To Expand Their Reach, Hospitals Call on Telemedicine

Telemedicine, the use of telecommunications to provide medical care to patients at home or remote locations, could greatly expand hospital reach to a wider patient population -- if the practice can overcome payer reticence.

There are several reasons why telemedicine is becoming more popular. It has the potential of eliminating or minimizing costly visits to the emergency room and unnecessary hospitalizations. Patients who have difficulty traveling to providers have better access. Hospitals say they can provide the same quality of care with telemedicine as with a hospital visit, at comparable or even lower costs.

What's more, telemedicine holds the appealing prospect for hospitals to expand their patient base far beyond their traditional geographic reach.

Several early adopters of telemedicine, including the Veteran's Administration and the University of Texas, report positive results with a relatively small investment. However, reimbursement issues could slow down telemedicine's growth, says Alice Watland, a spokeswoman for the American Telemedicine Association in Washington.

"Telemedicine faces all the same issues as regular medicine," she says. "Cost savings are driving interest in adoption. Everyone is interested in how you can keep costs down and prevent patients from running to the hospital six or seven times a year. But the question remains [of] who pays?"

There are other barriers. A widespread system of telemedicine will also depend heavily upon providers maintaining and sharing electronic medical records, so that physicians can access vital medical information when they are treating a patient who may be hundreds of miles away.

To date, telemedicine has largely meant the transmission and reading of digitized images, including MRIs, CAT scans or X-rays. Now, the technology includes provision of medical care through video conferencing visits, or "encounters," between physicians and patients.

Patients at home or in rural clinics can work with physicians remotely to monitor their own glucose or blood pressure levels and save themselves trips to the hospital, or even hospitalization, by interacting with physicians before they become symptomatic.

"It used to be that patients might spend the whole day traveling to a distant health care center for care, because the health care system was hospital-based," according to Dr. Adam Darkins, consultant for care coordination for the Department of Veteran's Affairs (VA).

"The model of health care delivery is evolving," Darkins says. "Health care delivery is becoming more decentralized because of technology. The technology has allowed us to standardize care and to provide the right care in the right place at the right time."

While it can cost millions of dollars to set up and equip a network, hospitals can charge telemedicine fees comparable or slightly less than those of an office visit.

The VA has invested $21 million to create a national "telehealth" program serving veterans who suffer from congestive heart failure, high blood pressure, diabetes, depression and pulmonary disease. VA patients in 30 states use devices at home to monitor their glucose and blood pressure, and text message the results and other medical information to hospital staff.

The VA is now conducting over 300,000 telemedicine "consultations" a year for over 11,000 patients across 32 clinical specialties. The number of patients treated is expected to increase to 50,000 a year in 2009. Thus far, the patient population enrolled in the program have shown a 30 percent reduction in hospitalizations and emergency room visits, according to Darkins.
But telemedicine has extended its base from monitoring symptoms of chronic ailments to actual examinations via teleconferencing. A typical hook-up operates over T-1 network lines and includes such instruments as digital stethoscopes, cameras, monitors and video conferencing equipment.

The University of Texas Medical Branch (UTMB) in Galveston has 80 employees, including 11 physicians, dedicated to telemedicine; they conduct some 60,000 patient visits a year in 11 campus teleconferencing studios, according to Dr. Glenn Hammack, assistant vice president and executive director of the UTMB Electronic Health Network.

The studios are equipped with cameras, microphones, speakers, monitors, and PCs for accessing medical records. UTMB spends approximately $8.5 million annually on its program. The fees charged for telemedicine visits are comparable to or slightly less than fees charged for visits on the UTMB campus.

Working with a paramedic, nurse practitioner or other clinical staff, patients at remote clinics or health centers receive examinations in primary care, cardiac care, urology, wound management and various other clinical specialties. Special medical devices such as digital stethoscopes and dermoscopes enable the doctor to see and hear vital signs in real time.

"Telemedicine allows us to remove the barriers to access and to improve the delivery of health care services for patients who would otherwise have a hard time seeing a doctor," says Hammack.

The telemedicine program began as an effort to provide cost-effective medical care to the Texas prison system. Its success in the prison system enabled the UTMB Electronic Health Network to expand into new markets, including rural health clinics, polar scientific research stations, offshore oil platforms and outposts in Russia.

Building upon its success, UTMB is now reaching out to extend its telemedicine services to underserved patient populations in urban areas of Texas.

Family physicians also suggest that telemedicine improves the quality of care for their patients. While not replacing traditional face-to-face visits, telemedicine can result in a more efficient use of health care services, says Dr. Thomas Weida, a member of the board of the American Academy of Family Physicians, who practices in Hershey, Pa.

Weida stresses that more patients are taking advantage of telemedicine.

"Why should patients disrupt their lives, if they don't have to?" he asks. "Why should they travel and then spend an hour waiting in my office to have their blood pressure taken? They can take their blood pressure at home. Often, they don't need visits, they just need reassurances."

Source: Richard Merli, Health Care Insider, March 30th, 2006