Improving Value Through Telehealth

Technology is fundamentally changing how hospitals deliver care to patients. Telehealth, the provision of care remotely through telecommunication technologies, such as videoconferencing, remote monitoring, electronic consults and wireless communications, enables providers to extend care and expertise. America's hospitals and health systems are increasingly adopting telehealth strategies. Between 2010 and 2017, the percent of hospitals reporting that they connect with patients and practitioners through technology more than doubled, growing from 35% to 76%.[1]

Telehealth helps ensure patients receive the right care, at the right place, at the right time. The benefits of telehealth are numerous, including:

- Immediate, around-the-clock access to physicians, specialists and other health care providers;

- Expanded access to specialty care that otherwise would not be available;

- Remote monitoring of patients without requiring them to leave their homes;

- Increased provider capacity to care for patients;

- Less expensive and more convenient care options for patients; and
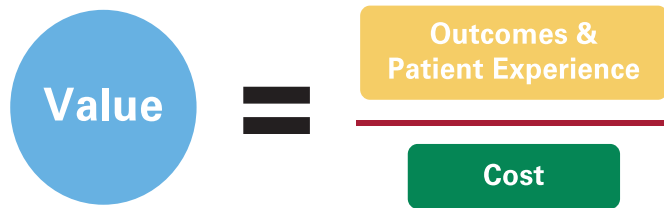
- Improved care outcomes.

Consumer interest in virtual care continues to rise. While 23% of consumers have had a virtual visit with a doctor or nurse, 57% of those who had not tried are willing to.[2] Consumers are particularly interested in the convenience that telehealth offers, with 73% likely to use it for after-hours appointments or discussing health concerns with a medical professional, 65% for follow-up care, and 62% for in-home follow up after a hospital stay.[3]

Though hospitals are implementing innovative virtual approaches to care, systemic barriers to widespread adoption remain. While private payers provide coverage for many telehealth services, Medicare and Medicaid coverage is limited; the latter's coverage varies by state.[4] In addition, inadequate access to broadband Internet in rural communities hinders hospitals' ability to virtually connect with patients in their community.[5] Further, provision of telehealth services face an array of legal and regulatory hurdles, such as health professional licensure, credentialing and liability insurance.

The AHA's *The Value Initiative* is addressing affordability through the lens of value to improve outcomes, enhance
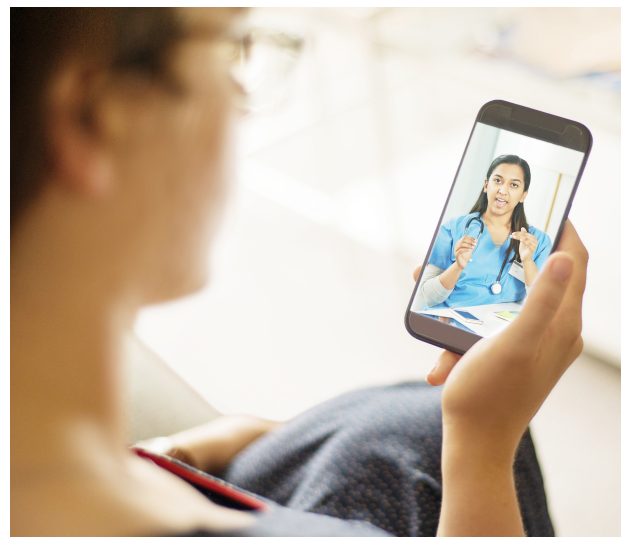
the patient experience and reduce cost. Telehealth improves each component of the value equation for hospitals and their patients.

$$\text{Value} = \frac{\text{Outcomes \& Patient Experience}}{\text{Cost}}$$

- **Improve outcomes:** By virtually expanding access to specialty care, hospitals can close gaps in care delivery. Telehealth also improves monitoring to detect patient declines both within the hospital and in their homes and strengthens care transitions. It helps reduce patient transfers by giving local providers the support they need to provide care in the community. The Veterans Health Administration's telehealth programs have improved quality, reflected in reduced hospitalizations – 40% reduction for mental health patients, 25% to 30% for patients with heart failure and hypertension, and 20% for patients with diabetes and COPD. They estimated an average saving of $6,500 for each patient participating in the telehealth program.[6]

- **Enhance the patient experience:** Telehealth enables hospitals to virtually provide convenient, on-demand care to their patients in a format that appeals to consumers. For example, *Children's Health* in Dallas developed a school-based telehealth program that provides access to care for students in more than 100 schools in North Texas. Parents report that the visits save them time and money, while educators say that students are able to return to class more quickly.

