



IBM Network Station helps keep hospital's IT healthy.

Just as healthcare has become more complex in recent years, information technology has also become challenging to manage. One hospital, though, is reining in computer costs, even as it uses more sophisticated technology to meet the needs of its growing portfolio of affiliated health-related organizations.

Like many such institutions, Presbyterian Intercommunity Hospital in Whittier, CA, approximately 20 miles east of Los Angeles, has evolved from providing traditional health services to also running a variety of related organizations. It manages several physician practices, clinics, specialty treatment centers, a home health agency, and a management service organization which adjudicates claims and distributes HMO paychecks to doctors.

Presbyterian Intercommunity Hospital's CIO, Jim Peelgren, found that every time the hospital needed to upgrade applications for its growing community of 600 computer users — which include nurses checking labs, doctors ordering tests, clerks admitting patients and procurement specialists making purchases — their PCs needed progressively more memory and faster microprocessors. "We were constantly chasing our tail to keep ahead," Peelgren says.

In addition, the hospital was spending valuable time and money installing applications on individual PCs, ensuring that upgraded applications "behaved similarly" on every desktop, and answering questions from perplexed users whose desktop environment had been customized or changed by more experienced personnel.

Thinning down at the desktop

Today, Peelgren is solving these challenges by using the latest server and thin-client technology from IBM, along with the industry-leading healthcare software

Application	Hospital and home healthcare management
Hardware	IBM Network Station Series 300; IBM Netfinity, AS/400e and RS/6000 servers
Software	HBOC Pathways and Star packages, SMS MedSeries4 software



The IBM Network Station is helping Presbyterian Intercommunity Hospital manage costs and improve patient care.

and integration services offered by Atlanta-based HBOC & Company (HBOC). With HBOC's assistance, Presbyterian Intercommunity Hospital is connecting 70 IBM Network Station™ Series 300 network computers (NCs) and a number of older PCs to six new quad-processor IBM Netfinity® Model 7000 PC servers running Microsoft Windows NT® Server 4.0, Terminal Server Edition and Citrix MetaFrame™. The project is being done under HBOC's Connect 2000 service, which specializes in integrating HBOC software with multiuser Windows NT and thin clients to resolve the interoperability and cost-of-ownership issues that health-care IT departments must address.

Peelgren anticipates the switch to a server-based, thin-client computing architecture will reduce by half the hardware and other expenses that would have been required for Windows NT loaded on individual PCs, of which only 50 will remain. The hospital will also be able to upgrade and deploy applications more quickly by having all users access a single copy of the application on the server, instead of placing separate versions on individual PCs.

Using thin clients with multiuser NT servers should also reduce training requirements and provide a more uniform interface, since basic settings can only be tweaked by the IT department. And because NCs have no disk drive, they effectively eliminate productivity losses attributable to pirated, incompatible or virus-infected software.

Peelgren has also noticed that in many cases system performance with NCs is better than on PCs. Since the network is professionally managed, IT managers can allocate just the right amount of memory and system resources (talk about "managed care"!), making for happier users and better service to patients. Plus, the Network Station's small footprint frees the hospital to install systems in more locations, giving more people access to hospital data. "Basically, we wanted a universal workstation concept, where users can access any application from any desktop," says Peelgren.

Reaching out to servers

Presbyterian's affiliated home health agency and internal billing, materials management and medical records departments will be the first to receive the network computers; as many as 300 more would go to others over a period of a few years. At first, NCs will be used primarily to replace dumb terminals, but in some cases they will be installed instead of new PCs.

The NCs and retrofitted PCs will access core hospital applications residing on IBM RS/6000®, Windows NT and HP 9000 servers, loaded with various versions of Pathways and Star software from HBOC. These applications handle everything from admitting patients and placing orders to receiving lab results and have modules for everything from pharmacology to radiology. According to Robert Connely, vice president, Connect 2000 product group at HBOC, the Pathways applications focus on enterprise-level healthcare data, while the Star applications focus on hospital-specific functions. Eventually, Presbyterian's thin-client users will also have access to the Internet through a 56kb communications line, router and firewall, thanks to HBOC's value-added network.

In addition to accessing the HBOC applications, Presbyterian is also using the IBM Network Stations (and their free, built-in terminal emulators) to access MedSeries4 billing, financials, and medical record software from SMS. These applications reside on the hospital's IBM AS/400e™ Model 620 business computer.

As in medicine, technology rarely offers any true panaceas. But if there ever were a solution that solves some of the challenges of a growing organization like Presbyterian Intercommunity, the combination of the IBM Network Station with HBOC software and services, and multiuser Windows NT comes awfully close.

For more information

To find out more about how network computing with the IBM Network Station and the IBM family of servers can help you make the most of your business opportunities, call 1 800 IBM-7080 in

North America. Outside North America, call 416 383-5152. Or contact your IBM Business Partner or local IBM representative. If you have access to the Internet, you can find additional Network Station information via the World Wide Web at www.ibm.com/nc.



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Produced in the United States of America
10-98

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GK20-5697-00