

Transitions Between Hospital and Home

Early in the Hospital Admission: Perform Medication Reconciliation on Admission

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Patients who have multiple conditions and complex needs may require care across different health care settings (e.g., hospitals, family physicians, specialists etc.), which could potentially pose serious risks to their safety and quality of their care. Incomplete or inaccurate transfer of information, lack of comprehensive follow up care, and/or medication errors at the time of transition could be very dangerous and cause serious, preventable harm to patients. Furthermore, the impact of these risks may be intensified by patients and families who feel unprepared for self-management, and are unsure of how to access appropriate health care providers for follow-up.

Figure 1 is an outline of **innovative practices and evidence-informed best practices** that are designed to improve transitions between hospital and home.

The use of these practices varies significantly across the province. Teams are encouraged to prioritize the implementation of evidence-informed best practices before adoption of the innovative practices.

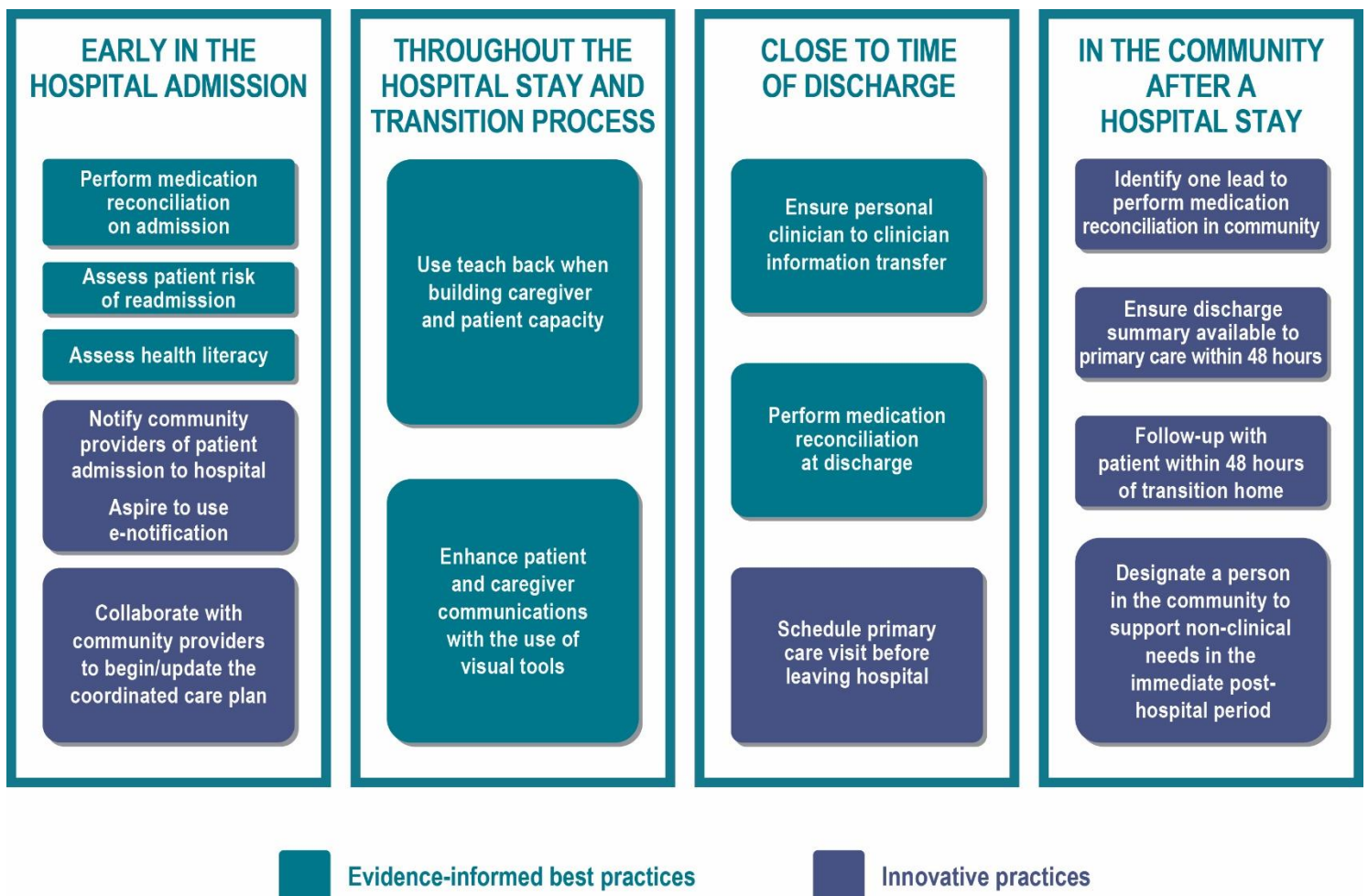


Figure 1: Practices to Improve Transitions Between Hospital and Home

Description of this Evidence-Informed Best Practice

Medication reconciliation (Med Rec) is a formal, systematic process in which health care professionals partner with patients to ensure accurate and complete medication information during transitions of care.¹ Medication reconciliation should occur within 24-48 hours of a person being admitted to hospital. According to **Accreditation Canada**, “of the 288 health care organizations surveyed in 2011, only 60% had a process for medication reconciliation at admission, and 50% had a process for medication reconciliation at transfer or discharge. Medication reconciliation practices showed the highest improvement from 2010 to 2011, yet continue to be one of the greatest patient safety challenges.”¹

Tools and Resources

In an environmental scan and literature review, the following tools were found to be highly effective and commonly used for medication reconciliation on admission. The decision to implement or administer one of these tools must be considered alongside other locally contextually relevant information.

