Inaugural Genomic Sequencing Procurement and Supply Chain Community of Practice (CoP) Meeting

Genomic Sequencing PSM CoP

Session 1

10th December, 2024

Welcome Remarks

Dr. Talkmore Maruta, Director of Program, ASLM

Dr. Collins Tanui, Africa CDC

Agenda

I. **CoP vision, objectives and structure**
   - Edwin Shumba, ASLM

II. **Reflections:** Key takeaways from the Addis and Abidjan sessions
   - Dr. Sarah Mwangi, Africa CDC

III. **Roadmap:** Priority activities and Framework for the PSM CoP
   - DR. Sarah Mwangi, Africa CDC

IV. **Near term priority action items** and progress to date –
   - Edwin Shumba, ASLM

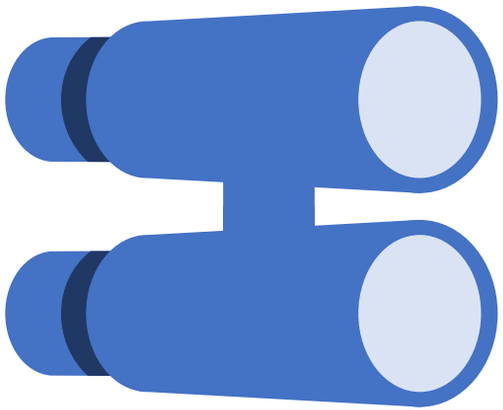
V. **Discussions –** All

VI. **Recap and Next Steps -** ASLM

CoP vision, objectives and structure

Edwin Shumba, ASLM

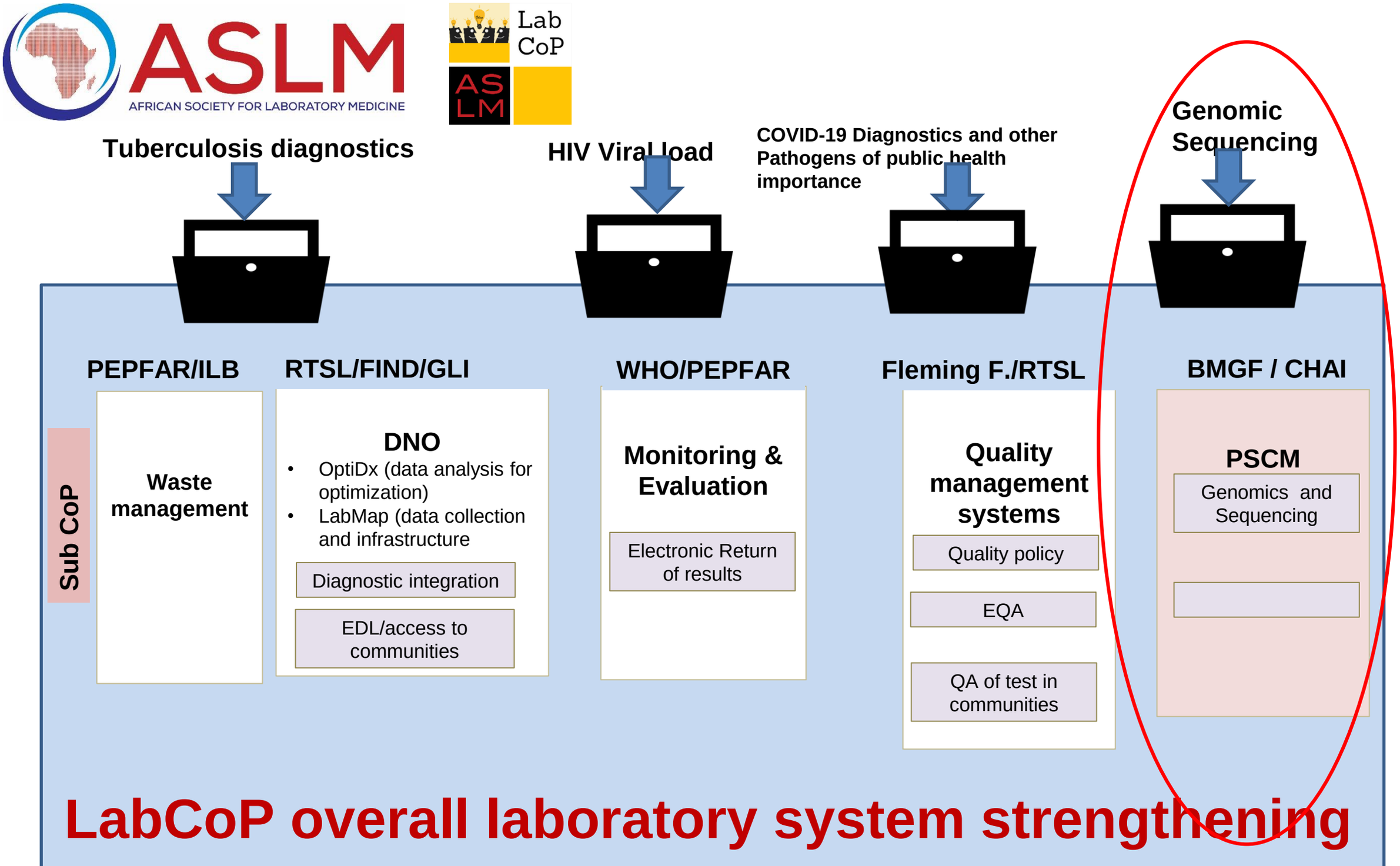
CoP Vision and Objectives



Establish a platform to strengthen genomic sequencing PSCM, ensuring timely, cost-effective, and quality access to resources

Objectives:

- Discuss and advance priority interventions to address challenges with genomics procurement and supply chain
- Enhance knowledge sharing on PSCM best practices and the use of genomics
- Foster innovation in supply chain efficiency and sustainability
- Discuss and address rising issues impacting the supply and use of genomic sequencing
- Coordinate and align with other initiatives on genomics and PSCM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Tuberculosis diagnostics
HIV Viral load
COVID-19 Diagnostics and other Pathogens of public health importance
Genomic Sequencing
PEPFAR/ILB
RTSL/FIND/GLI
WHO/PEPFAR
Fleming F./RTSL
BMGF / CHAI
Sub CoP
Waste management
DNO
OptiDx (data analysis for optimization)
LabMap (data collection and infrastructure
Diagnostic integration
EDL/access to communities
Monitoring & Evaluation
Electronic Return of results
Quality management systems
Quality policy
EQA
QA of test in communities
PSCM
Genomics and Sequencing
