Transition from Hospital to the LTC Facility: Preventing Medication Errors to Reduce Risk of Hospital Readmission

Transition from the hospital to the long-term care (LTC) facility can be a period of time when the resident is at greatest risk for medication errors. Caregivers are often working without complete information concerning the resident’s medications provided in the hospital or previous care setting. Lack of communication, documentation, and errors in transcription can lead to medication discrepancies, which often result in medication errors.

According to the Institute for Safe Medication Practices, error rates as high as 21% have been reported during transitions between the hospital and nursing home and over 50% of these errors are serious, life-threatening, or fatal. The Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 recognizes the significance of medication errors during transition and requires implementation of a quality measure domain for medication reconciliation to reduce medication errors, adverse drug events, morbidity and mortality, and avoidable hospitalizations. In addition, CMS recently released the final rule Reform of Requirements for Long-Term Care Facilities, which states medication reconciliation is to be included as part of the discharge summary that must be provided when a resident requires transfer to another care setting.

Errors that occur during transition are frequent and many times include high alert medications, resulting in an increased risk for harm. In July 2015, CMS released an Adverse Drug Event Trigger Tool to help identify medications at high risk for error. The wrong drug, wrong dose, drugs with look-alike names, and medications requiring frequent dose adjustments are among the most frequently identified errors. Below are some strategies to help identify and prevent medication errors during transitions of care.

• Reconcile medications that residents were receiving before hospital admission with new medications ordered at discharge. Review and compare medications for duplication, change in dose/frequency, or differences in the drug form (i.e. extended release versus immediate release).

• Do not accept “continue previous orders” as valid orders on admission. Prescribers should provide a new order.
for each medication to be initiated upon admission.

- **Verify the admission orders with the LTC provider**, paying attention to medications typically used only in hospital settings. Read back the full set of medication orders to the physician, including the dose and frequency, to verify accuracy.

- **Verify doses** of medications that often require dose adjustments (i.e., insulin, warfarin, antibiotics).

- **Verify “stop dates”** for medications such as anticoagulants (i.e., warfarin, rivaroxaban, enoxaparin), antibiotics, GI medications (i.e., PPIs), and anti-psychotics ordered in the hospital for delirium.

- **Identify unnecessary medications** by preparing a list of medications that may be unintentionally continued, but not often needed, after hospitalization (i.e., GI prophylaxis agents, sedative/hypnotics, anti-psychotics, anxiolytics, electrolyte supplements). Provide the list to nurses verifying the admission orders and educate staff regarding unnecessary medications.

- **Ensure appropriate lab monitoring** is ordered. In particular, watch for high alert medications, including anticoagulants (i.e. warfarin and enoxaparin) which require additional monitoring. Also, patients on insulin require more blood glucose checks and those on broad-spectrum antibiotics may need a Culture & Sensitivity.

- **Request the medication list early** to allow several hours before the resident’s arrival. This will provide enough time for medication reconciliation, obtaining controlled substance prescriptions, and receiving first dose medications in a timely manner.

- **Provide feedback to the hospital**. Take the time to document and report discrepancies in discharge summaries, medication reconciliation forms and duplication of therapy to the transferring hospital. This will support improvement in the process of discharge coordination between the hospital and nursing home.

- **Consider requesting an interim medication regimen review (iMRR)** from the pharmacy upon resident admission to identify potential medication-related problems early, including discrepancies with high alert medications and appropriate monitoring.

Reducing medication errors related to transitions of care will help reduce adverse drug events, lower morbidity and mortality, and decrease avoidable hospitalizations. Improving communication and implementing strategies to reduce or avoid medication errors during transition will enable your facility coordinate better care for the residents we serve.

More information on transitions of care will be available for CE for nurses and nursing home administrators for free at the 2017 PharMerica Geriatric Clinical Symposia. Ask your Account Manager for more details.

