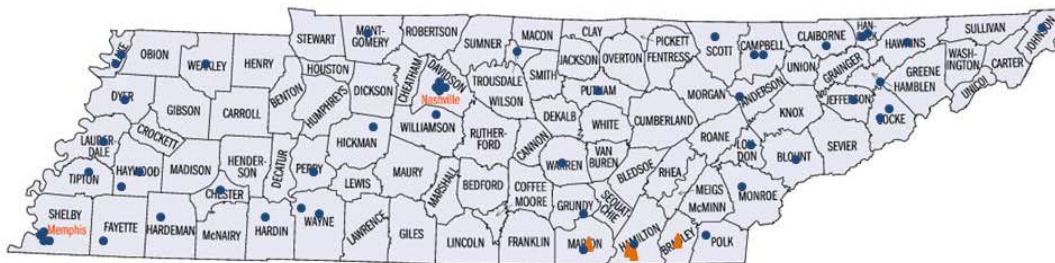


CHN TeleHealth Network

The Community Health Network, Inc. (CHN) is a 501c3 not-for-profit corporation whose members include 17 community health center organizations and the Tennessee Primary Care Association (TPCA), collectively operating approximately 100 clinics. Our mission is to improve the quality and efficiency of health care delivery for medically underserved communities by providing affordable, integrated technology systems, expertise, and related services for community health centers. One of the most successful ways we are using technology to improve the quality of care available to patients at our member clinics is by leveraging our existing statewide Wide Area Network (WAN) to offer telehealth and distance learning opportunities in community health centers, community mental health centers and faith-based clinics across the state. Currently, 55 community health and community mental health treatment sites have either completed installation or are in the process of installing necessary equipment to participate in the CHN Telehealth Network.

For many of the patients served by our member clinics, the CHN TeleHealth Project removes significant barriers of access to specialty services by reducing the need for long distance travel to visit a medical specialist. On average, end-user health centers are located 1.5 hours away or more from the closest major urban center where specialty medical services are available. Telehealth brings these needed specialty medical services closer to home at a reduced cost in terms of both money and time.



While this network is predominantly designed for treatment purposes, TPCA has also been working to establish distance learning programs to help staff at participating community clinics access continuing medical education (CME) opportunities. Distance learning opportunities are also available to end-users through the UTHSC network and will soon be available through Meharry Medical College, as well.

Further leveraging our network for the benefit of patients, CHN has recently expanded our telehealth services by contracting for translation and interpretation. We also work with Centers of Excellence and the Tennessee Department of Children's Services to provide teleconference capabilities.

CHN will continue to look for ways to maximize all aspects of this program, enhancing the delivery of community health care and providing the highest quality of care to Tennesseans who otherwise might not be served.

Expanding Everyday

CHN's entry into the telehealth field began in 2006 with the receipt of a \$370,000 USDA RUS DLT grant. The State of Tennessee supplemented these funds with a grant of \$1.6M. Together, these grants brought specialty medical care to disadvantaged or isolated populations by utilizing state-of-the-art telecommunications. Additionally, continuing education opportunities were made available to providers and staff of participating community health centers. Telehealth services are available in any part of the state via video/audio circuits supported by the state's TNII /NetTN network.

Early Success Breeds More Opportunities

The CHN Telehealth Network currently has 55 sites across the state of Tennessee but that number is rapidly growing.

The success of this early collaboration with the state's network has led to other opportunities. CHN joined with the State of Tennessee to submit an application to the FCC on behalf of the **Tennessee TeleHealth Network (TTN)**, requesting \$7,760,179 to expand connectivity and access to telehealth services to more than 440 nonprofit treatment sites in rural and underserved communities across Tennessee and in communities just over the border in adjoining states. In fact, the FCC funded this exciting project at \$7.9 million – more than requested! This proposal was strongly supported by TPCA, the Tennessee Hospital Association and the Tennessee Association for Mental Health Organizations. An additional outgrowth of the FCC expansion of the CHN telehealth project has been a \$1,000,000 from the State of Tennessee to implement a basic electronic medical record in those clinics that currently do not have one in an effort to expand the use of electronic prescribing across Tennessee.

CHN also contracted with the Vanderbilt Ophthalmic Imaging Center to read digital eye images captured by 3 mobile retinal cameras purchased under the state grant. To date, more than 1,000 patients have been screened. Within the first two months of the program, 16% of patients screened required urgent referrals for sight-threatening diabetic retinopathies and one patient was found to have an embolus and so was recommended for cardiology/vascular follow-up. The number of patients served is expected to increase dramatically over the next year as the program is further developed in participating telehealth clinics and expanded to additional clinics in East Tennessee. Already, this program is affecting lives in a very positive way by protecting one of our most valuable gifts...the gift of sight.

CHN has already been awarded \$302,000 in additional USDA DLT funding to expand telehealth services to 20 more sites and add mobile ultrasound devices, thus further enhancing the quality and timeliness of specialty services available to the rural communities we serve.

Working in conjunction with Regional Obstetrical Consultants, CHN will soon be adding OB-GYN/perinatal specialists to our telehealth offerings under the umbrella of the East Tennessee Perinatal Pilot Project. Through this initiative, patients and providers managing high-risk pregnancies in rural parts of East Tennessee will be able to consult with perinatal specialists who are located in Chattanooga or Knoxville via telehealth equipment available at the local community health center. This initiative is generously funded through a \$1.8 million grant from the BlueCross BlueShield of Tennessee Health Foundation. It will add an incremental 11 sites to the CHN telehealth network and add OB-GYN/perinatal specialists to the roster of services available statewide.

CHN is also making the most of a timely opportunity to expand the use of the telehealth network to include translation services in 13 languages via telehealth video equipment. Using trained medical interpreters, providers will now be able to have a more complete 2 way communication in a patient's native tongue including cultural and nonverbal cues. CHN is implementing this project in partnership with [Health Assist Tennessee](#).

Success is spreading

This project has proven its worth at the community level by providing easier, more timely and less costly access to specialized medical services for the diagnosis, treatment and follow-up of a wide range of health needs. For the 43 centers with installations during the first year, an estimated 100,000 rural or disadvantaged patients had improved access to specialty care services. Many of these patients have restricted access to specialty care due to the need to travel long distances on narrow and winding country roads. Between six and 11 percent live in households without access to a vehicle. Others do not have the available time to be away from home or work, or the money to make such trips, or are fearful of going to unfamiliar urban centers where most specialists practice.

Hardeman County's Bolivar patients are already enjoying monthly access to pediatrics and dermatology care provided by one of our participating health centers in Nashville, Matthew Walker Health Center. Patients in both Scott County and Campbell County have improved access to mental health crisis teams via telehealth equipment installed at the community hospital emergency rooms. Their response times were previously averaging about two hours due to travel times but have now been reduced to mere minutes thanks to telehealth technology. In addition to providing more timely services, it also reduces overall costs by freeing up much needed space in the emergency rooms, and has ultimately been a win-win for all parties involved.

CHN will continue to seek out opportunities to expand the scope and reach of the telehealth project, and to provide technical and administrative assistance to support ongoing operations. The potential to improve health care in rural and underserved communities using telehealth technologies is without bounds. CHN will keep exploring new ideas to improve access to care and the quality of care available for Tennesseans in all parts of our state.

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