LabCoP overall laboratory system strengthening

COP members

Procurement professionals from genomic labs

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Representatives from funding agencies and NGOs.

IT specialists in inventory and logistics systems.

SUPPLY CHAIN MANAGERS IN BIOTECH AND HEALTHCARE SECTORS

Researchers & lab managers

Technology vendors and suppliers

Scientists

AfricaCDC
Centres for Disease Control and Prevention

Academics and subject matter experts (SMEs) in genomics and supply chain

Policy and compliance officers.

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(SMEs)
Procurement
compliance
Policy
healthcare
CDC
Representatives
logistics
officers
experts
ASLM
biotech
matter
suppliers
managers
NGOs
subject
genomic
vendors
specialists
Supply
sectors
chain
systems
labs
Technology
funding
lab
professionals
agencies
inventory
genomics
Africa
Researchers
Academics

CoP Governance

- **Steering Committee/ Secretariat**:
  - Oversees the CoP's strategy and ensures alignment with industry needs.

- **Working Groups**:
  - Time-bound deliverable focused subgroups .

- **CoP Coordinator (ASLM)** :
  - Ensures smooth communication, organizes meetings, and tracks outcomes.

CoP Knowledge sharing mechanism

Platform for Collaboration:	Events:	Resource Library:	Mentorship and Peer Learning:
• A secure online portal with discussion forums, document sharing, and real-time collaboration tools.	• Quarterly webinars and virtual workshops. • Annual summit featuring keynote speakers and case studies.	• Centralized repository for procurement policies, supplier scorecards, case studies, and white papers.	• Pairing junior members with experienced procurement professionals. • Facilitating cross-organization job shadowing opportunities.

CoP Key performance Indicators

# of active participants and event attendance rates.

Reduction in procurement costs through collective initiatives

Reduction in lead times and stockouts.

