

Wireless World: PDAs reduce medical errors

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Medical errors are declining dramatically at hospitals and healthcare centers that are using sophisticated wireless technology to let physicians communicate with nurses and other medical practitioners, experts tell UPI's Wireless World.

A survey of 2,800 medical professionals conducted by Skyscape Inc., based in Marlborough, Mass., and provided to Wireless World indicates that handheld units, Palm Pilots, Pocket PCs and Smart Phones help increase the effectiveness of their patient care.

"One of the biggest problems faced by medical professionals is the diversity and extent of accurate and trusted information needed at the point of care to make informed decisions for patient care," said Sandeep Shah, chief executive officer of Skyscape, in an exclusive interview with Wireless World.

Shah said that wireless personal digital assistants work quite well in speeding up the process of getting vital patient information for diagnosis, care plan and treatment, mostly because they are intuitive and work as if a real-time conversation were taking place or present the information as if the doctor were examining a paper-based file.

"The kind of information that is available includes the clinical information, drug information, including the interactions, treatment strategies, specialty specific guidelines, research abstracts, medical journal articles, laboratory and procedure deadlines, and evidence-based medical information," said Shah.

The Skyscape survey showed that as a result of using wireless devices, 72 percent of medical professionals were able to provide care more quickly, and 84 percent said there was a decrease in potential medical errors.

Concerns about patient safety have been increased during recent years for a number of reasons. In 1999 the Institute of Medicine, which is part of the National Academy of Sciences, reported that there were about 100,000 deaths per year in the United States due to medical errors in hospitals. The federal government became involved, and, subsequently, the Agency for Healthcare Research and Quality noted that poor point-of-care treatment information access was a "frequent and significant" cause of the errors, Shah said.

"With the increasing pace of new research and clinical trial findings as well as the pace of drug approvals, the issue has been further compounded in modern medicine," said Shah.

Physicians are using the advanced wireless technologies of today to have medical data pushed to their mobile devices -- even their cell phones. This includes news from the Food and Drug Administration, drug-safety recalls and other relevant information. Without the wireless access, the majority of those news items would not reach the doctors. Wireless is indeed a solution. "Nearly 50 percent of physicians carry handheld devices and smart phones," said Shah.

A spokesman for another leading firm in the field, Westwood, Mass.-based Medical Information Technology Inc. (Meditech), said mobile computing is going "mainstream." PDAs and Smart Phones are aimed at the mobile doctors -- but those who work in an office practice can glean a lot of new medical data right from their Web browsers, too. There are a lot of technology integration issues -- wireless and wired -- emerging in hospitals now, as a consequence, the spokesman told

Wireless World.

Even veterinarians are going wireless in an attempt to help improve the general public-health situation. A company called TekVet has developed a wireless system, using a small tag, that can be attached to a cow's ear, which contains a small, plastic tube and a thermostat, a veterinary thermometer, and an antenna. "Transmission range? Up to a diameter of 300 feet -- not 18 inches or less (common) for RFID tags," a spokesman said.

This sensor is enabling veterinarians to track the health and body temperature of all the animals on a farm or commercial feedlot -- animal patients are decidedly less articulate about their symptoms than humans -- and is improving food safety in the \$190 billion beef industry, the spokesman said.

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