Medication Reconciliation Project Edmonton Zone

Steps To MedRec Success Across Multiple Programs and Sites in a Large Urban Setting

Natalie McMurtry, BSc Pharm, Sr. Medication Consultant; Vanessa Moorgen, BScN, RN, Sr. Medication Consultant; Clint Torok-Both, MD FRCPC, Physician Lead; Dawn Genge, MedRec Pharmacy Technician; Sakina Adamjee, Pharmacy Student; Christopher Chuy, Pharmacy Student

CSHP 2015 Objective

- **CSHP Objective 1.1:** In 100% of hospitals and related healthcare settings, pharmacists will ensure that medication reconciliation occurs during transitions across the continuum of care (admission, transfer, and discharge).
- The Edmonton Zone MedRec Project is part of a larger Provincial project to roll out MedRec on Admission, Transfer and Discharge throughout the province by 2015.

Sites Involved

- Sites involved include:
  - Tertiary care sites:
    - University of Alberta Hospital/Stollery Children's Hospital
    - Mazankowski Heart Institute
    - Royal Alexandra Hospital
  - Specialty care sites:
    - Glenrose Rehabilitation Hospital (Rehabilitation)
    - Cross Cancer Institute
    - Alberta Hospital Edmonton (Psychiatric care)
  - Rural/Suburban care sites:
    - Devon General Hospital
    - Westview Health Centre
    - Leduc Community Hospital
    - Sturgeon Community Hospital
    - Fort Saskatchewan Community Hospital

Healthcare Team Involvement

- Edmonton Zone MedRec Team
  - Pharmacy Senior Consultant and Educator
  - Nursing Senior Consultant and Educator
  - Audit personnel
  - Physician Team Lead
  - Pharmacy Students
- Other Project support personnel
  - Managers, Educators, Administrators, Front Line staff
  - Physician Program and Site Leads
  - Clinical Faculty support

Background - What is MedRec?

- Formal structured communication process to help reduce adverse drug events at transition points
- Forms a partnership with patients/families to verify and communicate accurate patient medication information
- Steps in the process include:
  - Creating an accurate, up-to-date list of what patients are currently taking (Best Possible Medication History)
  - Reconciling medication orders with the BPMH at each transition of care
  - Documenting and communicating decisions about patients medications at all transition points

- **Bottom Line**: MedRec is intended to ensure that medications are not omitted, added or changed inadvertently

Rationale - Why MedRec?

- Improved patient safety by ensuring "Patient's on the RIGHT STUFF"
- Medication errors and repeat admissions are reduced
- The patient and family is empowered by actively participating in their care
- Communication is improved between all healthcare providers across all setting resulting in:
    - Reduced calls to clarify orders
    - Reduced time tracking down medication orders
    - More complete picture of how patients are taking medications when making decisions
- Multiple medication histories and rework by different healthcare providers is decreased

Medication Errors Result In…

- The total cost of preventable, drug-related hospitalizations is about $2.6 billion per year[1]
- Preventable medication reconciliation errors occur in all phases of care: 22% during admissions, 66% during transitions in care and 12% during discharge[2]
- 20% of patients discharged from acute care facilities experience an adverse event, and of those, 66% are drug-related[3]
- 54% of 151 patients (>4 meds) had at least one unintended discrepancy. 39% had potential to cause moderate to severe discomfort or clinical deterioration[4]
- 62.0% of the study population had at least 1 unintentional medication discrepancy at the time of transfer, and the most common discrepancy was medication omission (55.6%)[5]

Methods - Who does MedRec?

