Reducing Hospital Readmission: Medication Reconciliation

According to the Centers for Medicare and Medicaid Services (CMS), 45% of hospitalizations of skilled nursing facility (SNF) residents are avoidable. Medications are a significant contributor to adverse events resulting in hospital admission. They account for 37% of adverse events in SNFs based on a February 2014 report from the Office of the Inspector General.

A considerable risk of medication errors, and the resulting medication-related adverse events, occurs during the transition from the hospital to the nursing home. Error rates of 21% or more are reported during the transition. Serious, life-threatening, or fatal errors occur up to 60% of the time, according to the Institute for Safe Medication Practices. It is critical that SNFs take steps to reduce errors, and one tool that can help is medication reconciliation.

The Joint Commission's National Patient Safety Goals define medication reconciliation as “the process of comparing the medications a patient is taking (and should be taking) with newly ordered medications in order to identify and resolve discrepancies” – a definition also adopted by CMS. Due to the significant impact medication reconciliation may have on identifying potential medication-related adverse events and reducing avoidable hospitalizations, the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 specified it as a quality measure domain. CMS is currently developing a measure to enable data exchange and outcome comparison between post-acute care providers.

To review the OIG report, please visit the following link: http://oig.hhs.gov/oei/reports/oei-06-11-00370.pdf

Developing a patient-centered system to ensure accurate and thorough medication reconciliation upon admission from the hospital to the SNF is critical to improving patient safety and reducing the risk of rehospitalization. In addition to the monthly medication regimen review conducted by your Consultant Pharmacist, PharMerica can provide medication reviews for new admissions, including those with high-alert medications, through the interim medication regimen review (iMRR) process. Ask your Consultant Pharmacist for more information about how PharMerica can help improve your medication reconciliation process.

For more information on the IMPACT Act of 2014, please visit the following link: http://www.gpo.gov/fdsys/pkg/BILLS-113hr4994enr/pdf/BILLS-113hr4994enr.pdf
One in three skilled nursing facility (SNF) residents is affected by an adverse or temporary harm event within the first 35 days of a SNF stay, and half of them must return to the hospital, according to an Office of Inspector General (OIG) report titled “Adverse Events in Skilled Nursing Homes: National Incidence Among Medicare Beneficiaries” released in February 2014. Of these events, 37% are medication-related.

Following this report, the OIG recommended that the Centers for Medicare and Medicaid Services (CMS) instruct state agency surveyors to review nursing home practices to identify and reduce adverse events. Based on the prevalence of adverse events related to medications, CMS issued a memo on July 17, 2015, on the implementation of Focused Surveys on medication safety systems.

The objectives of the Focused Surveys are to:

• Identify preventable adverse drug events (ADEs) that have occurred or may occur
• Determine whether facilities
  • Identify residents’ risk factors for ADEs
  • Implement individualized interventions to eliminate or mitigate risks
• Implement effective systems to prevent ADEs as well as recognize and respond to those that do occur in order to minimize harm and reduce recurrence

The memo also noted that, within 30 days, survey and certification staff and managers should receive training on use of the Adverse Drug Event (ADE) Trigger Tool, which was created to assist surveyors as they investigate medication-related ADEs. While still in draft form, some of the key adverse drug events identified by the Trigger Tool include:

• Change in mental status/delirium related to opioid use
• Hypoglycemia related to use of diabetes medication
• Ketoacidosis related to insulin therapy
• Bleeding or thromboembolism related to antithrombotic use
• Prolonged constipation, ileus or impaction related to opioid use
• Electrolyte imbalance related to diuretic use
• Altered cardiac output related to cardiac medications
• Toxicities related to acetaminophen, digoxin, levothyroxine, ACE inhibitors, phenytoin, lithium, valproic acid, and antibiotics

F-Tags that may be emphasized as a result of the newly-implemented Focused Surveys include F329, F332, F333, F428 and F309. All skilled nursing facilities should become familiar with the ADE Trigger Tool and develop processes to avoid medication-related adverse events. PharMerica’s pharmacists are excellent resources in this area. Ask your Consultant Pharmacist for more information about how PharMerica can help.

For more information on the CMS memo, visit the following link: https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-15-47.pdf
To determine the appropriate therapeutic dose of warfarin, the standardized international normalized ratio (INR) is used to monitor effectiveness. All residents in skilled nursing facility settings receiving warfarin should be assessed at least every thirty days. For residents who have results that are sub-therapeutic or supra-therapeutic, INR should be checked more frequently as the warfarin dose is adjusted. In most cases, the warfarin dose is considered therapeutic when INR is between 2.0 and 3.0, although a higher range of 2.5 to 3.5 may be appropriate for some residents with a history of mechanical heart valve replacement.

Since higher INR results are associated with an increased risk of bleeding and nontherapeutic INRs pose a greater risk of adverse events from VTE, monitoring of INR as well as observing residents for signs of bleeding are paramount with the use of warfarin. In addition, since the anticoagulant effects of warfarin are impacted by a number of direct drug-drug interactions or drugs/foods that inhibit synthesis of or increase clearance of vitamin K, it is essential to monitor INR when adding or removing medications for residents who also receive warfarin.

Development of patient-centered plans for residents receiving warfarin or any anticoagulant medication should be part of the admission process. Coordination between prescribers, nurses, nursing assistants, pharmacists and the dietary team is extremely important to optimize stability and reduce the risk of adverse drug events.

Entresto is indicated to reduce the risk of cardiovascular death and hospitalization for heart failure in patients with chronic heart failure (NYHA Class II-IV) and reduced ejection fraction. Entresto is a combination of sacubitril, a neprilisyn inhibitor, and valsartan, an angiotensin II receptor blocker (ARB). It is usually administered in conjunction with other heart failure therapies, in place of an ACE inhibitor (ACEi) or other ARB.

Entresto is contraindicated in patients with a hypersensitivity to any component of the drug, history of angioedema related to a previous ACE inhibitor or ARB therapy, concomitant use with ACE inhibitors, or concomitant use with aliskiren (Tekturna) in patients with diabetes.

The typical starting dose of Entresto is 49/51 mg (sacubitril/valsartan) twice daily. Reduce the starting dose to 24/26 mg twice daily for patients who have not previously taken an ACEi or ARB, or who were on a low dose, for patients with severe renal impairment, and for patients with moderate hepatic impairment. In any case, double the dose of Entresto after two to four weeks to the target maintenance dose of 97/103 mg twice daily, as tolerated. If a patient is being switched from an ACEi to Entresto, there should be a 36-hour wash-out period between the administrations of the two drugs due to the increased risk of angioedema.

Observe patients receiving Entresto for signs and symptoms of angioedema and hypotension. The most common adverse reactions are hypotension, hyperkalemia, cough, dizziness, and renal failure. In patients who are elderly, volume depleted (including those on diuretic therapy), or have compromised immune function, concomitant use of non-steroidal anti-inflammatory drugs (NSAIDs), including COX-2 inhibitors, with Entresto may result in worsening of renal function, including acute renal failure. As with other blood pressure medications, renal function and potassium levels should be monitored for all patients.

For more information on Entresto, please visit www.entresto.com.