

Telehealth at MedStar Health

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What is Telehealth?

Definition: The origins of telehealth technology date back to the 1900s, when Dutch physiologist Willem Einthoven invented the electrocardiogram (ECG or EKG).¹ While telehealth technology has been relevant for more than a century, the term telemedicine (used interchangeably with telehealth) wasn't officially coined until the early 1970s.¹ The Latin and Greek roots of the word telemedicine translate to "healing at a distance."¹ Furthermore, the American Telemedicine Association defines telehealth as "the remote delivery of health care services and clinical information using telecommunications technology."²

How is Telehealth Delivered? Telehealth can be applied to a wide range of clinical and non-clinical services across various care sites. It is primarily delivered via:

- **Real-Time Virtual Visits/Consultations:** Live two-way audio or video interactions between a provider-provider or provider-patient (e.g. tele-behavioral health, urgent care virtual visits)³
- **Remote Patient Monitoring:** Electronic monitoring and transmission of personal health data from a medical device to a provider (e.g. Bluetooth glucose meters, blood pressure monitors)³
- **Store & Forward File Sharing:** Electronic transmission of health-related images and videos to a provider (e.g. transmission of x-rays, CT scans, or surgical videos)³

Advancing Telehealth at MedStar

In March 2017, Ken Samet, MedStar Health president and chief executive officer, chartered the creation of the MedStar Telehealth Innovation Center (MTIC). MTIC is embedded within the MedStar Institute for Innovation. Since its creation, MTIC has worked to establish and scale telehealth capabilities across MedStar's distributed care delivery network. The Center partners with providers and departments who are interested in integrating telehealth into their practices, while continuously evaluating areas of need within the system that could benefit from telehealth. Current telehealth initiatives are in place at numerous MedStar hospitals, emergency departments, and PromptCares.

MTIC strives to implement telehealth solutions that are integrated with providers' current care pathways, allowing patients to seamlessly transition from traditional brick-and-mortar care to virtual care (e.g. Emergency Department teletriage). While each telehealth implementation addresses a unique clinical need, telehealth as a whole provides a wide range of benefits to patients, providers, and staff, including:

- Increasing access to care, including high-demand specialty care
- Facilitating care between hospitals, other care sites, and the patient's home
- Improving outcomes, overall health, and disease management
- Making care more convenient for patients and providers
- Reducing the overall cost of care

Health for America Fellowship

Since September 2017, I have worked with MTIC on various telehealth projects. Through the team's guidance and mentorship, I have gained a better understanding of the domain of telehealth, its trends, leaders in the industry, and areas of opportunity for MedStar. My primary project work has included: 1) project managing a telehealth platform integration; 2) working one-on-one with providers to integrate telehealth within their surgical departments; and 3) exploring, ideating, and implementing a telehealth special project at MedStar Health, which is pending funding and confidential at this time.

Additional highlights from my fellowship experience can be found on my HFA blog:

<https://www.blog.healthforamerica.org/blog/author/Sharon-Rodriguez>

1. Strehle, E M, and N Shabde. "One Hundred Years of Telemedicine: Does This New Technology Have a Place in Paediatrics?" Archives of Disease in Childhood 91.12 (2006): 956-959. PMC. Web. 2 July 2018. 2. American Telemedicine Association. About Telemedicine: What is telemedicine? 2016; <http://www.americantelemed.org/main/about/about-telemedicine/telemedicine-faqs> 3. Walsh, Tracy. Telehealth industry trends for 2017; <https://www.advisory.com/research/population-health-advisor/events/webconferences/2017/2017-telehealth-industry-trends/ondemand>