

From infrastructure to innovation:

The GCC's growing influence
on clinical diagnostics

October 2026



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Introduction

Diagnostics sits at the centre of virtually every clinical decision, from identifying disease and selecting treatment to monitoring response. Yet the diagnostic function is increasingly being asked to do more than generate a result. Ageing populations, a rising chronic disease burden, pressure on healthcare budgets, and the growing complexity of precision medicine are changing where testing is performed, what information it generates, and how results are interpreted.

The shift is structural: away from purely centralised, high-volume laboratory models toward distributed, molecular-first models in which algorithm-supported interpretation complements clinical judgement.

According to Frost & Sullivan's analysis, the global clinical diagnostics market is sized at USD 115.7 billion in 2026, and is projected to reach USD 152.1 billion by 2031, a 5.5% CAGR over 2026–2031 (Exhibit 1).

The headline figure, however, conceals where growth is concentrating. Molecular diagnostics and point-of-care testing (POCT) account for roughly 40% of the market in 2026 but are expected to capture about 45% of its incremental revenue through 2031, together adding USD 16.2 billion of the USD 36.4 billion in new value. In other words, the market's centre of gravity is moving toward these two segments. The Middle East diagnostics market is smaller in absolute terms, estimated at USD 5.4 billion in 2026 and growing at a 5.1% CAGR over 2026–2031, but its strategic importance is disproportionate. The UAE and Saudi Arabia are no longer treating diagnostics as a procurement category. They are building domestic capability in genomics, laboratory infrastructure, and regulatory frameworks as part of broader national health and biotechnology agendas.

What is driving growth in clinical diagnostics today?

Molecular and precision diagnostics: Powering the shift to targeted care

Molecular diagnostics is expected to grow from USD 26.9 billion in 2026 to USD 36.0 billion by 2031, a 5.9% CAGR, driven primarily by oncology molecular profiling, companion diagnostics, and infectious disease surveillance. In practical terms, molecular diagnostics is what makes precision medicine actionable. A targeted therapy requires a reliable test to identify the patients most likely to benefit, while follow-up testing can help assess treatment response and identify emerging resistance.

The GCC has invested steadily in the genomic infrastructure required to support this transition. Cleveland Clinic Abu Dhabi, for example, provides advanced precision oncology and molecular testing, including next-generation sequencing (NGS), and operates genetic counselling and hereditary cancer services. The Emirati Genome Programme is also building population-level genomic datasets to support research and personalised healthcare.

Genomic testing is also reaching the population at large, not only the oncology clinic. Since

January 2025, genetic testing has been a mandatory part of premarital screening for Emiratis, covering 570 genes associated with more than 840 medical conditions.

The implication is broader than the adoption of individual tests. As genomic infrastructure, clinical expertise and reference datasets develop together, precision oncology and hereditary risk assessment can move beyond isolated centres of excellence and become more integrated into mainstream clinical pathways. With sequencing capacity, specialist centres and national reference datasets already in place, the constraint for new partnerships is less about building laboratories and more about clinical integration: embedding tests into treatment pathways, tumour boards and reimbursement decisions.



Decentralisation and point-of-care testing: Bringing the lab to the patient

POCT is one of the fastest-growing segments in diagnostics, increasing from USD 19.1 billion in 2026 to USD 26.2 billion by 2031, a 6.4% CAGR.

¹ Rapid molecular platforms are expanding testing beyond traditional laboratories into urgent care settings, community pharmacies and other points closer to the patient.

The UAE's approach is particularly relevant because access and infrastructure are being developed together. PureHealth operates the country's largest integrated healthcare network, spanning more than 143 laboratories, with PureLab at its core and SEHA forming part of the wider ecosystem. That scale is showing up in volumes: the network processed 34 million laboratory tests in 2025, up 17% year-on-year from around 29 million in 2024. A network of this size gives decentralised testing something it often lacks, a central quality, data and governance layer to plug into.

