



COVID-19 and the Digital Transformation of Health Care

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The global COVID-19 pandemic demonstrated the vulnerability of healthcare delivery to patients worldwide and challenged healthcare providers—not only in treating patients with coronavirus but also in trying to maintain optimal care for non-COVID patients at the same time.

But challenging times often provide a fertile environment for innovation, and we have certainly seen major transformation in health care this year, via technology and global models, with the goal to democratize health care and provide greater access and more efficient and effective delivery of healthcare services to patients, regardless of their income or geography.

Some of the world's top leaders and influencers in healthcare delivery transformation and health technologies, including blockchain and telehealth, converged at the 4th Annual

CONV2X 2020 Symposium held virtually from November 10 to 12, to talk about healthcare transformation.

By far, one of the most widely discussed topics in the many sessions that took place over the 2-day event was virtual health.

DEMOCRATIZING HEALTH CARE ACROSS THE GLOBE

Joe DeVivo, President, Hospital & Health Systems, Teledoc Health, spoke about the need to make access to healthcare services available to everyone, regardless of economic and geographical origin. The crisis we are living through today provides a unique opportunity to change the future.

2020 has been the year of many types of disruptions, including economic shutdowns, shuttered businesses decimated economies, and systemic racism. Health care has taken center

stage as a result of the global pandemic that broke loose in March and challenged traditional healthcare models.

DeVivo emphasized that 50% of the world's population lacks access to adequate health care. In the United States, the doctor to population ratio is 1:400, while in remote areas of Africa, the same ratio is 1:62,500, demonstrating the gross inequity in health care across our globe. As demand grows, there is an ever-increasing shortage of providers. In the United States, along with an increasing aging population, there is a growing aging provider population.

Virtual care awareness grew to 75% throughout COVID, and demand, due to quarantine restrictions and social distancing, is driving the adoption of virtual health. In 2019, there was 46% telehealth adoption; now 76% of the population is interested in this type of healthcare delivery. As for providers, 50–175× the number of telehealth visits have been performed as a result of COVID versus pre-COVID.

According to DeVivo, telehealth addresses real challenges and offers real solutions—especially in regard to healthcare delivery in remote countries. DeVivo recounted a telehealth success story where an US doctor in Texas instructed a doctor in sub-Saharan Africa in the surgical technique used to repair fistulas, an obstetric-related condition that leads to decades-long severe physical and emotional isolation for women due to constant incontinence. The doctor is now a competent and confident surgeon in this area, saving countless women from living lives of shame and seclusion. This is just one remarkable story among many.

But in order for telehealth to truly have a seat at the table in the United States, DeVivo said we

need repeatable reimbursement constructs, and Congress needs to address the in-person requirement for Medicare recipients and allow pre-deductible care for telehealth and remote services. He also noted that CMS has to expand the list of eligible Medicare services and that, as a whole, there has to be a national strategy to address digital literacy and universal internet access. The Division of Health and Human Services also needs to work with CMS to ensure that everyone can access telehealth services through Health Insurance Portability and Accountability Act (HIPAA)-compliant platforms.

“Now is the time not only to adapt to the new normal, but to create the new normal that we want. Of many things to do, it's time we finally get health care right for everyone.” DeVivo said.

A WORLD-WIDE STRATEGY FOR DIGITAL HEALTH DELIVERY

In a 15-minute recorded keynote presentation, Dr Tedros Adhanom Ghebreyesus, Director-General, World Health Organization, echoed this same sentiment, noting the great disparity in the delivery of digital health care. Dr Tedros stated that we need “safe, effective and affordable applications of digital technology to support digital health.”

He also mentioned that the one positive thing to come out of the COVID-19 pandemic has been the importance of digital technology that not only has allowed millions of companies to support their employees who were forced to transition to working from home but has also allowed us to deliver digital health services in a digital age. But there needs to be a digital health framework and strategy that addresses regulatory, benchmarking, and certifying digital health services for all countries, with

international regulations to protect the safety and privacy of patient health data.

