



Healthcare delivery in rural America has always presented its own unique set of challenges. Telehealth has long been touted as an essential part of the solution to provide quality essential health services and select, highly specialized consultative care to remote communities.

Historically there have been many obstacles impeding quality care in rural areas of the US. Many of the barriers include distance to the nearest healthcare facility, lack of local resources, access to transportation,

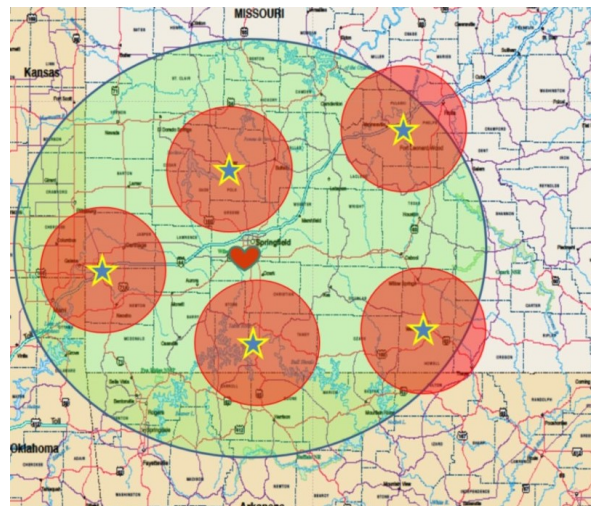
shortages of skilled healthcare workers, health insurance reimbursement, and health literacy. This is a shortlist of the historical impediments of access to quality care.

In these rural communities, developing new and unique healthcare delivery models has provided some solutions to the longstanding challenges. Though often slow to implement, outreach clinics, physician extenders, evolving technologies, and cost-effective Tele connectivity options have helped drive significant improvements in access to quality care.

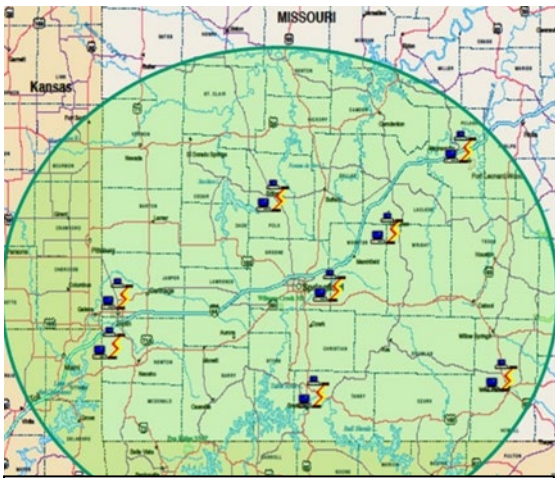
The COVID 19 pandemic of 2020 provided the imperative for the immediate acceptance of Telehealth by the American public, healthcare providers, and perhaps most importantly, the health insurance industry.

The Springfield Case Study: Springfield, Missouri, is the third-largest city in the state and is centered amid 53 rural counties geographically distant from the established tertiary health care centers of St. Louis, Kansas City, and Little Rock.

“The Children’s Heart Center” of Springfield was established over 30 years ago by Dr. James Shapiro to fill this void of access for a vast geography that was underserved for Pediatric Cardiac services. Over the last eleven years, we have created a rural healthcare delivery network of six outreach



Six outreach clinics in five regional locations



Eight Tele-echo sites in community hospitals

clinics and a robust tele-echocardiography network supporting eight hospitals/services. This delivery network has enabled our practice to effectively provide a foundation for quality access to pediatric cardiac care to the over 53 rural counties/12000 square miles of southwest Missouri.

The pandemic and associated public health restrictions challenged our practice to continue supporting our patients without undue delays in care or neglect of their immediate needs.

A custom-designed and rapidly deployed Telehealth solution from Mednax provided an easy to adopt and simple to implement service. Our Telehealth platform, VSEE, provided flexibility and a solution for remote patients and their families to access needed care. We combined this with our existing infrastructure of outreach clinic services to assure adherence to mandated CDC infection control measures during this critical time.

This enabled Pediatrix Cardiology of Springfield to continue to provide necessary healthcare in a timely fashion. Over the past 14 months, we have completed 188 Telehealth visits and met the needs of our diverse patient population. The primary diagnoses where it has been most useful is in hypertension, hyperlipidemia, arrhythmias and syncope. There has been select other diagnoses where it can be used in follow-up visit.

Observations which we have made during this time include:

- Over 90% of these visits have been completed using the family smartphone, with two prime reasons:
 - [19 million Americans—6 percent of the population—still lack access to fixed broadband service at threshold speeds. In rural areas, nearly one-fourth of the population —14.5 million people—lack access to this service. In tribal areas, nearly one-third of the population lacks access. Even in areas where broadband is available, approximately 100 million Americans still do not subscribe.](#)
 - Many families profess a lack of a computer with a webcam as a reason to prefer the smartphone.

- It is essential to optimize the features in any Telehealth platform that will be used. Ensuring simple things like enabling emails and text message notifications and links will help to streamline the patient, provider, and clinic staff experience.
- Integration with your EHR is highly desired. This can enable seamless scheduling and encounter prompting and tracking features between the Telehealth platform and your EHR, ultimately reducing any burden of navigating between two systems.
- Families are highly satisfied with their Telehealth visits and have excellent levels of compliance with the scheduled visit time.
- Completed appointment rates with Telehealth are higher by eliminating issues related to travel, childcare, illness, or work/school schedules since families can schedule outside of traditional clinic hours.
- More efficient utilization of limited clinic resources – including staff and space.

Drawing upon our successful implementation of this Telehealth service, we have optimized an otherwise limited set of clinic resources. This has allowed us to maximize our productivity and expand access to care while maintaining reasonable waiting times for appointments and allocate resources where needed. It also improves access for critical patients requiring an in-person visit to our outreach or primary clinics. As an added benefit, our patient satisfaction levels have significantly increased.



Going Beyond The Clinic

In addition, our outpatient Telehealth workflow can be readily translated to accommodate inpatients in a hospital setting. We can easily modify or use a similar workflow to provide hospital neonatal ICUs, newborn nurseries, PICUs, and pediatric units access to a comprehensive suite of consultations and diagnostics.

The acceptance by our referring hospitals and clinicians has been remarkable. We plan to offer the rural hospitals in our community this service in a staged and thoughtful sequence over the next several months.

Telehealth is the missing link in our healthcare delivery model for remote and large geographical regions like Springfield, Missouri. It is a population health tool that has

enhanced our ability to offer quality and timely care, increased patient family/referral clinician satisfaction, and improved the general well-being of the children we serve. We are excited to embrace the continued journey as we include new technologies and respond to the changing demands of our patients and our unique healthcare market.