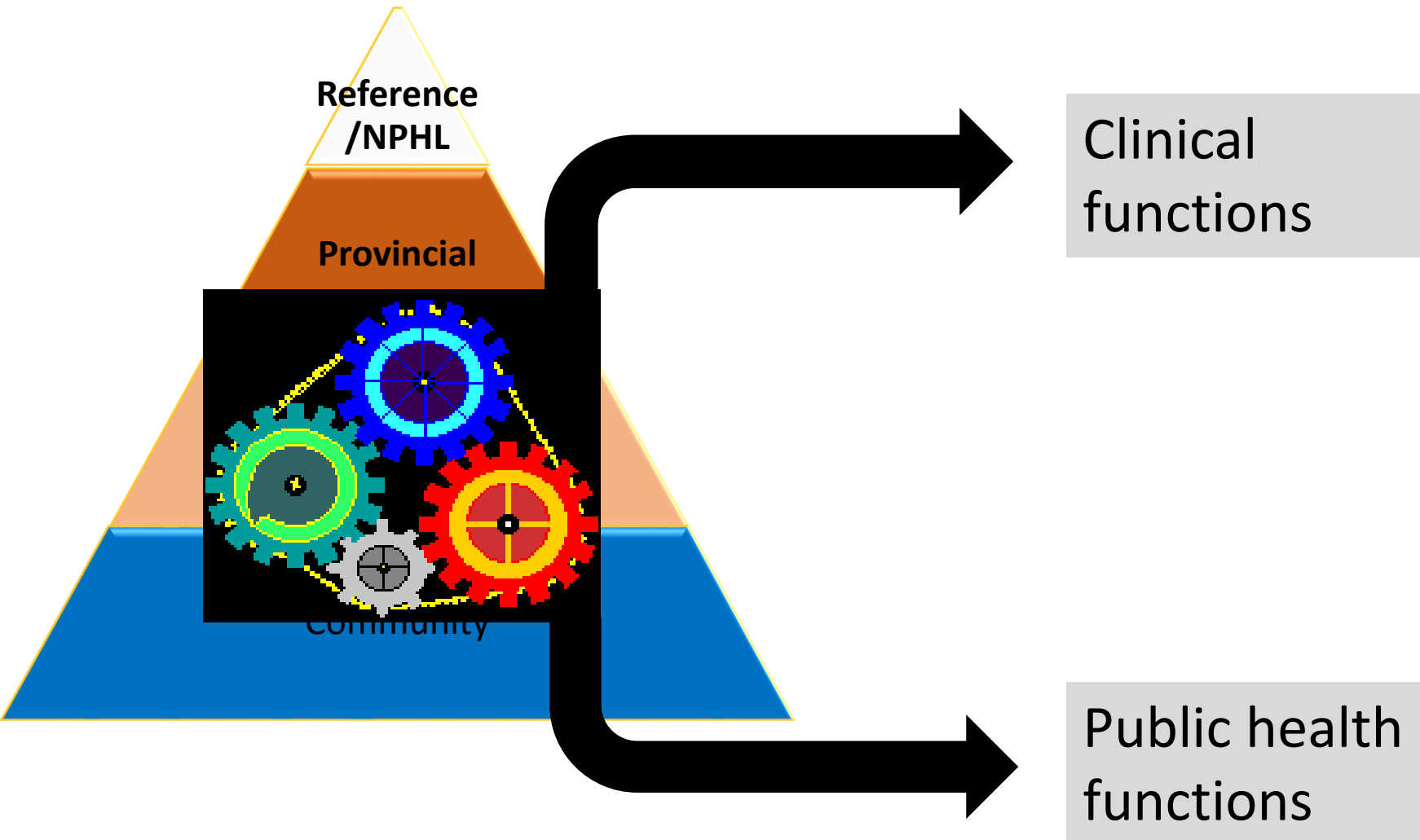


# The LABNET scorecard to strengthen laboratory networks in Africa

Pascale Ondo  
ASLM

Effective laboratory networks  
=  
well-organized and coordinated  
clinical and public health functions.

