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

ISMP Canada Safety Bulletin

Volume 21 • Issue 3 • March 30, 2021

# Never Events for Community Pharmacy

*"Never events" are patient safety incidents that result in serious patient harm or death, and that can be prevented by using organizational checks and balances.*[1] Identification of specific never events for the Canadian community pharmacy environment is intended to enhance patient safety by encouraging pharmacy teams to take action in specific areas where harmful errors are known to have occurred. Never events of greatest concern in this setting are listed in Table 1. Reporting and learning programs can help inform future revisions of this never event list.


ISMP Canada, with support from the Canadian Patient Safety Institute, has developed a new *Medication Safety Self-Assessment: Focus on Never Events in Community Pharmacy*. The content reflects learning from incident analyses and expectations from standards of practice and was informed by an analysis of recommendations from on-site assessments of community pharmacies described in the second part of this bulletin.

More information about this complimentary assessment is available from: https://mssa.ismp-canada.org/never-events-comm-pharm

**Table 1.** Never Events for Community Pharmacy

| Never Event<br>Death or serious patient harm as a result of: |
|---|
| • providing a medication to which a patient has a documented allergy |
| • preparing a compounded product for internal use with:<br>a) an incorrect medication or active pharmaceutical ingredient; or<br>b) an incorrect quantity of medication or active pharmaceutical ingredient |
| • dispensing methotrexate with instructions for daily administration when prescribed for a non-oncologic indication |
| • dispensing an incorrect formulation of an immunosuppressant prescribed to prevent organ transplant rejection |
| • dispensing a long-acting opioid without assessment for opioid tolerance |
| • failing to verify weight-based dosing of a high-alert medication for a child |

1. Never events for hospital care in Canada: safer care for patients. Ottawa (ON) and Toronto (ON): Canadian Patient Safety Institute and Health Quality Ontario; 2015 Sep [cited 2021 Feb 19]. Available from: https://www.patientsafetyinstitute.ca/en/toolsResources/NeverEvents/Documents/Never%20Events%20for%20Hospital%20Care%20in%20Canada.pdf

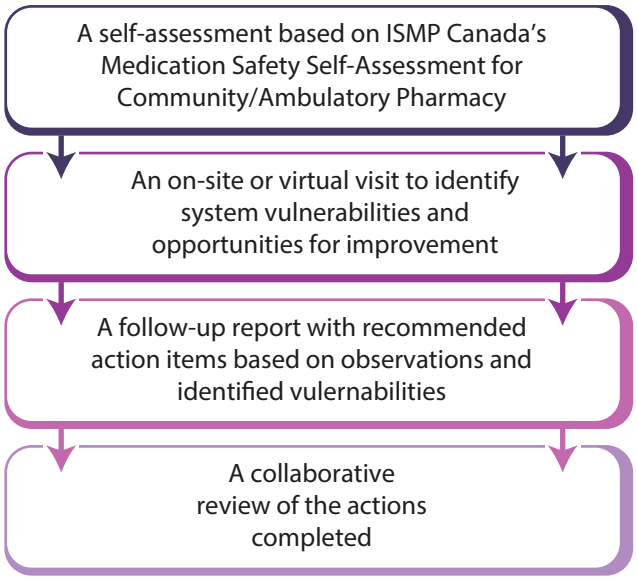
# Analysis of Findings from Safety Assessments of Community Pharmacies

Safe medication practices are a priority of community pharmacy teams across the country. A workplace that is committed to a culture of safety facilitates the identification of vulnerabilities in processes and practices. Learning from an analysis of findings from safety assessments of more than 2 dozen Canadian community pharmacies is shared with the goal of supporting continuous improvement in pharmacy workplaces to strengthen the medication-use system. This learning also informed the development of the *Medication Safety Self-Assessment (MSSA): Focus on Never Events in Community Pharmacy* described in the first part of this bulletin.

## METHODOLOGY

ISMP Canada offers medication safety assessments for community pharmacies, consisting of 4 components (Figure 1).