The more significant shift, however, is in what point-of-care testing can now do. Rapid tests historically traded accuracy for speed: antigen tests were quick but missed a meaningful share of infections. That trade-off is narrowing. Cartridge-based molecular platforms now deliver PCR-grade results near the patient. Roche's cobas liat detects SARS-CoV-2, influenza A/B and RSV from a single swab in around 20 minutes, and bioMérieux's BIOFIRE SPOTFIRE returns a multi-pathogen respiratory panel in about 15. Testing is also reaching conditions that once required a central

laboratory. Cepheid's Xpert HCV, the first point-of-care hepatitis C RNA test cleared by the US FDA, returns results within an hour from a fingerstick sample, making single-visit test-and-treat possible. The setting has moved too: Visby Medical's disposable PCR device became the first FDA-cleared at-home multiplex molecular test for COVID-19 and influenza, with results in roughly 30 minutes.

For health systems, the implication is that POCT is no longer a convenience layer beneath "real" diagnostics. With laboratory-equivalent accuracy, multiplex panels and connectivity into laboratory information systems, it is becoming a first-line channel for infectious disease, chronic disease monitoring and, increasingly used for women's health, compressing the time from symptom to treatment from days to a single visit. Integrated networks in the UAE are well placed to absorb this, because decentralised devices can feed results into a centrally governed quality and data system rather than operating in isolation. For POCT providers, connectivity, remote quality monitoring and LIS integration are now table stakes in GCC tenders.

Artificial intelligence and digital pathology: The new diagnostic co-pilot

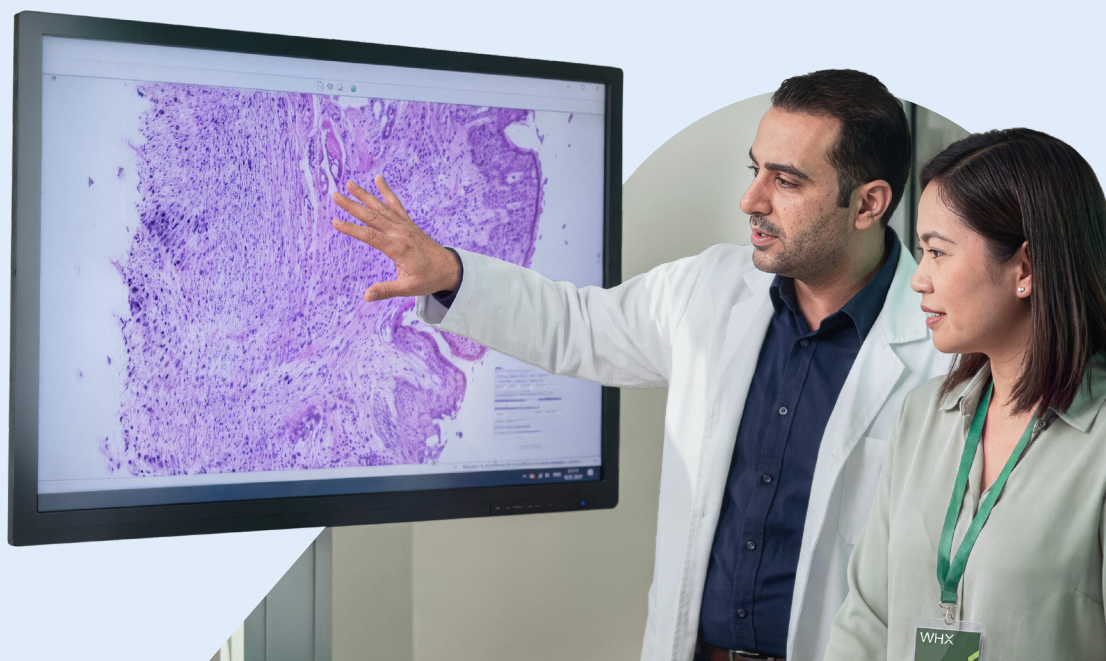
Within tissue diagnostics, the segment covering histopathology and other tissue-based testing, digital pathology and AI-assisted interpretation have the strongest near-term use case. The tissue diagnostics segment is forecast to grow from USD 7.8 billion in 2026 to USD 10.3 billion by 2031, a 5.5% CAGR over 2026–2031, as digital pathology and whole-slide imaging (WSI) move from validation and pilot programmes into routine clinical use. The near-term role of AI here is practical: algorithms screen images, flag areas of interest and support consistency across cases and sites. The pathologist remains responsible for the final interpretation, but the workflow starts from a more targeted and standardised review.

