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A KEY PARTNER IN
CMIRPS Canadian Medication Incident Reporting and Prevention System
SCDPIM Système canadien de déclaration et de prévention des incidents médicamenteux

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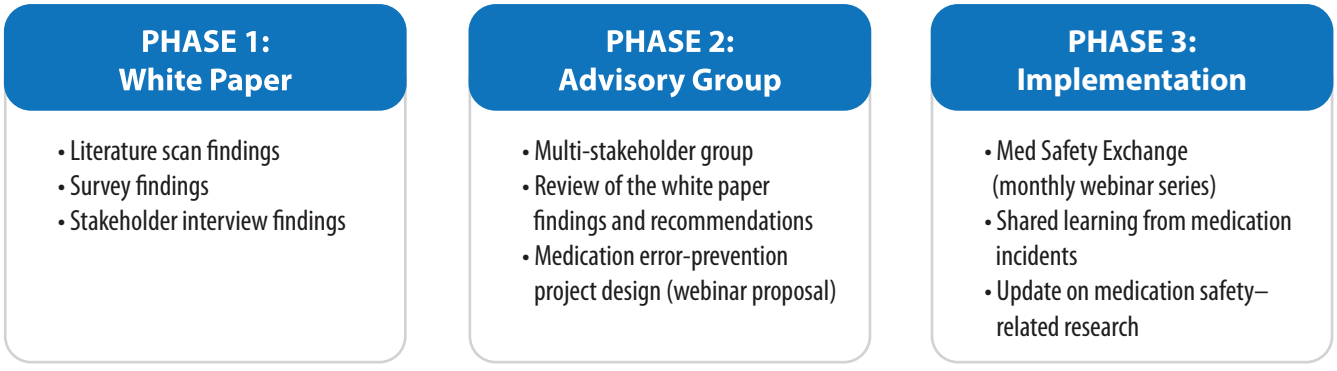
Medication Incident Data in Canada: A Strategy for More Effective Sharing and Learning

Most healthcare organizations providing patient care in Canada independently collect and analyze medication incident data; and many of these organizations develop and implement recommendations arising from their investigations. The reporting and analysis of medication incidents, is one way stakeholders can become aware of medication safety risks, as well as the factors that may contribute to harmful incidents.[1] The valuable knowledge gained from a local analysis could benefit other healthcare providers and organizations at the provincial, national, and international levels.

One mechanism to disseminate and increase awareness of internationally reported information is the Global Patient Safety Alerts program, run by the Canadian Patient Safety Institute (CPSI). This makes available a collection of indexed patient safety incidents (in the form of alerts and advisories), recognized by the World Health Organization (WHO) and its member countries.[2]

A Medication Safety Action Plan[3] was a key product of the Medication Safety Summit in 2014,[4] with the express goal to, "develop a mechanism by which medication information and learning from different data sources can be shared effectively" in Canada.[3] A cohesive, formal information-sharing strategy would facilitate a better understanding of reported medication incidents and would support the development of robust strategies for preventing patient harm, as well as creating a dynamic and supportive mechanism for shared learning.[3] The undertaking was divided into 3 phases (Figure 1).

Figure 1: Overview of the key tasks and outcomes of the 3 phases of the project.



Phase 1: White Paper on Medication Incident Reporting in Canada

The white paper on medication incident reporting in Canada, released in late 2016, was jointly authored by the Canadian Institute for Health Information (CIHI) and ISMP Canada, with funding from CPSI, and incorporated multidisciplinary input from across Canada.[5] The report describes findings and recommendations from the environmental scan of Canadian literature, a survey of practices at diverse Canadian health service organizations, and a series of stakeholder interviews.

Key recommendations from this white paper are to improve both the quantity and quality of medication incident reporting and to improve the linkage of reporting systems.[5] The recommendations focus on promoting development of a network of medication incident repositories and expanding awareness of available reporting systems and portals among all types of reporters. Collection and integration of reports would create a larger pool of data within which error and prevalence patterns could more easily be recognized. Implementing corrective measures as a result of reported medication incidents would then serve to further incentivize reporters to use and support the reporting process.

Phase 2: Medication Safety Advisory Group

A national group of representatives from multiple stakeholder organizations (Box 1) convened to develop a program to improve sharing of and learning from medication incident data across Canada. The group was tasked with applying the findings, recommendations, and key messages from the white paper toward the design, implementation, and evaluation of the proposed strategy.

