



BLOG

5G, Telehealth, and the Patient Experience

Patients don't care what 5G is and how it will improve their healthcare. They care about getting fast, accessible, affordable healthcare when they need it, wherever they are.

Physicians don't care what 5G is or how it will improve their connectivity. They care about how it can help them provide better patient care.

The bottom line – patients and physicians both want to come away more satisfied with personalized care and enhanced treatment outcomes. In other words, everyone wants a better experience.

Behind the scenes, 5G is delivering just that.

5G AND TELEHEALTH ACCESSIBILITY

A little background first. 5G is the fifth generation of cellular technology. Because 5G offers increased speed, up to 10 times more, ultra-low latency, and more bandwidth than 4G, it promises far greater performance, reliability, and capabilities that will impact every aspect of the telehealth ecosystem.

The effects of 5G on healthcare will only continue to grow as 5G networks become more widespread. It expands the reach of healthcare to patients in underserved rural areas with limited access to medical professionals and facilities. It also gives patients everywhere access to specialists who would otherwise be inaccessible. Thanks to 5G, all physicians, no matter where they are, can quickly access huge medical image data files from MRI, CAT, or PET scans; collaborate and review with colleagues in other cities, states, and countries; and assess patient monitoring data from wearables and other IoT devices.

The pandemic accelerated IT transformation and innovation in all industries, but none has felt the impact more than healthcare. As hospitals and clinics put extreme safety measures in place, patients went online – begrudgingly. Telehealth filled the need for accessible medical care at a time when it seemed unattainable.

The demand for expanded telehealth services also coincided with the nationwide expansion of the 5G networks needed to deliver them. Healthcare providers, large and small, accelerated efforts to upgrade their networks to 5G capacity. The combination of 5G and telehealth services created the right solution at exactly the right time.

CHANGING PATIENT PERCEPTIONS AND EXPERIENCES

Telehealth, which played a small role in the healthcare delivery ecosystem before COVID-19, moved to the forefront of healthcare delivery,^{1,2} raising its value and importance dramatically. Recent studies documented the sudden, steep rise in telehealth and its acceptance and demand, as a viable means to safely treat patients during the pandemic crisis, and as we are learning, post-crisis.

Before the pandemic, telehealth was little used and faced several barriers. Top of the list of obstacles was the patient perception of the poor quality of care. Almost 40%³ of respondents in a telehealth survey were concerned that they would not get proper treatment or a diagnosis with a virtual medical visit. Other barriers included limited insurance coverage, licensure regulations, and practitioner's inadequate technological capabilities.⁴

Most, if not all, of these barriers, fell during the pandemic, and none more dramatically than the perceived versus actual patient experience. One-quarter of respondents had not even considered telehealth as an option pre-pandemic. However, two-thirds said that because of COVID-19 they are now much more willing to try telehealth services in the future.⁵

INVESTING IN TELEHEALTH

Telehealth platforms enabled patients to receive healthcare safely, yet effectively. While people may have been reluctant to try telehealth, they are now embracing it in ways that no one could have predicted pre-COVID-19. The numbers are staggering.

For example, a pre-pandemic study projected the telehealth market to grow at an annual CAGR of 14.9% by 2026 with a market value of approximately \$53.1 billion by 2026.⁶

COVID-19 drastically changed the predictions for telehealth. Frost and Sullivan project a 64.3% increase in demand for telehealth visits and forecast a sevenfold growth in telehealth by 2025 at a CAGR of 38.2%.⁷

The pandemic panic also kept people from seeking needed face-to-face medical care. A survey of 36.5 million people by The Journal of the American Medical Association showed that in-person healthcare visits decreased by 37% from March through June 2019 to 2020. But during that same period, virtual medical visits increased from 0.3% of all contacts in 2019 to 23.6% in 2020. In addition, virtual behavioral health visits also increased from 22.1% to 46.1%.⁸ In many cases, the switch from in-person to video consultations happened overnight depending on the existing technological capabilities of the provider.

TELEHEALTH IS HERE TO STAY

While many practitioners may have been hesitant to invest in telehealth technology before the pandemic, they jumped on the virtual-care bandwagon. Now 93%⁹ of healthcare providers offer an online portal, website, or mobile app.

