

CONCEPT NOTE

Accelerating Diagnostics for Stronger Health Systems: Detect Early, Treat Better

Background

Access to timely, affordable, and quality diagnostics is the cornerstone of universal health coverage (UHC) and a critical enabler of resilient health systems. Yet, across Africa, diagnostics remain underfunded, heavily import-dependent and unevenly distributed. Studies show that less than 50% of primary health facilities in low-and-middle income countries (LMICs) have access to diagnostics.^[1] As a result, patients are often diagnosed late or not at all, undermining treatment outcomes and driving preventable deaths.

The World Health Organization (WHO) emphasizes that expanding access to diagnostics in Africa is essential to accelerating progress toward UHC, enabling earlier disease detection and more efficient use of resources.^[2] Economically, diagnostics offer one of the highest returns on investment (ROI) in health, with evidence showing substantial savings through avoided complications and efficient resource allocation. In South Africa, the country's molecular diagnostics programme is estimated to have a 10-year ROI of about \$13.9 value for each \$1 invested (across TB, HIV, COVID-19 testing) and to have averted approximately 4.3 million disability-adjusted life years DALYs.^[3] Such evidence reinforces that investments in diagnostics are not just a health priority but a sound economic one.

Emerging Momentum and Regional Initiatives

Global recognition of diagnostics is growing. The World Health Assembly Resolution on Diagnostics (WHA 76.5), recognized diagnostics as essential to health systems and has urged governments to integrate them into national strategies, strengthen regulatory frameworks, invest in workforce capacity, and expand access through innovative delivery models.

On the continent, several initiatives are laying the groundwork for scalable and sustainable systems. Practical solutions already exist, ranging from Essential Diagnostics Lists (EDLs) that guide priority setting, AI-enabled tools that shorten turnaround times, and mobile diagnostic units that extend access to underserved areas.

Real world initiatives include:

- **WHO Model List of Essential In Vitro Diagnostics (EDL):** Supports country-level adaptation and priority setting.
- **Africa CDC's Partnership for African Diagnostics Initiative (PADI):** Builds regional manufacturing capacity and strengthens supply chains.
- **African Society for Laboratory Medicine (ASLM) LabMap:** Tracks and enhances laboratory capacity across Africa.
- **African Medical Centre of Excellence (AMCE):** Expands diagnostics and specialist care capacity in West Africa.

Challenges and Pathways for Action

Despite progress, diagnostics in Africa remain constrained by several structural challenges. Procurement and supply chains often operate in siloes, limiting economies of scale. Heavy reliance on imports exposes systems to global supply shocks and cost volatility. Regulatory delays, inconsistent quality assurance, and lack of harmonized standards slow the uptake of new technologies. In addition, limited incentives for local research, development, and manufacturing restrict innovation and sustainability.

Addressing these challenges requires a coordinated approach. The 2026 AHB Symposium will build on insights from 2025, shifting the dialogue toward practical pathways for action. The focus will be on aligning policy, financing, and partnerships to transform diagnostics from a systemic gap into a strategic enabler of resilient health systems, with measurable impact on access, efficiency, and sustainability.



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Session Objectives

The session will convene key opinion leaders and stakeholders in diagnostics, including government and policy makers, global health partners and private sector innovators, to share perspectives and chart opportunities for strengthening Africa's diagnostic systems. Discussions will highlight how stronger diagnostics drive long term impact through improved disease prevention, earlier detection, and more resilient emergency response systems.

Focus areas will include:

- **Identifying scalable and sustainable pathways** to expand access to affordable and equitable diagnostics.
- **Discussing models** for financing, investment, and market shaping to incentivize local innovation and manufacturing for diagnostics.
- **Exploring ways to strengthen** laboratory and imaging networks while fostering innovation in rapid testing and point of care testing.
- **Examining** how EDLs can be updated, maintained, and embedded in national procurement and regulatory systems.
- **Deliberating strategies** to build a competent diagnostics workforce, foster regulatory harmonization, and support operational readiness for novel technologies.

Expected Outcomes

- » **A refined and feasible pathway** to **scale up access** to affordable diagnostics across diverse settings.
- » **A clear and prioritized roadmap of actions** for national and regional actors to increase diagnostic access.
- » **Proposed mechanisms** to strengthen laboratory networks, quality systems, digital tools, and workforce capacity.
- » **Defined consensus** on policy and regulatory reforms (e.g. adoption of EDLs, harmonized IVD oversight) to accelerate technology uptake.
- » **Identification** of financing models and incentive frameworks to de-risk investments in diagnostics and support local ecosystems.
- » **Consensus from stakeholders to collaborate** across sectors (government, private sector, donors, academia) to embed diagnostics as a backbone of UHC and health security.

References

- [1] "The Lancet Commission on diagnostics: transforming access to diagnostics," The Lancet, vol. 398, no. 10315, pp. P1997-2050, 2021.
- [2] World Health Organisation, "Strengthening diagnostics capacity (WHA76.5).," WHO, 2023.
- [3] d. N. A. C. N. H. L. d. S. M. C. K. G. K. H. A. P. A. J. L. S. L. S. W. Nichols BE, "Ten-year health impact, economic impact and return on investment of the South African molecular diagnostics programme for HIV, tuberculosis and SARS-CoV-2.," BMJ Glob Health., vol. 9, no. 12, p. e015830, 2024.

