## Electronic Medical Records Adoption Still Rare

Physicians who invest in

realize that the system may

have to be adapted to meet

the needs of their practice,

**EHR** software may not

delaying its adoption.

## Despite government incentives, the cost of EMR software and hardware is prohibitive for many.

BY TIMOTHY F. KIRN
Sacramento Bureau

SEATTLE — Despite the government's push to encourage the development of the electronic medical record system, only a quarter of physicians keep medical records electronically, and only 11% of hospitals have fully implemented them, according to Dr. Karen M. Bell, director of the federal government's Office of Health IT Adoption.

In addition, of the electronic record systems in use, probably fewer than half are fully operational, that is, able to take notes, make lab and pharmacy orders, and get lab results, said Dr. Bell at the annual meeting of the American Geriatrics Society. "The reality of it is that adoption of really good functionality is really very low," she said.

The barriers to widespread adoption continue to be the lack of good, accepted computer applications, and the time and cost, said Dr. Bell.

While it is thought that the use of electronic health records eventually would result in financial savings, start-up costs continue to be prohibitive, she said.

The cost to get every record interface—

every office, laboratory, pharmacy, etc. up to speed with appropriate software and hardware may be \$5,000 for each one, and for the nation as a whole it may cost \$50 billion, Dr. Bell said.

At the same time, those who are using electronic medical records are finding they

aren't exactly time saving. There is a learning curve involved. And, the records generally require more data than what were previously recorded.

The government currently has public policy advisory com-

mittees to encourage more adoption and to deal with privacy issues—significant challenges, Dr. Bell said.

In the meantime, her office is continuing to develop an exact definition of what is going to be needed in an electronic health record, she added. "There are no standard definitions for any of this stuff."

## **Added Challenge for LTC**

Other speakers at the meeting described

the significant hardship they went through acquiring a system specifically for geriatrics.

The electronic health record industry and its products are geared to the acute care environment, and when they can be used for a facility that cares for older persons, they need to be modified significantly, the speakers said.

"As I was trying to figure out which electronic health records system we would use

for geriatrics, I really ran into a lot of roadblocks," said Dr. Irene Hamrick of the division of geriatrics at East Carolina University, Greenville, N.C.

"There really is nothing out there that is very good," she added.

Her institution finally chose General Electric Company's Centricity system because it can be used in many locations, such as the home for health care visits.

However, the institution found that it needed to tailor the system for specific geriatric needs, adding records of diet and activities of daily living. Changes also needed to be made to the physical exam form to include sections for foot and mental status exams.

"Very little out-of-the-box software is user friendly for geriatrics. None is totally acceptable to my mind. If you want to use them, you have to adapt them," Dr. Hamrick said.

When the Gurwin Jewish Geriatric Center of Commack, N.Y., began to look for an electronic medical record system, the institution had no idea it would take so long to find and implement one, said Dr. Suzanne Fields, the medical director.

The center found that there are Web sites (such as www.providersedge.com/ehr\_links\_products\_services.htm) that can help one find a system, and that the American Academy of Family Practice has a rating form that one can send to vendors to get information on their systems for comparison.

And, the center found a number of products for long-term care. But, the center has both outpatient day care and clinics, and inpatient beds, and none of the products adequately accommodated both, Dr. Fields said.

Dr. Fields and her colleagues also found that they had to adapt a system to their needs. In the end, the center combined two products, one for long-term care and another for physician care. The system is not yet up and running.

"It has to be individualized. That's what I didn't realize," she said.

## Cleveland Clinic's E-Health System Boon for Patients, Physicians

BY JANE ANDERSON

Contributing Writer

The Cleveland Clinic has established a state-of-the-art electronic medical records system to provide the best information not only to clinicians, but also to patients, according to one of the system's architects.

The goal is to make sure that patients—who now have access to literally billions of pages of medical information online—can get the most relevant and accurate information as part of their electronic health record, said Dr. C. Martin Harris, chief information officer of the Cleveland Clinic Foundation.

"We need to get prepared for the coming consumerism in health care, because patients will have access to medical advice that no longer comes from the physician or nurse," said Dr. Harris.

He cited research that shows about one-third of medical information available online is of high quality, one-third could be useful but would require some interpretation, and the last third is "completely off the mark."

"One of the things we clearly have to understand is what information patients and consumers have access to and what tools they have to gain access, so that we can tailor our services," Dr. Harris said during a virtual conference sponsored the Healthcare Information and Management Systems Society (HIMSS).

Over the past 5 years, the Cleveland Clinic has built a foundation-wide e-health program that's completely integrated with its clinical programs, according to Dr. Harris.

The e-health initiative features electronic medical records, test ordering and results, pharmacy

records, and care reminders for physicians. But it also includes access to medical records and certain test results for patients, along with medical information

that's been vetted for accuracy and appropriateness.

"It allows us to establish an ongoing relationship with patients after they leave the physician's office and after they leave the hospital bed," Dr. Harris said, adding that the Cleveland Clinic set out to develop tools for both doctors and patients when it created the system.

"It is a single tool that goes from the initial ambulatory visit to the hospital and back again," Dr. Harris added.

A total of 5,662 physicians use the electronic medical record

module, including about 1,500 employed by the Cleveland Clinic and approximately 4,100 who practice in hospitals in the Cleveland Clinic system. Once other clinicians and support personnel are added, there will be about 33,000 users for the system, according to Dr. Harris.

On the outpatient side, the system integrates schedules, laboratory results, other medical documentation, a computerized physician order entry system, and

Patients receive a list of health maintenance activities, such as routine screenings, they should schedule over the course of a calendar year.

best practice alerts, Dr. Harris said. In one mode, physicians can communicate either informally or formally; in formal mode, comments are added to the medical record, he said.

On the inpatient side, it's exactly the same tool, although it incorporates some different elements, including a medication administration record, vital signs, and clerk order entry, Dr. Harris said, adding that "almost all of our nursing documentation is online at this point."

The system keeps track of recommended screenings and med-

ical procedures for all patients, and provides that list to the physician electronically at the time of an office visit, allowing the physician to focus on what hasn't been done and might be needed. "That's a very powerful technique," Dr. Harris said.

The system also provides safety tools and will alert physicians to potential drug-drug interactions and other possible problems, Dr. Harris said.

"It's virtually impossible for a

physician to remember every drug-drug interaction they might see in a particular patient," he added, noting that the average Cleveland Clinic patient is 65

years old and is taking at least six prescription medications.

Patient services include the ability to view medical records, health reminders, and health care schedules, as well as features that allow them to request appointments and renew prescriptions, Dr. Harris said. "Our goal is to get as much information in front of the patient as possible."

In fact, the Cleveland Clinic actually is releasing certain routine test results via this online system directly to patients, Dr. Harris said. "We're moving from having the physician screen it

[and approve the information's release] to having it automatically released after about 24 hours," he said.

In addition, patients are being sent a list of health maintenance activities, such as routine screenings, they should be arranging for over the course of a calendar year, Dr. Harris said.

And, the system produces a "health issues" list for patients to have and share with their physicians, he commented.

The Cleveland Clinic's system also provides a streamlined process for getting a second opinion for a serious diagnosis. This process, Dr. Harris said, is available to any patient, not just those in the organization's service area, and is offered directly to patients with payment expected up front; patients are provided with instructions on how to seek reimbursement from their insurers.

The goal of all this is to provide the best, most complete information to patients in a format that's easy to use and understand, Dr. Harris said.

"What we know is, we're going to have to make these tools available to patients and add value," he said. "This provides health information so they're not generally searching on the Internet."