

Med Safety Exchange

Webinar Series Evaluation

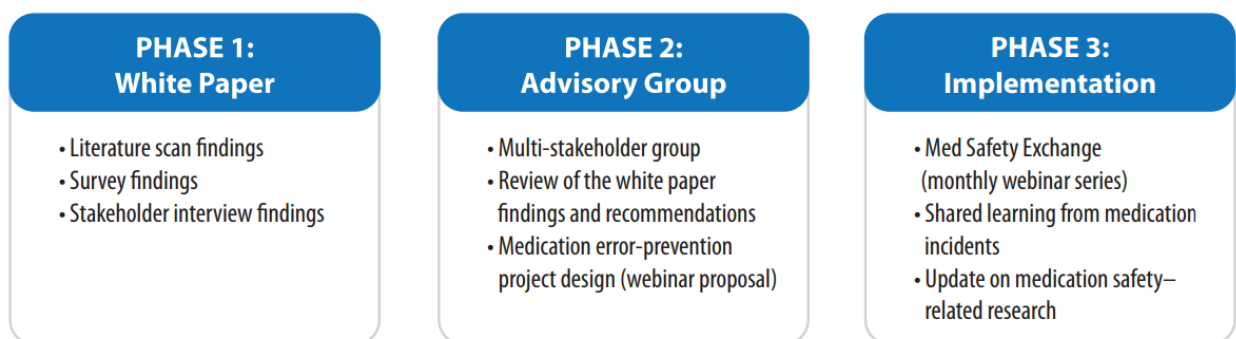
Project Background and Rationale

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 Plan³ 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 three phases (Figure 1).

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



Project Key Milestones

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.

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.

Box 1: Membership of the Medication Safety Advisory Group

National Organizations
<ul style="list-style-type: none">• 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
<ul style="list-style-type: none">• British Columbia Patient Safety and Learning System• Health Quality Ontario• Nova Scotia Medical Examiner Service
Regional Organizations / Individuals
<ul style="list-style-type: none">• Saskatoon Health Region• Academic researcher

Phase 3: Med Safety Exchange Webinar Series

The goal of the Med Safety Exchange webinar series was to facilitate shared learning from medication incident data analyses and medication safety initiatives. It was intended to be a national, practitioner-driven online platform, with interactive components, adapted from webinars with similar goals in other jurisdictions, such as NHS England. Each 1-hour webinar contained two 15-minute presentations from different healthcare organizations, followed by a 15-minute medication safety update (i.e., an observatory that featured updates from Health Canada, CPSI, ISMP Canada, other healthcare organizations, and/or recent academic literature in medication safety). Participants submitted questions and comments throughout the webinar, and a 10-minute discussion was held at the end to allow presenters to answer those questions.

It was hoped that the interactive Med Safety Exchange webinar series would encourage participants to identify similar vulnerabilities and/or safety opportunities in their own systems, and/or contribute their own strategies for dealing with identified medication safety issues. The recorded webinars were made available on the webpage within one week of the live presentation so that the timing of the webinar would not be a barrier to shared learning.

The Med Safety Exchange aimed to increase participants' awareness of key findings and recommendations from incident data, as well as medication safety-related initiatives, updates, and research. Additionally, the webinar series aimed to validate the benefits of error reporting in optimizing medication safety for patients, thereby promoting and reinforcing the value of the reporting systems themselves.

Evaluation of the Med Safety Exchange Webinar Series

The first six monthly webinars, from September 2017 to February 2018, served as a pilot run for the Med Safety Exchange webinar series. Prior to implementation, the logic model for this initiative outlined five key outcomes:

- Enhanced network of collaborating organizations sharing medication incident learning
- Increased capacity for safety improvements and risk reduction across Canada
- Increased national awareness of mitigating strategies and recommendations from medication incident data
- Increase national awareness of medication-related safety initiatives, updates, and research
- Improved appreciation of the value of incident reporting and enhanced reporting quality

The accomplishment of these goals was extrapolated from the pan-Canadian involvement in the Med Safety Exchange webinar series as presenters and/or participants (reflecting national awareness and a collaborating network), as well as the responses to the post-webinar survey questions regarding medication safety culture (reflecting the perceived utility of the medication safety-related learnings and the value of reporting).

