

SMART Medication Safety Agenda

Fentanyl [28:08:08 Analgesics Opiate Agonists]

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** (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).
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

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Incident Examples:

INCIDENT 1: Opioid-Dose Conversion and Considerations

The patient's guardian arrived at the pharmacy to pick-up fentanyl patch expecting a dose increase from 75 mcg to 100 mcg. This dose increase was confirmed by the pharmacy student and dispensed. However, the patient had been using 75 mcg along with ~36 mg morphine equivalents per day for breakthrough. This level of breakthrough use usually only warrants increase in dose by 12 mcg. The doctor should have written for 12 mcg instead of 25 mcg increase. The prescription was processed and prepared without a therapeutic check. As a result, it was released to the patient without having addressed the above issues first. One 100 mcg patch was applied to the patient before this error was discovered. POTENTIAL CONTRIBUTING FACTORS: (A) Incorrect calculation of "morphine equivalents" total daily dose. (B) Lack of standardized prescribing fentanyl guidelines to include an equianalgesic conversion table as reference for prescribers.¹

INCIDENT 2: Dosage Availability Per Patch

Directions for the fentanyl patch was entered as apply 25 mcg along with 100 mcg, but it should have been 25 mcg along with a 50 mcg and 100 mcg. POTENTIAL CONTRIBUTING FACTORS: Requiring multiple patches from the same and/or various strengths to be dispensed at once to meet the total daily dose prescribed.

Recommendations:

Prescribing: Implement standardized fentanyl prescribing guidelines.^{1,2,3} (A) Specify the quantity, strength, dosing interval, and day supply. (B) Include an equianalgesic conversion table.

Medication Dispensing: (A) Conduct independent double check on the total number of patches to be dispensed. (B) Ensure all strengths of fentanyl patches dispensed add up to the total prescribed dose for the patient.

Monitor / Follow-up: Initiate a fentanyl patch-for-patch partnership between the physician, pharmacist, and patient to develop a transparent monitoring plan.²

Provide naloxone kits to patients and/or family/friends of patients with the following risk factors:⁴ (A) Concomitant use of benzodiazepine and/or other sedatives, (B) Alcohol use, (C) High-dose opioid therapy.

¹ Grissinger M. Inappropriate prescribing of fentanyl patches is still causing alarming safety problems. *PT* 2010; 35(12): 653-654. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3008378/>

² Canadian Centre on Substance Abuse. Deaths involving fentanyl in Canada, 2009-2014. *CCENDU Bulletin* 2015; Aug: 1-10. Available from: <http://www.ccsa.ca/Resource%20Library/CCSA-CCENDU-Fentanyl-Deaths-Canada-Bulletin-2015-en.pdf>

³ Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain. Canada: National Opioid Use Guideline Group (NOUGG); 2010. Available from: <http://nationalpaincentre.mcmaster.ca/opioid/>

⁴ Lavonas EJ, Drennan IR, Gabrielli A, et al. Part 10: Special Circumstances of Resuscitation: 2015 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation* 2015; 132: S501-S518. Available from: http://circ.ahajournals.org/content/132/18_suppl_2/S501

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:
