



## Montefiore Medical Center Case Study

One of the nation's largest healthcare systems, Montefiore Medical Center is a leading center for medical education and research. It includes two hospitals, a network of neighborhood health centers, ambulatory specialty services, home healthcare, and rehabilitation and nursing home care. It is also the university hospital and academic medical center for the Albert Einstein College of Medicine.

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– Brian Hoch  
Director of Computer Resources

Director of computer resources, Brian Hoch, began working with Optimum Lightpath in 1994, when Optimum Lightpath installed two T-1s between Montefiore's main Bronx campus and its Yonkers data center. "Once I became an Optimum Lightpath customer, I realized the caliber of people I was dealing with," Hoch notes. "Optimum Lightpath is a very stable organization. The service organization is very, very proactive. Their monitoring is terrific. Anytime we have an alarm, Optimum Lightpath calls us first. With other providers, we always have to call them."

Through the years, the relationship has expanded; and Montefiore has partnered with Optimum Lightpath on a number of technology initiatives – one of which resulted in the development of a unique, proprietary video-on-demand system. "A few years ago, we wanted to come up with a way to use interactive technology to set The Children's Hospital at Montefiore apart from other children's hospitals," Hoch explains. "We worked jointly with Optimum Lightpath and Cablevision to develop a video-on-demand system that operates with smart card technology, wireless keyboards and plasma-screen TVs. The system gives patients access to age-appropriate programming, a jukebox of electronic games, and links to NASA's space station, medical databases and chat rooms where they can talk online with other kids who are being treated for the same thing. It also lets patients who are watching a movie who have to leave their room for

treatment unplug their smart card, carry it with them to wherever they're receiving treatment, plug the card in there, and resume viewing from wherever they left off."

*"With the Metro E system, we quadrupled our bandwidth, while our costs remained the same."*

– Brian Hoch  
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In 2005, Optimum Lightpath implemented a Metro Ethernet (Metro E) network that established 4 gigabit Ethernet links between different campuses. "We already had a medical records imaging system," says Hoch. "Now we have implemented a large PACS system (picture archiving and communications system). We need lots of additional bandwidth."

**For Montefiore, network dependability is critical.**

"Our institution is 100 percent physician order entry-based," notes Hoch. "We're very close to eliminating the paper chart. Everything we do runs on the 300 servers in our data center – our labs, medical records, radiology, billing. That's why it's crucial that our network is up as advertised all the time." To help ensure the extraordinarily high level of network availability it requires, Montefiore has built-in redundancy throughout its network, and quadruple redundancies in selected locations. "Montefiore is a very dynamic institution," states Hoch. "We never stand still. Optimum Lightpath has always been able to react to our needs on a quick and timely basis."