E-health records should play bigger role in patient safety initiatives, researchers advocate

July 19 2011

Patient safety researchers are calling for the expanded use of electronic health records (EHRs) to address the disquieting number of medical errors in the healthcare system that can lead to readmissions and even death. Their commentary is in the July 6 issue of *JAMA*, The *Journal of the American Medical Association*.

"Leading healthcare organizations are using electronic health records to address patient safety issues," said Dean Sittig, Ph.D., co-author and professor at The University of Texas Health Science Center at Houston (UTHealth) School of Biomedical Informatics. "But, the use of EHRs to address patient safety issues hasn't hit the mainstream yet and we think everyone should be doing this."

One way to fast-track the use of EHRs to address patient safety issues would be to incorporate the annual patient safety goals of The Joint Commission, a healthcare accreditation organization, into the criteria for the certification of EHRs, said co-author Ryan Radecki, M.D., who is scheduled to join the UTHealth faculty Aug. 1.

The Joint Commission's 2011 National Patient Safety Goals include identifying patients correctly, getting test results to the right staff person at the right time, making sure medications are labeled correctly, checking medications for possible adverse reactions, preventing infections and identifying patients at risk of suicide.

"The implementation of electronic health records may do more to improve the quality and safety of care in hospitals than almost any other initiative," said M. Michael Shabot, M.D., chief medical officer for the Memorial Hermann Healthcare System.

In the Memorial Hermann Healthcare System, caregivers use bar code scanners – much like the ones employed by store clerks to price products – to ensure that patients get the right medications.

"We have bar codes on our medications," Shabot said. He also noted that there are bar codes on patients' wristbands. "Before a nurse gives a medication, he or she takes a portable scanner and positively identifies both the patient and the medication. If there have been any changes in the patient's electronic health record such as new lab work that might advise a change in the medication, or not giving it at all, the nurse will be notified," Shabot said.

Likewise, UT Physicians, the medical group practice of UTHealth, use an electronic health record to help meet The Joint Commission safety goals.

Eric Thomas, M.D., M.P.H., holder of the Griff T. Ross Professorship in Humanities and Technology in Health Care at the UTHealth Medical School and director of The University of Texas Memorial Hermann Center for Healthcare Quality and Safety, said, "Electronic prescribing is convenient and reduces errors when I prescribe a medicine and when the pharmacist reads the typed (instead of handwritten) prescription. In addition, our electronic record notifies me when lab results are back and I can easily write a test result letter to the patient."

Another example of using an EHR to enhance patient safety would be a mechanism requiring doctors to acknowledge that they have received a test result and a method for tracking their follow-up actions. "This way,

you know the doctor has received the information and has had an opportunity to act on it," Sittig said.

"Although EHRs by no means represent all necessary mechanisms to address critical safety problems, they can provide tools to help organizations improve their performance," wrote the authors in the commentary.

The commentary is titled "Application of Electronic Health Records to the Joint Commission's 2011 National Patient Safety Goals."

Provided by University of Texas Health Science Center at Houston