

# ASLM SPECIAL CONVENTION ON DIAGNOSTICS

Accelerating Diagnostic  
Innovation and Collaboration  
to Combat AMR and Advance  
Health Security in Africa

NOV 25 - 27, 2025, RADISSON BLU  
NAIROBI, KENYA



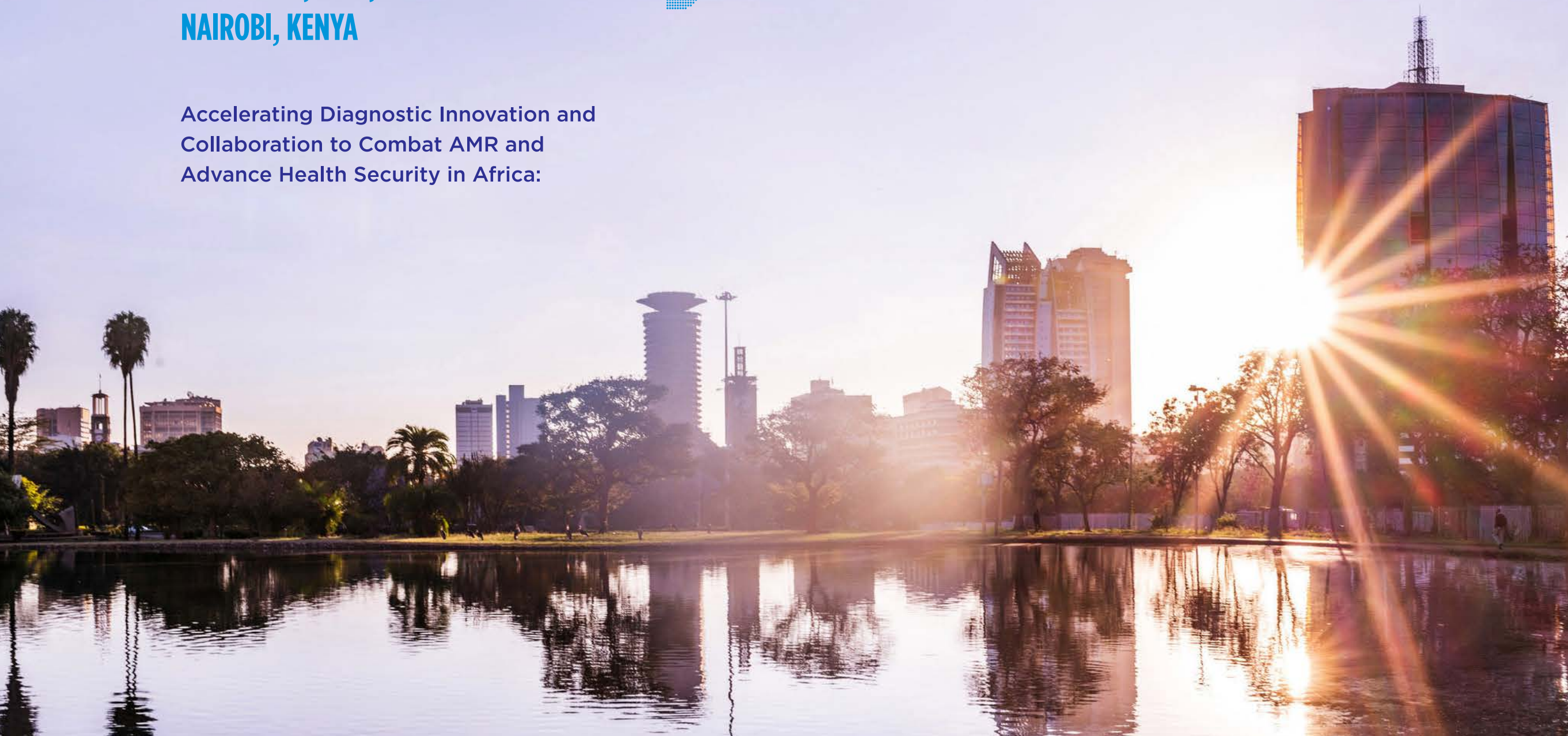
## PROJECT REPORT

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NAIROBI, KENYA



Accelerating Diagnostic Innovation and  
Collaboration to Combat AMR and  
Advance Health Security in Africa:



## THANK-YOU NOTE

The African Society for Laboratory Medicine (ASLM) extends its heartfelt appreciation for your attendance at the ASLM Special Conference on Diagnostics 2025, held under the theme **“Accelerating Diagnostic Innovation and Collaboration to Combat AMR and Advance Health Security in Africa.”**

Thank you for taking the time to join us and contribute to this important convening. Your presence, insights, and engagement greatly enriched the discussions and strengthened our collective efforts to advance diagnostic innovation and combat antimicrobial resistance across the continent.

We are grateful for your partnership and look forward to continued collaboration as we work together to enhance health security in Africa.

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INTERNATIONAL CENTRE FOR  
**ANTIMICROBIAL RESISTANCE**  
SOLUTIONS



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# List of Abbreviations:

ACDC	Africa Center for Disease Control and Prevention
AMC	Antimicrobial Consumption
AMR	Antimicrobial Resistance
AMS	Antimicrobial Stewardship
AMU	Antimicrobial Use
ASLM	African Society for Laboratory Medicine
ECSA-HC	East Central and Southern Africa Health Community
ICARS	International Center For Antimicrobial Resistance Solutions
IGS	Integrated Genomic Surveillance
NICD	National Institute for Communicable Diseases
UNGA	United Nations General Assembly
WOAH	World Organization for Animal Health

## Preface

This report summarizes the proceedings, key messages, and outcomes of the African Society for Laboratory Medicine (ASLM) Special Convention on Diagnostics, held from November 25 to 27, 2025 in Nairobi, Kenya. The convention served as a critical platform for diverse stakeholders—including policymakers, laboratory leaders, researchers, civil society representatives, and industry partners—to take stock of progress, address persistent challenges, and forge a collaborative path forward in the fight against Antimicrobial Resistance (AMR) in Africa.

The discussions reflected a unified understanding that effective diagnostics are the cornerstone of a robust AMR response. This document aims to capture the collective wisdom, commitments, and actionable strategies generated during the three-day convention to guide future investments, policies, and interventions across the continent.

# Executive Summary

The 2025 ASLM Special Convention on diagnostics under the theme: Accelerating Diagnostic Innovation and Collaboration to Combat AMR and Advance Health Security in Africa brought together leaders and experts to confront the urgent challenge of antimicrobial resistance (AMR) and the role of diagnostics in Africa’s health security, equity and universal health coverage



## Key Insights



### AMR Burden:

AMR now kills more Africans than HIV, TB, and malaria combined, with the continent carrying 22% of global AMR deaths. Diagnostic coverage remains critically low, with bacteriology testing capacity under 2%.

### People and Accountability:

Civil society, communities, and the laboratory workforce emerged as vital assets.

### Financing:

Costing studies revealed governments are already co-financing diagnostics, though often invisibly. Reliance on short term donor funding leaves systems fragile, risking “ghost laboratories” without sustainable domestic investment.

## Strategic Takeaways

AMR is rising health and economic crisis

Diagnostics must become the standard of care to end presumptive treatment.

AMR testing and surveillance must be nationally funded, predictable, and long term.

One Health integration is essential for effective AMR control.

Africa’s diagnostic future will be digital, decentralized, and data driven.

Regional manufacturing and harmonised regulation is a strategic priority for health security that can build diagnostic sovereignty and reduce dependence on imports.

## Call to Action



### Governments:

Establish national budget lines for AMR diagnostics and surveillance.

### Africa CDC & Regional Bodies:

Elevate AMR to African Union Heads of State agendas.



### Donors & Partners:

Align behind Africa's investment case with flexible, multi year catalytic funding.

### Civil Society:

Develop accountability scorecards and advocate for diagnostic access.



### Industry:

Co-create Africa appropriate diagnostic solutions through local manufacturing and service ecosystems.

# ASLM 2025 Special Convention in Numbers



**300+** attendees from over 50 countries,



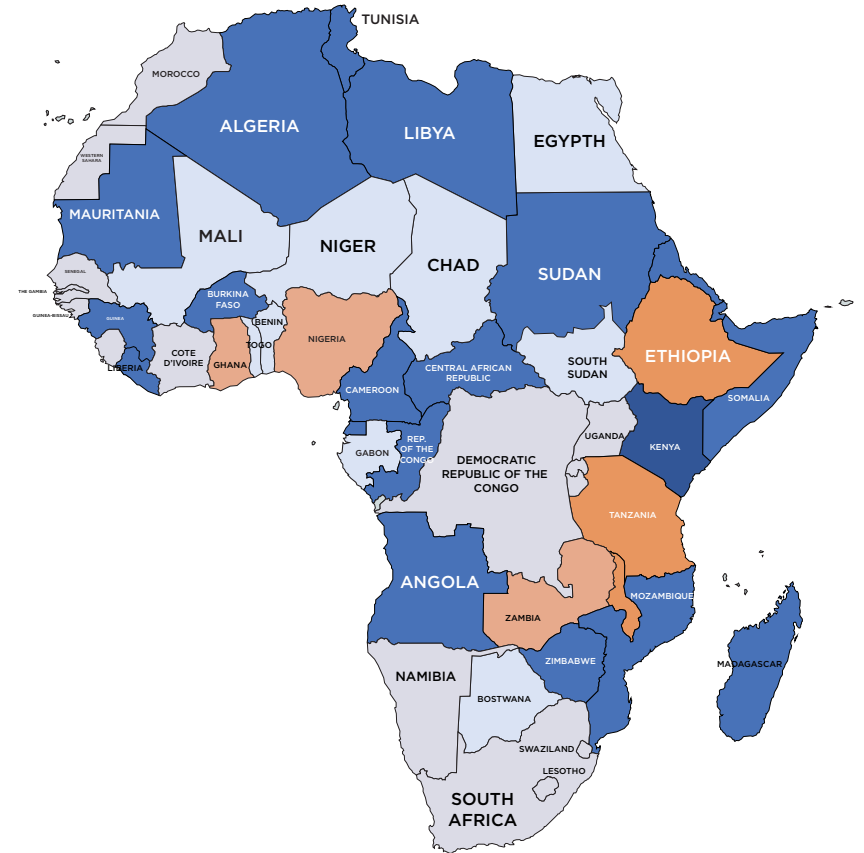
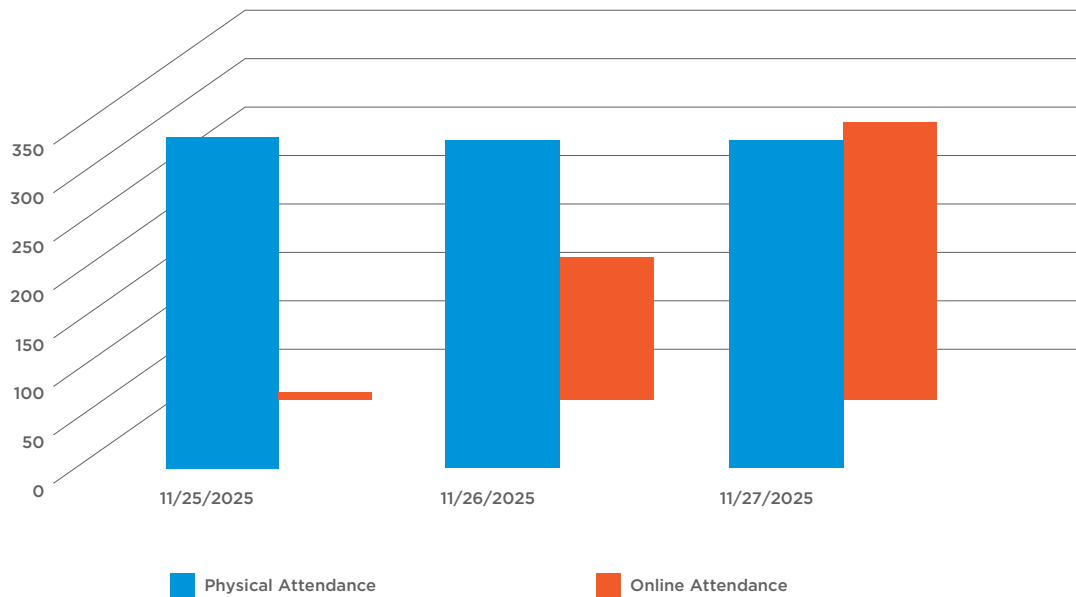
**15** exhibitors with 4 countries represented



**14** breakout rooms



**39%** (98/150) of delegates were females.



A total of **206 abstracts** were received of which 200 underwent review. 25 abstracts were selected for either oral or poster presentation



MOBILE  
LOVU

DR. PATRICK  
MATETA  
ASLM

DR. COLLINS  
OTIENO

ASLM



# 01. Introduction

The African Society for Laboratory Medicine (ASLM) is a pan-African organization dedicated to achieving a healthier Africa by increasing access to quality laboratory services for all. Since its establishment in 2011, ASLM has collaborated with governments, regional bodies, and global partners to strengthen laboratory systems and networks, ensuring that Africa's priorities are reflected in the global diagnostic agenda.

In 2024, ASLM convened the First Special Convention on Diagnostics, which underscored its commitment to advancing the diagnostic and laboratory agenda among policymakers. The convention highlighted the vital role of civil society in driving progress, launched a sub-community of practice on procurement and supply management for genomics, and issued a call to action urging governments to strengthen laboratory systems and networks across Africa to expand access to diagnostics.

Building on this momentum, the 2025 Convention advances Africa's leadership under the theme

## “Accelerating Diagnostic Innovation and Collaboration to Combat Antimicrobial Resistance (AMR) and Advance Health Security in Africa.”

AMR represents a growing global health threat that undermines decades of progress in controlling infectious diseases. In Africa, the challenge is compounded by limited diagnostic capacity, inadequate surveillance systems, and insufficient funding, which hinder timely detection and effective response to resistant infections.

<sup>1</sup> A landmark study published in *The Lancet* (2022, updated 2024) estimated that 1.14 million deaths worldwide were attributable to bacterial AMR in 2021, while 4.71 million deaths were associated with bacterial AMR.

<sup>2</sup> According to a comprehensive review in the *American Journal of Tropical Medicine and Hygiene* (2025), Africa bears one of the highest AMR mortality burdens globally, with fragile health systems and limited access to diagnostics exacerbating the crisis. Forecasts suggest that without urgent action, AMR could cause 10 million deaths annually by 2050, surpassing cancer as a leading cause of death. In sub-Saharan Africa, AMR was responsible for approximately 255,000 deaths in 2019, with Western sub-Saharan Africa recording the highest mortality rate worldwide. The mortality burden in East Africa is also significant, with pooled analyses showing tens of thousands of deaths annually linked to resistant bacterial infections. In sub-Saharan Africa, limited financial resources in low- and middle-income countries intensify the challenge, often forcing dependence on poor-quality medicines and leading to inadequate treatment outcomes.

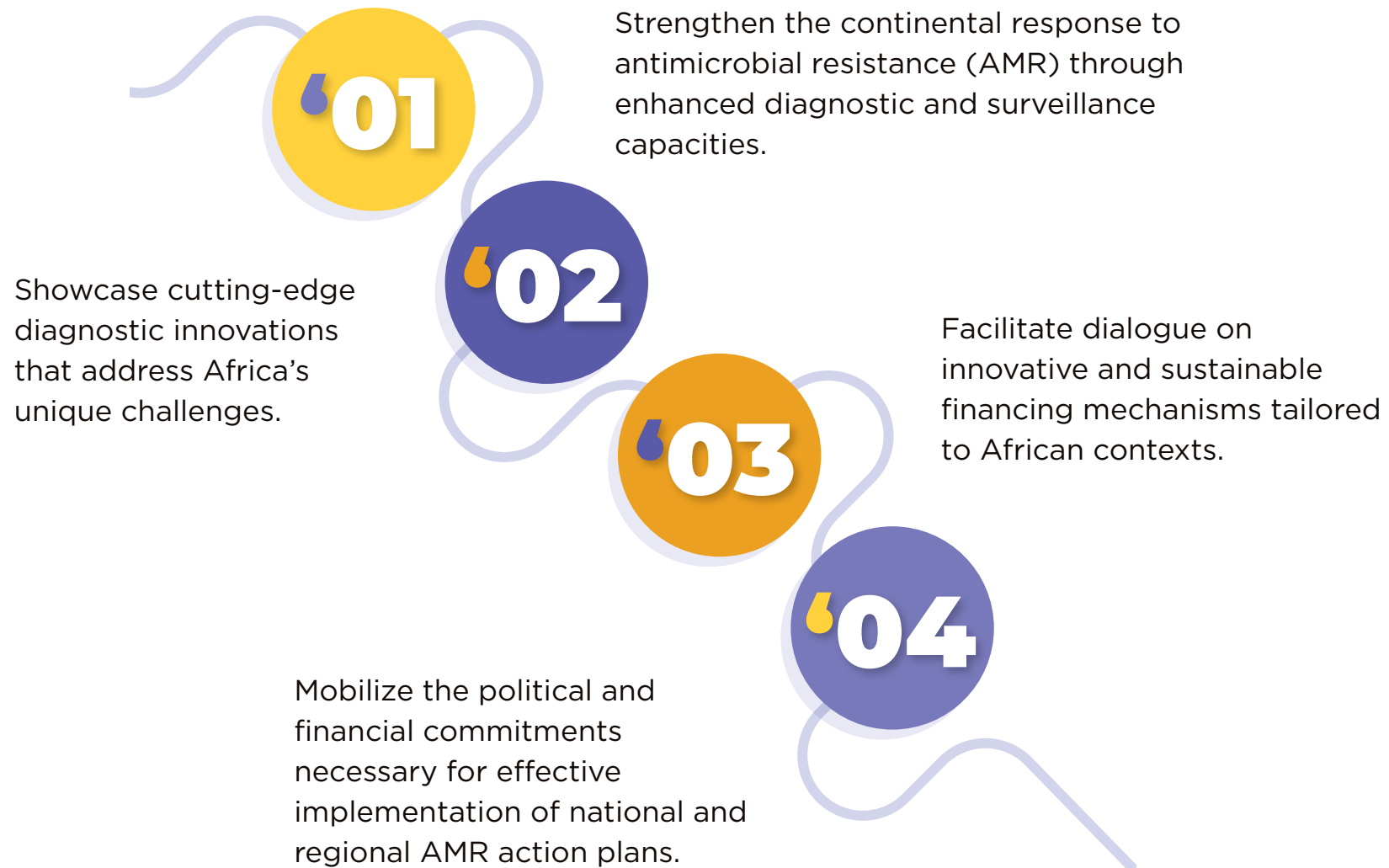
ASLM's interventions translate global commitments into African-led action, operationalizing the World Health Assembly's 2022 Declaration on Diagnostics and the United Nations General Assembly's 2024 Political Declaration on AMR. Through initiatives such as external quality assessment (EQA) programs, the AMR Knowledge Hub, the MAAP Store visualization platform, and workforce development via professional qualifications and fellowships, ASLM has been instrumental in strengthening diagnostic services and AMR surveillance across the continent.

<sup>1</sup> Global burden of bacterial antimicrobial resistance 1990–2021: a systematic analysis with forecasts to 2050. Naghavi, Mohsen et al. *The Lancet*, Volume 404, Issue 10459, 1199 - 1226

<sup>2</sup> The *American Journal of Tropical Medicine and Hygiene* 113, 2; [10.4269/ajtmh.25-0035](https://doi.org/10.4269/ajtmh.25-0035)

## Objectives

Against this backdrop, the objectives of 2025 ASLM Special Convention on Diagnostics were:



**Amplify African Voices and Priorities:** Present and disseminate the African Union Landmark Report on AMR to galvanize a unified continental response aligned with global mandates.

**Strengthen Diagnostic Capacity:** Address gaps in infrastructure, technology, and workforce to improve accuracy and timeliness of AMR detection across Africa.

**Showcase ASLM's and other stakeholders interventions of combating AMR** Highlight flagship initiatives such as the EQA business plan for quality assurance, the AMR Knowledge Hub fostering data sharing and collaboration, the MAAP Store for visualization and analytics, and professional development programs enhancing the laboratory workforce.



**Promote Sustainable Financing:** Analyze current financing landscapes, explore innovative health financing models (e.g., blended finance, public-private partnerships), and build a business case for scaling AMR surveillance sustainably.

**Mobilize Commitments:** Engage governments, donors, and the private sector to pledge funds and political will toward achieving at least 60% of African countries with fully funded AMR plans by 2030, in line with the target of raising US\$100 million for catalytic investments.

The Convention convened a diverse One Health audience—spanning ministries of health, agriculture, and environment; regional bodies such as Africa CDC, WHO AFRO, WOA, and ECSA-HC; global partners including UKAID, FAO, the World Bank, and the Fleming Fund; as well as donors, civil society organizations, and private sector partners. This created unparalleled opportunities for knowledge exchange, high-level networking, and impactful collaboration.

The 2025 Convention marked a pivotal moment for Africa to lead the global AMR response. By strengthening diagnostics, mobilizing resources, and amplifying African voices, ASLM and its partners are charting a path toward resilient health systems and a healthier future for all.



## 02. The State of the Antimicrobial Resistance Fight and Diagnostics

### 2.1 Opening Ceremony & High-Level Commitments

The opening ceremony featured presentations from global and regional leaders that reinforced the critical need for action against Antimicrobial Resistance (AMR) and the central role of diagnostics. In his opening remarks, the ASLM CEO, Mr. Nqobile Ndlovu set an urgent and decisive tone for the gathering. He described AMR as a “silent pandemic” surpassing HIV, malaria, and TB in mortality, with severe economic and security consequences. He emphasized that AMR is no longer a distant threat for Africa—it is already here, already claiming lives, and already outpacing our collective response. Our CEO reminded delegates: **“The time for talk is over. The time to accelerate begins now. The time is now.”**

If treatment is the visible face of medicine, diagnostics are its hidden engine—and in many African settings, that engine is weak or missing, he said. Without access to quality-assured bacteriology and reliable antimicrobial susceptibility testing, clinicians are forced to prescribe blindly. The consequences include overuse of broad-spectrum antibiotics, undertreatment of severe infections, and escalating selection pressure that fuels AMR.

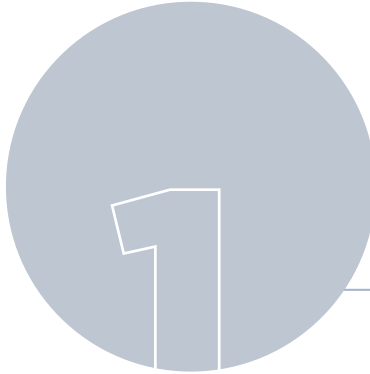
ASLM CEO stated: **“For too long, we have fought AMR without diagnostics. It is like entering a battlefield blind. This is unacceptable, and it must end.”**

Diagnostics also underpin surveillance. A single laboratory result is just a data point, but when generated in a quality-assured laboratory, shared through national bacteriology networks, and integrated into continental platforms such as ARMSNet, it becomes part of a real-time early-warning system—a **“nervous system”** capable of detecting resistant outbreaks, guiding stewardship, and informing policy.



Figure 1: Antimicrobial Resistance in Africa, in Numbers

Mr Ndlovu indicated that ASLM is shaping its AMR response around three non-negotiable pillars:



**Quality-Assured National Bacteriology Networks:**

Within five years, every member state should establish a functional, quality-assured national bacteriology network—not as a pilot, but as a permanent component of the health system. This requires standardized methods, external quality assessment, trained staff, and strong clinical linkages.

**Equity as the Benchmark of Innovation:**

Innovation must be measured by reach, not brilliance. Sophisticated AI-supported tools or near point-of-care tests mean little if they never reach rural health centres or district hospitals. ASLM's training, quality systems, and digital platforms are designed with last-mile access in mind, ensuring that innovation benefits all, not just national reference facilities.



**Connected AMR Data as a Continental Shield:**

Fragmented laboratory outputs must be transformed into connected, real-time intelligence. Working with Africa CDC and partners, ASLM has published AMR surveillance guidance to harmonize how countries collect, manage, and analyse AMR, antimicrobial consumption (AMC), and antimicrobial use (AMU) data. The vision is clear: AMR data must move fast enough to save lives, not simply fill reports.

The ASLM CEO called for a fundamental strategic shift and outlined a core framework for action, establishing three essential pillars:

**Precision over Presumption:** Move away from presumptive treatment. Diagnostics must become the standard of care across Africa, requiring the establishment of robust national bacteriological networks.



**Equity as the Benchmark for Success:** Technological advances are irrelevant if they don't reach rural and underserved communities. Success must be measured by equitable access for all laboratories.



