

THE RISE OF INDIA'S PATHOLOGY LABORATORIES

Strengthening Quality and Safety in Healthcare



India has seen its healthcare system witness an impressive evolution in the last two decades because of the growth in healthcare infrastructure, increased awareness, increased healthcare expenditure and the development of advanced technology in the country. While hospitals and doctors are central to healthcare, pathology laboratories have proved to be the backbone of clinical decision making and disease management. The use of laboratory diagnostic tools is crucial in the modern-day medicine for the detection of diseases, monitoring of effectiveness of the treatment, detection of infectious outbreak and precision medicine. Therefore, the pathology laboratories have been transformed into strategic partners in the healthcare system.

It is estimated globally that approximately 60-70% of all clinical decisions are made based on the results of laboratory tests which highlights the importance of the laboratory in healthcare. In India, the importance of the pathology laboratory in healthcare has been amplified because of the increase in non-communicable diseases, the persistence of infectious diseases, ageing population and health awareness regarding preventive healthcare.

The patients are now increasingly getting proactive regarding their health status and the demand for regular health checkups and specialized diagnostic tests has risen. The role of the pathology laboratory in increasing healthcare resilience has been proved by the COVID-19 pandemic when laboratory tests became critical for the diagnosis, tracking, surveillance and treatment of the disease. With the rise in the number of tests in the country, there has been huge investment in laboratory infrastructure, automation, molecular tests, digital reporting and skilled personnel which continue to impact India's diagnostics landscape even post pandemic.

Along with the rise in importance of the laboratories, the Indian diagnostics landscape has seen a shift from a fragmented market dominated by small independent laboratories towards an organized market with players like national diagnostic chains, hospital chains, specialized laboratories and technology-led diagnostic services. The organized market players are increasingly investing in automation, artificial intelligence (AI), molecular diagnostics, Laboratory Information Management Systems (LIMS), digital pathology and home sample collection services to make the services efficient and convenient for the patients. Such changes are impacting the patient

expectation and increasing the accessibility and reliability of the laboratory services in both metros and emerging cities. Health awareness, preventive healthcare, medical tourism and government initiatives continue to increase the demand for the organized diagnostic services.

Increasing importance of quality and safety in the laboratory is one of the core themes in this transformation of the healthcare system. The accurate results obtained from the laboratories lay the basis for any proper clinical decision. On the other hand, the errors in the diagnostic tests result in unnecessary delays in treatment, incorrect prescription of medicines, additional healthcare expenditures and worse patient outcome. Therefore, there has been increasing importance of laboratory accreditation, standard operating procedure, internal and external quality control, equipment calibration, staff competence and internationally recognized quality standards like ISO 15189. NABL (National Accreditation Board for Testing and Calibration Laboratories) is one of the popular forms of accreditation for the laboratories in the country.

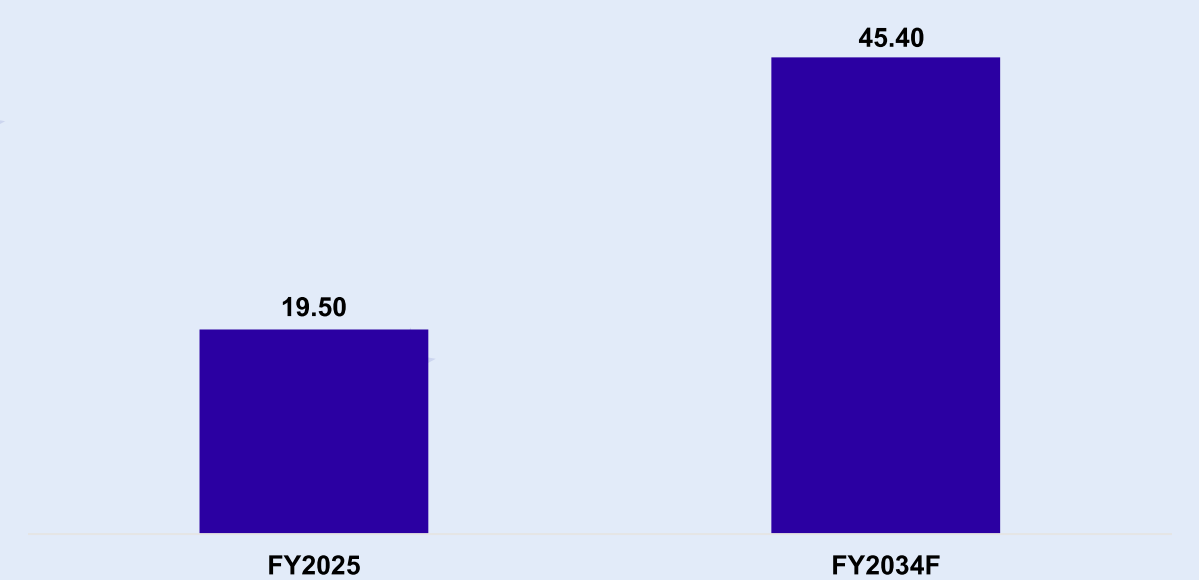
The government initiatives have helped the diagnostics landscape of the country become better through healthcare