Americans are finding they like the convenience and effectiveness of telehealth. In one survey, 60% of respondents used telehealth services for the first time during the pandemic and three quarters want to continue using it post pandemic¹⁰ for several reasons, including:

Quality. Americans like the quality of the virtual care they receive; 80% rate telehealth services as equal to or better than in-person healthcare. Of the survey respondents, 56% say telehealth is most effective for routine checkups while 53% find it most effective for talk therapy and mental health counseling.¹¹

Accessibility. Telehealth is simply easier. In a SatelliteInternet.com survey, more than 25% of telehealth users lived 15 miles, or more, from the nearest doctor's office, which can make in-person visits inconvenient, time-consuming, and expensive, especially if patients have a difficult time scheduling due to work or personal responsibilities. In the survey, 54% said they are more likely to seek medical advice if a telehealth option is available.¹²

Speed. Simply put, in-person visits can take much longer to schedule, up to two weeks longer according to 46%¹³ of respondents. And, they take longer on the actual day of the visit.

Convenience. Patients don't have to travel, find parking, and sit in waiting rooms. They can simply log in a few minutes before the appointment without leaving home.

Safety. Telehealth provides peace of mind by enabling medical visits without the risk of infecting others or being infected by others.¹⁴

Monitoring. Telehealth, via 5G, can directly improve patient care and treatment through the use of remote monitoring devices. 5G unlocks the speed and high reliability needed to make it possible.

Insurance. Pre-COVID-19, many people did not know if telehealth visits were covered by insurance. Now it is generally not an issue. At the time of the SatelliteInternet.com survey, 73% said their healthcare program includes a telehealth reimbursement.¹⁵

As 5G cellular technology rolls out and becomes more widely available, telehealth connectivity will increase. 5G promises greater bandwidth and data speeds, low latency, the ability to deliver effective IoT to a massive number of devices. That means eliminating many connectivity problems and enabling faster, cleaner, almost instantaneous data transmissions. 5G means incredible leaps forward in patient treatment, outcomes, and experiences.

That's the new reality of 5G and telehealth: happier, healthier, more engaged patients.

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1. Barnett, ML; Ray KN; Souza, J; Mehrotra, A; Trends in telemedicine use in a large commercially insured population, 2005-2017. JAMA. 2018; 320(20):2147-2149. doi: 10.1001/jama.2018.12354; <https://jamanetwork.com/journals/jama/fullarticle/2716547>

2. A multilayered analysis of telehealth: how this emerging venue of care is affecting the healthcare landscape.; FAIR Health. July 2019. Accessed February 17, 2021. <https://s3.amazonaws.com/media2.fairhealth.org/whitepaper/asset/A%20Multilayered%20Analysis%20of%20Telehealth%20-%20FAIR%20Health%20White%20Paper.pdf>

3. Siwicki, Bill, Survey: Americans' perceptions of telehealth in the COVID-19 era; Healthcare IT News, April 03, 2020; <https://www.healthcareitnews.com/news/survey-americans-perceptions-telehealth-covid-19-era>

4. Lau, J; Knudsen, J; Jackson, H; et al.; Staying connected in the COVID-19 pandemic: telehealth at the largest safety-net system in the United States. Health Aff (Millwood). 2020;39(8):1437-1442. doi: <http://dx.doi.org/10.1377/hlthaff.2020.00903>

5. Siwicki, Bill, Survey: Americans' perceptions of telehealth in the COVID-19 era; Healthcare IT News, April 03, 2020; <https://www.healthcareitnews.com/news/survey-americans-perceptions-telehealth-covid-19-era>

6. Telehealth Market Size, Share, Growth Opportunities, Trends, Sales and Forecast, 2019 - 2026; Broadband Communities Magazine; February 17, 2020; <https://www.bbcmag.com/breaking-news/telehealth-market-to-reach-growth-of-14-9-by-2026>

7. Miliard, Mike; Telehealth set for 'tsunami of growth,' says Frost & Sullivan; Healthcare IT News, May 15, 2020, <https://www.healthcareitnews.com/news/telehealth-set-tsunami-growth-says-frost-sullivan>

8. Jercich, Kat; Study of 36.5M people reveals huge jump in pandemic telehealth use; Healthcare IT News, March 25, 2021; <https://www.healthcareitnews.com/news/study-365m-people-reveals-huge-jump-pandemic-telehealth-use>

9. Cooke, Kristin; Report Shows that 76% of Americans Plan to Use Telehealth Post-Pandemic; HealthTech HotSpot; February 16, 2021, <https://healthtechhotspot.com/report-shows-that-76-of-americans-plan-to-use-telehealth-post-pandemic/>

10. Telehealth as a Bright Spot of the COVID-19 Pandemic; Recommendations from the Virtual Frontlines ("Frontweb"); <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7318864/>

11. Cooke, Kristin; Report Shows that 76% of Americans Plan to Use Telehealth Post-Pandemic; HealthTech HotSpot; February 16, 2021, <https://healthtechhotspot.com/report-shows-that-76-of-americans-plan-to-use-telehealth-post-pandemic/>

12. *Ibid*

13. *Ibid*

14. *Ibid*

15. *Ibid*