For more information on the IMPACT Act of 2014, CMS Reform of Requirements for Long-Term Care Facilities and CMS Adverse Drug Event Trigger Tool, please visit the following links:

https://www.gpo.gov/fdsys/pkg/BILLS-113hr4994enr/pdf/BILLS-113hr4994enr.pdf

For more information and resources on transitions of care and medication reconciliation, please visit the following links:

http://www.ihi.org/Topics/ADEsMedicationReconciliation/Pages/default.aspx
Antibiotic Resistance

Antibiotics have revolutionized medicine in many respects since the discovery of penicillin in 1928. Today, however, the emergence of drug resistance in bacteria may be compromising the progress of the past eighty years. Antibiotic resistance occurs from mutations or acquisition of new genes in bacteria that reduces or eliminates the effectiveness of antibiotics. The bacteria that survive antibiotic treatment continue to multiply with resistance to that antibiotic and may eventually cause more harm. Each year in the United States, approximately two million persons become infected with antibiotic-resistant bacteria and at least 23,000 persons die as a result of these infections. The cost of antibiotic resistance to the U.S. economy is an estimated $20 billion annually in excess direct health care costs.1

Bacteria that are resistant to several antibiotics, or multi-drug resistant organisms (MDROs), are often resistant to multiple classes of antibiotics substantially limiting treatment options. MRSA (Methicillin-Resistant Staphylococcus aureus) and VRE (Vancomycin-Resistant Enterococcus) are two of the more familiar MDROs. MDROs can represent an infection or colonization. Colonization means that the organism can be found on the body but it is not causing any symptoms or disease. Typically, colonization does not require treatment. Colonizing strains can cause infections if they gain access to body sites that are usually sterile like the bladder, lungs, or bloodstream. Infections are usually associated with symptoms which vary based on the site that is infected (i.e., cough with lung infections, urinary symptoms in bladder infections) and often cannot be differentiated from a susceptible infection based on clinical presentation alone. Infections caused by some MDROs are associated with high mortality rates, up to 50% in some studies.

There are several things healthcare providers can do to prevent the spread of drug resistance in a healthcare facility, including:

- Choose antibiotics wisely to reduce unnecessary antibiotic use
  - Only prescribe antibiotics when they will be beneficial to the patient (e.g. treating an active infection)
  - Target the likely pathogen as specifically as possible to reduce promotion of resistance
  - Avoid overlaps in antibiotic prescription – it is usually unnecessary to give two antibiotics to treat the same bacteria
  - Never treat viruses (like the common cold or influenza) with antibiotics

- Start or expand an antibiotic stewardship program in the facility. PharMerica will have a supportive program to help with this in 2017.
- Implement infection control precautions when MDRO infection is detected
  - MDRO may survive on environmental surfaces and medical equipment including pulse oximeters, EKG leads/wires, glucometers, and blood pressure cuffs if they are not cleaned and disinfected. For example, VRE can live up to 4 months, and MRSA can live up to 10 months on these surfaces
- Assure that all medical providers are knowledgeable about appropriate antibiotic use, antibiotic resistance, and adverse effects
- Be familiar with resistance trends in your region by contacting your local hospital for their annual antibiogram.

References:

Avoiding pharmacy related F-Tag deficiencies in the LTC setting takes a team effort between the skilled nursing facility, the pharmacy and the physicians. State and Federal scrutiny has never been higher, therefore we must develop and execute plans that entail the best of care for our residents. It is very important for everyone to remember that regulations (State and Federal) are the minimum standards and the facility should always strive for levels above this minimum. Let’s take a look at some of the steps necessary to help your facility avoid pharmacy related F-Tag deficiencies.

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First, knowledge of the regulations can help in several ways. All processes established by your leadership team, from the time of admission through discharge should comply with the current regulations and every staff member should have training in these regulations. If the processes you have in place comply with regulations, half of the battle has already been won. Second, by knowing the regulations, you can deter possible F-Tag deficiencies with the surveyors before they leave your facility. You should never let a state or federal surveyor finish their exit with issues that you know are not accurate when it comes to regulations. Once the deficiency hits the 2567, it is more difficult to get that deficiency taken off through the IDR process. If you are unsure of certain regulations, remember that you have a team of experts that can help, including your Consultant Pharmacist, Customer Field Services, Pharmacy Directors and Account Managers. Please do not hesitate to call.

