MedRec starts in the ED: Challenges and benefits for our seniors

By Cathy Sendecki, BSN, RN, and Shauna Holmes, BSN, RN

Geriatric emergency nurse clinicians often encounter medication reconciliation (MedRec) challenges. They include duplicate containers of antihypertensive tablets not taken "because I didn't want to upset my doctor by telling him they make me light-headed" but prescriptions diligently refilled; vital medications taken at half-doses because the patient could not afford both medication and adequate food; and various mysteries when medications found at home by the paramedics are quite different from those listed on a recent discharge summary.

Accreditation Canada Required Organizational Practices (ROPs) now include Medication Reconciliation. What does this mean for ED nurses? There is limited time in the emergency department setting to obtain information on medication use. Such time constraints can lead nurses to ask questions related to the required practice including: how can we take time to phone their pharmacies, or check all their pill bottles? Why would this be a nursing responsibility when physicians are ordering the meds? When a patient is unsure of what medications she is on, "You know, the little blue and white pill I take for my heart," would a pharmacy technician not be better suited to this role? Is this MORE paperwork for the already time-pressured ED nurse?

What is it?

MedRec is a systematic and comprehensive review of all the medications a patient is taking. This provides the medical professional with an opportunity to ensure that all medications being added, changed, or discontinued are carefully assessed and documented. It is meant to ensure accurate communication at care transition points. Examples would include events such as when a patient enters a hospital, transfers to another service or provider, or is discharged home.

Taking a best possible medication history (BPMH) is a foundational part of MedRec. BPMH involves interviewing the patient and family, or care partners, and using one other source to obtain information on the drug name, dosage, route and frequency of prescription and non-prescription medications. BPMH will only be required at the time of the decision to admit, so clearly this level of detailed history will not be required for every ED patient.

MedRec was first introduced as an Accreditation Canada ROP in 2006. ROPs are evidence-based practices that, when implemented, reduce the risk to patients and help improve the quality and safety of health services. When developing the MedRec ROPs, Accreditation Canada examined detailed literature reviews of peer-reviewed research and examined best-practices organizations use to mitigate medication errors. In addition, Accreditation Canada gathered a domain-specific group of experts.

Why is this needed?

MedRec reduces the potential for medication discrepancies such as omissions, duplications, and dosing errors, which can potentially lead to adverse outcomes. When properly done at time of discharge, MedRec helps to prevent readmissions to emergency departments that are caused by drug interactions, over-/under-doses, and other potentially harmful side effects. These readmissions can be very stressful to patients and families, and can be expensive to the health care system. It is estimated that the total cost of preventable, drug-related hospitalizations in Canada is about $2.6 billion per year.

Considering that seniors typically take multiple medications, the risk of errors is increased in this population. In 2011, the first members of the baby boomer generation turned 65. Of people aged 65 years and over, 69% reported taking five or more medications. Nearly 10% were taking at least 15 medications. Not surprisingly, the number of medications taken increases with age. Seniors in Canada take four times more over-the-counter (OTC) medications than any other age group. OTC medications or samples distributed by family doctors rarely appear on Pharmanet searches.

How best to obtain this information?

The "gold standard" is to have the medication history obtained by a clinical pharmacist, clearly not possible in most situations. Whatever medication-related documentation is done as the patient encounters any care transitions, it needs to start with an accurate list of what the patient has been taking prior to admission. Patient involvement is vital because a patient's actual medication use may differ greatly from what is shown in their records.

Particularly with seniors, the initial discussion often involves some assessment of cognition. Establishing a rapport can help patients and their care partners have a frank and open discussion about what they feel are barriers to medication compliance. Some patients may disclose they have not been taking medications as prescribed because of financial constraints, or because they may not have understood what to take. Some may have deliberately chosen to continue with medications previously prescribed by their GP rather than changes made by the hospital physician because they know and trust their GP. Certainly in the ED, where we assess pertinent negatives as part of a thorough assessment, we may need to question why this patient is not taking medications for a known condition for which medication is indicated.

Challenges and opportunities

As part of consultations the Canadian Patient Safety Institute (CPSI) conducted in 2011, MedRec was identified as one of the top three patient safety priorities in every jurisdiction by health care leaders across Canada. Despite this, MedRec ROPs continue to be some of the ROPs with the lowest compliance rates across Canada. Lack of human and fiscal resources, limited technology, and insufficient professional and government direction

have all been cited as contributors to the lack of MedRec implementation and compliance with this critical ROP. Key factors for success, identified by pioneers of MedRec implementation in Canada, include strong leadership support, physician champions/leaders, information technology support, and a comprehensive staff education plan. Without these supports being established, the medical profession can expect to see ongoing issues with MedRec implementation.

In our standard practice we are already laying the foundation of MedRec. Although we may not get all possible information about medications as part of the initial assessment, we are looking for all information relevant to the patient presentation. A possible head injury elicits questions about anticoagulant use; increased shortness of breath prompts assessment of recent changes in diuretics and so on. By utilizing our resources, and looking for ways to build on this initial information, we are on the road to establishing a strong base for MedRec, and increasing our patients' safety.

Some ideas:

- Watch for high-alert medications such as anticoagulants; Insulin and sulfonylureas such as Glyburide® with the risk of prolonged hypoglycemia; opioids, and medications with a narrow therapeutic window, including Digoxin and Phenytoin.
- Patients discharged within the last 30 days need to be a high priority for MedRec. An American study published in 2012 looked at recently discharged patients and found 56% had a discrepancy in medications within 48 hours of discharge. The readmission rate at 30 days post-discharge was approximately 14% of those experiencing medication discrepancies compared to 6% of those who did not.
- Encourage accurate medication information to be brought by patients, family members, care partners and emergency health services. Even if we do not immediately need to know all this information, clearly it is needed by other team members to provide safe care.

While this article does not answer all the questions raised, perhaps it will give support, as we all work to achieve this required practice. Medication Reconciliation will require more work by some team members, but not necessarily an inordinate amount by ED nurses. We can, as always, advocate for meaningful ways to increase patient safety through accurate assessment and ongoing education to help them and, when necessary their care partners, make the best decisions about medication management.

About the authors

Cathy has worked at Burnaby Hospital Emergency Dep't since 1987, in the past several years as Geriatric Emergency Nurse Clinician, as part of the Older Adult Program. Particular interests include working with persons with dementia and their care partners and embracing the challenges of dealing effectively with Elder Abuse. She enjoys being a grandma.

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