Video to connect doctors, patients

In state, project to boost access

By Tracie Dungan
Arkansas Democrat-Gazette
This article was published November 12, 2012 at 5:15 a.m.

FAYETTEVILLE — Imagine a day where Arkansans in every nook and cranny of the state could see a physician specialist without leaving their hometown doctors offices.
And where a patient's family doctor could sit in on the referral visit, to boot.

Health-care providers say that day has arrived for some of the state's residents. Thanks to telemedicine technology that's been around for several years, patients have access to high definition video "visits" to far-away doctors, among other things.

Soon every Arkansas county will have access to the technology as the University of Arkansas for Medical Sciences and others begin the final nine months of implementation of a $102 million federal grant for the Arkansas e-Link project.

The project, matched with $26 million by about a dozen public and private partners around the state, covers both health care and higher education.

It involves laying an ultra-high-speed broadband network - a bigger "pipe" with much faster speeds than conventional broadband offers - and linking doctors, hospitals, universities, colleges and public libraries in Arkansas' 75 counties.

The telemedicine side,known as the Arkansas Telehealth Network, should be connected before the grant period ends on July 31, said Debbie Green, director of Arkansas e-Link.

The objective is for the telemedicine component to tie together sites in all the counties - even the most remote and rural ones - within two weeks, she said.

"For sure, we should have all these sites connected by the end of the year," Green said Friday.

Once the connections and equipment are in place, it will be up to the clinics, hospitals, schools and other end-users to decide when to train their staffs and begin using e-Link.

"It's kind of like: The road's ready, but we can't make anybody get on unless they choose to," Green explained.

Washington Regional Medical Center in Fayetteville went live with its connection Thursday, one week after the hospital gave a demonstration on how the new connections would work, said Alan Faulkner, e-Link's program manager.

A spokesman for the Fayetteville hospital, Gina Maddox, said the hospital has been using telemedicine for at least four years with UAMS' "ANGELS" program and more recently through the AR SAVES stroke program, so the e-Link connection is an upgrade for it. (ANGELS stands for Antenatal and Neonatal Guidelines, Education and Learning System).

"The new bandwidth did go live and there were no problems whatsoever," Maddox said of Thursday's debut. "It was well-tested before they walked away from it, so it's working just fine."

The Nov. 1 demonstration covered other new technologies besides the high-definition videoconferencing. The demonstration also feature bluetooth-enabled stethoscopes with LED displays that can record and store audio of a patient's heartbeat or breathing so a remote specialist can hear it, either in real time or during future playback.

Officials with UAMS, e-Link and a group called the South Central Telehealth Resource Center also demonstrated a combination ear, nose and throat scope and "derm-cam" called a JedMed, which can capture still or video images in high definition.

"Those can be done 'store and forward' - or live," Faulkner said of the JedMed images. Its versatility allows it to take shots of the inside of the ear canal, throat or nose, as well as exterior skin images of a mole, rash or open wound.

Officials at the demonstration said the expanded telemedicine coverage will change Arkansans' lives.

Once health providers out in the state begin using e-Link, patients will be less likely to have to take off from work or spend money for gas and hotels to travel to physician specialists in more urban areas, they said.

Of the $102 million grant from the U.S. Department of Commerce, Washington County's portion was about $3.5 million to cover 11 sites, said UAMS spokesman Andrea Peel.

Like other counties, its sites include participating hospitals, federally funded community health clinics, mental-health centers, Arkansas Department of Health medical units and others. Many factors were involved in the grant distribution and the number of sites, including local agreements with providers to service the fiber-optic network, she said.

Other counties for which UAMS took a recent snapshot were:

Benton County, about $1 million for 13 sites.

Sebastian County, about $700,000 for 14 sites.

Independence County, about $1.2 million for eight sites.

Phillips County, about $1.6 million for eight sites.

Columbia County, about $500,000 for four sites.

Chicot County, about $400,000 for five sites.

Craighead County, about $1 million for 13 sites.

Statewide, there are 454 total sites for health care and higher education, Faulkner said, adding that project overseers expect the number to fluctuate as some participating facilities move locations or close.

The higher-education side of the equation includes an earlier project for the state's universities and colleges called the Arkansas Research and Education Optical Network.

Green said 10 four-year universities had already tied onto the broadband pipelines and that the Commerce Department grant would allow the 11th university in the state's plan, Southern Arkansas University in Magnolia, to tie on. That is expected to occur closer to the grant's July 2013 end date.

Officials refer to the grant by the nickname B-TOP, which stands for Broadband Technology Opportunities Program.

In all, the project extends into subcategories of health care and higher education, such as research, public safety and education at public libraries around the state, Faulkner said.

For instance, hospitals around the state had some broadband infrastructure in place because of a bioterrorism network called the Hospital Preparedness Network. A decade ago, T1 lines were installed in hospitals for this effort, Green said. The Arkansas Department of Health decided not to fund both, so the e-Link program will replace the bioterrorism network, she added.

The partners behind Arkansas e-Link have built websites that allow Arkansans to find the latest information on the developing network. They can be found at www.arkansaselink.com and learntelehealth.org.
Faulkner said e-Link's site includes maps, so people can track the latest on which sites are planned to have its broadband connections in their area.

Arkansas, Pages 9 on 11/12/2012