The group recognized that several different data standards and taxonomies are currently in use by the many existing reporting systems. Therefore, it was proposed that sharing the incident data analyses, rather than the raw data underlying those analyses, would be easier, more educational, and more useful for the multiple participating organizations.

Box 1: Membership of the Medication Safety Advisory Group

National Organizations

- Canadian Institute for Health Information (CIHI)
- Canadian Medical Protective Association (CMPA)
- Canadian Patient Safety Institute (CPSI)
- Health Canada - Patient Safety Section
- Institute for Safe Medication Practices Canada (ISMP Canada)
- Patients for Patient Safety Canada

Provincial Organizations

- British Columbia Patient Safety and Learning System
- Health Quality Ontario
- Nova Scotia Medical Examiner Service

Regional Organizations / Individuals

- Saskatoon Health Region
- Academic researcher

The group conceived a monthly webinar series focused on medication safety, as described in the following section. The initial format outlined for the monthly webinar includes quality improvement evaluation measures, which will contribute to the continued development of the webinar program.

Phase 3: Med Safety Exchange Webinars

The goal of the Med Safety Exchange webinar series is to facilitate shared learning from medication incident data analyses. It is intended to be a national, practitioner-driven online platform, with interactive components. Each 1-hour webinar will contain several short presentations from multiple healthcare organizations, followed by a review of recent regulatory warnings and alerts, as well as a discussion of the recent academic literature in medication safety. Opportunities to submit questions and comments will be provided. In this way, those in attendance can

identify similar vulnerabilities and/or safety opportunities in their own systems, or contribute their own strategies for dealing with identified medication safety issues. The recorded webinars will be available on the webpage within one week of the live presentation.

The Med Safety Exchange aims to increase participants' awareness of key findings and recommendations from incident data, as well as current medication safety-related research and Health Canada warnings. Presentations from a wide range of organizations will offer a variety of approaches and perspectives. Additionally, participation in the Med Safety Exchange will validate the benefits of error reporting in optimizing medication safety for patients, thereby promoting and reinforcing the value of the reporting systems themselves.

Conclusion

The overarching goal proposed by the Medication Safety Summit was to develop a new platform for effectively sharing and learning from medication incidents reported across Canada. The steps in this process, described above, have led to the upcoming complimentary Med Safety Exchange webinars. Healthcare providers and organizations from all types of care settings are encouraged to participate in the monthly series beginning **September 13, 2017**.

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References

1. Smetzer JL, Cohen MR. Medication Error Reporting Systems. In: Cohen MR, editor. Medication errors. 2nd ed. Washington (DC): American Pharmacists Association; 2007: 513-523.
2. Global patient safety alerts. Edmonton (AB): Canadian Patient Safety Institute; [cited 2017 Jun 30]. Available from: http://www.patientsafetyinstitute.ca/en/About/Programs/GPSA/Pages/default.aspx
3. A medication safety action plan. Edmonton (AB): Canadian Patient Safety Institute, Institute for Safe Medication Practices Canada; 2014 Sep [cited 2017 Jul 1]. Available from: http://www.patientsafetyinstitute.ca/en/About/PatientSafetyForwardWith4/Documents/A%20Medication%20Safety%20Action%20Plan.pdf
4. Medication safety summit. Edmonton (AB): Canadian Patient Safety Institute; 2014 June [cited 2017 Jul 11]. Available from: http://www.patientsafetyinstitute.ca/en/About/PatientSafetyForwardWith4/Pages/Medication-Safety.aspx
5. Medication incident reporting in Canada: a white paper. Executive summary. Edmonton (AB): Canadian Patient Safety Institute, Institute for Safe Medication Practices Canada, Canadian Institute for Health Information; 2016. Available from: https://www.ismp-canada.org/download/publication-position/Medication_Incident_Reporting_in_Canada-Executive_Summary.pdf

Med Safety Exchange
Webinar Series

Wednesday, Sept. 13, 2017, 12 p.m. EDT

Join your colleagues across Canada for complimentary monthly 60 minute webinars to share, learn and discuss incident reports, trends and emerging issues in medication safety!

