NH Medication Safety & Quality Newsletter

Issue 7 - Spring 2019

In This Issue

Update on Your Pharmacy Team: Your Trusted Medication Experts

Clinical Pharmacists have been working hard seeing patients on the ward and in primary care homes to optimize their medication. Over the past 9 months we have engaged with patients and the inter-professional team to:

- **Solve over 6,700 drug therapy problems.** Some highlights were to:
  - Stop over 1,000 medications that were no longer needed
  - Adjust over 1,800 medications to make them safer
  - Adjust over 1,500 medications to improve efficacy

The medications most often adjusted were:

- Antibiotics - Antimicrobial resistance is a growing problem worldwide and we are helping reduce it with Antimicrobial Stewardship (AMS)
- Medications with a narrow therapeutic index and/or the potential for serious adverse effects, such as anticoagulants and narcotics

Helping with medication reconciliation, we completed over 2,100 medication reconciliations (admission and discharge). Maintaining and utilizing accurate and up to date medication lists can prevent adverse effects to the patient from drug interactions, allergies, or duplicate therapy.

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10-110-6084 (IND Rev. 05/19)

To help even more patients we added 7 more pharmacists to our team!

- **Jennifer Day,** UHNBC Emergency Pharmacist and UHNBC Medication Reconciliation Lead Pharmacist - started April 1, 2019
- **Sydney Saunders**, Primary/Acute Care Pharmacist for Dawson Creek - started May 7 2019
- **Jessica Manning**, UHNBC Pharmacist - starting June 10, 2019
- **Kyle Costa,** UHNBC Pharmacist - starting July 15, 2019
- **Michelle Durand,** UHNBC Pharmacist - starting July 22 2019
- **Jessie McIntosh,** Pharmacist St. John's Hospital providing coverage for Vanderhoof, Fort. St. James, Lakes District and Burns lake (Omineca area sites) - starting June 10, 2019
- **Laura Mussfeld,** Pharmacist BVDH (regional coverage x18 months maternity relief) - started May 28, 20 , 2019

Primary care pharmacists (like all our clinical pharmacists) will provide direct patient care at the bedside, in primary care offices, or patients' homes. They will be working with others on the inter-professional teams and patients to optimize medication therapy and improve medication safety.

Northern Health Asked and Answered

If you don't know who to ask – how do you get questions answered of a **non-urgent nature**?

We all have mentors and colleagues we rely on in our day to day work but what if it is something new? What if your team or contacts do not know the answer? While this may not happen often, it does happen at times.

The Risk Management team, the Medication Safety Officer, and the Professional Practice team collaborated to create a resource for questions for **non-urgent** queries and feedback to the NH Asked and Answered e-mail box.

The full response can be read below or on the NH Asked and Answered article posted on the OurNH newsfeed.

As a Northern Health care provider, can I accept prescriber orders by text?

Medication orders can't be provided by text message for the following reasons:

- Orders are highly confidential information. Highly confidential information can only be shared by text when both the sender and receiver have installed the NH secure texting application (see the Email and Text Messaging Policy for more information)
- NH doesn't have clarity about how a record of the text message would be captured in the patient health record (see the Legal Health Record: Hybrid to Electronic policy for more information)
- Unintended auto-corrections when texting represent a unique aspect of cell phone technology which could increase the risk of error

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- Because cell phones have a small screen and there are potential challenges typing on phone keypads, orders could easily lack the essential information needed to support patient safety. Medication orders need to include all the necessary elements including:
    - Patient name and medical record number
    - Drug name
    - Dose
    - Frequency of dosing
    - Date
    - Time
    - Physician signature and College ID
    - Route
    - PRN reason
    - Allergy status

See the Safe Medication Order Writing policy for more information.

- The Institute for Safe Medication Practices recommends that texting of medication-specific orders not be allowed until current safety and technology issues have been resolved (ISMP Survey Raises Concerns about Safety of Text Messaging Medical Orders)

What you can do is:

- Phone any prescriber who attempts to send an order by text so you can obtain a telephone order
- Review your professional college standards

This answer was developed in collaboration between Northern Health Professional Practice, Risk Management, Regional Medication Safety Officer, and the Policy Office. Read the full Email and Text Messaging policy on OurNH.

