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

[directions]

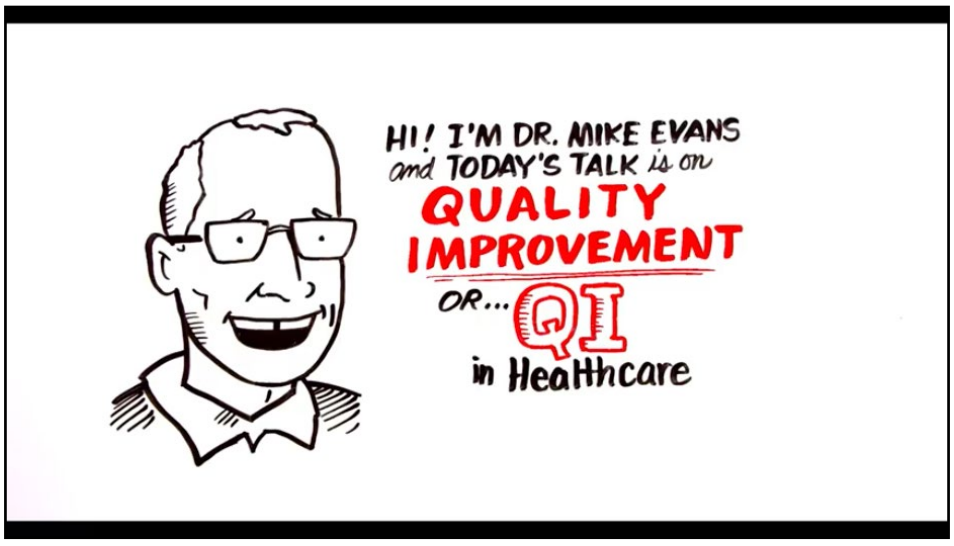
COMPASS Program Newsletter Volume Five / Issue One January 2020

Why Should You or I Care about Quality Improvement?

The answer to this question can be found in a fun-to-watch 11-minute YouTube video created by Dr. Mike Evans called, "Quality Improvement in Healthcare."

The link to the video is: **https://youtu.be/jq52ZjMzqyI**.

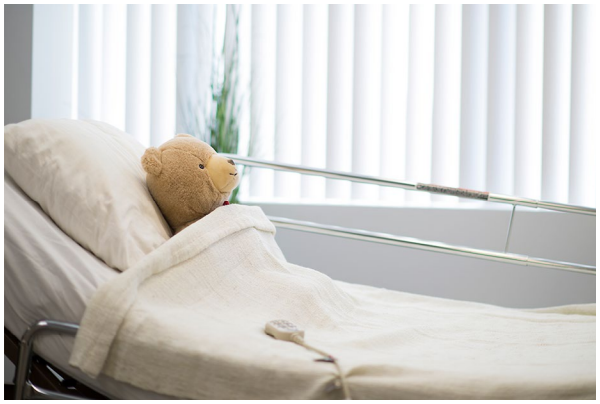
Known for developing innovative health messaging for the world, you can learn more about Dr. Evans **here**.



Shared Learning Opportunity

Incident Regarding Clavulin™ Suspension

A four-year-old male (17.2kg) was admitted to the hospital with community-acquired pneumonia. He received IV antibiotics for 48 hours and was discharged home two days later with a prescription for *Clavulin™ 250mg amoxicillin component PO TID for 7 days; 7:1 ratio product* ("TID" means three times a day). The standard dosing for this product is ~45-50mg/kg/day versus high dose, which is 80-100mg/kg/day, was intended.



The child was readmitted to hospital six days later with worsening pneumonia and left lower lobe effusion. Seven days of IV antibiotics in hospital was required, followed by another seven days of oral antibiotics at home. The child required the insertion of a chest tube to drain the effusion.

Upon readmission, the patient's Pharmaceutical Information Program (PIP) record was reviewed and the pharmacy that dispensed the prescription was contacted. The pharmacy technician at the dispensing community pharmacy indicated that the discharge prescription was filled as: *Amoxicillin-Clavulanate 400mg/5 mL – Give 3 mL twice daily for 7 days.* (i.e. 240mg amox/dose; ~28 mg/kg/day amoxicillin component).

When the dispensing pharmacist was contacted, they questioned the TID interval as medSask information on Clavulin™ says the 7:1 ratio is usually dosed BID (twice a day). Note: TID dosing can be given for more serious infections such as pneumonia. The pharmacist then instructed the family to administer the Clavulin™ BID and filled/labelled the prescription with the BID dosing and provided these directions to the family.

During a review of the incident, the dispensing pharmacist was asked if she called the physician to discuss the interval and to get a new prescription, but the pharmacist had not. The pharmacist also indicated that the prescription was written by a resident and assumed the resident was confused regarding the dosing. No further investigation was done by the pharmacist, the prescription was filled, and the family was instructed to provide the medication using the BID dosing. The change to the interval of the prescription resulted in a subtherapeutic dose of 28mg/kg/day amoxicillin component, and a readmission to hospital due to worsening pneumonia.

