SMART Medication Safety Agenda

Drug Tapering and Titration

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

COMPASS Community Pharmacy Professionals Advancing Safety in Saskatchewan

Si Safety. Improvement. Quality.

Drug Tapering and Titration

Unclear Dosing Instructions

A patient's computer-generated prescription for prednisone stated, "Take 6 tabs by mouth for 5 days." This direction was followed by, "Will wean after 7 days". The prescription lacked additional instruction and the total quantity to dispense. The patient was also unsure of how to take the medication.

POTENTIAL CONTRIBUTING FACTOR: Lack of clear written communication (prescription) and verbal communication (patient discussion) between prescribers, pharmacists, and patients.

RECOMMENDATIONS:

- Standardized prescriptions for medication tapers should be considered to encourage complete and accurate communication of information between the physician, pharmacist, and patient.[1]
- The patient's tapering schedule should be documented in an easy-to-use format (i.e., a personalized calendar) to clarify extensive directions for use.[2]

Labelling Restrictions

The directions for a medication taper were shortened to fit within the space provided in the pharmacy computer system. This reduction led to the omission of important parts of the instruction, thereby conveying incorrect information. The prescription label was corrected before it was given to the patient.

POTENTIAL CONTRIBUTING FACTOR: Pharmacy staff were unaware of the tools available when the directions for use extend beyond the designated field in the pharmacy computer system.

RECOMMENDATION: All staff members must be educated on how to use the "extended labelling" function in the pharmacy computer system. The complete instructions can then be entered, printed on an extra label, and affixed to the prescription vial.[3]

Calculation Error

A prescription for lamotrigine involved a gradual dose titration before reaching a stable maintenance dose. The total quantity to be dispensed was calculated incorrectly – 448 tablets were dispensed, but only 280 tablets were needed.

POTENTIAL CONTRIBUTING FACTOR: Calculation of the total quantity to dispense is complicated by the need to incorporate constantly changing daily doses, as well as the availability of certain strengths of the medication.

RECOMMENDATION: Independent double checks should be performed for each prescription during the medication-use process.[4] Calculations should be documented, independently double checked, and included in the prescription record.[5]

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:

REFERENCES:
[1]CSHP. How to promote best practice and safety through the use of order sets. *CSHP 2015 Toolkit*. 2011;1-8.
[2]Michael G. DeGroote National Pain Centre. Benzodiazepine Tapering Protocol. *Canadian guideline for safe and effective use of opioids for chronic non-cancer pain*. 2010;5(6):20, 38.
[3]Davis TC, Federman AD, et al. Improving Patient Understanding of Prescription Drug Label Instructions. *J Gen Intern Med*. 2009;24(1):57-62.
[4]ISMP Canada. Lowering the risk of medication errors: independent double checks. *ISMP Canada Safety Bulletin*. 2005;5(1):1-2.
[5]ISMP Canada. Hydromorphone intended for an adult patient inadvertently administered to an infant. *ISMP Canada Safety Bulletin*. 2008;8(6):1-3.