Patients in rural health settings face unique needs and challenges their urban counterparts do not share. Only about 10 percent of physicians practice in rural America, despite the fact that nearly one-fifth of the population lives in these areas. Difficulties in recruiting and retaining health care providers have resulted in long-standing disparities in rural and urban physician supply. In fact, rural Americans are nearly twice as likely to die from unintentional injuries, and they travel greater distances to reach a doctor or hospital.

The Affordable Care Act (ACA) contains workforce provisions aimed at addressing provider shortages and closing the access gap, but providers still are less likely to practice in rural settings. In an effort to improve access to care for rural Americans, telehealth networks are being increasingly used to connect patients and providers in different locations using a unique set of tools fueled by technology.

What Is Telehealth?

The Health Resources and Services Administration defines telehealth as “the use of technology to deliver health care, health information or health education at a distance.” The two types of telehealth applications are real-time communication and store-and-forward. Real-time communication allows patients to connect with providers via video conference, telephone or a home health monitoring device, while store-and-forward refers to transmission of data, images, sound or video from one care site to another for evaluation.

Telehealth in Rural Care Settings

According to Steve Barrow, policy director for the California State Rural Health Association, telehealth services “can prevent economically strapped patients from missing work, help reduce the effects of nursing shortages, improve home monitoring of chronic disease, and provide access to distant ICUs and specialists—all acute problems in remote geographic settings.”

New developments in the telehealth field allow patient access to specialty providers at the local hospital or even at home. For example, Avera, a private medical group, connects rural patients and providers with specialty providers using telehealth services such as eEmergency, eICU, eStroke and eConsult. The eEmergency service “links two-way video equipment in local rural emergency rooms to emergency-trained physicians and specialists at a central hub, 24 hours a day, seven days a week” in order to provide support, consultation or initiate physician-guided emergency care until a doctor can arrive on scene. These technologies have the potential to dramatically improve outcomes because they save time and travel for rural patients.

Home health monitoring devices allow chronically ill patients to transmit vital signs and health status survey data remotely to their care providers to help manage their disease and receive medical intervention when necessary. In some cases, providing such accessible contact and disease management has been shown to reduce hospital readmission rates and help prevent or mitigate medical emergencies.

State Action

In addition to the many health benefits of telehealth technology, states are beginning to recognize potential cost savings. In Wyoming, Bob Wolverton of the University of Wyoming’s Center for Rural Health Research and Education, said, “the [Wyoming] state Medicaid office strongly supports providing distance care because it brings treatment to patients sooner and it saves the cost of travel reimbursement, thereby reducing the cost to taxpayers.” In California, the state has realized long-term savings of $13 million because telehealth has been used to provide care to more than 16,000 state prisoners per year since 1997.

Many states have included telehealth technology in their public health efforts to increase access to underserved populations. In fact, 39 states currently provide some form of Medicaid reimbursement for telehealth services, and 12 require private insurance plans to cover telehealth services. New Mexico, for example, created the Telehealth Commission in 2005. It now offers coverage for telehealth services to Medicaid
recipients and funds telehealth services at school-based health centers. Alaska is establishing a large telehealth network that connects rural and remote Alaskans to providers. It plans to expand network capabilities to serve all Alaskan communities.

The opportunities presented by telehealth technology do not come without challenges, however. States are finding that many telehealth providers are not located in the same state as the patients they serve, creating the need for interstate licensure or specific telehealth practice licensure. Arizona and New Mexico, for example, have a special telehealth licensure provision that allows out-of-state physicians to provide services with consent from the patient and the patient’s “health care decision maker.” Nevada and Utah, on the other hand, exempt out-of-state, licensed providers from full state licensure requirements, allowing them to provide services for a short duration or specific event. Most states still have restrictive licensure laws, however, making use of interstate telehealth technology challenging.

**Conclusion**

Because rural communities face specific challenges regarding access to health care providers, they historically have suffered health disparities compared to urban communities. While the ACA created programs to strengthen the health care workforce, rural communities are likely to continue experiencing provider shortages and inadequate access to care. Telehealth allows an opportunity to help ameliorate this problem. Equipped in many ways to serve rural health needs, telehealth provides patients, providers and state governments to leverage existing provider networks and potentially improve rural health outcomes. Although challenges exist, telehealth continues to expand and offer new services as technology advances; state governments are working to keep pace. Despite its challenges, however, telehealth, coupled with many other rural health policy initiatives, has the potential to revolutionize rural health care.

**Selected References**


**NCSL Contact:** Joshua Ewing | joshua.ewing@ncsl.org