

MOHEG Student Essay Award  
“Telemedicine: A Virtual Reality”  
Rockhurst University, Helzberg School of Management (06/2018)  
By: Saba Siddiqi, M.D.  
9801 Lenexa Drive, Apt 3L, Lenexa, Kansas, 66215  
Phone: (516)-503-7341  
September 20, 2016

The advancements being made in the healthcare industry today are truly remarkable. Telemedicine is one such genre that has started to make strides that is reaching new heights in the healthcare world. With new technology and the virtual reality our society has started to live in, it is inevitable that hospitals will also start to follow this trend. This type of medicine has the potential to impact our society in ways that can make healthcare more accessible. Thinking about what the future holds regarding patient management and the ease of access to care, one can only hope that this transition happens smoothly.

In the past, healthcare professionals routinely relied on writing their patient notes by hand. These days, electronic medical records has taken over the task of writing notes by hand and has made it easier to access a patient’s history. Taking it a step further into virtual reality via telemedicine allows physicians to help a great deal of patients in rural, underserved areas and at an international level as well. By using this type of technology, patients can be monitored through store and forward solutions, remote patient monitoring or real-time telehealth.

Store and forward telemedicine solutions is asynchronous as it allows the consulting specialist, patient and primary care provider to interact through an email platform. This is a convenient way of communication as opposed to an increased amount of time spent in the waiting room for the patient. It also lets other healthcare specialists consult with one another as it

allows them to be thorough and get a second opinion. For instance, radiologists or pathologists can interconnect this way and efficiently make a diagnosis for the patient sooner rather than later.

Remote patient monitoring allows a physician to monitor a patient's vital signs from the comfort of the patient's home through digital connections. This is especially beneficial for patients with chronic medical conditions such as diabetes, hypertension or pulmonary disease who don't have the ability to travel long distances frequently. The healthcare provider can keep a keen eye on their patient and prompt them if they see any irregularities in their vital signs. If there are any abnormalities seen, the physician may immediately schedule the patient to come in for a visit or manage them at home.

Real-time telehealth is traditionally seen through one on one, secure audio and video communication. This type of telemedicine is ideal for patients who live in rural areas who don't have access to healthcare providers or specialists. They can communicate their medical problems and receive the care needed in remote locations. With the rise of new diagnostic tools on the market, patients can now use these devices to measure their blood pressure, blood glucose, heart and lung sounds more thoroughly. These devices can produce quality results that satisfy health care providers regarding the medical information measured by the patient. Real-time telehealth has been tremendously useful internationally as well. International telemedicine demand has risen in the last few years and has opened up the boundaries globally since many countries are constantly doing research. To be able to communicate in this fashion can lead us to learn a wide array of medical knowledge and procedures to treat various medical conditions.

According to the American Telemedicine Association, over half of the hospitals in the United States use telemedicine. They have also set current guidelines so that healthcare providers may practice this field responsibly. In essence, the general rule is that healthcare professionals

should follow the same guidelines for telemedicine as they would if they were treating a patient in person. Although there are still early restrictions and rules regarding telemedicine, we can recognize that there is still room for improvement and new innovations. The coverage plans regarding telemedicine differ amongst Medicaid, Medicare and private health insurance although which, for the most part, cover real-time telehealth but coverage of other services still vary depending on the state.

Telemedicine has enormous potential and may offer our society not just care across the United States but also access to international doctors around the world. The improvements being made can ultimately impact how we communicate with healthcare providers in the most efficient manner. Telemedicine can be used for a wide variety of medical problems as well as range widely by specialty. Whether the patient is using store and forward solutions, remote patient monitoring or real-time telehealth, it is a step forward in the right direction. It is an investment into the future that can pay back in enormous dividends in regards to patient satisfaction. Thus, there is still undiscovered territory of telemedicine that can be explored further to facilitate patient care.

## References

Beck, M (2016). New Gadgets That Could Give Telemedicine a Boost – *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/new-gadgets-that-could-give-telemedicine-a-boost-1474855442>

Beck, M (2016). How Telemedicine Is Transforming Health Care– *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/how-telemedicine-is-transforming-health-care-1466993402>

<http://www.americantelemed.org/about-telemedicine/faqs#.V-8UZvArLIU>

<https://evisit.com/what-is-telemedicine/>