

## Increased awareness boosts the diabetes diagnostic market

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India is called the 'diabetes capital' of the world and the burden is increasing day by day, especially in urban areas. As per reports, 26.1 per cent urban residents aged 60 years or more are diabetic and 9.3 per cent senior citizens living in India's rural areas are also diabetic. Among Indians over 45 years of age, 11.5 per cent were diagnosed with high blood sugar levels. India Diabetes Market size is expected to grow at an average CAGR of 6.5 per cent during 2016-2023. Global market for Diabetes Diagnostics estimated at \$26.5 billion in 2020, it's projected to reach \$42.4 billion by 2026, growing at a CAGR of 8.1 per cent. Test Strip is projected to record a 8.3 per cent CAGR to reach \$11.3 billion by 2026. Same rate will be applicable for India too. Increasing frequency and convenience in testing give a good boost to the diabetes diagnostic segment.



The Diabetes Market has been segmented as Type 1, Type 2, and Gestational diabetes. Based on the test, market is segmented into Random blood sugar test, Fasting blood sugar test, Oral glucose tolerance test, Initial glucose challenge test and others. If we take it on the basis of devices, it is segmented into Blood Glucose Monitoring Devices, HbA1c Testing Devices, Continuous Glucose Monitoring (CGM) Systems etc.

Need of the hour is for easier, economic, and efficient management of this epidemic, improving easiness and accuracy of machines, and development of non-invasive technology for simplification of testing. Agappe Diagnostics successfully markets Glucose Hexokinase reagent, 'AGGLH' with higher linearity & excellent correlation with reference methods.

## **HbA1C business In India**

The market for HbA1c testing has been expanding steadily and with better awareness of the healthcare regarding it increasing rapidly, the market is set to boom for a few years too due to its convenience & three months average estimation.

HbA1c levels surge in most Indian cities over the last 3-4 years. As per a release, at present, more than 77 million people are living with diabetes in India and the country's annual spend is approximately Rs 64,500 crore on diabetes related healthcare which is further expected to increase if diabetes is not controlled. Majority of the patients going for this test are confirmed diabetics. But with increasing awareness among people, this ratio is likely to change, and many more people are expected to go for the test independently, rather than the clinician's advice.

HbA1c testing market size is expected to reach \$1,992.44 million by 2025 at 12.24 per cent CAGR, owing to the rise in adoption of micro-optical detection method. Agappe stands at a very prominent position in the Indian HbA1C market, with 'AGA1C' on the Nephelometry platform, called Mispa i2 & Mispa i3. Agappe HbA1C has NGSP Certification & this product shows highest correlation with HPLC method, the gold standard.

## **Healthcare awareness**

Preventive healthcare also known as prophylaxis is the pivotal measure we take for preventing any disease. Preventive healthcare includes the use of any medical service or precautions that fight against the potential health crisis and it's getting momentum.

Due to increased general awareness on underlying reasons for non-communicable diseases such as diabetes, cardiovascular diseases, through internet and frequent educational articles in various health magazines and weekly newspaper magazines, the public are aware of the reasons and diagnostic tools. Hence, most of the members from educated societies do opt for voluntary tests off and on, before going to any physician, thereby influencing the diagnostic market in a big way.

## **Diabetic assisted markets like Renal Function Tests**

Diabetic nephropathy is one kidney disorder consequent to diabetes. Cardiovascular and renal complications share common risk factors such as blood pressure, blood lipids, linked with glycaemic control. The impact of diabetes on renal impairment changes with increasing age.

As per Kidney/Renal Function Test (RFT) Market forecast, the growth of this segment is at a CAGR of 6.1 per cent during (2017-2022), driven by the rising prevalence of kidney disease, growing prevalence of diabetes and hypertension, increasing geriatric population, and the rise in alcohol consumption. Diabetes is the most important one among these comorbidities which lead to kidney disorders. RFT tools include dipsticks, reagents, disposables; urine tests include: Urine Protein, Microalbumin, Creatinine Clearance), Blood Tests include Serum Creatinine, BUN etc.

Higher incidence of diabetes will multiply the kidney function tests in India especially in south India, directly proportional to the diabetes population.

## **POC & Other Glucose Monitoring Devices**

Glucose monitoring devices market in India was estimated around \$209 million in FY-2020 and its growth is expected to be at a CAGR of 10 per cent by FY 2026. India glucose monitoring devices market can be fragmented into self-monitoring glucose devices and continuous glucose monitoring devices, where the self-monitoring glucose devices segment overwhelmed the market until FY 2020 and the segment is expected to continue its leading position over the next five years as well. This can be attributed to ease of use and cost advantage.

The India glucose monitoring devices market is created by the growing amount of diabetes in the country, mainly Type 2 diabetes. Always faster and safer diagnosis techniques for diabetes are anticipated to expand the market in coming years. Increased awareness among the population regarding the treatment of diabetes will boost the market growth.

### **Continuous Glucose Monitoring (CGM) Devices**

Insulin pumps and CGM can help diabetic patients stay active and flexible and maintain confidence and better lifestyles. Insulin Pumps and CGM provide flexibility and better control.

CGM technology enables you to monitor your glucose levels 24 hours a day through a sensor that sends the readings to an insulin pump. This intelligent system predicts when you are approaching a low glucose level 30 minutes in advance and automatically stops insulin delivery and again automatically resumes insulin delivery when your glucose levels recover normal. In short, CGM provides a more complete picture of your blood glucose levels by giving you early warnings of lows and highs that HbA1C or fingerstick testing alone cannot deliver. In fact, use of CGM has been shown to lower HbA1c levels considerably.

The awareness of CGM levels has increased widely in India, and the market for monitoring devices is expected to see high growth in the country with a CAGR of 9 per cent during the forecast period.

### **Indigenisation of technology**

COVID-19 has put the diagnostic industry at centre stage with unparalleled demand for diagnostic tests, along with other critical medical supplies. Strained global relations, disrupted supply chains have created a trust deficit. All efforts were made to rapidly ramp up manufacturing capacity and capabilities in India, medical devices leaders are also looking outside their normal sector boundaries to explore creative solutions to further supplement capacity, such as partnerships with companies outside the sector, open-source equipment design, to support public-health needs. After a temporary dip, the healthcare industry has reemerged with the diagnostic industry getting maximum advantage. The pandemic has put the In vitro diagnostics (IVDs) sector at central stage due to higher requirement of diagnostic tools in all sectors including diabetes.

India imports about 80 per cent of the medical devices. Due to supply chain bottlenecks during pandemic, indigenous production has been given a big boost by favourable government policies. The Prime Minister of India also underlines that this crisis presents an opportunity to the Indian economy. The current pandemic is global, but the solutions to the challenge should be local.

Forecasts by global data indicate that the medical devices market in India contributed about 13 per cent of the Asia Pacific market in 2019 and would grow at a CAGR of 7.5 per cent through 2025. Future expansions will be with wearable glucose testing machines; implantable continuous glucose monitors or cloud-enabled continuous glucose monitoring devices, among others.

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