Number of resources created and shared within the CoP

Rate of uptake for new technologies and practices

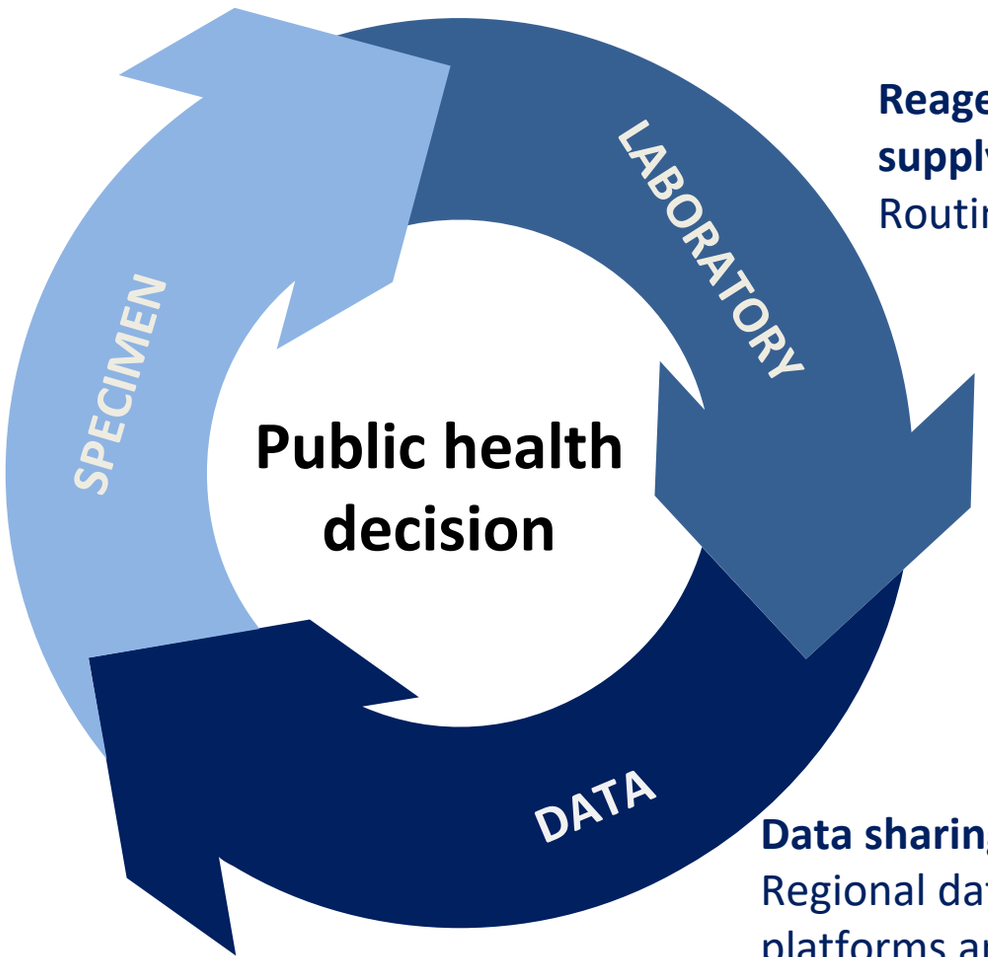
Key Takeaways from Addis, and Abidjan sessions and **CoP Roadmap**

Dr Sarah Mwangi, Implementation Science Lead, Africa CDC

REFLECTIONS
KEY TAKEAWAYS FROM THE ADDIS AND ABIDJAN SESSIONS

ROUTINE SURVEILLANCE: KEY PILLARS FOR MOLECULAR DIAGNOSTICS AND GENOMIC SEQIENCING

Specimen collection and biobanking
Strengthen capacity to collect and store specimens and metadata



