



**KANSAS HEALTH INSTITUTE**

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**Senate Utilities Committee**

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**Informational Testimony:  
Impact of Broadband on Health Care Access and Outcomes in Rural Areas**

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*To improve the health of all Kansans through educational offerings that support effective policymaking, engage stakeholders at the state and community levels, and provide nonpartisan, actionable and evidence-based information.*

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Mr. Chairman and members of the Committee:

My name is Linda Sheppard and I am a strategy team leader at the Kansas Health Institute, where I work on a variety of issues related to health reform and current issues in health care. The Kansas Health Institute (KHI) is a nonprofit, nonpartisan educational organization based here in Topeka, founded in 1995 with a multiyear grant from the Kansas Health Foundation.

Thank you for the opportunity to provide information today regarding how the lack of broadband affects health care access and outcomes in rural areas. While KHI has not performed extensive research on this subject, recent literature certainly suggests that the lack of broadband can impact the ability of patients in rural areas to access certain types of health care services and ultimately impact their health outcomes.

Contemporary health care is becoming increasingly more integrated with technology and telecommunications as a means to improve efficiency and effectiveness in service delivery. Telehealth/telemedicine (the remote delivery of health care services) has the potential to improve the quality, cost and availability of health care in rural areas by providing improved access to specialists, speedier treatment, the ability for patients to remain close to home, and the ability for rural health care providers to sharpen and maintain their skills. However, the success of telemedicine is dependent upon access to strong, reliable broadband service.

In a 2012 report entitled [The Role of Telehealth in an Evolving Health Care Environment](http://nap.edu/13466) (<http://nap.edu/13466>), the authors stated that telehealth can increase the quality of care and reduce costs by reducing hospital readmissions and unnecessary emergency department visits in rural communities. The report also noted that telehealth makes it more feasible for rural health care facilities to provide more specialty services to rural patients, including psychiatry, dermatology, dental care, audiology, oncology, and obstetrics. This technology can also facilitate chronic care management, emergency care, home monitoring, intensive care unit patient monitoring, and online behavioral health therapy and counseling.

Based on research showing a higher cancer death rate in rural areas compared to urban areas, the Federal Communications Commission (FCC), through its Connect2Health Task Force (C2HFCC), announced in December 2017 that it was partnering with the National Cancer Institute to focus on increased broadband access and adoption in rural areas. As providers increase their use of digital tools to diagnose and treat patients—such as remote monitoring, or the collection, storing and transmission of medical information—they can run into issues when visiting rural patients if the patient’s internet connection is weak or not secure. In areas with weak internet service, the signals can’t always support the bandwidth needed for rapid and reliable transmission of large volumes of clinical data. Arguably, the lack of adequate broadband service prevents these rural patients from getting the same quality of care they would get if they travel to their provider.

In October 2017, the Healthcare Information and Management Systems Society (HIMSS) encouraged Congress to “invest in infrastructure to support 21st Century health care” with funding for broadband expansion in rural parts of the country. HIMSS asserted that 39 percent of Americans living in rural areas lack access to “advanced telecommunications services,” compared to 4 percent of Americans in urban areas. Pointing to 2015 data, HIMSS stated that

counties with low connectivity generally have higher rates of chronic disease, obesity and diabetes.

Another benefit of broadband access in rural areas is the impact it can have on rural health care providers. For physicians who practice in small towns and experience feelings of isolation, telemedicine allows them to consult with specialists and physicians practicing in urban areas and continue their education and training. The continuing development of their skills and their ability to quickly access specialty physicians on behalf of their patients could certainly impact the health care of their patients.

Broadband connectivity is also being increasingly viewed as a social determinant of health, an environmental factor that is a driver for health and quality-of-life outcomes and risks. While an individual's health is certainly dependent upon their genetics and access to health care, it has become clear that lifestyle choices and environmental factors also play a major role. In today's world, broadband connectivity and the ability to make health care services—particularly specialty services—available to all individuals, no matter where they live, has become a significant environmental factor in health. In a clinical setting, broadband may improve the clinical experience by allowing patients to receive more comprehensive and timely care and provide health benefits such as focused and specialized care that was previously unavailable, easier access to personal health data for decision-making, and access to health-related applications and information to improve overall health and well-being.

Thank you for the opportunity to share this information with you today. I will be happy to stand for questions.