VIRTUAL HEALTH: THE NEXT FRONTIER IN HEALTH CARE

Both John Halamka, MD, President, Mayo Clinic Digital Platform, and Alex Harris, Partner, McKinsey & Company delivered keynote sessions on virtual health on separate days at the conference. Dr Halamka acknowledged that several changes would need to come about to be able to deliver complex care at a distance. These included:

- Technology changes that will allow for more remote patient monitoring
- Expansion of 5G networks that can provide higher broadband
- Policy changes that include rollbacks of regulations across state lines and site-of-service changes
- Changes in reimbursement to bring virtual care visits to near parity with in-person visits
- The ability for emergency medical technicians (EMTs), doctors, and nurses to deliver care in a number of places and allow for more virtual care

The Mayo Clinic houses over 154 years of data in the forms of electronic health records (EHRs), pictures, slides, films, and recordings that can be de-identified for AI algorithm development, providing an AI factory warehouse that can address the increasing need for real-time decision support to assist in rendering the right care. Along with the information delivered from monitoring devices that many people wear on their wrists, there is the capability to run real-time algorithms for the delivery of virtual care. Dr Halamka is “extraordinarily optimistic about our virtual care future, and looks forward to making the world a better and higher-quality, lower-cost, care-at-a-distance-enabled place.”

Alex Harris described virtual health care as an extension of the digital-everything world we live in where digital payments, social media, Amazon Prime, and streaming services are the norm. Consumers today have rising expectations for all things digital and are comfortable using digital channels and in sharing information with third parties. But health care still lags behind in terms of digitization.

COVID has been a major accelerant for virtual health but, according to Harris, certain shifts still need to occur to be able to scale virtual healthcare services, including:

- *Regulatory*—similar to the sentiment that Dr Halamka expressed, there needs to be reimbursement parity for virtual health care and a loosening of licensing restrictions allowing for a wider range of practice
- *Interoperability*—to enable more virtual health usage going forward
- *States*—implement e-triage services for COVID symptoms
- *Payors*—provide increasing access to their members to tele-behavioral health services
- *Providers*—enhance their tele-intensive care unit (ICU) and remote-monitoring capabilities

Harris stressed that there needs to be significant innovation in the healthcare ecosystem to achieve “a holistic coordinated experience for patients that aggregates data and helps them manage across home care, traditional care, social care and daily life activities with over-arching financial support for all their healthcare needs.”

BARRIERS TO ADOPTION, CHALLENGES TO OVERCOME

One of the major barriers to virtual healthcare adoption is the fact that many providers are not yet convinced that it is as effective as in-person

health care, even for the right kind of visits. Many also have questions about the impact of this type of care on their practice operations and are concerned about financial issues that have yet to be resolved. Harris predicts that stabilized adoption is likely to occur in 2030.

But there are a number of challenges that need to be overcome for virtual health to really go mainstream. These include:

- *Funding*—parity for certain services and questions about long-term reimbursement
- *Providers*—unsure about the quality of the patient experience and need to understand how best to incorporate virtual care into the practices and what the financial implications are
- *Consumers*—comfortable with all things digital and are likely to schedule telehealth visits, but consumer and provider adoption are linked
- *Cyber security*—at this point, Harris is not sure that we fully understand the vulnerability at the system, organization or patient data level. We ramped up quickly to address the pandemic, but more data leads to a greater risk in this area, so we need to be sure that all these data are safe.
- *Technology interoperability*—while there continues to be a major movement in this area, significant work needs to be done to bring disparate data streams together to manage patient care in a more integrated way.
- *Operations*—top of mind is how to incorporate virtual and physical care in

practice—is virtual care resolving issues or just creating more utilization.

- *Return on investment (ROI)*—is virtual health really going to drive cost savings and improve health? This is a question that many payors are asking along with wondering if practices with high virtual health usage will see better or worse outcomes in patients.

It is clear that this past year has presented both many challenges to healthcare delivery and opportunities for innovations in the manner in which health care is delivered. But it appears that there are still challenges that need to be addressed with virtual health care and the democratization of health care to ensure equitable access to services, no matter where patients live and despite their ability to pay for services.

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