For more information, visit www.ismp-canada.org/MedSafetyExchange/

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Institute for Safe Medication Practices Canada
Institut pour la sécurité des médicaments aux patients du Canada

cpsi icsp
Canadian Patient Safety Institute
Institut canadien pour la sécurité des patients

Unrealized Exposure to Heparin

In a recent newsletter, ISMP (US) discussed the problem of unrealized exposure of patients to heparin-coated medical devices.[1] These devices are most often used during surgery or other interventional procedures, and include certain vascular access catheters, guidewires, grafts, and stents. These devices are manually or commercially coated with heparin to attenuate the normal biologic responses that occur when blood comes into contact with a foreign body (e.g., platelet activation, thrombus formation).

Heparin-induced thrombocytopenia (HIT) is an immune-mediated response that can occur after exposure to any amount of heparin. Patients who have developed HIT have a 30% to 70% chance of experiencing a thrombotic event if heparin administration continues or if they are subsequently re-exposed to heparin. Thrombotic events can lead to amputation or death; therefore, patients with HIT must avoid even small amounts of heparin, like the often-unrecognized quantities found on medical devices.

Recommendations

To avoid unrealized exposure to heparin, ISMP (US) recommends that facilities and organizations take the following measures:

- **Identify hidden products.** Compile a list of heparin-eluting stents and commercially available and/or user-applied heparin-coated catheters and devices used in the facility that will expose patients to heparin. Update this list regularly, and establish a system for widespread notification whenever new products are purchased, so the list can be updated as needed.
- **Enable documentation of the exposure.** Work with software vendors to establish a system to document in the patient's medical record any exposure to devices containing heparin. Automated capture of this information is desirable, to improve the reliability of documentation.
- **Educate staff.** Ensure that practitioners who will be inserting the catheters or using the devices ask patients whether they have a history of an allergy to heparin or a history of HIT. Practitioners who care for patients exposed to heparin-coated or heparin-eluting devices should know the symptoms to monitor to detect an allergic response or possible HIT.
- **Seek out sources of heparin when symptoms arise.** It is imperative that practitioners look for hidden sources of heparin when patients experience symptoms suggesting possible HIT. Patients with exposure to heparin-coated or heparin-dipped catheters who have thrombocytopenia and other risk factors (e.g., decreased platelet count 5-10 days after initiation of heparin or sooner if they have had prior [within 30 days] heparin exposure, thrombosis) should be worked up for HIT.
- **Discontinue all sources of heparin** if HIT is *suspected* or *diagnosed*, and initiate appropriate treatment.

Reference

1. Unrealized exposure to heparin leads to missed HIT diagnosis and subsequent limb thrombosis. Acute Care ISMP Med Saf Alert. 2017 [cited 2017 Aug 9]:22(9):1-3. Available from: https://www.ismp.org/newsletters/acutecare/showarticle.aspx?id=1166

Take With Questions

This year's Canadian Patient Safety Week (CPSW) campaign, Take With Questions, is all about medication safety. Here's what you can do to prepare for CPSW (Oct. 30 to Nov. 3, 2017):

- Request (email: medrec@ismp-canada.org) a customized PDF of the "5 Questions to Ask about Your Medications" poster, featuring your organization's logo.
- Share with us how the "5 Questions" poster is being used in your organization and its impact on you and your patients.
- Register today for your free CPSW package.

More information is available at Take With Questions. (http://www.patientsafetyinstitute.ca/en/events/cpsw/Pages/default.aspx)

CMIRPS SCDPIM
Canadian Medication Incident Reporting and Prevention System
Système canadien de déclaration et de prévention des incidents médicamenteux

The Canadian Medication Incident Reporting and Prevention System (CMIRPS) is a collaborative pan-Canadian program of Health Canada, the Canadian Institute for Health Information (CIHI), the Institute for Safe Medication Practices Canada (ISMP Canada) and the Canadian Patient Safety Institute (CPSI). The goal of CMIRPS is to reduce and prevent harmful medication incidents in Canada.

HIROC

The Healthcare Insurance Reciprocal of Canada (HIROC) provides support for the bulletin and is a member owned expert provider of professional and general liability coverage and risk management support.

ISMP CANADA

The Institute for Safe Medication Practices Canada (ISMP Canada) is an independent national not-for-profit organization committed to the advancement of medication safety in all healthcare settings. ISMP Canada's mandate includes analyzing medication incidents, making recommendations for the prevention of harmful medication incidents, and facilitating quality improvement initiatives.

Report Medication Incidents

(Including near misses)

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ISMP Canada strives to ensure confidentiality and security of information received, and respects the wishes of the reporter as to the level of detail to be included in publications. Medication Safety bulletins contribute to Global Patient Safety Alerts.

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