In his remarks, **Dr. Patrick Mateta, Board Chair of ASLM and also CEO and Managing Partner at Vineyard Healthcare Solutions**, emphasized the importance of advancing diagnostic medicine in the post-COVID era. He underscored that the progress achieved through scientific breakthroughs must be matched by shared responsibility and collaboration across sectors, urging the community to unite in translating innovation into tangible impact. He underscored the foundational role of diagnostics in advancing Africa's health systems, describing it as "the gateway to healing, where data becomes insight, and early detection becomes the difference between life and death."

Dr. Mateta highlighted significant global progress in AI, genomics, and digital health, while drawing attention to persistent challenges in equity, access, and implementation across the continent. He stressed the urgency of building sustainable diagnostic systems and ensuring that innovations are accessible to underserved and rural communities. He encouraged delegates to approach the convention with curiosity, imagination, and shared responsibility, noting that Africa's next milestone in diagnostics will be shaped not by individual achievements but by collective action and unity of purpose.

Dr. Mateta concluded by affirming that this convention must serve as a catalyst for meaningful, lasting impact driven by partnership, innovation, and resilience.

**Connected Data as a Continental Shield:** Implement real-time AMR surveillance. Shared data acts as an early warning system to protect citizens and guide effective public health responses.





**Prof. Sujith J. Chandy, Executive Director of International Center For Antimicrobial Resistance Solutions (ICARS),** delivered an insightful address during the opening ceremony of the ASLM Special Convention on Diagnostics. He highlighted the fundamental pillars of healthcare—diagnosis, treatment, and communication—and emphasized that collective expertise is indispensable in addressing AMR. He stressed that ensuring equitable access to diagnostics requires collaboration across disciplines and sectors, underscoring that only through shared responsibility can Africa effectively mitigate the growing threat of AMR. Prof. Chandy highlighted the urgent need for diagnostics that are accessible, affordable, and supported by strong infrastructure, quality systems, and skilled expertise. He underscored the realities faced in many communities, where patients often travel long distances, and clinicians must make rapid decisions with limited diagnostic tools. He emphasized that for AMR to be effectively mitigated, Africa must strengthen diagnostic capacity not only for individual patient care but also for robust surveillance systems. He referenced the AU AMR Landmark Report and the United Nations General Assembly (UNGA) high-level meeting on AMR as important platforms that must now translate into action. He reaffirmed ICARS' commitment to context-specific, cost-effective, and sustainable AMR solutions across the One Health spectrum, inviting all partners to join in this critical moment to protect the continent from the growing threat of AMR.



**Dr. Kebede Yenew, Acting Director of the Center for Laboratory Diagnostics and Systems at Africa CDC,** outlined the significant threat that AMR poses to Africa, warning that it undermines hard-won gains in the fight against HIV, tuberculosis, and malaria. He emphasized that AMR is a universal challenge requiring collective, grassroots action to safeguard public health. He underscored that antimicrobial resistance is rapidly evolving into a health, development, and economic crisis, indicating a potential to shrink global GDP by up to 3% by 2030 if left unaddressed. Dr. Yenew highlighted the strides made across the continent through national AMR action plans, integrated surveillance initiatives, and regional policy frameworks, while emphasizing the critical gaps that remain in

diagnostic capacity, data systems, and sustainable investment. He reaffirmed that diagnostics lie at the heart of AMR control, enabling accurate treatment decisions, reducing inappropriate antimicrobial use, and supporting robust surveillance systems. Dr. Yenew called for a shift from high-level commitments to practical, community-driven interventions that reduce AMR risk, strengthen prescribing practices, and equip frontline health workers with the tools they need to respond effectively. He also reiterated Africa CDC's commitment to advancing coordinated action across human, animal, and environmental health sectors through a unified One Health approach.

The former Minister of Health, Republic of Malawi, Honorable Khumbize Chimponda, who is now serving as an AMR Champion, provided a country-level perspective, cautioning that progress in HIV and TB control is increasingly at risk due to AMR. She highlighted critical gaps in rural healthcare access and infrastructure, while noting the dangers of over-reliance on restrictive donor funding that limits sustainable solutions.

Representing the Principal Secretary, State Department for Public Health and Professional Standards, Mary Muthoni, Director for Public Health Dr. Stephen Muleshe welcomed delegates. He reaffirmed Kenya's commitment to placing diagnostics at the core of Primary Health Care (PHC), Universal Health Coverage (UHC) and national health security. Dr. Muleshe highlighted Kenya's progress over the past decade through expanded laboratory networks, strengthened genomic and AMR surveillance, integration of diagnostics into PHC, and increased domestic investment in health emergency preparedness. Dr. Muleshe commended ASLM for its leadership and expressed Kenya's strong support for institutionalizing this Convention as a permanent platform for policy alignment, innovation sharing and strengthening Africa's diagnostic ecosystem.

***"A stronger and more interconnected Africa begins with stronger diagnostics and Kenya remains committed to leading and collaborating toward this shared vision."*** He said.

## 2.1.1 Key Messages

AMR is one of the defining health and development challenges of our generation. In Africa, diagnostics and data will determine how many lives we lose—and how many we save. The following messages recurred throughout the session:

- **Paradigm Shift Needed:** A recurring theme was that a decade of declarations has yielded little progress; a fundamental change in strategy is now required.
- **Diagnostics as the Cornerstone:** There was unanimous agreement that quality, accessible diagnostics are the non-negotiable foundation for appropriate treatment, effective surveillance, and containing AMR.
- **From Innovation to Impact:** The focus must shift from developing new technologies to ensuring their deployment and sustainability in the field, especially in remote areas.
- **Health System Strengthening:** The fight against AMR cannot be won through vertical programs alone. It requires integrated efforts to strengthen entire health systems, including infrastructure, water, sanitation, and the healthcare workforce.
- **African Leadership and Platforms:** The convention itself was positioned as a platform for African countries to review progress, strengthen accountability, and drive ownership of the continent's health future.

The resounding message was that "The Time is Now" to reignite the diagnostic flame, facilitate correct diagnosis, and use antibiotics appropriately to safeguard the future.

## 2.1.2 Identified Gaps and Challenges

Africa continues to face a series of systemic challenges that intensify the threat of antimicrobial resistance. Health systems remain misaligned, relying heavily on short-term and restrictive donor funding rather than long-term, sustainable domestic investment. This financial

imbalance undermines efforts to strengthen resilience and capacity. At the same time, rural communities suffer from limited access to basic diagnostic services, a gap that fuels widespread antibiotic overprescription and poor treatment outcomes. Surveillance systems are fragmented and underfunded, leaving policymakers without the reliable data needed to guide effective interventions. Infrastructure deficiencies further compound the problem, as many health facilities lack essential infection prevention and control measures, as well as adequate water and sanitation, creating conditions that accelerate the spread of AMR. Human resource constraints also weaken healthcare delivery, with limited consultation time and the absence of diagnostic tools at the point of care reducing the quality and accuracy of treatment. Together, these challenges highlight the urgent need for coordinated investment, innovation, and collective action to safeguard Africa's health systems against the growing AMR crisis.

## 2.1.3 Call to Action

The session concluded with a powerful and unified call to action for all stakeholders:

Ministers and policymakers must embed diagnostics and AMR surveillance into protected budget lines and national strategies.

Industry and innovators must treat African institutions as co-creators, designing diagnostics and digital tools that fit African realities—power, connectivity, workflow, and cost.

Funders and global partners must move beyond short grant cycles to long-term system strengthening, supporting the pillars of quality, data, and workforce that make innovation meaningful.

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Accelerating Diagnostic Innovation and Collaboration to Combat AMR and Advance Health Security in Africa:

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## PANEL SESSION

THE AFRICAN AGENDA ON AMR AND DIAGNOSTICS: FROM PROGRESS TO FUTURE SURVEILLANCE



Taikno Maruta,  
Regional Director



Josefa Mungu,  
Regional Director



Nyambura Moremi,  
Africa CD



Nkomo Chonga



Evelyn Wasangara



Masinnee Govender,  
University of Pretoria



## 03. The African Agenda on AMR and Diagnostics: From Progress to Future Surveillance

The plenary examined Africa's achievements and remaining challenges in implementing the World Health Assembly (WHA) 76.5 Declaration on Diagnostics, antimicrobial resistance (AMR) containment, and One Health approaches. Discussions underscored the central role of diagnostics in advancing Universal Health Coverage (UHC) and strengthening health security, while drawing attention to ongoing barriers related to access, affordability, and governance. The sessions addressed key themes including diagnostic capacity, the burden of AMR, regional antimicrobial stewardship (AMS), innovation, and emerging policy directions.

### 3.1 Presentations by FIND, Africa-CDC, ECSA-HC, ASLM, University of Pretoria and Global Health Consultancy

Professor Joseph Ndung'u – the Regional Director of FIND in Kenya and Chancellor of Jomo Kenyatta University of Agriculture and Technology (JKUAT) presented on Progress and gaps in Implementing WHA Declaration on Diagnostics in Africa. He indicated that diagnostics are the foundation of Universal Health Coverage (UHC), patient safety, antimicrobial resistance (AMR) containment, and global health security (GHS). Dr Ndung'u called for accelerated progress on the 15 commitments of the World Health Assembly resolution on Diagnostics. He highlighted that the WHA76.5 resolution represents a critical political commitment to closing these gaps, ensuring that diagnostics become a cornerstone of stronger, more equitable health systems across the continent. Without reliable testing, treatment, prevention, and surveillance efforts are effectively blind, leaving health systems vulnerable. Across Africa, significant gaps remain in access, quality, and affordability of diagnostic services. Only 30% of health facilities are equipped with the necessary instruments or reagents

to perform even basic tests, leaving most patients without reliable diagnostic support. Most countries have yet to establish National Essential Diagnostic Lists, a key policy tool for guiding equitable access to essential tests. He emphasized that workforce capacity, local manufacturing, and national Essential Diagnostics Lists are foundations of stronger, more resilient diagnostic systems. Alarming, just 1.3% of laboratories across the continent currently have access to bacteriology testing, underscoring the urgent need for investment in diagnostic infrastructure, policy frameworks, and workforce development to close these gaps. He indicated that the Global Diagnostic (DxAMR) collaborative was launched in Ghana earlier this year, and its main objective is to ensure diagnostics have a far greater role in tackling AMR than they have to date.



**Dr. Nyambura Moremi AMR Technical Officer from Africa CDC** presented on the Africa Union Landmark Report on AMR that aims at elevating African Priorities for a stronger continental response. It also recommends concrete actions in the African context, strengthens the African Union's position to advance multistakeholder initiatives on AMR while building political will to stimulate equitable funding opportunities. She indicated that in October 2025, continental stakeholders met and generated consensus on top continental access priorities for combating AMR, these being

- i. Strengthening governance and stewardship systems,
- ii. Expanding diagnostics and innovation ecosystems and lastly
- iii. Building sustainable financing, procurement, and manufacturing pathways to enhance self-sufficiency and supply chain resilience.

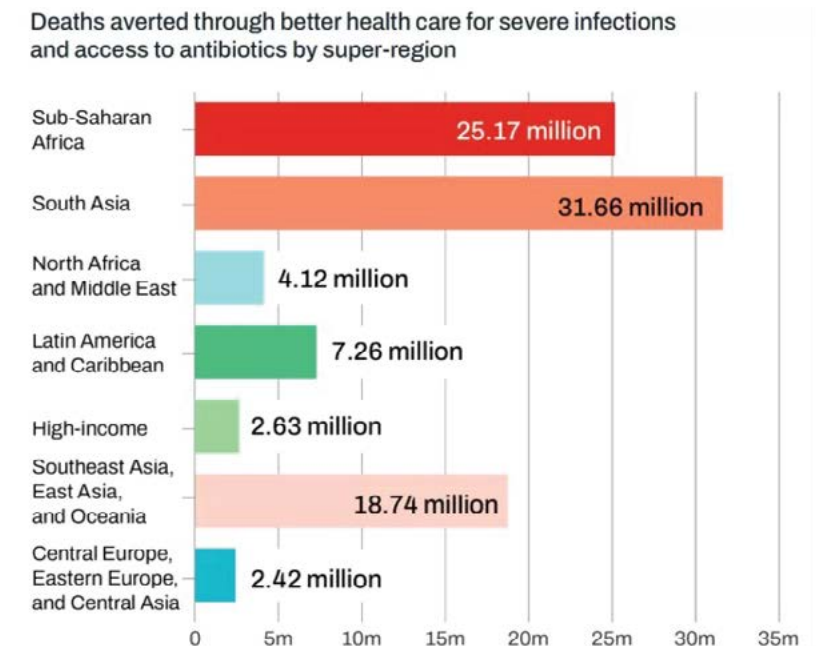
She also presented findings from Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP) project , which showed that only 1.3% of the biology laboratories across 14 countries in Africa perform bacteriological testing. She also highlighted that 60% of laboratories performing antimicrobial susceptibility testing (AST) conduct a small number of tests each year, limiting the understanding of AMR patterns, Figure 2.



**Dr. Evelyn Wesangula - Senior Antimicrobial Resistance Control Specialist ECSA-HC.** Shared experience on regional AMS guidelines of the ECSA region. The guidelines were developed to address critical gaps in the region’s response to AMR and antimicrobial stewardship (AMS), that included the absence of context-specific guidelines, limited surveillance capacity, inefficient AMR/AMU/AMC systems, and weak multi-sectoral coordination in countries. She mentioned that evidence shows that up to 92 million deaths could be prevented between 2025 and 2050 through improved healthcare for severe infections and expanded access to antibiotics, underscoring the urgency of practical solutions.



**Figure 2:** Summary of findings from Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP).



**Figure 3:** Estimated number of deaths that can be averted between 2030-2050 through better healthcare for severe infections and access to antibiotics. Source: <https://www.healthdata.org/research-analysis/library/global-burden-bacterial-antimicrobial-resistance-1990-2021-systematic>

The Blueprint provides a stepwise, feasible framework for establishing and scaling AMS programmes at national, sub-national, and facility levels, translating global commitments into actionable steps tailored to African health systems. Furthermore, it covers the background and rationale for AMS in ECSA-HC region, highlighting burden data and health system gaps, and sets out four core components across the product life cycle: research and development, regulation and manufacturing, supply chain, and diagnostics with responsible use. The guidance also defines the essential elements of AMS programmes—leadership, governance, accountability, drug expertise, reporting, education, communication, and quality improvement—while offering practical interventions at system, facility, and community levels. A stepwise approach supports countries at different readiness levels, complemented by monitoring, evaluation, resource mobilization, and risk management strategies. Importantly, the guidelines provide a harmonized regional standard that countries can adapt, avoiding fragmented approaches and linking AMS to broader health system building blocks such as governance, supply chains, laboratories, human resources, and financing. They help countries prioritize feasible interventions by level of care and resource envelope, while offering ready-made tools, templates, and examples to guide implementation. By strengthening cross-country comparability and peer learning, the Blueprint reinforces alignment with the African Union AMR Framework and WHO AMS guidance. She indicated that the implementation model channels regional funding through ECSA-

HC with clear accountability, enabling countries to define their national and regional priorities. Technical assistance supports country-led activities, while national capacity is leveraged to implement related priorities, ensuring ownership and sustainability. Significant achievements have been realized through this project. A regional study evaluating the implementation of AMS programs in the ECSA region reported baseline scores for AMS core elements ranging from 34% to 79%, which improved markedly to 58% to 92% at endline, Figure 4. To sustain momentum, a Community of Practice was established in August 2023, with annual meetings to support the implementation of National Action Plans on AMR. This collaborative platform ensures that countries can share experiences, strengthen capacity, and accelerate progress toward a unified continental response to AMR.

Countries	Assessment	Presence of DTC, ICC or AMS	DTC Functionality	Leadership Commitment	Accountability & responsibility	AMS Actions	Education & Training	Monitoring & Surveillance	Reporting & feedback	Average Score
Rwanda	Baseline	73	57	22	29	43	28	44	27	40
	Endline	91	70	51	63	70	68	61	45	65
	% difference	18	13	29	34	27	40	17	18	25
Tanzania	Baseline	71	53	37	29	58	25	35	19	41
	Endline	94	80	73	67	77	46	60	42	67
	% difference	23	27	36	38	19	21	25	23	27
Malawi	Baseline	92	70	69	75	58	69	71	49	69
	Endline	95	77	72	79	74	75	79	70	78
	% difference	3	7	3	4	16	6	8	21	9
Zambia	Baseline	91	49	56	72	50	54	76	46	62
	Endline	98	81	76	90	88	90	86	71	85
	% difference	7	32	20	18	38	36	10	25	23
Mozambique	Baseline	67	62	53	68	54	33	52	28	52
	Endline	83	85	57	78	67	35	64	64	67
	% difference	16	23	4	10	13	2	12	36	15
Average Scores	Baseline	79	58	47	55	53	42	56	34	53
	Endline	92	79	66	75	75	63	70	58	72

**Figure 4:** Antimicrobial Stewardship :A Regional Approach to Strengthening the Implementation of Sustainable Antimicrobial Stewardship Programs in Five Countries in East, Central, and Southern Africa- <https://doi.org/10.3390/antibiotics14030266>



**Mr Anafi Mataka, ASLM Head of Division,** emphasized that the moment is both urgent and full of opportunity. He underscored that diagnostics are a cornerstone of Universal Health Coverage (UHC) and emergency preparedness. He further noted that Africa is navigating new threats and funding shifts, while simultaneously leading a new era of ownership and innovation. In his remarks, Mr. Anafi emphasized that the guiding approach for the Special Convention is Dialogue → Solutions → Commitments. The program began with an exploration of the current state of the AMR fight, focusing on policies, the integration of One Health principles, and insights from ministers and partners through high-level panels. This was followed by discussions on sustainability and financing, where sessions will examine the economic cost of AMR, the broader business case for investment, opportunities for long-term funding, and the role of networks, quality systems, and digital tools, complemented by an industry forum. The final segment centered on demand creation and accountability, highlighting the role of civil society, the importance of data and evidence in shaping decisions, and a regional stakeholders' engagement and prioritization workshop. Together, these dialogues were designed to generate practical solutions and secure commitments that will strengthen Africa's collective response to AMR.



**Dr Vashnee Govender, University of Pretoria, Faculty of Veterinary Services** presented on “The AMR & Diagnostics Nexus under One Health”. In her remarks he mentioned that improving cross-sectoral AMR diagnostic capacity in Africa requires the establishment of quality standards across medical, veterinary, food safety, and environmental laboratories. Strengthening collaboration between these sectors will facilitate the sharing of AMR resources and expertise, while the identification and development of sentinel surveillance sites will provide reliable data for monitoring resistance trends. Ultimately, these efforts aim to enable centralized reporting within integrated AMR surveillance systems, supporting

evidence-based risk assessments and risk management interventions. He further acknowledged that challenges in AMR diagnostics within animal health remain significant, ranging from long turnaround times, to concerns over the quality of laboratory results, lack of accreditation, and low proficiency testing scores. Limited accessibility to both laboratories and antimicrobials, coupled with the absence of harmonized AMR breakpoints, further complicate effective diagnosis and response. Looking ahead, the future of AMR diagnostics in a One Health framework will depend on advanced tools capable of rapidly identifying pathogens and resistance mechanisms with high accuracy, including point-of-care testing, Matrix-Assisted Laser Desorption/Ionization - Time of Flight (MALDI-TOF), next-generation sequencing, and AI-powered analytics—particularly their adaptation to low-resource settings. Ultimately, connected diagnostics and integrated AMR surveillance across medical, veterinary, food safety, and environmental sectors must encompass both resistant microorganisms and antimicrobial residues to provide a comprehensive shield against AMR.



**Dr Nkatha Githonga, AMR Global Health Consultant,** presented on AMR Surveillance Guidance for the African Region: From fragmented data to a harmonized continental framework - The Blueprint. The Africa AMR Surveillance Guidance bridges global and regional fragmentation by creating a coherent continental framework. Prior to the Blueprint, surveillance of AMR, AMC, and AMU operated in silos, each relying on different tools and methods. This lack of alignment led to inconsistent reporting to WHO's Global Antimicrobial Resistance Surveillance System (GLASS), limiting regional comparability. Progress has been notable but uneven. Of the 47 WHO AFRO countries, 44 (94%) are now enrolled in GLASS, and 27 (57%) reported AMR data in 2023—up significantly from just 10 enrolled and 5 reporting in 2016. Yet data completeness remains a challenge; in 2023, only 16 countries (36% of those reporting) performed

antimicrobial susceptibility testing (AST) on at least 80% of blood culture isolates, underscoring variability in testing capacity. AMC surveillance shows similar patterns: 21 countries are enrolled (45% of WHO AFRO), with about half reporting annually, Figure 5 .

Seven “core” countries have maintained consistent reporting since joining, but sustained and comprehensive submission continues to vary. These gaps highlight the critical role of the Africa AMR Surveillance Guidance in driving data quality and routine reporting.

### Progress in AMR Reporting and AST Coverage in Africa (2016–2023)

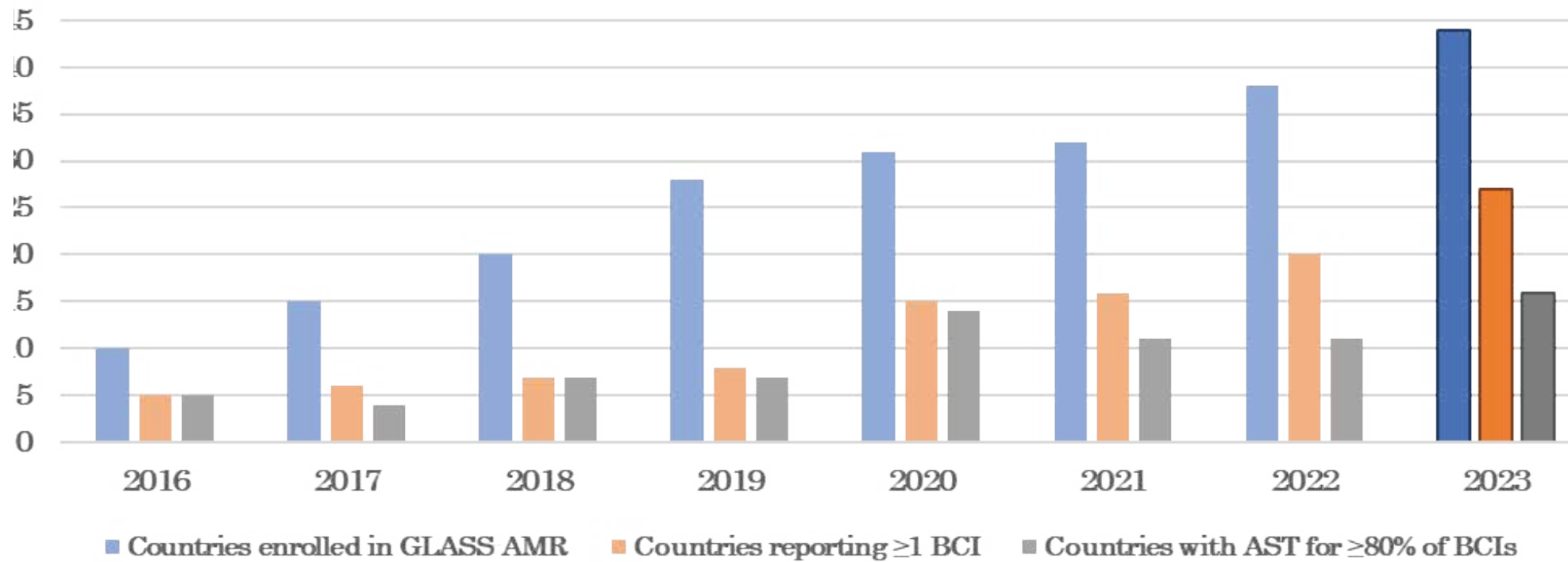
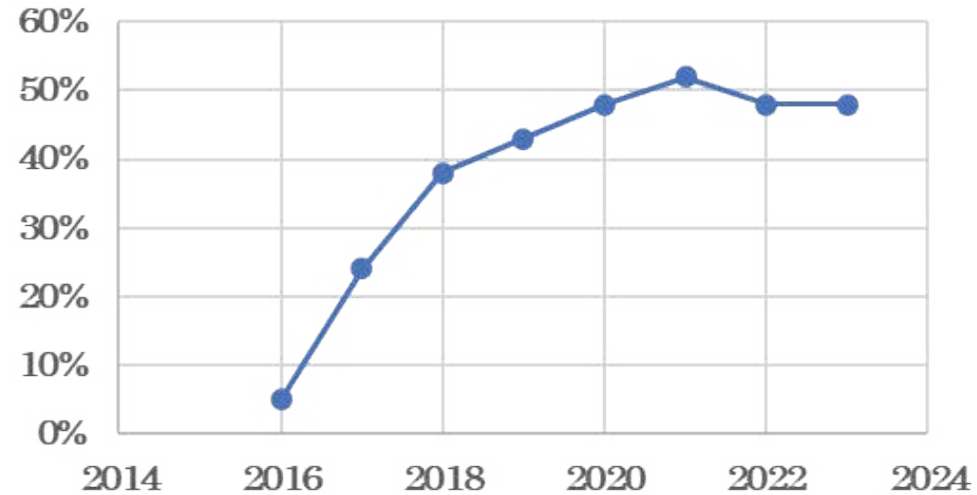
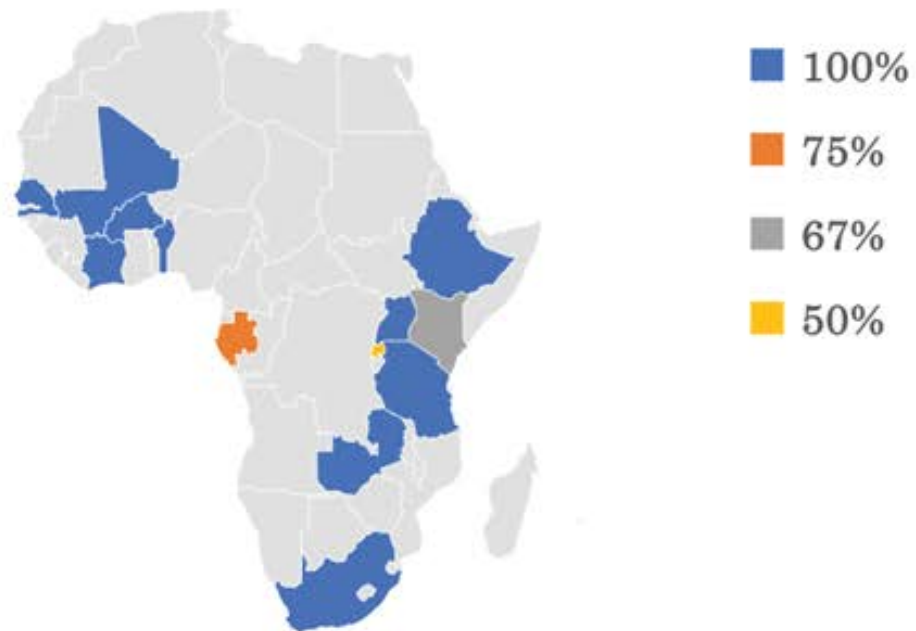


Figure 5 Reporting Consistency in Africa(2016-2023)

Percentage of Enrolled Countries (21)  
Reporting AMC Data (2016-2023)



AMC Reporting Consistency  
(Active period since year of 1st report)



The Blueprint provides a unified regional response by integrating AMR, AMC, and AMU surveillance into one harmonized system. Anchored in WHO GLASS standards but adapted to Africa's contexts, it offers standardized methodologies, data flow models, and analytical templates. This approach enables Africa to speak with a single surveillance voice, ensuring regional comparability while strengthening country ownership. As highlighted in the remarks, the Blueprint has already catalyzed evidence generation, skills development, and the automation of knowledge hubs—laying the foundation for a stronger, more coordinated continental response to AMR.

