American Telemedicine Association

Telemedicine is simply the use of telecommunications to provide health care. From the use of robotics to deliver medical procedures, to smartphone applications that provide consumer health information and services, telemedicine is a modern innovation that is revolutionizing the delivery of health care services. A variety of other names are associated with telemedicine, such as telehealth, connected medicine, mobile health, and remote monitoring. Regardless of the name, telemedicine offers patients convenient, patient-centered access to health care wherever they are located. Instead of patients going to the doctor, telemedicine allows the doctor to come to them!

Although little is known by the public until recently, the concept of telemedicine was considered in the early 1900s and later pioneered by the National Aeronautics and Space Administration to treat astronauts in space for more than 40 years. Adapted to the commercial market, telemedicine allows health care providers to diagnose, treat, or monitor patients from a distance. In fact, in 2013 approximately 11 million people received telemedicine services in the United States. However, many were not even aware of it. One of the most widely used telemedicine services is radiology. With digital imaging, radiologists no longer have to be located next to an imaging device. Over 5 million Americans had X rays, MRI scans, or CT studies read by radiologists who were located off-site. Mobile medical devices also represent a growing segment of the telemedicine market. About 1 million Americans have had a pacemaker or other implantable cardiac device that is wirelessly enabled for remote monitoring. In addition, over 300,000 patients received remote telemental health consults using online websites.

In an increasing number of cases, telemedicine is being used to save lives. For example, last year almost 90,000 stroke patients benefited from
telestroke services provided by a trained neurologist in a different location than the patient. This type of service allows hospitals or other health care facilities to remotely access trained specialists, such as neurologists, when one is not available in person. In addition to providing patients with access to appropriate specialty care, this type of service allows hospitals and other health care facilities to bridge gaps arising from physician shortages.

With advancements in technology and availability of hundreds of applications, telemedicine is now allowing patients to access health services at home, in the workplace, or wherever they may be located. Whether it involves smartphone applications that help the chronically ill monitor their conditions, online websites that provide consumers with live video health care assistance, or wireless services that allow doctors to monitor their patients while away, the barriers to health care imposed by geographic boundaries and distance are disappearing.

However, realizing the full benefits of telemedicine requires managing legal and regulatory barriers. For example, reimbursement for telemedicine services under Medicare and other public and private insurers lags behind coverage for services provided in person. Also, state physician licensure requirements and state laws governing medical practices have proven to be obstacles to wider telemedicine adoption, as the practice of medicine is largely regulated at the state and local levels with varying policies and regulatory approaches to telemedicine.

While progress is finally on the march, the adoption of technological innovation in health care has seriously lagged behind almost every other industry. Consumers would never think of patronizing a bank that did not offer ATM services. Even bookstores and music stores have long since gone digital and online. In fact, health care may be the last industry to evolve with the digital revolution.

As the use of telemedicine becomes more widespread in the coming years, it will likely be customary for patients to receive much of their care via virtual physician house calls or electronic consultations. And, telemedicine could offer tens of millions of baby boomers the opportunity to receive care in the comfort of their homes, on their terms, personalized to meet their needs. With lowered costs of telecommunications, increased interest by physicians and consumers alike, and the discovery that such innovation
not only can deliver health care to more people but also can do it in ways that save money and improve the quality of care, telemedicine is here to stay! It is fair to say that the best is yet to come, and the person who benefits from such innovation may be you.