**Figure 1.** Components of ISMP Canada's medication safety assessments for community pharmacy




Between September 2014 and March 2020, ISMP Canada completed safety assessments for 29 pharmacies from one Canadian jurisdiction. An analysis of the findings from these safety assessments was conducted according to the methodology for multi-incident analyses described in the Canadian Incident Analysis Framework.[1] The action items in the assessment reports were qualitatively reviewed by 2 analysts to identify common areas of vulnerability and opportunities to improve medication safety.

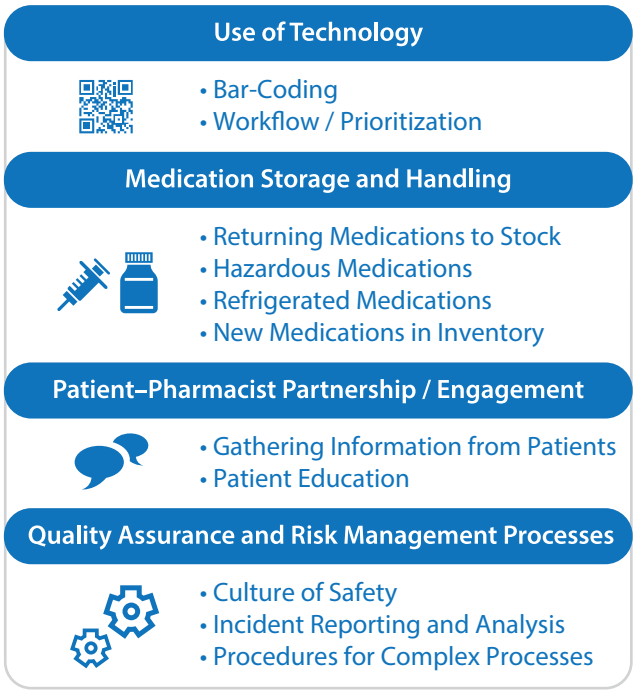
## QUANTITATIVE FINDINGS

Of the 29 pharmacies participating in the assessments, 15 were independent and 14 were part of a corporate group. These assessments generated a total of 1772 action items (average 61 per report, range 17–100); all action items were reviewed for the purpose of this analysis.

## QUALITATIVE ANALYSIS

Qualitative analysis of the action items identified 4 main themes and associated subthemes for improvement opportunities (Figure 2).

**Figure 2.** Improvement opportunities: Themes and subthemes identified in the qualitative analysis



### *Use of Technology*

There is opportunity to improve medication safety through the implementation and optimization of technology.

*Process Improvement Strategies*

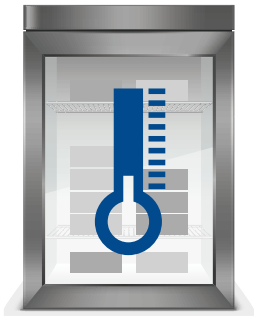
- Integrate bar-coding technology into all medication dispensing processes, including compounding and compliance packaging.
- Proactively identify and prevent known workarounds (e.g., scanning one item multiple times); educate staff about the risks of circumventing safeguards. The most effective strategies are forcing functions that make it impossible to perform specific erroneous acts.[2]
- Enhance the use of technology (e.g., a medication synchronization program to align refill dates for a patient's medications) to improve workflow and reduce interruptions.

### *Medication Storage and Handling*

Processes for returning medication to pharmacy stock when patients have not picked up prepared prescriptions was frequently identified as an area of vulnerability related to medication storage.

Another vulnerability relates to the management of hazardous medications (e.g., oral anti-cancer drugs) and other substances (e.g., cleaning supplies).[3] Segregated and secure storage will help prevent inadvertent access, will remind staff that precautions for handling such medications are needed, and will comply with the Canada Health and Safety Regulations.[4]

Some pharmacies exhibited deficiencies in complying with requirements related to medication storage of refrigerated items (e.g., addressing temperature excursions).