Saudi Arabia acted early on this front, publishing a digital pathology accreditation framework covering WSI and AI-assisted interpretation,

one of the first of its kind in the region.

Hospitals rarely commit significant capital to a new modality until there's a defined regulatory pathway to operate within. The presence of that framework suggests the adoption window is opening, not still hypothetical.

AI is already moving from pilot to routine use in the UAE. In June 2026, M42's National Reference Laboratory introduced AI-powered prostate cancer diagnostics with digital pathology company Qritive, integrating the technology into its diagnostic workflow. The system analyses digitised tissue samples, highlights areas of concern and supports more consistent detection and grading. For diagnostic AI vendors, the practical lesson is to engage with Saudi and UAE accreditation frameworks early and design validation studies to their specific requirements from day one.



Regulatory and reimbursement evolution: Building the policy foundation

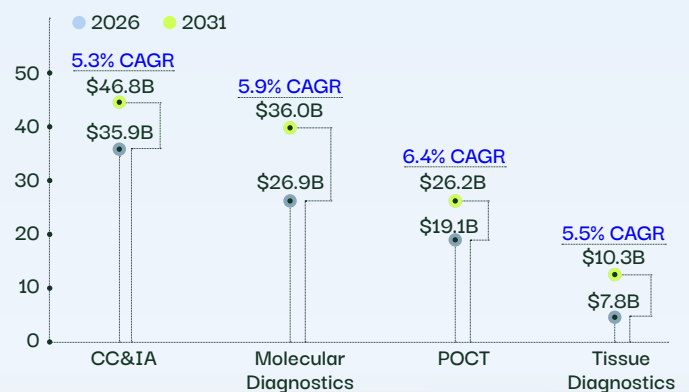
Technology alone does not move diagnostic practice at scale. Regulatory approval and reimbursement determine whether a validated test can become a routinely deliverable health service. Reimbursement is following across the GCC, coverage has expanded to include oncology next-generation sequencing, non-invasive prenatal testing and decentralised molecular testing.

For providers and technology companies, these developments are important because they reduce two of the principal barriers to adoption: uncertainty over whether a technology can be deployed and uncertainty over whether it can be sustainably funded.

The broader implication is that the GCC's diagnostics opportunity is not limited to laboratory infrastructure or technology procurement. Regulatory and reimbursement systems are becoming equally important components of the region's diagnostics

ecosystem. The regulatory and reimbursement infrastructure in the region is sophisticated enough to support commercial-scale deployment, not just pilots. Companies must map their diagnostic portfolio against the reimbursed list and prioritise where policy tailwinds already exist.

Exhibit 1: Global Clinical Diagnostics Industry Revenue by Segment, 2026–2031F



Source: Frost & Sullivan Analysis

(Note: CC&IA = Clinical Chemistry and Immunoassays, the largest segment at USD 35.9 billion in 2026.)



Conclusion

A pattern is emerging across global healthcare that deserves more attention than it currently receives. The health systems pulling ahead on clinical outcomes, cost efficiency, and patient access over the next decade will not be those with the most advanced individual technologies. They will be those that built the institutional capacity to absorb those technologies at speed, the governance structures, the data architectures, the regulatory clarity, and the reimbursement pathways that determine whether a breakthrough test reaches ten thousand patients or just ten.

The distance between these two groups, health systems that can buy diagnostic technology and those that can absorb it at scale, is what we call the diagnostic infrastructure gap, and it is widening. Markets that embrace technology without building the institutional capabilities to implement it effectively will continue to invest in costly pilot projects that fail to scale. In contrast, markets that develop both advanced technologies and the enabling frameworks to deploy them will strengthen their competitive advantage year after year.

The GCC's position in this landscape is instructive, and not for the reasons most observers assume. The region's significance isn't its purchasing power or its willingness to adopt new technology early. It

is the decision to build these capabilities in parallel rather than one at a time, which compresses the timeline from innovation to population-level impact in a way few health systems have attempted at this scale.