- **Reduce cost:** Telehealth allows hospitals to provide the right care at the right time, avoiding escalation that results in unnecessary visits to the emergency department (ED), hospital admission or transfer. A Hospital at Home program implemented by Johns Hopkins Medicine showed that the total cost of at-home care was 32% less than traditional hospital care, and patient satisfaction was higher in the home setting than for inpatient care.[7]
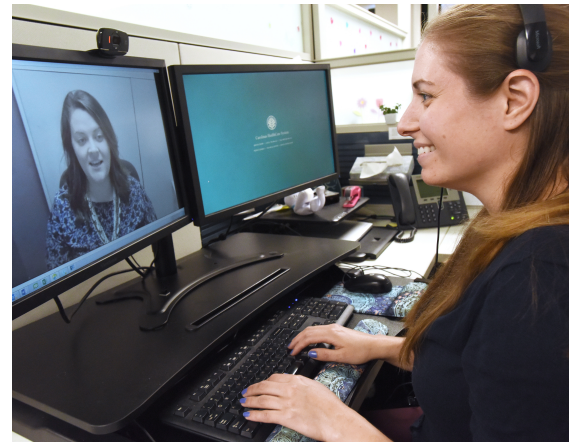
AHA Advocacy Efforts

In order to increase access to telehealth services for patients and remove barriers to adoption and use by hospitals and other providers, AHA supports the CONNECT Health Act of 2019. This legislation would expand telehealth for mental health and emergency medical care as well as expand the ability of rural health clinics and federally qualified health centers to provide access to services via telehealth. Current Medicare reimbursement for telehealth services does not provide adequate support to all sites of care. Enhanced support for all providers using telehealth is important to improve patient access to care and health outcomes.

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Approaches to Delivering Telehealth

Telehealth is becoming an integral component of how hospitals and health systems are providing care. Telehealth services fall into two primary buckets – those that connect health professionals and those directed at consumers. These approaches are described below with hospital case examples.

Provider-to-Provider

This approach involves virtual consultations between health care professionals, bringing specialty care to the patient's bedside, wherever the patient may be. Provider-to-provider telehealth extends expertise and resources for specialty care to providers with fewer resources, often in rural communities, giving those providers access to expertise and capabilities normally only found at tertiary care hospitals. This approach enables providers to remotely monitor complex patients and advise local clinicians on care, allowing patients to receive high-quality care close to home. Provider-to-provider telehealth services are commonly used to deliver ICU, emergency, psychiatric, pharmacy and neurology services.

Provider-to-provider telehealth offers a wide range of benefits for hospitals and patients including:

- Rapid access to physicians, specialists and other care providers for unusual or complex patients;
- Expanded care for critically ill patients;
- Reduced medical risks and costs associated with patient transfer; and
- Peer support.

Telehealth supports rural hospitals by enabling them to:

- Provide local care so patients and their families can stay close to home;
- Decrease transfers and retain higher acuity patients;
- Maintain lower-cost specialist coverage; and
- Support provider retention and reduce professional isolation.

Hospitals are seeing the results of provider-to-provider telehealth strategies:

Mercy Virtual Care Center, in Chesterfield, Mo., operates around the clock and houses a variety of programs, including teleICU, telestroke, telesepsis and telehospitalists. By having dedicated specialists available via audio and video technology and supported by advanced analytics, patients spend less time in the ICU. The center also provides direct-to-consumer services such as Engagement@Home, a program that supports chronically ill patients in their homes, and care management solutions such as nurse on call. Mercy's telemedicine approach has shown improvements in quality and cost. Inpatient lengths of stay and mortality rates have declined by 40%, while the average cost of care has significantly declined.[8]

In an effort to reduce patient transfers, increase access to care and reduce costs, *Spectrum Health* in Grand Rapids, Mich., created its telehealth program, MedNow, to include a site-to-site specialty telehealth.

Consults are available via mobile carts in 34 medical specialties and 90 use cases in the ED and inpatient and outpatient settings. Telehealth services are provided among the system's 15 hospitals and 180 ambulatory sites throughout Michigan. There have been 70,600 patient encounters resulting in 323 avoided inpatient transfers, 16,434 avoided ED and urgent care visits and $5.9 million savings to payers. The telehealth program also saves patients time and money. Spectrum estimates a typical cancer patient from Marquette, in the Upper Peninsula, spends 14 ½ hours and $611.80 in non-medical expenses for a routine consult at a hospital in Grand Rapids. The same consult via Specialty MedNow costs the patient 45 minutes and $14.

Direct-to-Consumer

Hospitals also are developing virtual platforms that allow them to connect directly and on-demand with patients outside of traditional clinical visits. Common types of direct-to-consumer telehealth include:

- **Remote patient monitoring** where providers can monitor patients via connected devices;

- **Video visits** where providers connect directly with patients via video to conduct a visit; and

- **eVisit** where the provider connects with a patient via messaging or virtual platform to provide clinical advice.