- MedRec is the responsibility of ALL health care professionals that have medication management within their scope of practice.
- The authorized prescriber is responsible for addressing the discrepancies
- Process is interprofessional, interdependent, and reliant on a team approach

Building Success

**"Learn from the people,
Plan with the people,
Begin with what they have,
Build on what they know,
Of the best leaders,
When the task is accomplished,
The people all remark,
We have done it ourselves."**

-Lao Tsu

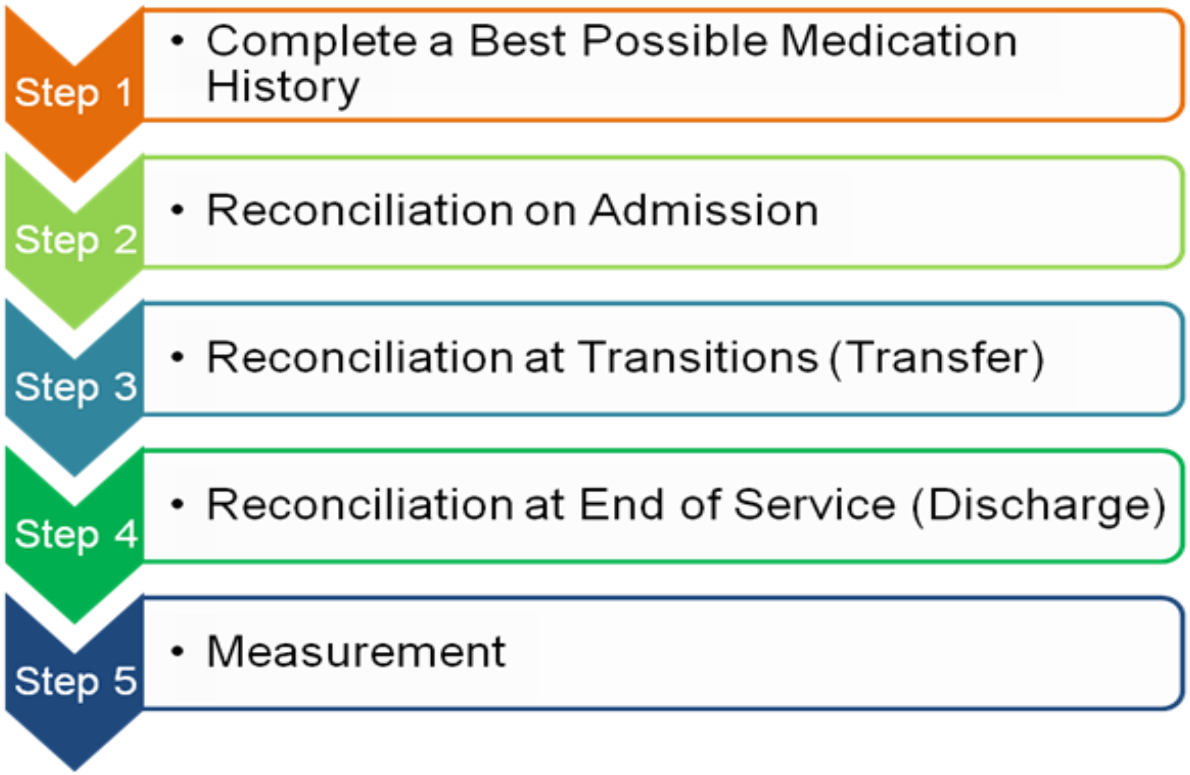
Methods - Guiding Principles

- People, Process, Purpose and Planning
  - People- Deployment of engagement, communication, education and change management strategies
  - Process- Focus on a standard structured 5 step process with local workflow and standard tools to suit the patient population
  - Purpose- Patient's on the right stuff!
  - Planning- A detailed multi-year plan focused on:
    - 1) Project Management
    - 2) Education and Excellence
    - 3) Implementation
    - 4) Sustainability
- Guided by the Provincial project principles: Patient Safety, Inter-professional responsibility, communication, local adaptability, change management support, measurement and continuous improvement.

Methods - Overview

- **Implementation Approach:**
  - Step 1: Meet ALL parties involved in implementing MedRec at each particular location due to the diversity of each unit and practice site
    - ✓ Identify the unit's current workflow, support and resources
    - ✓ Work with the unit to adapt their workflow map so that the 5-step process is embedded within the unit's culture.
    - ✓ Identify further educational needs (i.e. more structured training on performing a Best Possible Medication History or BPMH)
    - ✓ Identify champions within the unit or practice site to help sustain process and increase uptake
  - Step 2: Perform monthly audits on the units that have implemented MedRec
    - ✓ Provides feedback relating to the success of uptake and completion of the BPMH form to unit managers and team
    - ✓ Provides information to MedRec team to identify challenges and to allocate their resources to units requiring more assistance or education during implementation
  - Step 3: Continue to work with the units to develop a self-sustaining practice