infrastructure development, digital health initiatives, disease surveillance programs and quality assurance. The initiatives like ABDM (Ayushman Bharat Digital Mission), expansion of healthcare infrastructure through the initiative of Ayushman Bharat, increasing use of digital health records and laboratory standardization contribute to creation of an integrated patient centric healthcare system. With the increasing private sector investments, these initiatives

help pathology laboratories play a more strategic role in the country. With the development of India as a digitally enabled healthcare economy, it is expected that the role of the laboratories will expand beyond conventional diagnostics. The advances in genomics, molecular pathology, AI diagnostics, precision medicine and predictive analytics will transform the laboratories into clinical intelligence centers.

India Pathology Lab Services Market Size (US\$ Billion)



Source: IMARC Group

EVOLUTION OF INDIA'S PATHOLOGY LABORATORY INDUSTRY

The market of pathology lab services in India has experienced steady growth in the past few years on account of increasing health awareness, high prevalence of chronic diseases and lifestyle diseases, increasing focus on preventive health care, and increasing investment in diagnostic infrastructure. As per IMARC Group, the market was valued at US\$ 19.5 billion in FY2025 and is expected to touch a value of US\$ 45.4 billion by FY2034, growing at a CAGR of 9.37% over FY2026-FY2034. Some of the factors driving growth in the market include increasing health insurance coverage, increased investment in improving healthcare

infrastructure, rapid advancements in technologies for diagnostics, increased medical tourism, and an increase in the trend of organized diagnostic chains for pathologies.

The industry for pathology labs in India has undergone significant change in the last few decades in line with the overall healthcare system, economy, and technological advancement in India. It has changed from being basic hospital laboratories that performed routine diagnostics to advanced networks that include national diagnostic chains, specialized laboratories for testing, molecular diagnostics laboratories, hospitals' own laboratories, research institutes, and digitally connected diagnostic systems.

Traditional Hospital-based Laboratories: Building the Foundation

The period right after Independence saw the use of testing procedures limited to laboratory services based in the laboratories affiliated to government hospitals, medical colleges and few private healthcare facilities. The laboratory services were primarily based on investigations such as pathology, microbiology, haematology and biochemistry that aided doctors in identifying infectious disease conditions and common medical disorders.

In this time frame, the infrastructure for diagnostic testing was highly fragmented with huge gaps between the quality of testing services offered in urban healthcare centers and those offered in rural healthcare facilities. Laboratory services were highly manual based, hence long turn-around time, low testing capacity and lack of consistency in quality parameters. Advanced laboratory testing services could only be accessed in major metropolitan cities while patients from small towns had to travel great distances for advanced testing procedures. Nonetheless, the period saw the establishment of the institutions necessary for the development of laboratory medicine in India.

