



Understanding the Telemedicine Industry's Growth, Changes and What's to Come

Telemedicine has proven to be a powerful mechanism in delivering high-quality care, particularly to those patients with limited access to traditional health settings. Beyond its positive effects on patients, studies have also shown that many healthcare facilities consistently realize cost savings and significantly improve their operational capacities when adopting long-term telehealth platforms.

Industry Growth

Telemedicine used to garner skepticism from the provider, patient and industry perspectives. While some limitations in care still exist, its gradual increase in adoption over the past several years-coupled with recent telehealth demands in light of COVID-19-have proved that the industry will only continue to expand in both usage and innovation. The global telemedicine industry was valued at approximately \$40 billion in 2018 and expected to reach \$148 billion by 2025, due to spikes in usage caused by the pandemic, this estimation likely undervalues these projections¹.

\$148 billion

The global telemedicine industry expected to reach \$148 billion by 2025

When looking at private sector investment, it's not hard to see why the industry has evolved over the last several years. According to a 2018 Rock Health report, venture funding for digital health companies in 2017 approached approximately \$6 billion². In addition, continuously new products, such as wearables, have transformed the way both patients and providers receive and monitor health data. In

fact, 82% of consumers view digital solutions as the most effective way to monitor health metrics³.

Of course, sleek, modern technology like the Apple Watch and FitBit are just a small slice of what comprises the telehealth industry. It's too early to tell which sectors will undergo the most long-term growth post-pandemic, but even areas such as primary care, cardiology and dermatology have already exhibited strong increases in adoption. It's safe to say that telemedicine in almost all its forms is here to stay. After all, virtual patient visits increased by 261% between 2015 and 2017, and a 2019 Doximity report showed that the number of physicians who reported telemedicine as a skill doubled between 2015 and 2018⁴.

In general, the effects of COVID-19 have left patients with little choice but to adopt more tech-based platforms for their care, and once adopted, there's little reason to believe that virtual care will revert to pre-pandemic levels.

82%

of consumers view digital solutions as the most effective way to monitor health solutions.

261%

Virtual patient visits increased between 2015 and 2017

¹"Telemedicine Market Size, Share and Forecast to 2025." Brand Essence Research.

²,³"Deconstructing the Telehealth Industry: Part II, Improving the Access Points of Healthcare Delivery." Ziegler. Spring 2018.

⁴"2019 Telemedicine and Locum Tenens Opportunities Study: Measuring Physician Interest in Employment Areas." Doximity. July 2019.

Types of telemedicine

There is not one correct way to categorize types of telemedicine, and even each definition has slight variations depending on the agency, association or practice using them. However, telemedicine can usually be described as being synchronous (in real time) or asynchronous (often referred to as “store and forward”); in addition, remote patient monitoring (RPM) and mobile health (mhealth) are other ways to administer telehealth services.



Synchronous

Any two-way communication that occurs in real time between a patient and provider or between providers is considered synchronous. This is the type of service that often comes to mind when one thinks of a telemedicine consult or appointment. While almost anyone can benefit from these types of services, it can be particularly useful for patients with disabilities or chronic conditions and those who live in areas with insufficient access to healthcare facilities. There are many types of synchronous telehealth services, but broadly speaking, it refers to the immediate video and audio communication between two parties.



Asynchronous

Unlike synchronous modes of communication, asynchronous services rely on exchanges of health-related information that do not rely on each party participating at the same time. A common example would be a specialist

uploading or documenting information in an EHR for review by the patients’ primary care doctor at a later time. This type of practice is also referred to as “store and forward”. Uploading images and test results between facilities and/or providers would be considered an asynchronous type of telemedicine.



Remote patient monitoring (RPM)

RPM is becoming increasingly common as more digital technologies allow patients to wear or use devices that track their health on a daily basis. This type of telehealth can be used for either asynchronous or synchronous purposes. Examples could include a glucose monitoring system that transmits the patient’s levels directly to a patient’s electronic record. That information could either be used in a synchronous manner if treatment is needed immediately, or it could be used in a store and forward system, where the information is gathered for general monitoring purposes.



mHealth (mobile health)

mHealth is focused less on provider input and analysis and more on patients’ self-tracking. Many of these include apps that can help track physical activity and caloric intake. They are not necessarily being monitored by a medical professional but still provide valuable insight into an individual’s health and are oftentimes valuable for tracking preventative measures.

¹⁾“Telemedicine Market Size, Share and Forecast to 2025,” Brand Essence Research.