Methods - Edmonton Zone 5-Step Process



Methods - Transition to Implementation

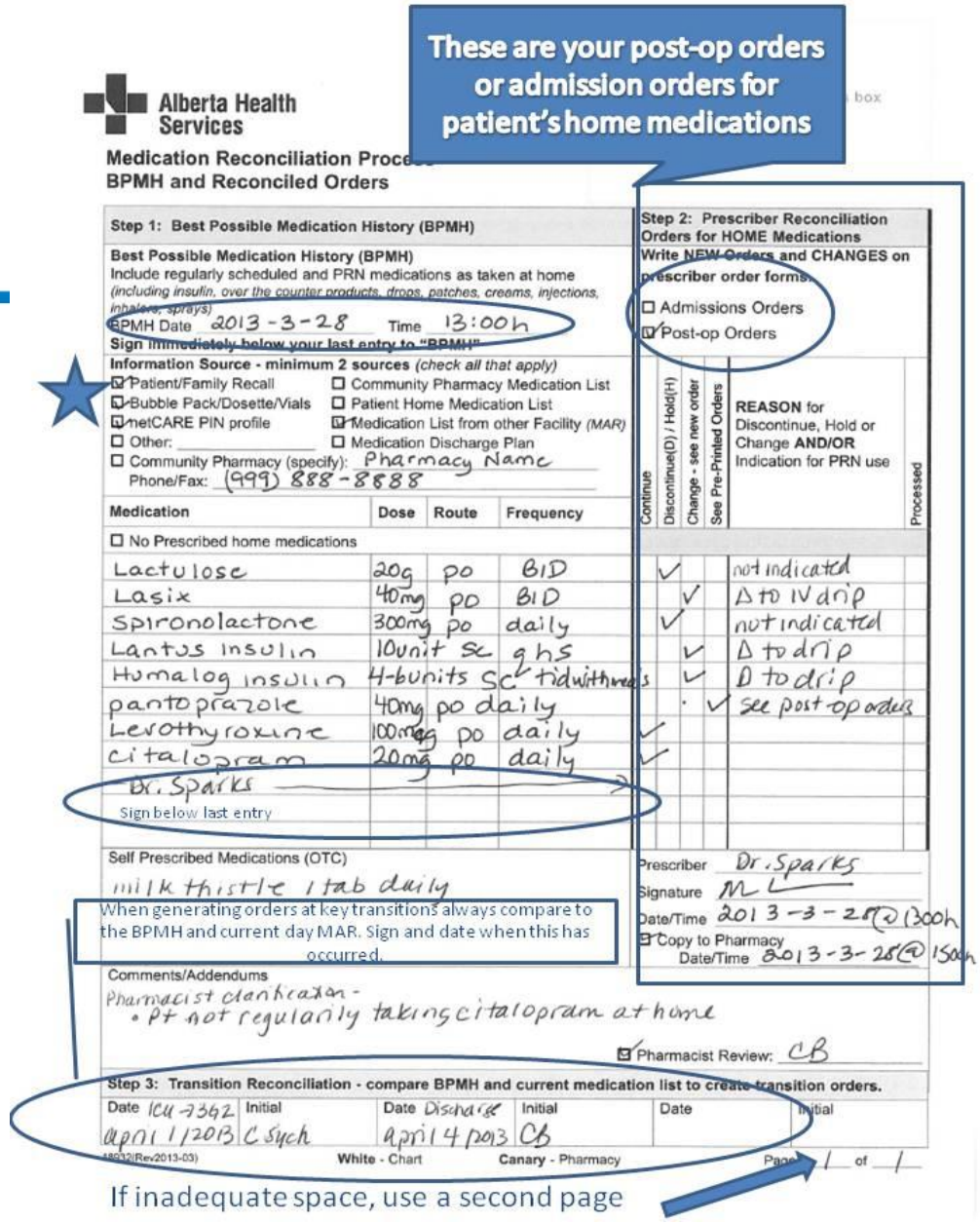
Formal Process Steps	Tools Used	Area Specific Workflow
Step 1 BPMH	[x] NetCare PIN [x] Patient/Family Interview [x] Approved MedRec Form	