Emergence of Organised Diagnostic Chains

The liberalization of economics in the 1990s was a major shift for the diagnostics



industry in India. Private investments in healthcare helped to create a platform for specialist diagnostic services which could create dedicated pathology labs independent from hospitals. The organized diagnostics chains slowly grew through major cities by providing standardized testing procedures, more infrastructure, wider menus of tests, and better customer service.

In contrast to the existing laboratories, the organized players used the hub-and-spoke model of operations which involved centralized advanced testing labs along with wide networks of sample collection centers and franchise labs. Such an organizational model increased efficiency and lowered the cost of testing, ensured higher quality control, and facilitated the provision of specialized diagnostic services without long distance traveling. Additionally, many organized players have developed such customer-oriented innovations as health preventive packages, appointment booking via Internet, electronic reports, wellness programs for companies, and sample collection at home services.

Expansion of Preventive Healthcare and Specialised Diagnostics

As we moved into the 2010s decade, there was an acceleration in the growth of the pathology laboratories in India owing to the rise in the occurrence of lifestyle diseases such as diabetes, heart diseases, cancer, thyroid problems, kidney diseases and others. With the rising level of disposable income, health insurance and increased awareness about preventive medicine, people started getting diagnosed on a regular basis, even if they did not have any symptoms.

In addition, laboratories started offering special diagnostic tests such as molecular diagnostics, immunology, cytogenetics, histopathology, genetic testing, oncology diagnostics, reproductive diagnostics, infectious disease testing and others. Such specialized tests helped doctors in giving



developed because of the pandemic. In addition to that, public private partnership helped scale up the country's diagnostics capability, highlighting the role of pathology laboratories in the overall healthcare system. In addition to the increased need for diagnostics, the COVID-19 outbreak helped raise awareness about laboratory diagnostics, preventive care, and disease prevention in the general population. Patients became more accustomed to using digital health services including telemedicine, online appointment booking, and even at-home sample collections.

accurate diagnoses along with personalized treatment. Moreover, the technological advancements led to the growth of automation in the laboratories due to the introduction of analyzers, barcode system, robotic handling of samples, and LIMS.

COVID-19: A Transformational Moment

The advent of the COVID-19 pandemic was one of the major milestones in the development of the pathology laboratory industry in India. The increased demand for diagnostics necessitated an upgrade in molecular testing facilities and the creation of RT-PCR laboratories by pathology labs along with other important actions such as biosafety measures and staffing collaboration with the government agencies.

Laboratory automation, digital reporting, sample handling, high throughput testing facilities, and quality control systems were among the technologies that have been



The Current Landscape: Towards an Integrated Diagnostic Ecosystem

Currently, the pathology lab industry of India is amongst the most rapidly evolving sectors in the healthcare industry. Organized chain laboratories have continued to grow into Tier II and Tier III cities using franchises, acquisitions, and online tools. Laboratory infrastructure in hospitals has improved considerably, and specialized laboratories have continued to increase capacity in molecular diagnostics, genomics, personalized medicine, and companion diagnostics. The use of artificial intelligence, digital pathology, cloud-based reports, telepathology, predictive analytics, and integrated patient records is slowly reshaping laboratory processes and clinical decisions. On the other hand, increasing focus on NABL accreditation and quality management programs is improving the reliability and performance of the pathology industry.

Industry forecasts suggest that pathology continues to be the largest segment in India's diagnostics laboratory industry, and organized diagnostic companies will keep increasing their share as demand grows for preventive healthcare services and accredited laboratories. Expansion into non-metropolitan areas combined with the adoption of technology and quality management will fuel future growth in the industry.

Competitive Landscape: India's Organized Diagnostics Players

The Indian pathology laboratory industry has moved from a fragmented, hospital-anchored market to one increasingly shaped by a small set of organized, listed diagnostic chains competing on network reach, test menu depth, turnaround time

and brand trust. Together, the top organized players have driven the shift away from unaccredited standalone labs described earlier in this report, even as the unorganized segment continues to hold the largest single share of the market. The players below represent the primary organized competitive set relevant to this industry.

