Telehealth

A Path to Virtual Integrated Care

Telehealth: A Path to Virtual Integrated Care

How patients experience health care is shifting. Care that used to take place only in brick-and-mortar settings can now occur digitally. Accordingly, hospitals and health systems are exploring a variety of virtual care models, many of which are underpinned by telehealth technology.

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 integrated care; why telehealth is critical to health care transformation; the current state of telehealth and opportunities for growth in hospitals; and, most importantly, how hospitals and health systems can build capacity to expand access, improve outcomes and reduce costs.

This report is based on information and insights taken from a number of sources, including interviews with hospital and health system leaders and other health care experts, surveys of hospital and health systems, and a number of health care reports and research articles. A complete list of sources appears on Page 16 of this brief.

The AHA Center for Health Innovation thanks everyone for their contributions to this analysis.

97%

Patients satisfied with their first telehealth experience and would recommend the program

Source: Harvard Business Review

1 million

Americans are using remote cardiac monitors

Source: American Telemedicine Association

Telehealth's Role in Digital Transformation

Telehealth is part of a larger digital transformation in health care. The electronic health record (EHR), omnipresent mobile devices and faster internet connections have provided new ways for patients and providers to interact. Patients are increasingly making decisions about who delivers their care and engaging in the delivery of that care digitally. As a result, hospitals and health systems need a strategy for their own digital transformation.

Hospitals already are using telehealth to improve access and fill gaps in care; provide services 24/7; and expand access to medical specialists. It's a smart way to leverage finite health care resources as demands for health care services increase.

Telehealth and digital health care enable a model of care that is ubiquitous and seamless, more affordable and integrated into patients' lives. In the shift to demand-driven health care, telehealth becomes the patient's first — and most frequent — point of access for urgent care, triage for emergent conditions, specialty consults, post-discharge management, medication education, behavioral health counseling, chronic care management and more.

Hospitals and health systems that are working now to increase the maturity of their telehealth capabilities will be well-positioned to meet patient demands for digital tools that allow them to conveniently engage in care. Hospitals that don't address these expectations increasingly will be challenged by new market entrants and other disruptors that seek to attract new health care consumers and encroach on existing patient-provider relationships.

Defining Telehealth Delivery Platforms: Provider to Provider and Direct to Consumer

Today, hospitals and health systems offer several types of telehealth services to improve access to services and quality of care. Telehealth delivery platforms fall into two main categories:

1 **Provider-to-provider**, which extends expertise and resources for specialty and subspecialty care, and addresses workforce shortages and the efficient use of health professionals.

2 **Direct-to-consumer**, which includes virtual care, remote patient monitoring and extending care delivery into the home via technology.

The Health Resources & Services Administration of the Department of Health & Human Services defines telehealth as the use of electronic information and telecommunication technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health and health administration. The most common telehealth platforms include synchronous and asynchronous technologies like videoconferencing, store-and-forward imaging, email and remote-patient monitoring.

9 Areas in Which Telehealth is Expanding Access

One of the most frequent reasons hospitals use telehealth is to extend access to specialty care. Other reasons for embracing telehealth are efficient post-operation follow-up, lower hospital-readmission rates, better medication adherence and positive care outcomes. By increasing access points and redistributing expertise where it's needed, telehealth can address disparities and improve health outcomes from pediatric health services to senior care.

There are many use cases for telehealth. Seven of the most frequent are noted on the chart developed by Manatt Health [Page 4] and are used to provide the following services:

1 | **Pharmacy services**, such as medication review, patient counseling and prescription verification, can be offered remotely to patients with diabetes, congestive heart failure and other chronic diseases.

2 | **Chronic care management:** By equipping patients with home-mon-

itoring systems that record such patient vital signs as temperature, heartbeat patterns, pulse, blood pressure and glucose levels, readings are logged into the EHR, and alerts are sent wirelessly to clinicians when readings fall out of normal range.

3 | **Telestroke services:** Used for those with acute strokes to create access to the limited supply of stroke neurologists and targeted use of therapies to preserve brain function and save lives.

4 | **Tele-ICU tools:** Provide 24-hour intensivist support for intensive care unit staff to provide optimal local care for the most acute patients.

5 | **Specialty telemedicine consults:** To address challenges that patients face when accessing such specialty care services as transportation, eligibility, translation and cultural competency, health care organizations are making telemedicine consults available in dentistry, geriatrics, obstetrics and gynecology, oncology, ophthalmology, dermatology and other specialties.

6 | **Diagnostic screening for diabetes-related eye disease** is 90 percent effective in preventing blindness. Using telemedicine at community health clinics increased the number of patients with diabetes who received eye exams — 94 percent were screened via telemedicine versus 56 percent when referred out.

