



Affinity Health System Cutting Ties With Phone Lines

(Reprinted from [Health Data Management](#))

Delivery system's physicians remotely access its hospital information system via the Internet, saving thousands of dollars.

When Affinity Health System, Menasha, Wisconsin, first enabled physicians to access its hospital information system from their homes, the delivery system thought the strategy would help save time and staffing costs. It hoped physicians could use modems on their home PCs to dial directly via telephone lines into Affinity's hospital information system to access and update patient information, thereby reducing the time they had to spend onsite.

The plan, however, created more work for Affinity's IT staff, who now had to attend to data transmission problems caused by the varying quality and connection speeds of each physician's home modem. The problems also frustrated Affinity's physicians, who wanted instant access to patient information from their homes, says Doug Shew, network manager at Affinity Health System.

"Our physicians had different modem speeds, which resulted in differences in data transfer quality," he says. "We were spending a large amount of time dealing with modem issues."

To combat its remote data transfer problems, the delivery system decided instead to use a standard Internet connection to enable physicians to remotely access the hospital information system. Using NetAccess, Web-based connectivity software from Interbit Data Inc., Framingham, Mass., Affinity created a password-protected, encrypted Internet connection to the server that houses its hospital information system. By implementing the Web-based remote link to the hospital

information system, Affinity was able to eliminate its previous modem transfer problems. Now, instead of using a direct dial-up connection to its hospital information system, Affinity's physicians use a Web-based connection from NetAccess.

The Internet connection provides Affinity with a faster backbone to transfer data. It also enables the delivery system's physicians to transfer patient information from their home PCs back to Affinity without the varying data transmission speeds and modem capabilities that plagued them in the past.

The delivery system also is saving thousands of dollars in communications costs each month by enabling its hospital information system vendor to use the same Internet connection to remotely access the system for maintenance upgrades.

"The Internet link to our hospital information system has made my life a lot easier," Shew says.

Differing Objectives

About two years ago, when Affinity Health System first sought to create the remote Internet connection, its only objective was to enable physicians to have better remote access to patient information.

But as a prospective vendor, Interbit Data, suggested the delivery system could save more money by also enabling its hospital information system vendor, Westwood, Mass.-based Medical Information Technology Inc., to use the Web-based connection.

Affinity was paying \$9,000 per month to enable Medical Information Technology to access the software at the Wisconsin delivery system from the vendor's Massachusetts headquarters via a toll-free number. The vendor used the toll-free number to gain access to Affinity's network so it could maintain its Magic hospital information system for the delivery system.

Interbit Data suggested that if Affinity used the NetAccess product, which could enable Medical Information Technology to use a standard Internet connection to access the delivery system's hospital information system, it could cancel its toll-free number and save thousands of dollars each month.

After the vendor assured Affinity that physicians also could use the same software and Internet connection to access the information system from their homes, the delivery system agreed to make the purchase. Affinity in July 2000 purchased the NetAccess software to use with its Magic hospital information system for \$12,500, which includes unlimited licenses for remote users. It also pays \$1,500 annually for Interbit Data to maintain the Internet connection.

The delivery system then purchased a new Internet server, upon which it installed the NetAccess software. It established the new remote Internet connection within a week. Its hospital information system vendor now uses NetAccess to access the system, and Affinity has begun to help each of its 180 physicians use the system from their homes.

Secure Access

To ensure data security, remote users of Affinity's hospital information system must enter a separate NetAccess password before they can access the system. NetAccess also uses 128-bit encryption to further secure the data as it is sent over the Internet.

To access and update its hospital information system at Affinity remotely, Medical Information Technology support representatives click on a NetAccess icon on their PCs. The icon instructs their PC to dial a local number to access the Internet.

Medical Information Technology representatives then enter a user name and password on Interbit Data's Web site to access NetAccess. Then they enter a second user name and password to access the provider organization's Magic system.

After maintenance or upgrades are completed, NetAccess encrypts the information as it is transported over the Internet to Affinity's Web server. The upgrades are then applied to Affinity's hospital information system software.

"We didn't have a whole lot of security when we were using a direct modem connection to remotely access our hospital information system," Shew says. "The increased security is a result of our new system."

It's common for delivery systems like Affinity to use a third-party vendor to obtain an Internet-based connection that enables remote users to access information systems, says Charles Anastos, vice president for business development at Norwell, Mass.-based Beacon Partners Inc., a health care information technology consulting firm.

And it might become more common for health care organizations to use such a remote connection to enable increased security features, such as passwords and encryption, as the deadline for the privacy rule of the Health Insurance Portability and Accountability Act draws near, he adds.

"Enabling physicians to remotely access and transmit data to a hospital information system without encrypting it is in violation of the HIPAA privacy rule," Anastos says. "But organizations can kill two birds with one stone by using a third-party Internet connection to enable better remote access for physicians while also increasing data security."

Physician Use

Affinity executives say their physicians who use the connectivity software have easier access to the hospital information system than they had in the past. Because the delivery system purchased the software with unlimited licensing, it can enable each of its 180 physicians to download a NetAccess icon on their home PCs.

The icon enables physicians to more quickly connect to the Internet and, thus, the hospital information system to access and update lab results, dictation reports and other patient data in the system. They also use the system to electronically sign these reports. Affinity plans to help its physicians use cable modems for remote access, which will further improve data transmission and speed, Shew explains.

CONNECTWITHUS

