FOCUS ON RURAL HEALTH

Studies: Telemedicine pays dividends in rural health

Deploying telehealth in rural areas and elsewhere to deliver care more efficiently while reducing costs and expanding access continues to accelerate. And the evidence is mounting that virtual care is delivering on these promises.

This was a hot topic at the recent AHA Rural Health Care Leadership Conference, where rural hospital and health system leaders shared strategies and information about how they’ve expanded telehealth services to areas like behavioral health emergency assessments, obstetrics, nephrology and neurology.

Yet, for all the progress being made to leverage technology and clinical expertise to bring care more efficiently to those in rural and remote areas, detailed studies on the clinical and financial impact of these efforts have been few and far between. But this, too, is changing.

A study conducted by Intermountain Healthcare leaders and published in the Journal of Telemedicine and Telecare showed that the total cost for some of the most common virtual diagnoses was sharply lower than in other care settings. The study, which looked at SelectHealth (a nonprofit health plan serving 900,000 members in Utah, Idaho and Nevada) claims between April 2016 and March 2017, reported that the $429 total cost of virtual care for the most common
telehealth diagnoses was $232 less than urgent care, $278 less than primary care and $2,974 less than diagnoses delivered in the emergency department.

![Costs of virtual care vs. traditional settings for low-acuity urgent conditions](image)

**Intermountain’s Connect Care Pro** 24/7 on-demand telehealth system provides services in seven western states and to many facilities that are not part of Intermountain, which began offering neonatal telehealth services in 2012. Marc Harrison, M.D., Intermountain Healthcare’s president and CEO, noted in the Harvard Business Review that telehealth has had a profound impact on patients and the health system.

Aside from driving significant decreases in unnecessary ED and urgent care utilization, Intermountain Connect Care Pro has contributed to decreased mortality and intensive care unit lengths of stay, improved door-to-door time for stroke patients, and decreased evaluation time for behavioral health patients in crisis. The program also has had a significant impact on preventing unnecessary and costly patient transfers for newborn and ICU patients.

Another more recent telehealth study, albeit much smaller in scope, conducted by the Mayo Clinic found that using an asynchronous telehealth platform for consults with infectious disease experts resulted in a sharp reduction in risk of death within 30 days, as well as a decreased risk of rehospitalization. The study at Mayo Clinic’s Austin and Albert Lea hospitals in southeastern Minnesota, saw a 70% reduced risk of death within 30 days and a trend toward reduced readmission within 30 days.

**5 ways telehealth is benefiting patients, providers and payers**

Many factors are driving the growth of telehealth services in rural areas, from changing demographics and consumerism to a continuing shortage of providers to advancing technology.

As these studies demonstrate, provider organizations, patients and payers are seeing the following benefits:

- Enhanced access to care.
- Improved patient convenience.
• High degree of provider satisfaction.
• Increased levels of sustainable services.
• Reduced cost of staff and patient travel.

LEVERAGING AI TO PROVIDE A RURAL ‘RETAIL MEDICINE’ EXPERIENCE

Artificial intelligence-enabled technology can help clinicians make better diagnostic and treatment decisions while improving access and quality. These are critical issues for all providers and patients, but particularly so for those in rural areas, where limited transportation options often contribute to delayed or foregone treatment, resulting in disease progression and higher costs.

Winona (Minn.) Health is using an intelligent online exam tool built on an AI platform to automate care delivery and improve both efficiency and the patient experience for those in remote areas. Patients can access Winona Health’s SmartExam platform from Bright MD 24/7, complete an online questionnaire about their current symptoms, health history and medications and connect with an urgent care clinician in minutes.

In a recent podcast interview with John Supplitt, senior director of AHA Rural Health Services, Winona Health CEO Rachelle Schultz says the platform helps clinicians quickly diagnose illnesses and injuries and recommend customized treatment plans.

This “retail medicine” approach with $39 virtual visits, Schultz says, is based on the latest medical guidelines and makes optimal use of clinician time to review the patient’s health history, provide a diagnosis and prescribe medications that can be picked up at the patient’s pharmacy of choice. Once a patient invests the 15-20 minutes it takes to create an account and complete the online questionnaire, the information is immediately picked up and reviewed by a Winona Health care provider — often in between seeing patients in person.

The clinician review process — conducted by one of four physicians or nine nurse practitioners — typically takes two to three minutes without touching the patient’s electronic health record. The completed visit then goes directly into the patient’s medical record.

Since the program launched this past June, about 1,000 consumers have registered online, Schultz says, and providers now perform 45-60 exams per month, most commonly for colds/coughs/flu, allergies and women’s health issues. Winona Health will look to expand the program to some of its clinics this year.

For more on AI’s impact on health care and how leverage the technology to improve care delivery, see the AHA Center for Health Care Innovation’s Market Insights reports.

We want to hear from you! Please send your feedback to Bob Kehoe at rkehoe@aha.org.