Share your thoughts and feedback with us at NHAskedAndAnswered@northernhealth.ca

Change to Policy Non-Formulary and Excluded Medications

The Non-Formulary and Excluded Medications policy can be found on the Our NH website.

Summary of Changes:

- Non-formulary and excluded medications cannot be routinely stocked – sites must obtain approval from MUM, Pharmacy Manager or Regional Director of Pharmacy to stock these regularly
- Non-formulary medications can be approved by clinical pharmacists (and others as listed in policy)
- Excluded medications cannot be approved by clinical pharmacists (must be approved by MUM, Pharmacy Manager, or Regional Director of Pharmacy)
- All approvals to provide non-formulary or excluded medications is a one-time approval only and further dispenses require another approval

New and Improved Parental Drug Administration Manuals

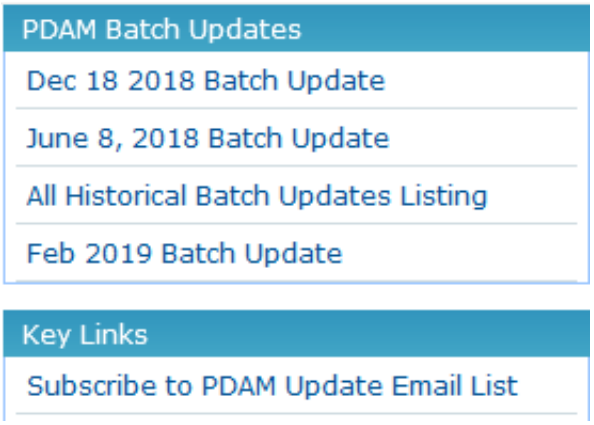
Visit OurNH→Medications→Parenteral Drug Administration Manual

The Parenteral Drug Administration Manual received an overhaul!

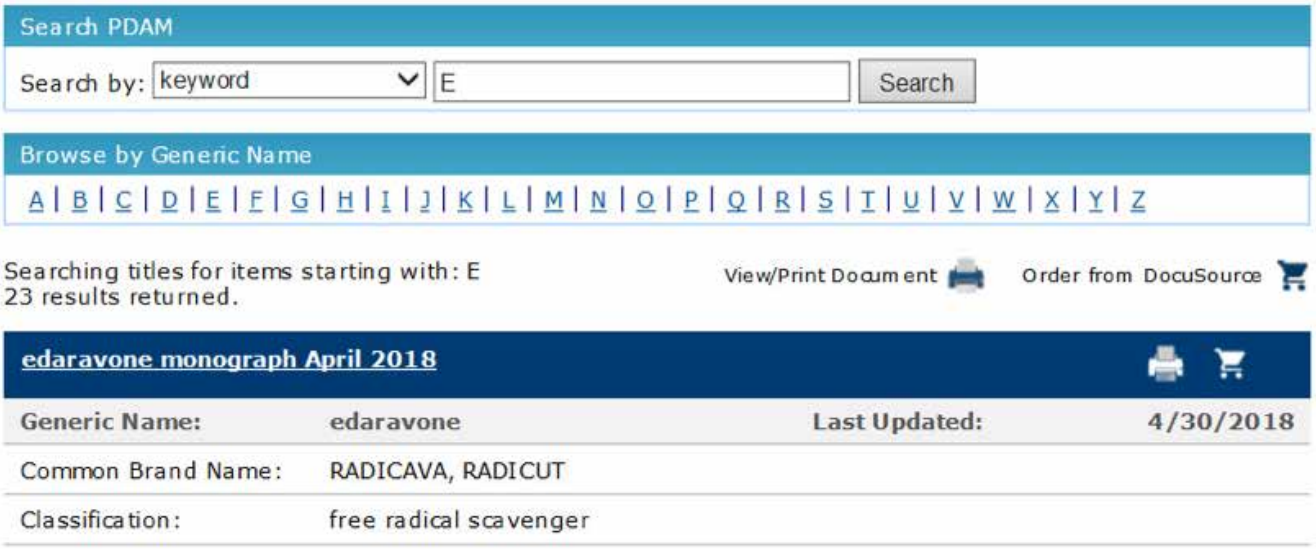
We heard you, we know how difficult it can be navigating a massive PDF document to search for the information you need. So over the last several months we have been working on creating an online, electronic version of the Adult Parenteral Drug Administration Manual and Neonatal Drug Administration Manual. Keep in mind, this online version will not completely replace your printed manuals, those are still available for use, however it will make the online version a lot more user friendly.

