

# EXECUTIVE BRIEFING 1

By Debi H. Tucker

## The Promise of Telehealth

Telehealth increasingly is vital to our health care delivery system, enabling providers to connect with patients and consulting practitioners across vast distances. Hospitals are embracing telehealth technologies because they offer such benefits as virtual consultations with distant specialists, the ability to perform high-tech monitoring without requiring patients to leave their homes, and less expensive and more convenient care options for patients.

Telehealth also has moved into the mainstream. In 2013, 52 percent of hospitals utilized telehealth, and another 10 percent were beginning the process of implementing telehealth services. Consumer interest, acceptance and confidence in it are growing as well. Recent studies on the use of telehealth services have shown that:

- 74 percent of U.S. consumers would use telehealth services;
- 76 percent of patients prioritize access to care over the need for human interactions with their health care providers;
- 70 percent of patients are comfortable communicating with their health care providers via text, email or video, in lieu of seeing them in person;
- 30 percent of patients already use computers or mobile devices to check for medical or diagnostic information.

Telehealth has many uses, from re-

mote monitoring programs used by hospitals for post-discharge monitoring to reduce readmissions, to emergency departments that use remote video consultations to enable patients to receive telepsychiatric screening. Increased use of telehealth reflects a changing landscape with a move toward integrated delivery and new payment models. Also spurred by consumer demand, telehealth is viewed increasingly as an efficient and cost-effective care delivery vehicle.

### THREE TRADITIONAL MODALITIES

Telehealth traditionally encompasses three main modalities, each with distinct applications within the broader telehealth industry.

**1. Real-time** is a live, two-way, synchronous interaction between a patient (or the patient's caregiver) and a health care provider using audiovisual technology. Real-time telehealth services can be used to consult, diagnose and treat patients.

**2. Store-and-forward** involves asynchronous transmission of a patient's recorded health history (e.g., prerecorded videos or digital images like X-rays and photos) through a secure electronic communications system to a health care provider, usually a specialist. The information is used to evaluate a patient's case or, in some cases, render a service outside of a

real-time interaction. Store-and-forward technologies have the advantage of providing access to patient data after they have been collected, and are particularly beneficial to patients who require specialty care when providers are not available locally. This modality also is used to provide services to patients in other countries.

**3. Remote patient monitoring** involves collection of a patient's personal health and medical data via electronic communication technologies. Once collected, the data are transmitted to a provider at a different location, allowing the provider to continue tracking the patient's data once the patient has been released to his or her home or another care facility.

In addition to these traditional modalities, a growing number of mobile health, or mHealth, technologies, applications and online services are being sold directly to patients, such as wearable devices to track health and wellness. The market for wearable devices is expected to increase from \$1.5 billion in 2014 to \$6 billion by 2016. Patients will be able to benefit from tools like wearable electrocardiogram monitors that deliver EKG readings to their treating physicians.

### APPLICATIONS OF TELEHEALTH

Hospitals can provide the base from which telehealth services are offered,

thereby expanding their reach to populations they otherwise might not be serving. Some examples of hospital-based platforms include:

### 1 Improving access to health care and convenience for patients in rural areas

Approximately 20 percent of Americans live in rural areas where many do not have easy access to primary care or specialist services. The availability of telehealth services to these areas facilitates greater access to care by eliminating the need to travel long distances to see a qualified health care provider. Telehealth also can fill gaps in subspecialist care. Telepharmacy is another way to offer patients the convenience of remote drug therapy monitoring, authorization for prescriptions, patient counseling and monitoring patients' compliance with prescriptions. And, with a nationwide shortage of psychiatrists, telepsychiatry can be the answer for patients in need of behavioral health services who may have to drive hours to see mental health providers in some

parts of the country. Telepsychiatry services allow psychiatrists to speak with and evaluate patients in need of mental health services through videoconferencing.

Rural and critical access hospitals are often in need of critical care clinicians to diagnose, manage, stabilize and make transfer decisions concerning their most complex patients. Tele-ICU programs can help hospitals to supplement clinician staffing of their intensive care unit beds.