7 Telehealth Use Cases

Provider-to-Provider Platforms					
	Use Case	**Description**	**Timing**	**Video**	**Information transferred**
1	**eConsult**	Templated communications, where primary care provider eConsults with specialist to share information and discuss patient care.	Asynchronous	No	Medical records and images
2	**Virtual video consult**	Distant specialist connects in real time to a provider/clinical setting to deliver a clinical service directly supporting the care of a patient (e.g., telestroke).	Synchronous	Yes	Medical records and images
3	**eICU/TeleAcute**	Remote covering clinicians use multiple modalities (video, monitor data) to follow a defined set of seriously ill patients.	Synchronous	Yes	Medical records,images and monitoring data
Direct-to-Consumer Platforms					
4	**Second opinion**	Patient-initiated electronic request for provider to give an opinion on a clinical case.	Asynchronous	No	Medical records and images
5	**Remote-patient monitoring**	Providers remotely monitor patients via connected/mHealth devices or PROs.	Synchronous	No	Monitoring data and patient-reported data
6	**Video visit**	Provider connects directly with patient via video to conduct equivalent of a visit.	Synchronous	Yes	None
7	**eVisit**	Provider connects with patient via email or secure messaging to provide clinical advice or support.	Asynchronous	No	Patient-reported data and images

Source: Manatt, 2019

7 | Sleep disorders: Via telemedicine devices, patients with sleep apnea can be monitored for sleep patterns, body positions and breathing.

8 | Telepsychiatry: It can assist patients in need of behavioral health services who otherwise may have to travel hundreds of miles to see the nearest practitioner or wait months for an appointment.

9 | Opioid-use disorder (OUD): In rural areas hit hard by the opioid epidemic, patients must travel long distances to receive treatment, and there are too few clinicians available to provide medication-assisted treatment (MAT), an essential component in the treatment of OUD. Telemedicine expands access to buprenorphine-based MAT.

Challenges to Widespread Telehealth Adoption

By increasing access to physicians and specialists, telehealth helps to ensure that patients receive the right care at the right place and at the right time. Telehealth expands access to services that otherwise may not be sustained locally. However, there are several barriers to expanding access to care through the use of telehealth, including statutory restrictions on how Medicare covers and pays for telehealth. In the Calendar Year 2019 Medicare Physician Fee Schedule Final Rule, the Centers for Medicare & Medicaid Services expanded Medicare coverage for virtual services and the agency provides waivers in some alternative-payment models, but more fundamental change is needed to expand payment to all geographic areas and all services that are safe to provide via telehealth.

Specific Objectives Achieved by Telehealth

Objectives (Illustrative)	Provider-to-Provider			Direct-to-Consumer			
	eConsult	Virtual consult	eICU	Second opinion	Remote monitor	Video visits	eVisits
Increase specialist access availability and capacity.	✓					✓	✓
Manage capacity and ambulatory space-use efficiency.	✓	✓				✓	✓
Improve patient/family experience and support consumerism strategies.				✓	✓	✓	✓
Strengthen referrals and transitions of care between referring providers and long-term/post-acute care providers.	✓	✓					
Improve central monitoring for early detection of decline, improved quality in ICU and other acute settings.			✓				
Continue regional growth, extend brand and promote system-ness.	✓	✓					
Enhance clinical relationships with partners and within specialty networks.	✓	✓	✓				
Prepare for implementation/expansion of value-based payment models.	✓				✓	✓	✓

Source: Manatt, 2019

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Other policy challenges include burdensome licensure laws and regulations that limit the ability to provide telehealth services across state lines. Additionally, many hospitals and health systems find that the infrastructure costs for telehealth are significant and need support from the government to fund telehealth startup costs. Finally, some areas still lack adequate broadband service to support telehealth and many payers do not yet provide payment parity with services delivered in person. See the AHA policy factsheet on telehealth and additional resources.

Lack of reimbursement, complex licensing requirements and the high cost of the technologies limit widespread telehealth adoption and the ability to scale programs. Other barriers to telehealth's integration into care delivery models include leadership and organizational commitment; identifying needs and partners; producing a strategy; securing funding; implementing cultural and workflow changes; and monitoring and evaluating telehealth services. Recognizing the importance of human factors and workforce implications, the change process and the changing culture are critical to successful implementation.

8 Barriers to Telehealth Expansion

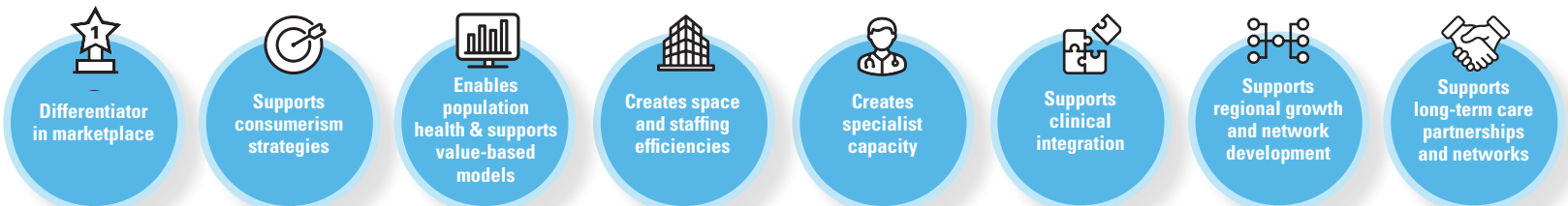**1** | Restrictions on how Medicare and other payers cover and pay for telehealth.

