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Many Hospitals Resist Computerized Patient Care

By MILT FREUDENHEIM

For years, technology has been held out as an important way to curb the scourge of medical errors. President Bush and Senator John Kerry have each called for a bigger commitment to computerization to reduce the 98,000 avoidable deaths a year that an eye-opening federal report in 1999 said might be caused by mistakes of doctors, nurses and other hospital personnel.

Yet even now, despite pressure from large employers, unions and health care advocacy groups - and aggressive marketing by vendors - only a few dozen medical centers across the country are making full use of the latest computerized patient safety systems.

The systems are intended to overcome problems as common as illegible handwriting on doctors' prescriptions that cause patients to receive the wrong drugs or doses, or result in one physician's not knowing what another has ordered.

Still, hospitals and doctors say they have good reason to be cautious about the new technology. Many doubt that the computerized systems will ever repay their multimillion-dollar costs, according to Janet Corrigan, a health care financing and quality expert at the Institute of Medicine, which published the 1999 report and a follow-up in 2001 that called for eliminating "most handwritten clinical data by the end of the decade."

They also fear that current technology will be outmoded or cost much less in a few years. And many doctors complain that using the systems to write prescriptions and order tests takes time away from seeing patients and running their offices on already stressful workdays.

The challenges are clear both in the few cities where hospitals are using the systems and in places where they have been rejected.

In Seattle, it required steady pressure from a leading employer, Boeing, and the machinists' union there to prompt hospitals to adopt patient safety measures promoted by the Leapfrog Group, a national organization of 150 employers and unions.

In Los Angeles, doctors at the Cedars-Sinai Medical Center rebelled last year, complaining that the computerized system was too great a distraction from their medical duties. Their resistance forced the withdrawal of a system that was already online in two-thirds of the 870-bed hospital complex.

The slow progress is not for lack of sales efforts by an array of companies, ranging from a handful known mainly to their hospital customers, like the Cerner Corporation and the Eclipsys Corporation, to giants like General Electric, Siemens and McKesson.

"By a rational standard, we are making dreadful progress," said Dr. Donald M. Berwick, president of
the nonprofit Institute for Health Care Improvement and a professor at Harvard Medical School. "Many, many lives could be saved," he said, and "a lot of injuries could be prevented if we would move faster."

After citing the matter in his State of the Union address, President Bush asked Congress for $100 million in next year's budget to finance demonstration projects promoting the use of information technology to improve health care quality. He recently called a group of purchasers and providers of health care to the White House to follow up on the proposal.

Senator Kerry, for his part, is calling for enhanced federal reimbursements to help install computerized patient safety systems in every hospital by the end of the decade. But no one has proposed spending the $20 billion or more it would cost to meet that goal.

In all, about 300 of the nation's 4,900 nongovernment hospitals have the systems, including 15 in the New York area. But only 40 have fully met the standards of the Leapfrog Group, which was formed largely in response to the report by the Institute of Medicine, an advisory group associated with the National Academy of Sciences.

For a hospital to win its approval, Leapfrog - whose members provide health care for 34 million consumers - requires that 75 percent of doctors use an online system to order prescriptions and tests. Claire Turner, a Leapfrog spokeswoman, said that 118 more hospitals were expected to qualify this year, which would increase the total to just 3 percent of the nation's hospitals.

By the end of the year, more than a third of patients in employer health plans in Seattle are expected to be admitted to hospitals where doctors routinely use the new technology, according to Dr. Arnold Milstein, a Leapfrog board member who is a consultant to Boeing.

Hospitals spend millions of dollars to acquire the systems - and there are no subsidies currently available from the government or big employers. But officials of Boeing's largest union, the International Association of Machinists and Aerospace Workers, insisted during Leapfrog-sponsored meetings with hospital executives at Boeing headquarters that patient safety had to be the top priority.

Leapfrog representatives asked each hospital to lay out its plans for capital spending. "After we heard the list at one hospital, my colleague said, 'I'll take a postponement on the parking lot,' " Susan Palmer, a union representative at the meetings, recalled.

