Pharmacists take aim at med errors during care transitions

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Government mandates and increasingly complex patient medication regimens are fueling a need in hospitals for medication reconciliation systems that will provide close and thorough review of patients’ drug lists upon admission, transfer, and discharge, in order to prevent inconsistencies or errors across transitions of care.

Error prevention

The subject is not new to healthcare institutions. Medication errors, including those resulting from unsuccessful medication reconciliation, have come under increasing scrutiny for more than a decade and continue to be a persistent problem.

“Preventing Medication Errors,” a report published in 2006 by the Institute of Medicine (now the National Academy of Medicine), said the average hospitalized patient is subject to at least one medication mistake per day, putting drug errors at the head of the list for patient safety errors.

A study published in The Joint Commission Journal on Quality and Patient Safety in 2004 found that more than 40% of medication errors were believed to result from inadequate reconciliation in handoffs during admission, transfer, and discharge of patients. Of these errors, approximately 20% were believed to result in harm.

The Joint Commission made medication reconciliation a National Patient Safety Goal in 2005, and meaningful use requirements include a medication reconciliation mandate.

Industry insiders suggest that one way to prevent medication errors is for healthcare organizations to make it a priority to develop, implement, and sustain effective medication reconciliation practices.

State of the art

Hospitals and health systems are turning to state-of-the-art reconciliation systems.

Munroe Regional Medical Center in Ocala, Fla, has adopted the MedsTracker MedRec system from First Databank. So far, the program has been well received by the medical, nursing, and pharmacy staffs.

David Willis, MD, chief medical information officer, said users have found the system very intuitive. “On admission, we have benefited from a couple of the key features from the MedsTracker app. We’ve been able to pull information from the community when a patient may not remember all of his meds — we can find some lists within the community so we can at least have a conversation [with the patient],” said Willis.

Another beneficial feature, he said, is system groups. Providers can easily compare the patient’s home medication list to the list of hospital medications, as the lists are presented side-by-side and delineated by color.
Willis noted that his facility met Stage 2 Meaningful Use on all measures after using the system for only 11 days.

“The system itself draws people along to better practice and behavior in doing the right thing, because it’s easier to do the right thing,” Willis said.

Flexible interface

Dewey Howell

Dewey Howell, MD, PhD, vice president of clinical applications, First Databank, said that customers want a med rec system that integrates with many data sources. Among the challenges in medication reconciliation, according to Howell, is getting a good, “clean” list of medications. When patients don’t know what 20 medicines they are taking, it is difficult to gather and document data. “To make that work, you not only have to integrate it into the doctors’ workflow, you have to bring as much data together as you can and present it in a usable way. We have a commitment to integrate data sources and pull disparate data sources together,” he said.

He pointed out that over the last decade in particular, the growing complexity of healthcare and hospital medications has been driving the need for more efficient ways to reconcile medications.

For example, in the past a hospitalized patient with pneumonia would stay in the hospital for three days with antibiotic treatment. That doesn’t happen anymore, because the condition is now treated at home. Instead, patients who come into the hospital have multiple issues.

“Patients are on complicated med regimens and have several diagnoses. The complexity of healthcare has gone up tremendously — particularly hospital medicine,” said Howell.

Another challenge is related to complex care teams. For instance, in the past the physician who saw the patient in the clinic would go to the hospital and take care of that patient. The physician knew everything about the patient, and there was no gap or miscommunication.

Medicine doesn’t work that way today, said Howell. The physician caring for the patient in the hospital often is not the one from the clinic. Today, a complex care team composed of physicians, nurses, pharmacists, and care managers is the norm.

Piloting a new system

Louisiana-based Ochsner Health System is using the MedMined Surveillance Advisor from BD (Becton, Dickinson and Company) in a pilot program expected to go live this month at 12 hospitals.

“We plan to use technicians on admission to review the meds with the patient. The technician will look at a 365-day review of where the patient has filled meds and interview the patient. The pharmacist will oversee and check off the final med list,” said Debbie Simonson, PharmD, vice president of pharmacy services. “One of the reasons why I went with this product is because it can give me 92% of the data for a full medication review,” she added.
“The MedMined team also gave us the opportunity to request builds to improve the tool. When I can partner with a vendor that is willing to listen and improve their product, we end up with better tools and a better partner for future projects.”