2 | Licensure laws and regulations that limit the ability to provide telehealth services across state lines.

3 | Some areas still lack adequate broadband service to support telehealth.

4 | Lack of leadership and organizational commitment to develop an overarching strategy and integrate into care delivery.

5 | Decentralized departmental solutions and pilot programs without governance structure and dedicated management.

6 | High cost of the technologies and infrastructure and a lack of funding.

7 | Inadequate clinical engagement and readiness without consideration of human factors in the user experience and workflows for both clinicians and patients.

8 | Evolving measures of success and key performance indicators hamper scaled platforms.

Why Telehealth is Critical to Health System Transformation

Despite challenges, telehealth is a critical element of digital-health transformation. Using telehealth tools to treat patients is a more effective and efficient way to use limited staff and resources. Health care systems are finding solutions that make telehealth services more affordable. Early adopters can differentiate by expanding service offerings and their patient base.

Regional growth and development can be leveraged across sites of care by connecting hospitals, physician offices, diagnostic centers and long-term care through telehealth networks. Virtual care technology can improve the timing, quality and impact of care for more patients by eliminating travel and bringing in specialized care as needed.

DATA

$2,750

Health care providers saved almost $2,750 per patient when using telehealth instead of in-person physical therapy when discharged after knee-replacement surgery

Source: Veritas study, conducted by the Duke Clinical Research Group

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Why Digital Health and Telehealth are Critical to System Transformation

