

Long Term Care Initiatives in Ontario

Kris Wichman
Project Leader LTC
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Support

- Ministry of Health and Long Term Care of Ontario provided funding for ISMP Canada projects
- Fall 2004, scope expanded from acute care into Long Term Care

Mandate

In collaboration with long-term care facility associations, ISMP Canada will work to raise awareness of medication safety issues within LTC facilities and to identify and prioritize opportunities for medication safety interventions.

CCHSA Patient Safety Goals and Required Organization Practices

NEW

High priority areas:

1. Patient Safety Culture
2. Communication
3. Medication Use
4. Worklife/Workforce
5. Infection Control



Drug reactions harm, even kill, elderly: Study

MOIRAWELSH
STAFF REPORTER

Fragile, elderly residents of nursing homes are being seriously harmed and sometimes killed by drug reactions that are mostly preventable, says a new study.

Bad reactions to medication in nursing homes are far more common than previously documented, according to the study — which examined records at Toronto's renowned Baycrest Centre for Geriatric Care and a Connecticut nursing home.

"This is huge," said geriatrician Dr. Paula Rochon, a co-author of the study, published yesterday in the *American Journal of Medicine*, and senior scientist at Baycrest. "The results of this study should take a big lead in saying that adverse drug events are an issue that we need to look at much more carefully," said Rochon. "It's a very big issue across the industry."

The solution is two-fold, the study concludes:

- ★ Nursing homes must make greater use of computer data to tell doctors and nurses what medications work or don't work for each patient.
- ★ As well, nursing home administrators must give families more information about their relatives' care so they can watch for symptoms.



A study that examined medication records of nursing homes in Toronto and Connecticut has found that preventable drug reactions are seriously harming many patients.

Long Term Care Advisory Committee

- Nancy Cooper OLTC
- Linda Dohoo Homes for the Aged Kipling Acres
- Dr. James Edney Castlview, Toronto Rehab CCC
- Scott Hebert Baycrest Centre for Geriatric Care
- Sharon King Almic Services Inc.
- James Lam Providence Healthcare
- Marsha Nicholson Toronto Homes for the Aged
- Marilyn Okopyny West Park Hospital
- Janice Takata-Shewchuk Bridgepoint Hospital
- Norine Graham-Robinson Medical Pharmacies Inc.
- Jena Winterburn Lanark Heights Long Term Care Centre
- Marg Colquhoun ISMP Canada
- Kris Wichman ISMP Canada
- David U ISMP Canada

Objectives 2004/5

- To identify medication safety issues
- To coordinate educational workshops/sessions on medication safety
- To distribute ISMP medication safety newsletters and alert bulletins
- To plan the development of a Medication Safety Self-Assessment for long-term care facilities (long term)
- To promote reporting of medication errors

Deliverables

To coordinate educational on medication safety

1. Co-ordination of educational workshops on medication safety

- Welcome to June 28th Workshop
- Due to overwhelming requests, this is a repeat of the April workshop
- Region 5 Administrators Group
- OLTCA Spring Retreat

Deliverables

To identify medication safety issues

2. Identification of medication safety issues and action targeted to one or two selected issues

Focus groups identified targets for interventions:

- Medication Reconciliation
- Narcotic patches
- Medical abbreviations
- Crushing of medications

Deliverables

To identify medication safety issues

2. Identification of medication safety issues and action targeted to one or two selected issues

High alert drugs:

- Narcotics
- Warfarin
- Insulin
- Psychotropics

Deliverables

To identify medication safety issues

2. Identification of medication safety issues and action targeted to one or two selected issues
 - Initiated creation of safe medication practice checklist
 - Includes drugs to avoid in geriatrics

Deliverables

To distribute ISMP medication safety newsletters and alert bulletins

3. Distribution of the ISMP medication safety newsletters and alert bulletins

- Distribution initiated with assistance of Ontario Long Term Care Association and members of Advisory Committee
- Long term care bulletin?
- Contact Kris Wichman or info@ismp-canada.org

Medication Safety Bulletin - Alert!

ISMP Canada
Safety Bulletin
(monthly)

ISMP Canada is an independent Canadian non-profit agency established for the collection and analysis of medication error reports and the development of recommendations for the enhancement of patient safety.



The Healthcare Insurance Reciprocity of Canada (HIROC) is a member-oriented expert provider of professional and general liability coverage and risk management support.

Volume 3, Issue 5 **ISMP Canada Safety Bulletin** May, 2003

Human Factors and Substitution Errors

Approximately 45-50% of medication errors reported to the USP-ISMP Medication Error Reporting Program (MERP) are related to problems with product labeling, packaging and nomenclature.¹ Although many of these problems involve original manufacturer products, they can originate from hospital in-house manufacturing and packaging. ISMP Canada has received two error reports involving in-house packaging practices that contributed to substitution errors and resulted in patient harm. The reporting hospitals indicated a desire to obtain information about their respective errors with others for learning purposes.

