MEDICATION RECONCILIATION (ACUTE CARE)

safer healthcare now!

Goal

PREVENT ADVERSE DRUG EVENTS (ADES) BY IMPLEMENTING A MEDICATION RECONCILIATION PROCESS UPON ADMISSION, TRANSFER AND DISCHARGE

Background

- In a Canadian investigation, Forster et al. found that 23% of hospitalized patients discharged from an internal medicine service experienced an adverse event; of the 23%, 72% were ADEs.[1]
- A Canadian study by Cornish and colleagues found that 53.6% of the study population had at least one unintended discrepancy, of which 38.6% were judged to have the potential to cause moderate to severe discomfort or clinical deterioration. Most discrepancies (46.4%) included the omission of a regularly used medication.[2]
- 62% of patients had at least one actual unintentional medication discrepancy at hospital discharge and 55% had at least on potential unintentional discrepancy.[3]
- Kwan et al. conducted randomized controlled trial with 464 surgical patients at the University Health Network in Toronto, Ontario. They demonstrated that multidisciplinary medication reconciliation (pharmacists, nurses and physicians partnering with the patient) in a preadmission clinic resulted in a 50% reduction in the number of patients with discrepancies linked to home medications. Furthermore, the collaborative intervention also resulted in more than halving the number of patients with discrepancies with the potential to cause possible or probable harm compared to standard of care (29.9% vs. 12.9%).[4]
- New evidence is emerging on a continual basis.

Intervention

What is Medication Reconciliation?

Medication reconciliation is a formal process in which healthcare providers work together with patients/caregivers to ensure accurate and comprehensive medication information is communicated consistently across transitions of care.

Medication reconciliation is a three-step process:

1. **Create** a complete and accurate Best Possible Medication History (BPMH) of the patient's medications including name, dosage, route and frequency. This includes the patient/family interview and a review of other sources of information.
2. **Reconcile Differences.** Use the BPMH to create admission orders or compare the BPMH against admission, transfer or discharge medication orders; identify and resolve all discrepancies; and
3. **Document and Communicate** any resulting changes in medication orders to the patient, family/caregiver and to the next provider of care.

Medication reconciliation requires a systematic and comprehensive review of all the medications a patient is currently taking to ensure that medications being added, changed or discontinued are carefully evaluated. It is a component of medication management and will inform and enable prescribers to make the most appropriate prescribing decisions for the patient. Medication reconciliation is a process designed to prevent medication errors and the potential for adverse events at patient transition points. Implementation has proven to be more complex than expected but the experience of 500 teams in 5 years has created an abundance of tools and resources and experts across the country.

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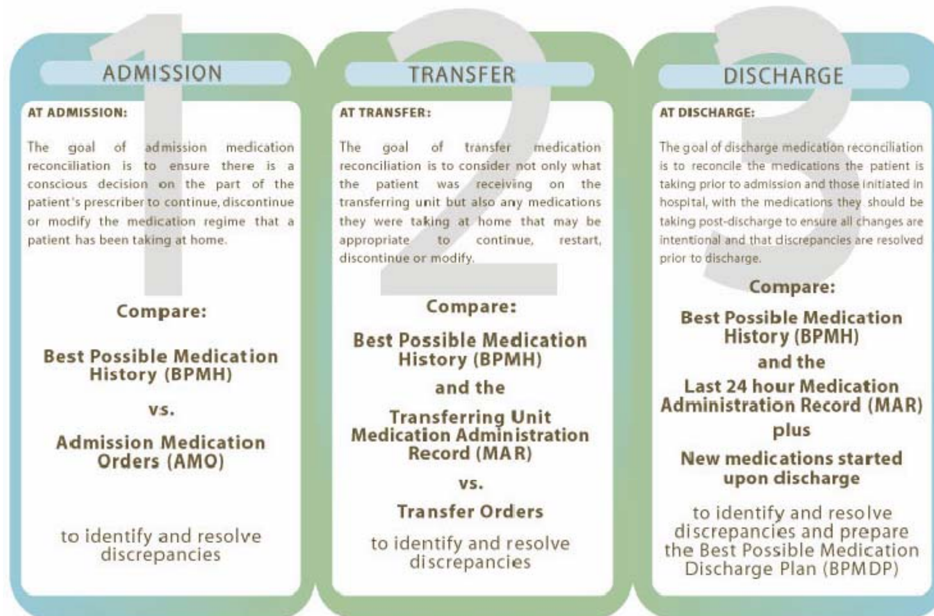
[1] Forster AJ. Clark HD. Menard A, Dupuis N, Chernish R. et. al., Adverse events among medical patients after discharge from hospital. Can Med Assoc J. 2004; 170(3):345-349

[2] Cornish PL, Knowles SR, Marchesano R, Tam V, Shadowitz 5, Juurlink DN, Etchells EE. Unintended medication discrepancies at the time of hospital admission. Arch Intern Med. 2005;165:424-429.

[3] Wong JD, Bajcar JM, Wong GG, Alibhai SM, Huh JH, Cesta A et al. Medication reconciliation at hospital discharge: evaluating discrepancies. Ann of Pharmacother 2008; 42(10):1373-9.

[4] Kwan Y, Fernandes OA, Nagge JJ, Wong GG, Huh J, Hurn DA , et al. Pharmacist medication assessments in a surgical preadmission clinic. Arch Intern Med 2007;167:1034-1040.

Safer Healthcare Now! supports teams of practitioners across Canada to implement medication reconciliation at admission to acute care, at transfer when medication orders are rewritten and at discharge from acute care to home or another care provider. Teams are supported to implement medication reconciliation through national calls, webinar series, a Community of Practice and Getting Started Kits, conferences, emails, mentors and telephone consultations. The interpretation of medication reconciliation has changed over time to include assessment of therapy in addition to obtaining a Best Possible Medication History (creating the most complete and accurate list of all home medications for each patient) and referring to it at all transition points.



Adapted from Barnsteiner, J. H. (2005). Medication Reconciliation. American Journal of Nursing, 3(suppl), 31-36. Created by the Institute for Safe Medication Practices Canada (ISMP Canada) for the *Safer Healthcare Now!* campaign.

Measures

Mean number of UNDOCUMENTED INTENTIONAL Discrepancies [Documentation Accuracy]
Goal: *Reduce baseline in area of focus by 75%*

Mean number of UNINTENTIONAL Discrepancies [Medication Error]
Goal: *Reduce baseline in area of focus by 75%*

Percent of Patients Reconciled at Admission
Goal: *100% of all eligible patients*

Percentage of patients reconciled at discharge with a Best Possible Medication Discharge Plan (BPMDP)
Goal: *100% of all eligible patients*

Success Stories

A multidisciplinary team at the Royal Jubilee Hospital (Vancouver Island Health Authority) developed a sustained practice medication reconciliation model in a surgical pre-admission clinic serving four surgical wards. During a six-month review of 615 patients with 3570 medications reconciled, the team estimated 591 potential discrepancies were avoided with the intervention.

Pincher Creek Hospital, within the Chinook Health Region, has implemented a system to ensure the community pharmacy was contacted for a current medication list. To date, 90% of complex medical clients are admitted with a current medication history.

The Regina Qu'Appelle Health Region recognized that taking a complete, concise medication history upon admission has been the role of the bedside nurse for decades. In 2007, the RQHR created a MedRec process to enhance nursing's ability to capture this information, improving the ease of this task. This process has been successfully implemented in 26 acute care urban patient care units, five rural acute care sites, the Regina Emergency Department, the pre-admission clinic and in a number of out-patient clinics. Today, greater than 90% of all patients admitted to these sites are interviewed about their home medication use.