Perform Medication Reconciliation on Admission		
Name of Tool	Overview	Considerations/Links
BPMH (Best Possible Medication History)	According to the <i>Institute for Safe Medication Practices (ISMP) Canada</i> , BPMH is a “history created using: 1) a systematic process of interviewing the patient/family; and 2) a review of at least one other reliable source of information to obtain and verify all of a patient’s medication use (prescribed and non-prescribed). Complete documentation includes drug name, dosage, route and frequency. The BPMH is more comprehensive than a routine primary medication history which is often a quick preliminary medication history which may not include multiple sources of information.” ²	<ul style="list-style-type: none"> The BPMH is a “snapshot” of the patient’s actual medication use, which may be different from what is contained in their records. This is why the patient involvement is vital. More information and tools for creating BPMH can be found at ISMP Canada: https://www.ismp-canada.org/medrec/
Medication Reconciliation in Acute Care: Getting Started Kit	The Getting Started Kit from <i>ISMP Canada</i> and <i>Safer Healthcare Now</i> provides “support to start the process on small numbers of patients, make changes, and gradually develop, implement and evaluate medication reconciliation broadly using quality improvement processes.” ³	<ul style="list-style-type: none"> The Getting Started Kit from <i>Safer Healthcare Now</i> includes an update on measurement, proactive and retroactive models for medication reconciliation at admission, expanded BPMH guidelines, and updated resources. The Getting Started Kit is available at: http://www.patientsafetyinstitute.ca/en/toolsResources/Documents/Interventions/Rapid%20Response%20Teams/RRT%20Getting%20Started%20Kit.pdf

¹ Accreditation Canada, the Canadian Institute for Health Information, the Canadian Patient Safety Institute, and the Institute for Safe Medication Practices Canada. Medication Reconciliation in Canada: Raising The Bar – Progress to date and the course ahead. 2012. Ottawa, ON: Accreditation Canada. Available from: https://www.cihi.ca/en/med_reconcil_en.pdf

² Institute for Safe Medication Practices Canada. Definition of Best Possible Medication History (BPMH). Available from: <https://www.ismp-canada.org/medrec/>

