

Managing Efficiently Future Pandemics

THE JOURNAL 2022

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Telehealth Platforms: The Foundation for Digital Transformation

An overview of the role of digital transformation in the healthcare space, particularly the adoption of telehealth solutions during the pandemic and an outlook of the future of telehealth solutions and the momentum of digitalisation in healthcare.



Key Points

- During the COVID-19 pandemic, digital transformation efforts in healthcare have accelerated, especially in the telehealth sphere.
- Remote patient monitoring is here to stay, and the idea of keeping tabs on patients at home is an important transition in healthcare.
- Digital transformation is also the path to improving the flow of information, increasing patient adherence, reducing the cost of care and improving productivity.
- The next evolution would be to build algorithms around artificial intelligence and deliver that information to augment clinicians to achieve better diagnosis and identify best practices and pathways.
- Healthcare is now better positioned to harness technology to deliver better, quicker, less expensive care.

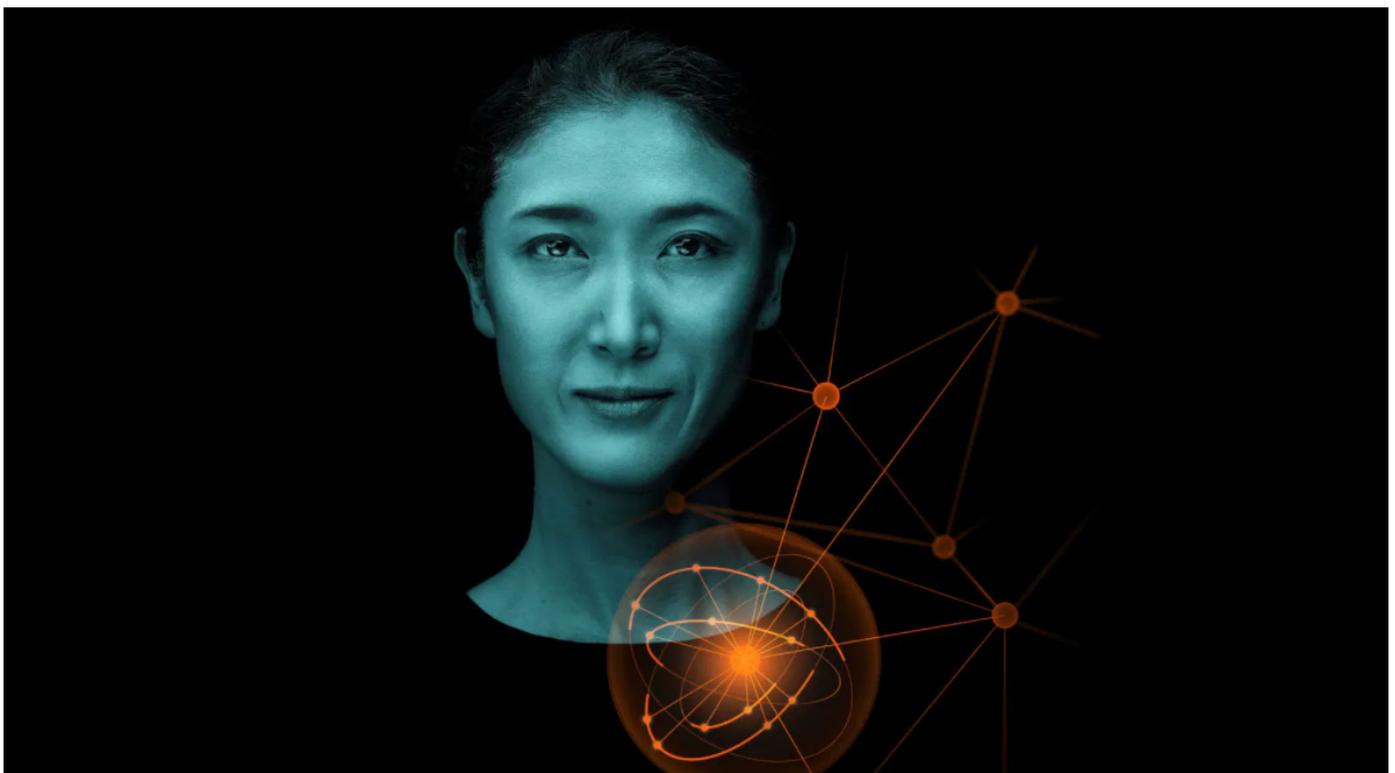


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Digital Transformation in the Healthcare Space

The primary goal of digital transformation in healthcare is to facilitate the adoption of a patient-focused approach where healthcare providers streamline their operations, better understand patient needs and build loyalty and trust to offer a better healthcare experience.

The digital transformation of healthcare is a logical transition. Today, the use of video and audio to connect with patients and connect patients to specialists is a reality. Also, workforce and

understand what technology is capable of doing and implementing that technology responsibly. It is also about developing the right kind of partnerships with technology providers who offer telehealth solutions. In other words, technology partners, clinicians and regulatory authorities have to work together to pave the way for digital transformation in healthcare.