Differentiator in marketplace

Supports consumerism strategies

Enables population health & supports value-based models

Creates space and staffing efficiencies

Creates specialist capacity

Supports clinical integration

Supports regional growth and network development

Supports long-term care partnerships and networks

Source: Manatt, 2019

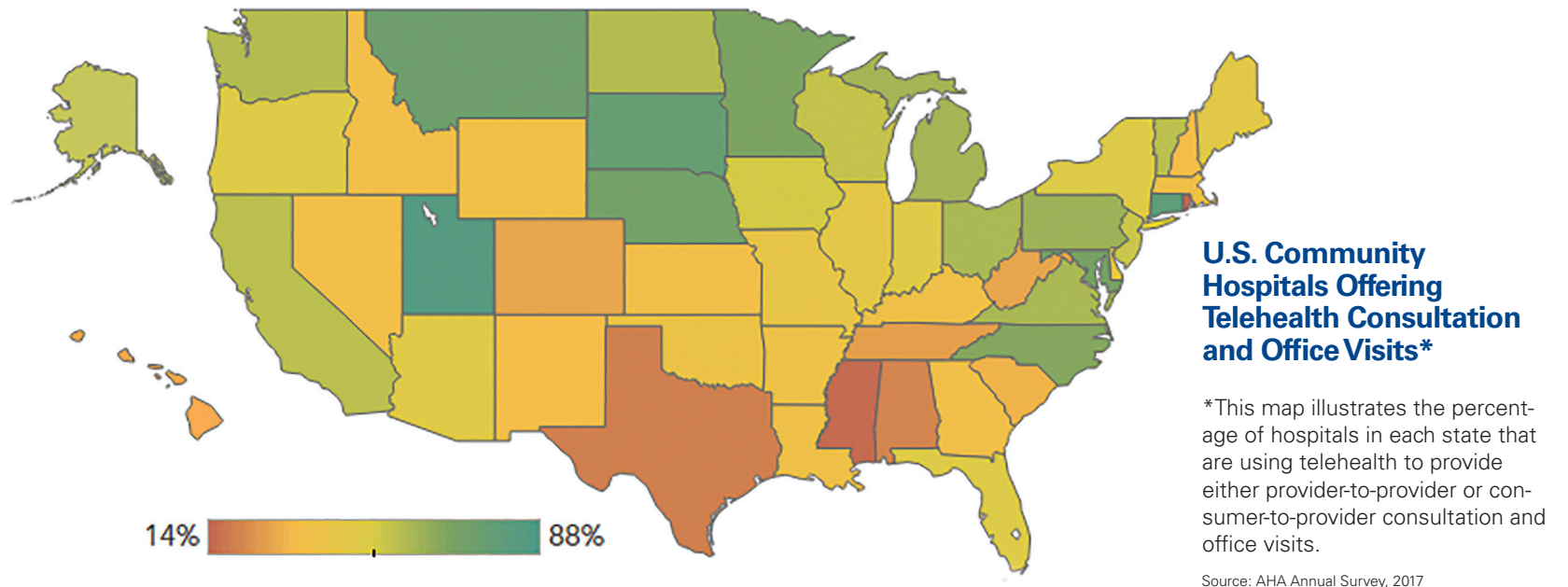**LEARN MORE** | Visit AHA.org/center

An integrated system of care with telehealth and other virtual services supports consumer-directed care and value-based models. Digital health and telehealth provide technology infrastructure for population-health initiatives. An enterprise approach to virtual care enables more efficient operations, creates staffing efficiencies and specialist capacity, improves access and convenience for patients and lowers the cost of care — affordable, high-quality care in the right place, at the right time for the right patient.

The Growth of Telehealth in U.S. Hospitals and Health Systems

14% 88%

U.S. Community Hospitals Offering Telehealth Consultation and Office Visits*

*This map illustrates the percentage of hospitals in each state that are using telehealth to provide either provider-to-provider or consumer-to-provider consultation and office visits.

Source: AHA Annual Survey, 2017

To advance the adoption, sustainability and optimization of telehealth services, a maturity model is useful to set criteria for competency, capability and level of sophistication. The Hospital Telehealth Maturity Model developed by Manatt Health (Page 8) provides a framework that can be used to measure and develop existing and prospective telehealth services by program and platform within prescribed best-practice parameters. This model may be useful for self-assessment and benchmarking to guide telehealth programs toward the adoption of best practices. In this report, the Hospital Telehealth Maturity Model will be applied to current hospital data on telehealth adoption and uses.

Hospitals and health systems use telehealth in different ways to address patient needs and organizational strategies. Using 2017 AHA Annual Survey data on the adoption and use of telehealth, the AHA Center for Health Innovation has prepared peer comparison data for community hospitals, health systems, academic medical centers, urban hospitals,

rural hospitals and critical access hospitals. Criteria from the Hospital Telehealth Maturity Model, expert panel interviews and research are applied to hospital cohorts as a framework for the development of

additional telehealth services. For each type of health care organization, we offer steps to consider and opportunities for expansion of services and partnerships to improve access to timely care.

Hospital Telehealth Maturity Model

		Basic	Foundational	Advanced
Platform	**Telehealth platforms/ technology**	• Small set of pilot projects • Rely on fragmented technology solutions • Limited integration with EHR • Inefficient workflows • Unreliable technology	• Established technology platform standards • High levels of adoption in narrow domains • Mostly integrated with EHR • Increasingly efficient workflows • Good reliability	• Scaled platforms that enable capabilities across the enterprise • High levels of adoption • Fully integrated with EHR • Highly reliable and easy to access
Program	**Resources**	• Limited resource commitment (< $1M/year) • No or limited centralized telehealth team or support model; programs individually managed by pilot leaders	• Moderate resource commitment ($1M-$ 5M/year) • Centralized team that provides limited support for core services (technology rollout and general support)	• Significant resource commitment ($5M+/year) • Robust centralized team with extensive telehealth experience that provides full range of support services (customized design and implementation, training, 24/7 support, optimization, etc.)
	Leadership and governance	• No clear governance structure • Majority of programs have grown organically and are being directed locally • Lack of unified vision and strategy • No or limited success criteria or value metrics • Poor program visibility across the organization • No consistent policies and standards	• Enterprise-level governance structure that helps to allocate resources and guide decision-making around policies, platform decisions and resource allocations • Emerging vision and strategy • Alignment of enterprise priorities and telehealth investments • Improving communication and visibility • Established success criteria and process for measuring and tracking • Formalized telehealth policies and standards	• Fully transparent, highly nimble governance structure • Resources allocated to highest value initiatives • Value tracked, measured and used to inform investment decisions • Program accountability managed across technology and operations leadership • Telehealth policies and standards deployed consistently across the institution
	Adoption	• Moderate levels of adoption among small subset of interested providers	• High level of adoption within narrow domains	• High level of adoption across all domains

Source: Manatt, 2019

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Community Hospitals

76% have a computerized telehealth system

Telehealth-use cases

Consultation and office visits
45%

Stroke care
47%

eICU
21%

Psychiatric and addiction treatment
29%

Remote-patient monitoring for ongoing chronic care management
22%

Remote-patient monitoring post-discharge
19%

0% 5 10 15 20 25 30 35 40 45 50 55 60 65 70

Source: 2017 AHA Annual Survey; 2017 AHA IT Supplement Survey

Community hospitals are moving from the basic to the foundational level on the Hospital Telehealth Maturity Model with opportunities to address gaps in care.

Maturity Model Indicators
- Relying on fragmented technology solutions and limited integration with the EHR.
- Limited resources and telehealth support model.
- Lack telehealth strategy and governance to set priorities.