Leading Organized Players



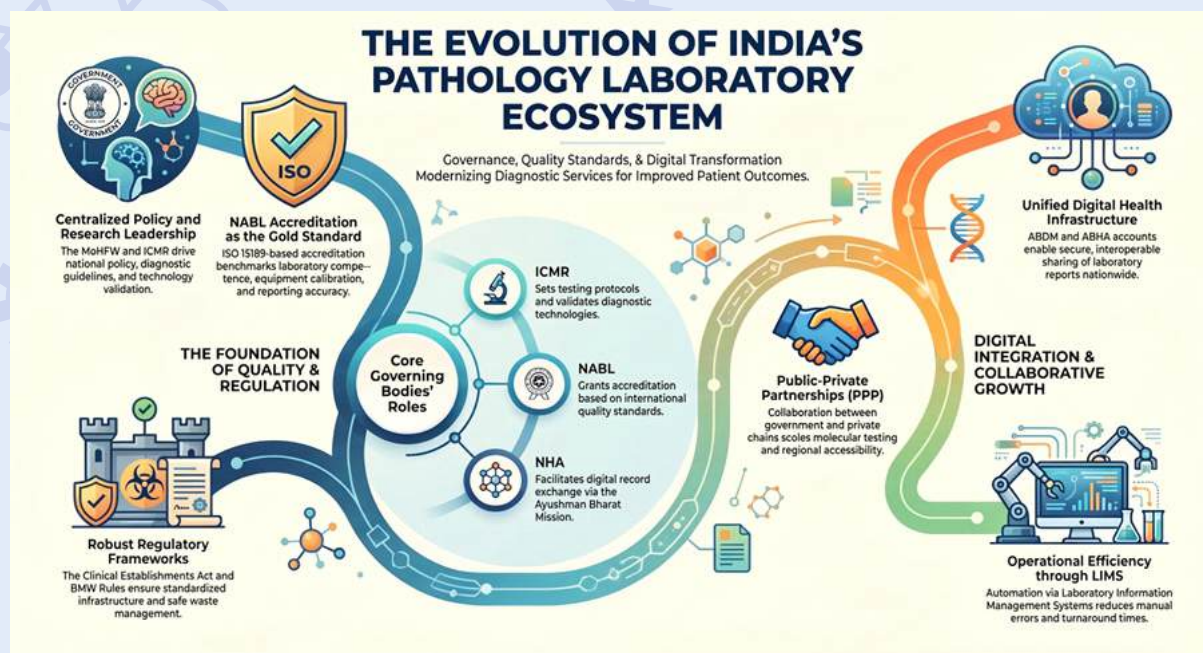
INDIA'S PATHOLOGY LABORATORY ECOSYSTEM AND REGULATORY FRAMEWORK

The pathology laboratory ecosystem in India has developed into an interactive and interconnected structure, enabling the development of the country's healthcare industry. With the growing role of diagnostic tests in disease prevention, early detection and evidence-based healthcare, pathology laboratories have become crucial in providing accurate clinical data for healthcare-related decision-making. The ecosystem includes government bodies, regulatory bodies, accreditation organizations, public and private healthcare providers, organized chains of diagnostics, technology and research companies.

Due to the increasing burden of chronic and infectious diseases, growing healthcare awareness, higher health insurance coverage and the fast growth of

digitalization, the scope of pathology services in India has become much wider than before. At the same time, quality control, laboratory accreditation, standardization of work and introduction of technologies have become priorities in providing diagnostic services. This ecosystem has made pathology laboratories more than just diagnostic laboratories; they have become partners in preventive healthcare and precision medicine.





Government Institutions Driving India's Diagnostic Ecosystem

Government bodies make a vital contribution towards the development of India's pathology laboratory landscape by means of formulating policies, defining quality standards and improving diagnostic infrastructure. The Ministry of Health and Family Welfare (MoHFW) develops general guidelines on the development of the healthcare industry in India and also promotes the development of diagnostic services within the scope of various national health programmes and infrastructure projects. The Indian Council of Medical Research (ICMR) is the apex organization responsible for biomedical research in India and has made an essential contribution towards the development of laboratory testing guidelines, validation of diagnostic technologies and strengthening of the surveillance of diseases. During the COVID-19 pandemic, ICMR contributed substantially to the expansion of India's molecular diagnostic capacity by authorizing testing laboratories and defining standardized procedures and testing approaches.