# The mechanic underlying the laboratory network functions



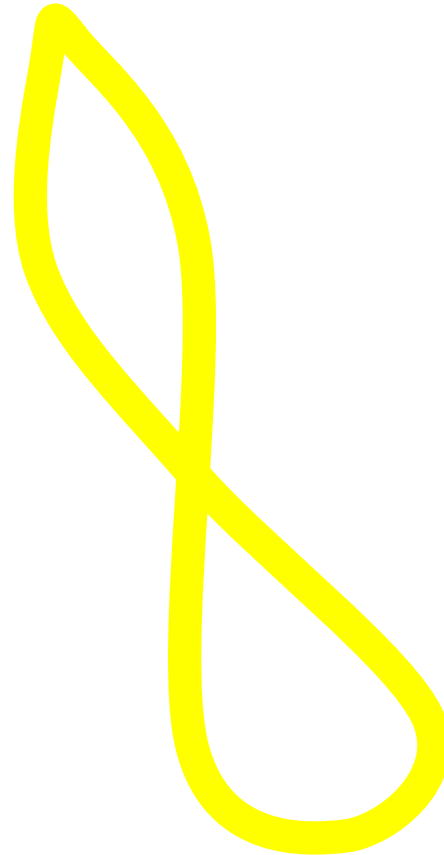
How can the functions of the tiered laboratory network be measured?



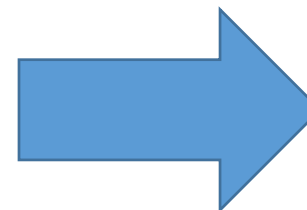
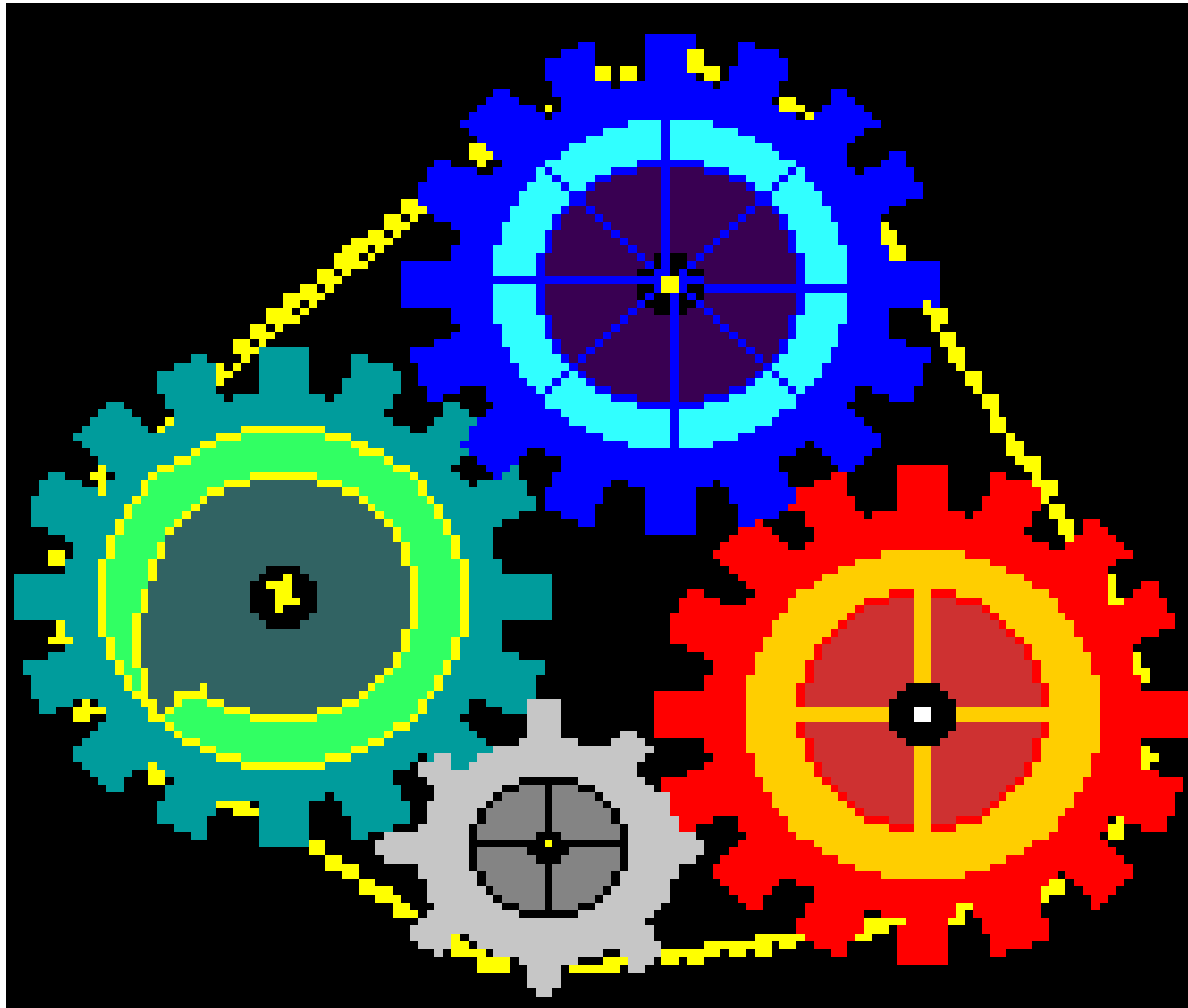
**The clockwork metaphor**

