Table 1.

SMART Medication Safety Agenda

Immunosuppressive Agents

SMART Medication Safety Agenda

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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** (Specific, Measurable, Attainable, Relevant and Time-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).
- 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).

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











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May 2023

SMART Medication Safety Agenda

Immunosuppressive Agents

Incorrect Drug

INCIDENT EXAMPLE: A prescription for Advagraf (tacrolimus, extended release) was erroneously dispensed as Prograf (tacrolimus, immediate release). **POTENTIAL CONTRIBUTING FACTORS:**

- Lack of awareness of different formulations of immunosuppressive agents
- Confirmation bias due to look-alike/sound-alike drug names **RECOMMENDATIONS:**
- Work with vendors to give prominence to key information in pharmacy software¹ (e.g., Advagraf [tacrolimus, **extended release**]).
- Add auxiliary labelling to containers of look-alike/sound-alike drugs² to aid distinction.

Dose Too Low

INCIDENT EXAMPLE: Post-heart transplant, a patient received a prescription for mycophenolate 1000 mg twice daily. The prescription was filled as 500 mg tablets with instructions to take two tablets daily.

POTENTIAL CONTRIBUTING FACTORS:

- Over-reliance on mental calculations without an independent double check
- Lack of knowledge regarding dosing frequency for immunosuppressive agents

RECOMMENDATIONS:

- Incorporate an independent double check into the dispensing process to confirm calculations for the dose and quantity to dispense.¹
- Develop educational materials (e.g., comparison tables) to inform staff about medication formulations and dosing regimens, and to provide a quick reference in the pharmacy.¹

Drug Toxicity

INCIDENT EXAMPLE: A patient was prescribed clarithromycin posttransplant and complained of intolerable side effects. The pharmacist then realized that the patient was also taking sirolimus (whose levels are increased with concomitant clarithromycin), which was filled at the hospital (i.e., not in the pharmacy system).

POTENTIAL CONTRIBUTING FACTORS:

- Incomplete list of current medications due to atypical access to immunosuppressive agents
- Lack of clinical assessment for therapeutic safety, including a drug interaction check

RECOMMENDATIONS:

- Conduct a medication review with the patient to confirm current medication use³ prior to dispensing medications.
- Require a clinical assessment by the pharmacist for every new medication received, including consideration of potential drug interactions.

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. ISMP Canada Safety Bulletin. 2023;23(4):1-7.
- 2. ISMP Canada Safety Bulletin. 2023;23(2):1-6.
- 3. ISMP Canada Safety Bulletin. 2022;22(10):1-4.