

TELEMEDICINE TECHNOLOGY



JULY 2018 TECH BRIEF FOR HEALTH CARE TALENT NETWORK

A Subcategory of Digital Health

Telemedicine is a growing industry often cited as an important innovation for reforming healthcare, especially helping to reach patients in underserved communities and reducing trips to expensive care facilities. We are writing about it here because it will be at the forefront of innovation.

Delivery devices used for delivery include desktop and laptop computers, smartphones or other wireless devices. Experts report that [telemedicine](#) has the potential to improve patient health status by increasing access to medical care and by providing real-time responses; all at lowered costs. [Telemedicine includes monitoring of chronic conditions](#). For example, about [1 million Americans](#) use remote cardiac monitoring, so doctors can receive data related to their vitals to monitor them real time.

Over half of U.S. hospitals already use telemedicine in some capacity. However, [only 33% use credentialing by proxy](#) which may cause issues with Medicare when/if services are expanded. Using traditional credentialing processes is [prohibitively expensive and time consuming](#), so the concern is raised about gaps in credentials.

Labor Force Takeaway

As of July 21, 2017, NJ has a telemedicine [regulation](#). For an industry which prefers clear government guidelines, legislation is key to expansion. NJBiz reports that [RWJBarnabas Health is planning to offer telehealth](#) services to its 32,000 employees sometime in 2018 allowing them to spring board into the market.

Likely, telemedicine will not pay as well as medical advice administered at local clinics; not for medical doctors and certainly not for paraprofessionals. The reason to consider telemedicine a stepping stone is this:

[Telemedicine will be on the forefronts of Artificial Intelligence, Virtual Reality and Health Care reform](#)

Learning the ins-and-outs of AI [capabilities enabled by telemedicine platforms](#) will propel workers forward into career paths not yet defined. This tech brief will discuss several applications, without discussing the platforms competing on the market.

Telemedicine vs. Doc-in-a-Box.

School nurses say telemedicine helps them treat students faster right at school, reducing risk of infection, and relieving a big burden on the students' families. For a student with an earache, say, an employee of the school can first assess the eardrum in person, take video and photos of the ear canal, then connect the student to a doctor for a real-time consultation.

At a time when **school shootings** and other acts of violence call for **mental-health services** for teen agers, experts also see telemedicine as a way to efficiently connect students with psychiatric care. Imagine if a student is showing significant symptoms of depression and anxiety. A school counselor may seek an evaluation from a child psychiatrist, either through video or in person. Albeit, parental consent is often required before a psychiatric consultation can be given.

In many ways, telemedicine is competing against urgent care facilities, not emergency rooms or specialist. It is a subset of digital health, although it is not the same as **healthcare information technology** (IT). Healthcare IT refers to electronic medical records. Whereas, **telemedicine** is the actual delivery of clinical services remotely using technology such as video chats, email, or other technologies. The hardware/software behind both services **are related** and may well include some of the same AI technology.

Key Definitions in the **NJ law regulating telemedicine**:

- Telemedicine is broadly defined as the delivery of a health care service using electronic communications, information technology, or other electronic or technological means to bridge the gap between a health care provider who is located at a distant site and a patient who is located at an originating site. The term does not include “the use, in isolation, of audio-only telephone conversation, electronic mail, instant messaging, phone text, or facsimile transmission.”
- Telehealth is defined as the use of information and communications technologies, including telephones, remote patient monitoring devices, or other electronic means, to support clinical health care, provider consultation, patient and professional health-related education, public health, health administration, and other services.
- Asynchronous Store-and-Forward is defined as the acquisition and transmission of images, diagnostics, data, and medical information either to, or from, an originating site or to, or from, the health care provider at a distant site, which allows for the patient to be evaluated without being physically present.
- Health Care Provider is broadly defined as an individual who provides a health care service to a patient, which includes, but is not limited to, a licensed physician, nurse, nurse practitioner, psychologist, psychiatrist, psychoanalyst, clinical social worker, physician assistant, professional counselor, respiratory therapist, speech pathologist, audiologist, optometrist, or any other health care professional acting within the scope of a valid license or certification issued pursuant to Title 45 of the New Jersey Statutes.