Setting patients up for success: Tools to manage medications at transitions in care

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Miscommunication at care transitions is commonly cited as a contributing factor to medication-related adverse events. The Canadian Adverse Events Study (Baker, 2004) cited drug- and fluid-related events as the second most common type of adverse event. Chart reviews have shown that over half of all hospital medication errors occur at interfaces of care (Rozich, 2001). Effectively communicating about medications at care transitions can be challenging for both patients and health care professionals. Developing processes, tools, and resources to facilitate effective communication will enhance the safety of medication use and optimize medication management for patients.

Communicating information through medication reconciliation

Medication reconciliation is a systematic process whereby health care providers work together with patients, families, and care providers to ensure accurate and up-to-date medication information is communicated during care transitions. It is one component of medication management (see Figure 1 on next page) and will inform and facilitate appropriate prescribing decisions for the patient (SaferHealthcare Now!, 2011).

Many organizations have created policies and procedures, allocated staff, and invested in technology resources to support medication reconciliation at admission. Now they are challenged to implement a quality medication reconciliation process at all care transitions to reduce the potential for medication errors.

Discharge from a health care facility is a particularly high-risk time, when the responsibility for managing medications is transferred back to the patient, family caregiver, or another health care professional. In a recent study, 43 percent of patients experienced medication adverse events related to prescribing errors on discharge, with the majority of these deemed to represent a risk of moderate harm (Riordan, 2016).

Case study*

Meet Sharon, who experiences atrial fibrillation and was admitted to hospital after experiencing symptoms that did not resolve with her existing medication. During her hospital stay, she took her medications when they were given to her. She didn’t question that the medication regimen was different from the one she had at home. On the day of discharge, Sharon was handed an envelope of papers and told, “Your prescription is in the envelope. You are on a new blood thinner. Take this to your community pharmacist.” No further instructions were provided.

Once home, she was tired, so she decided to take her trip to the pharmacy the next day. Sharon had dinner, took her usual bedtime pills, and went to bed. The next day she wasn’t feeling well, so she asked her daughter to go to the pharmacy. The pharmacist looked at the papers from the hospital and found

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*This is a fictitious case study based on ISMP Canada experience.
Figure 1: Medication reconciliation as a component of medication management

Medication Management
Medication management is defined as patient-centred care to optimize safe, effective and appropriate drug therapy. Care is provided through collaboration with patients and their health care teams.

Clinical Medication Review
Addresses issues relating to the patient’s use of medication in the context of their clinical condition in order to improve health outcomes.

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

Best Possible Medication History
A complete and accurate list of all the medications a patient is taking created using at least 2 sources of information including a client and/or family interview.

1. Developed collaboratively by the Canadian Pharmacists Association, Canadian Society of Hospital Pharmacists, Institute for Safe Medication Practices Canada, and University of Toronto Faculty of Pharmacy, 2012.
2. www.health.gov.bc.ca/pharmacare
3. ISMP Canada. Medication Reconciliation in Acute Care: Getting Started Kit. 2011
4. ISMP Canada. Medication Reconciliation in Acute Care: Getting Started Kit. 2011

Adapted from Fraser Health, Providence Health Care, Provincial Health Services Authority, Vancouver Coastal Health.

(Source: ISMP Canada; used with permission)
the discharge prescription. After reviewing the discharge prescription, the pharmacist identified that:

- Two of her usual medications were not included and there were no instructions to discontinue or continue them
- Several new drugs were added, one of which was not covered by her insurance plan
- Instructions for the new blood thinner were “Take as directed,” and the patient was unaware of how to take them

Now the community pharmacist needed to locate the prescriber and clarify what the patient should take. The lack of clearly communicated medication-related information on discharge led to missed doses of new medications, additional work for the community pharmacist, and the potential for medication errors that could have resulted in serious patient harm.

**Ensuring a clear medication discharge plan**

When being admitted to hospital, the majority of patients are interviewed to determine their Best Possible Medication History (BPMH). A quality BPMH is the foundation of solid decisions about medications during the hospital admission and is also a valuable source of medication information at all transitions in care.

To manage medications successfully once a patient is discharged, a clear medication discharge plan must be provided. This is commonly known as the Best Possible Medication Discharge Plan (BPMDP). The BPMDP should include instructions about the medications identified on the admission BPMH (e.g., which to continue, change, or discontinue), a rationale for any changes, and information about new medications that were prescribed during or at the end of hospitalization. It should also communicate any monitoring or follow-up requirements to the patient and the health care professionals involved in their care. Communicating the BPMDP is essential to facilitate medication reconciliation in the next care setting (e.g., another acute care facility, primary care, home care, or long-term care) and ensure that patients and health care providers have the information they need for safe medication management post discharge. Even when a clear discharge plan is provided, discrepancies and medication-related problems can occur due to a variety of other challenges including the inability to pay for new medications, unidentified use of over-the-counter and natural health products, or limited patient engagement leading to unfilled prescriptions or non-adherence to medication regimens.

