

Special Report: Improving Rural Health with Responsible Virtual Care

Tonight, in a rural Midwest farming community, a 54-year-old man suffers a stroke. His wife calls the local clinic, which offers only dental services and x-rays; the clinic doctor requests air transport to a hospital across the state. Responders prep the helicopter for dispatch and load the patient, then make the 30-minute trip. By the time they've unloaded the patient and connected him to the right care team, the patient has lost valuable treatment time - and the trip has cost \$28,000.

The alternative? Virtual care - in this case, a telestroke solution. A remote neurologist asks diagnostic questions and observes images in real time via videoconference. The neurologist orders the administration of tPA, a FDA-approved clotdissolving treatment, and arranges follow-up care. The patient's door-to-needle time is dramatically reduced, his recovery accelerated.

Telemedicine can save money, time and patients' lives across the healthcare spectrum. From Olympic athletes to elementary school students, virtual care connects patients to immediate medical expertise. But its impact is especially strong in small towns and rural communities,

which often lack healthcare resources beyond primary care providers.

By connecting rural patients to specialists in other locales, telemedicine is helping underserved populations live healthier lives.

Challenges in Rural Care

Rural Americans make up 15-20 percent of the U.S. population. Yet rural communities across the U.S. — from desert towns in the Southwest to Appalachia to Midwest farming communities often face a shortage of healthcare providers. Specialists tend to congregate in urban areas to broaden their patient pool. Small communities struggle to attract enough primary care providers to serve their populations. While some programs offer college loan forgiveness to young doctors who practice for a defined period of time in rural communities, these providers often move on once the loans are repaid.

The National Rural Health Association reports there are only 30 specialists per 100,000 people in rural communities, compared to 263 specialists per 100,000 urban residents. A University of Minnesota School of Public Health study reported that in 2014, 54 percent of rural counties did not have a hospital with obstetrics services.

The NC RHRP reports that at least 80 rural hospitals in 26 states have closed since January 2010.

Residents who live in small towns, farms, ranches and reservations can face a two-hour trip or longer to reach a health care provider. Those trips often involve lost wages, childcare arrangements and transportation costs. Patients who have high-deductible insurance plans (or no coverage at all) may feel that missing work and funding transportation to a distant appointment are additional expenses they can't afford. Often they skip preventive screenings and delay care until a problem or condition reaches a more serious stage.



The High Cost of Minimal Care

Patient outcomes depend on available healthcare options. The longer patients go without appropriate medical care, the slimmer their chances for positive outcomes. An early stage cancer can turn metastatic; untreated diabetes can lead to endorgan damage.

The impact on rural communities is dire and undeniable:

According to the Centers for Disease Control and Prevention (CDC), rates for the five leading causes of death in the U.S. - heart disease, cancer, unintentional injury (including vehicle accidents and opioid overdoses), chronic lower respiratory disease and stroke-are higher in rural communities.

Opioid overdose deaths are 45 percent higher in rural areas, but most treatment centers are near urban areas.

Rural areas have higher infant mortality rates and higher childhood rates of mental, behavioral and developmental disorders.

Rural residents are more likely to have cancers connected to modifiable risks, such as tobacco use, human papillomavirus (HPV), and lack of preventive cancer screenings.

Without available care, rural communities face an ongoing legacy of poor health outcomes.

Telemedicine Connects Rural Patients to Quality Care

Even in remote towns with few healthcare resources, telemedicine can connect patients to world-class doctors through real-time interactive communication. Video capabilities and integrated medical devices allow clinicians to evaluate. diagnose and treat patients remotely. These doctors can monitor vital signs and collect information for blood glucose monitoring, blood pressure readings, ear and eye infections, heart ECG data, sinus infections, ultrasounds and other needs.



Telemedicine benefits rural communities in multiple ways:

- Patients can receive specialist care and focused medical expertise that wouldn't otherwise be available in their community.
- Through faster appointments and better preventive care, patients can potentially avoid more serious conditions and increased healthcare costs.
- Small hospitals can create a sustainable revenue stream by offering telemedicine services that connect their patient base with remote specialty services.
- Patients can develop consistent primary care relationships, even if those providers leave the area.
- Patients can avoid lengthy trips to inperson appointments.

Rural Patients, Improved Outcomes



Alicia is a former child pageant queen who began tanning at the age of 12. She notices a changing mole on her leg but her rural Texas town is four hours from the nearest dermatology clinic in Lubbock. She ignores it until a mobile telemedicine clinic visits her community - where providers diagnose her with melanoma and connect her to life-saving treatment.



Jeff, a U.S. veteran in rural Vermont, lives far from the nearest Department of Veterans Affairs medical center. Suffering from PTSD and hypertension, he typically vacillates between frequent hospitalizations and months of no treatment. A VA telemedicine program establishes him with a PCP, behavioral health specialist and medication regimen, eliminating his inpatient admissions.



There are no dentists or periodontists in Carmen's small Montana town – just two dental hygienists. When one diagnoses her with periodontal disease during a cleaning, Carmen is told she'll need to visit the city for multiple sessions of painful and expensive gum flap surgery, each of which will involve opioids and several days off from work. Carmen avoids surgery by visiting the other hygienist, who treats her in a single non-invasive procedure using a teledentistry micro-endoscope.



Sam, who suffers from diabetes and chronic heart failures, lives on the Navajo Nation in Arizona. He's been rushed to a Flagstaff hospital by helicopter several times. Through a <u>remote monitoring program</u>, he uses blood pressure monitors, pulse oximeters, scales and smart phones to be remotely treated by nurses. He dramatically reduces his number of hospitalizations – and when he has a heart attack, telemedicine saves his life by connecting paramedics to a remote cardiologist.



A New Era in Rural Health

While modern medical advances have helped Americans in major cities and affluent suburbs, outdated models of healthcare delivery have left many rural communities behind. GlobalMed is solving this care gap with a sustainable virtual care model that reaches patients who might not otherwise receive treatment. From rural Alaska to struggling Appalachian towns, GlobalMed can connect any patient to doctors, therapists and specialists for faster and more thorough treatment.

Private practices and rural hospitals can reinvent their service offerings – and establish a stronger culture of care across their communities.



GlobalMed powers the world's largest, most advanced virtual care programs by designing, manufacturing, and deploying fully integrated software and hardware solutions.

Providers are enabled with data capturing tools to deliver evidence-based treatment and improve patient outcomes while lowering costs. Providers looking for their own technology to manage capacity, save money, and deliver responsible medicine, will get all they need from one platform. Recognizing the importance of trust and consistency in healthcare, GlobalMed also offers white-label versions of their systems so that providers can self-brand their virtual care offerings to strengthen the patient relationship with their organization.

With over 15 million consults delivered in over 55 countries, GlobalMed is honored to be the telehealth provider to the Department of Veterans Affairs, Defense Health Agency, and the White House. Its virtual care platform has the Authority to Operate (ATO) on U.S. Department of Defense networks with the highest level of security and supports a patient at any point in the continuum of care. Learn more at www.globalmed.com.