The Physician’s Guide to Telemedicine in 2018
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Telemedicine is the remote treatment of patients by medical professionals through the use of telecommunication tools such as telephones, smartphones, and computers. Predicted to be worth more than $34 billion by the end of 2020, the convenient and efficient nature of telemedicine makes it a profitable and worthwhile venture for healthcare leaders and professionals to invest in.

According to The New England Journal of Medicine, it takes an average of 20 days to secure an appointment with a physician, wherein only 20 minutes out of two hours will actually be spent with the physician and the remaining time is allotted for travel and waiting. In contrast, there is no travel nor wait time with telemedicine. In an effort to help healthcare institutions run more efficiently and reduce needless costs and foregone revenue associated with seeing and diagnosing patients, telemedicine has the ability to deliver services to the 20% of persons who account for 80% of health care expenditures. As stated by the U.S. Senate Committee on Finance, “Traditionally telehealth has been viewed as a tool to improve access to services, but interest is growing to see if telehealth has the potential to reduce health care costs.” Through advanced communications and monitoring technologies, the healthcare industry can adopt a more patient-centric approach by practicing telemedicine.

Telemedicine has the ability to deliver services to the 20% of persons who account for 80% of health care expenditures.

If a healthcare practitioner or patient is interested in utilizing telemedicine and its services click here to see conditions that must be met according to the Center for Connected Health Policy.

**History of Telemedicine**

The use of telemedicine in the United States has progressively grown and is now being integrated into the daily operations of hospitals, home health agencies, private physician offices, specialty offices, and patient’s homes and workplaces. Telemedicine enables patients to have access to their healthcare professional at any time. Due to its wide range of benefits, telemedicine has developed into a multi-billion-dollar industry that several major hospital and healthcare systems are adopting and viewing as a tool that has the potential to reinvent healthcare. According to
Introduction to Telemedicine

a market research report by Mordor Intelligence, “The global market for telemedicine will be worth more than $34 billion by the end of 2020”. Currently, North America accounts for more than 40% of the global market. Telemedicine is still growing and expected to be completely adopted by 2020. Telemedicine is the future and will transform the U.S healthcare system.

Telemedicine was made possible through a series of electrical inventions, such as the telephone, that have made communication and technology an integral part of everyday life. This allows for telemedicine to be a process that is welcome and used by many individuals.

In April 1924, the magazine “Radio News” imagined a “radio doctor,” who is a doctor that listens to a patient through sound and live picture. In 1959, clinicians began finding medical uses for video communication. They used two-way television to transmit neurological examinations across campus to other students, where they established a link with the State Hospital to provide diagnosis of difficult cases, research seminars, and neurological exams. These programs arose because people that lived in remote populations did not have the luxury of different health services.

However, it began to be adopted among urban lines as well. In 1967, University of Miami physicians used voice radio channels to transfer electrocardiographic rhythms from fire units to hospitals in rescue situations. Additionally, telemedicine is especially useful for nursing home patients or non-physician providers in ambulatory care clinics. The US Department of Health and Human Services, NASA, and more supported and invested in the application of telemedicine. One of the ways they did so was to sponsor STARPAHC, which provided medical services to astronauts and to residents of an isolated Indian reservation by transmitting medical information. However, because transmission costs were very high, telemedicine did not seem like a liable idea, and so telemedicine was not truly valued until the end of the 1980s, due to improved technologies and lower costs.

Telemedicine is now rapidly expanding because of the advantages with using the Internet and technology to quickly be in contact with a provider/patient at no additional cost instead of traditionally visiting a hospital. Providers are viewing telemedicine as the new way to expand markets even to an international level and to grow in a changing healthcare environment.
Benefits of Telemedicine

Benefits for Health Providers

Telemedicine is helping health providers, employers, and patients get connected electronically. Telemedicine is a speedy way to share medical services directly from patient to practitioner, which allows for patients to contact providers that may be thousands of miles away. One way that this may be useful is in the case of rural patients, because this services permits for them to connect with specialists in bigger hospitals and in faraway regions that may not be accessible otherwise. Another benefit is that it allows providers to make additional income for providing telemedicine services at their convenience by seeing patients remotely via telemedicine communication channels.

Benefits for Patients

Telemedicine is also beneficial for patients because of its convenient health care, increased specialty access, and extended provider access. It allows patients to access their provider without the cost of travel and time, and offers a greater variety of specialties for specific diseases without needing to travel far distances. For simple tasks, such as contacting a doctor about over the counter treatment, getting a prescription for something that’s easily and readily identifiable, or getting an expired prescription re-authorized, it can be advantageous to be with a telemedicine provider. In addition to this, patients can consult their providers and gain a treatment plan in minutes when in critical need as compared to traveling to their doctor.

