

IT-Managed Fiber Optics System Links Louisville Medical Community

It's four a.m. and the emergency room physician at University of Louisville Hospital is alert and wired. He checks an incoming patient's records from a previous stay at Jewish. He consults with his colleague at Norton Hospital about a new treatment that might be just right for the situation. He is hopeful. Wired, yes—but it's not from running from clinic to clinic, and it's not the coffee. It's the fiber optics.

In order to link the downtown hospital consortium of the University of Louisville, University Medical Center, Inc. (UMC), Jewish Health System and Norton Healthcare Systems (formerly Alliant), a high-speed networking system has been implemented. The Louisville Medical Center (LMC), as the community of health centers is called, is being linked together through a system of fiber optic cabling in order to share patient knowledge and information.

"This will position us for future communications between enterprises," says Tom Sawyer, an assistant vice president for Information Technology at the University of Louisville. "The network becomes the heart and soul of information exchange. It will position the health science community to be able to take advantage of technologies across enterprises." IT managed the union of the four separate and distinct networks onto one system.

"The network ties them together," says Mike Dyer, IT's director for research and development. "All of the hospitals have university faculty on staff, all have teaching and research aspects. And the network is tying it all together."

A "fiber backbone," known as "LMCnet," has been laid through underground tunnels and through buildings in order to network among all entities. "Everything sits on top of the backbone," says Mr. Dyer. "And once it's in place, applications will run across the backbone."

The first project, due for completion in July, will replace existing circuits (leased from Bell South) among the hospitals. Proposed projects involve shared telephone services, joint e-mail and Internet access and, ultimately, shared patient care applications.

According to Mr. Dyer, the goal of the LMC project is "integration and sharing of applications to the point of building a consistent environment." However, good things take time,

"It's not going to happen overnight," he says, "but it's a worthy goal."

Why now? With several renowned hospitals in one concentrated area, why is such a connection necessary? The answer may be, why not?

"Some hospitals don't have Internet access at each desktop," says Mr. Sawyer, "and some have very limited e-mail access. We can design new applications any way we want and share data without communications issues being a deterrent."

Adds Mr. Dyer, "It's really competitive, with different companies [involved]. But, there's also a lot of collaboration. We need to collaborate with other major regional medical centers."

To add to this coalition, discussion is underway to extend the network to the Jefferson County Board of Health. The sharing of knowledge among the local medical community in this way is consistent with the university's teaching and research mission and the spirit of collaboration.

When it comes to saving lives, the hospital with access to the best knowledge is not

the winner; the patient is. By linking all possible sources, the information pool is expanded.

"It allows us to dream," Mr. Sawyer says. "We now that have ability to do things we've never dreamed of, without the network being a barrier."