Steps to Consider
- Define patient needs that could be met better with telehealth.
- Evaluate partnerships that can address those needs if capabilities are not in house and partner with a network or established telehealth program.
- Improve reliability and integration with the EHR for efficient workflows.

Opportunities
- Increase specialist access, availability and capacity.
- Reduce rehospitalizations with remote-patient monitoring in target patient populations.
- Add telepsychiatry to care settings with partnerships. ●

Health Systems

89% have a computerized telehealth system

Telehealth-use cases

Consultation and office visits
66%

Stroke care
70%

eICU
36%

Psychiatric and addiction treatment
53%

Remote-patient monitoring for ongoing chronic care management
48%

Remote-patient monitoring post-discharge
45%

0% 5 10 15 20 25 30 35 40 45 50 55 60 65 70

Source: 2017 AHA Annual Survey; 2017 AHA IT Supplement Survey

Many health systems are moving from the foundational to the advanced level on the Hospital Telehealth Maturity Model with opportunities to gain further efficiencies by scaling opportunities across the enterprise.

Maturity Model Indicators
- Highly reliable platforms integrated with the EHR.
- Centralized governance, team and significant resource commitment.
- Resources allocated to highest value initiatives.

Steps to Consider
- Align digital health teams for capacity management, care coordination and patient engagement.
- Develop on-demand care teams for different levels of care across the continuum.
- Continue to evaluate friction points in patient experience and new uses of telehealth to remove.

Opportunities
- Fully integrate virtual care into health care delivery across the continuum.
- Use artificial intelligence (AI) to analyze data and navigate patients to the right care.
- Offer telehealth platform and services to other hospitals.

DATA

80%

Emergency virtual visits wind up "resolving the episode of care" without a trip to the emergency department (ED) or another site of care.

Source: Jefferson Health

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Telehomecare is a remote home-monitoring and self-management coaching initiative for patients with COPD and congestive heart failure.

Health System Case Study: *Telehomecare Monitoring Services | Northern Light Health VNA Home Health Hospice | South Portland, Maine*

Maine is a predominantly rural state, meaning the distance between patients and medical services can be challenging. For older individuals with multiple chronic conditions, this challenge can be especially problematic, as consistent monitoring is critical to managing their health. To address this issue, in 2006 as Northern Light Health, formerly Eastern Maine Healthcare Systems, was merging home care, VNA launched a telehealth monitoring program for a small number of patients with chronic heart and lung diseases. (See the full case study.)

When VNA launched the telehealth monitoring program, 32 patients in the southern portion of the state were enrolled in an effort to decrease heart-failure rehospitalizations. Today, more than 400 patients participate in the program.

"We look at this more as a hospital-avoidance program. Our goal is to connect with patients who have multiple, high-risk diagnoses because that is where we have the most opportunities to intervene and keep them out of the hospital." — **Leigh Ann Howard, R.N., MSN, CHFN-K, director of home health and specialty services, VNA Home Health Hospice** ●

Academic Medical Centers

91% have a computerized telehealth system

Telehealth-use cases

Consultation and office visits
61%

Stroke care
55%

eICU
21%

Psychiatric and addiction treatment
42%

Remote-patient monitoring for ongoing chronic care management
36%

Remote-patient monitoring post-discharge
33%

0% | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70

Source: 2017 AHA Annual Survey; 2017 AHA IT Supplement Survey

Academic medical centers are moving from foundational to the advanced level on the Hospital Telehealth Maturity Model with opportunities to use resources more efficiently and leverage their deep expertise.

Maturity Model Indicators
- High level of adoption within narrow domains, mostly integrated with EHR.
- Centralized team for core services resources and telehealth support model.
- Emerging vision, telehealth strategy and governance to set priorities for highest-value initiatives.

Steps to Consider
- Identify patient populations whose needs could be met with telehealth, i.e., post-hospitalization services to improve outcomes, chronic care management and geriatrics.
- Structure community-hospital partnerships to provide telestroke, tele-ICU, telepsychiatry and other specialty services.
- Develop virtual care strategies to efficiently use multidisciplinary care teams and personalized care pathways.

Opportunities

- Extend specialty and subspecialty expertise and resources to other providers with a telehealth network and offer specialty virtual visits.
- Employ digital health to improve care coordination, patient engagement and ongoing health management.
- Combine telehealth with advanced analytics and AI to offer personalized medicine services.

Academic Medical Center Case Study: *Telestroke Program | Mount Sinai Health System | New York City*

Mount Sinai Health System — which includes seven hospital campuses in the New York City metropolitan area — has used telestroke technology to maximize accurate diagnoses and early intervention. To answer the growing demand for stroke care within its community, the ED at Mount Sinai Queens implemented videoconferencing to consult in real time with a stroke-team specialist at Mount Sinai Hospital in Manhattan. Using a state-of-the-art video telecommunications system, the off-site expert conducts a standard stroke evaluation, helps to diagnose the patient and determines if immediate intervention is needed. (See the full case study.)

