Telehealth/Telemedicine

Technology has impacted every industry in our society, especially health care. From the emergency department to board conference rooms, telehealth is changing the way health care is provided. Through expanding patient access to routine and specialty care while simultaneously improving patient satisfaction and outcomes, telehealth services have created innovative ways to deliver high-quality care.

Telehealth or Telemedicine:

The Health Resources Services Administration defines *telehealth* as the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration. Technologies include videoconferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications.

The American Telemedicine Association defines *telemedicine* as the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.

Telehealth is different from telemedicine because it provides a broader array of health care services than telemedicine. While telemedicine refers specifically to remote clinical services, telehealth can refer to remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services. However, sometimes the terms are used interchangeably.

All telehealth applications require health information technology (IT), but not every use of health IT can be called telehealth. Stand-alone systems like electronic health records (EHRs) or computerized decision support (CDS) are types of health IT that are not typically thought of as telehealth applications.

While “telemedicine” has been more commonly used in the past, “telehealth” is a more universal term for the current broad array of applications in the field. Its use crosses most health service disciplines, including dentistry, counseling, physical therapy, and home health, and many other domains. Further, telehealth practice has expanded beyond traditional diagnostic and monitoring activities to include consumer and professional education.

A connection exists between health information technology (HIT), health information exchange (HIE), and telehealth, neither HIE nor HIT are considered to be telehealth.

This document provides an overview of telehealth/telemedicine’s impact to hospitals, what hospitals can do to utilize more telehealth/telemedicine, and useful telehealth/telemedicine terms.
Better Integration of Care:
Utilized daily across the world among physicians to coordinate on routine procedures and to receive answers for urgent situations. Patients are also using telehealth to manage their chronic conditions from home through telecommunicated enabled devices that relay their blood pressure, heart rate and other vital signs to their practitioner. Telehealth/telemedicine allows for better care in places where medical expertise may not be as easily accessible.

In 2015, Mercy Health System opened the first Virtual Care Center. A four-story, 125,000-square-foot building, the Virtual Care Center houses 330 Mercy co-workers, however it has no traditional patients. Cleverly described by its president as a “a hospital without beds,” the facility is the epicenter of the health center’s existing telemedicine programs and includes several programs. An electronic intensive care unit (ICU), where doctors and nurses monitor patients’ vital signs and provide a second set of eyes to bedside caregivers. An adjunct neurologist program for community emergency rooms. Virtual hospitalists and home monitoring programs where doctors order needed tests or read results 24/7 through virtual care technology. The center is also a workspace for innovations in patient care and product testing. The facility provides remote support for intensive-care units, emergency rooms and other programs in 38 smaller hospitals across the nation and has seen 15 percent reduction in how long patients stay in the hospital.

Cost Efficient:
Telehealth/telemedicine is increasingly being viewed as a cost-effective method to deliver quality patient care and expand access. Therefore, coverage for telehealth should be incorporated into emerging payment models.

The Veterans Health Administration (VHA) began introducing telehealth programs in the 1990s and has since pioneered the use of telehealth in the United States. The VHA uses multiple types of telehealth interventions that provide routine care and targeted care management services to veterans. In 2012, the VHA served over 150,000 beneficiaries with telehealth services. Through its development the VHA’s program has shown substantial efficiencies. The annual cost to deploy the telehealth program in 2012 was $1,600 per patient per year, compared to over $13,000 for traditional home-based care and over $77,000 for nursing home care. The programs have been associated with a 25% reduction in number of bed days and a 19% reduction in hospital admissions across all VHA patients utilizing telehealth. The VHA has also achieved significa reduction in hospitalizations for conditions with high disparities; including a 40% for mental health patients and about 25% for patients with chronic condition. Overall, the VHA estimates average annual savings of $6,500 or $1 billion system-wide saving for each patient that participated in the telehealth program in 2012.
Reimbursement:

Limited coverage for telehealth services is a major obstacle to greater adoption. Among public payers, Medicare offers the most limited coverage of telehealth, paying for a narrow set of services and only in rural areas. CMS has recently allowed for expanded use of telehealth by waiving the geographic and practice setting limitations for providers participating in certain experimental Medicare payment initiatives, such as the Bundled Payments for Care Improvement Initiative (BPCI) and the Next Generation Accountable Care Organization (ACO) model.