Reagents, consumables and supply chain
Routine sequencing capacity

Data sharing and utilization
Regional data sharing platforms and policies

PSM LESSONS FROM IMPLEMENTING A CONTINENT-WIDE GENOMIC SURVEILLANCE PROGRAM

32

Countries

182

Shipments of equipment, reagents and supply

51

Equipment
70% Procurement
30% donation

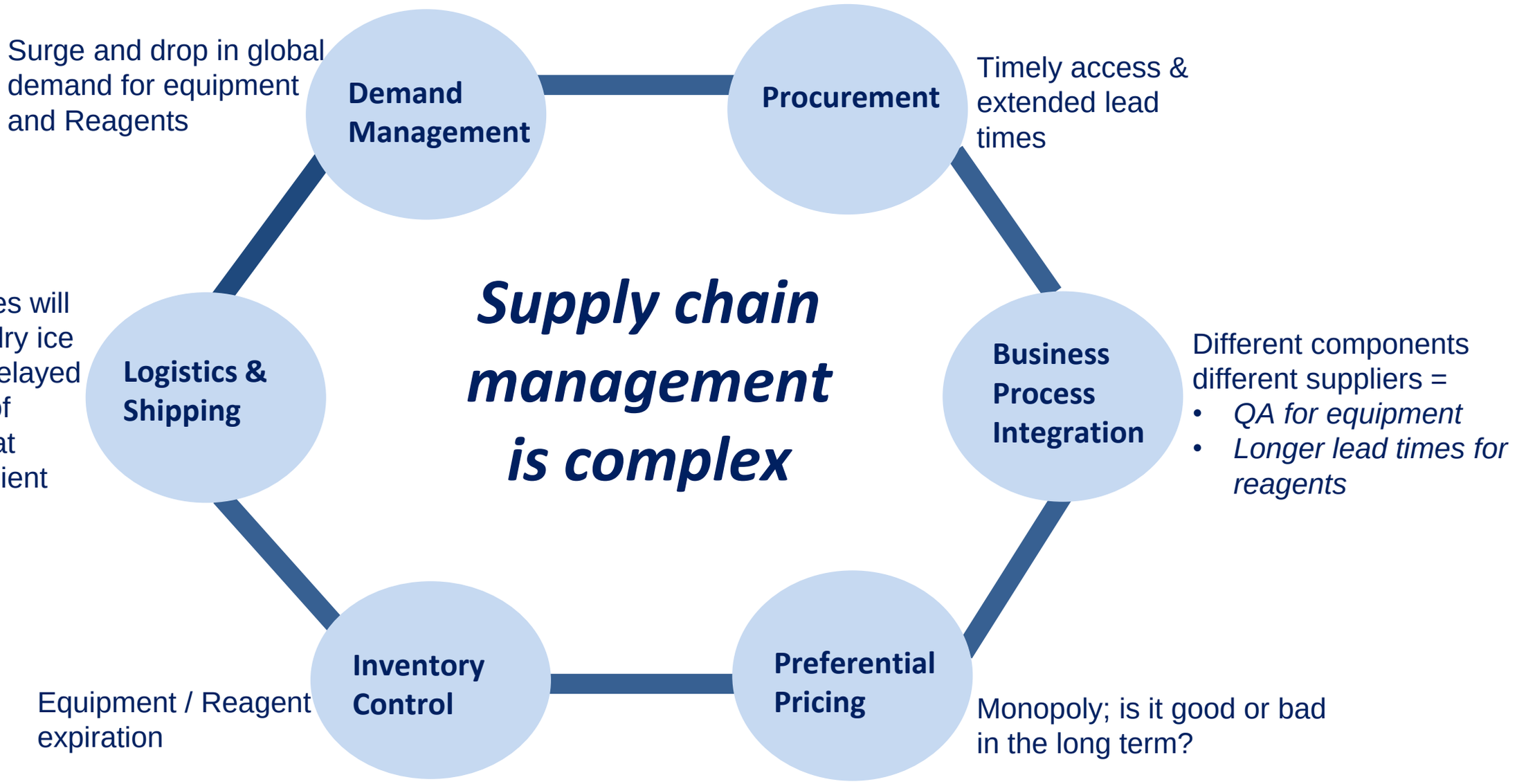
3

Use-cases
COVID-19, Ebola, & Mpox

218K

Reagents
50% Procurement
50% donation

MEDICAL SUPPLY CHAINS ARE COMPLEX



Adapted from labproservices.com

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CHALLENGES / GAPS

•Heterogenous regulatory landscape.
•Extended lead times for delivery of reagents.
•Paucity of channel partners.
• Cost: Sequencing is extremely expensive on a small scale.
•Local technical capacity/workforce for equipment

maintenance.