Often, pharmacies lacked a process to identify and communicate the potential for errors when new drug products with look-alike/sound-alike names or packaging, or other opportunities for error (e.g., complex dosing or instructions) were added to stock.

*Process Improvement Strategies*

- When unclaimed prescriptions are returned to inventory, do not pour the vial contents back into the manufacturer's stock bottle; and:
  - keep the unclaimed medications in the dispensed container but obscure any patient-specific information and add the expiry/beyond-use date and lot number on the pharmacy label;
  - remove patient-specific labels from bulk packages (e.g., topical products).[5]
- As an annual exercise, review the NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings to identify medications stocked by the pharmacy that may require special storage or handling. Assess the level of risk for your workplace and determine which safety precautions need to be followed.
- Review the Canadian guidelines on management of oral anti-cancer drugs in community pharmacies to identify and address gaps in medication-handling processes.[6,7]
- Use designated, labelled counting trays for oral anti-cancer drugs, and clean the trays with soap and water after each use. Do **not** use alcohol for cleaning because it can spread drug residue.[7]
- Establish a procedure for monitoring temperatures for medication storage refrigerators to comply with local public health department or regulatory body policies or guidance.[8,9]
- Share information with pharmacy team members about new products added to inventory and any associated risks.

### *Patient–Pharmacist Partnership / Engagement*

Many pharmacies lacked a standardized process to collect information at prescription drop-off, as well as a process to provide detailed counselling and education during pick up of new and refill prescriptions, especially for high-alert medications.

*Process Improvement Strategies*

- Consider standardizing prescription intake using a questionnaire or checklist to identify/confirm relevant clinical information.
- Provide printed information and/or recommend suitable electronic resources about the safe use of high-alert medications (e.g., opioids) when indicated.

### *Quality Assurance and Risk Management Processes*

Establishing a culture of safety, predicated on a "just culture"—a consistent, fair, and just process for assessing accountability and dealing with health care providers involved in adverse events[10]—is foundational to patient and medication safety. Such a culture is achieved by focusing on system gaps rather than individual shortcomings.

Medication safety in community pharmacies has strengthened over the years. Most provincial/territorial regulatory authorities have either developed a mandatory quality improvement program with self-assessment, incident reporting, learning, and sharing components or have integrated these components into their standards of practice.[11-14]

Many of the pharmacies included in this analysis did not have documented standard operating procedures (SOPs) for staff to consult when performing complex processes (e.g., preparing compliance packaging, compounding). Some corporate pharmacies had centrally determined SOPs that did not reflect local processes. SOPs assist in establishing practice expectations and are also the foundation for quality assurance and improvement processes.

*Process Improvement Strategies*

- Prioritize building and maintaining a safety culture. The ISMP Canada MedSCIM tool can act as a quality improvement resource by assessing the maturity of the safety culture in a workplace.[15]
- Provide targeted medication safety learning opportunities to staff. Resources are available from provincial/territorial regulatory authorities and patient or medication safety organizations.
- Formalize and regularly communicate SOPs for complex processes as a means to clearly articulate expectations and establish accountabilities for pharmacy staff.

## CONCLUSION

Pharmacy team members are encouraged to review the medication safety vulnerabilities described in this analysis to look for similar gaps in their own practice, and take the necessary steps to strengthen the medication-use system in their workplace.


## ACKNOWLEDGEMENTS

*ISMP Canada gratefully acknowledges expert review of this bulletin (in alphabetical order):* Ronda Eros B.Sc.(Pharm.), Practice Consultant, College of Pharmacists of Manitoba, Winnipeg, MB; Jeannette Sandiford BSP, Asst. Registrar – Field Operations and Quality Assurance, Regina, SK; Stephen Routledge MPH, Senior Project Manager, Alberta Health Services Cancer Strategic Clinical Network, Calgary, AB; Anastasia Shiamptanis PharmD MHSc, Strategic Policy Lead, Ontario College of Pharmacists, Toronto, ON

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