Pan-Canadian Support

Over the pilot run of the Med Safety Exchange webinar series, the number of participants averaged 237 per webinar, ranging from 151 to 309 (Figure 1). The total number of participants was determined by combining two figures: the number of WebEx phone lines during the webinar, which was identified by the system; and the number of individuals 'in the room' per phone line, which was identified by (and

therefore limited to) responses to the post-webinar survey. Since we cannot know the number of people 'in the room' for every WebEx phone line, these values are conservative estimates. The lowest number of participants was seen in December 2017, and subsequent feedback from participants indicated that an academic year of webinars avoiding the holidays (i.e., summer months and December) would be preferred.

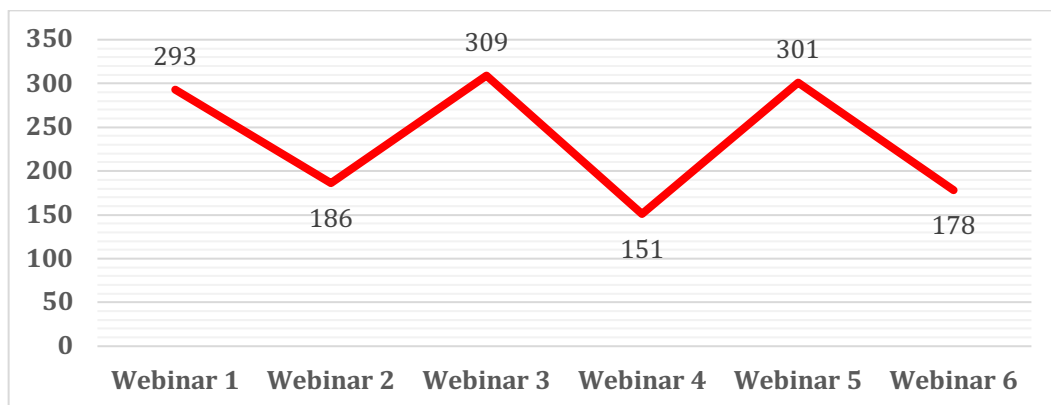


Figure 1: Graphical representation of the number of participants per webinar in the Med Safety Exchange series. This data reflects the number of WebEx phone lines, as well as the number of people 'in the room' per phone line (but only for those who responded to the survey).

The participant data collected during registration for the live webinars indicated that almost half of the participants were in the pharmacy field (including pharmacists, pharmacy technicians, and pharmacy assistants, in any healthcare setting) and about one quarter of the participants were in the nursing field. This finding suggests that marketing for the webinar series should continue to encourage participation from those in the pharmacy and nursing fields, but also expand this to physicians (currently 1%), administrators (e.g., risk managers, policymakers) and other allied health professionals.

In addition to participation in the live webinar, participants were able to view a recording on the Med Safety Exchange website within one week of the webinar. The number of views per webinar has been 168, ranging from 60 (last webinar) to 362 (first webinar), which reflects the amount of time that the recording has been available for viewing. Again, this is a conservative estimate, as it is not possible to determine the number of people listening to the recording per single view.

The Med Safety Exchange webinar series has successfully achieved pan-Canadian participation, with representation from all provinces and most territories (except for Nunavut). Relative to the populations within each province and territory, Saskatchewan, Alberta, Nova Scotia, and Ontario have been well-represented, while more efforts are needed to engage participants in Quebec and British Columbia (Figure 2).