OPPORTUNITIES

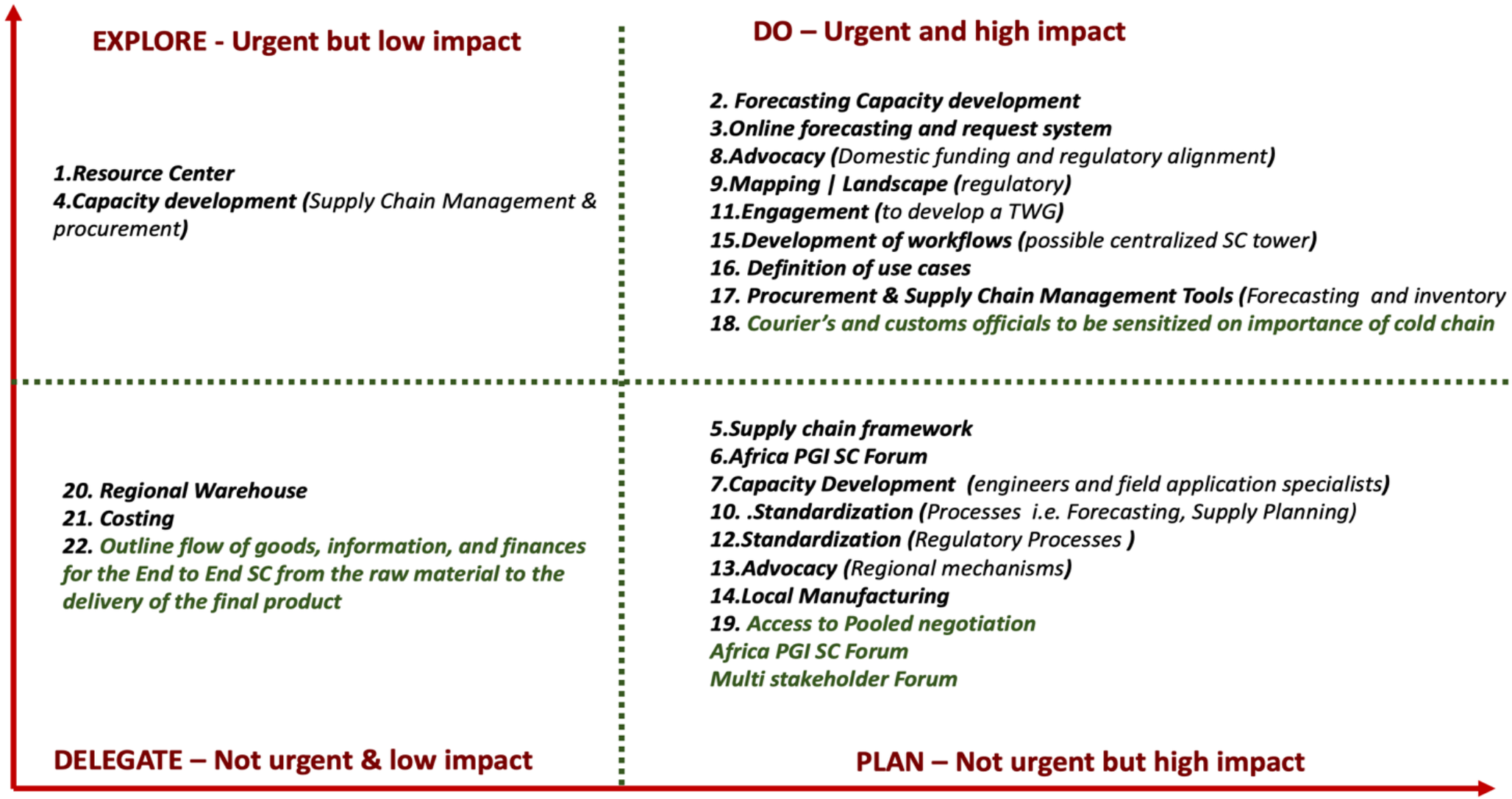
•Negotiation with regulatory authorities.
•Data driven demand forecasting.
•Introduction of more channel partners.
•Negotiated prices for bulk buying.
•Expansion of local biomedical engineering capacity.

How do we leverage from the lessons learnt thus far to optimize the supply chain for molecular diagnostics and genomic surveillance?

AFRICA-AWARE SOLUTIONS

Workshop On Optimisation Of Supply Chain For Genomic Surveillance In Africa (Dakar, February 2023)

AFRICA-AWARE SOLUTIONS
KEY TAKEAWAYS FROM THE DAKAR MEETING



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Workshop For Future Fit - Genomic Sequencing Procurement And Supply Chains (Addis Ababa, July 2024)

FIND
Diagnosis for all

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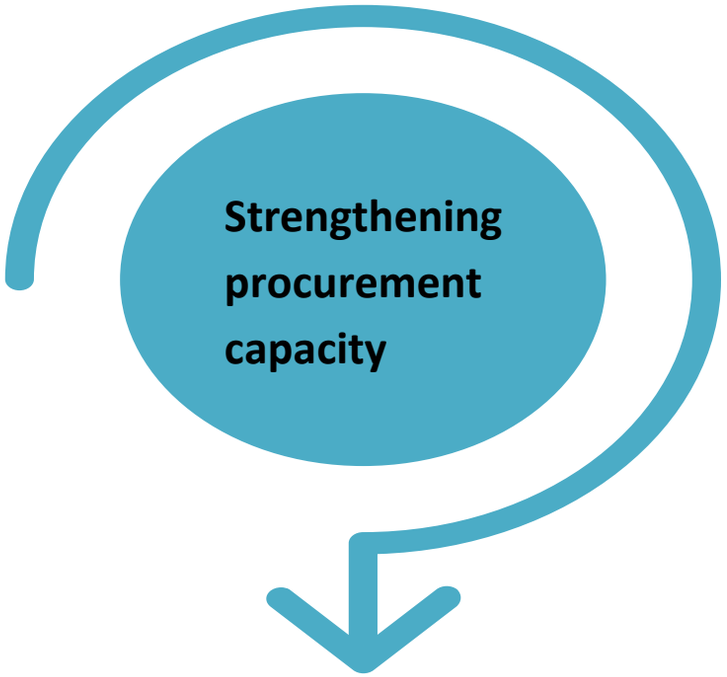
HYPOTHESISED SOLUTIONS & PROPOSED ACTIONS

