By Ronda K. Lehman, PharmD, MBA

HealthCare System's Medication Reconciliation Solution

ST. RITA'S MEDICAL CENTER IS A 450-BED, ACUTE CARE, NON-PROFIT MEDICAL center in Lima, Ohio, approximately one hour north of Dayton. We have been striving to improve our medication reconciliation process across the continuum of care. We have made major changes in how the admission medication information is documented and communicated to all health care providers at St. Rita's. In addition, we have developed new forms and processes to communicate information at transfer and at discharge, including discharge to other facilities. While this is still a very complex problem, there is now a great deal of literature, sample forms, and discussion surrounding these particular aspects of medication reconciliation. There are a number of resources detailing best practices and electronic solutions available to guide any facility that has not yet established their own process for medication reconciliation.

Even with all of the literature available and new processes in place, we still found a major gap in performing a safe medication reconciliation process for our patients at the time of admission. Our practice had always been to rely on the patient and/or family members for accurate and complete medication information. However, if this information is not accurate, it often leads to problems that perpetuate throughout our system. Issues occured when patients provided incorrect dosing information and/or drug names, and when patients were unable to provide any information concerning their current medications. These factors contributed to several medication errors.

FOR REFERENCE ONLY
NOT TO BE USED AS ORDER FORM!

(Place Label Here)

St. Rita's Medical Center

Patient Name: DOE, JANE | DOB: 7/12/67 | Room: 2W-201-A
Allergies: | Account #: 895134 | Age: 39 years

HOME MEDICATION RECONCILIATION WORKSHEET

Please refer to the information below to complete the home medication section of the assessment

Remember to include all medications, herbals, vitamins and over-the-counter medications

Medication Strength (PRINT ONLY)	Directions: Dose	Route	Freq	Qty Days Supply	Original Last Fill	# of Fills	Poss Non Comp*	Prescriber
LISINOPRIL 20 mg				30 30	8/10/06 11/10/06	3	Y	Jones, Sam MD.
TRIAMTERENE HYDROCHLOROTH 37.5-25 mg				30 30	8/10/06 11/10/06	3	Y	Smith, John MD.
AVANDIA 4 mg				60 30	8/10/06 11/10/06	3	Y	
ALBUTEROL 90 mcg/Actuation				17 15	10/20/06 10/20/06	1		Jones, Sam MD.
NASONEX 50 mcg/Actuation				17 30	9/11/06 10/11/06	2		Smith, John MD.
SINGULAIR 10 mg				30 30	8/6/06 10/11/06	2	Y	Smith, John MD.
RANITIDINE HCL 150 mg				60 30	8/6/06 10/11/06	2	Y	Jones, Sam MD.
DOXYCYCLINE HYCLATE 100 mg				20 10	8/31/06 8/31/06	1		
CEPHALEXIN 500 mg				30 10	8/25/06 8/25/06	1		

This report is not intended to be all inclusive. Certain information may not be available or accurate (such as low cost prescriptions, OTC's, Cash-Pay or Non-participating insurance information).
Clinicians should always independently verify medication history with the patient

Upon admission, an HL7 admission transaction generated by the hospital's native information system notifies the HCS Medication Reconciliation server to initiate a query. Within minutes, a medication history summary containing up to 12 months of patient-specific drug history, such as the one pictured above, is directed to the admitting clinician.

While there are a variety of tools and systems available to assist caregivers in gathering and communicating medication information, few vendors have attempted to address the need to obtain an accurate history at the time of admission. When we heard about HealthCare Systems' Medication Management software, described as a system through which a patient's home medication list could be more accurately obtained, we believed it would be worth pursuing.

How It Works

HealthCare Systems (HCS) contracts with third-party payers to create a master database of prescription information, including the drug name, instructions, the quantity, the fill date, the prescriber, and the filled-by pharmacy. By creating a simple interface between this database and St. Rita's admitting system for patient admission information, HCS can search for our patients' recent medication information. The database is continuously updated with current information. Within seconds of admission, outpatient medication information can print to any designated network printer. Currently, we have designated printers for all inpatient nursing units and ambulatory care centers. We decided to review prescription information from the past six months; however, HCS can retrieve data from as far back as 12 months. The applicability of information available in the database is dependent on the patient-payer mix at our facility and the third parties contracted to provide information to HCS' database. Due to this variability in the number of patients with data in the system, HCS charges are based on the number of "hits" (defined as patients with information in their database) that occur.

St. Rita's had already invested a considerable amount of time and energy in developing a Cerner PowerChart template used to record home medication information. Instead of replacing that process, we opted to instruct end users to use the information found in HCS as a guide when collecting accurate home medication information with the PowerChart form. After the data collection is completed, this information is placed under the "medications" section of the medical record for future reference.

We first went live with the HCS Medication Management software in our emergency department. It was a very transparent process, and did not interrupt workflow in the department. Within hours of using the system, we encountered several case reports for which the HCS system provided additional data that we did not previously have access to. In one example, the parent of a pediatric patient was unsure of the name of the eyedrops the child was currently using. HCS had this information in their database, and the profile printed immediately in the nurses' station. A second patient came in with a chief complaint of depression, not reporting any antidepressant prescriptions. However, the patient information generated showed that her Prozac prescrition had not been refilled for several months. In addition, this information can also be of great benefit if the patient is unable to provide any information or arrives as a full code.

While this system is not to be viewed as a replacement for a thorough patient interview, having an additional reference for medication information can be extremely beneficial. Keep in mind that patients may have changed places of employment, impacting their prescription provider and the data in the system. The HCS database is certainly a helpful tool, but all of these factors need to be weighed when gathering this initial information from the patient or caregiver. Our future plans for HCS include working with the company to ensure that we are maximizing the number of patients with available data and, most importantly, emphasizing with our staff the importance of using this information during the initial assessment. ■

Currently the director of pharmacy at St. Rita's Medical Center in Lima, Ohio, Ronda K. Lehman, PharmD, MBA, received her BS in pharmacy from Ohio Northern University, her doctorate of pharmacy from the Ohio State University, and her MBA from Tiffin University, also in Ohio.

WHERE TO FIND IT:

HealthCare Systems, Inc. ....**Circle reader service number 2**
or visit www.hcsinc.net