### 3.2 Key Messages

- **Diagnostics are foundational to UHC, PHC, and health security**, yet only 30% of facilities can perform basic tests, underscoring a major access gap.
- **AMR poses an urgent continental threat**, accounting for 22% of global AMR-related deaths and risking a 5% annual GDP loss by 2050, demanding stronger AMS programmes and coordinated regional action.
- **Policy and innovation are accelerating**, with National Essential Diagnostics Lists, AI-enabled analytics, Next Generation Sequencing, MALDI-TOF, digital quality systems, and pooled procurement platforms reshaping diagnostic access and surveillance.
- **A One Health, multisectoral approach is essential** to address AMR comprehensively across human, animal, and environmental health systems.
- **Sustainable financing, local manufacturing, and high-quality data systems** are critical to build resilient supply chains, ensure accountability, and drive evidence-based decision-making.

### 3.3 Identified Gaps and Challenges

The following gaps and challenges were noted regarding progress to AMR Surveillance

- **Slow translation of policy into practice**, resulting in delayed implementation of national strategies and limited impact at facility level.
- **Persistent workforce shortages and weak quality management systems**, undermining the reliability and consistency of diagnostic services.
- **Limited availability of diagnostics at the primary health care level**, restricting early detection and timely treatment for priority conditions.
- **Heavy dependence on imported diagnostics and constrained local manufacturing capacity**, exposing countries to supply disruptions and high procurement costs.
- **Fragmented supply chains and complex regulatory pathways**, leading to delays in product registration, distribution, and market entry.
- **Insufficient demand creation and low political prioritization for AMR diagnostics**, slowing adoption of essential tools for surveillance and stewardship. Long turnaround times for veterinary diagnostics and lack of harmonized standards, weakening One Health surveillance and cross-sectoral response capabilities.

### 3.4 Call to Action



#### Strengthen Diagnostic Systems Across All Levels of Care

- Develop and implement national diagnostics strategies and Essential Diagnostics Lists.
- Integrate diagnostics into Universal Health Coverage benefit packages.
- Invest in primary health care infrastructure and affordable point of care testing.
- Advance Antimicrobial Stewardship and One Health Integration



#### Strengthen AMS programmes using regional guidance and harmonized M&E frameworks

- Institutionalize One Health approaches in AMR containment strategies.



#### Accelerate Innovation, Local Production, and Regulatory Alignment

- Align regulatory frameworks to support local manufacturing and diagnostic innovation.
- Develop reimbursement and incentive models that expand access to diagnostics and AMR solutions.



#### Build Collaborative, Data Driven Regional Health Security

- Foster regional collaboration for pooled procurement, surveillance, and shared learning.
- Elevate African priorities in global AMR governance platforms.



#### Invest in People, Digital Systems, and Accountability

- Build workforce capacity and strengthen digital health systems for real time decision making.
- Enhance accountability through civil society engagement and evidence based policy action.



# 04. Empowering Laboratory Leaders: Building the Next Generation of Diagnostic Leadership in Africa

This session unpacked commitments, focusing on solutions for sustaining diagnostic capacity, service continuity, and resilience amid funding transitions. In his opening remarks, Dr Talkmore Maruta, ASLM Director of Programs mentioned that the global public health funding environment is shifting rapidly. He went on further to say, many African countries are experiencing reductions in external support for laboratory systems, diagnostics, and disease surveillance. As donor priorities evolve, countries are under increased pressure to expand domestic financing and assume greater ownership of laboratory system sustainability. At the Africa CDC Laboratory Convention Symposium, the LabDF convened a roundtable discussion that culminated in two major commitments within the **“Resilience in Diagnostics and Genomics for Public Health Security in a Shifting Funding Landscape”** Call-to-Action:

## Sustainable Domestic and Regional Financing

Commit to progressively increasing domestic investments in diagnostics, laboratory networks, and genomic surveillance. Member States should integrate laboratory financing into national budgets, adopt co-financing models, and explore innovative funding approaches to reduce reliance on external support.

## Laboratory Leadership and Workforce Development

Commit to strengthening laboratory leadership and management capacities, particularly through the Africa CDC-ASLM Laboratory Leadership Fellowship and other capacity-building initiatives. Emphasis is placed on succession planning, mentorship, and equitable gender representation.

In his opening remarks, Mr. Nqobile Ndlovu, CEO, ASLM welcomed participants and emphasised that strong, empowered laboratory leadership is central to achieving resilient health systems, advancing universal health coverage, and safeguarding Africa’s health security. He noted that the Forum continues to serve as a critical platform for elevating the voice of laboratory leaders, strengthening collaboration across countries, and driving the advocacy needed to position diagnostics at the heart of national health agendas. He further underscored that leadership development is no longer optional but essential, given the increasing complexity of laboratory networks and the growing demands placed on national laboratory system.

## 4.1 Leadership Excellence for African Diagnostics

In his presentation Dr Visopo Hurawa: made following summary regarding the Status on Laboratory Leadership in Africa

- **Laboratory leadership remains structurally under positioned** in many countries, with the absence of dedicated directorates limiting influence, visibility, and participation in high level decision making.
- **Leadership capacity is growing**, supported by initiatives such as ASLM’s LEAD Programme and the Africa CDC endorsed Laboratory Directors Forum, which are building a continent wide cadre of skilled, empowered laboratory leaders.
- **Laboratory leaders face persistent advocacy challenges**, as critical issues are often poorly communicated or deprioritised within Ministries of Health, slowing action on system needs.

- **Momentum is increasing**, with regional engagements, stronger political recognition, and collective advocacy efforts elevating the role of laboratories in health security and universal health coverage.
- **Sustained investment in leadership**, governance structures, and advocacy platforms is essential to ensure laboratory leaders can drive resilient, integrated, and high performing laboratory systems across Africa.



**Paul Omollo of Roche** provided an overview of the ASLM-Roche LEAD (Leadership Excellence for African Diagnostics) initiative. He said the programme is a multi year partnership designed to strengthen laboratory leadership across Africa and expand access to quality diagnostics. He highlighted that, although global awareness of diagnostics increased significantly during the COVID 19 pandemic, nearly half of the world’s population still lacks access to essential testing. He noted that despite the availability of strong technical guidance for laboratory strengthening, many African countries continue to operate without well governed National Laboratory Directorates (NLDs) equipped with the leadership, management, and strategic capabilities required to oversee increasingly complex laboratory networks. Referring to ASLM’s 2024 Status Report on Laboratory Leadership in Africa, he explained that while 79% of countries reported having an NLD, most are positioned several levels below the Minister or Permanent Secretary, limiting their influence and visibility. He further pointed out that core leadership and management competencies—such as strategic vision, organisational leadership, resource management, and coordination—were identified as the weakest areas among laboratory leaders.

Additional systemic challenges, he said, include weak or absent diagnostics policies, limited data for decision making, and insufficient experience in advocating for laboratory priorities within national health plans. He

emphasised that the LEAD programme aims to address these gaps by enhancing leadership capabilities, fostering regional collaboration, and improving health outcomes through sustainable and scalable capacity building. Over a three year period, emerging leaders from multiple countries will receive training in technical, policy, and advocacy skills, supported by mentorship, peer learning, and professional development opportunities. He explained that the programme focuses on five domains—advocacy, structure, strategy, professionalisation, and core competencies—with 29 actionable areas identified. He also described the programme’s methodology, which includes stakeholder engagement (involving the Laboratory Directors Forum, Ministers, and laboratory leaders), curriculum development with academic partners, structured training delivery, and robust monitoring and evaluation.

He noted that the Laboratory Directors Forum plays a central role by endorsing the programme, identifying trainees and mentors, co facilitating sessions, and raising visibility among emerging leaders. As immediate next steps, he said the programme will be socialised at the ASLM Convention, followed by completion of individual needs assessments and finalisation of the curriculum. Overall, he concluded that LEAD is positioned as a transformative initiative that will build a strong, skilled, and influential cadre of laboratory leaders capable of driving sustainable improvements in diagnostics access and laboratory system performance across Africa.

## 4.2 Navigating the New Funding Landscape

To set the scene for this session, Africa Dr. Kgomotso Makhaola, Senior Science Manager, presented findings from the ASLM Survey on the Impact of USG Temporary funding Freeze on Laboratory Services in Africa. She highlighted that the ASLM analysis of the USG temporary funding freeze showed that the pause exposed deep structural vulnerabilities across African laboratory systems, which rely heavily on PEPFAR and other USG mechanisms for essential diagnostics, sample transport, equipment maintenance, quality assurance, and AMR surveillance.

Countries reported immediate disruptions to service continuity, procurement delays, and workforce insecurity, with most unable to sustain core diagnostic functions for more than a few months without USG support. Beyond operational impacts, the freeze highlighted the urgent need for diversified financing, stronger domestic investment, and regulatory reforms to reduce over dependence on external funding. ASLM positions the event as both a warning and an opportunity: African governments, partners, and civil society must accelerate efforts to build resilient, self-reliant laboratory systems, strengthen accountability, and ensure African priorities are protected within global health governance.

### 4.3 Panel Discussion

A panel discussion on Navigating the New Funding Landscape, moderated by ASLM’s Director of Programs, Dr. Talkmore Maruta, brought together a distinguished group of speakers, including Dr. Yewew Kebede of Africa CDC; Dr. Susan Nabadda, Chair of the Laboratory Directors Forum (LabDF); Mr. Joseph, Deputy Director representing national Laboratory Directors; and Prof. Sujith J. Chandy from ICARS, speaking on behalf of development partners.

Dr. Yewew Kebede, Acting Director of Laboratory Systems and Networks, Africa CDC reflected on the recently launched Laboratory Leadership Fellowship Programme, looking at both the structure of the programme and its accessibility. He explained that the Fellowship represents a major continental investment in building a strong pipeline of laboratory leaders, an initiative designed to cultivate a strong cadre of laboratory leaders capable of driving resilient, high-quality, and integrated laboratory systems across Africa. It blends leadership development with technical strengthening, equipping mid- to senior-level laboratory professionals with competencies in strategic management, quality systems, biosafety, data-driven decision making, and emergency preparedness. Delivered through a mix of online learning, in-person workshops, mentorship, and peer exchange, the programme prepares

participants to navigate complex public health environments and lead meaningful improvements within their institutions and national laboratory networks.

A defining feature of the programme is the capstone project, which transforms learning into tangible systems-level impact. Each participant identifies a real challenge within their laboratory or national system—such as gaps in QMS, biosafety, AMR surveillance, or workflow efficiency—and designs and implements a solution using the leadership and management skills gained throughout the programme. Guided by mentors, participants engage stakeholders, mobilize resources, and measure outcomes, culminating in a project that demonstrates both leadership growth and practical improvement. Through this applied component, graduates emerge not only with enhanced leadership capacity and stronger professional networks, but also with a proven track record of strengthening Africa’s public health laboratory systems in alignment with the Africa CDC’s New Public Health Order. The first inaugural cohort will be in 2026 and will be coordinated by the Workforce Development Division of Africa CDC.



While speaking on the role of the **Laboratory Directors Forum**, Dr. Susan Nabadda, the Forum’s inaugural Chair, she indicated that the forum was established in 2023 in Cape Town and formally endorsed by Africa CDC, and has rapidly positioned itself as a continental platform for high-level advocacy on the value of laboratory systems. Since its inception, the Forum has successfully convened a diverse range of stakeholders—including industry partners, funders, policymakers, civil society, and senior government officials—at major Africa CDC and ASLM gatherings. These engagements have enabled laboratory leaders to shift the conversation from purely technical discussions to a compelling business case for investment in laboratory systems.

By illustrating the economic and public health costs of under resourced laboratories, particularly during outbreaks, the Forum has captured the attention of influential decision makers, including heads of state such as the President of Uganda. Regional engagements supported through the LEAD project, in partnership with Roche, have further expanded this momentum by enabling the Forum to reach multiple regions across the continent and amplify its advocacy messages.

Through these sustained advocacy efforts, the Forum has catalyzed calls to action that are now translating into concrete initiatives by regional bodies, demonstrating the growing recognition of laboratories as foundational to health security and universal health coverage.

The Forum has also broadened participation in its meetings, bringing politicians and non traditional stakeholders into the conversation and reinforcing the message that laboratory systems are not merely cost drivers but strategic investments that underpin resilient economies and effective health systems. This expanding coalition reflects a shared understanding: strong laboratory systems are essential for safeguarding populations, enabling rapid outbreak response, and supporting the broader development agenda across Africa.

A key question raised during the session was whether existing structures within Ministries of Health enable laboratory leaders to operate effectively.



**Dr. Joseph Bitilinyu Bangoh Deputy Director, Public Health Institute Malawi**, presenting on behalf of the Laboratory Directors, highlighted that the absence of a dedicated laboratory directorate—an issue common across many countries—creates significant barriers to influence and decision-making. Without a clear structural home at senior levels, critical laboratory issues are often poorly articulated, communication channels are slow, and the individuals designated to

represent laboratory services may not fully understand or convey the strategic importance of the laboratory system. As a result, laboratories are frequently excluded from high-level discussions, leading to misrepresentation of priorities and delayed action on essential system needs.

This structural gap undermines the visibility and authority of laboratory services and limits the ability of leaders to advocate effectively for resources, policy attention, and system strengthening. Dr. Joseph Bitilinyu emphasized that for laboratory leaders to fulfil their mandate, organizational structures must elevate and support them—ensuring that laboratory services are positioned at the decision-making table and recognized as central to health security, universal health coverage, and national development. Strengthening these structures is therefore not merely an administrative adjustment but a foundational requirement for resilient and responsive health systems.

Professor Sujith J Chandy, Executive Director for International Center for Antimicrobial Resistance Solutions(ICARS), acknowledged that although only two of fifty-five countries have met the Abuja target of allocating 15% of national budgets to health, there is a growing recognition that AMR threatens health security, economic stability, and development. Countries may not yet be fully ready to transition to domestic financing, but many are increasingly aware that long-term AMR action cannot rely solely on external support. He emphasized that stakeholder perception is one of the most defining challenges for laboratory professionals.

Drawing from his own experience, he described the constant need to convince clinicians that laboratory results are essential for patient care, and to persuade administrators that investing in the right equipment is not optional but foundational. Beyond this, laboratory leaders must continually demonstrate that they possess the competencies, leadership, and management skills required to deliver accurate, reliable results.

A further challenge lies in supply chain continuity. Even when systems are well designed, they collapse without consistent access to reagents, consumables, and maintenance support. He noted that laboratories are inherently expensive to run, and not everyone understands or appreciates the unique demands of laboratory work. Laboratory professionals require a distinct personality—perseverance, patience, accuracy, and deep concentration—qualities that must be matched by adequate investment, expertise, and leadership at government level. He posed a critical question: Does the government have the resources, expertise, and leadership capacity to build and sustain the laboratory system the country needs? To answer this, he stressed the importance of identifying where government must invest—whether in supply chain systems, equipment, workforce development, or management structures.

He argued that the first step is ensuring policymakers truly believe in the value of laboratories. This requires messaging that reaches both their minds and their hearts. He encouraged the use of real-life stories—patients who died or suffered because diagnostics were unavailable or incorrect—to humanize the issue and build urgency. Before presenting a costed budget, he advised that laboratory leaders must demonstrate that they understand policymakers’ competing priorities. They should present multiple funding scenarios—minimum, medium, and maximum models—so that governments have realistic entry points. Even a minimum model, he noted, can grow from 15% to full coverage over time if strategically planned. He highlighted the importance of GIS-based laboratory mapping to show disease burden, identify optimal locations for hubs, nodes, and spokes, and determine the resources required at each level—especially in countries with remote areas. This helps governments visualize where investments will have the greatest impact. He also emphasized the need to define the broad diagnostic packages required in rural settings and to build laboratory systems around four pillars, including technology adoption. Without embracing new technologies, he warned, countries risk falling further behind. He encouraged efforts to attract younger generations to

laboratory careers and to simplify curricula so that laboratory concepts are accessible at all levels.

Finally, he noted that to truly transform laboratory systems, countries must explore innovative tools such as artificial intelligence, which can bring efficiency and compensate for the reality that traditional resources will never be sufficient.

**“Once the leader is created and the structures have been created, the structure needs to be oiled to function-, and that oil is funding”,**  
remarked Dr Talkmore.

## 4.4 Key Messages

1. Strengthen high-level political engagement by ensuring that Permanent Secretaries, Ministers, and other senior decision-makers are consistently included in laboratory dialogues, enabling them to fully appreciate the strategic value of laboratory systems.
2. Invest in developing skilled, empowered laboratory leaders, as envisioned by the LEAD program, to ensure countries have the leadership capacity required to drive system strengthening, influence policy, and champion laboratory priorities at national and regional levels.
3. Build strong, evidence-based investment cases—including locally generated AMR burden data—to clearly demonstrate the economic, health, and security consequences of under-investing in laboratory systems.
4. Expand partnerships and advocacy networks, engaging private laboratories, clinicians, civil society, and grassroots actors to amplify the laboratory agenda and broaden support for system improvements.

5. Sustain continuous, strategic advocacy and accountability, recognising political turnover and ensuring policymakers remain responsible for commitments that support resilient, sustainable laboratory systems.

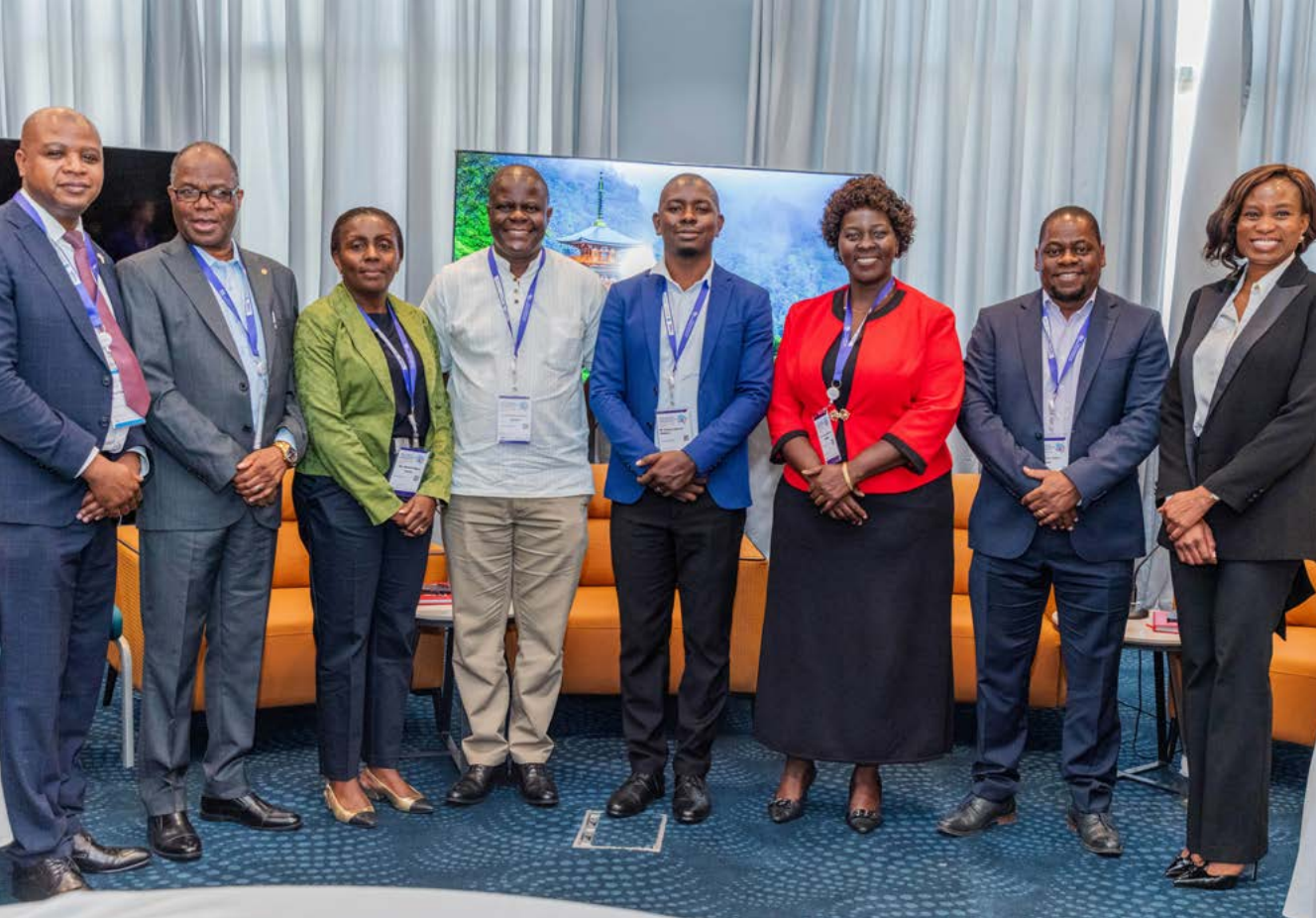
#### 4.5 Call to Action

Expand invitations to include high-level policymakers—such as Permanent Secretaries and Ministers—so they fully understand the laboratory agenda and the strategic case for investment.

Strengthen unity and collective advocacy among laboratory directors, working together strategically and consistently to push the laboratory agenda forward.

Develop strong, evidence-based investment cases, including locally generated AMR burden data, to clearly demonstrate the economic and health consequences of under-investing in laboratory systems.





## 05. Workforce development and AMR surveillance capacity building - Outcomes of Regional Phase 2 Fleming Fund Regional grants

This session showcased progress, innovations, and persistent challenges in antimicrobial resistance (AMR) workforce development and surveillance capacity across Africa. Presenters highlighted how long term mentorship, competency based training, gender responsive approaches, and One Health collaboration are strengthening national systems, while also underscoring the need for sustainable structures beyond donor cycles.



**Prof. Revathi Gunturu, Associate Professor at the Aga Khan Teaching Hospital in Kenya**, opened the session by emphasising the shift from individual competencies to resilient national systems for AMR surveillance and diagnostics. She highlighted diagnostic stewardship as a critical lever for aligning testing with prescribing decisions and advocated for a transition from empiric therapy to diagnostics guided care. Achieving this, she noted, requires stronger clinician-laboratory collaboration, targeted education, and sustained access to affordable, quality diagnostics—supported by multi sector prioritisation, investment, and policy action, including integration into Universal Health Care benefit packages.