Check

that all gears and pieces are present



# Assess that they function together as a clockwork



The **African Society of Laboratory Medicine(ASLM)**  
&  
The **Association of Public Health Laboratory (APHL)**  
jointly developed the **LABNET scorecard** to measure  
the performance of national laboratory networks

**African Journal of Laboratory Medicine**  
ISSN: (Online) 2225-2010, (Print) 2225-2002

 **AOSIS**

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 Lessons from the Field

## **A new matrix for scoring the functionality of national laboratory networks in Africa: introducing the LABNET scorecard**

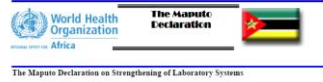
Ondoa P, Datema T, Keita-Sow M-S, et al.



# Characteristics of the LABNET Scorecard

# Covers the essential normative standards for the laboratory systems and networks

WHO-Maputo declaration for strengthening of laboratory systems in RLS



We representatives of governments, institutional systems, development partners, professional associations, and academic institutions, participated in a Consensus Meeting on Clinical Laboratory Testing Harmonization and Standardization in Maputo, Mozambique, on 12<sup>th</sup> - 14<sup>th</sup> January 2018. The meeting sought to address laboratory challenges that limit the scaling up of effective tuberculosis, malaria and HIV diagnosis and care.

The objectives of the Maputo meeting:

- To review and agree on a list of laboratory networks.
- To develop a consensus to pilot laboratory networks.
- To develop a consensus on key equipment or system needs.

Recognize the burden of the priority infectious diseases and the impact of antimicrobial resistance on public health. The incidence of infectious diseases is increasing globally, while the burden of chronic diseases is also increasing. This presents a difficult clinical challenge, especially in resource-poor settings.

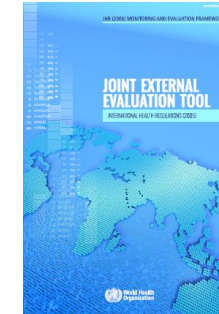
Recognize the need to expand and strengthen health systems through implementing primary care, strengthening surveillance and control of infectious diseases.

Recognize that in resource-limited settings, the scaling up of prevention, control and treatment interventions, is a significant public health and quality of care challenge.

Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO) have developed a framework for integrated disease surveillance and response (IDSR) in the African Region.



WHO-IHR: binds all countries to be alert and ready to respond collectively to public health threats, also across borders.



Aligned with WHO JEE tool



WHO-IDSR: Makes the best use of country resources to conduct integrated surveillance of priority diseases. → Implement IHR

## The FAO-OIE-WHO Collaboration

Sharing responsibilities and coordinating global activities to address health risks at the animal-human-ecosystems interfaces

A Tripartite Concept Note

FAO-OIE-WHO One-health concept note: prevent, detect, respond to public health and animal risk through inter-sectoral collaboration.