### 2 Improving quality of care and patient satisfaction

Research conducted in 2013 on nearly 120,000 adult patients from 56 ICUs in 32 hospitals belonging to 19 U.S. health care systems concluded that ICU telehealth interventions, especially those that increase early intensivist case involvement, improve adherence to ICU best practices, reduce response times to alarms and encourage the use of performance data. In addition, the overall effects of ICU telemedicine programs were as-

sociated with better survival rates for patients and reduced hospital lengths of stay. Significant improvements in the quality of care for seriously ill and injured children treated in remote rural EDs also were achieved by using telehealth consultations with pediatric critical care medicine physicians at UC Davis Children's Hospital.

### 3 Telehealth growth and expansion

Applications of telehealth technologies are filling the need for critical health care services in a variety of specialty areas and across diverse patient populations. Some of the most common conditions for which patients seek telehealth services are acute respiratory illnesses and skin problems, but the list of possible uses of telehealth technologies continues to grow. As patients become more proactive in their health care delivery choices, utilization of telehealth services will increase from an estimated 250,000 patients in 2013 to an estimated 3.2 million patients in 2018.

### 4 Advancing telehealth through new health care delivery models

The Affordable Care Act has accelerated the use of telehealth technologies by incentivizing Medicare-participating hospitals and other providers to test and implement various types of clinically integrated care models. Congress created the Center for Medicare & Medicaid Innovation for the purpose of testing "innovative payment and service delivery models to reduce program expenditures ... while preserving or enhancing the quality of care" for those individuals who receive Medicare, Medicaid or the Children's Health Insurance Program. One of these models is the Medicare Shared Savings Program to facilitate coordination and cooperation among providers to improve the quality of care for Medicare fee-for-service beneficiaries and reduce unnecessary costs. Eligible providers, hospitals and suppliers may participate in the MSSP by creating or participating in an accountable care organization. Participating ACOs are

## Hospital-based Telehealth Platforms

### PLATFORM DESCRIPTION



Telestroke	Remote evaluations, diagnoses and treatment recommendations are transmitted to emergency medicine doctors at other sites using advanced telecommunications technologies.
Teleradiology	Images and associated data are transmitted between locations for the purpose of primary interpretation or consultation and clinical review.
Tele-ICU	Networks of audiovisual communication and computer systems are linked with critical care physicians and nurses to intensive care units in other, often remote, hospitals.
Telemental health	Mental health and substance abuse services are provided from a distance (for example, using videoconferencing and other advanced communication technologies).
Telepathology	The practice of pathology is performed at a remote location by means of video cameras, monitors and a remote-controlled microscope.
Cybersurgery	Surgeons use surgical techniques with a telecommunication conduit connected to a robotic instrument to operate on a remote patient.
Remote monitoring	Patients are subject to continuous or frequent periodic clinical monitoring via advanced communication technologies.
Telepharmacy	Pharmaceutical care for patients (or supervision of technicians) is provided at a distance using advanced telecommunications technology.
Consultations	Remote consults are conducted with remote specialists, primary care providers, counselors, social workers and other health care professionals.

Source: AHA TrendWatch, 2015

encouraged to use telehealth technologies and remote monitoring as a means to help them meet the goals of improving quality and reducing costs.

## 5 Employer-driven telehealth

Employers that offer employees access to telehealth services have an opportunity to increase employee productivity by reducing the time taken by employees to see physicians in person. Employers also save money on primary care or ED visits, and costs related to these health care encounters. Almost a quarter of employers with 1,000 or more employees currently offer telehealth services to employees, and an additional 37 percent of employers expect to offer such services by 2015. In addition to employee convenience and increased productivity, U.S. employers could save up to \$6 billion per year by making these telehealth technologies available to their workforces.

## COVERAGE AND PAYMENT FOR SERVICES

Few obstacles present greater challenges for providers' seeking to improve patient care through telehealth technologies than the issues of coverage and payment for telehealth services. Whether public and private payers cover telehealth services and adequately reimburse hospitals and other health care providers for providing those services is a complex and evolving issue and, as a result, a possible barrier to adopting such services. Providers that also have their own health plans may find it easier to deploy telehealth because they control coverage and can benefit from the cost savings.