Direct-to-consumer telehealth creates efficient and convenient access points for care by reducing barriers such as distance and limited offices hours. Hospitals also are starting to use telehealth strategies to engage patients in managing their chronic diseases in between appointments. All of this contributes to improved outcomes, a better patient experience and reduced costs.

Here are examples of hospitals successfully deploying a direct-to-consumer telehealth strategy:

Winona Health in Winona, Minn., launched SmartExam in June 2019 in response to patients' desire for easier access to care at a lower price point. The SmartExam mobile platform uses a store-and-forward video-conferencing technology, known as an asynchronous virtual visit. Patients input their medical concerns in the mobile app. Then AI-enabled software summarizes that patient's symptoms for the Winona provider and creates recommendations for patient care. The clinician then reviews the recommendations, signs off on the note, which gets included in the electronic medical record, and provides treatment recommendations to the patient. A Winona Health SmartExam virtual visit costs $39 and if no diagnosis is made, there is no charge. Winona Health found that patients were saving an average of about $125 per visit.

University of Mississippi Medical Center's Center for Telehealth provides remote caregiver access throughout the state in more than 35 specialties. The Center has recorded 500,000 patient visits in 68 of the state's 82 counties and has expanded to more than 200 sites. The Center's Diabetes Telehealth Network has shown improved clinical outcomes and care coordination for managing diabetes, increasing access to care, and bringing health care resources into patients' homes. In the pilot, the average A1C level had dropped by 1.7 percentage points in just six months. The data from the first 100 patients also showed that participants avoided traveling 9,500 miles they would have driven to see specialists. Furthermore, $339,000 in health care costs was saved.

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Tailoring Your Telehealth Strategy to Meet Patient and Community Needs

Given the range of telehealth options available, hospitals need to tailor their telehealth strategy to meet the needs of their specific patient populations and communities. At *The Value Initiative*'s Executive Forum in June 2019, Kevin Curtis, M.D., medical director of Connected Care at Dartmouth-Hitchcock Medical Center in New Hampshire, shared six guiding questions that hospitals should consider as they design a telehealth strategy.

Why? Why are you doing telehealth? What specific problems are you trying to solve?

The breadth of potential telehealth activities is wide, so it is important to prioritize what elements of a telehealth strategy are the most important and which ones will make the greatest impact on value. Articulate a problem statement for your hospital and community that will drive the mission, focus and secondary goals of the telehealth strategy. Consider the needs of both the hospital and the population you are looking to serve.

At Dartmouth-Hitchcock, they recognized that regional capacity and access were a significant driver of many of their rural health care issues, and that their hospital was unable to fully meet the capacity and access needs of the region for specialty care. They also noted that small rural hospitals in the region are both essential and that their stability is somewhat tenuous. By going through this process, they were able to articulate their mission to help deliver outstanding care to their region independent of patient location with a focus on rural health care and with a goal of keeping care local whenever possible.

Where? Where are your patients and customers?

Part of tailoring a telehealth strategy is to understand the region and people you are looking

Supporting Rural and Critical Access Hospitals through Telehealth

Telehealth has the potential to transform how care is provided in rural communities. Though rural hospitals may have none or limited specialty services available in their community, telehealth can connect rural hospitals with specialists at tertiary hospitals to support their ability to care to their patients. This allows higher acuity patients to stay in the local hospital and prevents unnecessary transfers. Being able to access high-quality medical care in the community provides value for patients, their families and the hospital. Some examples of how rural hospitals are benefiting from telehealth services include:

Intermountain's Connected Care Pro partners with rural hospitals and clinics using technology to connect clinicians with one another to remove barriers to accessing specialty care, where access to specialists is often limited. This allows patients to get the care they need, keeping them closer to home and out of the hospital when possible. Every Intermountain hospital now has the telehealth technology accessible in every patient room, bringing the benefits of a tertiary care hospital to the community setting. As a result of the program, serious safety events dropped significantly, and the number of patients that had to leave their community for care decreased by 40%.

Bryan Health in Lincoln, Neb., launched ezVisit in 2015 for Lincoln and surrounding rural communities. ezVisit provides simple-to-use, online diagnosis and treatment option for minor health conditions at an inexpensive flat fee. It takes patients 5 to 10 minutes to complete the diagnostic questionnaire. After the physician on call receives the results, a response is guaranteed in less than one hour or the patient is not charged for the visit. ezVisit makes care not only affordable but also easily accessible to anyone with a smartphone, computer, or tablet.

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to serve. Dartmouth-Hitchcock serves a largely rural population in northern New England. In designing their strategy, they recognized the socioeconomic challenges of many rural communities, the provider shortages, challenges to recruitment and retention of clinicians, shrinking reimbursement rates, travel time for care, and capacity at the referral centers. Having this knowledge of their patients and consumers helped Dartmouth-Hitchcock design a telehealth program that would meet consumer needs.