The National Centre for Disease Control (NCDC) complements the work done by MoHFW and ICMR by improving the

surveillance of diseases within the scope of laboratories, monitoring of infectious diseases outbreaks and preparedness for such diseases. In addition to that, NHA through its initiative – Ayushman Bharat Digital Mission (ABDM) contributes to the digitalization of the healthcare industry of the country through the exchange of health records. The state health departments regulate clinical establishments and public health programmes and expand laboratory infrastructure in the region.

Regulatory Framework Ensuring Quality and Patient Safety

A sound regulatory regime is crucial to maintaining quality and safety in pathology laboratory services. India has improved its regulatory regime via enactment of laws, technical guidelines, and quality control mechanisms designed to create uniformity in laboratory operations and protect patients' interest. Under the Clinical Establishments (Registration and Regulation) Act, 2010, there is provision for registration and regulation of healthcare facilities, including laboratories, in those states which have adopted this law. The Act strives to establish minimum standards for infrastructure, staffing, equipment and service provision within

healthcare facilities.

Also, laboratories are supposed to comply with the Biomedical Waste Management Rules, 2016 that address issues relating to safe segregation, handling, transportation and disposal of biomedical wastes generated from diagnostic tests. Compliance with the rules ensures public health and environmental protection. Technical guidance from the Indian Council of Medical Research (ICMR) on laboratory procedures, biosafety and quality management; and regulation of in-vitro diagnostic medical devices by the Central Drugs Standard Control Organisation (CDSCO) to assure safety, quality and effectiveness prior to use in the healthcare sector. These regulatory mechanisms ensure uniformity in laboratory operations, reduced error rates and increased patient confidence in pathology services.

NABL Accreditation: Benchmarking Diagnostic Excellence

Quality assurance through accreditation has become one of the major factors that has spurred improvements in the quality of the pathology laboratory sector in India. This is because the National Accreditation Board for Testing and Calibration Laboratories (NABL) accredits medical laboratories based on the international standard for quality and competence of laboratory testing as per ISO 15189 - Medical Laboratories: Requirements for Quality and Competence. Accreditation from NABL assesses the quality of laboratories in many areas, including personnel competency, calibration of instruments, sampling procedures, test procedures, documentation, internal quality control, external quality

assurance, reporting and continual improvement. Accredited laboratories must adhere to rigorous quality management systems and undergo continuous evaluations to ensure consistent compliance to international standards.

Participation in the Internal Quality Control (IQC) programs and External Quality Assurance Scheme (EQAS) improves the quality of laboratories through continued evaluation of the accuracy of the tests done. These quality assurance processes reduce analytical variation and increase the reproducibility of the tests and clinical reliability of the results. Increased understanding of the importance of the quality of laboratory tests amongst the healthcare providers, health insurance providers and patients has increased the importance of NABL accreditation to indicate technical competence.

Digital Healthcare Strengthening Laboratory Integration

The advent of digital transformation in India has resulted in the betterment of the laboratory ecosystem in terms of connectivity, efficiency, and patient experience. With the increasing use of digital technology, the laboratories can improve their efficiency, minimize the turnaround time, and facilitate the exchange of information between various stakeholders of the healthcare ecosystem. The Ayushman Bharat Digital Mission (ABDM) through its Ayushman Bharat Health Account (ABHA) is establishing a digital health ecosystem which helps individuals to gain secure access to their health information that can be accessed by authorized healthcare professionals.



At the same time, the pathology laboratories are making use of Laboratory Information Management Systems (LIMS). Such systems are used for automation in the process of sample tracking, workflow management, quality management, and report generation. Sample barcoding, use

of automated analyzers, reporting through the digital platform and mobile applications have made a significant contribution towards efficiency improvement and reduced errors. Telemedicine, digital consultation services, and home sample collection services have helped increase the integration of diagnostic services into patient-oriented healthcare service delivery model.

