

## Rural hospitals' link to get boost

**Network to add access to experts, leading to better care, officials say**

By James Kimberly

Tribune staff reporter

November 29, 2007

Rural hospitals throughout Illinois will soon be connected to a high-speed fiber-optic network aimed at improving their health care by linking staff to the expertise and resources of much larger hospitals in the Chicago area, officials said Wednesday.

The network, expected to begin operation within a year, would allow emergency room physicians at rural hospitals to send complex CT or MRI images to specialists at other hospitals and get almost instantaneous feedback, said Roger Holloway, president of the Illinois Rural Health Association. That could potentially save lives by quickly conveying treatment instructions, he said.

Currently, most rural hospitals have Internet access equivalent to the speed of a home cable modem, and it could take hours, if not days, to transmit complex medical images, Holloway said.

"We have the ability to buy the latest CT scanner, but we don't have the ability to transmit that image to the radiologist who may live 35 miles away. This would allow us to do that," Holloway said.

Northern Illinois University in DeKalb and 11 other hospital and university networks announced the project Wednesday after Illinois was awarded a \$21 million Federal Communications Commission grant to pay for it. The grant was part of \$417 million the FCC awarded to 42 states and three territories to improve rural health care.

The grant, which will be paid over three years and requires 15 percent matching funds, will pay for the creation of a fiber-optic network able to transmit large data files at high speeds for 85 Illinois hospitals, from Delnor-Community Hospital in Geneva west to Galena-Stauss Hospital and as far south as Hamilton Memorial Hospital in Downstate McLeansboro.

In addition to helping Chicago-area physicians make real-time emergency room diagnoses from afar, hospital officials said the network would reduce costs by avoiding unnecessary transfers to those larger hospitals.

"The key here is to connect the rural places that aren't that far from Chicago to Chicago," said Walter Czerniak, associate vice president for information technology at NIU.

The network will be created by linking up to current fiber-optic networks, installing some new fiber-optic lines in some areas and using wireless broadband transmitters to fill in the gaps. The first hospitals could be connected to the network within the next year, and the entire network will take about three years to build, Czerniak said.

The network could benefit hospitals in other ways as well.

Small rural hospitals that could not afford to implement an electronic medical record system of their own could save money by sharing those of other hospitals in the network. Another benefit would be access to psychiatric consultations, because many rural hospitals do not have psychiatrists on staff or in the area.

Currently, such a patient can occupy a small hospital's emergency room staff for hours while they wait for a psychiatrist to arrive for a consultation, Holloway said. Once the network is operational, it will be possible to consult with a psychiatrist in another city via teleconference, Holloway said.

NIU played a leading role in the Illinois Rural HealthNet Consortium, which included Illinois State University, the University of Illinois at Urbana-Champaign, Southern Illinois University School of Medicine, the Metropolitan Research and Education Network and seven hospital networks.