**Dr. Patrick Mubangizi, Regional Director for Africa at the Fleming Fund**, outlined persistent bottlenecks across laboratory systems, including reagent shortages, gaps in sample preparation and result interpretation, and limited integration of clinical decision making. He stressed that long term, competency based training—not short workshops—is essential to building the microbiology expertise and digitally enabled workforce required for robust AMR surveillance. He also underscored the need for strong governance and sustainable financing for automated laboratory systems, citing Kenya’s progress as an encouraging

model. He closed by urging scientists to engage policymakers more deliberately, noting that AMR solutions must extend beyond technical spaces into political and decision making arenas.



**Dr. Ranyl Nguena, QWArS alumnus from Cameroon**, demonstrated how QWArS-driven AMR workforce development is translating into measurable national and regional gains—from strengthened strategic frameworks to improved surveillance and laboratory systems. He described how the programme expanded his technical and leadership competencies, enabling him to support Cameroon and partners such as FAO, WHO, and ASLM through targeted technical assistance, multi-country assessments, and evidence generation. His experience reflects both institutional impact and meaningful professional and personal growth.

**Ms. Phoebe Nzombe, ASLM Internship Programme Manager**, presented the ASLM Internship Programme as a practical model for developing the next generation of laboratory professionals. The 12 month hands on programme embeds interns within ASLM projects and in-country host institutions, supported by structured mentorship, rotations, and mini project deliverables. Early milestones from Cohort 1 include contributions to laboratory accreditation readiness, animal health sampling, and AMR National Action Plan development. The programme has also generated mentorship tools and lessons to strengthen future cohorts.



**Dr. George Mrema**, together with **Mr. Godwin Minga and collaborators from Tanzania’s Ministry of Health (MoH), National Public Health Laboratory, Muhimbili National Hospital (MNH), MOHCP, and Tanzania Veterinary Laboratory Agency (TVLA)**, presented

a gender responsive One Health AMR study from Kilimanjaro. The study demonstrated how gender influences antibiotic access, decision making, and exposure pathways in households and farming systems. By combining five years of clinical AMR data (2020–2025) with findings from poultry and fish farms and community knowledge, attitudes, and practices, the team identified gendered AMR risks across human, animal, and environmental interfaces. Dr. Mrema outlined next steps to integrate fellowship gains into longer term national and regional AMR surveillance and capacity building efforts.

Mr. Minga further illustrated how QWArS and the Fleming Fund Fellowship complement each other in strengthening AMR surveillance from an animal health perspective. While QWArS builds bench level microbiology quality, the fellowship enhances AMR/AMU/AMC analysis and reporting for decision making. He highlighted concrete gains in Tanzania, including standardised AST and data workflows (e.g., WHONET/BacLink), improved national and global reporting (FAO InFARM/WOAH), and strengthened One Health collaboration and mentorship structures.

**Mr. Junior Shao, Project Coordinator at ASLM,** presented the Fleming Fund Fellowship in Tanzania as a national impact model that builds a critical mass of AMR leaders through long term mentorship and One Health collaboration. The programme has trained 17 fellows embedded in public institutions, contributing directly to national priorities such as the AMR National Action Plan (2023–2028), health security planning, and evidence generation through audits, policy briefs, and publications.



**Mr. Sylvester Z. Moyo, Project Manager at ASLM,** presented the Fleming Fund QWArS Project, highlighting achievements, lessons, and a sustainability framework. Implemented across 17 countries through a

blended model of ASLM Academy e learning and in person practicums, QWArS has delivered measurable results across Phase 1 and 2. He showcased the 6 step domestication framework and the Nigeria QWArS (NiQWArS) case study, demonstrating how countries can embed QWArS into existing national training systems such as FELTP to ensure long term ownership and scale.

The session concluded with a panel discussion moderated by **Mr. Ibrahim Mugerwa of NHLDS/NMRL Uganda**, titled “From Skills to Systems – The Path to Ownership.” The discussion shifted focus from training outputs to how countries can retain, absorb, and domesticate the One Health AMR workforce beyond donor cycles. Panellists emphasised the importance of national budget lines and posts, regulatory recognition, and country led delivery of curricula. They highlighted practical levers for sustainability, including domestication of training materials, using alumni and master trainers to cascade skills, and strengthening the data to policy bridge so AMR evidence translates into funded action—while ensuring that animal and environmental sectors are not left behind. The session closed with a challenge to decision makers to commit to one immediate policy change that secures workforce sustainability at national level.

## 5.1 Key Messages

- **Africa is strengthening AMR systems through coordinated strategic planning**, including updated National AMR Action Plans, surveillance guides, and emerging genomic surveillance strategies that position countries for more advanced, data driven decision making.
- **Sustainable capacity building is taking root across the continent**, driven by regional programmes such as FAO, InFARM and RENOFARM, long-term fellowships, internships, and blended learning models like QWArS that have already trained 536 professionals, 301 experts, and 58 master trainers.

- **Cross-sector professional expansion is accelerating**, with fellows and alumni contributing to AMR surveillance, policy development, and evidence generation across multiple countries through collaborations with FAO, WHO, ASLM, and national institutions.
- **Gender dynamics are shaping AMR risks and responses**, with evidence showing that women face dual exposure pathways and that cultural norms influence antibiotic access and use—underscoring the need for gender responsive AMR strategies.
- **Innovative tools and frameworks are enhancing surveillance quality and sustainability**, including Cameroon’s Landscape Surveillance Assessment Tool, cost effectiveness evaluations (TADE), genomic integration into AMR plans, the Gender Analysis Framework, QWArS’ blended qualification based model, and the 6step Domestication Framework for long term country ownership.

## 5.2 Identified Gaps & Challenges

- **Slow and uneven implementation of AMR National Action Plans**, with limited translation of strategies into operational practice.
- **Insufficient and unstable resources for sustained AMR surveillance**, including reagent shortages, weak quality systems, and limited genomic capacity.
- **Fragmented and non-harmonized data systems**, hindering consistent reporting and effective data-to-policy translation across One Health sectors.
- **Workforce pipeline gaps**, including gender imbalances, narrow recruitment focused mainly on laboratory medicine, and inconsistent institutional engagement in internships and fellowship.
- **Operational and system-level constraints**, such as reliance on imports, long veterinary diagnostic turnaround times, and regulatory and supply chain bottlenecks that weaken surveillance and response.

## 5.3 Call to Action





# 06. Diagnostics Without Disruption: Strengthening Supply Chains for Access and Sustainability

The presenters for the session were



**Dr Thresa Sumani - Malawi Ministry of Health (Diagnostics): Laboratory Commodities Amidst Funding Uncertainties - Malawi**

She indicated that Malawi's laboratory system operates through a tiered national network supported by structured governance, supply chain coordination, and integrated commodity management. However, funding uncertainties—particularly the USG stop-work order—have led to stock-outs, reduced HIV/TB/malaria testing, HR gaps, and disrupted logistics and data systems. The Ministry of Health is responding with prioritised testing, staff redeployment, improved tracking, and stakeholder coordination. Going forward, Malawi aims to strengthen sustainability through increased domestic financing, electronic end-to-end commodity monitoring, and stronger government leadership of laboratory supply chains



**Mr Anafi Mataka - ASLM: MADE in Africa: Manufacturing to Accelerate Diagnostic Excellence**

The MADE in Africa (Manufacturing to Accelerate Diagnostic Excellence) initiative aims to strengthen Africa's diagnostic supply by supporting local manufacturing of affordable, high-quality diagnostic tools. Despite high disease burden, most diagnostics are imported, creating supply risks and limiting access—only 19% of primary care patients in LMICs have basic diagnostics. Through partnerships, financing, regulatory harmonisation, and market shaping, the project builds regional R&D, quality systems, and manufacturer capacity. The goal is a sustainable, self-reliant African diagnostics ecosystem that improves equitable access and health security

## 6.1 Panel Discussion

The presentation were followed by panel discussion moderated by Dr. Chancy Chavula, CHAI, Malawi , with Dr Thresa Sumani, Malawi MoH; Dr Sydney Chanda & Dr Royce Gomo, PFSCM ; Dr Tapiwa Kujinga, DEC; Dr Nyawira Njeru, Hologic and Dr Diana Kizza, Roche as panelists. The panel discussion underscored the importance of strategic, coordinated approaches to strengthening diagnostic access and AMR surveillance across Africa. PFSCM highlighted the role of Global Access Programs in stabilising pricing and ensuring affordability, while emphasising the need for domestic funding models that align with global standards. They also introduced the Global Access Hub as an emerging innovation designed to promote equitable pricing and improve market transparency. Discussions on governance and accountability reinforced the need for transparent procurement systems, stronger regulatory frameworks, and improved forecasting mechanisms. Panellists stressed that real-time electronic data is essential for anticipating demand, preventing stockouts, and enabling more efficient supply chain management. time electronic data is essential for anticipating demand, preventing stockouts, and enabling more efficient supply chain management.

Manufacturers, represented by Roche and Hologic, shared their perspective on persistent market challenges, including fragmented demand and slow, inconsistent regulatory pathways across countries. They pointed to demand aggregation, harmonised regulatory processes, and strengthened infrastructure as critical solutions for improving market efficiency and accelerating access to diagnostics. From the community perspective, PATAM highlighted the ongoing challenge of low diagnostic literacy, which limits uptake and delays care seeking. They called for stronger advocacy to build robust supply chains and expand access to point-of-care diagnostics, particularly in underserved settings. PATAM also emphasised the value of community led monitoring as a real-time mechanism for identifying gaps, improving accountability, and ensuring that diagnostic services reach those who need them most. seeking. They called for stronger

advocacy to build robust supply chains and expand access to point of care diagnostics, particularly in underserved settings. PATAM also emphasised the value of community led monitoring as a real time mechanism for identifying gaps, improving accountability, and ensuring that diagnostic services reach those who need them most.

## 6.2 Key Messages

- **Funding instability—such as the USG Stop Work Order—had significant consequences in countries like Malawi**, leading to stock-outs, reduced testing capacity, and critical human resource shortages across the diagnostic system.
- **Persistent supply chain weaknesses—including inadequate storage, fragmented data systems, parallel reporting structures, and insufficient financing—continue to undermine reliable access to diagnostics.**
- **Targeted mitigation strategies are beginning to show progress**, with Malawi adopting electronic commodity management tools, increasing domestic funding by USD 1.3 million, integrating parallel systems, and investing in capacity building.
- **The MADE in Africa initiative represents a transformative opportunity**, aiming to reduce dependence on imports by strengthening local manufacturing, harmonising regulatory pathways, and expanding regional research and development.
- **The global diagnostic access gap remains profound**, with 47% of the world's population lacking essential tests; closing this gap could avert an estimated 1.1 million preventable deaths each year.

## 6.3 Identified Gaps & Challenges

- **Continued dependence on imports and external donor funding**, leaving countries vulnerable to market shocks and supply disruptions.
- **Insufficient local manufacturing capacity**, limiting regional self reliance and slowing access to essential diagnostics. reliance and slowing access to essential diagnostics.
- **Inconsistent regulatory and policy environments**, creating delays, inefficiencies, and barriers to market entry.

- **Weak infrastructure for storage, distribution, and last mile delivery**, undermining the reliability and reach of diagnostic services. mile delivery
- **Low community awareness and limited diagnostic literacy**, contributing to delayed care seeking and underutilisation of available services. seeking and underutilisation of available services.

## 6.4 Call to Action

- **Increase domestic financing and integrate donor supported systems** to build resilient, country owned diagnostic and AMR surveillance platforms. supported systems owned diagnostic and AMR surveillance platforms.
- **Institutionalize electronic monitoring and reporting tools** to enhance transparency, strengthen accountability, and improve real time decision making. time decision making.
- **Harmonize regulatory frameworks across Africa to accelerate product registration**, reduce market fragmentation, and improve access to quality diagnostics.
- **Promote local manufacturing and incentivize private sector investment**, reducing reliance on imports and strengthening regional diagnostic security.
- **Strengthen community engagement and diagnostic literacy** to improve uptake, empower users, and ensure equitable access to essential testing services.
- **Develop regional collaborations for procurement and distribution** to leverage pooled demand, stabilize pricing, and improve last mile delivery.

SPECIAL  
MENTION  
AGNOSTICS

AWARDS  
PRESENTATION



# 07: Sustainability & Financing

## 7.1 Financing AMR Surveillance in Africa- Building the Investment Case

This plenary session focused on building a robust economic argument for investing in Antimicrobial Resistance (AMR) surveillance in Africa. Featuring presentations from multi-country and national studies, the session highlighted the critical need to move from donor-dependent projects to sustainably financed national programs. The core message was encapsulated in the phrase: "You cannot finance what you cannot cost."

The presenters and their topics were:

**Prof Mouiche Moctar (ASLM) & Dr Ntombi Nkonde (UNZA):** "The Cost of AMR Surveillance in Africa - Evidence from Multi-Country Studies." This presentation framed the session by introducing the "Investment Case" approach, a granular One Health costing model designed to provide transparency and unlock sustainable blended financing.



**Dr Ntombi Mudenda (University of Zambia):** "Surveillance Costing and Output - Zambia." The presentation analyzes the cost and outputs of Zambia's AMR surveillance system from 2021-2024, covering sentinel sites in animal and human health sectors, funding contributions, cost per sample, and sustainability challenges.

The assessment of AMR surveillance costs and outputs revealed a system structured around a network of sentinel sites comprising four Animal Health and nine Human Health facilities, supported by reference laboratories across the One Health spectrum. Between

2021 and 2024, the total cost of implementing AMR surveillance amounted to USD 7.18 million, with the largest expenditures attributed to reagents (USD 3.77 million), personnel (USD 1.84 million), and equipment (USD 1.02 million). On average, Animal Health sites incurred USD 341,442 per site, while Human Health sites averaged USD 674,272. The cost per sample reflected this difference, standing at USD 414 for Animal Health and USD 137 for Human Health. Funding was largely driven by the Fleming Fund, which contributed USD 3.95 million—nearly half of the total and over 90% of all reagent costs—while the Government of Zambia (GRZ) provided USD 2.61 million primarily for personnel. Institutional contributions amounted to USD 1.18 million, with an additional USD 0.3 million from other partners. In terms of outputs, Human Health sites processed 163,032 samples compared to 4,127 in Animal Health, with human health testing showing a steady upward trend while animal health volumes remained low.

Despite these gains, several challenges persist, including the high cost per sample in animal health due to active surveillance and low sample throughput, heavy reliance on Fleming Fund support for reagents and consumables, limited government financing for operational costs, and gaps in health economics expertise needed to quantify AMR burden. The initiative, however, introduced important innovations such as user friendly costing tools for surveillance budgeting and the integration of a One Health approach in the design of sentinel sites. Key recommendations include developing sustainability strategies that prioritise recurrent laboratory costs—particularly reagents and equipment maintenance—diversifying funding sources beyond the Fleming Fund, increasing sample collection in animal health to improve cost efficiency, and strengthening national capacity in health economics for AMR cost benefit analysis. These findings carry significant policy implications, underscoring the need for a national framework to secure long term AMR surveillance financing, prioritise operational costs within government budgets, enhance One Health collaboration for efficient resource use, and institutionalise costing tools as part of routine surveillance planning.

**Dr Dodoo Cornelius (Ghana):**

"Surveillance Costing and Output - Ghana." The presentation examined the cost and outputs of antimicrobial resistance (AMR) surveillance interventions in Ghana, comparing the pre intervention period with the period supported by the Fleming Fund Country Grant and additional partners. Prior to 2018, AMR surveillance in Ghana was limited and fragmented, but the Fleming Fund investment enabled significant scale up across human, animal, and environmental health sectors, with contributions from FAO and WHO. Surveillance activities were implemented across multiple sites, including major teaching hospitals, veterinary laboratories, and environmental research institutions.

A detailed cost analysis revealed that the intervention period required substantial investment, particularly in reagents and consumables (GH¢74.6 million), infrastructure (GH¢16.4 million), personnel (GH¢11.5 million), and equipment (GH¢12.1 million). These categories emerged as the major cost drivers of AMR surveillance. Despite the high investment, the intervention produced notable gains: the number of samples tested increased from 15,032 before the intervention to 92,572 during the intervention period. As a result, the cost per sample decreased significantly from GH¢1,909 to GH¢1,172, demonstrating improved efficiency.

Cost effectiveness analysis showed negative incremental cost effectiveness ratios (ICERs), indicating that the intervention was both cost saving and effective. The ICER remained well below Ghana's GDP per capita threshold (GH¢19,477.84), confirming that AMR surveillance represents a highly cost effective public health investment. However, the analysis also highlighted several challenges, including the high cost of reagents and infrastructure, limited pre intervention capacity, and continued dependence on donor funding for sustainability. Innovations introduced through the programme included the application of ICER methodology to AMR interventions, the

integration of human, animal, and environmental health sectors, and the use of economic evaluation to justify long term investment.

The presentation recommended sustaining and scaling up AMR surveillance nationwide, improving workforce efficiency, prioritising cost effective infrastructure investments, and identifying lower cost but high quality alternatives for reagents and consumables. From a policy perspective, the findings provide a strong investment case for AMR surveillance in Ghana and underscore the need for national policies that secure long term financing, institutionalise cost effectiveness analysis, and promote a One Health approach to optimise resources.

**Dr Annie A. Kaliati (Public Health Institute of Malawi):**

"Analysis of the Cost Drivers for Establishing Antimicrobial Resistance Surveillance in Malawi." The analysis of AMR surveillance activities revealed a total estimated financial cost of USD 1.98 million, with an average cost of USD 118 per sample collected. Surveillance in the animal health sector was found to be significantly more expensive—approximately five times the cost of human health surveillance—largely due to higher specimen collection costs (USD 55 versus USD 12). Despite these cost differentials, investments in AMR surveillance have contributed to notable improvements in the quality of patient care, enabling real time reporting, more accurate prescribing practices, and strengthened microbial surveillance. However, domestic funding for AMR programmes remains minimal, with major expenditures directed toward consumables and infrastructure renovations. The findings also highlight opportunities to leverage AMR investments within existing disease programmes such as malaria, HIV, and TB.

Several challenges persist, including the high cost of animal health surveillance, limited domestic financing, the need for advanced skills and service contracts to maintain laboratory equipment, and logistical difficulties in transporting samples from remote areas.

Nonetheless, the programme introduced important innovations, such as real time AMR reporting systems, integration opportunities with other health programmes, and the development of sentinel sites as centres of excellence for quality assurance. Key recommendations include strengthening coordination under the One Health agenda, increasing domestic funding while maintaining donor support, harmonising AMR resources with national priorities, scaling surveillance to strategic districts such as Karonga, Nkhotakota, Mulanje, and Balaka, and building local capacity for equipment maintenance. The report also calls for a full economic evaluation of AMR programmes and a redesign of animal health surveillance systems to improve cost effectiveness. These findings carry significant policy implications, underscoring the need to align national AMR resource allocation policies, institutionalise the One Health approach across sectors, establish sustainable financing mechanisms, and integrate AMR surveillance into broader health programmes.

**Dr Ranyl Nguena G. N. (Cameroon):**

"Surveillance Costing and Output - Cameroon." The assessment of the AMR surveillance system shows a network of 23 sentinel sites, comprising 19 Human Health and 4 Animal Health facilities, supported by reference laboratories across sectors. Between 2020 and 2024, the total cost of implementing surveillance activities amounted to USD 1.21 million, with an average annual expenditure of USD 241,353. The largest cost components were construction and renovations (43.9%), followed by reagents (15.4%) and personnel (14.2%), reflecting the substantial investments required to establish and operationalise surveillance capacity. Funding was mobilised from multiple partners—including WHO, FAO, ASLM, the Global Fund, and USAID—underscoring the system's heavy reliance on external support. During the period, Human Health sites processed 77,710 samples, while Animal Health sites processed 1,140 samples. The cost per isolate varied significantly: USD 94.46 for automated/manual Human Health testing, USD 31.32 for fully manual Human Health testing, and USD 7.91 for manual Animal Health testing.

Despite progress, several challenges persist. The system requires high upfront investment for equipment

and capacity building, and while surveillance is active in the animal health sector, it remains largely passive in human health. Coordination across the laboratory network is inconsistent, government funding remains limited, and the true AMR burden—particularly in terms of lives saved or lost—remains unknown. Field sample collection and access to testing inputs also continue to pose operational difficulties. Nonetheless, the programme has introduced important innovations, including the establishment of a multi-sectoral AMR surveillance network, integration with global reporting platforms such as GLASS, ANIMUSE, and InFARM, and the adoption of automated techniques in selected Human Health sites.

Key recommendations include strengthening advocacy for sustained support, improving intersectoral coordination, investing in data quality and infrastructure optimisation, and securing a dedicated national budget line to reduce dependence on donors. Enhancing sustainability will require stronger domestic financing, improved resource alignment with national priorities, and long-term planning for equipment maintenance and operational costs. From a policy perspective, AMR is recognised as an existential threat to both health and the economy, necessitating institutionalisation of surveillance within government systems, establishment of sustainable financing mechanisms, and alignment with global AMR reporting standards.

## 7.2 Key Messages

The session introduced several critical insights and innovative methodologies to address the financing challenge:

- **The "Investment Case" Approach:** A central novel concept was moving beyond simple costing to creating a compelling "investment case." This involves using a detailed One Health Costing Model that captures costs across human, animal, and environmental sectors to prove value and justify funding.
- **Making "Invisible" Contributions Visible:** A key finding from Zambia was that governments are often already co-funding surveillance through embedded costs like staff salaries and utilities. The investment case explicitly credits these contributions, demonstrating existing government commitment to donors.
- **Blended Financing as a Strategic Model:** The session promoted "Blended Financing" as a sustainable solution. This model clearly delineates funding responsibilities: domestic governments cover

stable, predictable "sovereignty" costs (e.g., personnel, utilities), while donors cover volatile, technical "catalytic" costs (e.g., reagents, specialized equipment).

- **Data-Driven Cost-Effectiveness:** The study from Ghana provided a powerful tool for advocacy by calculating a negative Incremental Cost-Effectiveness Ratio (ICER), proving that the AMR surveillance intervention was both effective and cost-saving compared to the status quo.
- **Proactive Scenario Planning:** The costing model incorporates sensitivity analysis and scenario planning (e.g., modeling the impact of inflation or a doubling of sample volumes), which helps stress-test budgets and build a more resilient and persuasive financial plan for ministries of finance.
- **Focus on Transition Planning:** A critical lesson highlighted was the need for a clear exit strategy for donor funding, where governments gradually absorb recurrent costs (especially reagents) into national medical supplies budgets as GDP grows.

### 7.3 Identified Gaps and Challenges

Presenters consistently identified a set of common and critical gaps that threaten the sustainability of AMR surveillance:

- **Sustainability Cliff and Donor Dependency:** A major risk across all countries is the heavy reliance on external donors for recurrent costs, particularly reagents and consumables (often >80-90%). This creates a "ghost lab" scenario where labs have equipment but no capacity to function when donor projects end.
- **Lack of Domestic Funding Integration:** There is a critical lack of sustainable domestic funding. AMR surveillance is often not integrated into national budget lines, and domestic contributions, where they exist, are minimal and not systematically planned.
- **High Unit Costs in Animal Health:** A significant inefficiency was identified in animal health surveillance, where costs per sample are 5-10 times higher than in human health. This is primarily due to the high cost of active surveillance and low sample volumes, which fail to leverage economies of scale.
- **Data Gaps in Economic Impact:** There is a pronounced lack of data on the operational costs of surveillance and a gap in health economics expertise to conduct in-depth analyses of the full

economic burden of AMR (e.g., lives saved/lost, broader economic impact), which weakens the investment case.

- **Coordination and System Fragmentation:** Challenges in intersectoral coordination (One Health), harmonization of databases, and alignment with national priorities were noted, leading to inefficiencies and duplicated efforts.
- **Logistics and Infrastructure Gaps:** High fixed costs and logistical challenges (e.g., sample transport from remote sites) drive up costs. There is also a need for advanced skills and service contracts for maintaining sophisticated laboratory equipment.

### 7.4 Call to Action

- Establish sustainable AMR financing through blended models, ensuring predictable government budget lines complemented by catalytic donor support, and integrating consumables and surveillance costs into national medical supply and health financing systems.
- Institutionalize economic and costing tools by adopting standardized costing models, training staff in health economics, and conducting full economic evaluations to demonstrate return on investment and guide long term planning and resource allocation.
- Strengthen One Health coordination and integration, expanding linkages with major disease programmes (HIV, TB, malaria), increasing sample volumes in animal health, and enhancing cross sector collaboration to optimize resources and improve surveillance efficiency.
- Build national technical capacity for equipment maintenance, data analysis, and real time reporting, supported by improved data quality systems that enable timely decision making, operational accountability, and stronger national ownership of AMR surveillance.
- Promote regional collaboration and market shaping approaches to reduce costs, harmonize regulatory and operational practices, and facilitate shared learning across countries, reinforcing the sustainability and resilience of AMR surveillance systems.

