some information about how it will operate.

**Purposes of the CMIRPS**

- To coordinate the capture, analysis, and dissemination of information on medication incidents.
- To enhance the safety of the medication use system for Canadians.
- To support the effective use of health-care resources through the reduction of potential and actual harm caused by preventable medication incidents.

**Key Principles and Attributes of the CMIRPS**

- 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 relevance and utility of the system.

**Roles of Participating Organizations**

The CMIRPS will be developed and implemented through the collaborative efforts of 3 national organizations: Health Canada, the Institute for Safe Medication Practices Canada (ISMP Canada), and the Canadian Institute for Health Information (CIHI). CMIRPS will have both an individual practitioner reporting component and a health services organization reporting component.

**ISMP Canada Role**

ISMP Canada is responsible for the development and implementation of the individual practitioner reporting component of CMIRPS. Using information obtained through both the individual practitioner and health services organization reporting components, ISMP Canada will:
- Conduct follow-up as necessary
- Conduct root cause analysis for selected medication incidents
- Develop and disseminate timely information bulletins and alerts
- Conduct analytical studies
- Provide support for the development and implementation of preventive measures
- Work with Health Canada, pharmaceutical manufacturers, and other stakeholders to promote enhancements to product packaging and labelling.

**CIHI Role**

CIHI’s primary role is the development, pilot-testing and implementation of the health services organization reporting component of CMIRPS. Once this reporting component is launched, CIHI will be responsible for conducting analytical studies, responding to ad hoc requests for information, and providing stakeholders with comprehensive reports on the data.

**Health Canada Role**

Health Canada provides funding, coordination, and support for the CMIRPS program. Its role includes working collaboratively with stakeholders to address issues related to pharmaceutical product naming, packaging and labelling.

**Reporting of Medication Incidents**

CMIRPS will accept incident reports from both individual practitioners and health-care organizations. Continued on page 31.
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ual 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 incident and does not collect information about individual patients. Reports are accepted from anyone working within the healthcare system, including healthcare professionals such as physicians, nurses, pharmacists, technicians, and paramedics, as well as risk managers, regulatory colleges, coroners’ offices, and insurance providers. A variety of reporting mechanisms are offered including telephone, and web portal electronic submission.

At the organizational level, reporting to CMIRPS will initially be limited to 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 aggregate data to allow local patient safety strategies. Data will also be used to support trend analysis and comprehensive reports.

Working Together to Improve Patient Safety

The collaborative model for CMIRPS is unique in the world and will contribute substantially to the patient safety directions. ISMP Canada, CIHI, and Health Canada are working closely with the Canadian Patient Safety Institute, and an advisory committee to strengthen Canada’s ability to effectively manage and coordinate medication incident information. Together, we can share the lessons learned from medication incidents and reduce the risk of similar incidents occurring elsewhere.

For more information on the Canadian Medication Incident Reporting and Prevention System, please visit our website at: www.ismp-canada.org; e-mail: cmirps@ismp-canada.org

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