Discipline:	Task:
Unit Clerk	Ensure PIN is printed if not already done, ensure MedRec form is on chart. Flag for completion if necessary. Place both documents in the clear plastic sleeve in PCO section (Do Not Thin)
Prescriber	Complete Best Possible Medication History (BPMH) within 24hrs of admission.
Pharmacist	Review BPMH and make amendments as necessary on MedRec form.
Nursing	Collect med info/home meds from patient during intake. If any lists are provided ensure a copy is placed in clear plastic sleeve. Ensure BPMH is complete, make any amendments and notify prescriber.

An example of how the MedRec team breaks the 5-step process down to discipline specific tasks and unit specific workflow to make implementation easier. Each step in the 5 Step process is broken down into unit or site specific tasks.

Implementation

This is a sample of the most recent Acute Care MedRec Admission Form that is currently in use at some acute care sites



Methods - Optimization

- Detailed success audit results discussed with local leaders
- Update workflows and improve process as needed
- Review education needs
- Utilize local champions and peer support models
- Encourage sharing across and within sites and programs

Methods - Sustainability

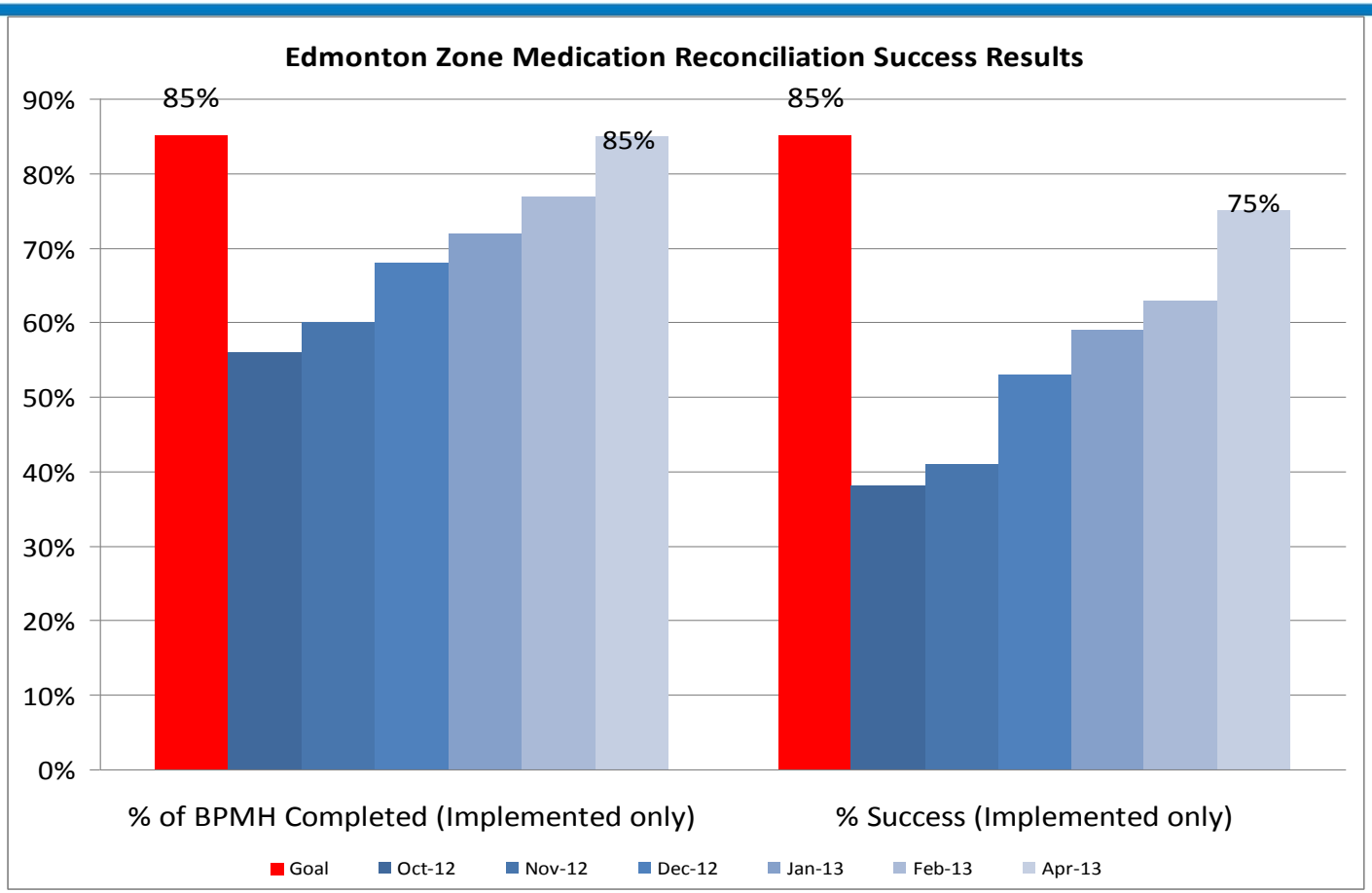
- Includes ongoing education and staff skill development
  - ✓ Ensuring MedRec process is part of new staff orientation information and ongoing skill assessment
- Includes measurement, evaluation and process improvement
  - ✓ Continued success and quality audits for feedback to staff and stakeholders
  - ✓ Utilization of PDSA cycles to focus goals and workload efforts
- Transition of work to local operations with MedRec consultants as content experts and support