# ASLM SPECIAL CONVENTION ON DIAGNOSTICS

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# 08: Sustainability and Business Case for AMR: Mobilizing Resources to Achieve 2030 Targets

## 8.1 Sustaining AMR Investments in a Changing Funding Landscape

### Remarks by Mr Nqobile Ndlovu, ASLM CEO

Mr Nqobile Ndlovu opened the session by acknowledging the significant progress Africa has made in advancing the antimicrobial resistance (AMR) agenda. Drawing on the African Union’s landmark AMR report, he highlighted that nearly 80% of countries on the continent now have National Action Plans (NAPs) in place—an important indicator of growing political commitment and coordinated regional action. He noted further achievements, including strengthened surveillance systems, increased participation in GLASS, and substantial improvements in laboratory infrastructure and workforce capacity, much of which has been supported through investments such as the Fleming Fund.

Despite these gains, he underscored several critical challenges that threaten the sustainability of current momentum. Global financing for AMR is declining, and Africa faces a substantial funding gap: the continent requires an estimated \$2–6 billion annually for an effective AMR response, yet current financing levels fall short by a factor of ten. At the national level, most NAPs remain severely underfunded, with countries needing approximately \$100 million per year to operationalize their plans. Against this backdrop, he posed a central and urgent question: How do we sustain the gains?



### Remarks by Dr. Susan Nabanda, Laboratory Director's Forum Chairperson

Building on this framing, Dr. Susan Nabanda anchored the discussion around the imperative of sustaining past investments amid a shifting and uncertain funding landscape. She emphasized that the conversation must begin with a clear understanding of the impact that previous investments have delivered—particularly in strengthening systems, capacities, and country

readiness to respond to AMR.

She outlined three core objectives for the session: first, to reflect on the tangible outcomes of past investments; second, to explore how national priorities can be better aligned with emerging funding opportunities; and third, to hear directly from countries on how financial support has translated into measurable improvements. These testimonies, she noted, are essential for identifying what works, where gaps persist, and how future investments can be more strategically targeted.



### Expert Presentation: The Case for Investment – Dr. Raphael Chanda (Director, ReAct)

Dr. Raphael Chanda reinforced the urgency of sustained investment by presenting a compelling economic case for action. He highlighted that AMR currently costs the global economy an estimated \$66 billion annually, a figure projected to rise to \$160 billion by 2050. For Africa, the stakes are even higher: failure to effectively address AMR could cost the continent up to 5% of its GDP, undermining health security and economic development. He pointed to a stark disconnect between planning and financing. While many African countries have developed NAPs, only 2% have allocated funding for implementation, and none rely on domestic financing. This gap, he stressed, threatens the continent’s ability to mount a coordinated and sustainable AMR response.

Dr. Chanda outlined several critical intervention areas where significant gaps persist. In IPC, WASH, and vaccination, Africa’s compliance stands at just 13%, compared to a global average of 90%. Strengthening these foundational systems could avert an estimated 18% of AMR-related deaths in sub-Saharan Africa. In financing and coordination, effectiveness remains low—9% in Africa versus 23% globally—highlighting

the need for stronger governance and resource alignment. He also emphasized persistent weaknesses in evidence generation, with surveillance, diagnostics, and data systems often limited, passive, and non-representative. He concluded by identifying priority needs to close these gaps: deeper community engagement, targeted resource mobilization, strategic investment in high-impact areas, and strengthened active surveillance systems.



#### AMR Champion Testimonial - Honorable Dr. Khumbize Kandodo Chiponda

Dr. Khumbize Kandodo Chiponda added a strong advocacy voice to the session, emphasizing the centrality of country ownership in driving sustainable AMR responses. She urged development partners to align their support with national priorities, noting that externally driven agendas often fragment efforts and dilute long-term impact.

She called for strategic, cross-cutting planning that breaks down disease-specific silos and promotes the pooling of partner resources to strengthen broader health systems. Such an approach, she argued, is essential for ensuring that AMR interventions are embedded within resilient, integrated service delivery platforms.

Dr. Chiponda also underscored the importance of data-driven priority setting and costing, noting that evidence-based planning is critical for reducing the economic and social burdens of AMR. Finally, she advocated for regional collaboration and increased support for regional and local manufacturing, highlighting these as key pathways to building sustainable, self-reliant systems capable of withstanding global supply chain shocks.

## Session Panelists

The discussion brought together insights from a distinguished panel, including

Dr. Raphael Chanda, Dr. Khumbize Kandodo Chiponda, and Dr. Pascale Ondo, each offering complementary perspectives on the economic, policy, and systems dimensions of AMR financing and sustainability.

## 8.2 Key Messages

- 1. AMR is a major health and economic threat**  
 AMR undermines health outcomes and economic stability, worsening the burden of HIV, TB, and malaria while posing significant GDP risks for African countries.
- 2. A critical funding crisis threatens sustainability**  
 Despite progress in NAP development and capacity strengthening, massive financing gaps persist. Sustainability remains the biggest challenge, requiring increased domestic investment and innovative financing models such as levies and pooled funds.
- 3. Integrated, system-wide approaches are essential**  
 A strong One Health framework—anchored in IPC, WASH, vaccination, and cross-sector planning—is necessary to break disease silos and strengthen overall health systems.
- 4. Data-driven decision-making must guide priorities**  
 Weak surveillance and diagnostics (with only ~30% of facilities equipped) limit evidence generation. Strengthening data systems is crucial for priority setting, costing, and demonstrating impact.
- 5. What Africa Needs Now**  
 Africa needs a paradigm shift toward ownership and collaboration. Sustaining gains requires stronger country ownership, alignment of partner investments with national priorities, regional collaboration, and positioning AMR as an economic stability issue on global platforms.

## 8.3 Calls to Action



## 8.4 Pledges and Commitment Roundtable

In opening the session on partner commitments, the moderator noted that the ASLM Special Convention had brought together key global and regional institutions to reaffirm their support for strengthening laboratory systems and advancing diagnostics across Africa. He emphasized that the pledges made reflected a shared recognition that sustainable laboratory systems are central to health security, AMR containment, and universal health coverage. Representatives from the Global Fund, UKHSA, and ICARS outlined their respective commitments, signaling renewed momentum for coordinated investment in laboratory systems strengthening.

### Global Fund

The Global Fund representative outlined the organization's commitment as a financial mechanism supporting HIV, TB, and malaria programs, with an expanding mandate that now includes AMR. He explained that AMR interventions are eligible under the Pandemic Preparedness and Response (PPR) and Laboratory Systems Strengthening (LSS) funding streams. The Global Fund will continue to support data systems, infection prevention and control, wastewater surveillance, genomic sequencing, workforce development, and pooled procurement. He emphasized that countries must align AMR priorities with existing national programs to maximize impact and ensure coherence across funding portfolios.

## UK Health Security Agency (UKHSA)

UKHSA confirmed a three-year commitment focused on technical assistance, capacity building, and strategic partnerships. The representative highlighted ongoing and future support in quality assurance (QA), external quality assessment (EQA), laboratory leadership development, surveillance, IPC, and antimicrobial stewardship. Support will be delivered through a combination of in-country advisors, UK-based experts, and regional collaboration with Africa CDC and ASLM. UKHSA also noted its intention to help countries transition from reliance on Fleming Fund support toward more sustainable national and regional mechanisms.

## International Centre for Antimicrobial Resistance Solutions (ICARS)

ICARS reaffirmed its role as a provider of implementation research and catalytic funding to support LMICs in developing sustainable, evidence-based AMR solutions. The representative highlighted ICARS' focus on IPC, antimicrobial stewardship, digital tools, capacity building, and regional learning platforms. ICARS currently manages a growing portfolio of approximately USD 40 million, with USD 3 million committed for the coming year. The organization will continue to provide economic analysis, technical expertise, and co-creation of context-appropriate interventions with governments and national stakeholders.



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# 09: Industry Forum: Co-Creating End-to-End Diagnostic Solutions for Africa in a Changing World

## 9.1 Session Speakers and summaries

Mr. Nqobile Ndlovu provided the opening remarks and Mr. Anafi Mataka facilitated the collaborative discussion which included more than 45 representatives from key industry players – including local manufacturers, as well as country representatives (laboratory directors), ASLM, and other stakeholders.

The African Society for Laboratory Medicine (ASLM) convened its Inaugural Industry Forum this November 26, 2025 by bringing together directors of national and regional laboratories alongside representatives from leading diagnostic industry partners – approximately 45 individuals attended the session. The purpose of the workshop was to advance laboratory systems, catalyze multi-stakeholder collaboration, align priorities, explore opportunities for innovation, equitable access as well as sustainability in diagnostics across Africa. The workshop ended on a common agreement that as a Pan-African organization, ASLM should establish a steering committee as well as a working group which will serve as a joint task force to monitor progress on laboratory strengthening and diagnostic innovation. ASLM was also tasked to facilitate capacity-building workshops and advocate for policy harmonization at regional and continental levels.

The following proverbs captured our attention:

- **"Buy Africa Build Africa" is a proverb which rhymes with an African proverb which says "You have to make with someone from your village"**: this is aimed at encouraging indigenous entrepreneurship/production which eventually leads to availability of diagnostics at affordable costs.

- **"Do not buy the hen that feeds you"** is an African proverb which means in this circumstance that if Government takes too much

time to pay suppliers, then it will end up "buying the hen" thereby sending the industries to bankruptcy.

## 9.2 Key Messages

The meeting centered on the overarching theme: "The Future of Diagnostics in Africa." This theme was articulated through a series of critical issues, namely:

Creation of an ASLM Industry Forum to address the urgent challenges contributing to the diagnostics gap.

Supply chain and innovation, focusing on barriers that limit efficiency, reliability, and access..

Sustainable financing models to ensure long-term viability of diagnostic services.

Policy and market shaping to create enabling environments for adoption and scale-up of new technologies.

Product development and equitable access to ensure innovations reach those who need them most.

Across all these issues, participants engaged with a common question: How can stakeholders collectively address the challenges and dismantle the barriers that perpetuate the diagnostics gap in Africa?

## 9.3 Identified Gaps and Challenges

### Scientific and Technical Gaps

- Proliferation of closed-system platforms, limiting interoperability, competition, and local innovation.
- Limited visibility into emerging technologies, with no clear point of contact for staying abreast of global trends and advancements.
- Insufficient investment in scientific research and innovation, slowing progress toward locally adapted diagnostic solutions.
- Fragmented and siloed approaches, driven by competition rather than coordinated ecosystem development.

### Resource and Infrastructure Challenges

- Inadequate and unpredictable funding, undermining long term sustainability of diagnostic and manufacturing initiatives.
- Limited technical guidance during early decision making, particularly in selecting appropriate products, platforms, and instruments.
- Weak infrastructure for production, storage, and distribution, constraining scale up and reliable last mile delivery.

### Policy and Governance Challenges

- Weak and inconsistent regulatory frameworks, resulting in slow, complex, and costly product registration processes.
- Low trust in government systems, affecting collaboration and slowing adoption of locally manufactured products.  
Misalignment between industry priorities and national needs, creating barriers to coordinated planning and investment.
- Poor inter-ministerial coordination, with limited engagement between government, regulators, and industry forums.
- Cross border regulatory and political barriers, hindering regional market access and mutual recognition.
- Insufficient policy support for product validation, limiting the ability of local manufacturers to demonstrate quality and gain market confidence.

### Social and Behavioral Challenges

- Profit driven market behavior, often overshadowing programmatic and patient centred priorities.
- Low trust in locally manufactured products, with a persistent preference for imported technologies.
- Affordability constraints, forcing trade offs between price and the ability of countries or facilities to pay.
- Weak commitment and follow through among key actors, slowing progress toward coordinated, sustainable solutions.

## 9.4 Call to Action

**Strengthen continental market shaping and access mechanisms** by streamlining import and procurement processes, generating stronger demand (including through civil society), and advancing pooled procurement across regional blocs such as SADC, COMESA, and WAC.

**Accelerate regulatory harmonization and innovation** through deeper collaboration with the Africa Medicines Agency (AMA), establishment of regional manufacturing hubs, preferential procurement and tax incentives for local producers, and expanded technology transfer to boost local manufacturing capacity.

**Secure sustainable financing for diagnostics and AMR surveillance** by adopting blended funding models (e.g., 30 60 100), establishing national budget lines and health levies, improving demand forecasting, and honouring commitments such as the Abuja Declaration.

**Build strong national systems and technical capacity** by improving data quality and real time reporting, strengthening equipment maintenance and analytical skills, and enhancing cross sector One Health integration with major disease programmes.

**Deepen regional and public-private collaboration**, including institutionalizing the ASLM-Industry Forum, engaging industry as strategic partners, and leveraging ASLM's convening power to align Finance and Health ministries on sustainable diagnostic and AMR financing.

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# 10: Quality at the Core: Building Trust in Diagnostics (EQuAFRICA)

This session focused on the critical role of External Quality Assessment (EQA) in ensuring reliable laboratory data for combating Antimicrobial Resistance (AMR) in Africa. The presentations showcased a multi-pronged approach, from innovative EQA models and accreditation of providers to the implementation of a large-scale regional program.

## 10.1 The speakers and their topics were:

**Prof. Olga Perovic (NICD, South Africa / WITS University):**

**"Innovative EQA model for rapid tests, bacteriology and Antimicrobial Susceptibility Testing (AST)."**

This presentation explored the future of EQA, highlighting the shift towards digital EQA (dEQA), AI-assisted analytics, and hybrid models to overcome traditional challenges like shipping and cost.

**Sylvanus Tekwe Fon (ASLM):**

**"EQA QMS - Delivering ISO/IEC17043 for Accreditation Proficiency Testing Providers."**

This presentation detailed a systematic capacity-building program to train and accredit EQA providers across Africa against the international ISO/IEC 17043 standard, ensuring they are competent and reliable.

**Patience Dabula (ASLM):**

**"Successful Regional EQA model to address AMR Surveillance in 14 countries."**

This presentation provided an overview of the ASLM EQuAFRICA project, a large-scale, operational success story that has provided bacteriology EQA to 287 laboratories across 14 Fleming Fund countries under a One Health approach.

This session focused on the critical role of External Quality Assessment (EQA) in ensuring reliable laboratory data for combating Antimicrobial Resistance (AMR) in Africa. The presentations showcased a multi-pronged approach, from innovative EQA models and accreditation of providers to the implementation of a large-scale regional program.

## 10.1 The speakers and their topics were:

The session highlighted several innovative strategies and key takeaways:

- **Digital and Innovative EQA (dEQA):** Moving beyond physical samples to digital EQA using case scenarios, digital images, and raw data for interpretation. This allows for more frequent, lower-cost testing and remote participation.
- **The EQuAFRICA Regional Model:** A proven, scalable framework for delivering EQA across multiple countries by leveraging a consortium of African "Centres of Excellence" as EQA providers, coordinated by ASLM.

- **Systematic Accreditation of Providers:** A focused effort to build a network of accredited EQA providers (against ISO/IEC 17043), which is fundamental for generating trusted, international-grade AMR data.
- **One Health Integration:** The EQuAFRICA project successfully integrates human, animal, and environmental health sectors into a single EQA scheme, guided by a multi-sectoral Technical Advisory Committee.
- **Data-Driven Feedback:** The use of detailed EQA reports and a dedicated informatics system to provide laboratories with actionable feedback, guiding corrective actions and continuous quality improvement.

## 10.3 Panel Discussion

The EQA program is significantly strengthening AMR laboratory quality across Africa, but long-term impact depends on sustainable funding, stronger communication systems, improved logistics, expanded environmental and food microbiology capacity, and full integration of the One Health approach. The panel discussion was held under the following themes.

### 10.3.1 Participant Engagement & Attendance

Participant engagement has always been central to the success of the EQA program. After each cycle, feedback sessions are held to review results and provide corrective guidance designed to strengthen learning and build confidence among participants. Yet, despite the value of these sessions, attendance has remained a challenge. On average, only about one in five participants attend the meetings, leaving the majority without the benefit of direct discussion. The reasons are varied but familiar. For some, demanding work schedules make it difficult to step away. Others struggle with connectivity issues that cut them off from virtual sessions. And for many, the timing of meetings simply clashes with other responsibilities. These barriers, though practical, risk weakening the very purpose of the feedback process.

In response, the program introduced a series of solutions aimed at drawing participants closer. Frequent reminders now help keep the

sessions visible amid busy calendars. Flexible engagement strategies offer alternative ways to connect, ensuring that even those who miss the live meetings can still benefit. Continuous sensitization efforts remind participants of the importance of their involvement, reinforcing that their presence is not just requested but essential. Together, these measures are gradually reshaping the story of engagement—turning low turnout into an opportunity for innovation, and building a culture where feedback is not only shared but truly embraced.

### 10.3.2 Sample Preparation & Stability Improvements

In the early stages of the program, swabs were used to distribute samples. However, this approach quickly revealed a critical limitation: after approximately four weeks, the organisms lost viability, making meaningful evaluation increasingly difficult. To address this challenge, the program transitioned to the use of freeze-dried samples. This innovation brought several important advantages. Not only did it improve the stability and viability of the organisms, but it also reduced packaging size and minimized transport risks. Additionally, the shift contributed to greater environmental sustainability by streamlining materials and logistics. Collectively, these improvements significantly enhanced the reliability of external quality testing, ensuring that the program could deliver consistent and trustworthy results.

### 10.3.3 Laboratory Performance Improvement

Although not every laboratory is tested in each cycle, global evidence makes one fact clear: consistent participation in external quality program leads to remarkable improvement. Studies show that laboratories engaged regularly in EQA testing strengthen their performance by more than 80%. This pattern underscores the power of continuity—each cycle builds on the last, reinforcing good practices and correcting weaknesses. Continuous participation is therefore recognized as a powerful driver of quality improvement, ensuring that laboratories steadily advance toward higher standards of accuracy and reliability.

### 10.3.4 Key Challenges Faced by EQA Providers

To strengthen the program, well-characterized isolates are sourced to reflect AMR priorities across human, animal, and environmental health. Careful attention is given to ensuring the homogeneity and stability of

samples, while maintaining strict biosafety and biosecurity standards. At the same time, efforts focus on method standardization across multiple laboratories, each using different testing platforms, to ensure consistency and comparability of results.

### 10.3.5 Communication Barriers & Solutions

The program has faced several challenges, including delayed feedback from laboratories, difficulties in accessing online reporting platforms, and late or missing result submissions. To overcome these obstacles, collaboration with national coordinators has been strengthened, refresher training on data submission platforms has been provided, and WhatsApp groups have been created to improve communication. In addition, multiple channels are now used to ensure timely engagement and more reliable reporting.

### 10.3.6 Logistics & Shipping Challenges

Transporting biological materials across borders presents significant challenges. Customs delays and varying regulatory requirements between countries often slow the process, while the limited availability of approved transporters adds further complexity. These factors heighten the risks associated with moving infectious materials internationally. To safeguard integrity and reliability, the program has implemented several measures. Close coordination with regional partners ensures smoother navigation of regulatory hurdles, while daily shipment tracking provides transparency and control. Pre-shipment and in-transit quality checks, together with continuous temperature monitoring, help maintain sample stability. Most importantly, the adoption of freeze-dried samples has greatly reduced transport risks, offering a resilient solution that protects the integrity of materials throughout their journey.

### 10.3.7 Training & Capacity Building

Two rounds of structured training were conducted to build laboratory capacity and strengthen quality practices. The sessions covered core areas such as EQ principles, panel preparation, organism characterization, antimicrobial susceptibility testing, Quality Management Systems (QMS), and data analysis, reporting, and interpretation. In addition, laboratory professionals received practical instruction on swab methods as a backup approach, freeze-drying

techniques to ensure sample stability, and—introduced later as capacity expanded—the detection of resistance mechanisms. Together, these trainings equipped participants with both foundational knowledge and advanced skills, laying the groundwork for more reliable and resilient laboratory performance.

### 10.3.8 Continuous Education & Feedback

After each EQ cycle, participants are provided with expected results, detailed evaluation reports, and standardized technical commentaries to guide their performance. Laboratories are encouraged to use duplicate samples to carry out corrective actions and to implement improvements ahead of the next cycle. Over time, these practices have led to noticeable progress, with both the quality of reports and the level of participation steadily improving.

### 10.3.9 Selection of EQ Providers

EQ providers were chosen through a formal proposal and vetting process, ensuring that only institutions with the necessary technical capacity, infrastructure, and commitment to sustainability were selected. Central to this process was a strong African-led principle: “Africans providing EQA for Africans.” By embracing this vision, the program reinforced ownership and accountability within the continent. To further strengthen resilience, multiple providers were appointed across different regions, building a broad base of continental capacity and ensuring that external quality assessment could be delivered reliably and sustainably.

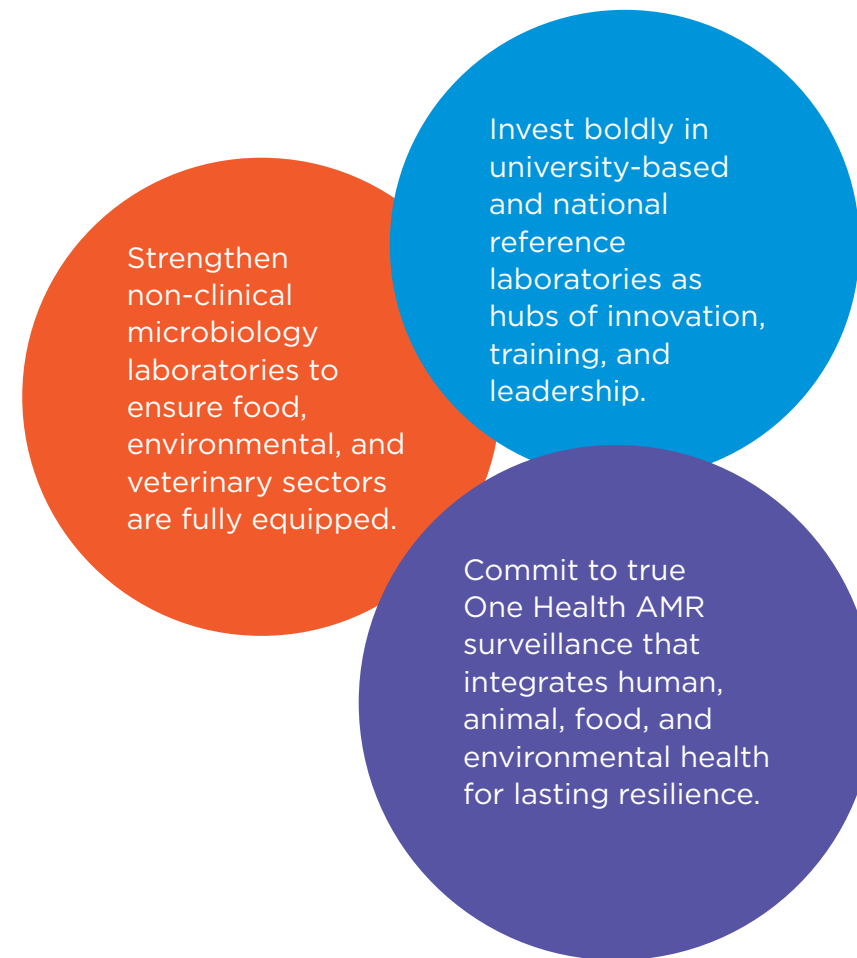
## 10.4 Identified Gaps and Challenges

- **Laboratory performance remains below expected standards**, with many facilities failing to meet the 80% benchmark due to weak technical skills, quality management gaps, and persistent difficulties in core testing such as AST and pathogen isolation.
- **Heavy reliance on donor funding creates a sustainability cliff**, with limited government integration and no long term business models to ensure continuity once external funding ends.
- **High rates of EQA non returns—driven by reagent shortages**, equipment failures, and unresponsive laboratories—signal deep operational weaknesses across the system.

