



## Telehealth and Medicine Today 2022 Market Predictions

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*Each year, Telehealth and Medicine Today reaches out to journal board members, annual ConV2X Symposium speakers, and ecosystem subject matter experts to share their views and perspectives for the near term in the telehealth and virtual care marketplace. This article presents insights into where authors anticipate market opportunities and gaps that must be addressed for the most appropriate and effective patient care programs globally and regionally for 2022.*

### INTRODUCTION, TORY CENAJ, FOUNDER AND PUBLISHER, TELEHEALTH AND MEDICINE TODAY, USA

It is estimated that the compound annual growth rate (CAGR) for telemedicine through 2028 will be 18.5% (1). Because our journal, Telehealth and Medicine Today (TMT), reflects and sets trends in the marketplace, leaders in the telehealth field graciously share here their views and prediction(s) with our readers around the globe for the near term.

As a publisher of TMT, over several years, I have focused on the impact of telehealth on the home care market, continuum of care, and care transitions. Telehealth is a cost-efficient alternative to institutional environments, and one that injects more choice and convenience for the health consumer. With aging populations and a looming healthcare worker shortage, virtual care in this setting builds resilience into the US health system, and it will continue to expand along with market investment and reimbursement. Although low cost, fast, secure data interoperability is on most agendas, I would like to see the ‘healthcare for more’ box checked. Today, 12 states have still not expanded Medicaid. Statewide regulatory consistency is a must.

We may have too much tech and wasted grant dollars in the industry, which block true innovation that holds the promise to change the trajectory of this market. More solutions built around the needs of patients that are low cost and accommodate multiple user experiences that are interoperable, and secure must be filled. One growth area to watch is the ambient artificial intelligence (AI) in order to enable intelligent environments to interact with people. More technology that anticipates and responds to people’s needs and forecasts behaviors across the continuum of care is a field that should explode in the near future.

The cash economy in health care is on the rise. It is what I call the ‘retail health revolution’. To this end, employers have begun giving employees cash rather than health insurance. This business model of care – where consumers pay cash for drugs and services – should continue to grow, making goods and services less expensive than those covered through insurance.

Price transparency is a one trillion dollar market hot potato. Centers for Disease Control & Medicaid Services (CMS) requires most health insurance market plans to make hospital pricing transparent for patients in order to comparison shop. To date, 5.6% of hospitals are compliant. Yet, 85% of Americans believe cost cuts and transparency should be a priority (2). Integrity matters to consumers. If companies are looking for loyalty, transparency is the way forward. So, let us challenge insurers to provide more price transparency.

If its use is to expand, learning to wield long-term consumer brand loyalty must be better understood by the telehealth market. Changing doctors with every new health plan or visit does not endear loyalty. Satisfaction with direct-to-consumer and payers has dipped. To address this, service response time, connectivity access, tech platform ease of use, and price must become fluid (2). In addition, it would be wise for service providers and societies to engage consumer non-government organizations (NGOs) to bolster favorable policy, regulation, and brand loyalty savoir faire. Let us read where experts believe the market is heading.

**LISA M. LAVIN, FOUNDER, CHAIRMAN AND CEO, ŌMCARE INC., USA**

Consumers are increasingly demanding health care to be as convenient as shopping on Amazon.com. And companies like Amazon are responding. We predict that the competition between retail and traditional healthcare providers will intensify that reimbursement models will continue to evolve to support ‘home as the site of healthcare service’ and technology will quickly evolve past the current ‘clunky, disconnected devices’ to more real-life virtual care experiences in the home. We believe that ‘Star Trek’s holodeck’ experience is not out of reach for health care in the home.

**BRADLEY J. ERICKSON, PROFESSOR OF RADIOLOGY, MAYO CLINIC COLLEGE OF MEDICINE AND SCIENCE, ROCHESTER, MINNESOTA, MAYO CLINIC, USA**

Near term in the telehealth and virtual care marketplace, it is possible to forecast two advances. First, Intelligent Process Automation (IPA) will become widely adopted in the ‘front office’ (patient care) side of health care. Second, Multimodal AI will quickly replace today’s unimodal AI (unimodal AI = AI tools that only use one type of information such as just as the CT images). Multimodal will use multiple images (e.g. prior exam) as well as other information such as drug doses, molecular tests, and lab tests to improve prediction accuracy.

**RAMI FARRAJ, CHAIRMAN OF THE BOARD OF DIRECTORS OF ELECTRONIC HEALTH SOLUTIONS, JORDAN**

Over the next couple of years, I predict that more medical specialties will embrace the concept of telehealth, and future consultations will routinely be a mix of telehealth and physical consultations. Tele-ICU may become more common, especially where the number of intensivists in the system is insufficient. In addition, requesting home delivery of refill medicines online and booking medical appointment online will be implemented at many sites.