The pandemic has clearly shown the benefits of telehealth. [Remote patient monitoring](#) is here to stay, and the idea of keeping tabs on patients at home, not only from a visit but also

Utilising technology to be in more places simultaneously is one of the biggest benefits of digital transformation

staffing challenges, whether nurses or doctors, continue to be an issue in healthcare. There is a huge need for additional manpower. Utilising technology to be in more places simultaneously is one of the biggest benefits of digital transformation. In particular, during the last 18 months, as the world struggled with the COVID-19 pandemic, digital transformation efforts in healthcare have accelerated, especially in the [telehealth](#) sphere.

COVID-19 put a spotlight on [telehealth technologies](#) and remote patient monitoring. The need to reduce potential virus exposure in patients and healthcare providers alike pushed clinicians to adopt this method. The use of video and two-way video/two-way audio into the patient bed spaces allowed the reduction of personal protective equipment (PPE). Therefore, nurses or doctors didn't need to don PPE to go in and have a quick conversation with the patient. Instead, they could do it remotely from a monitoring station or phone. That gave a whole level of comfort and a lot less anxiety or stress about entering into a patient's bed space who may be suffering from coronavirus. In addition, there was an increase in both provider willingness and consumer willingness to use telehealth. Finally, the regulatory changes that came into play were adapted very quickly to accommodate the telemedicine/telehealth situation.

The Benefits and Challenges of Digital Transformation in Healthcare

Digital transformation has accelerated everywhere during the pandemic, although the healthcare sector has had some specific constraints that make this transformation different from other industries. First, the level of regulation regarding technology and how it is utilised within the patient setting differs in healthcare. Video is a powerful tool, but with privacy concerns, there is strict guidance that healthcare providers need to follow. Therefore, the challenge in healthcare is to apply technology within these regulations, help regulators

devices that will give vital information back to the caregiver, is an important transition in healthcare. [Digital transformation](#) is also the path to improving the flow of information, increasing patient adherence, reducing the cost of care and improving productivity. All this can be achieved while the patient is at home.

An important element of digital transformation is the use of healthcare data. The data generated while using technology to provide care is a valuable asset for clinicians. The goal is to collect data acquired through healthcare organisations and bring it back into a central database, thus allowing clinicians to use this data to their advantage. With the increase in the use of remote patient monitoring devices, the challenge is to take data, aggregate it into a patient-centric record, and serve it up to clinicians so that it gives them better insights into how to treat that patient in the best possible way.

The next evolution would be to build algorithms around artificial intelligence and become a partner to clinicians as they diagnose and treat patients in real-time. Building algorithms around AI and delivering that information will augment what the clinician is trying to achieve, not only in the diagnosis, but in the treatment of patients and in identifying best practices and pathways. This will require technology providers to partner with clinicians to help them make more informed, better decisions. Today, there is inexpensive technology that can allow the collection of a large amount of data. Healthcare organisations can use this data to provide a better patient experience. This will allow the realisation of a more patient-focused approach where it's not just about the outcomes, although those are very important, but also about the quality of care and the patient experience.

There has been a quick evolution of space and innovation beyond the virtual urgent care convenience in recent months. These innovations around virtual longitudinal care and enabling care at the home and remote patient monitoring,



and investment in this digital front are all coming to be adopted and accepted by the medical community, not only from the physician but from the patient. This acceptance will continue to grow. It will help clinicians and providers, as they stretch their resources, to become more attentive and be able to do more with less.

When the world is out of the pandemic, the ability to decide which patients will be seen first based on the remote monitoring solutions data that has been acquired can be a huge benefit. Clinicians would be able to build their rounds based on the data. This can be beneficial, both to the caregivers, because they will know exactly what they're going into and why, and also for the patients. There's the obvious benefit that people who need to be seen sooner will be seen sooner. As we move forward, these innovations will continue to be of great value, especially because the world continues to be an uncertain place. Having these systems in place will be extremely valuable, no matter what comes next.

The world is also seeing the utilisation of 5G in the private networking space in connecting very rural, very remote locations. There has been a tremendous amount of success there in improving quality and equity of care. Even if it is a rural area or a rural setting, patients can receive the same level of care utilising new technologies.

The pandemic has driven mass production and a huge increase in different organisations building sensors, for example. There's now a wide range of sensors on the market that it's driving the price down of hardware, allowing the solutions to be accessible to a lot more people. This is the ultimate goal – to be able to offer advanced solutions to as many people as possible that can benefit from them and to have better patient outcomes, better patient experiences, and better experiences for the workers themselves. Healthcare is now better positioned to harness technology to deliver better, quicker, less expensive care. ■

REFERENCES

Williston K (2021) Telehealth Platforms: The Foundation for Digital Transformation. insight.tech. Available from <https://www.insight.tech/events/telehealth-platforms-the-foundation-for-digital-transformation>