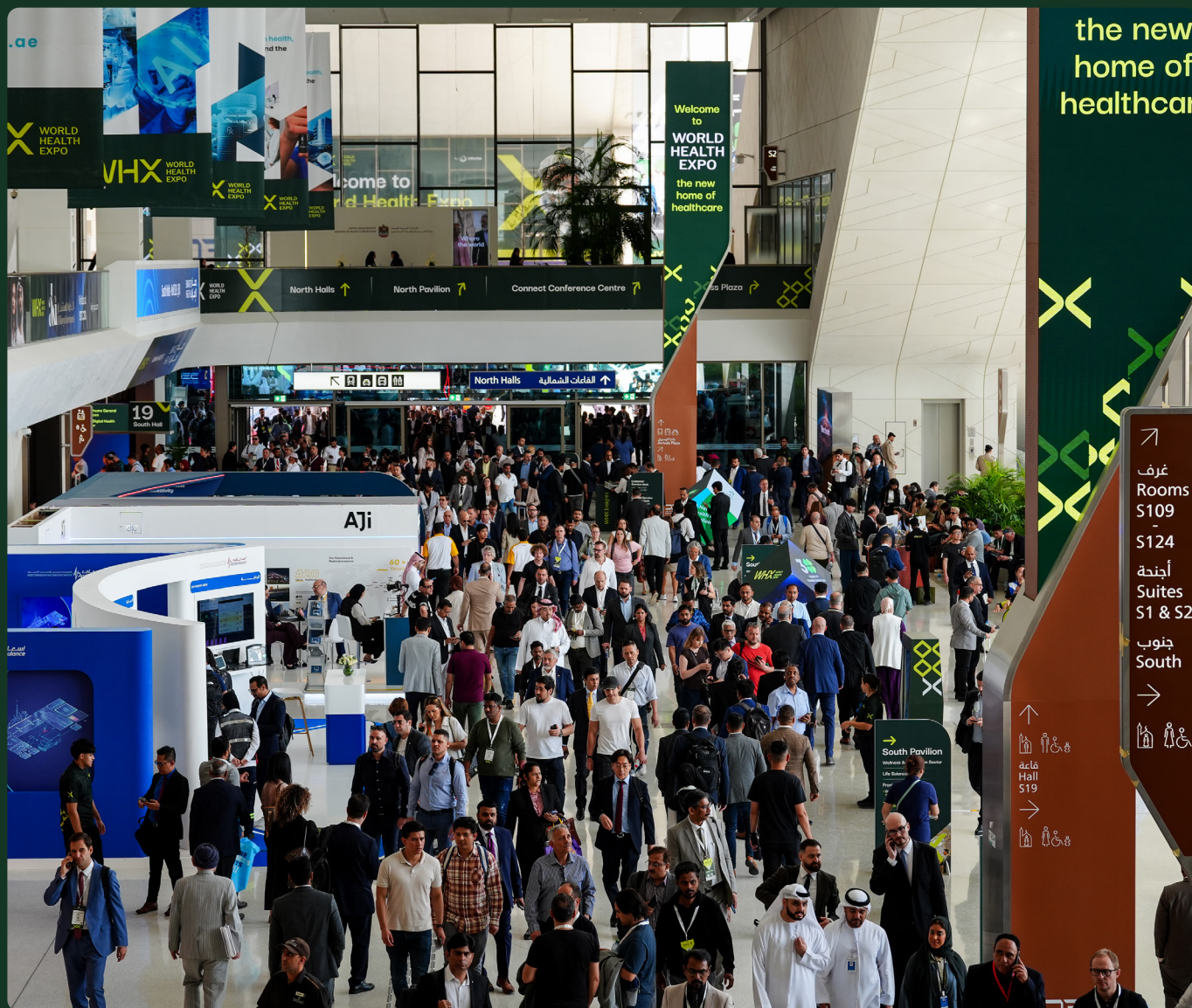
By 2031, the regions that made this integrated investment will hold something more valuable than market share. They will hold the operational playbook, the real-world evidence of what works, what doesn't, and what it actually costs to deploy molecular, decentralised, AI-enabled diagnostics at system level. That playbook is what every other health system, investor, and MedTech executive will eventually need.

The GCC's diagnostics story is ultimately not about market growth or technology adoption. It is about a region that has begun treating diagnostics as foundational health-system infrastructure, as essential as hospital capacity or insurance coverage, and investing accordingly. WHX Dubai 2027's Labs and Healthspan stages are where the results of that investment will be most visible. The question for every stakeholder in the room is whether they are there to observe it or to help write the next chapter.

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