Next, knowing the Nursing Center Policy and Procedures (P&Ps) is very important as these set the stage for how your team will function on a daily basis. For example, a nurse passing meds can be doing the job correctly in terms of regulatory compliance, but if they are not following the P&Ps, your facility may be cited with an F-Tag deficiency. Every staff member that has any part in pharmacy related services, from ordering and storing meds to dispensing meds, should become familiar with the most current P&Ps and have periodic training concerning the P&Ps. Now that the P&P manual is available electronically via ViewMasteRx, you should ensure that all pertinent nursing staff are able to access this manual at any time – sign-on privileges should be assigned and maintained.

Finally, there are several committee meetings that must take place quarterly or yearly. These include committees for patient care policy, infection control and pharmaceutical service. In addition, there are QAPI committees, IDT committees and various other committees. These are not only required by regulation, but are of extreme benefit to your facility. These committees are responsible for the inner workings of every aspect of pharmacy services. A well executed QAPI meeting can set the stage for moving your team forward toward delivering the highest level of care possible.

In summary, knowing the regulations that govern our industry, knowing the P&Ps that help guide your staff on a daily basis and then holding various committee meetings to set, review and enhance your staff’s performance all work together to decrease your facility’s risk for pharmacy related F-Tag deficiencies.
XIFAXAN (rifaximin), an antibiotic used for multiple indications, was FDA approved for patients with liver disease in 2010, and received further approval for Irritable Bowel Syndrome-D patients in 2015.

XIFAXAN has 3 FDA approved indications:

1. Reduction in risk of overt hepatic encephalopathy (HE) recurrence in adults
2. Treatment of irritable bowel syndrome with diarrhea (IBS-D) in adults
3. Treatment of traveler’s diarrhea (TD) caused by noninvasive strains of E. Coli in adults and pediatric patients 12 years of age and older

XIFAXAN should not be used in patients with diarrhea complicated by fever, blood in the stool, or diarrhea due to pathogens other than E. coli.

XIFAXAN has poor bioavailability in patients with normal hepatic function. XIFAXAN has increased bioavailability in patients with Child-Pugh Class C dysfunction in Hepatic encephalopathy, and should be used with caution in this patient population.

XIFAXAN has restrictive dosing recommendations, and should only be used for the dosage and duration listed in the package labels:

**Traveler’s Diarrhea:** One 200mg Tablet 3 times a day for 3 days

**Hepatic Encephalopathy:** One 550mg tablet 2 times a day. A supporting clinical trial evaluated efficacy over a 6-month treatment period for this indication only.

**Irritable Bowel Syndrome-D:** One 550mg tablet 3 times a day for 14 days. Patients who experience recurrence can be retreated up to two times with the same regimen.

Limited evidence exists for the off label treatment of recurrent Clostridium difficile infections. Most experts recommend prolonged therapy with vancomycin for a second recurrence of C. diff infection. There is greater debate about the best therapy for additional relapses. One option is vancomycin followed by XIFAXAN. Although included in the SHEA/IDSA guidelines as an alternative, there is no specific recommendation for therapy. Use of XIFAXAN for overt hepatic encephalopathy episodes has been substantiated by inclusion in the guidelines from the American Association for the Study of Liver Diseases. This inclusion must be utilized as guidance for consideration of utilization of XIFAXAN rather than a recommendation.

XIFAXAN should be administered at the same time every day, with or without food. No dosage adjustments are needed for patients with renal impairment. Caution should be used in patients with Child-Pugh Class C hepatic impairment.

For more information on XIFAXAN, visit www.xifaxan.com.