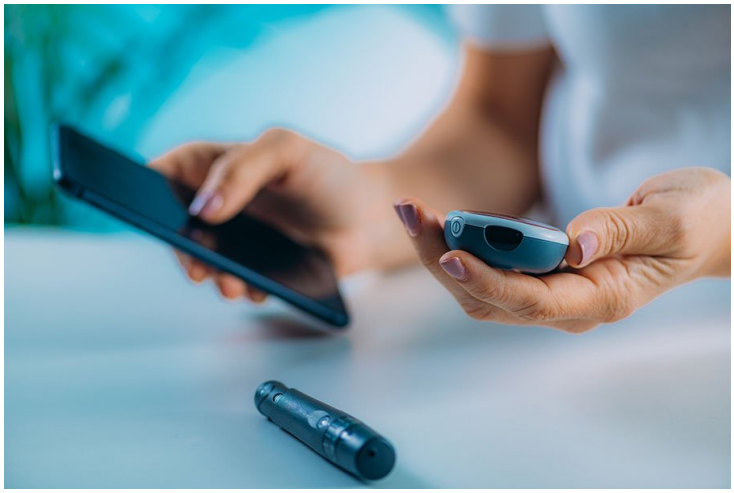
BioSpectrum
the business of Bi
24 years of leveraging the business of Bio
www.biospectrumindia.co

Home diagnostics turn inevitable necessity

01 October 2021 | Views | By Sanjiv Das

With a change in people's sentiment and armed with tech advancements, the home-based diagnostics sector is likely to sail through smoothly. The recent great leaps in AI and IoT in healthcare, not to mention the need to maintain â??social distancingâ?? and lack of workforce in the healthcare sector, as in others as well, has become a driving force to reckon with. Letâ??s explore this exciting new phase in healthcare.



Gone are the days when one has to visit a diagnostic centre, wait in a queue, and get tested for any ailment. Offering freebies, many diagnostics players are in the fray to grab the market share. The COVID-19 pandemic has turned the home diagnostics market more lucrative with players in the sector going the extra mile to offer the best services they can.

The global at-home diagnostics market will register to value over $6 billion by the end of 2026 and a CAGR of over 3 per cent during the forecast period of 2019-2026. According to a report from

FutureWise Research, North America and Europe dominated the global market due to high awareness among the general population. North America accounts for a 90 per cent market share due to high adoption. Europe, the UK, Germany and France dominated the global market due to high penetration among the general population.

The Asia Pacific and Latin America portrays the most opportunistic market for manufacturers due to the large patient population. Both the zones were expected to witness a high growth rate during the forecast period. The Rest of the World accounts for a small fraction of the market and it is expected to account for more share during the later phase of the forecast period. India with a high population base offers a lot of opportunities for the home diagnostics market.

Current trends

The introduction of home-based diabetes testing kits was the first to be introduced as a viable solution. Since then a lot of innovation has been made in home-based diagnostics.

Gurugram-based Healthians has launched health testing at home in 100 new cities in the country. For the expansion, Healthians is in the process to recruit 1,500 support staff, including pathologists, phlebotomists, lab technicians and runners, over the coming six months. According to Deepak Sahni, CEO and Founder, Healthians, the second wave of COVID has made the entire nation understand the importance of diagnostics at home.

Mumbai-headquartered Abbott launched its Panbio COVID-19 Antigen Self-Test for the detection of the SARS-CoV-2 virus. The Panbio COVID-19 Antigen Self-Test. The kit contains all the materials required including nasal swabs, test devices and reagent ampules. No additional instrumentation is required to conduct the test. Sanjeev Johar, Divisional VP, Abbott's rapid diagnostics business in the Asia Pacific, Singapore says, "Self-testing is a proven tool that provides an added layer of defence along with public health protocols and the vaccine rollout."

Lonavala, Maharashtra-based Mylab Discovery Solutions' COVID-19 self-test kit, CoviSelf is designed as the mid-nasal swab test and can detect positive results in just 15 mins, according to Hasmukh Rawal, Managing Director, Mylab Discovery Solutions. Each unit contains a testing kit, instructions to use (IFU) leaflet and a bag to safely dispose of after testing.

Gujarat-based Meril's self-use Rapid Antigen Test for COVID-19, CoviFind, provides accurate results in just 15 minutes.

Redcliffe Life Diagnostics, headquartered out of Noida, recently launched four new labs in Patna, Indore, Raipur and Noida to respond to the new rise in home comfort diagnostics prompted by post-Covid care.

Bengaluru-based startup MyDiagnostics allows to book lab tests and offers health checkup packages online. Partnering with NABL, ISO, CAP certified labs across the country, MyDiagnostics aims to provide testing and diagnosis services at home.

These are some of the examples of home-based diagnostics. The future of diagnostics will include the use of new technology such as medical implants that send data to a smartphone and smartwatch to actively monitor vital signs 24 hours a day, seven days a week.