Public-Private Collaboration Accelerating Diagnostic Expansion

Collaborations of the public and private sectors have become a key factor behind the development of diagnostics infrastructure in India. Organized diagnostic chains, hospitals, and specialized laboratories are increasingly becoming complementary to the efforts of the government towards healthcare through providing better access to quality diagnostics in diverse geographic locations. The collaboration of the public and private sectors became evident in the case of the pandemic of COVID-19 when a rapid increase in lab capacity, expansion of molecular testing infrastructure, and national disease surveillance was achieved. Collaboration between government agencies and private diagnostic companies has led to a massive increase in testing, better utilization of resources, and adoption of innovative technologies during times of high demands for healthcare services.

Apart from being helpful in emergency situations, these collaborations continue to aid in national screening programs, preventive care initiatives, maternal and childcare initiatives, and infectious diseases control measures. Organized diagnostic companies also provide better access to services by expanding their presence in Tier II and Tier III cities using hub-and-spoke systems, franchising, and online platforms. Continued collaboration between policymakers, government regulators, healthcare organizations, and private diagnostic

companies will be crucial for establishing a robust, technologically advanced, and quality-based diagnostics infrastructure in India.

STRENGTHENING QUALITY AND SAFETY THROUGH MODERN PATHOLOGY LABORATORIES

With their increasing relevance to the current Indian healthcare system, modern pathology laboratories have become critical components for delivering accurate diagnoses, facilitating clinical decisions and making sure patients receive safe medical care. With the transition to preventive medicine, laboratory services have become the determining factor in the effectiveness of treatment and prevention programs. The tasks that modern pathology laboratories perform extend beyond mere diagnosing. They provide reliable information for physicians which helps them to detect diseases early, monitor their progression and make evidence-based medical decisions. To ensure accurate diagnosis, it is necessary to maintain high levels of quality management within laboratory processes. Modern laboratories adhere to the standard operating procedures, tested and proven methods of analysis and quality assurance guidelines to minimise errors during sample analysis and reporting. The use of automated analysers, barcodes and Laboratory Information Management Systems (LIMS) increased efficiency of the process and decreased the number of manually performed actions and time of reporting.



Accreditation is becoming a crucial measure for preserving the diagnostic excellence of Indian pathology laboratories. Pathology laboratories accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) comply with ISO 15189, setting the international requirements for the quality management and technical competence of medical laboratories. The calibration of equipment, training of personnel, internal quality control (IQC) and participation in External Quality Assurance Schemes (EQAS) help pathology laboratories to achieve consistent, reliable and accurate results in their tests. Innovations are making significant contributions to the increase in diagnostic accuracy and patient safety in the diagnostics sector. Automation of laboratory processes, digital pathology, molecular diagnostics and the application of AI in medical analysis are providing more accurate testing and allowing processing of a greater number of samples with high efficiency.

In addition to the tasks related to disease detection and treatment monitoring, pathology laboratories contribute to preventive medicine and surveillance of public health threats. The growing awareness of the importance of preventive diagnostics has led to a growing demand for such services which allow for early detection of chronic illnesses such as diabetes, cardiovascular disorders and cancer. At the same time, in case of public health emergencies, pathology laboratory networks can support large-scale disease surveillance and helping to detect outbreaks in order to improve overall preparedness of India's healthcare system. With the modernisation of India's healthcare system, pathology laboratories are transforming into quality-centred diagnostic centres which combine advanced technology with international quality standards.



TECHNOLOGY RESHAPING INDIA'S PATHOLOGY LABORATORY LANDSCAPE

Technological advancements have become a significant factor in the transformation of India's pathology laboratory industry due to their ability to enable laboratories to provide more effective, precise, and timely diagnoses. The rise in the number of tests performed, the need for specialized examinations, and changing customer requirements have motivated labs to introduce more sophisticated diagnostic technologies that boost performance and ensure quality as well as patient safety. At the moment, technology not only improves laboratory processes but also changes the entire process of receiving a diagnostic service.

