

A Digital Future for Healthcare

01 March 2022 | Views

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Healthcare has seen an evolution not just in the technology used for treatment but also in the delivery of care and well-being. One reason for this is the advances in digital technology over the last two decades that have impacted every industry. While the digital transformation of healthcare had already begun before the pandemic, the pace was steady but slow. Five years ago, projections had indicated that 40 per cent of Internet of things (IoT)-related technology would be health-related by 2020. Driven by artificial intelligence and machine learning, innovation in digital health technologies was increasingly taking place, but a major impact on the delivery of care was yet to be visible. The pandemic forced the delivery of care to rapidly adapt to a new digital normal encompassing health records, doctor consultations, smart wearables and digital therapeutics.

Since the pandemic, the emphasis has been on a smooth integration of digital technology into healthcare. Digital health is not just limited to doctors providing consultation over the telephone or video call but also includes maintaining digital health records for treatment continuity, integrating data from wearable devices and mobile applications for monitoring and reporting critical updates directly to the caregiver and choosing the most suitable treatment based on an AI-enabled clinical research module.

Artificial Intelligence (AI) is set to revolutionise and redesign medicine and healthcare. From traditional image processing techniques covering a limited number of diseases in 1993 to assistive software like IBM Watson and predictive apps like the Apollo AI-powered Cardiovascular Disease Risk tool, the potential of AI in healthcare is set to explode. There is a huge amount of information that is generated regarding medical conditions, treatment protocols from medical records. One of the applications of AI is in managing this Big Data.

AI and ML (Machine Learning) capabilities in digital healthcare have equipped providers to deliver customisable treatment and services directly to patients' homes, after analysing a plethora of use cases fed into the clinical R&D systems daily. Just like Google Maps uses traffic information and data to show us the best route to a destination, AI can help by using all the medical data to show the doctor the best tests based on the symptoms to reach a diagnosis or the best treatment methods to reach a cure.

Digital Healthcare in India is evolving by the day and enabling the healthcare industry to further improve patient diagnosis, treatment and management and work towards preventive and predictive care and well-being. The continuing transformation of healthcare delivery platforms and the advent of high-speed connectivity will ensure that more patients from Tier-II and Tier-III cities in India get the same quality of treatment as in the metros.

Technology will also help build a larger and stronger pool of talent through remote learning and continuous skilling. Over time, this will help improve the doctor-patient and nurse-patient ratio.

This is just the beginning! National public health initiatives like Ayushman Bharat and the National Digital Health Mission, India have already taken a major step forward to digitise healthcare. With technology powered by AI and ML enabling integration of health data across platforms, digital health will ensure a seamless delivery of care. Digitisation will also enable accessibility and expansion of reach thus adding value to the health economy and a long-term positive impact on the growth of the healthcare sector. A digital future for healthcare awaits us in 2022 and beyond!

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