Benefits for Employers

For employers, telemedicine is an affordable alternative to visiting the doctor’s office, and also has the potential to improve employee productivity and reduce absences. This is because a telemedicine visit is less time consuming than usual doctor visits by reducing factors such as transportation and wait time. One such case is 9-year-old Aeon Strange, who traveled 200 miles every quarter year to visit his psychiatrist for attention deficit hyperactivity disorder. Each time, Strange had to miss a day of school and one of his parent’s would have to miss work. Through the telepsychology program, Strange and his family were able to utilize the remote connectivity technology to reduce the time loss on travel, and just receive behavioral health exams from video. Telemedicine technology can also address a variety of needs, from common ailments such as colds to also assist monitoring more serious medical conditions such as diabetes.
Affordability

Telemedicine can create value for patients by decreasing patient travel and wait time, increasing the reach of healthcare services, and promoting the potential for 24/7 coverage. This makes telemedicine and its capabilities an attractive prospect for people who care about those values and may increase customer satisfaction. Thus, some states are passing parity laws that require health plans to cover specialties through telemedicine that would be otherwise covered through their policy, such as in New York.
Federal Stance on Telemedicine

Federal law has not yet been established to define each state. There is currently progress on defining telemedicine. On February 3rd 2015, federal legislation HR 691 (Telehealth Modernization act of 2015) was introduced to Congress. This legislation seeks to establish a federal telehealth standard and serve as guidance for states. To become law, this legislation needs to pass through the House of Representatives, pass Congress, and signed into law by the President of the United States of America. This legislation has only been introduced in the House of Representatives but has yet to pass.

The Center for Connected Health Policy has broken down what current federal laws are in place and what the legislation proposes here.

The full version of the legislation can be found here.
Telemedicine with MACRA

Historically, telemedicine has not been required for quality reporting programs such as the Physician Quality Reporting System (PQRS) and Meaningful Use; however, the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), which calls for replacing these programs, includes a definition of telehealth services for Medicare reimbursement.

MACRA emphasized the need for better value-oriented healthcare and repealed the Sustainable Growth Rate (SGR) formula. As the healthcare industry transitions from the traditional fee-for-service model to value-based care, providers are concerned about how this shift will affect their reimbursement.

There are two paths for providers to earn reimbursement under MACRA, the Merit-Based Incentive Payment System (MIPS) and Advanced Alternative Payment Model (APM). The majority of providers will participate in MIPS, which will consolidate all existing quality reporting programs into one, asking providers to report on four categories:

• Quality
• Improvement Activities
• Advancing Care Information
• Cost

The Improvement Activities category lists remote patient monitoring and telehealth in the care coordination subcategory. Telemedicine is also allowed in most APMs, which will likely develop telehealth strategies for the group.

CMS defines a patient-facing encounter “as an instance in which the MIPS eligible clinician or group billed for services such as general office visits, outpatient visits, and procedure codes under [the Physician Fee Schedule].” Telehealth services are included in this definition of patient-facing encounters.
PrognoCIS Telemedicine

PrognoCIS EHR offers a Telemedicine solution that integrates seamlessly with our EMR software and is designed to keep your medical practice running smoothly. This interoperability provides faster and more accurate diagnoses, improved efficiency in care coordination, quicker treatment, and more.

**PrognoCIS Telemedicine Package**
The PrognoCIS EHR Telemedicine Solution integrates works seamlessly with the EMR software. The main components of the package include:
- Web Patient Portal for laptops, tablets and desktops
- Telemedicine app with embedded patient portal app
- Payment Gateway (Integrity Pays)
- Zoom Integration

**PrognoCIS Telemedicine Services**
The standard service package for Telemedicine includes:
- Configuration of user workflow between PrognoCIS EMR and Telemedicine package
- Customization of Telemedicine App to add customer logo and colors and certifying for Android Google Play Store and Apple AppStore

Visit [http://prognocis.com/telemedicine](http://prognocis.com/telemedicine) and see how to add Telemedicine to your practice today.
• **Cross-State Telemedicine Licensing**: Cross-State licensing allows whether or not a registered physician in one state can legally practice telemedicine in another state.

• **Eligible healthcare providers**: Healthcare professionals that are legally allowed by their state to practice Telemedicine.

• **E-prescriptions**: Electronic prescriptions that can be prescribed to patients without the patient being physically present.

• **Informed Patient Consent**: When providing Telemedicine as a service, one has to inform their patient of their rights, risks of Telemedicine and address their concerns written or verbally.

• **Interstate Medical Licensure Compact**: A compact, or an agreement, amongst Nevada, Idaho, Montana, Utah, Wyoming, Arizona, Colorado, Kansas, Minnesota, Wisconsin, Iowa, South Dakota, Illinois, Mississippi, Alabama, Pennsylvania, West Virginia, and New Hampshire. This compact allows doctors from compact states to practice across state lines, as long as the reciprocal state is part of the compact.

• **Parity Laws**: Passed legislation that requires payers to reimburse the same way they would for in-person medical treatment.

• **Pending Legislation**: Legislation that has been introduced to the legislative branch of the United States but has yet to be signed into law.

• **Remote Patient Monitoring**: Used when a patient needs to be monitored day to day. For example: measuring blood pressure or tracking weight).

• **Reimbursement Policy**: How physicians will be compensated when practicing telemedicine. This is between an insurance company or Medicaid and the patient.

• **Reimbursement Rate**: The percentage of telemedicine covered under insurance.

• **Specialties Covered**: Explicitly listed in legislation as a permitted specialty under telemedicine.

• **Store and Forward**: Process that allows patients to pre-record themselves for the doctor to review at a later time.
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Benefits of Telemedicine: Healthcare Savings for Employers?
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Doctor Tele-consults Boosted by New Regulations [PDF file]

HR 691 - Telehealth Modernization Act of 2015 [PDF file]
http://cchpca.org/sites/default/files/resources/Matsui%20HR%20691%20Factsheet.pdf

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Telemedicine gives rural patients better access to healthcare
http://www.modernhealthcare.com/article/20140308/magazine/303089979

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