- Minimum required SLAs appropriate for guaranteed uptime of equipment
- Donation framework guidelines that ensure inclusion of SLAs
- Key principles of SLAs that can be shared with procurers to ensure basic plan is implemented
- National level engagement on SLAs by AfCDC



- Procurement digitalization
- Increase price transparency
- Development of a multi-country forecast to understand overall demand and order aggregation
- Development of competency tool kits for individuals and organizational design
- Strengthen and update national and regional policies related to a) procurement law, b) adoption of digital procurement, c) tax levies

- AMA registration and regional harmonization
- Genomic sequencing products to have zero or minimal duties
- Genomic sequencing products to be included in the EDLs

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KEY COMPONENTS OF THE ROADMAP

Advocacy

Strengthening Procurement Capacity

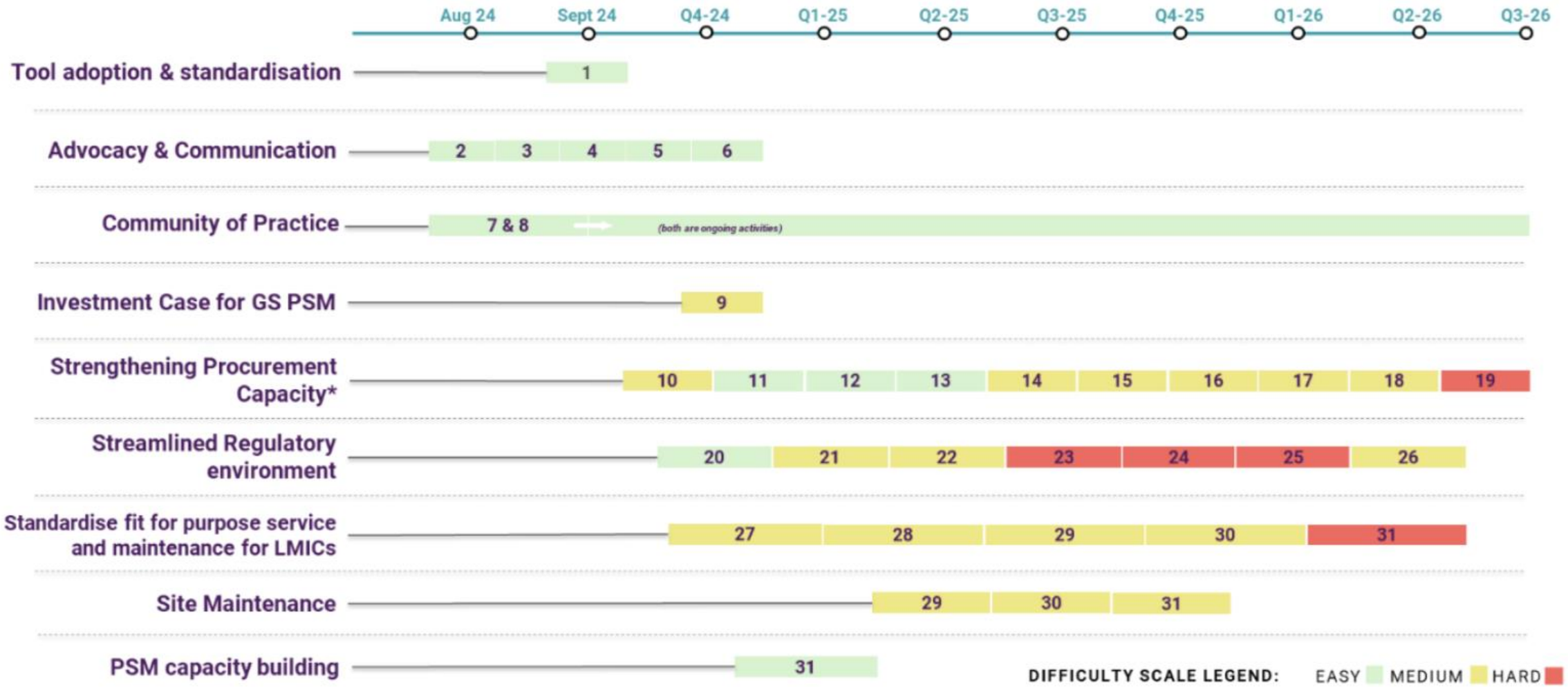
Improve Service Level Agreements

Streamlined Regulatory environment

Investment case for Genomic Sequencing

Capacity Building

AFRICA-AWARE SOLUTIONS : HIGH-LEVEL ROADMAP



What have we achieved to date?