The Med Safety Exchange webinar presenters were also representative of Canada, including national organizations such as CPSI, Health Canada, ISMP Canada (including CPhIR), CIHI, and CSHP. The province-specific webinar presenters have been from Ontario, Alberta, Saskatchewan, Nova Scotia, Manitoba, and British Columbia (Figure 2). Interestingly, the first four provinces listed here had relatively high representation during the webinars, but it is not known whether presentation by a colleague engaged additional participants or participation led to a willingness to present; this finding may be useful to further engage webinar participation and presentation.

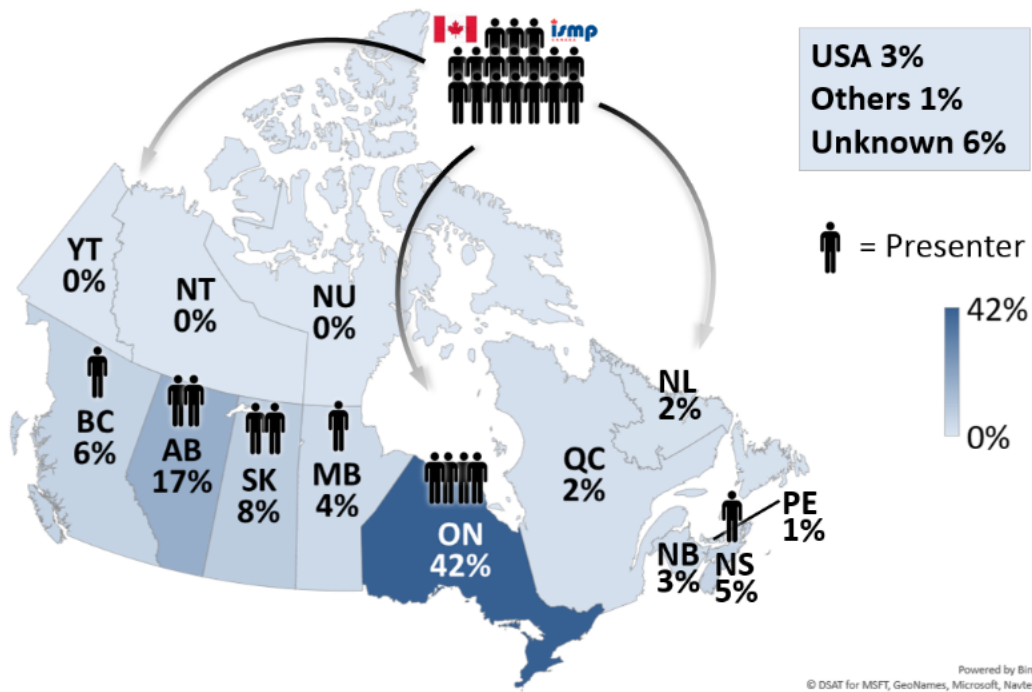


Figure 2: Geographical illustration of pan-Canadian involvement in the Med Safety Exchange webinar series. Participation rates are depicted as a percentage per province, and presenters are depicted as an icon per province or as part of a national organization.

Improvement in Medication Safety Culture

Participants had an opportunity to respond to a post-webinar survey on three occasions (and were asked to complete only one): first, a poll available to participants within the last 10 minutes of the live webinar; second, a WebEx survey available once the live webinar ended; and third, an email survey within one week of the live webinar. The average response rate was 43%, garnering 106 to 187 responses per webinar.

The survey consisted of five questions, three of which were related to medication safety culture used a 5-point Likert scale: 1, strongly disagree; 2, disagree; 3, neutral; 4, agree; 5, strongly agree. To simplify the data, responses were grouped as negative (1 and 2), neutral (3), and positive (4 and 5), in the graphs below. The survey also asked participants the number of individuals ‘in the room’ with them and for any additional comments they wanted to share.

