## Medicare to Test Electronic Health Record

The agency is asking small offices to test the software as a step toward establishing certification criteria.

BY MARY ELLEN SCHNEIDER Senior Writer

fficials at the Centers for Medicare and Medicaid Services are seeking physicians to test electronic health record software originally developed by the Department of Veterans Affairs and adapted for use in physicians' offices.

CMS is releasing a test version of the software—called VistA-Office—in an effort to assess its effectiveness, usability, and potential for interoperability in small physician practices, the agency announced late last month.

"The release of an evaluation version of VistA-Office will provide a testing laboratory for interoperability and will supplement efforts by the American Health Information Community to establish a certification criteria and process," CMS Administrator Mark B. McClellan, M.D., Ph.D., said in a statement.

The goal is to refine the software based on the results of the test period and to develop a version of the VistA-Office electronic health record (EHR) that could be certified under a process that is recognized by the Department of Health and Human Services.

The VistA-Office EHR was adapted from the hospital information system of the Department of Veterans Affairs (VA). The VA system is used in 1,300 sites and has been in use for more than 20 years.

The test version of the software includes core functions such as clinical order entry, standard progress note templates, and results reporting. It also includes features designed specifically for physician offices including interfaces to existing practice management and billing systems, quality measure reporting capabilities, clinical reminders for disease management, and templates for ob.gyn. and pediatric care.

The VistA-Office test software will not be free. The first-year costs (cost of software, licensing fees, and support) are estimated to be about \$2,740 for a group of 1-7 users, according to a CMS spokesman, who added that practices are likely to incur added office staff costs associated with implementing the EHR.

Health information technology experts welcomed the testing of a new officebased EHR product, but cautioned that not all physician practices are suited to becoming a beta-test site.

"It's good for physicians to have more choices," said Mark Leavitt, M.D., Ph.D., chair of the Certification Commission for Healthcare Information Technology, a voluntary, private-sector initiative to certify health information technology products.

But Dr. Leavitt warned that participating in a beta test isn't for everyone. "A beta test definitely stresses the office," he said. Generally in such a test, practices are not supposed to rely on the new software, so physicians would have to run the test software parallel with their paper systems. That extra step can cost the practice in terms of time and money, he said. The best candidates for a beta test are physicians who are technically savvy and who have the extra time and interest to devote to the project, Dr. Leavitt said.

Physicians should carefully review the VistA-Office product before volunteering to test it and not just choose it because it is less expensive than some other options on the market, said Joe Heyman, M.D., secretary of the board of trustees of the American Medical Association and a gynecologist in solo practice in Amesbury, Mass.

As with any other EHR, it's important for physicians to survey their own office and work flow, he said.

Family physicians are looking forward to evaluating and providing feedback on the ease of use and associated costs of the product, said David C. Kibbe, M.D., director of Center for

Health Information Technology at the American Academy of Family Physicians.

While the costs cited by CMS were below market costs for most EHR systems, Dr. Kibbe cautioned that charging at all for a beta test could diminish physicians' participation. "Uncertainty is a cost as well," he said.

The test software provides a reasonable cost option for physicians, said Arthur McDowell III, M.D., a cardiologist in Middletown, Conn., who has already implemented an EHR in his practice.

But what will really spur adoption of EHRs will be government-sponsored payfor-performance programs, Dr. McDowell said.

The fear among physicians on pay for performance is that the government will choose to pay physicians less. Instead, the government needs to take the step of providing reasonably priced software and then offering payments for making the change, Dr. McDowell said.

The current discussion about incentives from the federal government is very promising, said Dr. Leavitt. Physicians want to see incentives that offer extra payment or lower the cost or administrative hassle, he said. While there are some pilot

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projects that offer incentives, the challenge is to make them available to the mainstream, he said.

The Certification Commission can help spur incentives, he said, because then govern-

ment payers and health plans will know that they are paying for something robust.

"All the signs are pointing the right way," Dr. Leavitt said.

Physicians who are interested in being part of a beta test should contact an approved vendor who will actually run the test of the software. Vendors will select a small number of physician practices to participate. A list of approved vendors is available online at www.vista-office.org. A video demonstration of the VistA-Office software is available online at www.vista-office.org/software/

## Electronic Medical Record Interfaces Contribute to Errors

BY PATRICE WENDLING Chicago Bureau

Los Angeles — Electronic health records have been proposed as one way to reduce medical errors, but their design can contribute to errors as well, Melonie Nance, M.D., said at the annual meeting of the American Academy of Otolaryngology-Head and Neck Surgery Foundation.

'The way doctors work, and the way we think about patient problems and diseases is often completely mismatched with the way things are presented in electronic records," Dr. Nance, a resident, said in an interview.

Dr. Nance and her colleagues at the University of Pittsburgh analyzed two cases of preventable medical errors that occurred in part because of computer interface design. In neither case did the error lead to patient injury, thus both were "near misses."

In the first case, a resident reviewed the pathology report of an operative biopsy prior to a composite resection and noted that the diagnosis was squamous cell carcinoma, but failed to recognize that the date of the biopsy was from the previous year.

In the electronic record used, multiple pathology reports were displayed on the same screen. Further, pathology and operative reports were stored in separate categories and were not linked, even though both reports resulted from the same procedure. The problem consisted of both time-line and data-fragmentation errors.

Rather than presenting critical data in a way that links related information, the electronic record in this case had recreated a problem seen with traditional paper files where information is stored by data type, Dr. Nance said.

Standardized time lines, unambiguous links between related information, and data organized by problem are all potential solutions to this problem, Dr. Nance said. For example, pathology reports of a head and neck cancer should be displayed with other information about the specific cancer, whereas reports of a liver biopsy should be linked to other information about the patient's liver disease.

In the second case, a patient was discharged in acute renal failure 30 minutes after the renal failure had been noted and documented by the critical care fellow. The fellow had entered the diagnosis into the electronic record at the end of a lengthy note but had not communicated the information to the otolaryngology resident who discharged the patient. The error was discovered quickly and the patient was readmitted 2 hours later.

The primary problem in this case was that data entry was mistaken for thorough communication. Critical patient information was hidden from the discharging physician and the record contained excessive information.

Dr. Nance and her colleagues suggested that a severity scale could be used to bring attention to important information such as abnormal lab data. Copied-and-pasted notes, a strategy often used to generate complete documentation, could be marked with color coding, time stamps, or a notation similar to the "track changes" function on word processors.

The authors further suggest that communication failures such as this case illustrates could be reduced with an automated warning system triggered by attempts to discharge patients with worsening conditions. Electronic medical records also could come with a message system similar to email that notifies parties when a message has been retrieved.

"There were human errors in both cases, but electronic records should be designed better to reduce the risk of error," he said. ■

