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Towards a Tech-Led Equitable Future

31 December 2021 | Views | By Kiran Mazumdar-Shaw, Executive Chairperson, Biocon and Biocon Biologics

The pandemic has accelerated innovation, catalysed technological breakthroughs and created a fertile environment for the emergence of low-cost innovations



The COVID-19 pandemic has plunged the world into a new digital reality. The life sciences industry is deploying technology and digital capabilities like never before to analyse data to better understand patient needs and to look ahead and prepare for emerging health crises.

Companies are increasingly using data and digital platforms to be competitive and to position their businesses for the future. At the same time, consumers are progressively embracing technology and governments are bringing in more flexible regulation to enable greater technological adoption.

Going into 2022, these digital trends are likely to gather steam as technology promises to address the challenges and opportunities of the life sciences industry in the “new normal.”

Healthcare at doorstep

Telemedicine became a lifeline for patient care at the height of the pandemic. In fact, data show a dramatic increase in the volume of telehealth visits in 2020 as patients sought to safely obtain outpatient care over the internet. Going into 2022, we are likely to see increased use of telehealth platforms for addressing a wide range of conditions, from urgent care, primary care check-ups, medication follow-up and COVID-19 screenings. Technology will also allow specialists to reach patients in remote and inaccessible areas with poor health infrastructure.

Remote patient care

Going forward, we are likely to see increased demand for therapies that are patient-focused, data-driven and digitally enabled. Patient care will move to non-clinical settings as accelerated adoption of ‘smart’ digital therapeutics will allow healthcare providers to gather real-time patient care insights and deliver care to patients remotely.

Digital health records

Digital technology can provide innovative and effective solutions for the maintenance of patient health records in an electronic format. Digital Health IDs will serve as a unified interface for all healthcare records of an individual. Having control of their own data through electronic health records (EHRs) will empower patients and enhance their ability to easily identify what is in their

best interest. Availability of longitudinal EHRs will make it easier for doctors and healthcare workers to get a good and customised view of every patient's journey.

AI-Enabled healthcare

Artificial Intelligence is aiding rapid diagnosis by identifying CT scans with COVID-19 associated pneumonia, as well as distinguishing non-COVID related pneumonias with a high level of accuracy in patients.

AI innovators are developing quicker technology-enabled testing and screening modalities to replace traditional methods that require expensive equipment and specialist human technicians. Going forward, we are likely to see the interaction of human intelligence and AI leading to better decision-making in the larger interests of patients.

AI can educate and assist patients, while AI-based Primary Healthcare Centers can be equipped to provide screening, wellness, awareness, and diagnosis in resource-scarce settings. Using AI, healthcare providers will be able to more efficiently reach patients and, in some cases, triage their needs.

Better diseases tracking

The pandemic saw the advent of mass scale platforms like CoWin and Arogya Setu that have combined mobile phones, individual IDs and OTP-based verification to capture key diagnostic, vaccination and outcome data which are perhaps the most advanced databases in the world. We must leverage these powerful digital platforms beyond COVID-19 to manage both communicable and non-communicable diseases in real time. Software and data analytics have enabled us to track and trace COVID-19 infections, vaccination doses as well as re-infections linked to sequenced variants and have provided us with strong surveillance based COVID-19 management. This has truly spearheaded digital disruption in healthcare delivery which can have wide applications beyond the pandemic.

An equitable future

The pandemic has accelerated innovation, catalysed technological breakthroughs and created a fertile environment for the emergence of low-cost innovations anchored in affordability and accessibility. Digital technology has given the life sciences industry the opportunity to make healthcare accessible to the most economically disadvantaged individuals and usher in a healthier, more equitable 2022.

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