What happens when a rattlesnake bite, ATV accident or accidental shooting happen in rural areas where advanced specialized care is not nearby? If victims of serious trauma, heart attack and stroke don’t receive the help they need right away, their lives are in danger. Even in less dramatic scenarios — like a nursing home resident whose blood pressure is dropping — timely care makes all the difference.

Avera Health, a health system with 300 locations across the Upper Midwest, has found telemedicine to be a solution to many of the daunting challenges of health care today: timely access to specialized care, workforce shortages, provider burnout and lack of mental health resources. It is home to Avera eCARE, the world’s most extensive telehealth network.

The rattlesnake bite happened to a 14-year-old girl when she was ambling along a river shore with her cousins while camping in rural South Dakota. Her symptoms came on quickly and severely — causing her to be incoherent, fading in and out of consciousness, with shallow breathing. As soon as she arrived at the nearest rural critical access hospital, staff activated the video connection to immediately bring emergency specialists from eCARE’s eHelm virtual hub in Sioux Falls, S.D. As they consulted on care for the moment, they dispatched the Careflight helicopter to bring the all-important antivenom. The right steps at the right time saved the girl’s life.

An overturned ATV in rural Montana left a 10-year-old girl injured and gasping for air due to collapsed lungs; she was 30 minutes away from the nearest rural hospital and hours away from a tertiary care center. Before she even arrived, staff at the rural hospital had established a video connection with a specialist at Avera eCARE Emergency, who remotely guided the local team through life-saving procedures rarely attempted in a small hospital. Without the right intervention, she may not have survived. Today, she is whole and healthy.

At a South Dakota long-term care facility, an 83-year-old woman had just been admitted when her blood pressure dropped from 139/55 to 81/43 30 minutes later. The staff called Avera eCARE Senior Care, whose providers ordered adjustments to her medications, ordered a fluid bolus along with labs and remained on camera during those interventions until the resident was stable. In a scenario that would have most likely resulted in an ambulance ride, this resident could receive care in place.

Avera eCARE was developed by Avera Health 25 years ago through a pilot project to connect our growing network of medical specialists in Sioux Falls to patients living in rural and small-town locations who either had to drive for specialty services or go without. Avera leaders were intentional about growing the reach of eCARE to live out the organization’s mission to make a positive impact in the lives and health of persons and communities.

Avera eCARE has proven to bridge these gaps in rural settings — but also in urban locations. A model worldwide, it has grown to serve over 450 sites.

**AVERA eCARE OVERALL IMPACT**

Now serving sites in 30 states, Avera eCARE offers
innovative and specialized care through a range of service lines in the hospital and beyond — emergency, pharmacy, ICU, senior care, specialty clinic, consult, hospitalist, behavioral health, correctional health, school health, Avera eCARE virtual doctor visits and more. Avera eCARE is continually finding new ways to fill the gaps. Our latest projects involve behavioral health — building a team that’s able to respond to crises and not only provide consultations but treatment 24 hours a day, seven days a week.

**Ambulatory Telemedicine** — The hardship of taking time off work or school, or requiring assistance to travel across the state for one or even multiple appointments can take a toll on patients and their loved ones. With telemedicine, patients can see physicians in many medical specialties — including infectious disease, pulmonology, cardiology, nephrology and others — without having to leave their community. Up to 30% of our eCARE Consult patients indicate that without telemedicine, they would have foregone specialty care. We see this especially in our partnership with Indian Health Service where patients may not qualify for coverage of specialty services unless they are provided at the IHS clinic through telehealth.

**Community Care** — With the advent of high-quality, secure telemedicine applications, we can further extend this care model into patient homes. This allows us to truly meet patients where they are, on their terms. For patients with gestational diabetes, as an example, this can have a tremendous impact. These patients are young and motivated to quickly control their blood sugar once they receive a diagnosis. With telehealth tools, we can bring the clinic to the patient, delivering timely education, clinical support and ongoing monitoring of their care. The moms enrolled love that they can have an appointment from their office or during a lunch break. Knowing that their care team is monitoring their daily glucose levels keeps them motivated to track their progress, watch what they eat and work with the team if insulin is prescribed. The results are impressive — happier, healthier deliveries, reduced birth complications and fewer C-sections, not to mention thousands of miles not having to be traveled by patients.

**Post-Acute** — The elderly population living in skilled nursing homes and long-term care facilities are frail, medically complex and dealing with multiple chronic conditions. Due to the way health care is structured and paid for in the United States, many nursing home residents face challenges in accessing timely, quality care, often causing rapid health deterioration and further

**Unnecessary hospitalization and emergency room visits are harmful, costly and represent a major opportunity to improve health outcomes and quality of life for a vulnerable population.**

**POLICY HURDLES**

Telemedicine is gaining acceptance and accolades for providing better care, yet we need to continue to break down policy barriers to allow this technology to be used to its fullest extent.

**Reimbursement Issues** — Although recently there has been good momentum behind telemedicine payment practices, there is quite a way to go. Congress passed legislation in 2000 that restricted telehealth reimbursement based on rurality. Currently telemedicine reimbursement does
not cover the 80% of Medicare beneficiaries who live in 1,200 metropolitan counties not included in the definition of “rural.” There is also no coverage for services originating from a beneficiary’s home (even for the “homebound”), hospice and other common non-medical locations from which a beneficiary seeks service. Services with newer modalities of care, such as store and forward (where patient medical data is shared between locations in order to read test results or to assist with diagnosis or treatment), remote patient monitoring, and other review of patient-generated data are increasingly being recognized by major payers including the Centers for Medicare & Medicaid Services (CMS). However, it is difficult to assign an appropriate value to this work, and that coupled with the requirement of patient co-pays can create significant rollout challenges for providers. CMS continues to seek public comment and adjust payment on these types of services in response to the low utilization of such code sets. Medicaid and private payers typically have different reimbursement requirements and may lag Medicare in adopting new codes for telehealth reimbursement. That can create confusion and even disincentives for providers interested in exploring telehealth.

Due to providers not receiving equitable compensation for services provided via telehealth, they are less willing to offer the service even when it is in the patient’s best interest. Many states have passed coverage parity but not payment parity, meaning some states have provided for telehealth services over in-person services. This is definitely an issue worth figuring out as we want to give our providers the confidence they need to do telehealth, while receiving the same compensation rate as they would with in-person services.

**Connectivity/ Broadband Issues** — Going back to care for moms with gestational diabetes, we’ve found that moms who have easy and accessible tools via telemedicine are able to experience impressive results. However, with the current state of broadband, some women are not able to afford or access reliable, robust broadband internet access connectivity. Without expanded broadband, we are leaving some areas of our country without the advantage of these potentially life-saving, money-saving and career-saving services. Expanding broadband and continuing to fund improvements is a necessity in order to evolve with the advancement in telemedicine.

At Avera we are continuing to be innovative with finding creative ways to bring together technology and expertise to meet individual patients where they are. There has been good support among in the U.S. Congress for advancements in telehealth. If you are interested in supporting or learning more about telemedicine, work with your congressional representatives on the CONNECT for Health Act of 2019, or follow the FCC progress on the Connected Care Pilot.

MANDY BELL is the quality and innovation officer for Avera eCARE in Sioux Falls, S.D. She has been with Avera eCARE for over eight years. She has previous experience as a quality manager and grants writer with the Avera Health system.

JESSICA GAIKOWSKI is an administrative fellow with Avera McKennan Hospital & University Health Center in Sioux Falls.

**RELATED POLICY BRIEFS**

National Rural Health Association Policy Briefs