Most state Medicaid programs cover some telehealth services, although the criteria for coverage vary from state to state. Private payers have been more willing to embrace telehealth as a covered service for beneficiaries.

Many private payers are aligning incentives to ensure that patient quality of care is high – in order to avoid costly readmissions and other adverse outcomes – and financial resources are used wisely in order to control costs.

Experts from health plans, which have incentives to ensure patients receive efficient care, have advocated for Medicare and other programs to expand telehealth coverage. Notably, at the February 2016 meeting of the Medicare Payment Advisory Commission (MedPAC), commissioners representing health plans encouraged MedPAC to recommend that Medicare embrace telehealth in coverage guidelines. The commissioners noted the benefits of telehealth for patients, including less time lost due to travel and greater convenience, and expressed concern that Medicare may be proceeding too cautiously on coverage of telehealth services.

In 2016, Rhode Island Gov. Gina Raimondo signed “The Telemedicine Coverage Act” into law. The law requires “health insurance policies, plans, or contracts issued, reissued or delivered on or after January 1, 2018 to include provisions for reimbursement of telemedicine services in the same manner as such policies, plans, or contracts reimburse for health care services provided through in person consultation or contact.”

Under the legislation telemedicine is defined as, “the delivery of clinical health care services by means of real time two-way electronic audiovisual communications, including the application of secure video conferencing or store and forward technology to provide or support health care delivery, which facilitate the assessment, diagnosis, treatment, and care management of a patient's health care while such patient is at an originating site and the health care provider is at a distant site, consistent with applicable federal laws and regulations.

Telemedicine does not include an audio-only telephone conversation, email message or facsimile transmission between the provider and patient, or an automated computer program used to diagnose and/or treat ocular or refractive conditions”.

This law takes effect on or after January 1, 2018.
Considerations When Creating a Telemedicine Program:

- Set a clear vision
- Establish goals and measurements
- Develop a plan
- Create an effective work environment
- Manage implementation and communication
- Provide training and support
- Develop a team that includes management, assistance and leadership
- Market your program to others
- Publish your results
Useful Telehealth/Telemedicine Terms:

- **Distant or Hub site:**
  - Site at which the physician or other licensed practitioner delivering the service is located at the time the service is provided via telecommunications system.

- **Originating or Spoke site:**
  - Location of the patient at the time the service being furnished via a telecommunications system occurs. Telepresenters may be needed to facilitate the delivery of this service.

- **Telepresenter:**
  - A medical professional at the originating site that presents a patient to the physician or practitioner at the distant site

- **Medical Codes:**
  - States may select from a variety of HCPCS codes (T1014 and Q3014), CPT codes and modifiers (GT, U1-UD) in order to identify, track and reimburse for telemedicine services.

- **Live Videoconferencing (Synchronous):**
  - Live, two-way interaction between a person and a provider using audiovisual telecommunications technology.

- **Store-and-Forward (Asynchronous):**
  - Transfer of data from one site to another through the use of a camera or similar device that records (stores) an image that is sent (forwarded) via telecommunication to another site for consultation.

- **Remote Patient Monitoring (RPM):**
  - Personal health and medical data collection from an individual in one location via electronic communication technologies, which is transmitted to a provider in a different location for use in care and related support.

- **Mobile Health (mHealth):**
  - Health care and public health practice and education supported by mobile communication devices such as cell phones, tablet computers, and PDAs.
Sources:

1. http://www.americantelemed.org/about-telemedicine/what-is-telemedicine#.V5n307grK70
6. Medicare provides coverage for telehealth services only in regions designated as a Health Professional Shortage Area (HPSA) and in a county that is outside of any Metropolitan Statistical Area (MSA), defined by the Health Resources and Services Administration (HRSA) and the Census Bureau, respectively.
14. 42 U.S.C. 1395m(m)(4)(c)(i)
15. 42 C.F.R. 410.78(b)(4)
19. 42 U.S.C. 1395m(m)(1)
20. 42 U.S.C. 1315a(2)(B)
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22. http://webserver.rilin.state.ri.us/BillText/BillText16/HouseText16/H7160B.pdf