

THE HEALTH CARE I.T. AUTHORITY

Group Practices

HIPAA Heats Up Demand for Environmental Monitoring

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Until early 2005, CM-2. executives never heard of the Health Insurance Portability and Accountability Act. Since that time, the environmental monitoring technology vendor has learned that HIPAA's security rule is behind a spike in its hospital-based business.

The Austin, Texas-based vendor makes hardware that monitors temperature, air flow, water content, and light and power levels in server rooms and computer closets. Accessories include Internet-based cameras that monitor server rooms or closets and track whether doors have been opened.

From its launch in early 2002 until spring 2005, the company's customers were I.T. departments across a range of industries.

Then, around June 2005, business picked up and "the hospital segment exploded," says Jason Cohen, chief technology officer and co-founder.

Company CEO Gerry Cullen attributes that growth largely to HIPAA-related issues among provider organizations.

Cullen, also a co-founder, says CM-2s' revenue climbed more than 250% from 2004 to 2005, about half of which he attributes to new hospital business.

Evidence of monitoring

Hospital customers want to track such factors as temperature and humidity and save the data someplace so that if questions ever arise, there is evidence these factors are being monitored, Cohen says.

The vendor's largest health care customer is Nashville, Tenn.-based Hospital Corporation of America, which began buying equipment last summer for about 1,000 computer rooms across 190 hospitals and about 100 surgery center sites, Cohen says.

HCA buys a package of monitoring equipment and software and makes it available to the facilities it owns. The bundle includes a box about the size of a blade server with sensors that also monitor water level in case a leak elsewhere intrudes into a computer room. Other accessories include Web cameras that enable room monitoring from remote or centralized locations.

CM-2 monitors include a built-in Web server enabling technicians to monitor a unit via the Internet with no other software.

An onscreen 'console' monitors the vendor's equipment in graph form as well as displaying an event log. The console includes audible alarms and can send pager, cell phone and e-mail alerts if a sensor detects a sudden rise in temperature, which, for example, could indicate an air conditioning malfunction.

Too hot

Temperature swings of 20 degrees can be fatal to some servers, Cullen says. "In addition to complying with HIPAA, hospitals have to protect their servers, especially blade servers, which are getting denser and more expensive."

The HIPAA security rule requires protection of "electronic medical records systems and related buildings and equipment from natural and environmental hazards and unauthorized intrusion."

Lewis-Gale Medical Center in Salem, Va. began using CM-2 equipment in early 2005 to meet both environmental and HIPAA needs. Conditions the devices monitor include temperature, humidity and water in more than 30 computer closets across the 500-bed facility and several clinics, says Rob Poff, IS support technician.

"Once the environmental part was under control, we found the technology became more helpful to physically monitor security," Poff explains. Sensors can detect changes in lighting levels in the main server room and other climate changes if someone goes into a computer closet and leaves the door open.

Web watcher

The addition of Web cameras enables managers to monitor all locations. That's particularly reassuring for checking remote locations, Poff adds, because "if there is no I.T. staff on those campuses you have no control."

Poff, one of the first health care customers for the technology, adds, "Having seen it in use now I can say this type of technology is a luxury that turned into a necessity."