^{2,3)}“Deconstructing the Telehealth Industry: Part II, Improving the Access Points of Healthcare Delivery,” Ziegler, Spring 2018.

⁴⁾“2019 Telemedicine and Locum Tenens Opportunities Study: Measuring Physician Interest in Employment Areas,” Doximity, July 2019.

Specialties

Numerous sectors have expanded their usage of virtual care, but behavioral health/psychiatry, radiology and neurology have consistently ranked in the top 5 specialties utilizing telemedicine over the last several years. Health system executives also cited primary care and cardiology as the specialties where telemedicine solutions have highest potential to transform the standard of care. However, according to the report, post acute/smart aging and chronic care management are prime for rapid growth and have some of the most potential for the highest impact on patient care⁵.

Chronic care

Chronic care management (CCM) comprises a significant percentage of the total health care costs. In fact, about

71% *of healthcare spending in the US is associated with those with more than one chronic condition⁶.*

While payers, particularly Medicare, have often put burdensome restrictions on telemedicine reimbursement, taking advantage of virtual options for chronic care patients could improve traditional healthcare facilities' capacities.

Post acute/Smart Aging

Patients 65+ not only have the most complex chronic conditions, but they can also benefit the most from behavioral health services, especially those caused by loneliness or dementia. Virtual care has the potential to meet the need for comprehensive care that can be provided to older populations on a regular basis. Medicare and Medicaid reimbursement may continue to pose challenges, but since skilled nursing facilities also face financial penalties under Medicare, exploring online options may help ease gaps in care.

Cardiology

A 2019 poll found that out of 2,000 surveyed adults, two-thirds used some type of digital health monitoring device.⁷ When combined with the fact that devices such as Apple watches contain FDA-approved apps that conduct and transmit EKGs in real time, it's no surprise that virtual care can offer tremendous benefits to the cardiology sector.

^{5,6}"Deconstructing the Telehealth Industry: Part II, Improving the Access Points of Healthcare Delivery." Ziegler. Spring 2018.

⁷"Telehealth in Cardiology: The Future Is Today". American College of Cardiology. November 2019.
National Policy: Telehealth and Medicare. Center for Connected Health Policy.



Behavioral health

Behavioral health and telepsychiatry offer immense value on their own, but they can also positively impact providers treating patients with other physical ailments, such as chronic conditions. This sector has proven to be an increasingly effective way to meet patients' needs, especially as it typically requires less investment than other specialties, which may rely on imaging, lab results and other third party costs.

Of course, this is by no means an exhaustive list, as many other specialties continue to see benefits from telemedicine. Outpatient and long-term care are likely to increase telemedicine offerings as well.



Insurance: Parity Laws, Reimbursement & Regulations

• Medicare

While CMS is making continuous updates around reimbursements due to COVID-19, Medicare typically only covers services if delivered via live video. According to the Center for Connected Health Policy, originating sites (where the patient is located at the time of service) must be



in a Health Professional Shortage Area (HPSA) as defined by Health Resources and Services Administration (HRSA), or in a county that is outside of any Metropolitan Statistical Area (MSA) as defined by the US Census Bureau.⁸



Patients being treated for end stage renal disease, acute stroke or substance abuse disorder may be exempt.

Beginning this year, telehealth coverage has also been expanded under Medicare Advantage Plans, APMs and ACOs.

However, keep in mind that not all of these changes will be permanent and may continue to update on short notice.

⁸ "Deconstructing the Telehealth Industry: Part II, Improving the Access Points of Healthcare Delivery." Ziegler. Spring 2018.

- **Private payer**

As of 2019, 6 states, including California, Georgia and Hawaii, had passed or enacted telehealth payment parity laws (meaning reimbursement amounts for telehealth services must be the same amount as if they were administered in person). 41 states (including Washington DC) have some type of law that governs how telehealth can be covered under private plans.

- **Medicaid**

Because Medicaid is governed on a state-by-state basis, each program will have its own set of requirements. Many place restrictions on what constitutes an originating site. Before the start of the COVID-19 pandemic, 19 states considered the patient's home to be an eligible site under particular circumstances. Twenty-two states offered at least partial coverage of remote patient monitoring services.

- **Regulatory changes in light of COVID-19**

The passage of HR 6074 and HR 748, as well as other CMS guidelines, relaxed some of the regulatory and reimbursement restrictions around telehealth for Medicare patients. This includes expanding the qualifications for an originating site, what types of practitioners can provide telehealth services and expansion of telehealth services covered.

