Elderly Lose as Rules Choke Health IT Progress

Remote sensing devices could be used to limit the cost of monitoring the health status of elderly patients.

BY JENNIFER LUBELL
Associate Editor, Practice Trends

WASHINGTON — The United States has underinvested in health information technologies that could help improve the lives of elderly people, Craig Barrett, chairman of the board of the Intel Corporation, said at the 2005 White House Conference on Aging.

Companies have been actively investigating these technologies—"just not here in the U.S.," he said. "Many other countries are ahead of us."

In Korea, for example, user-friendly devices such as cell phones that double as glucose monitors are being tested. "It's not trialed here. It's not allowed," he said.

Bringing such technology to market requires research and development funding, but licensing hurdles, regulatory issues, reimbursement issues, and liability concerns slow the process in the United States. Physicians, for example, don't use e-mail to communicate with patients because they are not reimbursed for giving advice over the Internet, Mr. Barrett said.

If the United States were to coordinate companies' efforts to tap research and development funding for such technologies, elderly patients could live better quality lives in their homes, rather than in hospitals and clinics, he argued.

Those efforts also would help lower the medical costs of caring for elderly patients, who make up 15% of all patients, but who account for 85% of medical costs, Mr. Barrett said. "If we can figure out a way to lower those medical costs to help that small population of people, we'd be much farther ahead."

Various devices capable of monitoring information about diseases could be made available to patients, caretakers, and physicians, he said. "You could turn the health care system around so that all sorts of technology could be used by individuals at home to ward off having to go to the hospital," he said.

"You could help prevent disease, entice people to exercise right." For example, you could put a pedometer on a patient that has a wireless connection to a PC and encourage the patient to walk 4 miles a day, then monitor the patient's progress, he said.

You could detect disease onset with monitors and sensors. By placing these technologies in the home, "you could sense if individuals are walking around, opening refrigerators, if they're taking their medication, what they're doing on a daily basis." The sensors would be monitored remotely so that caregivers and family could check up on their parents or elders at any time.

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Sensors that are available today could be usd to help monitor chronic disease, tracking variables such as mobility, sleep quality, heartbeat, and breathing regularity, he said.

Such technology could also be used to improve lifestyles of older patients, he said. "People who have memory problems often don't want to answer the phone because they're afraid they're not going to know who's on the other end. They don't want to answer the door because they're afraid they might not recognize who's at the door."

A potential solution is to give elderly patients a simple, enhanced call monitoring system that shows them the picture of a person, their relationship, and when the two last talked.

Wireless broadband offers a communication channel between patient, physician, and caregiver, Mr. Barrett said. "As the country gets more and more broadband, the connectivity between homes, offices, and individuals, becomes easier and more useful."

White House Conference on Aging delegates approved several implementation plans to advance health information technology, such as:

- Updating Medicare to place greater emphasis on establishing cost-effective linkages to home and community-based options through the Aging Network, to promote chronic disease management and increase health promotion and disease prevention measures.
- Establishing a new title under the Older Americans Act to create aging and disability resource centers as a single point of entry in each region across the country, charged to coordinate health and aging programs and ensure access to diverse populations.
- Including in the Older Americans Act provisions to foster development of a virtual electronic database that is shared between providers.
- Amending the Health Insurance Portability and Accountability Act and other "restrictive" regulations to allow communication between health providers and the aging network regarding client care. ■

Success of Electronic Medical Records Varies With Cardiology Practice Size

BY CHRISTINE KILGORE
Contributing Writer

WASHINGTON — The introduction of a customized electronic medical record system in a multisite practice of heart specialists enhanced efficiency and the quality of care that the patients received, said Dr. Vince Bufalino in a presentation at the Heart IT Summit.

Dr. Bufalino, who came to the summit from the 55-physician multisite Midwest Heart Specialists practice in suburban Chicago, reported on a host of improved outcomes that the practice has documented since it developed an electronic medical record (EMR) system in 1997.

He detailed improvements in the numbers of patients achieving LDL-cholesterol goals, significant increases in the numbers of coronary artery disease and heart failure patients taking recommended drugs, and more. He also said his practice's customized EMR system "has made us more efficient" and "it practices the way we practice."

The summit, which was sponsored by the American Heart Association, American Stroke Association, the Agency for Healthcare Research and Quality in coordination with the Office of the National Coordinator for Health Information Technology, was devised to "develop a road map" for using IT to improve the quality of care for patients with cardiovascular disease and stroke. Each organization went home with a list of potential strategies developed by break-out groups focusing on clinical practice, research, and patients.

However, Robert Miller, Ph.D., who reported on electronic happenings in solo and small group practices, said that of 14 primary care practices he and his associates studied, only 2 had extensively used their electronic medical record systems to improve chronic and preventive care.

Dr. Miller, of the University of California at San Francisco, said that practice support services and performance incentives that are tied to quality improvement are "musts" for increasing the "value for all" of EMRs in smaller practices.

Overall, the physicians in his study saw a mean revenue gain from EMRs of $33,000 per full-time provider per year after an average "pay-back time" of 2.5 years. Almost all of that gain came from increased coding levels and efficiency-related gains—results that are a good value for many practices but not for payers or even patients, he said.

The differences between the large IT leaders and the small- to medium-sized practices that are attempting to build electronic systems—or still rejecting them—were the cruxes of the summit.

"We all know the quality benefits of the EMR" from the larger practices, "but how do we actually roll it out on a larger scale?" said Dr. Rose Marie Robertson, chief science officer of the American Heart Association.

The problem is that little is known about how off-the-shelf systems work in everyday practice and about what nontechnical factors—such as organizational factors—are needed to sustain electronic systems, she and other physicians at the meeting said.

The physicians recommended developing interoperable systems, standardized clinical nomenclature and decision support tools, fiscal and nonfiscal incentives for using EMRs, and sharing best practices. ■

Computerized Drug Orders Can Reduce Hospital Errors

BY JOYCE FRIEDEN
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WASHINGTON — Aiming for computerization of physician order entry at health care institutions isn't the right course to take, Dr. Stephen T. Lawless said at a health care congress sponsored by the Wall Street Journal and CNBC.

"That's the wrong goal," said Dr. Lawless, who is chief knowledge and quality officer at Nemours, a Wilmington, Del., pediatric subspecialty practice with about 1 million patient encounters per year. "The right goal is NPOE—*no* physician order entry. Just tell us what you want and we'll have the best person [enter] it for you."

With this caveat, computerized order entry still remains an important tool in reducing medication errors, said Dr. Lawless, who also is professor of pediatrics at Jefferson Medical College, Philadelphia.

He said that the hospital where he practices—the Alfred I. DuPont Hospital for Children, Wilmington—partnered with a large pharmacy chain and asked the pharmacy to find the errors in the hospital's handwritten prescriptions.

Of the handwritten prescriptions, 35%-40% had errors, he said. "Of those, 53% had legibility problems, 36% had issues with completeness, and 11% had content errors."

The hospital's use of electronic prescribing has eliminated legibility errors, but that still leaves the other half of the errors to be resolved, he said. That's where the "decision support" piece comes in, which has encountered some resistance.

On further analysis, hospital officials found that most errors occurred at three different times of the day: 6 a.m. to 8 a.m., 5 p.m. to 6 p.m., and around midnight, he continued. "What goes on around those periods of time? Handoffs or dinner."

In a handoff in an airline cockpit or in the military, "you would not have these errors because there's a discipline put into it," Dr. Lawless said. But "discipline" measures such as checklists are often resisted by the medical community because "we all think it's about health care professionals being industrialized. I'm saying it's [about] health care craftsmen fighting being professionalized." ■