Technological innovations

Artificial Intelligence and Machine learning have transformed the healthcare delivery system. The diagnostics sector is no exception to this and with the aid of technology has evolved to suit the need. Discoveries like genomics and genetic testing will make diagnostic services more personalised to the needs of customers. Companies are investing heavily in upgrading the technologies so that customers can get their tests done from the comfort of home.

Aishwarya Vasudevan, Group COO, Neuberg Diagnostics from Bengaluru says, “In the US, for instance, the need for diabetes testing kits peaked during the surge in annual mortality rates from diabetes. During the pandemic, the demand has shifted from a treatment-based healthcare system to that of preventive healthcare, largely due to public awareness on health and prevention.”

Says Mumbai-based Sushant Kinra, COO, Suburban Diagnostics, “Technological advancements and investments in a digital platform for in-vitro tests will make the Indian IVD industry more accessible to clinicians and patients globally.”

Just like in Amazon, where a very large portion of technology and investment is done to power the Amazon experience, Metropolis is similarly approaching at-home diagnostics.

Vijender Singh, CEO, Metropolis Healthcare based out of Delhi opines, “In terms of innovation, this means re-imagining the entire value-chain of diagnostics very differently. We are now solving processes like routing and scheduling of our collection agents, chat-bot based ordering systems for WhatsApp and integration of external health data like IoT devices. It’s an exciting space to be in, and we see a huge potential for growth with advanced technological offerings."

Dheeraj Jain, Founder, Redcliffe Life Diagnostics says, “Monitoring and care are shifting from diagnostic and healthcare facilities to the home, leveraging technologies such as connected devices, IoT and wearables. Especially with the advent of easy-to-use medical equipment for self-diagnosis like sugar, BP monitor, oximeter, and AI technologies, has drastically widened and enhanced the role of diagnosis.”

COVID-19 impact

India saw an unprecedented demand for home-based tests with the start of COVID-19. The epidemic exposed the flaws in the health systems and was an eye-opener. People had to queue for hours to get the tests done at the diagnostic centre and getting the report took another three to four days. Many were reluctant to move out of the house which resulted in a delay in starting the treatment.

A joint statement by the Federation of Indian Chambers of Commerce and Industry (FICCI) and Ernst and Young (EY) states that the diagnostics sector saw a steep fall in volumes due to COVID-19. On the other hand, the sale of home monitoring devices and services such as sample collection from home, online availability of reports and doorstep delivery of medicines saw a rise.

According to US federal data, the number of lab tests increased by 6X in the last two months. In mid-August 2021, the number of tests per day rose to 1.5 million, from 250,000 tests per day in July 2021. With plans to reopen schools across the world, the demand for home-based diagnostics services is going to see a surge with rapid test kits for COVID-19 being the main vehicle for detection. The availability of kits has encouraged more people to test themselves at home, increasing the demand for rapid test kits.

Aishwarya opines, "The COVID-19 pandemic made ease of getting tested important, around the world. With RT PCR testing becoming mandatory for travel, more people are getting tested, repeatedly. Intercity lockdown restrictions have decreased visits to hospitals and clinics, in turn increasing the demand for diagnostic tests, in general."

Says Jain, “Diagnostics is back in the spotlight, thanks to a three-fold increase in testing, emphasising the urgent need for more well-equipped facilities with qualitative testing capabilities.

Tech steps

Tests done from the comfort of home are likely to make a change in attitude in the common man’s mind. With a highly populated country like India, the healthcare need is going to rise and providers need to find innovative ways to tackle the ever-growing need.

Metropolis has been making all tests as a part of home-collection and inching towards the goal. In parallel, the diagnostics major wants to redefine the home-diagnostics experience at par or even ahead of what people get from Zomato, Flipkart etc.

“The future of at-home diagnostics is now largely dependent on the supply chain, which has been stressed throughout the pandemic. With new government initiatives towards healthcare and the foray of strong private healthcare providers, many operational challenges can be circumvented with the right synergies,” says Aishwarya.

Kinra adds, "Leveraging technology to consolidate lab and testing services and improving the logistics and supply chain will help to harness those opportunities. Investments for maintaining quality standards and upgrading the skills and knowledge of staff will also heighten activity and enhance skill sets to match the technological advances."

A greater emphasis on drive-through testing stations, mobile vans for COVID sample collection, home collection, telemedicine, and telehealth services will aid in the growth of the home diagnostics sector.

Promising future

Experts believe that the future of diagnostic laboratories will favour more testing at the point of care (or near to the patient). This depends on the supply chain, which was stressed throughout the pandemic. With the help of government initiatives, good technology, AI and machine learning, the future of the home diagnostic segment looks promising.

Sanjiv Das

(sanjiv.das@mmactiv.com)