Survey Finds Low Use of EHRs by Hospitals

BY MARY ELLEN SCHNEIDER

Less than 11% of U.S. hospitals have a "basic" electronic health record system operating in at least one major clinic unit, study results showed.

Even fewer hospitals have a "comprehensive" EHR system operating in all major clinical units, the survey found (N. Engl. J. Med. 2009;360:1628-38).

The findings shed light on the use of health information technology at a time when the federal government is directing billions of dollars in incentives to physicians and hospitals to begin using those systems to improve quality and cut costs.

Among hospitals without EHR systems, 74% cited inadequate capital for purchase, 44% had concerns about maintenance costs, and 32% were wary of the unclear return on investment.

The results are based on a 2008 survey of nearly 3,000 nonfederal acute care general hospitals in the United States.

About 1.5% of hospitals met the definition of a comprehensive EHR system, meaning that they have implemented 24 functions—such as clinical documentation, test and imaging results, computerized provider-order entry, and decision support elements—across all major clinical units in the hospital.

Basic EHR systems, on the other hand, are defined as having at least eight functions that had been implemented in at least one major clinical unit in the hospital. Those systems do not include clinical decision support and have fewer results-viewing features and computerized order entry functions than do the comprehensive systems. About 7.6% of hospitals have a basic system that includes functionalities to allow for physician notes and nursing assessments, and 10.9% of hospitals have a basic system that does not include clinician notes.

The comprehensive record definition should serve as a goal for all hospitals, while the basic system standard represents the minimum level of functionality needed to help clinicians improve quality of care for patients, said Dr. Ashish Jha of the Harvard School of Public Health, Boston, and the lead author of the study.

Despite the low rates of adoption of full EHR systems, there is some good news in the survey, Dr. Jha said. Some key functions, such as computerized provider-order entry and test and imaging results–viewing functions, are being used at higher rates than the overall adoption figures reflect. For example, computerized provider-order entry for medications has been implemented across all clinical units in 17% of hospitals. And more than 75% of hospitals reported implementing electronic laboratory and radiologic reporting systems in all clinical areas. "That suggests that we have a good place to start," Dr. Jha said. "Many hospitals have just not put it together in a way that really would help them deliver high-quality care."

The study was funded by the Robert Wood Johnson Foundation and the federal Office of the National Coordinator for Health Information Technology.

The study was conducted by researchers at Massachusetts General Hospital, the Veterans Affairs Boston Healthcare System, and the Brigham and Women's Hospital, all in Boston, and George Washington University in Washington. The researchers reported receiving consulting fees and grant support from UpToDate Inc. and GE Healthcare.

The goal of the survey was to establish a baseline for EHR adoption in hospital settings. Before the survey, published estimates of EHR adoption by U.S. hospitals ranged widely, from 5% to 59%, reflecting differing definitions of an EHR system, convenience samples, and low response rates.

Cost continues to be a significant barrier to the implementation of EHRs in hospital settings, the survey found. Among hospitals that had not implemented EHR systems, 74% cited inadequate capital for purchase of a system, 44% had concerns about maintenance costs, and 32% were wary of the unclear return on investment.

But responses from hospitals that had successfully implemented an EHR system indicated that financial incentives could spur adoption. About 82% of hospitals that had adopted EHRs said that additional reimbursement for the use of an electronic system could help, and 75% said financial incentives for adoption would be a positive step.

"This is really hard work," said John P. Glaser, Ph.D., vice president and chief information officer of Partners HealthCare System in Boston, which has put such advanced clinical decision support features as computerized provider-order entry into 11 of its hospitals and has implemented EHRs in outpatient settings for about 3,000 physicians.

The implementation of an EHR system in a large multihospital system can cost hundreds of millions of dollars, involves difficult work-flow and behavior changes for the staff, and requires sustained leadership, Dr. Glaser said. "These are not trivial undertakings," he cautioned.

Some hospitals may not have access to sufficient capital to purchase and implement a system, while others may be hesitant about their ability to recoup some of the costs. At Dr. Glaser's institution, they have worked with area managed care companies to build financial incentives into the contracts, so their physicians are more willing to adopt EHRs, he explained. ■

Hospitalized Patients Getting Hospitalist Care More Often

BY JOYCE FRIEDEN

Hospitalized elderly patients are receiving care from hospitalists more and more often, a study of Medicare beneficiaries has found.