In the first case a patient diagnosed with methanol overdose was transferred from another facility and prescribed "continue IV ethanol drip at 100 mL/h" and "ethanol to dilute as per protocol." The Pharmacy initially supplied prepackaged 100% ethanol for addition to the dialysate and, after clarification with the physician, prepared an intravenous infusion solution of 10% ethanol. Both items were prepared in similar sterile bottles as shown in Figure 1. Although the bottles were correctly labeled, the 10% ethanol intended for addition to dialysate was inadvertently administered intravenously. The patient initially developed renal impairment as a result of the error. The patient also required dialysis to repair metabolic acids, resulting from ingestion of 100% ethanol. Fortunately, the patient made a full recovery.

The hospital identified the following possible contributing factors to the error:

- Written order - the order for IV ethanol infusion did not specify the drug concentration.
- Accessibility of information - the hospital manual describing parenteral administration policies listed ethanol information under "alcohol." The nurse attempted to search for information under "ethanol" and was unable to find the information.
- Labels - the 100% ethanol was supplied in a clear plastic bottle with stopper. This bottle can be confused with another bottle which is compatible with intravenous use.
- Warnings - the 100% ethanol product was multi-generated warning: "For Intravenous Use Only." The warning was not prominent.

The following in-depth review of the event, the changes were recommended and instituted:

- Development of a pre-printed treatment order set for the management of methanol overdose.
- The manual describing intravenous medication policies has been modified to include a cross-reference for ethanol and alcohol.
- 100% ethanol prepared for addition to dialysate is now prepared in amber glass bottles with screw caps that are incompatible with IV sets, to prevent inadvertent IV infusion. See Figure 2.
- The amber bottle containing 100% ethanol are labeled with bright orange auxiliary warning labels, stating "Not for Injection".



Figure 1. Similar packaging and labeling of an IV solution and a solution intended for addition to dialysate.



Figure 2. Changes implemented to better differentiate an IV solution from a solution intended for addition to dialysate.

Medication
Safety
Alert!
(biweekly)

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Volume 3, Issue 5 **ISMP Medication Safety Alert!** May, 2003

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Safety Alerts

Zetia and Zetona mix-ups. In March, we alerted you to look-alike containers between ZETIA (ezetimibe), a new medicine used to treat hypercholesterolemia, and ZESTRIL (lisinopril), an angiotensin-converting enzyme inhibitor. Now we've also heard about a mix-up between Zetia and ZEBETA (ezetimibe/benazepril), a beta-blocker. Zetia 10 mg was ordered but Zetia 10 mg was dispensed and given to the patient. Zetia was not yet on the hospital formulary, so the pharmacist was unfamiliar with the medication. Consequently, in a physician's handwritten order appeared to be the more familiar drug, Zetona. Fortunately, the error was quickly discovered. The patient experienced hypotension, but no permanent harm. Several letters, 2.5-14, and a 10 mg tablet strength are shared between these drugs, and the dosing frequency is once daily for both. When combined with poor handwriting, these similarities can lead to a mix-up.

Unintended discontinuation of drugs. Hospital pharmacists should have a safety system to ensure that antibiotic doses exceed past their intended stop date aren't inadvertently discontinued. A pharmacist administered one of the vials of such a system. Its pharmacy computer provides a daily report of all antibiotics about to be discontinued. A pharmacist then reviews each patient's chart to ensure that discontinuation is appropriate. This effort paid off last week. An order for 100 mg was due to expire that day, but a pharmacist noticed that the physician had written "not continue antibiotics" in the progress notes. He had just forgotten to review the order. Investigating further, the pharmacist read an infectious disease consultant's report and learned that the patient had endocarditis and needed 4 weeks of antibiotic therapy. If not for this "safety net," it's likely that the drug would have been stopped without a trace, and the outcome might have been different.

Mind your "Medrols"

PROBLEM: Numerous cases of confusion between methylprednisolone acetate (DEPO-MEDROL) and methylprednisolone sodium succinate (SOLU-MEDROL) have been reported over the years. While both forms of the product are used to treat inflammation, dosing may differ, and the acetate form should never be administered intravenously (IV). Most recently we heard about a 3-year-old child in the emergency department (ED) who was prescribed Solu-Medrol 40 mg IV. The nurse accidentally selected methylprednisolone acetate 40 mg, which was the first form and strength of the generic methylprednisolone that appeared on the automated dispensing cabinet screen. Shortly thereafter, the pharmacist who entered the order for Solu-Medrol into the computer noticed that Depo-Medrol had been removed from the cabinet, and he called the unit to alert the nurse to the error. Fortunately, the nurse had already noticed that she had selected the wrong product and the child received the correct form of the drug.

