Hospitals Slow in Adoption of Electronic Records

Survey of 3,000 acute care hospitals shows about 1.5% meet definition of comprehensive system.

BY MARY ELLEN SCHNEIDER

ewer than 11% of U.S. hospitals have a "basic" electronic health record system operating in at least one major clinic unit, according to data from a survey of nearly 3,000 nonfederal acute care general hospitals in the United States.

Even fewer hospitals have a "comprehensive" EHR system operating in all major clinical units, the survey, conducted in 2008, 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.

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. It 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 Health-Care 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."

Some hospitals may not have access to sufficient capital to purchase and implement a system, whereas 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 said.

Medicaid Is Better Than Medicare in Paying for Health IT

BY JOYCE FRIEDEN

Athough Medicare is almost always a better payer than Medicaid, one notable exception is the health information technology funding contained in the Recovery Act.

For physicians applying for incentive money to purchase electronic health record (EHR) systems, "Medicaid is a little better than Medicare because there's more upfront money," Dr. William Jessee, president and CEO of the Medical Group Management Association (MGMA), said in a teleconference on the stimulus bill.

The Recovery Act—formally known as the American Recovery and Reinvestment Act of 2009—includes about \$19 billion for spending on health IT, said Dr. Jessee. Physicians can apply for money through either Medicare or Medicaid, but not both. Other clinicians eligible for the Medicare incentive include dentists, podiatrists, optometrists, and chiropractors.

To qualify for the incentive, physicians must be "meaningful electronic health records users" and use electronic prescribing. In addition, the EHR must have the capability of exchanging information with other users, and physicians must report clinical quality measures to the Health and Human Services department, presumably through the Physician Quality Reporting Initiative, Dr. Jessee said.

To be eligible for the Medicaid incentive, at least 30% of a provider's practice base must be Medicaid recipients. Pediatricians have a lower threshold of 20%. The states administering the Medicaid portion of the incentive can make payments to Medicaid providers for up to 85% of net average allowable costs, to a maximum of \$63,750 over 6 years for a certified EHR. The maximum incentive starts at \$25,000 in the first year

and then gradually decreases each year.

Under the Medicare incentive, physicians using an EHR in 2011 or 2012 can receive an incentive equal to as much as 75% of their Medicare allowable charges per year for the cost of their hardware and software, up to a maximum of \$44,000 over a 5-year period. (The maximum allowable benefit per provider is \$15,000 in the first year, gradually decreasing over the next 4 years.) Physicians in health professional shortage areas can receive a 10% additional payment, Dr. Jessee noted.

Many provisions—such as who is a "meaningful" user—haven't yet been made clear. "What's [also] still fuzzy is, do you report in 2010 and get your first payment in 2011, or report in 2011 for a first payment in 2012?" he said.

The incentive also comes with a "stick" attached: Physicians who are not using an EHR by 2015 will see a decrease in their Medicare payments, said Dr. Jessee.

Also still to be determined is what constitutes a certified EHR."You need to... make sure that the product you use or are contemplating investing in will be a certified product that qualifies for an incentive. We suggest putting a [clause] in your contract saying that the vendor will make sure the product you're using will qualify for the incentive, he said.

In addition to the federal EHR incentives, Congress allocated another \$2 billion for indirect grants to support HIT, primarily at state and regional levels, he said. "It's an HIT extension service modeled on the agricultural extension service, with the idea that people will need assistance implementing HIT. No one knows who's going to be performing that function, or whether it will be national, state, or local, but a substantial sum of money has been devoted to supporting that extension service."

There has been speculation about whether the government was going to come out with a free EHR for

providers, but "my guess is, don't hold your breath," he said. "Remember when HHS said it was going to create a 'freeware' version of [the EHR used by the Veterans Affairs department]? They found it wasn't exactly free, and it didn't lend itself to being transferred from a large mainframe environment to a disseminated environment."

Physicians looking to hospitals for funding of their EHR systems aren't getting any guidance yet on whether the new EHR rules will help or hurt their cause, according to Rob Tennant, senior policy advisor at MGMA. "There's nothing we've seen that prohibits that, but it's a gray area where we'll have to see what the government does in terms of regulation."

The Recovery Act also contains additional health care privacy provisions, Dr. Jessee said. For instance, providers are required to have the ability to track every disclosure of personally identifiable health information, including information released for payment purposes. "The patient has a right to request who you've disclosed their information to for 3 years; this is probably going to require a system upgrade" for those who already have an EHR.

If the patient's information has been disclosed because of a breach of privacy, providers must notify the patient or their next of kin within 60 days; if the breach affects more than 500 patients the local media must be notified along with HHS, so it can be posted on the department's Web site, he added.

The interim regulation spelling out all the EHR requirements is due to be published no later than July of this year. Practices that already have EHRs have until Jan. 1, 2014 to comply with the new rules; those who buy EHRs from now on have to comply either by the day they purchase the system or by Jan. 1, 2011, whichever is later, he said. MGMA, MedFusion, Athena health, and MicroMD sponsored the teleconference.