Laboratory automation has been recognized as one of the most significant innovations in modern diagnostics. Automated analyzers, robots for handling samples and specimens and barcodes allow reducing manual work, human errors and speeding up the diagnostic process. In addition, laboratory automation allows processing many samples with high accuracy, which makes

it especially useful for organized diagnostic chains working with central laboratory services for several sample collection centers. Digitalization technologies are also improving the processes in laboratories due to the widespread introduction of Laboratory Information Management Systems (LIMS). LIMS facilitates the management of laboratory work from registration of the samples and tests distribution to quality control, generation of reports and management of the digital data. The connection with the hospital information systems and electronic medical records helps the doctors get the reports immediately thus ensuring better integration between diagnostic services and clinical activities.

One more important innovation of recent years is the growing use of artificial intelligence (AI) for the analysis of images, recognition of patterns and providing recommendations to the specialists. AI-driven tools help the pathologists to analyze digital slides, to detect abnormalities and to prioritize cases. Although AI does not replace medical specialists, their growing use is expected to improve productivity and consistency of the diagnostics. Molecular and genomic diagnostics and testing have been changing the process of diagnosing and treating diseases in recent years. For example, technologies like PCR, NGS and biomarker-based testing allow detecting diseases on the early stage, identify genetic abnormalities and to develop individual treatment strategy.

Digital health platforms and services have been also improving the patients' experience through simplifying the process of getting a test, providing easier access to diagnostic services and helping laboratories to reach new clients. Booking appointments, mobile apps, online payment systems and cloud-based reports have made it easier to get a diagnostic service, and the possibility to send the sample from home helped to reach elderly people, patients with restricted mobility and other clients who needed more convenient solutions. These innovations have contributed to the development of patient-oriented diagnostics and are expected to become even more popular as India's healthcare system gets more connected.

ECONOMIC AND HEALTHCARE IMPACT OF INDIA'S PATHOLOGY LABORATORY INDUSTRY

With the emergence of India's pathology laboratories' industry, a lot of advantages have been gained in addition to the diagnostics itself, which positively impacted the healthcare provision, economic development, and public health preparedness. The integration of laboratories in the healthcare provision process allows them not only to diagnose diseases but to provide services that support preventive healthcare, facilitate clinical decision-making, create employment and promote innovations within the life sciences sphere. An increase in the number of organized



diagnostic networks has contributed to better access to high-quality diagnostics in Tier II and Tier III cities.

First and foremost, the role of laboratories in improving healthcare outcomes includes timely and accurate disease diagnosis. It enables physicians to detect diseases on time, start treatment and track patients' recovery. This issue is especially relevant regarding chronic diseases like diabetes, cardiovascular diseases, chronic kidney disease, and cancer when the earlier treatment can lead to much better results and reduce the healthcare expenses in the long run. Increased attention to preventive healthcare has increased the number of people who regularly go for health checkups, thus leading to early disease diagnosis and improved disease management. The pathology laboratory industry also supports India's rapidly growing pharmaceutical, biotechnology, and clinical research sectors. The advanced lab testing is needed for drug discovery, conducting clinical trials, biomarker analysis and companion diagnostics to make it possible for researchers and pharmaceutical companies to create more targeted treatments. With the growing interest to precision medicine and genomics, the pathology laboratories' role

in biomedical research and innovations is expected to grow even more.

The industry is also seen as a great opportunity for skilled employment generation. The development of organized diagnostic chains led to creation of new jobs for pathologists, microbiologists, laboratory technicians, molecular biologists, quality managers, bioinformaticians and healthcare IT professionals. Simultaneously, an increase in the demand for the laboratory equipment, diagnostics reagents, logistics services and digital health technologies led to development of the corresponding industries, thus generating multiplier effect in the healthcare value chain.