Key features for the new site/manuals:

- **SEARCH BAR!** Search for a monograph or infusion chart by Keyword, Classification, Common Brand Name or Generic Name
- Quick access links to order replacement pages, updates or order the entire manual from Document Source
- Quick access to print individual pages as needed
- Alphabetical listing for all monographs and infusion charts
- Pull up individual documents easily and quickly
- Current and historical batch update listings to easily determine if your version is up to date and replace out of date pages



Questions or concerns, let us know! Jennifer Bogh at Jennifer.Bogh@northernhealth.ca



Preventable Tragedies – ISMP Canada

Incident No.1:

Concentrated potassium phosphates solution for injection, available in a patient care area, was mistakenly used to flush a child's IV line; a flush solution of normal saline (0.9% sodium chloride) was intended. The child immediately became pulseless and later died, despite intensive resuscitation efforts. The error was recognized when blood tests revealed severe hyperkalemia and hyperphoshatemia.

Incident No. 2:

An infant required IV replacement of potassium during a hospital stay. The medical resident contacted the staff pediatrician by phone for direction. The resident subsequently gave a verbal order to the nurse to administer IV potassium chloride (KCl) to the infant. The prescribed dose was not available in a premixed format, so the nurse used a vial of concentrated KCl solution for injection (stocked on the ward) to prepare the IV infusion for administration. However, the verbal order was misinterpreted, and 10 times the amount of KCl required was added to the IV bag. The IV solution was administered overnight, and the infant went into cardiac arrest and subsequently died.

Contributing factors:

- Availability of concentrated injectable potassium solution in patient care areas.
- Non-standardized processes for the prescription and preparation of IV electrolyte solutions.
- Lack of Independent Double Checks.
- Similar physical appearance of electrolyte solutions and vials due to a product shortage.

Preventative Measures:

- Do not stock concentrated electrolytes in patient care areas (pharmacy only, in designated locations).
- Ensure that robust safeguards are included in procedures for prescribing, dispensing, preparing and administrating IV electrolyte solutions.
- Avoid selection and calculation errors by using premixed solutions.
    - *Neonates and infants may require solutions that are not commercially available. Processes should be in place for the preparation of these solutions by pharmacy or the use of a mixing sheet including necessary calculations, with a signed, independent double check, to be retained in the medical record.*

Health Care Practitioners:

- To minimize the need for calculations and additional manipulations in the patient care area, prescribed standardized doses of IV electrolytes that align with premixed concentrations of commercially available solutions.
- If the patient requires a "custom" or nonstandard IV electrolyte replacement solution, consult a pharmacist for assistance.
- To minimize the risk of misinterpretation, communicate orders in writing. If verbal orders must be given (emergency situations only), use a "repeat back" technique to ensure clarity and understanding.

Read the complete article: ISMP Canada – Two Preventable Tragedies:
Two Pediatric Deaths Due to Intravenous Administration of Concentrated Electrolytes
Volume 19 – Issue 1

Contact us: Medication Safety and Quality Team

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- Ryan Doerksen – Regional Medication Use Management – Pharmacist
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DID YOU KNOW?

Medication errors result in 9,000-24,000 preventable deaths annually in Canada, and many more instances of harm. Of all the stages of the medication process, order writing has the highest amount of errors (40%).