- **Traditional EQA models are costly and logistically complex**, requiring international shipment of biological samples, IATA trained personnel, and navigating regulatory hurdles, often resulting in delays.
- **Provider capacity is increasingly stretched**, as growing numbers of participating laboratories, shipment delays, and uneven infrastructure across regions strain resources and slow evaluation cycles.
- **Funding limitations and inequitable investment threaten long term sustainability**, particularly across the One Health spectrum where human health advances outpace animal, food, and environmental microbiology.
- **Significant gaps persist in non human sectors**, with environmental, food, and fisheries microbiology remaining underdeveloped, weakening the continent's overall One Health AMR resilience
- **Lack of early sustainability planning and weak national ownership** hinder the transition from donor -driven programmes to integrated , country led systems

## 10.5 Call to Action

A clear and urgent call has been made: the fight against antimicrobial resistance cannot be won by clinical laboratories alone. To build true resilience,





# 11: Diagnostic innovations and implementation challenges- Symposium - Integrated Genomic Sequencing in AMR countries)

## 11.1 Summary of Discussions

### Presenters:

Dr Sarah Mwangi Africa CDC, Dr Abebaw Kebede Africa CDC, Dr Bright Adu University of Ghana, Dr Stanford Kwenda ASLM, Dr Collins Tanui Africa CDC

The session highlighted the urgent need to integrate genomic sequencing into AMR surveillance to overcome the limitations of traditional phenotypic testing. Presenters emphasized that genomics offers strain-level resolution essential for tracing transmission, detecting emerging resistance, and guiding targeted interventions. Despite growing political will, implementation is hindered by infrastructure gaps, limited workforce capacity, fragmented data systems, and donor-dependent financing. Solutions discussed included hub-and-spoke regional sequencing models, long-term sustainability planning, strengthened data governance through AGARI, and embedding genomics within national AMR programs. The session also showcased AGARI platform a secure platform for archiving, managing, and sharing pathogen genomic data, designed to overcome fragmentation and support real-time AMR surveillance. It emphasized standardized metadata, controlled access, and collaborative project workspaces that enable countries to upload, analyze, and share high-quality genomic datasets. The session concluded with a call for coordinated investment, cross-border collaboration, and actionable pathways to translate genomic innovation into routine public health practice across Africa.

**"Innovation becomes impact only when converted into systems, people, and policies—together we can bridge that gap "** Dr Bright Adu

## 11.2 Key Messages

### The Imperative for Integrated Genomic Surveillance in AMR

Presenters underscored the limitations of current approaches, noting how delayed detection, the absence of strain-level insights, and missed transmission events weaken outbreak control efforts. These challenges reinforced the critical role of genomics in strengthening surveillance and response. Discussions highlighted how genomic tools can pinpoint clonal spread, uncover emerging resistance mechanisms, and track transmission across species. Beyond these scientific insights, genomics was recognized as a cost-effective early-warning system—providing timely signals that enable faster interventions and more effective containment of outbreaks.

The session also highlighted the severe gaps in AMR surveillance across Africa, noting that only 1.3% of laboratories conduct routine bacteriology and most rely on slow, conventional AST methods. The discussions demonstrated how integrated genomic surveillance addresses these limitations by providing strain-level resolution, enabling early detection of clonal spread, emerging resistance, and outbreak sources. Progress from the IGS project was also showcased, including local sequencing capacity in 7 of 9 countries, over 1,400 genomes shared, and strengthened regional data analysis through AGARI.

### Implementation Challenges and Pathways to Sustainable Integration

The journey toward strengthening genomics capacity has not been without obstacles. Persistent infrastructure gaps, unreliable reagent supplies, and a limited bioinformatics workforce have slowed progress. Fragmented data systems and an over reliance on donor funded projects further highlight vulnerabilities that threaten sustainability. In response, stakeholders have proposed clear pathways forward.

Regional hub and spoke sequencing models would allow laboratories to share resources and expertise more efficiently. Long term financing strategies are essential to reduce dependence on external donors and secure stability. Integrating genomics into national AMR programmes ensures that surveillance becomes embedded within broader health systems. Finally, strengthened data governance platforms—such as AGARI—offer a foundation for harmonized, secure, and accessible information sharing across the continent. Together, these measures chart a path toward resilient, sustainable genomics capacity that can drive Africa’s leadership in AMR surveillance.

### Strengthening Continental Genomic Data Sharing Through AGARI

The presentation highlighted AGARI as a secure, standardized, and collaborative platform designed to empower African institutions in managing pathogen genomic data. By enabling laboratories to upload, organize, and share information while safeguarding national ownership and governed access, AGARI strengthens both trust and accountability. Its project-based workspaces foster multi-country collaboration, harmonize metadata, and integrate analysis across diverse settings. In doing so, AGARI marks a decisive shift away from fragmented, siloed data systems toward a unified continental approach—one that enhances real-time AMR surveillance and supports faster, more effective public health responses

### Gaps and Challenges

The expansion of genomics capacity has been hindered by several critical obstacles. Persistent infrastructure gaps and unreliable reagent supplies have disrupted continuity and slowed progress. A limited bioinformatics workforce further constrains the ability to analyze and interpret complex data at scale. Fragmented data systems weaken collaboration and prevent seamless sharing of insights across institutions. Compounding these challenges is an over-reliance on donor-funded projects, which threatens long-term sustainability and leaves programs vulnerable when external support shifts. Together, these barriers underscore the urgent need for stronger investment, coordinated systems, and locally driven solutions to secure lasting impact.

## 11.3 Panel discussion

### Moderator:

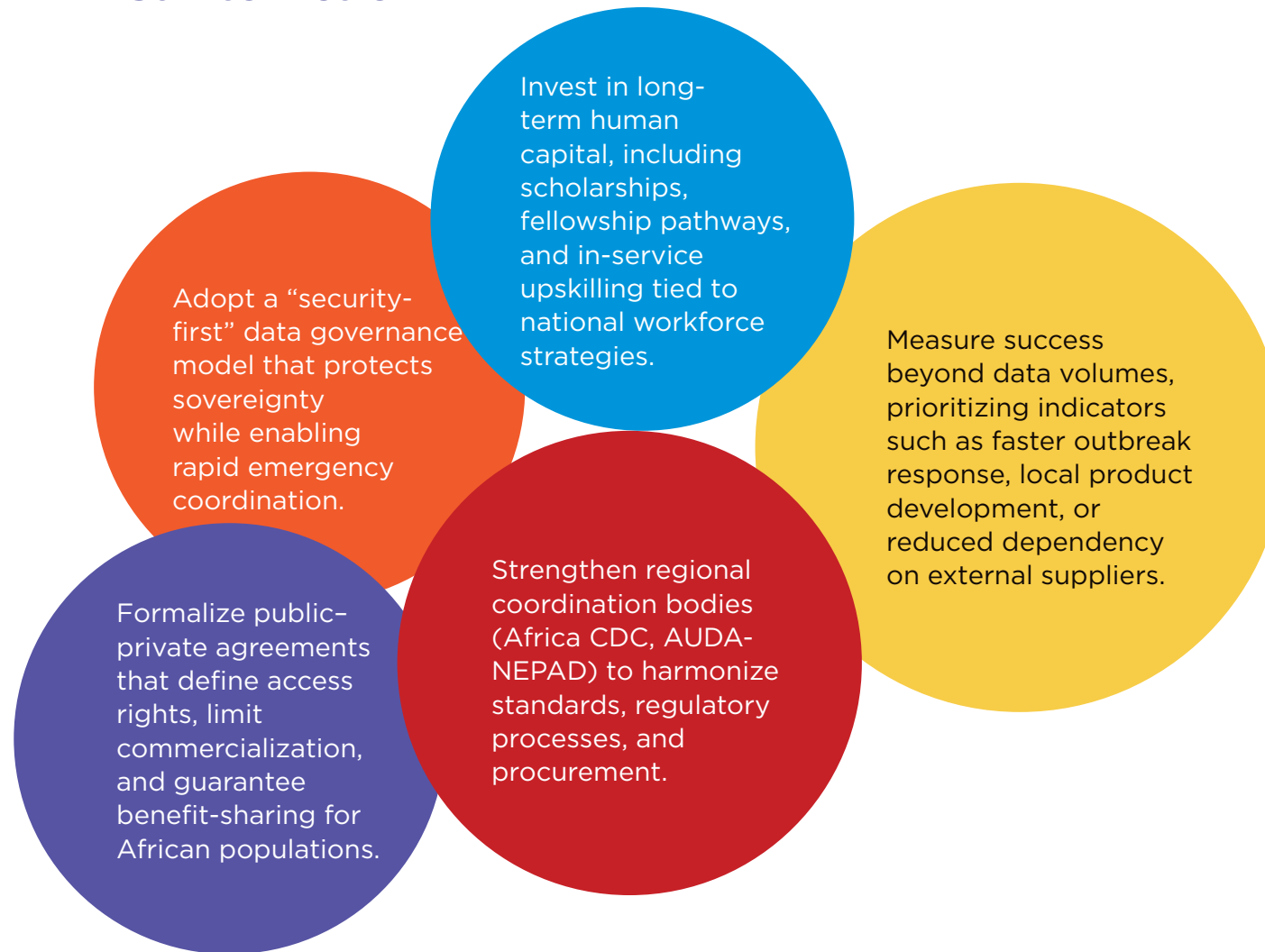
**Dr Umah, Ahmad and Panelists: Dr. Essomba Rene Cameroon MoH; Prof. Jeremiah Seni; Dr Barakat IPD Morocco**

The panel explores how Africa can balance national data sovereignty with the urgent need for rapid data sharing during outbreaks, how the continent can build sustainable local capacity to analyze and act on genomic data, and how private sector engagement can be governed to ensure equitable partnerships that protect public interests and prevent the commercialization of shared public data resources.

Novel/Innovative Ideas and Recommendations from the panel discussion

- **Automatic Outbreak Data-Release Triggers**  
A continental mechanism that pre-authorizes immediate data sharing during declared health emergencies to avoid delays caused by sovereignty negotiations.
- **Pan-African Workforce Pipeline**  
A coordinated strategy linking universities, Centres of Excellence, and national public health institutes to train bioinformaticians, epidemiologists, and data scientists through shared curricula, secondments, and virtual learning ecosystems.
- **Ethical Data-for-Value Partnerships**  
Structured agreements where private companies gain access to data in return for commitments such as affordable product pricing, technology transfer, and local manufacturing.
- **Regional Platform Interoperability**  
Designing genomic platforms that connect seamlessly with disease surveillance, supply chain, and clinical systems to support faster, data-driven decisions.

## 11.4 Call to Action



# 12: Demand Creation and Accountability

## 12.1 Plenary 4: The Role of Civil Society in Diagnostics:

The session focused on how civil society and communities can drive equitable access to diagnostics, strengthen accountability, and leverage strategic communication to influence health policy and outcomes.

Moderators: Ms Nancy Bowen (Kenya) & Dr Collins Mitambo (Malawi)

- **Mr Tapiwanashe Kujinga (Diagnostic Equity Consortium) -** Communities as Advocates for Diagnostic Access. Tapiwanashe emphasized that communities are essential drivers of change in the fight for diagnostic equity in Africa, serving not as passive recipients but as informed advocates with critical lived experience. He highlighted how initiatives like the Diagnostic Equity Consortium (DEC) empower communities through training, literacy programs, and structured advocacy tools—such as SWOT analyses and policy frameworks—to demand accountability and system improvements. By building a networked movement across over 20 countries, DEC equips communities to monitor commitments, target decision-makers, and push for the implementation of national essential diagnostics lists. His central message was clear: sustainable, people-centered health systems depend on resourcing and mobilizing community power to hold governments accountable and turn policy promises into tangible access.
- **Mr Nelson Otwoma (NEPHAK, Kenya) -** Civil Society as Accountability Partners In his address, he underscored the indispensable role of civil society as accountability partners in advancing diagnostics and antimicrobial resistance (AMR) responses across Africa. He highlighted how civil society employs mechanisms like community-led monitoring and shadow reporting to hold institutions accountable, ensure community voices shape policies, and promote responsible antimicrobial use. Ultimately, he asserted that empowered and well-resourced civil society networks are fundamental to building transparent, equitable, and people-centred health systems.

- **Mr Daniel Walusangula, Distory Communications Team -** The Power of Strategic Communication in Science Daniel emphasized that Strategic communication empowers civil society to translate complex diagnostic and AMR science into compelling public campaigns and actionable policy advocacy. By framing evidence through clear narratives and targeted media engagement, civil society can demystify science, mobilize public demand, and hold leaders accountable for equitable diagnostic access. This disciplined approach to messaging is essential for shifting perceptions, driving political will, and building the community trust required for sustainable health system change.

## 12.2 Key Messages

- o Community Power Shift: From passive recipients to active stakeholders
- o Evidence-Based Advocacy: Using NEDLs and situational analysis
- o Community-Led Monitoring: Structured feedback mechanisms
- o Shadow Reporting & Scorecards: Independent accountability tools
- o One Health Integration: Linking health, agriculture, and climate
- o Strategic Communication: Embedding storytelling in program design
- o Positive Media Trends: Improved expert citations and policy framing

## 12.3 Identified Gaps & Challenges

- o Low community involvement and knowledge gaps
- o Difficulty translating policy commitments into action
- o Funding shortages and weak legal frameworks for CSOs
- o Underreporting of AMR, gender, equity, and poverty in media
- o Limited African representation in global health coverage

## 12.4 Calls to Actions

- **Strengthen community engagement and accountability** by expanding training, enhancing social contracting, and fostering partnerships among governments, CSOs, media, and communities.

- **Secure sustainable financing** through increased domestic funding, mandated budget lines for advocacy and communication, and support for civil society and human-rights-based health programming.
- **Integrate AMR and One Health priorities into national systems** by embedding community engagement in diagnostic policy, aligning sectors, and adapting information systems to reduce duplication and improve efficiency.
- **Enhance evidence generation and communication** through regular situational analyses, journalist training, and media policy reforms that incentivize coverage of equity and AMR issues.

## 12.5 Panel discussion: Round table dialogue

A panel discussion focused on the challenges communities face in accessing diagnostic services and the critical role Civil Society Organizations (CSOs) can play in overcoming these barriers, particularly in the context of AMR

### Primary barriers to community access to diagnostics and empowering CSOs to drive change and shape health communication, especially regarding AMR

**Low Community Awareness:** Many communities lack a fundamental understanding of what diagnostics are, often associating hospital visits solely with treatment rather than initial testing. This is exacerbated by the absence of direct equivalents for "diagnostics" in many local languages. **Lack of Prioritization in Healthcare Systems:** Diagnostics are often not positioned at the foundational level they should be, especially in low and middle-income countries. **Empiric diagnosis (treating based on symptoms without testing)** is common, leading people to believe diagnostics are only for complex or severe conditions.

### Communication Challenges for Complex Issues: Concepts like Antimicrobial Resistance (AMR)

They are difficult to communicate effectively to communities, partly because AMR itself doesn't cause immediate symptoms, making it hard

for people to appreciate its urgency. Translating such concepts into local languages further compounds this difficulty. **Focus on Treatment Over Diagnosis:** The prevailing mindset often prioritizes immediate treatment (e.g., getting a pill from a pharmacy) over understanding or undergoing diagnostic tests, which are seen as an inconvenience or an unnecessary step.

### Role of Civil Society Organizations (CSOs) in Driving Change:

**Sustained Awareness Campaigns:** CSOs are crucial for launching targeted and ongoing campaigns to educate communities on the full spectrum of diseases and the indispensable role of diagnostics in detection and effective treatment.

### Sensitization on Health and Well-being:

CSOs should sensitize communities to define health comprehensively, including the importance of diagnostics as a fundamental part of well-being, not just a response to illness.

### Partnerships and Education:

Partnering with communities to educate them from the outset about diagnostics is vital to shift the perception from "treatment first" to "diagnosis first." **Proactive Engagement in Policy and Implementation:** CSOs need to move beyond merely reacting to urgent issues. They should actively shape the communication and implementation strategies for initiatives like AMR, ensuring community voices are integral to planning and policy, rather than just being responsive stakeholders.

### Role of Media: Amplifying CSO Voices:

The media has a responsibility to actively seek out and feature CSO perspectives in their reporting to address the historical underrepresentation of critical community voices.

### Fostering Partnerships:

Media can play a role in fostering partnerships between CSOs and other stakeholders by providing platforms for dialogue and showcasing their work.

## 13: Symposium: Turning AMR Data into Action

The session focused on turning AMR data into actionable insights by addressing barriers, opportunities, and digital innovations within a One Health framework. Key highlights included the introduction of AMDataNet for automated AMR/AMC/AMU data analysis and the AMR Surveillance System Assessment Tool for country-led evaluations. Experiences from Ghana, Malawi, Uganda, and Zambia showcased practical applications, digitalization efforts, and economic justification for AMR interventions.

**Dr Ritah Namusoosa**, presenting under the theme “Turning AMR Data into Action: Barriers, Opportunities, and Digital Innovation Across One Health”, from the Uganda Ministry of Health – National Health Laboratory and Diagnostic Services (MoH-NHLDS), highlighted Uganda’s progress in strengthening AMR surveillance through digitization of microbiology laboratory tools, nationwide expansion of the ALIS-Microbiology AMR module, improved real-time data reporting via a central AMR warehouse, and enhanced dashboard-driven data visualization, all contributing to better data quality, facility-level antibiograms, and evidence-based national reporting, while outlining next steps that include broader interoperability, advanced analytics, and integration of phenotypic and genotypic data.

**Mr John Farrow**, Public Health and Health Information Systems Specialist and Principal Partner of the E-Shift Partner Network, Geneva-based nonprofit supporting ASLM through the TADE grant, introduced the AMR Surveillance System Assessment Tool (SSAT), a country-led One Health assessment framework developed under the Fleming Fund’s TADE grant, designed to help nations evaluate and strengthen AMR surveillance systems through landscape analysis, political economy considerations, and monitoring and evaluation; he outlined its components—including stakeholder mapping, surveillance system profiling, data-sharing assessments, and power-influence analyses—alongside visualization dashboards and M&E scoring domains, emphasizing its role in guiding national planning, investment, collaboration strategies, and future improvements such as expanded

visualizations and an updated version following recent field testing.

**Mr Anafi Mataka and Mr Allan Abala** - presenting on “Regional Technical Assistance to Improving AMR/U/C Data Quality and Quantity, Analysis, and Reporting – MAAP Highlights & Innovative Tools,” and affiliated with the MAAP/ASLM regional AMR strengthening initiative, showcased how the MAAP2 program is advancing antimicrobial resistance (AMR), antimicrobial consumption (AMC), and antimicrobial use (AMU) surveillance across 14 African countries by improving data quality, expanding epidemiological inputs, and standardizing analysis through tools such as the open-source AMDataNet suite, which automates data cleaning, validation, visualization, and reporting; he highlighted persistent gaps—including limited standardization, insufficient epidemiological variables, and slow analysis cycles—while demonstrating how the GitHub-based automated pipeline has dramatically reduced turnaround times from weeks to minutes, increased the usability of surveillance outputs, and enabled scalable, policy-ready evidence to support national and regional AMR response strategies

Presented by **Dr. Collins Mitambo**, the Malawi Country Showcase highlights the nation’s significant progress in establishing a unified, multisectoral Antimicrobial Resistance (AMR) Surveillance Platform designed to address long-standing fragmentation in AMR data collection and reporting. AMR has been designated a national priority within Malawi’s One Health AMR Strategy, prompting the development of a system capable of harmonizing information from human health, animal health, and environmental sectors. The new platform provides a single, coordinated structure for collecting, validating, analyzing, and visualizing AMR and antimicrobial use/consumption (AMU/AMC) data, enabling more reliable evidence to inform clinical guidelines, stewardship efforts, and outbreak response.

## 13.1 Panel Discussions

During the panel discussion, Mr Emmanuel Tanui, Assistant Chief Pharmacist at the National Quality Control Laboratory, Ministry of Health Kenya, outlined key challenges hindering the development of a sustainable AMR surveillance data management system. He highlighted persistent interoperability issues, noting that health facilities continue to use diverse and incompatible platforms for AMR and antimicrobial consumption reporting. This fragmentation, coupled with variability and gaps in data quality, limits the ability to generate reliable analyses and undermines evidence-based decision-making.

Mr Tanui also emphasized the need to strengthen human resource capacity, particularly in lower-level facilities where data management skills vary significantly. He cautioned that Kenya's heavy reliance on donor funding—such as support from the Fleming Fund—poses long-term sustainability risks, underscoring the importance of increased domestic financing. He concluded by calling for stronger coordination among stakeholders, stressing that effective AMR surveillance depends on cohesive collaboration across institutions and sectors.

**Dr. Chizimu Joseph**, AMR Surveillance Coordinator at the Zambia National Public Health Institute, emphasized the critical need to strengthen the integration of economic and burden-of-disease data into AMR decision-making. He noted that a major gap remains the limited availability of robust burden and economic data, which constrains the ability to design targeted interventions and assess the effectiveness of current AMR strategies.

Dr. Joseph highlighted that generating this evidence is essential for evaluating the impact of communication efforts, understanding the true costs associated with diagnostic testing, and structuring AMR budgets more efficiently. He underscored that improved data integration would enable more inclusive, evidence-based, and cost-effective policy decisions, ultimately supporting a more sustainable national AMR response.

**Ms Emiliana Francis**, National AMR Coordinator at the Ministry of Health Tanzania, outlined key strategies for strengthening the integration of AMR data into national health information systems to

enhance efficiency and sustainability. She emphasized the importance of transitioning AMR data from siloed management information systems into routine national platforms such as DHIS2, ensuring that surveillance outputs become part of standard health reporting. Francis highlighted the need for technical alignment between laboratory information management systems—particularly those with microbiology modules—and the broader HMIS to enable seamless data exchange. She stressed that effective integration requires close collaboration between MIS and laboratory teams, alongside deliberate adaptation of existing systems to incorporate AMR parameters and shared frameworks for interoperability. Drawing on regional experiences, she noted that adopting best practices from other countries can help Tanzania avoid common pitfalls and accelerate progress toward a more unified, sustainable AMR data ecosystem.

**Mr Khadija Sandembou Diop**, Environmental Health Safety Specialist and One Health expert from Senegal, underscored the importance of sustaining AMR data use beyond the conclusion of major donor programs such as the Fleming Fund. She emphasized that Senegal's priority is to leverage existing resources more strategically, creating synergies across sectors to maintain momentum. Mr Diop highlighted the need to develop local funding mechanisms and build a strong economic case for domestic investment, noting that long-term sustainability depends on reducing reliance on external financing. Her intervention reinforced that securing the future of AMR data systems requires deliberate national commitment to ensure they continue to inform policy and decision-making effectively.

## 13.2 Key Messages

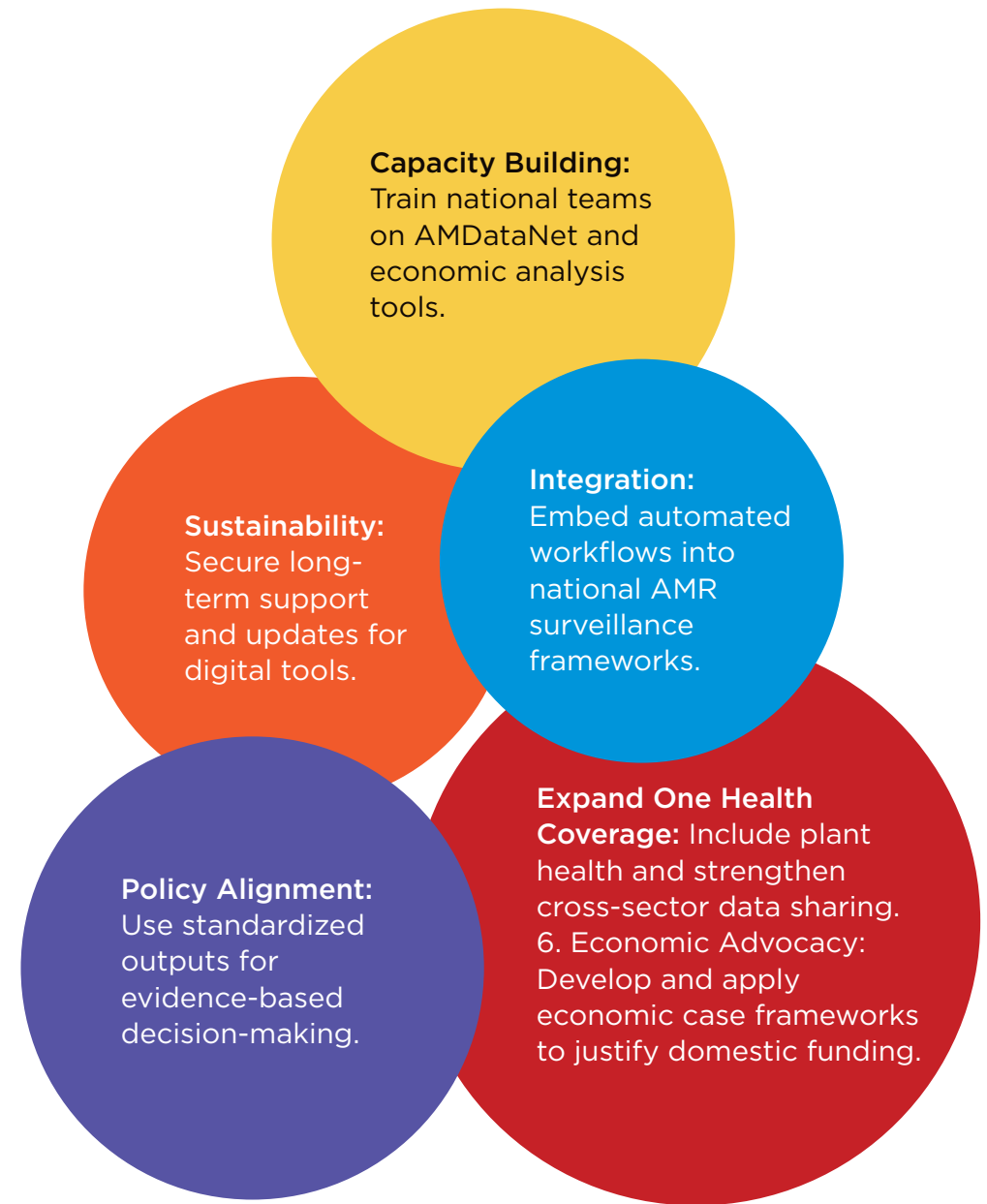
- **Digital transformation and data utilization are essential for impact**  
The shift from data collection to data use is critical. Digital tools—such as AMDataNet, ALIS, real-time dashboards, and interoperable LIMS-HMIS systems—dramatically reduce processing time, improve data quality, and generate policy-ready insights. Integration, automation, and private-sector engagement are key to sustainability.