- **HIPAA**

According to the US Health & Human Services Agency, "Effective immediately, the HHS Office for Civil Rights (OCR) will exercise enforcement

discretion and waive penalties for HIPAA violations against health care providers that serve patients in good faith through everyday communications technologies, such as FaceTime or Skype, during the COVID-19 nationwide public health emergency."⁹

Cost-savings & ROI

There are numerous studies showing that telemedicine often leads to cost savings for practices. A 2017 survey found that 71% of respondents realized cost savings or ROI from telemedicine services and 54% realized savings above 10%¹⁰. And since the Affordable Care Act dictates that hospitals must maintain low levels of readmission rates and patient infections, ensuring accessible outpatient services can also help prevent financial penalties.

A look at data from the Veterans Health Administration shows that in 2012, the cost of their telehealth program equaled \$1,600 per patient per year, whereas traditional home-based care cost over \$13,000 and over \$77,000 for nursing home care. According to the American Hospital Association's brief on the VHA study,

“

Telehealth also was associated with a 25 percent reduction in the number of bed days of care, and a 19 percent reduction in hospital admissions across all VHA patients utilizing telehealth..¹¹

”

⁹Issue Brief, Telehealth Helping Hospitals Deliver Cost-Effective Care." American Hospital Association.

¹⁰"COVID-19 Market Pulse: US Healthcare Needs and Attitudes in the Age of COVID-19." Sage Growth/BlackBook Research. March 27, 2020.

¹¹Issue Brief, Telehealth Helping Hospitals Deliver Cost-Effective Care." American Hospital Association.

Conclusion: COVID-19 and Future Adoption of Telemedicine Platforms

Many patients are unaware of their providers' virtual options and whether or not their insurance will cover remote services. According to a recent Black Book survey, only 25% of respondents had used telehealth before COVID-19, and 59% are more likely to use telehealth services now than previously.¹² Over half believe they either do not have access or are unsure if they do. What's more is that doctors without previous experience are feeling pressured to get up to speed quickly. While recently released guidelines by the CDC, WHO, the Academy of Family Physicians and the American Medical Association have offered some support, knowledge gaps among both providers and patients will still take time to fill.

However, despite previous hesitation on the part of patients, providers and payers, there is good reason to believe that widespread adoption of telemedicine platforms is here to stay, even post-pandemic. Concerns around insurance coverage and technology use still persist, but as more telemedicine platforms continue to innovate, these hesitations and knowledge gaps should gradually subside.

¹² "COVID-19 Market Pulse: US Healthcare Needs and Attitudes in the Age of COVID-19." Sage Growth/BlackBook Research. March 27, 2020.



About DrChrono

DrChrono is revolutionizing the medical industry. Founded in 2009, DrChrono enables medical providers to be the best they can be by providing a platform that streamlines administration and the delivery of care. DrChrono EHR, practice management, medical billing, and revenue cycle management solutions are the most flexible and intuitive on the market. They can be completely tailored to any medical practice and are open to third-party innovation and visionary partnerships via a robust and modern API.

Other References

"Telemedicine: Risk Management Considerations." American Society for Health Care Risk Management. 2018.
<https://www.ashrm.org/sites/default/files/ashrm/TELEMEDICINE-WHITE-PAPER.pdf>

"What Is Telehealth? Context for Framing Your Perspective." Telehealth Resource Center. 2019.
<https://www.telehealthresourcecenter.org/wp-content/uploads/2019/06/2019-Framing-Telehealth.pdf>

"2019 Telemedicine and Locum Tenens Opportunities Study: Measuring Physician Interest in Employment Areas." Doximity. July 2019.
<https://s3.amazonaws.com/s3.doximity.com/press/2019TelemedicineAndLocumTenensOpportunitiesStudy.pdf>

National Policy: Telehealth and Medicare. Center for Connected Health Policy.
<https://www.cchpca.org/telehealth-policy/telehealth-and-medicare>

State Telehealth Laws & Reimbursement Laws. Center for Connected Health Policy. Fall 2019.
<https://www.cchpca.org/sites/default/files/2019-10/50%20State%20Telehealth%20Laws%20and%20Reimbursement%20Policies%20Report%20Fall%202019%20FINAL.pdf>

"Look Up Your Hospital: Is It Being Penalized By Medicare?". Kaiser Health News. January 30, 2020.
<https://khn.org/news/hospital-penalties/>

"Medicare Eases Readmission Penalties Against Safety-Net Hospitals". Kaiser Health News..
<https://khn.org/news/medicare-eases-readmissions-penalties-against-safety-net-hospitals/>



www.drchrono.com



ehr@drchrono.com



[@drchrono](https://twitter.com/drchrono)