Background

Learning from medication incidents is fundamental to improving medication use systems. However, many Canadian hospitals lack the resources and expertise to effectively analyze and learn from medication incidents.

Objective

To develop an innovative Knowledge Mobilization Tool (KMT) that will provide hospital practitioners with access to timely, context-specific medication safety information to facilitate medication incident analyses.

Methodology

- The KMT will be available as a website-based tool hosted by ISMP Canada. When a medication incident is entered into the KMT, it will generate a report containing context-specific information units as extracted from ISMP Canada Medication Safety Bulletins.
- The information output will include similar medication incidents, potential contributing factors and recommendations for consideration.
- A KMT prototype is developed by extracting information from ISMP Canada Medication Safety Bulletins and incorporating them into a sophisticated information matching algorithm. The prototype is then tested and refined to maximize the ability of providing relevant results.

Results

Using incidents from previously published ISMP Canada Medication Safety Bulletins, the KMT data output indicated an 84.4% sensitivity in retrieving relevant information. With respect to the overall concept and user-friendliness, a preliminary demonstration of the KMT prototype at an ISMP Canada workshop garnered positive feedback from workshop participants.

Conclusion

The KMT is the first of its kind, and will contribute to medication safety by providing hospital practitioners with tools and information to effectively learn from medication incidents.