- **A One Health, system-wide approach is non-negotiable**  
 Effective AMR response requires coordinated action across human, animal, and environmental health sectors. Integrated surveillance, cross-sector planning, and harmonized data systems strengthen national resilience and reduce duplication.
- **Workforce and laboratory systems must be strengthened continuously**  
 Sustainable AMR surveillance depends on skilled personnel, reliable supply chains, and quality-assured laboratory systems. Investments in training, technology adoption, and supportive supervision are essential to maintain diagnostic accuracy and expand coverage.
- **Economic justification and innovative financing models are critical for sustainability**  
 As donor funding declines, countries must build strong economic cases for domestic investment. Tools such as Zambia’s PALY framework and cost-impact models help quantify the economic burden of AMR. Leveraging local resources, co-creating solutions with the private sector, and adopting innovative financing mechanisms will be central to long-term success.

### 13.3 Identified Gaps and Challenges

Africa has established a strong policy foundation for antimicrobial resistance (AMR), with 97.8% of countries now having national action plans in place. However, implementation remains significantly constrained by fragmented and often paper-based data systems, manual processes, and limited technical capacity—particularly for non-technical users who struggle with complex tools. Laboratory networks remain under-resourced, and gaps persist in One Health frameworks, including the absence of plant health indicators and insufficient economic expertise across AMR-related sectors. These systemic weaknesses are compounded by the lack of sustainable financing and the slow integration of AMR functions into national digital and health information systems. As a result, the continent’s strong policy commitments have yet to translate into fully functional, efficient, and resilient AMR surveillance and response systems

### 13.4 Calls to Action



# ASLM SPECIAL CONVENTION ON DIAGNOSTICS

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# 14: Closing Ceremony

The closing ceremony started with a very vibrant entertainment by Safari Cats who blended art and science, the high drum note made louder the sounded a high note in calling for urgent response

## 14.1 Mr Nqoblie Ndlovu, ASLM CEO - Highlights of the Convention & Call to Action

Closing the three-day intensive deliberations, ASLM CEO Mr. Nqobile Ndlovu underscored the urgency of confronting AMR, warning that the crisis is “getting out of hand in Africa” and that it requires immediate, coordinated, and well-resourced action.

**“Over the last three days of the convention we examined the state of diagnostics of AMR from every angle- political, technical, financial, social and even operational, and a few things stood out clearly,”** said Mr. Ndlovu before going ahead to outline the key themes that stood out.

- **The State of the AMR Fight:** Delegates confronted stark truths: AMR now claims more African lives than HIV, tuberculosis, and malaria combined. The continent bears 22% of global AMR deaths, yet only 30% of health facilities provide basic diagnostic tests. Bacteriology capacity remains below 2%, leaving clinicians reliant on presumptive treatment. Despite these challenges, progress is evident. Countries are adopting essential diagnostics lists, implementing stewardship guidelines, and aligning behind the World Health Assembly Declaration on Diagnostics. The Convention underscored that diagnostics are not a luxury but the cornerstone of modern medicine and health security.
- **Financing, Sustainability and the Business Case:** The Convention emphasized the economics of AMR control, recognizing that fragile systems cannot be strengthened without sustainable

financing. Costing studies from Zambia, Malawi, Cameroon, and Ghana revealed that governments are already contributing more than previously understood, though often in unstructured ways. In some countries, over 80% of reagent costs depend on short-term donor funding, while animal health surveillance costs remain disproportionately high. Without predictable domestic financing, the risk of “ghost laboratories” looms—facilities with equipment but no consumables, networks without samples, and surveillance without data. The investment case presented, built on a One Health costing model and blended financing strategy, offers ministries of finance concrete evidence and partners a roadmap for catalytic rather than perpetual support.

- **Accountability, Demand and People:** The Convention elevated voices often marginalized in AMR discussions: civil society, communities, and the laboratory workforce. Participants stressed that civil society organizations must be integrated into governance structures from the outset, and that data must be translated into actionable insights for clinicians, policymakers, and the public. Africa’s laboratory workforce—from seasoned professionals to young interns—was recognized as a vital asset in the AMR fight. Fragile supply chains remain a challenge, but the “Made in Africa” movement demonstrates the potential for diagnostic sovereignty through regional manufacturing, regulatory harmonization, and pooled procurement. Across all sessions, one truth resonated: Africa does not lack innovation, but rather sustained investment, aligned governance, and political prioritization.

### 14.1.1 Convention Key Takeaways

1. Diagnostics must become the standard of care across Africa. We will not win the AMR battle with presumptive treatment where only 5-10% of inpatients on antibiotics get microbiology tests.
2. AMR Surveillance must shift from short term projects to nationally funded, sustainable programs. Reagents, consumables, EQA and workforce must be budgeted within national health security budgets

3. One Health approaches are essential, integrating human, animal, and environmental sectors into a unified surveillance shield.
4. Africa's diagnostic future will be digital, data-driven and decentralized, leveraging AI-enabled analytics and interoperable platforms.
5. Local manufacturing is a strategic health security priority, requiring accelerated production, regulatory harmonization, and demand aggregation.

### 14.1.2 Call to Action

The Convention concluded with a collective commitment to five concrete actions

- (i) African Governments: We call upon all governments to establish dedicated national budget lines that integrate AMR diagnostics and surveillance into UHC benefits.
- (ii) Africa CDC and Regional Bodies. Elevate AMR to the agendas of AU Heads of State and support member states with advocacy.
- (iii) Donors and Global Partners. Align behind Africa's investment case and shift toward flexible, multi-year catalytic funding
- (iv) Civil Society and Communities. Develop accountability scorecards, advocate for diagnostic access, and educate communities on responsible antibiotic use.
- (v) Industry and the Private Sector. Engage in the ASLM Industry Forum to co-create Africa-appropriate diagnostic solutions, including local manufacturing and service ecosystems.

## 14.2 Closing Address, Delivered by a Ministry of Health representative.

The Ministry of Health of Kenya delivered the closing remarks at the conclusion of the 2nd ASLM Special Convention on Diagnostics. The statement highlighted the convention as technically robust, politically relevant, and strategically forward looking, with appreciation expressed to ASLM leadership for selecting Nairobi as the host city. Special recognition was given to Hon. Khumbize Kandodo Chaponda,

AMR Champion and former Minister of Health of Malawi, for her advocacy and leadership, as well as to sponsors, exhibitors, presenters, moderators, partners, and technical teams whose contributions ensured the success of the event.

Delegates from government, civil society, academia, industry, and One Health sectors were commended for their active engagement and collaborative spirit, which enriched discussions and shaped actionable outcomes. The Ministry emphasized that the findings and calls to action emerging from the convention align closely with Kenya's national strategies and its commitment to work with ASLM, Africa CDC, and partners to translate insights into tangible progress. Nairobi was described as a hub of innovation and African collaboration, with Kenya expressing its openness to host future ASLM conventions.

The remarks concluded with a call to sustain the unity, technical insights, and shared purpose that defined the meeting, affirming the collective responsibility to strengthen diagnostics, confront emerging threats, and build a secure and healthy Africa. The convention was officially declared closed, with delegates wished safe travels home.

## 14.3 Vote of Thanks, Mr Joshua Mwangi, COO, ASLM,

The 2nd ASLM Special Convention on Diagnostics concluded with a Vote of Thanks delivered on behalf of the African Society for Laboratory Medicine by Mr Joshua Mwangi. Over three days, delegates engaged in meaningful discussions across the diagnostics ecosystem, and the success of the convention was attributed to the collective contributions of speakers, partners, exhibitors, and participants.

Special appreciation was extended to keynote speakers and session chairs whose insights shaped the milestones of the event, as well as to moderators who guided discussions toward concrete actions. The support of partners and sponsors—including the Fleming Fund, Mott MacDonald, MasterCard Foundation, Canada and UK Governments, Africa CDC, ICARS, Hologic, and KH Medical—was acknowledged for enabling exhibitions, workshops, and symposia.

Exhibitors and poster presenters were recognized for showcasing innovations and practical solutions that enriched understanding of Africa's diagnostic landscape. Service providers ensured smooth operations, while delegates and participants were thanked for their active engagement, which strengthened collective efforts against AMR. Finally, deep gratitude was expressed to the ASLM Secretariat, planning

committee, volunteers, rapporteurs, technical teams, and logistics staff whose professionalism ensured seamless execution of the convention. The closing moment celebrated the ASLM staff, marking the event's success with unity and renewed commitment to advancing diagnostics across Africa.



# Appendices

## Appendix A: Presentation of Certificates and Awards

Presented by Dr Patrick Mateta -ASLM board Chair, to recognize contributors, speakers, and partners.

### 1. ASLM Special Recognition Award – Ministry of Health Kenya Citation

ASLM is honored to present the ASLM Champion for Laboratory Services Award to PS Mary Muthoni Murioki, Principal Secretary, State Department for Public Health and Professional Standards, in recognition of her exceptional leadership and unwavering commitment to advancing diagnostics in Kenya. Her stewardship has been instrumental in strengthening Primary Health Care (PHC), driving progress toward Universal Health Coverage (UHC), and successfully hosting the 2nd ASLM Special Convention on Diagnostics.

### 2. ASLM AMR Champion Award – Hon. Khumbize Kandodo Chiponda

#### *Citation*

“ASLM presents the AMR Champion Award to Hon. Khumbize Kandodo Chiponda for her outstanding leadership and advocacy against antimicrobial resistance. Her continental engagement, including delivering Africa’s AMR Position at the 2024 UN General Assembly and supporting surveillance and stewardship in Malawi, has elevated AMR as a public health priority across Africa.”

### 3. ASLM Beacon of Innovation Award – Ministry of Health Uganda

#### *Citation*

“ASLM honors the Ministry of Health, Uganda, for its exemplary leadership in epidemic preparedness and laboratory innovation. Uganda’s rapid detection, genome sequencing, and deployment of the Type IV Mobile Laboratory during the 2025 SVD outbreak demonstrated continental excellence. Continued investments in quality systems and pandemic readiness position Uganda as a leader in health security.”

### 4. Health Systems & Diagnostics Lifetime Achievement Award – Dr. Yenew Kebede

#### *Citation*

“ASLM presents this Lifetime Achievement Award to Dr. Yenew Kebede for his transformative leadership in strengthening laboratory systems and diagnostics across Africa. His contributions to pathogen genomics, biosafety, pandemic preparedness, and his extensive scientific work have significantly advanced public health on the continent.”

### 5. Convention Award – ICARS

#### *Citation*

“ASLM recognizes ICARS as the ASLM 2025 Convention partner. ICARS’s commitment to practical AMR solutions and sustainable diagnostics strengthening aligns closely with ASLM’s mission. We honor ICARS for its partnership and leadership in advancing evidence-based approaches to AMR control across Africa.”

**Presented by Mr Nqolibe Ndlovu - ASLM CEO**

## 6. ASLM Silver Sponsor Award – Hologic

### **Citation:**

ASLM proudly recognizes Hologic as a Silver Sponsor of the 2025 ASLM Special Convention on Diagnostics. We sincerely appreciate your valuable support and continued commitment to strengthening diagnostic capacity, advancing innovation, and improving health outcomes across Africa.

## 7. ASLM Silver Sponsor Award – HK Medical

### **Citation**

ASLM is pleased to recognize HK Medical as a Silver Sponsor of the 2025 ASLM Special Convention on Diagnostics. We extend our heartfelt appreciation for your generous support and steadfast commitment to advancing diagnostics, strengthening health systems, and improving health outcomes across Africa.

## 8. ASLM Ambassadors Award

### **Citation**

“ASLM recognizes its Ambassadors for their exceptional commitment to elevating diagnostics and laboratory systems on regional and global health agendas. Through dedicated advocacy, they champion AMR, health security, equity in diagnostics, and strengthened collaboration across Africa and beyond.”

Awardees:

1. Ms. Karemu Sharon Gakii
2. Mr. Japheth Ouma Juma
3. Ms. Nancy Bowen
4. Mrs. Susan Karimi Kiambi-Soi
5. Mr. Ronald Odero
6. Dr. Naima Shukri Abdullahi
7. Ms. Marion Chepngeno
8. Dr. Cara Mia Dunaiki (Namibia)

*Presented by Dr Talkmore Maruta – Director of Programs*

## 9. Best Abstract Award – Mrs. Patricia Kafweta

### **Citation**

“ASLM presents the Best Abstract Award to Mrs. Patricia Kafweta for her innovative work on strengthening AMR diagnostics through Zambia’s National Microbiology Mentorship Network. Selected for excellence from 200 submissions, her study advances practical, scalable models for AMR surveillance.”

## 10. Student Best Abstract Award – Mr. Innocent Chibwe (Malawi)

### **Citation**

“ASLM presents the Student Best Abstract Award to Mr. Innocent Chibwe for his One Health genomic study on ESBL-producing E. coli in Malawi. His work demonstrates strong scientific rigor and contributes meaningfully to AMR surveillance research.”

## 11. Best Exhibitor Award- Goauzhou Plus Life Technology

(Based on delegate voting via app)

### *Description*

“Presented to the exhibitor receiving the highest number of delegate votes for excellence in engagement, innovation, and presentation during the 2025 ASLM Special Convention on Diagnostics.”

### Exhibitors Awards

1. Molbio Diagnostics
2. Hologic
3. KH Medical
4. Inqaba Biotec EA
5. Scientific Laboratory Supplies
6. Change Biotec Limited
7. F&S Scientific
8. Cepheid
9. Human Quality Assessment Services - HuQAS
10. Eppendorf Middle East & Africa
11. Incas Global
12. Sysmex
13. SmartSpot
14. Thermo Fisher Scientific
15. Goauzhou Plus Life Technology

Presented by Nelly Rwenji – Senior Brand and Communication Manager – ASLM

## 12. Social media Champion

Dr Yenew Kebede

Mr Tapiwa Kujinga

Dr Nyambura Moremi

Agnes Juru

### *Event organizing partners*

Rococo PR Media

MC

Events and promotion

## Appendix B: List of Sessions and Speakers

# Convention Program



TUESDAY: 25 NOVEMBER 2025					
THE STATE OF THE AMR FIGHT AND DIAGNOSTICS		EXHIBITION AND POSTER HALL 10:30am – 5:00pm			
9:00 - 10:30 AM	OPENING Ceremony (9:00am – 10:30am)	Session Chair: Master of Ceremony	ASLM Africa CDC AU IBAR	ICARS Mott McDonald	AMR Champoin Former MoH Malawi MoH Kenya
10:30 AM	BREAK				
11:00 - 12:30 PM	PLENARY 1: THE AFRICAN AGENDA ON AMR AND DIAGNOSTICS: FROM PROGRESS TO FUTURE SURVEILLANCE				
	Session Chair: Talkmore Maruta, ASLM	<b>From Commitment to Action:</b> <b>Joseph Ndungu, Regional Director of FIND</b> Progress and Gaps in Implementing the WHA Declaration on Diagnostics in Africa <b>Nyambura Moremi, Africa CDC</b> The African Union Landmark Report on AMR – Voicing African Priorities for a Stronger Continental Response - African Priorities <b>Nkatha Githonga</b> The Blueprint: AMR Surveillance Guidance for Africa <b>Evelyn Wasengula</b> Regional AMS Guideline - The ECSA-HC Experience <b>Vashnee Govender, University of Pretoria</b> The AMR and Diagnostics Nexus: Linking Health, Food, and Environment for a One Health Future			
12:30 - 1:00pm	TOUR OF EXHIBITION AND POSTER HALL		1:00 - 2:00 pm	LUNCH BREAK (1:00pm – 2:00pm)	
2:00 - 4:30 pm	BREAKOUT SESSIONS	<b>Session 1:</b> <b>Empowering Laboratory Leaders:</b> Building the Next Generation of Diagnostic Leadership in Africa <b>Convener:</b> Lab Directors Forum	<b>Session 2:</b> <b>Workforce development and AMR surveillance capacity building:</b> Outcomes of Regional Phase 2 Fleming Fund Regional Grants <b>Convener:</b> QWARS, Fellowship, Internship Program	<b>Session 3:</b> <b>Diagnostics Without Disruption:</b> Strengthening Supply Chains for Access and Sustainability <b>Convener:</b> ASLM	5:00 - 6:00 PM Oral Poster/ Abstract Presentations Screen A to D Large Screen

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<b>WEDNESDAY: 26 NOVEMBER 2025</b>					
<b>SUSTAINABILITY &amp; FINANCING</b>		<b>EXHIBITION AND POSTER HALL</b> 10:30am - 5:00pm			
<b>9:00 - 10:30 AM</b>	<b>PLENARY 2</b>				
	<b>Session Chairs:</b> Watipaso Chifundo, ICARS	<p><b>COST AMR SURVEILLANCE IN AFRICA - BUILDING THE INVESTMENT CASE</b> The Cost of AMR Surveillance in Africa: Evidence from Multi-Country Studies</p> <p><b>Speaker 1:</b> Prof Mouiche Moctar &amp; Dr Ntombi Mudenda, UNZA The African Union Landmark Report on AMR – Voicing African Priorities for a Stronger Continental Response - African Priorities</p> <p><b>Speaker 2: Promising and Fit-for-Purpose Health Financing Models for Labs, Diagnostics, and AMR</b> World bank</p> <p><b>Country Case Perspectives - Making the Case for Financing AMR Surveillance</b> Ghana: Dr Dodoo Cornelius, Zambia: Dr Ntombi Mudenda, Cameroon: Dr Ranyl Nguena,</p>			
	<b>Q &amp; A</b>	<b>10:30 - 11:00 AM</b>	<b>BREAK</b>		
<b>11:00 AM - 12:30 AM</b>	<b>PLENARY 3</b>	<b>SUSTAINABILITY AND BUSINESS CASE FOR AMR - MOBILIZING RESOURCES TO ACHIEVE 2030 TARGETS</b>			
	<b>Session Chair:</b> Nqobile Ndlovu, CEO ASLM and Susan Nabadda, LDF & Uganda	<p><b>Business Case for AMR Implementation</b> ASLM</p> <p><b>Continental/Global Perspective - Why Fund AMR in Africa Now</b> Dr. Raphael Chanda, Deputy Director Implementation and Partnerships, ReAct</p> <p><b>Testimonial: AMR Champion</b> Khumbize Kandodo Chiponda, Former Minister of Health, Malawi</p>			
	<b>Pledges &amp; Commitments Roundtable (30 min)</b>		<b>1:00 - 2:00 PM</b>	<b>LUNCH</b>	
	<b>Panelist:</b> ICARS, World Bank, Global Fund UKHSA, Wlecome Trust				
<b>2:00 - 4:30 PM</b>	<b>BREAKOUT SESSIONS</b>	<b>Session 1:</b> <b>Industry Forum:</b> Co-Creating End-to-End Diagnostic Solutions for Africa in a Changing World <b>Convener:</b> ASLM Industry Forum	<b>Session 2:</b> <b>Laboratory Quality and AMR surveillance capacity building:</b> Outcomes of Regional Phase 2 Fleming Fund Regional grants <b>Convener:</b> EQA	<b>Session 3:</b> Diagnostic innovations and implementation challenges: Symposium - Integrated Genomic Sequencing in AMR countries) <b>Convener:</b> AFRICA PGI	<b>Session 4:</b> <b>Annual Regional BSBS TWG Meeting:</b> Eastern and Southern Africa <b>Convener:</b> Canada BSBS in Africa Phase III
		<b>4:30 - 6:00 PM</b> <b>Oral Poster/Abstract Presentations:</b> Exhibition, Posters, ASLM Membership Booth Screen A to D Large Screen			

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THURSDAY: 27 NOVEMBER 2025		EXHIBIT AND POSTER HALL 10:30am - 5:00pm	
9:00 - 10:30 AM	PLENARY 4		
	<b>Session Chair:</b> Nancy Bowen, Kenya and Collins Mitambo, Malawi	<b>ROLE OF CIVIL SOCIETY IN DIAGNOSTICS</b>	
		<b>Civil Society as Advocates for Diagnostics Access</b> Tapiwa Kujinga, Pan-African Treatment Access Movement	
		<b>Civil Society as Accountability Partners</b> Kenya Global Fund CCM representative - Nelson Otwoma	
		<b>Why Stories and Science Need Each Other: The Power of Media in Health</b> Daniel Wesangula -Distory Communications	
		<b>Q &amp; A</b>	
10:30 - 11:00 AM	BREAK 		
11:00 AM - 12:30 AM	SYMPOSIA		
	<b>Session Chair:</b> Nqobile Ndlovu, ASLM	<b>Session 1:</b> Turning AMR Data into Action: Barriers, Opportunities and Digital Innovation across One Health <b>Sponsor:</b> MAAP & TADE	
		<b>Session 2:</b> Regional AMR stakeholders' engagement and prioritization workshop <b>Sponsor:</b> International Centre for Antimicrobial Resistance Solutions (ICARS)	
		<b>Session 3:</b> Annual Regional BSBS TWG Meeting: Eastern and Southern Africa <b>Sponsor:</b> Canada BSBS in Africa Phase III	1:00 - 2:00 PM <b>LUNCH</b> 
2:00 - 4:30 PM	<b>BREAKOUT SESSIONS</b> 	<b>Convener:</b> Regional AMR stakeholders' engagement and prioritization workshop	
		<b>Convener:</b> International Centre for Antimicrobial Resistance Solutions (ICARS)	

# Convention Program

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FRIDAY: 28 NOVEMBER 2025	
DEMAND CREATION AND ACCOUNTABILITY	
9:00 - 10:30 AM	Regional AMR stakeholders' engagement and prioritization workshop Sponsor: International Centre for Antimicrobial Resistance Solutions (ICARS), 
10:30 - 11:00 AM	BREAK 
11:00 AM - 12:30 AM	Regional AMR stakeholders' engagement and prioritization workshop Sponsor: International Centre for Antimicrobial Resistance Solutions (ICARS), 
1:00 - 2:00 PM	LUNCH 
2:00 - 4:30 PM	Regional AMR stakeholders' engagement and prioritization workshop Sponsor: International Centre for Antimicrobial Resistance Solutions (ICARS), 



## Appendix C: List of Poster and Oral Presentations

**Abstract ID 1273:** Investigating World Health Organization Priority Fungi and other Opportunistic Fungi Isolated from Environments Contaminated with Excreta of Synanthropic Pigeons (*Columba livia*) at Households in Zomba and Blantyre, Southern Malawi, Mr Bashir Merico, Malawi University of Science and Technology **Authors: Bashir Merico**<sup>1\*</sup>, Petros Chigwechokha<sup>2</sup>, Gama Bandawe<sup>3</sup> Affiliation<sup>1</sup>. Ndata School of Climate and Earth Sciences, Malawi University of Science and Technology<sup>2</sup>. Academy of Medical Sciences, Malawi University of Science and Technology<sup>3</sup>. Center for Clinical and Biological Sciences Research, Malawi University of Science and Technology

**Abstract ID 1290:** Sustainable Costing and Financing for AMR Diagnostics: Per-Test Cost Analysis of Conventional Bacterial Culture and AST Methods in Zambia. Authors: **Lutinala N. Nalomba**<sup>1</sup>, Mox Kalumbi<sup>2</sup>, Baron Yankonde<sup>3</sup>, Pascalina Chanda-Kapata<sup>4</sup> Affiliations <sup>1</sup>. ECSA Health Community <sup>2</sup>. Texila American University <sup>3</sup>. University of Nicaragua.

