Patient Safety Tip of the Week

September 16, 2014

Focus on Home Care

We know some of our readers will read no further when the see "home care" in the title. But the problems that take place in home care are the result of errors and contributing factors that occur throughout the healthcare system and usually not the result of errors by what we might traditionally think of as "home care" providers. Particularly as the bulk of medical care is being shifted to the home and ambulatory care side, we are likely to see more and more adverse events occurring outside the hospital setting.

A little over a year ago we did a column on adverse events in home care (see our August 13, 2013 Patient Safety Tip of the Week "Adverse Events in Home Care") in which we reviewed several excellent studies done in Canada. Well, our neighbors to the north have again made another excellent contribution to our understanding of adverse events in home care. ISMP Canada has done an analysis of medication incidents in home care (ISMP Canada 2014).

ISMP Canada found 153 incidents over roughly 14 years in their database of voluntary medication safety incidents and found there were three main themes:

- Medication Transition Failure
- Complex Communications
- Medication Handling Errors

Two-thirds of the incidents involved **problems in the transition of patients from the hospital to home**. That obviously includes problems with medication reconciliation. The authors stress that a discharge medication plan must not only focus on the medications themselves. Rather there needs to be a comprehensive assessment of the patient and his family or caregivers regarding financial issues, knowledge deficits, physical challenges, etc. They note that a medication considered "appropriate" may, in fact, be "inappropriate" if the patient cannot afford, manipulate or swallow it.

But they take it a step further and point out that our communication with community partners may be suboptimal. While home care nursing is usually made aware of the discharge medication plan, the community pharmacy seldom is. That can give rise to delays in treatment (eg. a pharmacy may not have a particular drug in routine stock). We've previously also discussed another way the community pharmacy is often cut out

of the loop. In our May 27, 2014 Patient Safety Tip of the Week "A Gap in ePrescribing: Stopping Medications" we highlighted a critical issue: stopping a medication is often much different than starting one. Starting a medication requires an active process – you either write a prescription, enter one into a computer, or call the pharmacy. But discontinuing a medication is often more passive – you may just tell the patient to stop it. You don't call the pharmacy to stop it. And, if there was no associated office visit, you might forget to update the patient's medication list in your office EMR (or paper records) until the patient's next office visit. Thus, a patient may continue to get medications that you thought you had stopped. A study done in a large multispecialty group practice in Massachusetts (Allen 2012) showed that among targeted medications that were electronically discontinued (on the practice's EMR) 1.5% were subsequently dispensed by a pharmacy at least once. We suspect those discontinued at hospital discharge are equally likely to continue to be dispensed when the community pharmacy is left out of the loop.

The second main theme in the ISMP Canada analysis, involved in 14% of their incidents, was **complex communications**. They point out examples where communication must take place among multiple different providers, with each communication increasing the likelihood of error. An example they provide was a patient suffering continued pain despite a plan for use of a pain pump in the home. A pain pump had been delivered to the home but no nursing visit was scheduled in advance so an undue delay in pain management occurred. ISMP Canada points out that coordination among home care providers can be very complex – involving electronic referrals, faxes, phone calls, and manual documentation. They note that any change in the care plan may affect multiple providers. The fact that our current systems are poor at intercommunicating often leads to duplication of effort and an increased likelihood of error. They note that a physician may need to write orders on a home care order sheet but then also write new prescriptions.

The third ISMP Canada theme was **medication handling**. This theme, which involved in 22% of their incidents, included errors in dispensing, administering, and repackaging medications. They note that many patients on multiple medications do better when their medications are repackaged into blister packs or dosettes. They stress that systematic double checks need to take place when repackaging and that the blister packs or dosettes must have the patient name and list of contents clearly labelled. They note a fatal incident where a patient's dosette was filled with medications intended for the patient's spouse.

Also included in this theme are cases in which patients or their caregivers misinterpret instructions for use of a medication. An example was use of the abbreviation "tsp", which was interpreted by some as "tablespoon" rather than "teaspoon". Also problematic is the instruction "take as directed". In our April 12, 2011 Patient Safety Tip of the Week "Medication Issues in the Ambulatory Setting" we noted how you tell patients to take their meds (the "sig:" on your prescriptions) is also critical. A study (Wolf 2011) gave well-educated volunteers prescriptions for seven drugs and watched them try to figure out how and when to take them all. They could theoretically be consolidated to be taken in 4 dosing sets per day. Yet only 15% were able to consolidate the regimen to 4 times daily or less. Most ended up with regimens taking medications 6 or 7 times daily. Even the

instructions “twice daily” and “every 12 hours” resulted in medications being taken at different times.

The drugs involved in the ISMP Canada study included high-alert medications in a quarter of the incidents (opioids, anticoagulants, hypoglycemic agents, immunosuppressants, and pediatric liquids) so it’s not surprising that over a third of the reported incidents resulted in harm to patients.

The ISMP Canada database relies on voluntary reporting. Undoubtedly, the actual prevalence of medication errors in home care is much higher. But this is an excellent article that draws attention to how care in multiple parts of our complex medical system impacts on patients in their home setting.

We also suggerst that you read a couple of our prior Patient Safety Tips of the Week that have important considerations for medication safety in the home care environment:

April 12, 2011 “Medication Issues in the Ambulatory Setting”
August 13, 2013 “Adverse Events in Home Care”

References:

ISMP Canada. Aggregate Analysis of Medication Incidents in Home Care. ISMP Canada Safety Bulletin 2014; 14(8): 1-4
http://www.ismp-canada.org/download/safetyBulletins/2014/ISMPCSB2014-8_MedicationIncidentsHomeCare.pdf

Allen AS, Sequist TD. Pharmacy Dispensing of Electronically Discontinued Medications. Ann Intern Med 2012; 157(10): 700-705
http://annals.org/article.aspx?articleid=1391698

Wolf MS; Curtis LM, Waite K, et al. Helping Patients Simplify and Safely Use Complex Prescription Regimens. Arch Intern Med. 2011; 171(4): 300-305
http://archinte.ama-assn.org/cgi/content/abstract/171/4/300

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