A baseline question with respect to provider payment for telehealth services is whether the payer covers telehealth services at all. On the public payer front, inconsistencies exist. For example, Medicare's policies for coverage and payment for telehealth services lag far behind other payers due to its restrictive statutes and regulations. Many state Medicaid programs cover telehealth services to some

## CASE STUDY

# Mayo Clinic's Medical Kiosk Plan

Mayo Clinic has launched a pilot program to bring health care providers into the workplace using telehealth kiosks. The first "Mayo Clinic Health Connection" kiosk is located on the Mayo Clinic Health System campus in Austin, Minn., approximately 40 miles west of Mayo's main campus in Rochester. The planning for the pilot program began in early 2014, and the first patients were seen at the end of 2014.

"Patients can conveniently walk up to the kiosk without scheduling an appointment and be treated for minor, common health conditions by doctors, nurse practitioners and physician assistants from both Mayo Clinic and Mayo Clinic Health System," says Matt Bernard, M.D., Southeast Minnesota region primary care service line chairman. "Mayo is committed to reducing health care expenses for employees and employers by improving access to medical services through convenient and more affordable care."

The pilot project is expected to "decrease absenteeism, lower costs and increase wellness, a win-win for employers and employees," Bernard says.

extent, although the criteria for coverage vary widely from state to state. On the private payer side, by contrast, there has been significant expansion, with many states passing laws requiring private payers to provide coverage for telehealth services.

### Private payers

According to the American Telemedicine Association, 19 states and the District of Columbia have enacted full parity laws, which generally require health insurers to cover and pay for services provided via telehealth the same way they would for services provided in person. Virginia and New Mexico are two progressive states that have created a regulatory environment that encourages the availability and provision of telehealth services, including providing telehealth coverage for their state employee health plans.

Two additional states — Arizona and Colorado — have enacted partial parity laws that require coverage of and reimbursement for telehealth services. However, coverage is limited to a certain geographic area or a pre-defined list of qualified services.

### Medicaid

A 2014 report by the Center for Connected Health Policy noted that 46 state Medicaid programs, both fee-for-service and Medicaid managed

care, have some form of coverage for telehealth services, such as for remote patient monitoring (13 states). Live video is the most frequently covered telehealth service, while store-and-forward services are defined and reimbursed by only a handful of state Medicaid programs. State Medicaid programs rarely cover email, telephone and fax consultations, unless they are used in conjunction with some other type of communication. Twenty-four states pay providers either a transmission or a facility fee, or both. A few states have adopted the Medicare policy that restricts coverage to telehealth services provided in rural or underserved areas.

### Medicare

Medicare's restrictive coverage and reimbursement policies for telehealth services result from the program's narrow definition and scope regarding telehealth:

- Telehealth services may be provided only to Medicare beneficiaries who live in or use telehealth systems in eligible facilities located in rural Health Professional Shortage Areas, either located outside of a Metropolitan Statistical Area or in a rural census tract, as determined by the Office of Rural Health Policy within the Health Resources and Services Administration; or in a county outside of an MSA.

- Medicare does not cover telehealth services provided via store-and-forward technology, except in Alaska and Hawaii.