Edwin Shumba, ASLM

Advocacy Notes developed and finalised

Minimum requirements for SLA's

Africa CDC Advocacy Note
Service and Maintenance
Adoption and Implementation of Required Minimum Service Level Agreements (RMSLAs)

Executive Summary

Ensuring reliable equipment uptime is crucial for maintaining and protecting investments in advanced technologies, thereby guaranteeing uninterrupted research, surveillance, and clinical activities, ultimately leading to improved public health outcomes. [1] However, many genomic sequencing (GS) laboratories across the African continent face disruptive downtime due to lengthy turnaround times (TAT) for service and maintenance support

Harmonised regulatory

Africa CDC Advocacy Note
Streamlined Regulatory Environment
Harmonized Registration for Genomic Sequencing Products

Abstract

The African Medicines Agency (AMA) has an opportunity to enhance its regulatory harmonization process by including Genomic Sequencing (GS) products, which are increasingly important for disease surveillance [1] and clinical use [2], for example tracking drug resistance, and differentiating between relapse and reinfection [3], especially for diseases like HIV and TB. Currently, the absence of GS products from the harmonization framework of AMA results in fragmented, costly, and slow country-specific registration processes, often delaying product availability in laboratories by up to 12 months. [4]

Multi-country forecasting

Africa CDC Advocacy Note
Developing Multi-Country Forecasting:
The Key To Understanding Total Market Size/Demand

Abstract

Genomic sequencing (GS) in Africa has seen significant growth since the COVID-19 pandemic, now encompassing various pathogens and clinical applications to enhance public health outcomes [1,2]. Technological advancements and new funding sources are

Duty free waivers

Communiqué: Genomic Sequencing Products Duty-Free Waivers

The Director General
African Continental Free Trade Area (AfCFTA)
Africa Trade House, Ambassadorial Enclave
Liberia Road, Ridge, Accra
Ghana

Addis Ababa, October 2024

Communiqué: Technical Support Request - Genomic Sequencing Products Duty-Free Waivers

Genomic Sequencing Equipment Install Base Platform Developed

AfricaCDC Centres for Disease Control and Prevention

FIND Diagnosis for all

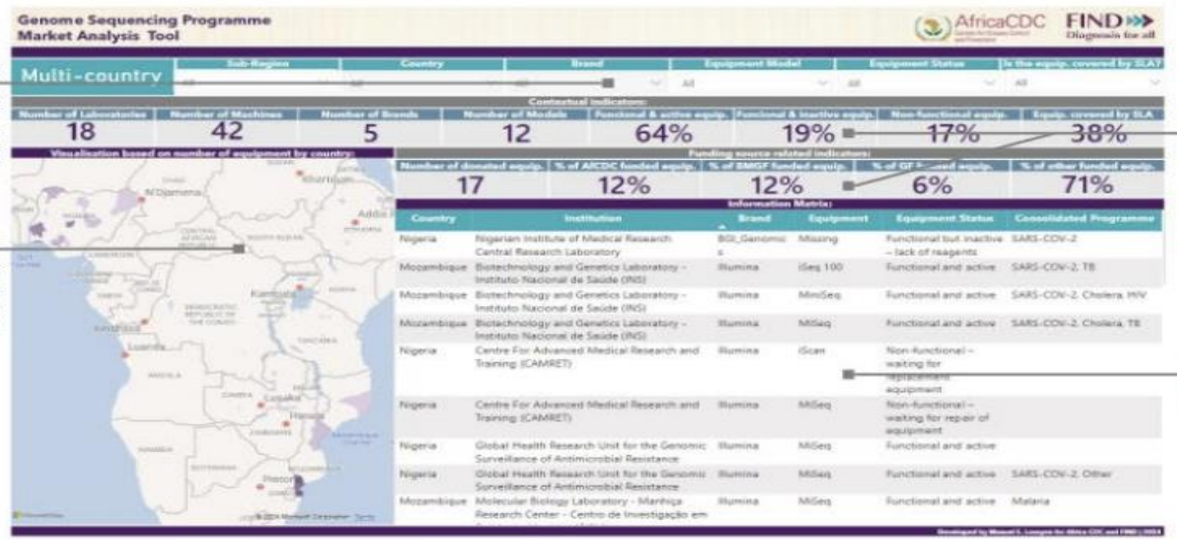
Overview of the Install Base and Funding Source Tool:

Data Filters:

Sieve through the available data based on your selections

Map:

The map represents the amount of equipment per country



Indicators:

This section provides contextual information regarding the install base and funding source of GS equipment

Data Matrix:

This section provides a detailed overview of the GS equipment

Overview of the Market Segmentation Tool:

Data Filters:

Sieve through the available data based on your selections

Map:

