

## CRITICAL ACCESS HOSPITAL TELEHEALTH NETWORK

The Critical Access Hospital Telehealth Network will enable small rural hospitals to

- electronically access information and services to support and streamline administrative functions
- enhance the ability of staff to participate in and provide educational programs
- improve access to information available through the Internet
- enable telemedicine consultations and video connections that will overcome the remoteness of rural hospitals and the residents they serve.

This goal will be accomplished through the development of a telecommunications network supporting voice, video and data transmission using Internet-based standard protocols. The Illinois Century Network (ICN) will provide the communications backbone for this network. The ICN is geographically well distributed throughout the state and represents a significant investment by the state to promote connectivity for colleges and universities, public schools, libraries, local government, and now, health care facilities. By using the ICN, any linked hospital will be able to communicate with any other hospital, rural or urban, small or large, linked through the ICN.

Consolidating input received over many months from network, telecommunications and video consultants, policy makers and telehealth users, a package of recommended equipment and infrastructure support has been created that will enable rural hospitals to participate in this telehealth network. A grant of approximately \$45,000 to \$55,000 will be awarded to each critical access hospital to purchase the necessary equipment and arrange for infrastructure modifications. Technical assistance will be provided to the hospitals to complete installation of the equipment, training programs will be developed and a minimum level of on-going assistance will be made available to participating hospitals.

Using a T1 connection, the hospitals will be joined to the ICN at the nearest of the 16 ICN points of presence located in each LATA throughout the state. The grant will meet expenses associated with that connection, as well as initial telecommunications charges. Assistance will be provided to enable the hospitals to participate in the Universal Service Fund support program for rural health care providers.

Hospitals will be provided funds to

- upgrade six to eight personal computers to current standards used by state agencies for new purchases
- purchase necessary router and firewall equipment
- purchase video conferencing equipment (Polycom) for use in a conference room setting
- purchase a small personal, PC-based video conferencing camera for use by the hospital administrators or other key staff
- purchase telemedicine-related peripherals, when applicable; to meet initial costs associated with T1 connection
- help support installation and consultation services the hospitals may need

The peripheral equipment necessary to conduct telemedicine consultations will be provided for those hospitals ready to participate in such activities. At this time, there are very few referral or tertiary level hospitals/health care facilities and associated health care providers in Illinois who are performing medical consultations with remote sites. There are many more interested in developing such capabilities but the process is very labor intensive, requires dedicated and video-knowledgeable technical staff and health professionals, and a financial commitment.

Building a voice, video and data network to run on an Internet protocol has certain limitations. However, the geographic dispersion of the critical access hospitals, the limited amount of funds available, the ease of

use and mobility of selected equipment, and the on-going developments and improvements in technology all support this approach. This critical access hospital network is designed to be as flexible as possible, to offer compatibility with other networks that are under construction, and to be easily expanded and upgraded. Additional hospitals will be added, expanded uses of the network will be identified and new networks will offer ever-increasing service opportunities and communications partners for the critical access hospitals. This will be a long-term project with continuous development and adjustments. It offers the participating hospitals unlimited opportunities to enhance their abilities to meet the demands of the health care marketplace and best meet the health care needs of the rural Illinois residents they serve.

telemed network description  
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