Firstly, participants were asked if the presented strategies, recommendations, and/or medication safety-related research would be valuable in improving their practice (Figure 3). The majority of respondents consistently selected positive statements for this question in each webinar, with an average of 82% across the six webinars. Additionally, only a small number of participants selected negative statements for this question, with an average of 6%. This indicates that the learning presented in each webinar has been appreciated by participants, and needs to continue in subsequent webinars.

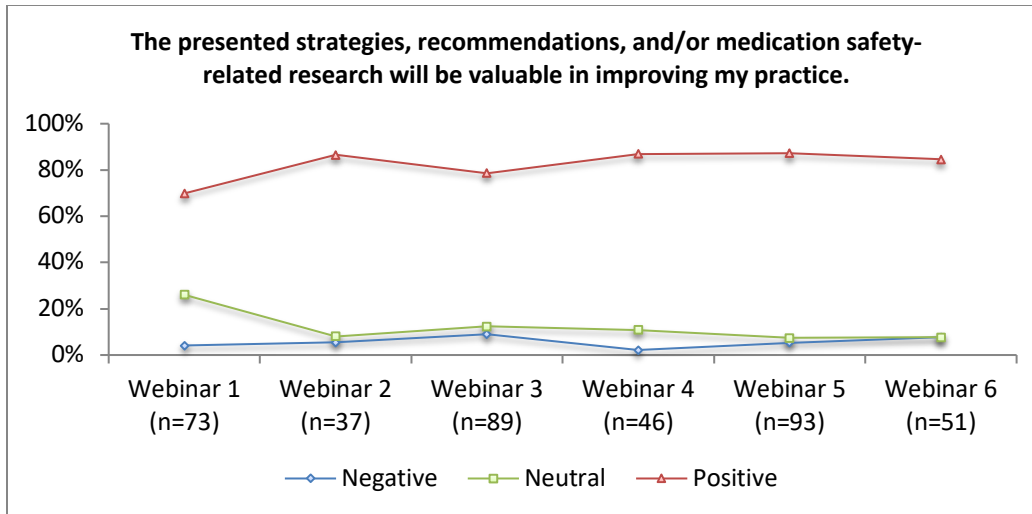


Figure 3: Graphical representation of the responses to the first question related to medication safety culture.

Secondly, participants were asked if they would implement one or more recommendations in their practice to optimize medication safety (Figure 4). The majority of respondents consistently selected positive statements for this question in each webinar, with an average of 78% across the six webinars. Additionally, only a small number of participants selected negative statements for this question, with an average of 5%. This indicates that the learning presented in each webinar can be applied to practice, although comments from participants suggest that incidents from even more types of care sites (i.e., long-term care homes, ambulatory clinics, etc.) would be appreciated.

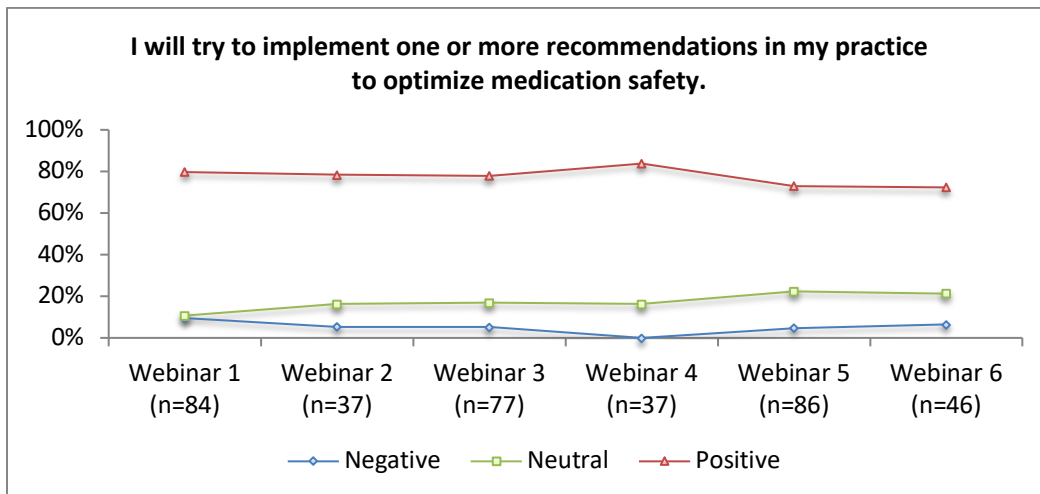


Figure 4: Graphical representation of the responses to the second question related to medication safety culture.