"Through our telestroke program, we can now triage for the endovascular clot-retrieval interventions that have become so important in the past few years." **— Stanley Tuhrim, M.D., director, Mount Sinai Stroke Center** ●

Urban Hospitals

77% have a computerized telehealth system

Telehealth-use cases

Consultation and office visits
26%

Stroke care
31%

eICU
13%

Psychiatric and addiction treatment
17%

Remote-patient monitoring for ongoing chronic care management
12%

Remote-patient monitoring post-discharge
10%

| 0% | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |

Source: 2017 AHA Annual Survey; 2017 AHA IT Supplement Survey

Urban hospitals are moving from the basic to the foundational level on the Hospital Telehealth Maturity Model with opportunities to address gaps in care and care coordination across the continuum.

Maturity Model Indicators

- Relying on fragmented technology solutions and limited integration with the EHR.
- Limited resources and telehealth-support model.
- Lack unified, formalized telehealth strategy and governance to set priorities.

Steps to Consider

- Define patient needs and inpatient-service shortages that could be met with telehealth.
- Evaluate partnerships that can address those needs and partner with a network or established telehealth program.
- Improve reliability and integration with the EHR for efficient workflows.

Opportunities

- Address specialist and subspecialist shortages in departments with telehealth programs and consider using intensivists via tele-ICU to improve outcomes.
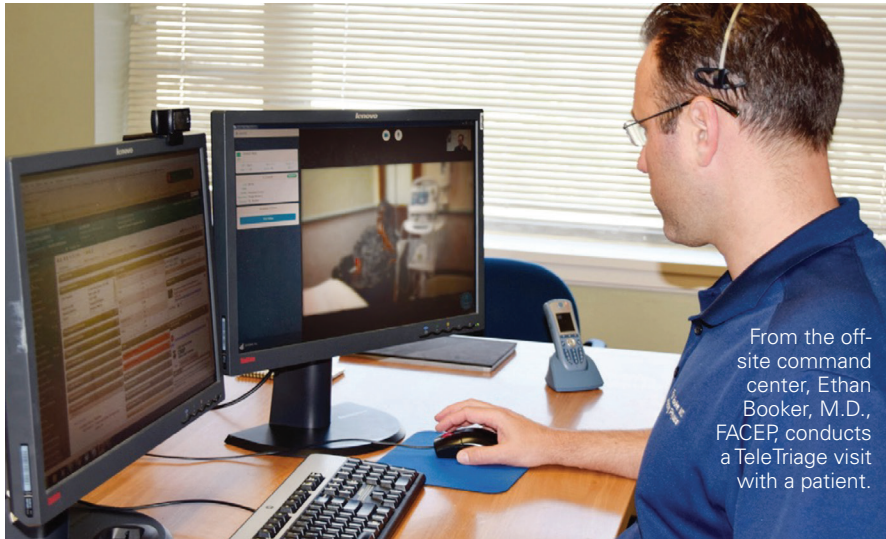
- Reduce readmissions and hospitalizations with remote-patient monitoring and chronic care management in target patient populations.
- Add telepsychiatry to care settings with partnerships.

Urban Hospital Case Study: *TeleTriage Emergency Department Program | MedStar Washington Hospital Center | Washington, D.C.*

In the TeleTriage model, a triage nurse interviews the ED patient, then connects to the off-site attending physician and summarizes the patient's symptoms. The physician is located in a remote command center with two computer screens. One screen displays a secure, live, two-way video and audio connection. The second screen displays the EHR, allowing the on-duty physician to review medical records that inform the diagnostic pathway and treatment plan, to place patient orders and to document the encounter. (See the full case study.)

From the off-site command center, Ethan Booker, M.D., FACEP, conducts a TeleTriage visit with a patient.

"After listening to the triage nurse's presentation, reviewing the patient's history and speaking to the patient, the physician then makes a preliminary diagnosis and immediately places orders into the system. Instead of returning to the waiting room, the patient then moves to the internal area of the ED for initial diagnostic treatment." — **Ethan Booker, M.D., FACEP, attending physician in the department of emergency medicine at MedStar Washington Hospital Center and medical director of the MedStar TeleHealth Innovation Center at MI2.** ●

78% have a computerized telehealth system

Rural Hospitals

Telehealth-use cases

Consultation and office visits
25%

Stroke care
23%

eICU
11%

Psychiatric and addiction treatment
11%

Remote-patient monitoring for ongoing chronic care management
10%

Remote-patient monitoring post-discharge
4%

0% 5 10 15 20 25 30 35 40 45 50 55 60 65 70

Most rural hospitals are at the basic level on the Hospital Telehealth Maturity Model with opportunities to address gaps in care.