Evaluation

- Currently monthly audits look at:
  - ✓ Process uptake (Is the BPMH completed?)
  - ✓ Form completion (Are the medications reconciled?)
  - ✓ Location in the chart (Is it in clear plastic folder marked “do not thin”?)
- In April 2013, 19 areas had 100% success* on our MedRec audit for the admission process.
- In areas that have implemented MedRec, overall compliance with completing the BPMH form is 85%

(*Success is defined as completing AND reconciling the BPMH form)

Audit Results Edmonton Zone



*Success is defined as completing AND reconciling the BPMH form

Success Audits - Next Steps

- Implementation of quality audits across sites to identify:
  - Accuracy and completeness of BPMH
    - ✓ BPMH >2 sources utilized
    - ✓ Actual med use verified by patient or caregiver
    - ✓ Each drug has name, dose, strength, route and frequency
  - Completeness of reconciliation process
    - ✓ All meds accounted for in admission orders
    - ✓ Prescriber documented rationale for “holds” or “discontinued” meds
  - Discrepancies are communicated, resolved and documented

Reflection

- **Important lessons learned:**
  - Invite everyone to the table at the beginning and listen to their thoughts and ideas (“Don’t talk about me without me there”)
  - Multidisciplinary process must be encouraged and supported throughout the implementation phase and throughout for long term sustainability
  - Utilize your champions and peer leaders
  - Ongoing feedback to areas on their performance is key to continued support of process

Future Direction

- Completion of MedRec at all Transition Points (admission, transfer, discharge) by 2014 to meet accreditation standards.
- Planning phase for Community/Ambulatory care MedRec currently underway
- Outcome measurements to determine impact on patient safety
- Patient survey project:
  - Discharge Survey Summer 2013- to determine whether MedRec is successful in clearly communicating the differences to patients about medications at discharge compared to those at admission.

References

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2. Santell, J.P. (2006). Reconciliation failures lead to medication errors. Jt Comm J Qual Patient Saf, 32(4), 225-229.
3. Forster, A.J., Murff, H.J., Peterson, J.F., Gandhi, T.K., Bates, D.W. (2003). The incidence and severity of adverse events affecting patients after discharge from the hospital. *Ann Intern Med*, 4,138(3), 161-7.
4. Cornish, P. L., Knowles, S. R.,Marchesano, R., Tam, V., Shadowitz, S., Juurlink, D. N., et al. (2005). Unintended Medication Discrepancies at the Time of Hospital Admission. Arch Intern Med , 424-429.
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