ARTICLE TECHNOLOGY
Telehealth Is Improving Health Care in Rural Areas

by Marc Harrison
Rural communities, often amid stunning and isolated landscapes, are a defining feature of much of the United States. But those same landscapes can make it difficult for people to access health care.

**Intermountain Healthcare** is addressing the pressing needs of people who live in rural areas through telehealth, which uses secure video and audio technology to connect care providers in smaller health care facilities with specialists in large hospitals. The results we’ve experienced hold promise for rural communities throughout America.
In rural America, patients are often hundreds of miles from the care they need. Community hospitals, with low volumes and limited budgets, usually don’t have specialists like neonatologists, neurologists, and cardiologists on staff. And even when they do, there are often too few to ensure constant coverage.

Patients are frequently transferred to distant acute care centers to receive specialized care. Local caregivers don’t get the opportunity to learn from specialists about caring for complicated patients. Similarly, social workers, crisis workers, and care managers for chronic diseases are sometimes not available in smaller communities, requiring patients to travel hours for basic mental health and primary care.

Telehealth transforms those situations to everyone's benefit. The patient receives expert treatment locally without the added risk and cost of a transfer to a bigger hospital. Local hospitals retain vital revenue and enhance their services. Community members get better care that’s based on evidence-based best practices. Health care is better overall.

Intermountain operates 24 hospitals and 160 clinics in Utah and Idaho — a footprint that’s about the size of Italy. But our Connect Care Pro operation provides 40 telehealth services in seven western states to many facilities that are not part of Intermountain. We have a 24/7 telehealth center in Salt Lake City with a full-time staff, plus about 500 care providers on call who are in a wide range of medical specialties.

We have ensured that the televisions in patient rooms throughout our system and affiliated hospitals, in both rural and urban settings, have cameras to allow for telehealth care, and our hospitals also have carts with cameras that can be wheeled into rooms as needed. Telehealth-connected specialists can communicate directly with patients and local care providers and receive real-time updates on medical conditions.

The benefits to patients are profound. Recently, a baby born in a rural community with a hole in his lung received telehealth care using Intermountain’s 24/7 on-demand system. The baby obtained a critical care consultation that allowed him to stay in the facility where he was born instead of being transferred to a newborn intensive care unit (NICU) at one of Intermountain’s tertiary care facilities. That avoided a helicopter transfer that would have cost more than $18,000. The parents were able to remain in their community, surrounded by their support system, instead of making a seven-hour round-trip of more than 400 miles every time they wanted to see their baby in the NICU. And, the rural hospital was able to retain the revenue for caring for the baby, helping it remain economically viable.

The benefits are also evident for health care broadly. We’ve experienced a significant decrease in unnecessary emergency room and urgent care utilization among patients who’ve used the service. Sixty-two percent of patients who utilized Intermountain Connect Care reported that they would have otherwise accessed care at an emergency room or urgent care clinic. And, as the health industry
moves toward a value-based model that rewards providers for achieving better outcomes at lower costs and away from a fee-for-service model that bases payment on the volume of services provided, telehealth allows the best use of resources to provide high-quality care at the lowest possible cost.

Our use of Connect Care Pro has also contributed to decreased mortality and length of stay in our ICUs, improved door-to-needle time for stroke patients, decreased evaluation time for mental health patients in crisis, and avoidance of unnecessary and costly patient transfers for both newborn and ICU patients. With access to the latest best practices and standards of care, Connect Care Pro also promotes standardization of care and a pathway to constant learning for caregivers.

A recent study of Intermountain’s neonatal telehealth program, which began in 2012, evaluated the effect of video-assisted resuscitation on the transfer of newborns from eight community hospitals to newborn ICUs in Level 3 trauma centers. The service produced a 29.4% reduction in a newborn’s odds of being transferred, which corresponds annually to 67 fewer transfers — and estimated savings of $1.2 million for affected families.

To help us provide more benefits like that, Intermountain is expanding Connect Care Pro to add primary care and specialty care video consults. We expect this will result in an improved patient experience by reducing the burden of travel for routine physician visits and enabling specialists to assist in diagnosing conditions. We predict it will also help us engage the roughly 30% of millennials who don’t have a primary care provider.

The digital hospital model we’re creating is focused on identifying areas we feel we can impact from a safety, quality, access, cost, and experience standpoint. After those targets are identified and vetted, we align clinical teams, technology, and good data to deliver on our objectives. This allows us to spread best practices rapidly and without respect to urban proximity, so our patients receive consistent high-quality outcomes regardless of geography.

The model will also help smaller facilities meet federal standards, such as stewardship programs meant to ensure appropriate use of antibiotics. A lack of resources and of access to infectious disease specialists, pharmacists, and data analysts makes this requirement nearly insurmountable for small facilities. Telehealth not only makes antibiotic programs possible; it makes them more efficient, affordable, and scalable among a wide range of medical providers and facilities.

Telehealth isn’t just for rural communities. It can also be used to help patients in urban areas with transportation, time, or mobility constraints access a full range of specialties. But one challenge to scaling telehealth to improve health care nationwide is that, despite its many benefits and cost savings, the relevant payment policies and reimbursement models often prevent providers from receiving payment for telehealth services. So even though patients, families, community hospitals, their surrounding communities, and care providers clearly benefit, large integrated health care systems are left to cover the costs.
Intermountain is in a better position to deal with this challenge than many health systems because we have financial risk for about 42% of the patients we treat — much higher than most hospitals and health systems. That’s mainly due to the fact that we have our own health plan in Utah and Idaho, which has about 900,000 members. Telehealth makes great sense from both a clinical and financial perspective when you have financial risk since the savings aren’t escaping to a third-party insurer. For those patients outside the 42%, however, we often have to absorb the cost. But unlike many large health systems, our management and governance systems support forgoing revenue in order to provide these services that benefit so many people.

Payment policies and reimbursement models need to catch up with this major advance in health care technology and delivery, which works best in a pre-paid, or capitation, model vs. a fee-for-volume scenario. There is discussion in Washington, D.C., about creating parity in payment, so that care providers would be paid the same for a digital visit as for an in-person visit. But so far only limited telehealth services are being covered by the federal government and other payers.

In keeping with our tradition of data analysis, Intermountain is documenting the results of our telehealth initiatives, and we’ll share them broadly as the initiatives evolve. Stay tuned.

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