³ Bernier P, Boiteau P, Cass M, Couves L, Esmail R, Harries B. Safer Healthcare Now! Campaign April 2009 How-to Guide: Rapid Response Teams. Available from: <http://www.patientsafetyinstitute.ca/en/toolsResources/Documents/Interventions/Rapid%20Response%20Teams/RRT%20Getting%20Started%20Kit.pdf>

		ments/Interventions/Medication%20Reconciliation/Acute%20Care/MedRec%20%28Acute%20Care%29%20Getting%20Started%20Kit.pdf
MyMedRec phone app for patients	MyMedRec phone app for patients is a portable up to date health record that can be easily shared with your family, doctor, nurse, pharmacist or anyone else involved in your healthcare.	<ul style="list-style-type: none"> The MyMedRec app for patients can be found at: http://www.knowledgeisthebestmedicine.org/index.php/en/ap
5 Questions to Ask	<p>Multiple organizations have collaborated to create a set of five (5) questions to help patients and caregivers start a conversation about medications to improve communications with their health care provider. Examples include:</p> <ul style="list-style-type: none"> • Doctor's appointment (e.g. family physician or specialist) • Interaction with a community pharmacist • Discharge from hospital to home • Visit by home care services 	<ul style="list-style-type: none"> 5 Questions to Ask poster can be downloaded at: https://www.ismp-canada.org/medrec/5questions.htm

Additional Resources

For additional information on Quality Improvement, please visit: <http://qualitycompass.hqontario.ca/portal/getting-started>.

For additional information on Medication Reconciliation, please visit:

- *Accreditation Canada*
<https://accreditation.ca/>
- *Medication Management on Home and Community Care*
<http://qualitycompass.hqontario.ca/portal/Home-and-Community-Care/Medications-Management>
- *Medication Reconciliation in Acute Care*
<http://qualitycompass.hqontario.ca/portal/plans-hospital/Medication-Reconciliation-at-Admission>
- *Canadian Patient Safety Institute*
[http://www.patientsafetyinstitute.ca/en/Topic/Pages/Medication-Reconciliation-\(Med-Rec\).aspx](http://www.patientsafetyinstitute.ca/en/Topic/Pages/Medication-Reconciliation-(Med-Rec).aspx)

References

Systematic Reviews

1. Kwan JL, Lo L, Sampson M, Shojania KG. Medication Reconciliation During Transitions of Care as a Patient Safety Strategy: A Systematic Review. *Annals of Internal Medicine*. 2013;158(5 Pt 2):397-403. Available from: <http://annals.org/article.aspx?articleid=1656444>
2. Mueller SK, Sponsler KC, Kripalani S, Schnipper JL. Hospital-Based Medication Reconciliation Practices: A Systematic Review. *Arch Intern Med*. 2012 Jul 23;172(14):1057-69.

Supporting Resources

3. Bell CM, Brener SS, Gunraj N, Huo C, Bierman AS, Scales DC, Bajcar J, Zwarenstein M, Urbach DR. Association of ICU or Hospital Admission with Unintentional Discontinuation of Medications for Chronic Diseases. *JAMA*. 2011;306(8):840-847. Available from: <http://jama.jamanetwork.com/article.aspx?articleid=1104261>.
4. Boockvar KS, Blum S, Kugler A, Livote E, Mergenhagen KA, Nebeker JR, Signor D, Sung S, Yeh J. Effect of Admission Medication Reconciliation on Adverse Drug Events from Admission Medication Changes. *Arch Intern Med*. 2011; 171(9):860- 861. Available from: <http://archinte.jamanetwork.com/article.aspx?articleid=487036>.
5. Boockvar KS, Santos S, KushnirukA, Johnson C, Nebeker JR. Medication Reconciliation: Barriers and Facilitators from the Perspectives of Resident Physicians and Pharmacists. *J Hosp Med*. 2011 Jul-Aug;6(6):329-372011;6(6):329-337.
6. Gleason KM, McDaniel MR, Feinglass J, Baker DW, Lindquist L, Liss D, Noskin GA. Results of the Medications at Transition and Clinical Handoffs (MATCH) Study: An Analysis of Medication Reconciliation Errors and Risk Factors at Hospital Admission. *J Gen Intern Med*. 2010; 25(5):441-447. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2855002>