Long Island BusinessNEWS

Hospitals cut the cord, go mobile

by CLAUDE SOLNIK

Jan 9, 2004

NEW HYDE PARK - When residents at Long Island Jewish Medical Center go through the time-honored tradition of running their medical rounds, they don't rely on clipboards and paper.

Instead, they turn to their trusty handheld computers, which let them click their way through a check-up and enter patient information into the hospital's database.

"We hope to expand [handheld use] across both campuses - to North Shore also," said Dr. Stephan Kamholz, chairman of the department of medicine at North Shore University Hospital at Manhasset and at LIJ.

Signs in the hallways of the LIJ and Manhasset hospitals still warn people not to use cell phones - lest they interfere with medical equipment - but handhelds use lower frequencies than cell phones. Plus they give nurses, doctors and other health-care providers immediate access to information and allow that data to be uploaded in real time to hospital networks.

Long Island hospitals such as LIJ and Stony Brook University Hospital, and health-care facilities nationwide, are beginning to use other wireless equipment as well - personal digital assistants and laptops on rolling carts, for example.

Wire-free devices not only let hospital personnel do "mobile rounds" but also provide immediate access to updated patient information and cut costs for home care, allowing one professional to monitor the care of many patients instead of having to visit each one individually.

Even so, the migration to wireless in the health-care space is a gradual one. "Only a fraction of hospitals have doctors using computers," said Kenneth Kleinberg, senior director of health care for Symbol Technologies Inc., in Holtsville. "In most cases, doctors are still scribbling on little sheets of paper."

At least one-third of hospitals, however, have a wireless local area network, or LAN, installed somewhere in the building, although those networks may be small and used for a variety of functions.

"Mobile-computing usage faces a significant number of obstacles to widespread adoption within in-patient hospital settings," said Gregg Malkary, managing director of Menlo Park, Calif.-based Spyglass Consulting Group, which did a study last summer on mobile computing in the health-care market. Those hurdles include difficulty integrating new wireless systems with hospitals' legacy networks and the need to protect the confidentiality of patient information under Health Insurance Portability and Accountability Act regulations, Malkary said.

At the same time, others said the investment in software used to comply with HIPAA may be spurring wireless investment and the creation of "killer apps" that let health-care providers use handhelds to access clinical data.

"Many health-care organizations are using this opportunity to forge ahead and embrace technology to develop even more advanced solutions," said Sean Tetpon, a spokesman for Somers, N.Y.-based IBM Corp. The computer vendor recently helped Penn State's Milton S. Hershey Medical Center in

Hershey, Pa., set up a wireless system powered by IBM DB2 Everyplace, which IBM bills as the "Mobile Database Solution for Health Informatics." With that system, Hershey Medical Center anesthesiologists can view a patient's medical history on a handheld device prior to treatment or surgery.

"Now patient data such as medical and prescription history is literally in the palm of a doctor's hand, allowing doctors to make faster decisions toward improved patient care," Tetpon said.

Group Health Inc., an insurer, recently rolled out a pilot program, providing nearly 100 doctors - mostly in Staten Island - with PDAs so they can write prescriptions electronically. The wireless system reduces errors and increases efficiency, and the insurer hopes that doctors will foot the bill for PDAs in the future, once they see how beneficial the system is.

Meanwhile, Wavelink Corp., a Kirkland, Wash.-based provider of wireless network management solutions, set up a system that lets doctors use handheld computers at St. Vincent's Hospital, in Birmingham, Ala., and the Visiting Nurse Service & Hospice of Suffolk has begun using wireless equipment made by HomMed, Brookfield, Wis., to let patients take their own vital signs at home and transmit them to a central station over a wireless network.

"Every day the system gives patients feedback on their health," said Linda Taylor, executive director of the Visiting Nurse Service of Suffolk, based in Northport. "They become more involved with their own health care through this daily process."

Students at the New York Institute of Technology's New York College of Osteopathic Medicine learn to access medical information and monitor schedules with PDAs, and the Drexel University College of Nursing and Health Professions in Philadelphia mandates the use of PDAs for undergraduates.

"The PDA becomes a tool of their trade, as second nature to them as typing," said Kevin Kaufman, a spokesman for Drexel.

Others at the school also view the PDA as a key element of health care in the future. "Change is scary for some, but PDAs are only enhancing what humans can accomplish," said Frances Cornelius, an assistant professor at Drexel's nursing school. "Like a stethoscope helps doctors hear better, PDAs help nurses perform the tasks of their job more efficiently, effectively and safely."