Ochsner plans to use the med rec system in-house to ensure that hospital medications that the patient did not take before admission are included before discharge.

Admission and discharge

Simonson noted that the Ochsner pharmacy team has a defined medication review process for patients on admission to the hospital.

“This review now falls to the physician and nurse. Our goal is to complete that review with our team. We will use a technician to complete the history and a pharmacist for final approval. A comprehensive medication history can take 15 to 30 minutes. Our plan is to use the MedMined tool in this process to help streamline the workflow process,” she said.

The Ochsner pharmacy team also will handle the medication review process at discharge. According to Simonson, this comprehensive review will take into account the active medication refills the patient had upon admission, so that if medications are discontinued, the pharmacist can ensure their termination. If a prescription has been changed, the pharmacist will ensure, as an agent of the provider, that the discontinued prescription has been discontinued with the retail pharmacy, so that the patient does not continue to get that discontinued medication.

Upon discharge, if a patient has been prescribed any new medications in the hospital, the pharmacist will review the order to make sure the medications are covered on the patient’s insurance and are affordable. “If they are not, the pharmacist will work with the provider to change the prescriptions before they leave,” said Simonson. “The pharmacy team will also offer to fill those new medications before they leave the hospital. Patients who need assistance are referred to outpatient assistance programs,” said Simonson.

The team will use the MedMined tool to help streamline this workflow.

The staffing models in the 12 hospitals that compose the Ochsner system vary by hospital. Each hospital will pilot defined processes, and each site will target defined populations or areas, depending on its staffing and support. The goal will be to expand this process to all patients, said Simonson.

“The pilot will help determine what resources are needed. My hope is, we can support hospitals from a centralized point to cover verification of orders, to ensure that the local team has manpower to do these tasks at the hospital.”

Pharmacists’ role

Simonson said that some of the system’s hospitals have an extensive number of clinical pharmacists already rounding with the teams who will be able to cover 80% of patients. However, some of the smaller hospitals have limited staff. According to Simonson, those hospitals will have to decide which patients to target first. “My goal will be to figure out how to support those sites so they can complete this task. “

The plan, she said, is to maximize the organization as a system, while doing what is needed to support the different sites.
“We feel that this task is one that needs to be local. So what can I do for them centrally that can support them locally? We are doing things with medication management review that we may do from a centralized location for all areas, like priority clinic support. We will use MedMined for that too.”

Ochsner’s goal is to provide the best quality care in an affordable manner, Simonson said.

“As a system we will take advantage of any centralized function to support the hospitals for tasks or work that must be done at the site. So if a pharmacist needs to do discharge counseling and med review from 1 p.m. to 3 p.m. at a site, we can help support that hospital with centralized verification during that time,” Simonson said.

The Ochsner pharmacy team is planning other ways to support providers, whether from centralized locations or by means of telepharmacy.

“Our strategies for the coming years include telepharmacy activities. We want the correct pharmacy expertise available to all sites for the specific function needed. So if a critical access hospital needs to speak to an infectious-disease-trained pharmacist, they will have that access,” Simonson said.

The MedMined tool, Simonson said, will show where a prescription was filled. “If we need to contact that site for the patient, we will have that ability.”

Readmission issues

Readmission penalties are another factor forcing hospitals to incorporate pharmacists into aggressive medication reconciliation strategies.

Vikas Gupta “The skill set is there, and what we’re seeing is a lot more pharmacists and pharmacy techs getting involved,” said Vikas Gupta, PharmD, director of clinic strategy at BD MedMined services.

Historically, medication reconciliation strategies have focused on addressing the inpatient setting, medication stewardship, antibiotic stewardship, and anticoagulation.

“What we wanted to do is link both the inpatient and outpatient settings. Healthcare has changed. Readmission penalties have put a greater focus on the ambulatory setting. Instead of the term med rec, we use more clear transitions,” said Gupta.