



## Bringing the Laboratory Quality to the Next Level

### ASLM2021 Symposium 3

#### Co-conveners

- **Patrick Mateta**, Clinical and Laboratory Standards Institute
- **Fausta Mosh**, World Health Organization, Regional Office for Africa

#### Summary

The importance and significance of medical testing laboratories have continued to rise especially in the age of HIV, TB, Malaria, the rise of chronic non-communicable diseases, and the emergence of infectious diseases such as COVID-19. According to the Clinical Laboratory Services – Global Market Trajectory & Analytics Report (2021), the market for clinical laboratory services is projected to reach more than \$120 billion by 2024. This is being driven by emerging infections, growing test volumes compounded by the ageing population and the ongoing trend toward preventive healthcare. This massive increase in patient specimens for testing is also attributed to increased disease surveillance, epidemic spread of chronic diseases such as diabetes, rise in cancers, and robust testing technologies. Most importantly, the market growth is also being driven by an increasing patient awareness over the importance of timely disease diagnosis.

Since the laboratory supports more than 70% of medical decision-making, provides for 90% of surveillance decision-making information and provides critical disease data to inform health policy, they must be capacitated to meet the ever-increasing demand for testing without compromising quality. Everything that the laboratory does impacts the patient, hospital, community, country, region and world.

For laboratories to remain viable, they need to ensure that accurate results are produced at the appropriate time and a reasonable cost. The challenge is to reduce the level of inaccuracy as much as possible, given the complexity of analytical testing laboratories that, like any type of complex system, exhibit an inherent variability. Therefore, the Quality Management System model (QMS), which looks at the entire system, is very important for assessing and controlling the laboratory complexity and achieving good performance. Tools and programmes such as the SLIPTA, SLMTA, LQMS or LQSI, and various mentorships schemes have been specifically designed to facilitate the implementation of QMS and the achievement of accreditation have been designed and rolled out in low resource settings of Africa. While each of these programmes addresses important needs, the collective advancement of laboratories towards quality standards and better diagnostic practices remain contrasted. The COVID-19 pandemic currently

taking place highlights that prioritizing what should be done first to ensure reliable testing in a context of constrained resources is even more complex in situations of emergencies. Practical questions around the feasibility and sustainability of implementing QMS at all levels of the network, in the private and public sector and down to the lower levels of health care (where epidemics are first detected), remains a challenge.

This symposium will discuss the most recent updates in QMS implementation strategies in LIMCs from Africa, including highlights on country ownership, programme sustainability, regulation and policy. Country representatives, subject matter experts and various stakeholders will share their experience and opinions on best practices and available options that can facilitate QMS implementation from the perspective of individual facilities as well as national tiered laboratory networks. The requirements to transform QMS from facility-based activities to powerful national programmes impacting clinical and public health will be discussed

### **Objectives**

At the end of this symposium, the participants will be able to:

1. Understand the transformative role of quality in strengthening laboratory systems in low-and middle-income settings of Africa
2. Identify the determinants of success and the need for country ownership when implementing QMS in laboratory facilities and systems of Africa
3. Discuss the various options, strategies and creative solutions (including continual education) that can facilitate quality assurance in the context of the ever-changing laboratory landscape
4. Prepare leaders and professionals for the new world of medical technology and raise the profile of the profession – accepting the change.

### **Target Audience**

- Laboratory professionals
- Ministry of Health officials
- CDC Laboratory Leadership
- Cooperative Agreement partners
- Decision Makers and Professional Leaders

### **Session Programme**

<b>Presenter &amp; Affiliation</b>	<b>Title</b>
<b>Patrick Mateta</b> (Clinical and Laboratory Standards Institute)	Opening and introduction of the panel

<b>Fausta Mosh</b> (World Health Organization, Regional Office for Africa)	
<b>Tjeerd Datema</b> (DATOS)	Lessons learnt from 10 years of implementing QMS in African laboratories
<b>Beatrice van der Puije</b> (ASLM)	QMS – Innovation in Quality management system implementation
<b>Marcel Gbaguidi</b> (West African Accreditation System)	The challenges and opportunities of advancing laboratory accreditation through a regional approach: experience from WAAS
<b>Victor Waddell</b> (CLSI)	CE – Mindset of 21 <sup>st</sup> -century Laboratory Professional
<b>All session participants</b>	Question/Answer panel discussion
<b>Patrick Mateta</b> (Clinical and Laboratory Standards Institute)	Closing and Summary of the key points
<b>Fausta Mosh</b> (World Health Organization, Regional Office for Africa)	