Health Data MANAGEMENT

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Providers Use Technology For Medication Reconciliation

By Beckie Kelly Schuerenberg

On Jan. 1 of this year, hospitals were supposed to have implemented medication reconciliation processes to collect and compare patient medication information or risk losing their accreditation from the Joint Commission on Accreditation of Healthcare Organizations. Nearly a year after the deadline, at least 25% of hospitals haven't yet complied with the patient safety requirement, estimates Richard J. Croteau, M.D., executive director for patient safety initiatives at JCAHO.

To comply, hospitals must have processes in place for the five steps of medication reconciliation, which include developing a list of patients' current medications; developing a list of medications that will be prescribed; comparing the two lists; making clinical decisions based on the comparison; and communicating the new list to patients and caregivers.

Implementing these processes has posed a daunting challenge for many organizations, Croteau says.

"It's a burden to reconcile medications because it hasn't been done before and you often need to start at the beginning each time a patient comes in," he says. But many organizations that have succeeded in meeting the Joint Commission's requirements have found that using I.T. to support medication reconciliation processes has lessened that burden, Croteau adds. "Medication reconciliation is really an information management requirement," he says. "If hospitals have good I.T. to support their processes, they will be more efficient, the information will be more readily available and there will be less chance of error."

Earlier this year, Middletown (N.Y.) Community Health Center implemented Web-based software from New York-based MediModules Inc. that automates the medication reconciliation process, enabling providers to see each step from any computer with Internet access. It also triggers alerts when a patient's newly prescribed medications are duplicated or could cause an allergic reaction.

Additionally, it enables users to analyze data to determine how many and what kind of changes were made as a result of the alerts.

"Using technology for medication reconciliation is a step in the right direction because it can help remove errors," says Theresa Maloney, CEO. "It really helps us improve care quality."

Despite such touted benefits, medication reconciliation information systems can be challenging to deploy without clinician buy-in, says Croteau at JCAHO. Organizations that involve clinicians in choosing or creating such systems have a better chance of adoption, he adds.

"Technology for medication reconciliation has to be implemented in a way that doesn't increase user burden," he says. "So it's going to require a lot of trial and error to get clinicians to use it."

Even large academic delivery systems often must entice clinicians to use I.T. for medication reconciliation.

For example, Partners HealthCare, Boston, is enhancing its homegrown medication reconciliation system to increase clinician buy-in. The delivery system deployed the software at its two hospitals last summer but is planning application and workflow adjustments to gain more acceptance for it in the emergency and surgical departments, says Carol Broverman, corporate manager, medical informatics and decision support. These departments in particular have found that using the system can slow down their work processes because it requires them to complete a step that they hadn't done as rigorously as they should have, she explains.

Prior to deploying the software, medication reconciliation was an informal process at Partners. Now clinicians must create an automated patient medication list from patient interviews or via their chart in the delivery system's homegrown electronic records system.

"We built a common piece of software that each organization has integrated slightly differently into their ordering workflow that enables users to electronically document and import patient home medication data from our other information systems," she says. "But we're finding special training and considerations must be made for users in our specialty areas because of unique workflow challenges affecting compliance."

The delivery system plans to enhance the system by integrating it with Partners' pharmacy and claims systems. Further, Partners plans to integrate drug database software from First DataBank Inc., San Bruno, Calif., with its homegrown application to help clinicians better reconcile medications.

The delivery system's software now requires manual comparison of existing and newly prescribed patient medications because its two hospitals use varying terminology for many drugs, Broverman explains. The vendor's software will be used as a translation layer to enable automated comparisons, she adds.