SMART Medication Safety Agenda

Multi-Medication Compliance Aid (Blister Pack) Preparation

SMART Medication Safety Agenda

The Community Pharmacy Incident Reporting (CPhIR) program is designed for you to report and analyze medication incidents that occurred in your pharmacy. You can learn about medication incidents that have occurred in other pharmacies through the use of the SMART Medication Safety Agenda.

The **SMART** (**S**pecific, **M**easurable, **A**ttainable, **R**elevant and **T**ime-based) Medication Safety Agenda consists of actual medication incidents that were anonymously reported to the CPhIR program. Potential contributing factors and recommendations are provided to you and your staff to initiate discussion and encourage collaboration in continuous quality improvement. By putting together an assessment or action plan, and monitoring its progress, the SMART Medication Safety Agenda may help reduce the risk of similar medication incidents from occurring at your pharmacy.

How to Use the SMART Medication Safety Agenda

1. Convene a meeting for your pharmacy team to discuss each medication incident presented (p. 2).
2. Review each medication incident to see if similar incidents have occurred or have the potential to occur at your pharmacy.
3. Discuss the potential contributing factors and recommendations provided.
4. Document your team's assessment or action plan to address similar medication incidents that may occur or may have occurred at your pharmacy (Table 2).
5. Evaluate the effectiveness and feasibility (Table 1) of your team's suggested solutions or action plan.
6. Monitor the progress of your team's assessment or action plan.
7. Enter the date of completion of your team's assessment or action plan (Table 2).

Table 1.
Effectiveness and Feasibility
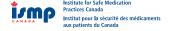
Effectiveness:

Suggested solution(s) or action plan should be system-based, i.e. shifting a focus from "*what we need to do …*" to "*what we can do to our environment to work around us.*"

1. **High Leverage – most effective**
   - Forcing function and constraints
   - Automation and computerization
2. **Medium Leverage – intermediate effectiveness**
   - Simplification and standardization
   - Reminders, checklists, and double checks
3. **Low leverage – least effective**
   - Rules and policies
   - Education and information

Feasibility:

Suggested solution(s) or action plan should be feasible or achievable within your pharmacy, both from the perspectives of human resources and physical environment.

1. Feasible immediately
2. Feasible in 6 to 12 months
3. Feasible only if other resources and support are available

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

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

COMPASS
Community Pharmacy Professionals Advancing **Safety** in Saskatchewan

Si Safety. Improvement. Quality.

Multi-Medication Compliance Aid (Blister Pack) Preparation

Incident Example: Order Entry

Upon hospital discharge, a patient was prescribed a new medication: amlodipine. The patient usually receives blister packs, but a vial of the new medication was given to bridge the patient until the next blister pack was due. When the new medication was entered into the computer, however, it was not flagged as a batch nor put in the panel for the next fill. Thus, when the pharmacy filled the next two weeks of blister packs, the system did not prompt for a doctor's authorization to refill amlodipine. The patient's son called the pharmacy because the vial of amlodipine had run out and the new blister packs did not contain amlodipine. The pharmacist also realized that the initial quantity of amlodipine in the vial was too low to bridge the patient to the next blister pack, as it had been one week short.

POTENTIAL CONTRIBUTING FACTORS:

- **Addition of a new medication in the middle of a blister pack cycle.** This increases the risk of errors because multiple modifications are needed in the patient's medication profile and multiple steps are needed to process the current prescription and subsequent batch fill.
- **Lack of verification with the most up-to-date prescription for each medication in the blister pack.** These practices increase the risk of blister packs being inappropriately processed.

RECOMMENDATIONS:

- Recognizing the complexity and vulnerability of blister packing, community pharmacists should verify each printed medication label with the most up-to-date prescription. This is especially important when there is a medication change, including a new prescription, a change in the dose or frequency, or discontinuation.
- Collaboration and communication with patients, caregivers, and other primary care practitioners can help community pharmacists minimize the risk of errors in the medication regimen prepared in each blister pack.[1]

Incident Example: Packaging Process

A patient received a blister pack that did not have the correct medications in each slot/blister. The doses of atorvastatin and rabeprazole were both doubled in the bedtime slot for Saturday and both missing in the bedtime slot for Sunday.

POTENTIAL CONTRIBUTING FACTORS:

Blister packs remain open during medication filling until final sealing. This can lead to the inadvertent placement of a medication in the wrong slot; this risk multiplies as the number of medications in the blister pack increases. Additionally, the open slots allow medications to jump between slots during the process of sealing the blister pack.

RECOMMENDATIONS:

- Pharmacy workflow, with respect to blister packing, should incorporate independent double checks whenever possible. This practice is particularly important for look-alike medications with similar shapes, sizes, and/or colours.[2,3]
- The clinical check by the pharmacist during medication filling of the blister pack should be followed by a technical check after the blister pack is sealed to ensure that the medications remained in the correct slots.

Table 2.
Assessment / Action Plan

Effectiveness:

- ☐ Forcing function and constraints
- ☐ Automation and computerization
- ☐ Simplification and standardization
- ☐ Reminders, checklists and double checks
- ☐ Rules and policies
- ☐ Education and information

Feasibility:

- ☐ Feasible immediately
- ☐ Feasible in 6 to 12 months
- ☐ Feasible only if other resources and support are available

Progress Notes

Date of Completion:

[1] Institute for Safe Medication Practices. Double-checking bingo cards. ISMP Medication Safety Alert! Community/ambulatory Care Edition 2013; 12(10): 2-3.

[2] ISMP Canada. Lowering the risk of medication errors: Independent double checks. ISMP Canada Safety Bulletin 2005; 5(1): 1-2. Available from: http://www.ismp-canada.org/download/safetyBulletins/ISMPCSB2005-01.pdf

[3] WHO Collaborating Centre for Patient Safety Solutions. Look-alike, sound-alike medication names. Patient Safety Solutions; 1(1): 1-4. Available from: http://www.who.int/patientsafety/solutions/patientsafety/PS-Solution1.pdf