Thirdly, participants were asked if the webinar demonstrated the value and importance of medication incident reporting (Figure 5). The vast majority of respondents consistently selected positive statements for this question in each webinar, with an average of 93% across the six webinars. Additionally, only a small number of participants selected negative statements for this question, with an average of 6%. This indicates that the shared learning presented in each webinar has shown participants the value of incident reporting and analysis. It is difficult to ascertain whether incident reporting rates were influenced by the Med Safety Exchange webinar series, but it is clear that the importance of reporting has been recognized.

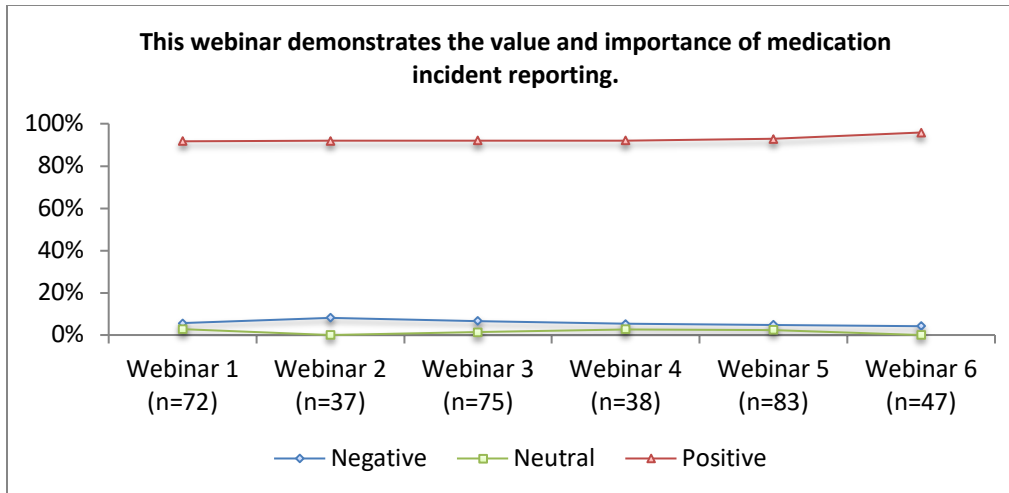


Figure 5: Graphical representation of the responses to the third question related to medication safety culture.

The last question in the post-webinar survey asked participants for comments and suggestions to improve the Med Safety Exchange webinar series. There were many positive statements that praised the series for sharing medication safety learning and fostering a culture of safety, as well as allowing recordings to be viewed at the participants' convenience. The suggestions for improvements were incorporated into the relevant sections in the discussion above.

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 subsequent Med Safety Exchange webinar series allowed healthcare practitioners to present incident analyses, recommendations, and medication safety-related learning to their peers in order to prevent error recurrence and encourage a culture of safety.

Participants found:

- 1) the presentations were worthwhile;
- 2) the presented strategies influenced safety practices;
- 3) the webinars reaffirmed the value of reporting, sharing and learning; and
- 4) the Medication Safety Exchange webinar series should continue.

Suggestions for change included a wider variety of practice milieus (e.g., homecare, long term care), and a slightly shorter webinar time (e.g., 45- 50 minutes to accommodate arriving late, leaving early).

The success of the pilot run has demonstrated that the Med Safety Exchange is a valuable, practical, and beneficial program to promote reporting, sharing, and learning for all healthcare practitioners across Canada.

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