Beyond the first 2 years, more international connectivity will bring in new advantages. For example, electronic health records will not be *with* patients but *ahead* of them. National health medical records that can be integrated with other records from other countries will improve care. The pandemic has shown us that we can work together on an international scale, achieving amazing results in record times. Expanding

health care to international affiliates can only improve health care. Perhaps consultations with top world experts will not be limited anymore to affluent patients with good communication support. Rather, these might become available to those needing it the most, whether they speak the language of the expert or not and whether they can afford the long trip to see the expert or not.

Medical adjudication software will also improve the efficiency of medical insurance and improve the patient experience while integrating medical necessity rules within health insurance claims that will save healthcare systems a significant amount of money, even though it may inadvertently control the non-traditional approaches to treatment.

**FLORIAN OTTO, CEO AND CO-FOUNDER, CEDAR, USA**

While the number of virtual health visits has declined slightly since the height of the pandemic, there is no question that telemedicine is here to stay. The pandemic solidified telehealth’s place in health care from both the provider and patient perspective, offering tangible value at a time when in-person care was not an option. Both parties are now more comfortable with the virtual setting (a barrier to adoption in the past), and this willingness gives yet another opportunity for providers to offer consumers more personalization along their care journey. What will shift, however, is *how* telehealth is leveraged in 2022 and beyond, in order to provide the most value in the right setting along the care journey.

Telehealth will prove itself as a useful tool in the long-run when applied to the appropriate care needs and setting, while yielding to traditional in-person visits for others. Certain types of care visits make more sense as candidates for virtual

care. One example is ad hoc visits for patients requiring a convenient and efficient way to connect with their doctor.

However, when it comes to continuous, longer-term care, we must shift back to the traditional care setting, in which patients build stable relationships with their physicians, who help them maintain good health and offer ongoing preventative care. In the coming years, a smart combination of telemedicine offering a quick, convenient solution for consumers in a ‘health-need-pinch’ and consistent long-term visits in-person will be a recipe for great healthcare experiences for providers and consumers alike. Who knows, we may even see better overall outcomes now that there are not excuses to avoid visits for short-term care needs (the little things can add up!).

**WILLIAM J. HERCULES, M.ARCH., FAIA, FACHA, FACHE**

The pseudo-system of health care will continue to be significantly influenced by governmental policies, as its form will trace a variation of the adage ‘form follows finance’. However, beneath governmental bureaucracies, entrepreneurial providers and care systems will continue to optimize and economize current systems incrementally. The longitudinal view is hardly disruptive innovation, but at best incremental adjustments. The hospital-centric enterprise will continue to be challenged as will its value of traditional silos. The efficacy of Hospital-at-Home or even Hospital-at-Work models will be explored but will face resistance from hospital-based labor. Finally, I expect the general populace to be as concerned with the intricate connections between planetary health as they are about familial or personal health and arresting them both in a matter of just a few decades.

**NIR SHALOM, CEO, FLOLIVE, ISRAEL**

While telehealth offers tremendous benefits and accessibility for patients in rural areas, this is yet to be realized. Today, there are, unfortunately, different levels of medical services for certain populations. Some of these are located in rural locations (with limited access to world-class experts), while others cannot afford the most advanced services.

The emergence of affordable and accessible connectivity services will allow us to close many of these gaps. Telehealth powered by the new internet of things (IoT) capabilities, particularly 5G, will transform the healthcare landscape. More bandwidth than earlier plus better coverage and overall lower infrastructure costs with different forms of wireless technology will allow communities in remote areas access to the best medical practitioners.

As more IoT applications and devices enter the healthcare technology ecosystem, medical organizations will have to navigate these new developments carefully and strategically. They will need innovative solutions to provide the performance, security, and compliance that are essential when it comes to critical IoT use cases – especially due to sensitive patient information and regulations such as HIPAA (Health Insurance Portability and Accountability Act of 1996). I believe we will see more regulations around this.

**EYAL ZIMLICHMAN, CHIEF INNOVATION AND TRANSFORMATION OFFICER, SHEBA MEDICAL CENTER, ISRAEL**

Over the next decade, telehealth will grow in scope. While today, when referring to telehealth, we mostly mean virtual live video sessions, in the future, this will include competencies from emergency care and hospital at home to chronic

disease management and rehabilitation. Telehealth will be enabled through technological progress in sensor technology, patient management platforms, and AI analytics. Furthermore, a main challenge will be in integrating the technology into one platform, providing a coherent central view describing the patient's condition including predictions performed through big-data analytics such as machine learning.