Maturity Model Indicators
- Relying on fragmented technology solutions and limited integration with the EHR.
- Limited resources and telehealth-support model.
- Lack telehealth strategy and governance to set priorities.

Steps to Consider
- Define patient needs that could be met better with telehealth.
- Evaluate partnerships that can address those needs and partner with a network or established telehealth program.
- Improve reliability and integration with the EHR for efficient workflows.

Opportunities
- Offer comprehensive OB-GYN care and other specialist access through virtual visits.
- Use telestroke and tele-ICU to minimize patient transfers and provide advanced care locally.
- Add telepsychiatry to address the opioid epidemic and to care settings with partnerships.

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Rural Hospital Case Study: *Virtual Urgent Care|*
Bryan Health | Lincoln, Neb.

Bryan Health, a Nebraska-governed, nonprofit health system in Lincoln, launched Bryan Health ezVisit as a strategic effort to expand access to care. Bryan Health ezVisit is a simple-to-use, online diagnosis and treatment option for minor health conditions. Offered at an inexpensive flat-rate fee, Bryan Health ezVisit makes mainstream medicine not only affordable, but also easily accessible to anyone with a smartphone, computer or tablet. (See the full case study.)

"[ezVisit] allows smaller hospitals to provide virtual urgent care at an inexpensive price point. This provides rural communities access to cutting-edge technology care they wouldn't otherwise be able to afford." **— Andy Whitney, director, Bryan Telemedicine Services** ●

An RN demonstrates the use of the telemedicine otoscope. The computer screen in the background displays the video from the otoscope to a remote physician.

72% have a computerized telehealth system

Critical Access Hospitals

Telehealth-use cases

Consultation and office visits
47%

Stroke care
36%

eICU
15%

Psychiatric and addiction treatment
23%

Remote-patient monitoring for ongoing chronic care management
15%

Remote-patient monitoring post-discharge
9%

0% | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70

Source: 2017 AHA Annual Survey; 2017 AHA IT Supplement Survey

Most critical access hospitals are at the basic level on the Hospital Telehealth Maturity Model with opportunities to address gaps in care and expand the provider network.

Maturity Model Indicators
- Relying on fragmented technology solutions and limited integration with the EHR.
- Limited resources and telehealth-support model.
- Lack telehealth strategy and governance to set priorities.

Steps to Consider
- Define patient needs that could be met better with telehealth.
- Evaluate partnerships that can address those needs and partner with a network or established telehealth program.
- Improve reliability and integration with the EHR for efficient workflows.

Opportunities
- Expand specialist access and provide comprehensive OB-GYN care through telehealth programs.
- Use telestroke and tele-ICU to minimize patient transfers and provide advanced care locally.

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• Grow telepsychiatry to address the opioid epidemic and to care settings with partnerships.

Critical Access Case Study: *Telepsychiatry Program | PeaceHealth Peace Island Medical Center | Friday Harbor, Wash.*

Situated on San Juan Island, PeaceHealth Peace Island Medical Center is a 10-bed critical access hospital with primary care and specialty clinics, a cancer center and a 24-hour emergency department (ED). After conducting a community-needs assessment in 2014, leaders at PeaceHealth Peace Island were compelled to develop an integrated behavioral health program in collaboration with primary health care providers on San Juan Island. Before this, no psychiatrists practiced on the island. Given the challenging location of the medical center, a telepsychiatry approach offered the most promise. (See the full case study.)

"Partnering with a psychiatry department that has a deep bench has been very important in terms of ensuring that providers are available to our patients." **— Merry-Ann Keane, MSN, BSN, NE-BC, FACHE, chief administrative officer, PeaceHealth Peace Island Medical Center** ●

How Hospitals and Health Systems Can Build Their Telehealth Capacity

Which telehealth technology a hospital or health system buys and from whom they buy it depends largely on where they are on their virtual care journey, commonly referred to as their telehealth maturity. Borrowing that descriptor of the spectrum, are hospitals and health systems telehealth newborns, toddlers, tweens, teens, young adults or adult adults?

Experts agree that now, few hospitals and health systems are adult adults when it comes to telehealth. That means only a few have created enterprisewide virtual care systems that mirror every aspect of their

clinical and financial operations along the entire continuum of care.