**Abstract ID 1373 :** From genome to bedside: benchmarking rapid lateral flow assays against whole-genome sequencing for carbapenemase detection in LMICs, Dr. Elloise du Toit - GARDP Africa, and University of Cape Town"Authors: du Toit E<sup>1,2</sup>, Patel F<sup>2,3</sup>, Africa SD<sup>2</sup>, Marais G<sup>2,4,5</sup>, Franceschi F<sup>6</sup>, da Costa RMA<sup>6</sup>, Geza E<sup>7</sup>, Brink AJ<sup>2,8,9</sup> Affiliations : <sup>1</sup>.Global Antibiotic Research & Development Partnership, Africa, <sup>2</sup>.Division of Medical Microbiology, Faculty of Health Sciences, University of Cape Town, South Africa,<sup>3</sup>. SAMRC/CPUT/ Cardiometabolic Health Research Unit, Department of Biomedical Sciences, Faculty of Health and Wellness Sciences, Cape Peninsula University of Technology, Bellville, South Africa,<sup>4</sup>. The Francis Crick Institute, London, United Kingdom, <sup>5</sup>.Centre for Infectious Diseases Research in Africa, University of Cape Town, South Africa,<sup>6</sup>.Research & Development, Global Antibiotic Research & Development Partnership- GARDP, Switzerland, <sup>7</sup>Computational Biology Division, Faculty of Health Sciences, University of Cape Town, South Africa.<sup>8</sup>National Health Laboratory Services, Groote Schuur hospital, Cape Town, South Africa, <sup>9</sup>.Institute of Infectious Disease and Molecular Medicine, Faculty of Health Sciences, University of Cape town, Cape Town, South Africa

**Abstract ID 1394** Transforming AMR Communication: Building Media Capacity to Drive Public Awareness and Accountability in Africa. Author: Mr Daniel Wesangula. Affiliation: Distory Kenya

**Abstract ID 1395:** Isolation and Identification of Probiotic Bacteria from Fish Gut as Sustainable Alternatives to Antimicrobials in Aquaculture, Dr Chizaram Ukauwa and Bolade T. Adeyemo, University of Abuja, Department of Health and Production.

**Abstract ID 1404:** Tuberculosis Drugs Resistance Surveys Conducted in 2016 and 2023 in Côte d'Ivoire: Lessons Learnt. Bai-Orsot D<sup>1</sup>, Bamba-Karamoko N<sup>1</sup>, Tiotsop B<sup>2</sup>, Adade O<sup>3</sup>, Adagra G.D.<sup>3</sup>, Eddyani M<sup>4</sup>, Cabbibe Andrea<sup>1</sup>, Kouakou J<sup>1</sup>, Akandi K<sup>1</sup>, Diarassouba M<sup>1</sup>, N'Guessan K. R<sup>1</sup>.1 UMTA, Laboratoire de Référence de la Tuberculose, Département de Bactériologie-Virologie Institut Pasteur de Côte d'Ivoire. 01 BP 490 Abidjan 01. <sup>2</sup> École Nationale Supérieure de Statistique et d'Économie Appliquée. <sup>3</sup> Programme National de Lutte contre la Tuberculose. <sup>4</sup> OMS, Genève. <sup>5</sup> Laboratoire Supranational de Milan (Italie) . <sup>6</sup> ECOWAS Regional Centre for Surveillance and Disease Control (RCDS)

**Abstract ID 1409:**Performance in antimicrobial susceptibility testing (AST) for GLASS pathogens among participants from the Southern African region in the EQuAFRICA program, 2024-25 . Authors: Olga Perovic<sup>1, 2</sup>, Rubeina Badat<sup>1</sup>, Marshagne Smith<sup>1</sup>, Patience Dabula<sup>3</sup>, Felix Humwa<sup>3</sup> .Affiliations: <sup>1</sup>. National Institute for Communicable Diseases a division of NHLS, Johannesburg, South Africa,<sup>2</sup> University of the Witwatersrand, Johannesburg, South Africa, <sup>3</sup> African Society for Laboratory Medicine (ASLM).

**Abstract ID 1424:** From Fever to Diagnosis: Mobile Laboratories as a Tool to Curb Antibiotic Misuse and Antimicrobial Resistance in Non-Malarial Illnesses, Dr Idrissa DIENG and Co. Virology Department, Institut Pasteur de Dakar.

**Abstract ID 1441:** Double défi: Comprendre le lien entre le changement climatique et la RAM au Cameroun. Authors: Boade Akibana A. L., Tonmeu Sandrine, Awouma Alphonse, Affiliation: Laboratoire National de Santé Publique, Cameroun.

**Abstract ID 1448:** A time series of antibiotic consumption and use at a tertiary hospital in North-western Tanzania in 2021, Authors: Mapunjo, S<sup>1</sup>, Magembe, E,<sup>2</sup> Mayenga E<sup>3</sup>, Shao J<sup>4</sup>, Sinibagiye D<sup>5</sup> Gabriel M<sup>5</sup>, Seni J<sup>5</sup>, Lubega C<sup>6</sup>, Makhaola, K<sup>4</sup>, Lumu I<sup>6</sup>. Affiliation 1 Ministry of Health Tanzania 2 National Public Health Laboratory, Tanzania 3 Central Veterinary Laboratory, 4 African Society of Laboratory Medicine 5 Bugando Medical Center/ CUHAS 6 Makerere University

**Abstract ID 1463:** Profil de sensibilité des Enterobacteriaceae aux bêta-lactamines à l'Institut national d'hygiène du Togo, Janvier 2020 à février 2025. Authors: Mapenda GAYE, Dame SYLLA, Mouhamadou Moustapha BA, Cheikh FALL and Yakhya DIEYE. Affiliation: Institut Pasteur de Dakar, Senegal

**Abstract ID 1489:** Diagnostic Stewardship to Optimize Antimicrobial Use and Test Utilization, Lessons from Uganda's AMR Surveillance Framework. Authors: Namusoosa R, Kanamwaji Benedict, Ibrahim Mugerwa, Tabajjwa Dickson, Senyonga William, Winnie Nambatya, Akello Harriet, Martha Pedun, Rogers Kisame, Saudah Namubiru Kizito, Grace Najjuka, Isaac Ssewanyana, and Susan Nabadda. Affiliation: National Microbiology Reference Laboratory, National Health Laboratory and Diagnostics Services, Ministry of Health, Kampala, Uganda

**Abstract ID 1493:** Establishing a National AMR Dashboard and Laboratory Information Management System for AMR Data Management in Uganda. Authors: Ritah Namusoosa, Rajab Kasolo, Ibrahim Mugerwa, Tabajjwa Dickson, Daniel Bulwada, Richard Walwema, Martha Pedun, Rogers Kisame, Saudah Namubiru Kizito, Grace Najjuka, Isaac Ssewanyana, and Susan Nabadda. Affiliation: Uganda National Institute of Public Health, Ministry of Health Kampala, Uganda

**Abstract ID 1515:** Participation in Phase 2 of External Quality Assessment for Africa (EQuAFRICA) for the Southern African region, 2024-2025. Authors: Rubeina Badat<sup>1</sup>, Marshagne Smith<sup>1</sup>, Patience Dabula<sup>3</sup>, Prof. Olga Perovic<sup>1,2</sup>. Affiliation: 1. National Institute for Communicable Diseases, 2. University of the Witwatersrand 3 African Society for Laboratory Medicine.

**Abstract ID 1510:** Creating a Network of Practice: Strengthening Diagnostics and Antimicrobial Susceptibility Testing through Zambia's National Microbiology Mentorship Team (NMMT) Network; Authors: Patricia Kafweta<sup>1</sup>, Mweemba Muviwmi<sup>1</sup>, Olajumoke Sule<sup>2</sup>, Esther Musongole<sup>2</sup>, Taurai Machawi<sup>2</sup>, Mwenya Makasa<sup>3</sup>, Ephraim Likando<sup>3</sup>. Affiliations: Ministry of Health Zambia; 2. UK Health Security Agency; 3. Microbiology Mentorship Team Leadership

**Abstract ID 1516:** Establishing an In-Country Bacteriology Proficiency Testing Program in Zambia: Results from a Pilot Trial; Authors: Lungowe I. Mukubuta<sup>1</sup>, Ephraim Chikwanda<sup>1</sup>, Vernon Sichalwe<sup>1</sup>, Edward Ukwimi<sup>1</sup>, Lombe Kampamba<sup>1</sup>, Esther Musongole<sup>3</sup>, Taurai Machawi<sup>3</sup>, Mwendabai Mulasikwanda<sup>2</sup>, Justin Chileshe<sup>1</sup> and Olajumoke Sule<sup>3</sup>. Affiliation 1. National Health Research and Training Institute, Ndola, Zambia 2. Ministry of Health-Zambia 3. United Kingdom Health Security Agency.

**Abstract ID 1522:** Evaluation of Antimicrobial Activity of Methanolic Extracts from *Searsia chirindensis* and *Phyllanthus burchellii* - Plants collected on Mount Gorongosa, Mozambique. Authors: Cumbana, Jennifer<sup>1</sup> Ragú, Hélio<sup>1,2</sup>, Massad, Tara<sup>2</sup>; Martins, Angelina<sup>1</sup>; Hlashwayo Delfina<sup>1</sup>; Mussagy Marília<sup>3</sup>. Affiliations: 2. Gorongosa National Park,<sup>1</sup> Faculty of Science and 3 Faculty of Medicine at Eduardo Mondlane University - Mozambique

**Abstract ID 1528:** Strengthening National Public Health through a Multisectoral Genomic Surveillance Strategy in Mali Author: Dr Cheickna Hamallah Dicko. Affiliation: National Institute of Public Health (INSP), Bamako, Mali,

**Abstract ID 1543:** Cross-Sectoral Genomic Insights into Extended-Spectrum Beta-Lactamase-Producing *Escherichia coli* in Human and Animal Health Settings in Malawi. Authors: Innocent Chibwe<sup>1,2,3</sup>, Peter Mwale<sup>2,4</sup>, Harry Milala<sup>1,2,3</sup>, Alinafe Kawerama<sup>1,2,3</sup>, Muonaouza Deleza<sup>2,4</sup>, Chikhulupiliro Chimwaza<sup>2,3</sup>, Dzinenani Maziya<sup>2,3</sup>, Ronald Chitanga<sup>2,3</sup>, Krupa Kunan<sup>2</sup>, Dr. Collins Mitambo<sup>2</sup>, Titha Dzewela<sup>2,3,5</sup>, Robert Krysiak<sup>2,5</sup>. Affiliation: 1. Antimicrobial Resistance National Coordinating Center, Public Health Institute of Malawi, Ministry of Health, Lilongwe, Malawi,<sup>2</sup>. Institute for Global Health and Infectious Diseases, University of North Carolina, Chapel Hill, USA,<sup>3</sup>. National Microbiology Reference Laboratory, National Public Health Reference Laboratories, Public

Health Institute of Malawi, Ministry of Health, Lilongwe, Malawi,<sup>4</sup>. Department of Animal Health and Livestock Development, Central Veterinary Laboratory, Ministry of Agriculture,<sup>5</sup> Fleming Fund Country Grant Malawi, University of North Carolina, Lilongwe.

**Abstract ID:** 1549 Detection of genotypic Doxycycline resistance genes in *Aeromonas caviaemis* attributed to *Vibrio cholerae* during the 2022–2023 cholera outbreak in Malawi. Authors: Innocent Chibwe<sup>1,2,5,6\*</sup>, Watipaso Nyirenda<sup>1,2</sup>, Nigel A. Cunliffe<sup>3,4</sup>, End Chinyama<sup>5,7</sup>, Chimwemwe Mhango<sup>3,7,8</sup>, Ernest Matambo<sup>3,7,8</sup>, Flywell Kaonga<sup>3,7,8</sup>, Prisca Matambo<sup>3,7,8</sup>, Christina Bronowski<sup>4,7</sup>, Jennifer Cornick<sup>4,7</sup>, Chrispin Chaguza<sup>9,10,11,12</sup>, Prof. Khuzwayo C. Jere<sup>3,7,8</sup>, Prof. Chisomo Msefula<sup>5,6</sup>. Affiliation: <sup>1</sup>. National Microbiology Reference Laboratory, Public Health Institute of Malawi, Ministry of Health, Lilongwe, Malawi, <sup>2</sup>. Antimicrobial Resistance National Coordinating Center, Public Health Institute of Malawi, Ministry of Health, Lilongwe, Malawi, <sup>3</sup>. Department of Clinical Infection, Microbiology and Immunology, Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool, Liverpool, UK, <sup>4</sup>. NIHR Global Health Research Group on Gastrointestinal Infections, University of Liverpool, Liverpool, UK, <sup>5</sup>. NIHR Global Health Research Group on Gastrointestinal Infections, Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>6</sup>. Department of Pathology, School of Medicine and Oral Health, Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>7</sup>. Malawi-Liverpool-Wellcome Programme, Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>8</sup>. Department of Medical Laboratory Sciences, Faculty of Biomedical Sciences and Health profession, Kamuzu University of Health Sciences, Blantyre, Malawi, <sup>9</sup>. Department of Epidemiology of Microbial Diseases, Yale School of Public Health, Yale University, New Haven, CT, USA., <sup>10</sup>. Yale Institute for Global Health, Yale University, New Haven, CT, USA., <sup>11</sup>. Department of Clinical Infection, Microbiology and Immunology, Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool, Liverpool, UK, <sup>12</sup>. NIHR Mucosal Pathogens Research Unit, Research Department of Infection, Division of Infection and Immunity,

**Abstract ID 1800:** Genomic Insights into *Acinetobacter baumannii* from Clinical and Environmental Sources in Northern Nigeria: Emerging Resistance Pathways and Public Health Implications. Author: Dr Ibrahim Yusuf. Affiliation: Kano Independent Research Centre Trust  
**Abstract ID 1802:** Antimicrobial Resistance and Treatment Outcomes

in Vaginal Discharge Syndrome: Insights from Molecular and Clinical Studies in Windhoek, Namibia. Authors: Cara M. Dunaiski, PhD,<sup>1</sup> Marleen M. Kock, PhD,<sup>1,2</sup> Hyunsul Jung, PhD,<sup>2</sup> and Remco P.H. Peters, MD, PhD <sup>2, 4, 5, 6, 7</sup> Affiliations: <sup>1</sup> Namibia Institute of Pathology, Windhoek, Namibia <sup>2</sup>. Department of Medical Microbiology, University of Pretoria, Pretoria, South Africa. <sup>3</sup> Tshwane Academic Division, National Health Laboratory Service, Pretoria. <sup>4</sup> Division of Medical Microbiology, University of Cape Town, Cape Town. <sup>5</sup> Maastricht University Medical Centre. <sup>6</sup> Research Unit, Foundation for Professional Development, East London, South Africa. <sup>7</sup> STI Care and Treatment, World Health Organization.

**Abstract ID 1803:** Molecular Epidemiology and Antifungal Resistance of *Candida glabrata* Isolates in Namibia. Authors: Cara M. Dunaiski<sup>1</sup>, Marleen M. Kock<sup>2, 3</sup> Hyunsul Jung<sup>2</sup> and Remco P.H. Peters <sup>2, 4, 5, 6, 7</sup>. Affiliation: <sup>1</sup>. Namibia Institute of Pathology, Windhoek, Namibia <sup>2</sup>. Department of Medical Microbiology, University of Pretoria, Pretoria, South Africa <sup>3</sup>. Tshwane Academic Division, National Health Laboratory Service, Pretoria <sup>4</sup>. Division of Medical Microbiology, University of Cape Town, Cape Town <sup>5</sup>. Maastricht University Medical Centre <sup>6</sup>. Research Unit, Foundation for Professional Development, East London, South Africa <sup>7</sup>. STI Care and Treatment, World Health Organization.

**Abstract ID 1804:** MBirSA: Towards fostering a unified network of medical biorepositories across South Africa. Authors: D. Anderson, E. H. Conradie, C. Staunton, F. February, M. Sanderson, M. Maseme, S. Singh, C. Swanepoel. Affiliation: Medical Biorepositories of South Africa  
**Abstract ID 1805:** Divergent Trends and High Burden of Antimicrobial Resistance in Cameroon: A Comparative Retrospective Analysis of MDR and MRSA in Two Referral Hospitals. Authors: Denis Zofou<sup>1,2</sup>, Abdel J. Njouendou<sup>1</sup>, Christiane Ingrid Medi Sike<sup>2</sup>, Marie Paule Ngogang<sup>3</sup>, Farida K.L. Moko<sup>3</sup>, Bertrand B. Eyoun<sup>2</sup>, Lady Cherifa Kutjam<sup>1</sup>, Edie-Gregory Halle-Ekane<sup>1</sup>, and Moctar M.M. Mouiche<sup>2</sup>. Affiliation: <sup>1</sup>. MRABL – University of Buea, <sup>2</sup>. Douala Laquintinie Hospital, <sup>3</sup>. Yaounde General Hospital, <sup>4</sup>. One Health Innovative Solutions (OHIS), <sup>5</sup>. ASLM



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**ANTIMICROBIAL  
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SOLUTIONS

Antimicrobial resistance (AMR) remains a growing threat to global health, with significant implications for the African region. Tackling AMR requires coordinated, evidence-based action informed by local contexts, capacity gaps, and national priorities. Identifying priority areas for intervention is a critical first step in designing contextualised AMR mitigation strategies. To achieve this, robust baseline studies and situational analyses are essential to generate data for evidence-based decisionmaking. However, methodologies and approaches vary widely across countries.

for Laboratory Medicine (ASLM), and other partners, is partnering with African countries to co-identify priority AMR problems, identify solutions and the stakeholders needed to ensure successful interventions. This work is part of the 'Strengthening AMR solutions in Africa' initiative (co-funded by the Danish Ministry of Foreign Affairs), which adopts a participatory approach to support governments and stakeholders in identifying key AMR challenges, codeveloping practical and impactful solutions, and prioritizing context-specific actions.

The International Centre for Antimicrobial Resistance Solutions (ICARS), in collaboration with the African Society



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safety, contributing to a healthier and more sustainable future for both humans and animals.

To strengthen our commitment to Africa, we established the KH Medical Africa Center in Accra, Ghana. Serving as a regional hub for innovation, training, and collaboration, the center supports local capacity building and improves access to high-quality diagnostics across the continent.

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## Exhibitors

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### Inqaba Biotec East Africa Ltd:

Inqaba Biotec East Africa Ltd (IBEA), established in Nairobi in 2010, supports leading research, academic and diagnostic laboratories across the region.

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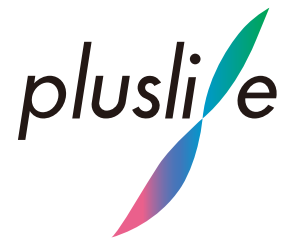
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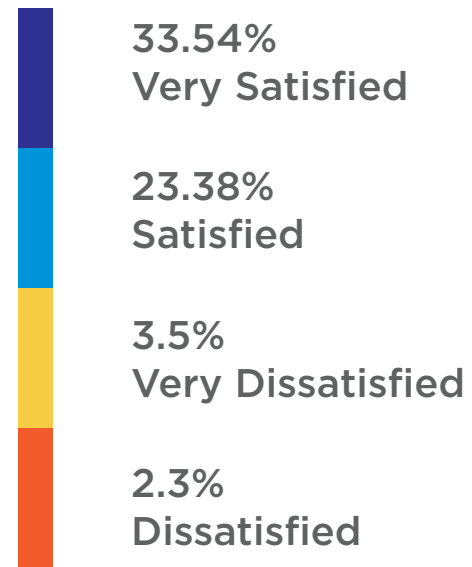
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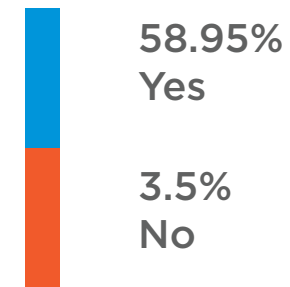
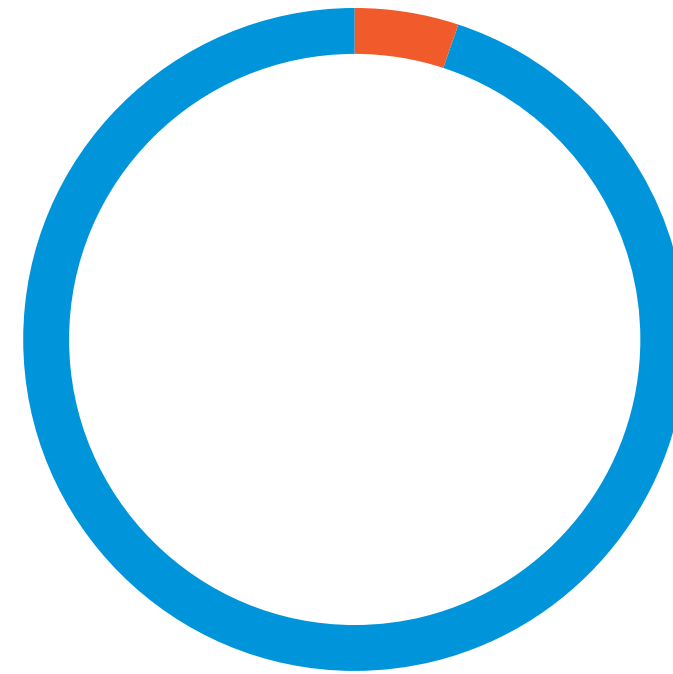
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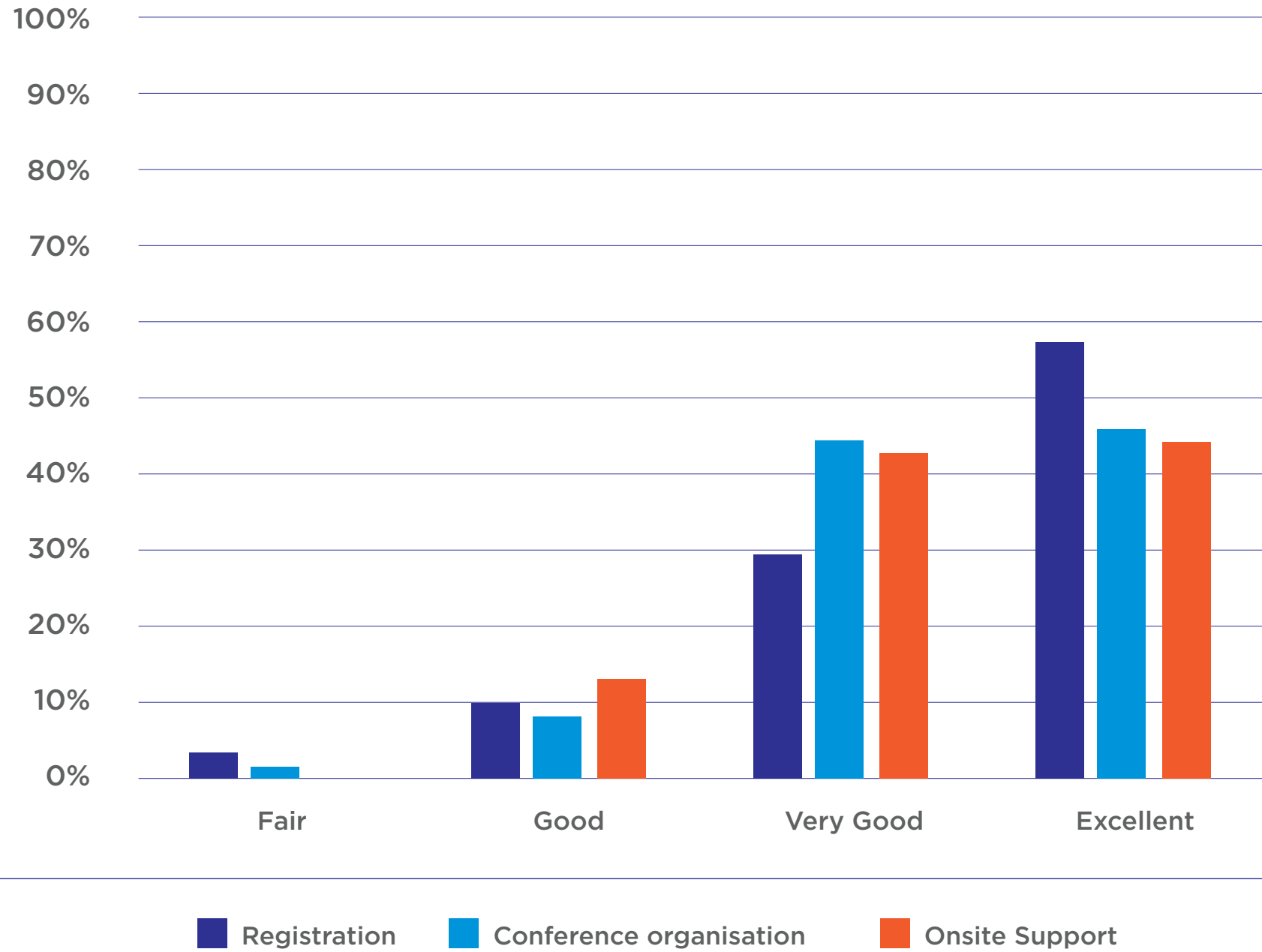
## Appendix E: Conference Evaluation



Overall level of satisfaction with the convention



Satisfied by the time of the year of the convention



Logistical aspects of the convention



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