

# Preventive MedTech, Before It Strikes



**Umang Vohra**

The future of healthcare is about to enter a period of rapid change. The advancement of new technologies and discoveries — as well as innovative combinations of existing ones — are among the many factors propelling patient empowerment, and fundamentally changing how we prevent, diagnose and cure diseases.

The World Health Organisation (WHO) predicts that 1 in 4 Indians are at risk of dying due to non-communicable diseases (NCDs) before reaching 70. In this scenario, emphasis on preventive healthcare is the new curative healthcare. Annual health check-ups are being increasingly preferred by people from various age groups for detection of potentially life-threatening or chronic health conditions, or diseases at an early stage. It's time to reimagine annual health check-ups in a more comprehensive manner.

This could include incorporation

of biomarkers as part of annual health check-up plan to significantly enhance disease prediction, diagnosis and prognosis for optimising treatment outcomes. Though the US Food and Drug Administration (FDA) lists biomarkers in several categories as inflammation, metabolic disorders, chronic diseases, etc, its application in cancer prediction has proven to be a game-changer. Also, an increase in adoption of point-of-care testing devices is likely to expand the diagnostic continuum.

This expansion is largely being driven by the use of digital technologies such as sensors and wearables. These devices have been instrumental in providing a deeper view into patient's vitals beyond the clinical environment. A significantly increasing number of caregivers are now using artificial intelligence (AI)/machine learning (ML)-powered predictive analytics for early risk prediction of conditions like stroke or cardiac problems, while others are deploying various remote monitoring tools to help track treatment outcomes in post-operative patients.

There are apps now that aid in securely managing, accessing and sh-



**Pre-emergency will prevail**

aring your medical records online. Medical files, health records, scans, etc, stored in one place with easy access is a boon, especially during emergency care, or while managing health remotely. Introduced under the Ayushman Bharat Digital Mission, this app aims to simplify healthcare, and offers easy maintenance of digital health records.

In the future, one envisions the use of the digital health ID as a one-stop shop for effectively capturing the complete health information of a patient. However, these innovations would only make sense when the cues generated by these are acted upon in a timely manner.

While vaccines have helped us combat diseases for more than two centuries, it has been interesting to see their application in life-threatening conditions such as hepatitis, cervical

cancer or, most recently, with Covid-19. It has been established that an efficient vaccination services delivery system and vaccine acceptance from the public are necessary to achieve high vaccination coverage. It is imperative that not only the gamut of vaccination is expanded further but accessibility, efficacy and innovative methods of vaccine delivery are also given utmost importance.

There has been an uptick in the demand for precision diagnostics towards attaining improved healthcare delivery. Ensuring widespread adoption of future innovations would be the key challenge driven by the 3As — availability, accessibility and affordability. The second most critical challenge would be to bring in behavioural change in the consumers. Though the consumers are empowered with varied information about their health indicators, it is important to ensure that they are equally receptive to the triggers, and have the sensitivity to seek prompt medical consultation in case of any deviations from normal.

A better future can be gained not just with better treatment but also with enhanced knowledge and sensitivities.

*The writer is MD-global CEO, Cipla*