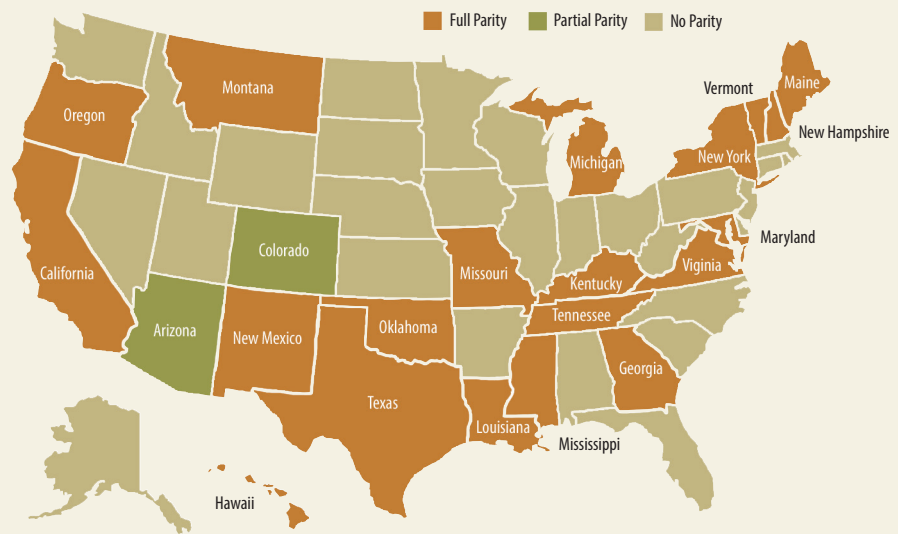
- Telehealth services will be covered only if the beneficiary is seen at an approved “originating site” authorized by law (including physician offices, hospitals and skilled nursing facilities).

- Only Medicare-eligible providers (such as physicians, nurse practitioners and clinical psychologists) can provide the services.

Medicare provides coverage only for a small, defined set of services (including consultation, office visits, pharmacological management and individual and group diabetes self-management training services).

For services that meet these criteria, hospitals are paid a facility fee of approximately \$25 for each claim to cover services provided to patients in an inpatient or hospital outpatient clinic setting. Off-site, hospital-owned sites also are considered “facilities” in the context of a facility fee. Professional fees for provision of telehealth

## Private Payer Coverage and Reimbursement for Telehealth Services



### CASE STUDY

## South Carolina’s Link to Rural ICUs

In August 2013, the Medical University of South Carolina (MUSC) launched a telemedicine partnership with Advanced ICU Care. The partnership with the nation’s largest tele-intensive care unit provider was made possible in part by a \$12 million grant to MUSC from the state of South Carolina. Through the partnership, telemedicine and tele-ICU care are provided at community and rural hospitals to help patients with life-threatening conditions in rural counties. Medical staff on-site at the rural hospitals are able to present a patient’s condition to an MUSC physician in real time via sophisticated videoconferencing equipment. MUSC board-certified critical care doctors, also called intensivists, virtually treat the patients without needing to transport them to another hospital.

services are the same as paid for an in-person encounter and are based on the Medicare physician fee schedule. On Jan. 1, 2015, Medicare began to cover and pay for several more services when provided via telehealth, including certain wellness visits, psychotherapy services, extended office visits, chronic care management and remote patient monitoring of chronic conditions. These additions to the list of telehealth services show Medicare’s intention to expand its coverage for telehealth services, but significant geographic restrictions remain. However, changes to the geographic restrictions require congressional action.

### Provider-based health plans

Generally, provider-based health plans have more ability to deploy telehealth strategies because they are not subject to private or public payer coverage rules. Further, cost savings that are realized from telehealth accrue to the provider-based health plan. For example, in 2008 Kaiser Permanente Northern California (KPNC) implemented an inpatient and ambulatory care electronic health record system for its 3.4 million members and developed patient-friendly telehealth tools using phone, email and video. The number of virtual visits

grew from 4.1 million in 2008 to 10.5 million in 2013. KPNC has found that the advantages resulting from the telehealth technologies have been central to its efforts to achieve superior quality and service while keeping costs competitive.

### CONCLUSION

The implementation and effective use of Internet, mobile and video technologies offer hospitals, physician groups and health plans ways to improve their performance and provide greater convenience and value to patients. As new health care delivery and payment models evolve, and the systems to support the use of new technologies improve and become less costly, the future holds great promise that telehealth will continue to improve the efficiency, convenience and cost-effectiveness of our health care system. **T**

*This is an excerpt from “The Promise of Telehealth for Hospitals, Health Systems and Their Communities” from the American Hospital Association. For the complete report, including all sources, go to [www.aha.org](http://www.aha.org).*

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