The map represents the amount of equipment per country

Indicators:

This section provides an overview of the market and its segmentation

Data Matrix:

This section provides a detailed overview of the GS equipment

Launch of the Community of Practice In Abidjan

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Africa CDC, CHAI and the Gates Foundation have kicked off a project to explore new procurement models for genomic sequencing and local manufacturing of laboratory consumables

Genomic sequencing technologies are transformative tools that could vastly improve the effectiveness of routine clinical care, surveillance, pandemic preparedness and response, antimicrobial resistance management, emerging cancer care, and other domains in human, animal and environmental health

Problem

Procurement and supply chain (PSM) challenges in Africa have constrained the ideal application of the genomic sequencing technology and threaten the long-term realization of its potential

PSM challenges identified*

- **High-cost** instrumentation, reagents and consumables and **reliance on imported** consumables from international suppliers
- **Limited market forecast visibility** as many countries have not established long term plans for expanding the use of genomic sequencing
- Expensive and poorly designed **service** and **maintenance agreements** with inconsistent and inadequate terms.
- **Lengthy procurement processes, import approval**, and costly custom clearance processes
- **Insufficient** in-country skills and capacity for PSM

Project Goal

To identify and pilot supply-side and demand-side procurement and supply chain solutions that **make pathogen genomic sequencing in Africa a more viable and scalable solution**

Approach (Nov'24 –Mar '26)

Phase 1: Co-design market shaping interventions in partnership with manufacturers and country governments

Phase 2: Pilot interventions in select countries

Phase 3: Disseminate learnings from the pilots and kick off market transformation

More reliable supply and service

Held sessions at the Global Health Supply Chain Conference, Lagos Nigeria, November 2024

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Panel Discussion
Genomic Sequencing Procurement and Supply Chain (PSM) Solutions for Africa

The panel will address solutions to ongoing PSM challenges in scaling genomic sequencing across the continent and expanding its use beyond surveillance and research. Key topics will include service and maintenance, alternative procurement models, local manufacturing, advocacy notes development and insights from country experiences and studies.

Moderator
Dr Trevor Peter
Senior Director
CHAI

Pragati Jaiswal
Manager
FIND

Dr. Adesuyi Omoare
Laboratory Network Coordinator
NCDC

Dr. Chika Onwuamah
Deputy Director
NIMR

Mr. Felix Ofungwu
CEO
ISN, Distributors

Dr. Priscilla Abechi
Manager
Ilumina

Global Health Supply Chain Summit

GHSC 2024 | Ballroom 3 | 13 November 2024 | 16:45 - 18:00 (in person)
Panel discussion will be followed by an 'Evening Mixer' starting 18:00 hrs

Near term priority action items: progress to date

Edwin Shumba, ASLM

CoP Near-Term Priorities: 3 – 6 months

Priority Area	Details	Leading entity
Delayed delivery of sequencing products for mPOX	• **Address immediate bottlenecks** in delivery of emergency sequencing products affected countries	**AfCDC,** CHAI, Manufacturers, governments
Advancing of advocacy notes	1. Communique Genomic Sequencing **Duty Free Waivers** 2. **Harmonized Registration** for Genomic Sequencing Products 3. **Multi-country forecasting** - key to understanding total market size and demand 4. **Required Minimum Service** Level Agreements	**Africa CDC** **Supporting:** ASLM, FIND
Strengthening procurement capacity	• **Adoption and expanding install base** tool to other member states	ASLM **Supporting**: FIND, AfCDC
	• Develop a **multi-country forecast** to understand the **total market**, overall demand and order aggregation	CHAI **Supporting:** ACDC, ASLM, Donors, PHI's, labs,CPS
	• Increase **price transparency** for Genome Sequencing products and services	ASLM **Supporting:** CHAI, ACDC, Manufactures, CPs
	• Improve **price transparency** and **consistency** across countries (e.g. ceiling price for machines/reagents)	ASLM

Cont...

Priority Area	Details	Leading entity
Strengthening procurement capacity	• Develop **guidance to inform evidence-driven equipment selection and placement**	ASLM **Supporting:** FIND, CHAI, governments, sequencing labs
	• **Transition the utilisation of incoterms** towards DDP or DAP	CHAI **Supporting:** ASLM, AfCDC
Streamlined Regulatory environment	• Include Genomic Sequencing products into the **Essential Diagnostic List (EDL)**	Country Lab directorates **Supporting**: ASLM
Capacity Building	• Draft up a **proposal to establish capacity building** programmes	ASLM **Supporting:** SMEs, sequencing centres of excellence

Open Discussion

Recap and Next Steps

Johnson Shonhe, ASLM

Closing Remarks

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Thank you…