COUNTRIES WORKING TOGETHER ON COMMITMENTS TO THE GLOBAL HEALTH SECURITY AGENDA

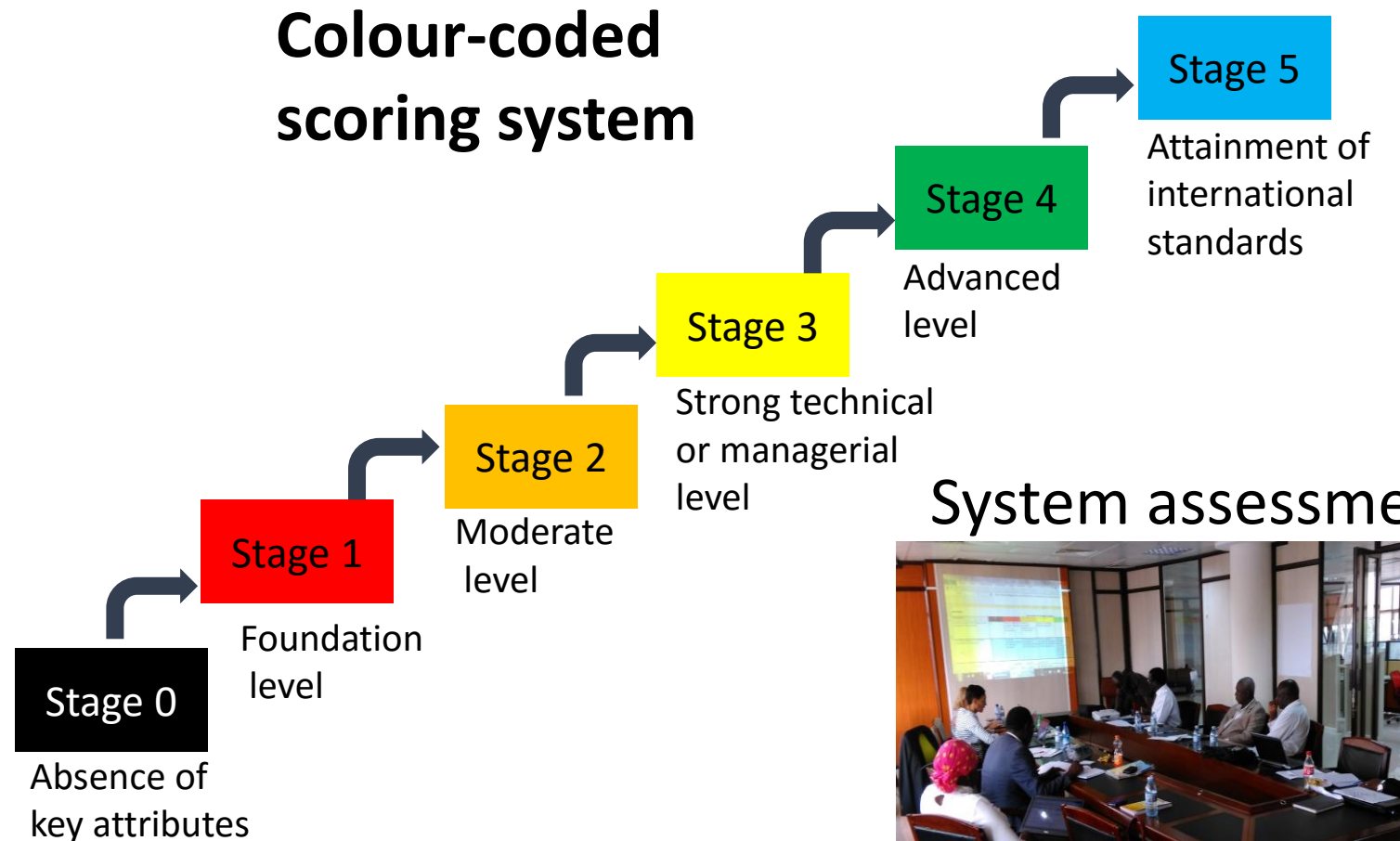


GHSA: international effort of nations and organizations to accelerate progress toward a safe world, by speeding up the implementation of IHR and OIE PVS. → Implement IHR



# Measures capability maturation of 9 essential functions of the laboratory network


1- Political, legal and regulatory framework
2-Structure and organization
<b>3-Network coverage and rapid response</b>
4-LIMS
5-Infrastructure
6-Human resources
7-Quality of the laboratory system
8-Biosafety/biosecurity
<b>9-Priority diseases</b>



## System assessment



How is the LABNET scorecard designed  
and how does it work?