**Facilitating safe transitions and empowering patients and families**

Several tools and resources have been developed to help patients and health care providers improve the communication of medication information at transitions in care and, in particular, on discharge.

The *Hospital to Home: Facilitating Medication Safety at Transitions Toolkit* (ISMP Canada, 2015) provides information about why hospitals
should invest in resources at discharge. The toolkit includes a checklist that health care providers can use to help patients and family caregivers better understand the medication regimen the patient is to follow and connect them with supports to help manage their medications once home from hospital.

Helping patients succeed in managing their medications is an important strategy in preventing harmful adverse events. An informed patient or family caregiver can take charge of their health care and may be able to seek help before an error occurs. When patients are engaged in their treatment plans, they can share challenges or limitations to safe medication use and are more likely to ask questions and get the information they need to use their medications safely.

To help patients start a conversation with their health care providers and address knowledge gaps which can lead to medication errors during care transitions, ISMP Canada, with support from the Canadian Patient Safety Institute, and in collaboration with Patients for Patient Safety Canada, the Canadian Society of Hospital Pharmacists, and the Canadian Pharmacists Association, developed 5 Questions To Ask About Your Medications (2015) (See Figure 2).

The 5 Questions to Ask About Your Medications is available in several languages to meet the needs of a variety of patients. A video is also available to demonstrate how patients can use the questions to start a conversation with their health care provider. Organizations are encouraged to make this information available to patients, families, and health care providers to foster crucial conversations about medications.

**What does this mean for Sharon and other patients?**

Let’s go back to our case study patient, Sharon, and consider how using these tools might help facilitate future transitions back to self-management:

- **Hospital to Home: Facilitating Medication Safety at Transitions Toolkit**

  Use of the toolkit by the discharging health care provider can help with discharge planning for Sharon, and provide an opportunity for prescribing clarifications such as potential alternatives for a costly new medication before she leaves the hospital. This can facilitate the timely dispensing of new medications by community pharmacists.

- **Best Possible Medication Discharge Plan (BPMDP)**

  Creating a BPMDP as part of Sharon’s discharge medication reconciliation process and communicating it to her and her community pharmacist may result in less confusion about medication changes.

- **5 Questions to Ask About Your Medications**

  This resource creates an opportunity for more open dialogue about medications, to validate the discharge plan and confirm Sharon’s understanding of it. This can enhance awareness about which medications to take, how to take them, and what ongoing monitoring is required.
Figure 2: 5 Questions to Ask About Your Medications

1. CHANGES?
Have any medications been added, stopped or changed, and why?

2. CONTINUE?
What medications do I need to keep taking, and why?

3. PROPER USE?
How do I take my medications, and for how long?

4. MONITOR?
How will I know if my medication is working, and what side effects do I watch for?

5. FOLLOW-UP?
Do I need any tests and when do I book my next visit?

(Source: ISMP Canada; used with permission)
post-discharge. Being knowledgeable about medications may help protect Sharon from harmful medication errors or avoidable hospital readmissions.

**Conclusion**

Ensuring safe medication management at transitions in care is clearly a team effort. Medication errors due to dose omissions, inappropriate administration, or lack of monitoring and follow-up can lead to significant patient harm. Organizations are encouraged to proactively implement strategies to reduce or eliminate medication management problems that occur at transitions of care so that patients can safely transition from hospital to home.

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Lisa Sever, RPh, BScPhm, ACPR, CGP, is a Consultant Pharmacist with ISMP, who graduated from the University of Toronto and completed her hospital residency at St. Joseph’s Hospital in Hamilton. She is a Certified Geriatric Pharmacist and enjoys working directly with patients and their caregivers. Her work experience includes hospital, long-term care and in-home pharmacist assessment. She joined ISMP Canada in 2013, participating in home and community care medication safety projects. She is passionate about keeping patients safe from medication harm.

**Alice Watt**

Alice Watt, RPh, BScPhm, joined ISMP Canada in 2007 as a Medication Safety Specialist and received her BSc. (Pharm.) from the University of British Columbia. She is actively practicing in a community hospital as a clinical pharmacist and has had over 15 years of experience in community and acute care settings. Alice is involved in medication safety and incident analysis, and has a passion for engaging consumers and health care practitioners in safe medication practices.

**Kim Streitenberger**

Kim Streitenberger, RN, is Project Lead at ISMP, and has a certificate in Quality Improvement and Patient Safety from the University of Toronto. She also has over 35 years of clinical, quality improvement, and patient safety experience. She was a recipient of the OHA Health Achieve Patient Safety Award in 2005 and the Baxter Guardian Scholarship for Excellence in Patient Safety in 2010. Within her current role as Project Lead, Kim has accountability for national medication reconciliation and safe labelling and packaging initiatives.
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