What? *What are you going to do? What are you not going to do?*

There is an array of telehealth strategies to choose from, but Curtis recommends focusing on priority areas to determine what services should be delivered first. Conducting a needs assessment of your patients and the organizations you are looking to support may be beneficial in determining priorities. One of the hardest parts of designing a strategy is often deciding what you are not going to do (or not going to do initially). Dartmouth-Hitchcock elected to start their telehealth strategy with a strong focus on urgent/emergent needs to help support local providers in rural hospitals and to decrease the need for transfers.

How? *How are you going to do it? How will you innovate? How will you deliver value?*

Determining how a telehealth strategy gets implemented is where the rubber hits the road. Some key areas to consider: are you only serving hospitals in your system, where are your providers coming from, how will you bill/pay for telehealth services, prioritization of technology vs. care, what is the expected return on investment (financial or otherwise), and how much is your organization willing and able to invest

in telehealth. Dartmouth-Hitchcock's telehealth program is agnostic to what health system the hospital is in and tailors its approach to the unique needs of each hospital and community. Their model aims to be collaborative with community-based providers in whatever way is helpful while not taking over care. Curtis notes that their telehealth services always prioritizes care over technology.

Who? *Who are your sponsors? Who will be your care deliverers? Who will you deliver care to?*

Engaging leaders in the hospital and community is crucial for launching and sustaining a telehealth strategy. An executive champion for a developing telehealth strategy helps make this work an organizational priority and allows it to be integrated with other initiatives. Dartmouth-Hitchcock has had consistent, ardent support for telehealth from its health system's executive leadership.

You also will need to consider who you choose to deliver the care. To make these decisions, you will need to understand your clinicians' bandwidth, regional expectations for who is delivering care, if the work will be additional or replacement, partnerships with local care teams, and how they will be billed.

When? *When will you launch various components of your telehealth strategy?*

Though it may be tempting to launch all components of a telehealth strategy at once, staging the implementation creates an opportunity to learn and make improvements along the way. Start with the priority areas and build from there, always engaging with partner hospitals and tailoring the approach as you go.

By considering all these questions, your hospital can design a telehealth strategy that improves value. To learn more about Dartmouth-Hitchcock Connected Care, see their *Members in Action* case example.

Conclusion

Telehealth offers an opportunity for hospitals to improve value for their patients, communities and regions. As they continue to innovate how they provide care, hospitals are seeing the measurable impact they can make by leveraging technology to connect with patients in new ways. While hospitals and communities have varied telehealth needs, strategically designing a high-value telehealth approach will help hospitals improve outcomes and the patient experience while reducing cost.

AHA Telehealth Resources

Telehealth: A Path to Virtual Integrated Care. This report from the AHA Center for Health Innovation examines how telehealth is part of a digital health revolution; the flexibility of delivery platforms and how they fit into virtual integrated care; why telehealth is critical to health care transformation; challenges to telehealth expansion; current state of telehealth and opportunities for growth in hospitals; technology options and choosing the right vendor; and, most importantly, how hospitals and health systems can build capacity to expand access, improve outcomes and reduce costs.

Telehealth: Delivering the Right Care, at the Right Place, at the Right Time. This report provides case studies that highlight a range of innovative solutions that hospitals and health systems are utilizing to deliver care through telehealth.

Fact Sheet: Telehealth. This fact sheet outline the issues AHA advocates for around telehealth.

Task Force on Ensuring Access in Vulnerable Communities. The task force report outlines nine emerging strategies that can help preserve access to health care services in vulnerable communities. These strategies will not apply to or work for every community and each community has the option to choose one or more that are compatible with its needs.

The Value Initiative Members in Action. Read case studies and listen to podcasts to learn about how AHA members are applying telehealth strategies to improve outcomes, enhance the patient experience and decrease costs.

- *Spectrum Health, Grand Rapids, Mich.*
- *University of Mississippi Medical Center, Jackson, Miss.*
- *Atrium Health, Charlotte, N.C.*
- *Montefiore Health System, New York, N.Y.*

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Sources

1. American Hospital Association. (2019) Fact Sheet: Telehealth. Accessed at *https://www.aha.org/system/files/2019-02/fact-sheet-telehealth-2-4-19.pdf*.

2. Abrams, K. et al. (2018) What can health systems do to encourage physicians to embrace virtual care? 2019 Survey of U.S Physicians, Deloitte Insights.

3. Accenture. (2018) Meet Today's Healthcare Team: Patients + Doctors + Machines. Consumer Survey on Digital Health.

4. American Hospital Association. (2019) Fact Sheet: Telehealth.

5. *Ibid.*

6. American Hospital Association. 2016. Telehealth: Helping Hospital Deliver Cost-Effective Care. Accessed at *https://www.aha.org/system/files/content/16/16telehealthissuebrief.pdf*.

7. *Ibid.*

8. *Ibid.*

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