Core capability 3	Components	Questions)	Graded responses and scores					
			0	1	2	3	4	5
Network coverage & rapid response	Tiered network coverage	Q1 Are all vertical programs (i.e. disease specific) laboratory services fully integrated into the general tiered laboratory network?	No integration at all.	Some collaboration takes place between vertical program laboratories and other general laboratories in the country. ✓	Some general laboratories perform selected testing for some vertical programs.	The whole general laboratory network perform selected testing for some vertical programs.	The whole general laboratory network perform selected testing for all vertical programs.	Full integration of all laboratory services from all vertical programs into the national laboratory network.
		Q2 Is there a current map or list of laboratories that fall under the national laboratory network?	No	Only for some laboratories for human health in the public sector.	For all human health laboratories and some veterinary and environment laboratories in the public sector. ✓	All laboratories under One health in the public sector and some laboratories in the private, private-not-for-profit, military and academia with incomplete GPS mapping.	All laboratories under the One health concept with incomplete GPS mapping.	All laboratories under one Health in the country are inventoried and GPS-mapped.
		Q3 Are laboratory facilities for the basic testing package available at a rate of 1 facility/100,000 population in all districts or in such a way that >80% of the population is at a maximum of 5 km from the lowest laboratory tier, in each district?	<div style="text-align: center;">  <ul style="list-style-type: none"> <li><input type="checkbox"/> Highlights weaknesses.</li> <li><input type="checkbox"/> Provides a roadmap for improving the maturation of each core capability.</li> </ul> </div>					
Rapid response & preparedness								
	Sample referral system							

# Lessons learnt from the LABNET scorecard assessment in Senegal & Uganda

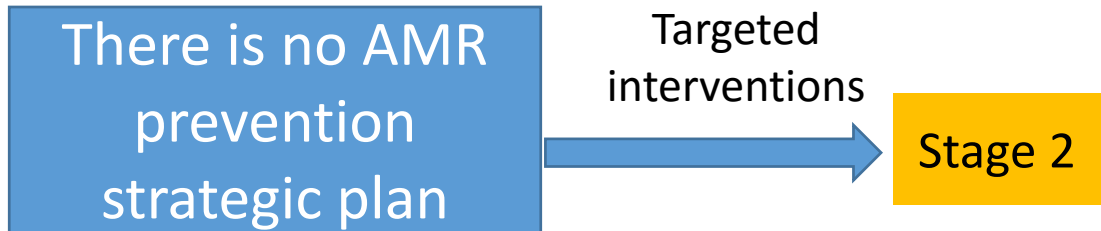
<b>Cap 1: pol. Leg. reg</b>	Legislation	Policy & plans	Governance	Finances
<b>Cap 2: struct., gov.</b>	Structure of the tiered network		Coordination et management	
<b>Cap 3: overage/rap.resp</b>	Network coverage	Rapid response & preparedness	Sample referral system	
<b>Cap 4: LIMS</b>	Data collection	Data analysis & sharing	Surveillance /Epi	Reporting
<b>Cap 5: inf./equip/reag</b>	Infrastructures	Supply chain management	Equipment	
<b>Cap 6: HR</b>	Training and education	recruitment	Strategy for HR development	
<b>Cap 7: QUALITY</b>	QA	QMS	Certification & accreditation	
<b>Cap 8: biosec/biosaf</b>	Biosecurity manual	National syst. Biosaf/biosec.	Sample storage	Waste management
<b>Cap 9: Priority Dis..</b>	Priorization	Tests	AMR	

# Targeted intervention to increase the performance of the Senegalese laboratory network

Cap 2: structure & governance.



The tiered network does not incorporate diagnostic activities at community level



Cap 9: Priority Diseases.



# The LABNET scorecard: a powerful tool to strengthen national laboratory networks

- ❑ Assessment results provides the opportunity to target interventions to critical areas of weaknesses
- ❑ The tool allows the monitoring of the laboratory network functionality over time and across countries
- ❑ The tool covers AMR which prevention and control is strongly dependent on the functionality of the network



LABNET scorecard assessor training  
Dakar 21 to 24 March 2016

**THANK YOU**