"The odds that a hospitalized Medicare patient would receive care from a hospitalist increased by 29.2% per year from 1997 to 2006," Yong-Fang Kuo, Ph.D., of the University of Texas at Galveston, and colleagues wrote (N. Engl. J. Med. 2009; 360:1102-12). "Although the growth of care by hospitalists has been greater in large hospitals, teaching hospitals, and in certain geographic areas, substantial growth occurred in every area and type of hospital."

The researchers looked at Medicare claims data from a 5% nationwide sample of beneficiaries for 1995, 1997, 1999, and 2001-2006. They defined hospitalists as general internal medicine physicians who had at least five evaluation and management billings in a given year and generated at least 90% of their total evaluation and management billings in that year from services to hospital inpatients.

The number of hospitalists increased greatly during this period; hospitalists identifying themselves as general internists, for example, grew from 2,770 in 1995 to 13,466 in 2006. Hospitalists' career stability has also increased over time; while 33% of those identified as hospitalists in 1995 met that definition 2 years later, that percentage rose to 66% for those identified as hospitalists in 2004.

The percentage of hospitals with at least three hospitalists increased as well, from 12% in 1995 to 47% in 2006. In major teaching and nonteaching hospitals, the median numbers of hospitalists were 11 and 3, respectively, in 2006. Use of hospitalists varied greatly by region, with Medicare patients in New England nearly four times more likely to receive care from a hospitalist as patients in the mid-Atlantic region in 2006.

Dr. Win Whitcomb, cofounder of the Society for Hospital Medicine, said the study provided a good qualitative snapshot of the increase in hospitalists overall.

"Their analysis is very detailed and as rigorous as any I've seen," he said in an interview. "I think the numbers are going to continue to increase for an indefinite period of time."

He said he was not surprised by the regional variation the authors found in hospitalist care. Nationally speaking, "Health care's hallmark is wide degrees in variation, so I'm not surprised by this."

Not everyone is thrilled with the increase in hospitalist care. "Although hospitalists provide important benefits, their involvement disrupts the continuity of care provided by the patients' primary care physicians, resulting in potential adverse effects for both patients and doctors," Dr. Arnold M. Epstein of the Harvard School of Public Health, Boston, and his colleagues wrote in an editorial. "With the increasing burden of chronic illness and complexity of medical care, coordinating care across settings and providers has become especially important. When primary care physicians are not at the bedside of their acutely ill patients, valuable opportunities to deepen the patient-doctor relationship are missed" (N. Engl. J. Med. 2009;360:1141-3).

Furthermore, "there is little to suggest that the hospitalist movement has increased the attractiveness of primary care as a career," Dr. Epstein and colleagues continued. Hospitalists "may have reduced [primary care physicians'] own value in the eyes of their patients and, in some instances, decreased their job satisfaction." Although the authors note that hospitalists have played an important role in the area of transitioning patients to outpatient or home care, they urged greater use, where possible, of a model in which members of a primary care group practice rotate as the practice's inpatient attending physician.

But Dr. Whitcomb said that he has seen "rotator" models of hospitalist practice come and go over the years. "In that model, as a primary care physician you're in the hospital 1 week out of every 8. You can't become involved in the hospital system or become a leader in hospital improvement" if you're there so infrequently. In addition, "if you have a busy practice and go away every 6-8 weeks for 1 week, you come back and are overwhelmed with office work and administrative responsibilities."

And rather than detract from the attractiveness of primary care, "no primary care practice can effectively recruit without hospitalists," said Dr. Whitcomb, vice president for quality improvement at Mercy Medical Center in Springfield, Mass. Although the hospitalist movement was driven by primary care in its early days, today primary care physicians coming out of training are going into practices that are covered by hospitalists, he said.

One coauthor of the study, Dr. Gulshan Sharma, reported receiving lecture fees from Pfizer Inc.; the other study authors and editorial authors reported no conflicts of interest. ■

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