There are a few learning opportunities that can be gleaned from this incident, which include;

- There are two different dosing schedules that can be used for Clavulin™, which are either "standard" dosing (45-50mg/kg/day) or "high" dosing (80-100mg/kg/day) depending on the clinical picture and prescriber preference. The online medSask document states that dosing "for severe infections and infections of the respiratory tract is 40-50mg/kg/day in 2 to 3 doses for children less than or equal to 38 kg."
- When determining the dose of the Clavulin™, it is important to look at the total daily amoxicillin component per kg dosing, not just the interval.
- It is important to not assume the intentions of another prescriber. If the intent of the prescriber is not clear, then it is important to review any concerns including the dose and interval with that practitioner.

One of the goals of COMPASS is to promote shared learning between Saskatchewan pharmacies regarding incidents, unsafe practices and other important issues to improve pharmacy care in Saskatchewan. Members can help achieve that goal by reporting interesting incidents/errors that occurred within the pharmacy.

If a member has had an incident that may be a good learning opportunity for other Saskatchewan pharmacy professionals, please forward it to "SCPP Medication Safety" at **info@saskpharm.ca**. Any information regarding the pharmacy and the person who provided the details of the incident/error will be kept anonymous.

The College encourages members to continue to send in incidents and errors so that together, we can all learn from them.

Statistics

Statistical reports are provided to bring awareness of the importance of identifying, reporting and discussing medication incidents. A total of **15,417** incidents have been reported to the Community Pharmacy Incident Reporting (CPhIR) database between December 1, 2017 and December 31, 2019. All statistics below are for the time period of December 1, 2017 to December 31, 2019.

Incident Types

The top three types of incidents were:

- incorrect dose/frequency – **3,517**
- incorrect quantity – **2,731**
- incorrect drug – **2,644**

Outcomes

The majority or **8,594** of incidents reported had an outcome of NO ERROR, which means the incidents were intercepted BEFORE they reached the patient.

There were **6,355** NO HARM incidents, which means the incidents reached the patient, but did not cause harm.

468 reported incidents did result in HARM, with most of these in the category of MILD HARM.

As well, **404** pharmacies have either completed or started their Medication Safety Self-Assessment (MSSA) online data entries and **378** Continuous Quality Improvement (CQI) meetings have been held.

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The SMART Medication Safety Agenda

The SMART (Specific, Measurable, Attainable, Relevant and Time-based) Medication Safety Agenda was introduced by the Institute of Safety Medication Practices Canada (ISMP Canada) to increased shared learning amongst pharmacies. Each issue deals with a specific drug or process within a community pharmacy and the incidents that have occurred with that drug or process.

Community Pharmacy Incident Reporting (CPhIR)

November 2019

SMART Medication Safety Agenda

Prescribing

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

The Agenda consists of actual medication incidents that have been anonymously reported into the Community Pharmacy Incident Reporting (CPhIR) program. Potential contributing factors and recommendations are provided for users to initiate discussion and encourage collaboration towards continuous quality improvement in the pharmacy. By putting together an assessment or action plan and monitoring its progress, the SMART Medication Safety Agenda can help raise awareness regarding similar medication incidents in the pharmacy.

The topic of the latest edition is **Prescribing**. All previous editions of the SMART Medication Safety Agenda can be found under the COMPASS link on the SCPP website under **COMPASS Newsletters**.

SMART Pharmacist Podcast

ISMP Canada has developed the second season of the **SMART Pharmacist Podcast** and it is currently available on **SoundCloud** and **iTunes**. The first episode in the second season is on **Errors Reported by Community Pharmacies in Nova Scotia**.

Podcast links:

- **SoundCloud link to podcast**
- **iTunes link to podcast**

The SMART podcasts are hosted by Jim Kong RPh, BSc, PharmD, who is a Program Development Manager at ISMP Canada with experience in both community pharmacy and long-term care. Jim has been engaged with pharmacy safety culture initiatives across Canada. He graduated with a PharmD degree from the University of Waterloo and is passionate about the value pharmacists bring to patient safety and patient care.

CPhIR Newsletters

One of the services the Institute of Safe Medication Practices (ISMP) Canada website provides are bulletins that highlight safety issues relating to community or hospital pharmacy practice. The bulletins are a valuable tool in identifying different safety issues to help prevent them from happening in other pharmacy practices.

One ISMP Canada safety bulletin is the Community Pharmacy Incident Reporting (CPhIR) newsletter. The topic of the most recent edition of the CPhIR newsletter is **Disclosure of Medication Incidents – A Suggested Framework**. The article discusses the importance of disclosing the details of incidents to patient, how this can be done and provides a framework on when disclosure is appropriate or necessary. Gain access to the newsletter by logging into the CPhIR program and clicking on the "CPhIR Newsletter" link on the home page.

Pharmacy staff members are encouraged to review this newsletter, as well as the other newsletters available through the CPhIR site.

Contact Information

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