Adoption of EHRs by U.S. Hospitals Is Low

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, according to a survey.

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.

The results are based on a 2008 survey of nearly 3,000 U.S. nonfederal acute care general hospitals. 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 government's 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.

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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 workflow 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. ■

POLICY & PRACTICE

CDC Proposes New Vaccine Criteria

The Centers for Disease Control and Prevention is proposing new criteria for setting vaccination requirements for U.S. immigrants. Currently, those seeking entry to the country or wishing to change their legal status must receive vaccinations recommended by the Advisory Committee on Immunization Practices. This system created controversy last summer when the ACIP recommended vaccination against the human papillomavirus (HPV). Many groups, including the American College of Obstetricians and Gynecologists, objected that the vaccine is prohibitively expensive at $360 for the three-dose series. ACOG also argued that unlike other infectious diseases on the vaccination list, HPV doesn't pose an immediate threat to public health. Under the criteria proposed by CDC, a required vaccine must be age appropriate and recommended for the general U.S. population by ACIP. It also must protect against a disease meeting at least one of the following criteria: has the potential to cause an outbreak, has been eliminated in the United States, or is in the process of being eliminated here. CDC would continue to require that immigrants be vaccinated against mumps, measles, rubella, polio, tetanus, diphtheria, pertussis, *Haemophilus influenzae* type B, and hepatitis—but not HPV.

Bill Backs Better Biomarkers

Federal lawmakers have reintroduced legislation aimed at improving ovarian cancer screening. The Ovarian Cancer Biomarker Research Act (H.R. 1816 and S. 755) would authorize $100 million over 4 years for research into biomarkers that detect or indicate a woman's risk of ovarian cancer, fallopian tube cancer, and primary peritoneal cancer. The research would be conducted at centers of excellence around the country. The bill would also establish a committee to help design a large clinical trial of such biomarkers. The bill is sponsored by Rep. Howard L. Berman (D-Calif.) in the House and Sen. Barbara Boxer (D-Calif.) in the Senate.

HIV Bill Would Expand Medicaid

House Speaker Nancy Pelosi (D-Calif.) and a bipartisan group of representatives are seeking to allow low-income individuals with HIV to enroll earlier in Medicaid. Rep. Pelosi, Rep. Eliot Engel (D- N.Y.), and Rep. Ileana Ros-Lehtinen (R-Fla.) recently reintroduced the Early Treatment for HIV Act (H.R. 1616). The bill is modeled after a law that provides early access to Medicaid for women with breast or cervical cancer. The HIV bill failed to make it out of committee in the previous Congress. But the chances for success for greater this time around, according to Speaker Pelosi, given the bipartisan support for the legislation and President Obama's support of the concept.

Bill Seeks Payment Floor for Tests

Ob.gyns., rheumatologists, endocrinologists, and others are throwing their support behind federal legislation that would establish a payment floor for dual-energy x-ray absorptiometry (DXA) and vertebral fracture assessment (VFA). The "Medicare Fracture Prevention and Osteoporosis Testing Act of 2009" (S. 769, H.R. 1894), would mandate payments not less than the 2006 Medicare rates for these services (CPT codes 77080 and 77082, respectively). The legislation would counteract deep Medicare payment cuts for the services that began in 2007. The new bill is supported by the DXA Task Force, which includes ACOG, the National Osteoporosis Foundation, the American Association of Clinical Endocrinologists, and the American College of Rheumatology.

Awareness Campaign Targets AIDS

The federal government plans to spend $45 million over the next 5 years on a new public-awareness campaign to fight growing complacency about HIV/AIDS in the United States. The effort, called Act Against AIDS, will include public service announcements, online communications, and targeted messages to African Americans, Latinos, and other groups that are disproportionately affected by HIV/AIDS. "Act Against AIDS seeks to put the HIV crisis back on the national radar screen," Melody Barnes, director of the White House Domestic Policy Council, said in a statement. "Our goal is to remind Americans that HIV/AIDS continues to pose a serious health threat in the United States and encourage them to get the facts they need to take action for themselves and their communities." More information on the campaign is available at www.cdc.gov/hiv/aaa.

EHR Applications Rise

By a March 31 deadline, 64 companies applied for certification of their electronic health record (EHR) products, one-third more than applied by the same time last year, the Certification Commission for Healthcare Information Technology reported. In addition, nearly 40% of the applications were for new EHR products, rather than renewals, according to the federally recognized commission. Nearly two-thirds of the applicants qualified as small businesses, the commission noted. The biggest category of applications, including 26, was for EMR products concerning health records for children. Other applications covered cardiovascular medicine, emergency departments, and inpatient records. So far, 25 of the products have been certified, the commission said.

—Mary Ellen Schneider