Pathology laboratories play an important role in strengthening public health system. The laboratory data is used for disease surveillance, outbreak monitoring, and epidemiological research that help public health authorities to detect the emerging threats and implement necessary measures. The current situation with the COVID-19 pandemic showed how strategically important the development of laboratory network was to expand the testing capacities and conduct the large-scale screening programs. The experience of the past pandemic will be the main driver of investments in the infrastructure of the industry and its diagnostic preparedness. In the future, the role of pathology laboratories in the healthcare ecosystem of India is going to grow even more. The development of technology, quality accreditation, and digitalization, along with increasing demand for preventive and personalized



healthcare are going to make the industry even more important for improving health outcomes, economic development and healthcare system resilience.

THE ROAD AHEAD FOR INDIA'S PATHOLOGY LABORATORY INDUSTRY

The pathology laboratory industry in India has become one of the key elements of the country's healthcare system because of the need for precise diagnostic procedures, evidence-based treatment approaches and improved results of health treatments. During its development, the sector has transformed from the fragmented and hospital-oriented labs to the highly technological diagnostic network which plays an important role in disease prevention, monitoring, and personalized medicine. Such factors as increased health consciousness of people, growing rate of both chronic and infectious diseases, wider health insurance coverage, and increased investments into healthcare infrastructure create a demand for reliable diagnosis across the country. These changes have been facilitated by better regulations, increasing adoption of quality standards, advanced technology, and growing digitalization of the field. Organized diagnostic service providers have extended access to high-quality

pathology services via automated labs, electronic reports, home sampling and specialized testing. At the same time, projects such as the Ayushman Bharat Digital Mission (ABDM) promote better interoperability within the healthcare environment and make pathology laboratories the core of India's digital healthcare network.

In the future, investment into lab improvement, professional staff training, quality management and advanced diagnostic solutions is required to deal with growing challenges related to the development of Indian healthcare. Increased coverage of accredited services in Tier II and Tier III cities, better cooperation between public and private companies in providing services and innovations in molecular diagnostics and artificial intelligence are expected to improve the impact of the sector on healthcare delivery. As India develops towards becoming a resilient, patient-oriented, and technology-based healthcare system, pathology laboratories are expected to become the key element of high-quality medical care. These emerging trends are expected to shape the future of India's pathology laboratory industry and are discussed below:

Technology Will Continue to Drive Innovation

The pathology laboratory industry of India is forecasted to witness rapid incorporation of high-end technology, including AI, laboratory automation, digital pathology, and molecular diagnostics. The technologies will help laboratories to improve diagnostic accuracy and shorten the time needed for test processing while handling large numbers of tests. Next-generation sequencing and other innovative technologies will help to advance personalized medicine through early detection and personalized treatment of diseases.





Digital Healthcare Integration Will Enhance Accessibility

The implementation of the Ayushman Bharat Digital Mission (ABDM) is bound to increase connectivity in India's healthcare system through the secure transfer of digital health records. With the increased use of Laboratory Information Management Systems (LIMS), cloud-based reporting systems and digital consultations, improved communication is likely to occur between the laboratories and healthcare organizations. At the same time, an increase in home sample collection and digital health systems will increase the availability of quality testing services especially in Tier II and Tier III cities.

Quality and Accreditation Will Remain Central to Growth

With increased need for reliable diagnostic services, there is a great expectation that quality management and accreditation will become a priority in

laboratories. International standards being widely adopted, with NABL (National Accreditation Board for Testing and Calibration Laboratories) accreditation being one of them, will go a long way in improving diagnostic uniformity, increasing patient confidence, and improving clinical results. It is important to invest in training the workforce, laboratory facilities, and quality management systems.

Organised Diagnostic Networks Will Continue to Expand

The diagnostics segment of India is all set to undergo further consolidation through the expansion of lab networks through acquisition and franchise operations. Expansion of diagnostics services to underdeveloped areas is expected to increase accessibility of standardized diagnostic facilities and help the government in achieving its objective of delivering quality healthcare to everyone. Public private partnership is also expected to play a vital role in preventive medicine and health preparedness programs.

