Despite advances, most hospitals are years away from fully computerized systems

by Keith Darce

Hospital records aren't what they used to be at Tri-City Medical Center.

Emergency room doctors record orders for lab tests, medications and treatments on wireless tablet computers. Nurses on the in-patient floors enter vital signs into rolling laptop computers. And digital X-ray images are available on computer screens throughout the Oceanside, Calif., hospital moments after they are taken.

UNHEALTHY RECORDS - Scripps Health production control specialist Debbie Taratuta, left, information services supervisor Tom Liston and senior computer operator Dennis Hemme monitor the San Diego County hospital operator's electronic medical records system from Scripps information technology operations center inside the company's headquarters in the University City area of San Diego. CNS Photo by Nelvin Cepeda. This kind of technology was a novelty just a few years ago, but now most hospitals across the country use some sort of electronic medical records system - a technological leap proven to reduce medical errors and one that many think is key to slowing runaway health care costs.

Several RAND Corp. researchers predicted that electronic health records could save hospitals and doctors $513 billion over the next 15 years, savings that could be passed along to insurers and patients, according to a 2005 article in the journal Health Affairs.

A trip to Tri-City suggests that the digital age has finally arrived in health care, but looks can be deceiving. Despite undeniable advances, most hospitals and doctors remain years away from full-scale electronic records and for those that do use electronic records, there is little, if any, way to share information.

It wasn't supposed to be like this.

For nearly two decades, physicians, health experts and even U.S. presidents have declared the nation within reach of the holy grail of medical information technology: a vast computerized network linking hospitals, doctors' offices, pharmacies, laboratories, clinics and insurers that would allow a patient's comprehensive medical record to accompany him around the nation's fractured health care system.

"We call the electronic health record a perpetually emerging technology," said Sam Karp, vice president of programs for the California Healthcare Foundation, a nonprofit group that has helped fund several health care technology efforts.

Creating this system has proven much more difficult and costly than anyone predicted.

Many health care providers have run into problems incorporating new software systems into current systems.

The health care and software industries have been slow to adopt technical standards that are needed to allow different computer systems to talk to each other.

Some health care providers, particularly doctors, have been reluctant to invest heavily in new technology without assurances that they will reap the financial savings created by the investment.

And the legal mandate to protect patients' privacy remains a vexing challenge for those creating systems designed to share information.

After declaring in 2003 that San Diego County was only a year away from establishing a regional data network that would tie together 19 hospitals and dozens of physician practices, Dr. Stephen Carson of the San

Diego County Medical Society Foundation now admits his prediction was far too ambitious and optimistic.

"I was really naive in my thinking and understanding," he said recently.

Carson isn't the only one who badly misjudged the pace of medical records computerization.

Recently, in Dallas about 3,000 gathered for Toward the Electronic Paper Record, a health care technology conference put on annually since 1984, when Ronald Reagan was president and "Footloose" topped the music charts.

The irony of the meeting's name isn't lost on Peter Waegemann, chief executive for the conference organizer, Boston-based Medical Records Institute. "I keep saying if we would have a banking industry meeting every year (with the same name) we would be laughed out of the room," he said.

In 1991, the Institute of Medicine, a medical research group associated with the National Academy of Sciences, called for all of the nation's doctors to use computerized patient records within a decade. In 1994, President Clinton extended that deadline to 2004.

More recently, President Bush called on the industry and government to create comprehensive electronic health records for most Americans by 2014.

About 68 percent of the nation's 6,000 hospitals have implemented some type of electronic medical records system, according to a 2006 survey by the American Hospital Association. But most of those systems operate in only portions of the facilities, such as in pharmacies, radiology or laboratories.

And while many hospitals have computerized nursing records, few systems let doctors enter orders for tests, medications and treatments.

Perhaps the biggest challenge is creating links between health care providers that will allow patient data to follow patients as they move among hospitals, doctors and insurers.

With some support from the federal government, health care communities in recent years have created more than 200 so-called regional health information organizations. But with limited funding resources and tepid support from health care providers focused on their own internal technology initiatives, few regional groups have gotten off the ground.

The movement took a hit at the end of last year when the Santa Barbara County Care Data Exchange, one of the oldest in the country, shut down after spending at least $20 million over the past nine years trying to electronically link three hospital systems, county health care programs and dozens of doctors.

The project's failure was blamed on a lack of long-term funding, disagreements over how to share data and keep it secure and a user scale that was too large to manage properly - problems that health care officials say have hampered many other regional groups.

"It was kind of a big-bang approach," said Karp with the California Healthcare Foundation, whose group contributed $10 million to the project.

These fits and starts should be expected considering that the computerization of medical records really is a part of a sea change in the way medical care is delivered, said Waegemann of the Medical Records Institute.

Physicians are moving from an intuitive way of practicing medicine, in which they treat a patient based on their own knowledge and experience, to so-called evidence-based medicine guided largely by mountains of data analyzed for patterns and trends, he said.

"What we are really seeing is a very traumatic historic change ... and it may take another 10 or 20 years," Waegemann said.

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