Experts also say that most hospitals and health systems are telehealth newborns and toddlers. That means they've dabbled in a few disparate telehealth technologies at the urging of an enthralled tech-savvy doctor or because grant money funded the purchase and implementation of the technologies at no cost to the hospital or health system.
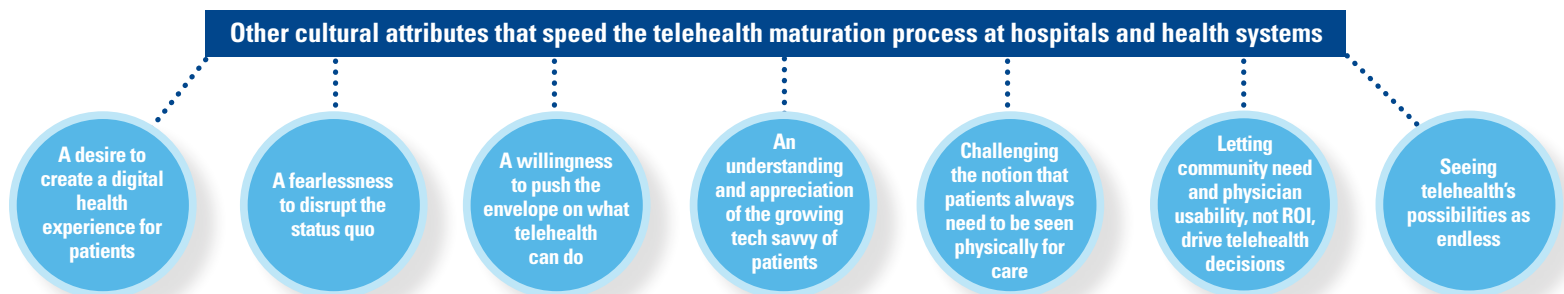
The rest of the hospitals and health systems swimming in the telehealth pool are somewhere in the tween, teen or young-adult phases, stretching their telehealth wings across more departments and more functions.

So, how do hospitals and health systems mature along that spectrum? As with all positive change in health care, it starts with culture, and culture starts at the top. The governing board and C-suite at a hospital or health system can ignite that cultural change with a telehealth vision statement that recognizes, accepts and embraces virtual care as an extension of what everyone at the hospital or health system does. It's not something new or separate or different. It's not telehealth care. It's simply health care.

In fact, adult-level hospitals and health systems prefer to call it virtual care to focus on the experience rather than telehealth, a term that many people associate with technology. Physicians and patients are more accepting of virtual care as another form of care than they are of new technologies. Succeeding at telehealth is as much of a change in mindset as it is a change in technology and vendors.

Scaling and Optimizing Telehealth Programs

No matter where a hospital or health system is along that telehealth program maturity spectrum, the goal is the same: Optimize the value of the program so it continues to grow. But like any new strategic initiative, it may not take much to knock a program off course, killing it before it has a chance to scale.

Other cultural attributes that speed the telehealth maturation process at hospitals and health systems

- A desire to create a digital health experience for patients
- A fearlessness to disrupt the status quo
- A willingness to push the envelope on what telehealth can do
- An understanding and appreciation of the growing tech savvy of patients
- Challenging the notion that patients always need to be seen physically for care
- Letting community need and physician usability, not ROI, drive telehealth decisions
- Seeing telehealth's possibilities as endless

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Expert Panel

The AHA Center for Health Innovation thanks the following people, organizations and sources for the time and insights that made this Market Insights report possible:

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Senior manager, Manatt Health

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What are the secrets to optimizing a hospital or health system's telehealth program? How do hospitals and health systems convert their telehealth vision statements into strategies and tactics that make their telehealth programs invaluable to physicians, patients and other stakeholders?

As mentioned, the two essential elements of a successful telehealth program are integration into the EHR system and integration into the workflow of clinicians. Optimization, though, goes beyond those two telehealth table stakes. The other essential elements to successful optimization include:

• **Using community and patient need as the starting points for the consideration of new telehealth services.** Many telehealth services go fallow because they started with interest by a physician or the finance office. Serve patients first, and physicians and reimbursement will follow.

• **Using telehealth services to coordinate care across health care settings.** One of the best uses of telehealth technology is tracking the health status of patients after discharge. Monitoring their health at home or in post-acute care settings can lead to better outcomes and lower costs.

• **Incorporating telehealth services into value-based care.** Telehealth services are an effective way to drive down the cost of care, making them valuable tools to use in value-based reimbursement models that reward hospitals and health systems for lower utilization costs.

• **Using telehealth services to help direct patients to the appropriate level of care.** Enabling a patient to talk virtually with a doctor can help to determine whether he or she should go to the pharmacy for a decongestant, schedule an office visit with his or her doctor or go immediately to the hospital ED.

• **Setting key performance indicators (KPIs) for telehealth.** Hospitals and health systems must have analytics capabilities to track and report how each of their telehealth services is performing against KPIs for that service. That could be general telehealth utilization, experience and satisfaction by doctors and patients, or it could be specific clinical outcomes like readmissions, elapsed sepsis diagnosis time and elapsed stroke diagnosis and treatment time.

Successful hospital and health system telehealth programs don't happen by accident. It requires discerning technology choices and critical vendor selection, it demands uncomfortable cultural changes and the right execution to create a comprehensive virtual care delivery system for patients. ●

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