ISMP Canada recently published an error in which another 3-year-old child did receive the acetate form of the drug IV. In this case, a daily outpatient infusion of Solu-Medrol 140 mg IV had been prescribed for the child, who had recently received an organ transplant at a large teaching hospital. The first dose was administered in the ED of a small community hospital on a Saturday when the pharmacy was closed. A nursing supervisor brought a box containing four vials of Depo-Medrol, each 40 mg, to the ED. The child's nurse noticed the box of Depo-Medrol and assumed that the medication had been supplied by the hospital where the transplant was performed. Unfamiliar with Solu-Medrol, the nurse checked a drug reference text and found that both Solu-Medrol and Depo-Medrol listed methylprednisolone as part of their generic names. She erroneously assumed that both medications were brand names for equivalent products and administered Depo-Medrol 140 mg IV to the child over 1 hour. The Pharmacia (now Pfizer) warning on the Solu-Medrol IV vial is very small print and is poorly visible (see the photo), so that the nurse never noticed the warning. The error was not detected until the following day, when the child's mother commented that the medication administered that day was clear while the medication given the day before had been cloudy. Fortunately, the patient did not experience an adverse effect. However, the manufacturer has received reports of adverse reactions, some severe, due to IV administration of Depo-Medrol. The United States Pharmacopoeia also advised us that 48 reports of mix-ups between Solu-Medrol and Depo-Medrol have been received through their MEDMARX program in the past 5 years, mostly related to look-alike brand and generic names.

SAFE PRACTICE RECOMMENDATION: To reduce the risk of confusion between Solu-Medrol and Depo-Medrol, consider the following:

- Increase awareness.** Alert practitioners to the differences between Solu-Medrol and Depo-Medrol. Some may not be aware that the word "depo" or "depot" in association with a drug indicates slow release or slow absorption, with longer duration of action. Thus, these products are not intended for IV administration.

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Now on ISMP
Canada's website

Deliverables

To plan the development of a Medication

Safety Self-Assessment for long-term care facilities (long term)

4. Plan the development of a Medication Safety Self-Assessment for long-term care facilities

- Development underway – draft completed for complex continuing care and now being circulated for review and testing
- Will use as start of one for nursing homes

Medication Safety Self Assessment Tool



HOSPITAL
MEDICATION
SAFETY
SELF-ASSESSMENT™



- Acute care
- Community pharmacy
- Available free in Ontario on request
- Developing one for complex continuing care



Deliverables

To promote reporting of medication errors

5. Reporting of medication errors

- All are encouraged to report errors to ISMP Canada
- Web site
ismp-canada.org
or phone 416-480-5899
- Confidential, see privacy policy

Software Available

A **ANALYZE-ERR**®

VERSION 1.3 2.7.0.1



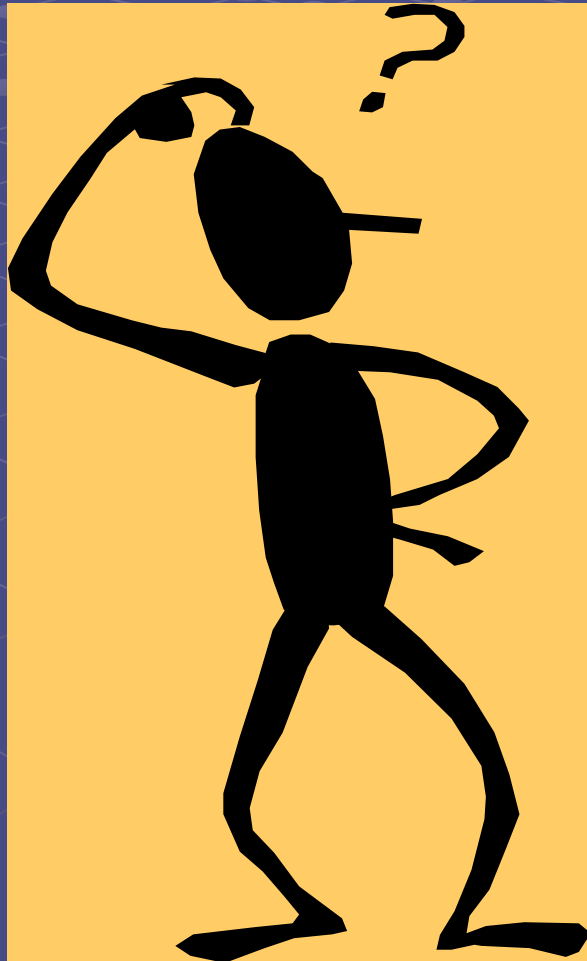
The permission to use the Taxonomy of Medication Errors copyrighted by the National Coordinating Council for Medication Error Reporting and Prevention in this program is gratefully acknowledged.

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How you can help

- Send in to ISMP Canada error reports
- Read safety bulletins
- Help influence a culture of safety - investigate errors with system awareness i.e. what contributed to the error? What could prevent the error?
- Interested in participating in developing a MSSA tool for nursing homes or an intervention project – let me know kwichman@ismp-canada.org

Still learning what is happening
and how to make it better!



www.ismp-canada.org