Technology, as well as more experience gained with telehealth services, will allow for patients to be hospitalized at home for acute admissions, with the hospital extending its services to the home environment. Hospital physicians will be able to communicate, perform physical examinations, monitor patients at home, and make clinical decisions using telehealth where possible. Hospitals will, thus, become hybrid – providing both on site care and care in the home environment using telehealth solutions.

**SHAYAN VYAS, SENIOR VICE PRESIDENT, TELADOC HEALTH**

In 2020 and 2021, the market experienced massive investments, mergers/acquisitions, and adoption of digital health. 2022 will be similar. Primary Care, longitudinal care, and chronic care will continue to adopt at rapid pace. Inpatient and home care will become easier, but due to supply chain and last mile difficulties, true healthcare delivery at home across the nation will continue in a fetal stage through 2022. Healthcare's supply chain underlying Achilles' heel is workforce. This underlying issue has long existed but now has surfaced.

Nurses are the backbone of health care. The nursing shortage will not dissipate, but virtual health and connected technology (smarter inpatient rooms) will help bedside clinicians become more efficient and ease some of the

nursing shortage issues. Adding virtual care and virtual capabilities to the inpatient hospital will help with nursing shortage. Technology can help nurses. Remote Patient Monitoring will continue to be transformed into a better patient-centered model than the existing model.

In 2022, as the digital divide continues to crumble, we will see health care more accessible to all particularly telemedicine. Health plans will continue to encourage members to use virtual care first. New digital solutions and companies creating niche solutions will continue to create more fragmentation, making it difficult to scale these new solutions (more noise). Mature virtual solutions will become smarter and include more actionable individual insights. Years ago, Michael Dell said (paraphrasing), 'Technology companies will figure out healthcare before healthcare will figure out tech'. Consumer and clinicians want an easier experience. I believe years from now, >50% of call medical care will start with a virtual visit.

The new normal in health care is on the horizon in 2022.

**RUSSELL GLASS, CHIEF EXECUTIVE OFFICER, HEADSPACE HEALTH**

We will continue to live in an uncertain world as new COVID-19 variants and a lack of global vaccination combine to prolong the pandemic. This will lead to an extended period of heightened (and unsustainable) mental health needs through 2022 and well into 2023. To support this growing need, we will continue to see rapid adoption of virtual care, with increased focus on subclinical, preventive forms of care, such as behavioral health coaching. Moving toward prevention in mental health care is critical to addressing the growing supply–demand imbalance in this space.

I also expect that we will see a record number of acquisitions in mental health technology, as large digital health companies, both public and private, recognize the need to add mental health to their offerings in order to deliver comprehensive care. In particular, the proliferation of B2C2B (business-to-consumer-to-business) models where companies capture users through compelling consumer experiences will become increasingly desirable for payers willing to subsidize this care.

**ANDREW C. PHILIP, SENIOR DIRECTOR OF CLINICAL & POPULATION HEALTH, PRIMARY CARE DEVELOPMENT CORPORATION**

This year (2022) will be one of the most interesting years in the history of telehealth, with opportunities to take learnings from the recent rapid and sometimes frenzied mass implementations of telehealth services globally and solidify them into best practices and standards of care. Last year was a landmark year, with federal attention to telehealth policy in the United States and elsewhere. As we move from a state of emergency marked by numerous temporary allowances for telehealth coverage and access, we will likely see permanent growth in telehealth reimbursement and offerings, especially in primary care and behavioral health – the core access points for care.

The challenges, we must rise to, will be around ensuring parity and clarity in reimbursement, ensuring equitable access and experience of quality care for historically underserved and marginalized communities, and upgrading technologies used to support telehealth. Telehealth is by no means a new innovation, but the past 2 years of the global pandemic opened an entirely wider door to the future. Accordingly, 2022 will be the year for translating promising ideas into everyday realities.

**CONCLUSIONS BY DR. PHILIP**

In closing, we are building an exciting future for a new ecosystem of global connected patients and health systems, but this work has just begun. Telehealth and virtual care are poised for new frameworks, technologies, and business models that have demonstrated lower cost and convenience by leveraging new technology and broad market participation. However, the market seeks a balance where consistent policy and reimbursement guidelines are required to fortify an emerging market. The rapid explosion of adoption and use of virtual care products, services, and platforms during the pandemic have settled. Will low double-digit growth over time satisfy investment in accelerated technology, research and development, and new business models that continue to demonstrate small scale positive outcomes? Scale requires permanence in structured policy and standards. Presently, they are absent and/or in flux in the United States and around the globe at present.

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