Children's Hospital was the first in Seattle to meet Leapfrog's goal of having 75 percent of its doctors using a computerized ordering system. The hospital, which has 250 beds, also met a second requirement - supervision of the intensive care unit by a specialist. (A third Leapfrog goal, reporting a hospital's results on certain high-risk procedures, applies to medical care for adults.)

Adding to the impetus, starting July 1 Boeing will pay 100 percent of patients' bills only at hospitals that meet Leapfrog's goals, Greg Marchand, a Boeing human resources official, said. At other hospitals in Boeing's health network, employees will have to pay 5 percent of the charges.

Children's, which has already invested more than $10 million in safety-related technology, plans to spend $15 million to $20 million in all to convert to a paperless system. Virtually all orders and reports, including patients' charts and records in outpatient clinics, will be digital. This year, the hospital is spending more than twice as much on information technology - $13 million - as on clinical equipment, the executive vice president, Patrick Hagan, said.
The initial cost for an average-size hospital to install a system was estimated at $7.9 million, including hardware, software licenses and other expenses, in a study last year for the American Hospital Association and the Federation of American Hospitals by the First Consulting Group of Long Beach, Calif. Continuing costs average $1.34 million a year.

Dr. Mark Del Beccaro, a pediatrician who is clinical director of information services at Children's Hospital, said its staff had been discussing the project for a decade. The meetings with Boeing and the union provided "a more poignant, local reason" to make it happen, he said.

Nurses say the systems save valuable time. "Getting an antibiotic for a kid who has a fever used to take 45 minutes," said Kristi Klee, a clinical nurse specialist at Children's. "Now, you get it in half an hour."

But persuading doctors to use such systems can be a hard sell, especially when many of them have outside practices and are not on the hospital's payroll.

In what Dr. Milstein called a "debacle," doctors at Cedars-Sinai last year forced officials to withdraw a doctors' ordering system that was already online.

Dr. Michael Langberg, chief medical officer of Cedars, said doctors complained, in a stormy staff meeting, that using the computers took time they could not spare from heavy schedules.

"They said, 'If it takes five minutes more to order medications for each inpatient in the hospital, where am I going to find the two hours a day?' " Dr. Langberg recounted.

Cedars plans to reconsider the system late next year, he said, and will try to involve more of the 1,800 doctors in the planning. In the meantime, it is working on other innovations - including automated physician signoffs on medical orders and automated summaries for patients who are discharged - that could save time for doctors.

"The physicians are willing to accept some increase in time per patient," Dr. Langberg said. "They understood the patient safety issue. We look forward to doing better on the next time around."

Without outside help in paying for computerized systems, many hospitals are searching for less expensive, low-technology ways to improve safety - like improving doctors' handwriting and standardizing drug doses, said Kelly Devers, a health policy expert at Virginia Commonwealth University.

The Joint Commission on Accreditation of Healthcare Organizations is planning to publicize hospitals that use practices it defines as safe. The commission, a nonprofit group financed by fees paid by the hospitals, has not endorsed the expensive electronic systems that most of its hospital partners have not purchased.

But Dr. Dennis O'Leary, the commission's president, said its standards for administering medication safely and accurately would be easier for hospitals to meet if they had computerized physician-order entry systems.

The study for the American Hospital Association summarized various reports of savings credited to such systems, ranging from a 12.7 percent cut in total inpatient charges at a typical 500-bed hospital to reductions of $500,000 each in pharmacy and laboratory charges. None of the hospitals in the study said they expected the computerized-order system to pay for itself.
Mr. Hagan of Children's Hospital in Seattle is not expecting purely economic rewards. "At best, there will be an indirect return on investment, perhaps enabling us to be more efficient in a number of ways," he said.

The nation's hospitals are now spending $200 million to $300 million a year for computerized physician-ordering systems, according to Frost & Sullivan, a market research firm.

"The good part is that we are doing better than we were" in the 1980's, when the first such systems were built, said R. Adams Dudley, a health technology expert at the University of California, San Francisco. "The horrible part is how could we, after all this time, be only at this level?"