

LabCoP QUARTERLY

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The LabCoP Team Visits Burkina Faso

Between 7 to 10 July 2021, the LabCoP Core Team, comprising Dr Collins Ofieno, LabCoP Lead, and Dr Samba Diallo, Francophone LabCoP Coordinator, visited Burkina Faso, a new member of the community of practice, to support the country team's baseline assessment of the viral load (VL) testing cascade. The LabCoP team met the laboratory leadership and key implementing partners, including Dr Yabre Zakarya, Director-General for Laboratory Services, Dr Charles Sawadogo, Director of Biomedical Laboratories



The LabCoP Management team and Burkina Faso team with the Director General, Dr Yabre Zakarya

and Dr Patrick Djim, in-country LabCoP Team Lead, to outline the scope of the LabCoP project in supporting laboratory systems strengthening, including the need to reinforce diagnostic integration in light of the disruptions in laboratory services experienced during the COVID-19 pandemic.

The laboratory leadership highlighted key challenges in laboratory services that needed attention. The integration of testing services was identified as a key outcome for Burkina Faso's Ministry of Health because VL testing services were affected by the repurposing of HIV equipment for COVID-19 testing, leading to longer turn-around times. Some best practices were identified, including integrated sample referral and implementation

of point-of-care testing in decentralised facilities. These will be shared with other countries in upcoming ECHO sessions. As a follow-up, the team met Mr Flavien Ake, Director of Davycas International, a company collaborating with the Burkina Faso Ministry of Health and the postal service to coordinate the integrated specimen referral system, which

has been in existence for three years, having started in four districts through support from ASLM. It has now expanded up to the district and national levels and is funded through pooled resources from disease programmes. Mr Ake also outlined additional plans to decentralise to lower health facilities through support from the Global Fund.



Burkina Faso LabCoP team conducting a self-assessment

health facilities through support from the Global Fund. The LabCoP team also met

Dr Adjima Combarry, National Tuberculosis Coordinator, who outlined current efforts to integrate testing for HIV, tuberculosis (TB), COVID-19 and other diseases using existing GeneXpert instruments. Burkina Faso's Joint National Committee, composed of HIV and TB programmes and implementing partners, meets quarterly to review services with an established common funding basket overseen by the office of the president. The national committee also conducts field visits to assess the implementation of integrated services. The country has joint reference documents on integration, norms and protocols for HIV and TB screening, an algorithm for TB/HIV diagnosis, and training modules for GeneXpert.

The LabCoP team will follow up with the Burkina Faso team to identify priorities and develop a fundable work plan for the next funding cycle.

ECHO Sessions Summary

ECHO sessions in this quarter included topics on HIV viral load (VL) demand creation, updates and innovations in tuberculosis (TB) and COVID-19 diagnostics, and opportunities to strengthen laboratory systems. Here are some highlights.

HIV demand creation: VL testing is essential for monitoring antiretroviral treatment. However, test uptake and knowledge around the importance of VL remains low. In the [June LabCoP session](#), representatives from four countries shared lessons learnt from targeted campaigns conducted to increase awareness of VL testing among people living with HIV.

Tuberculosis diagnosis: The [June LabCoP Extended session](#) covered the detection of lipoarabinomannan, a marker of tuberculosis infection. Lipoarabinomannan detection has improved the diagnostic yield for TB, leading to decreased mortality.

Symptomatic PLHIV: stratification by settings		
Patient population	Pooled Sensitivity*	Pooled Specificity*
All settings	42%	91%
Inpatients	52%	87%
Outpatients	29%	96%

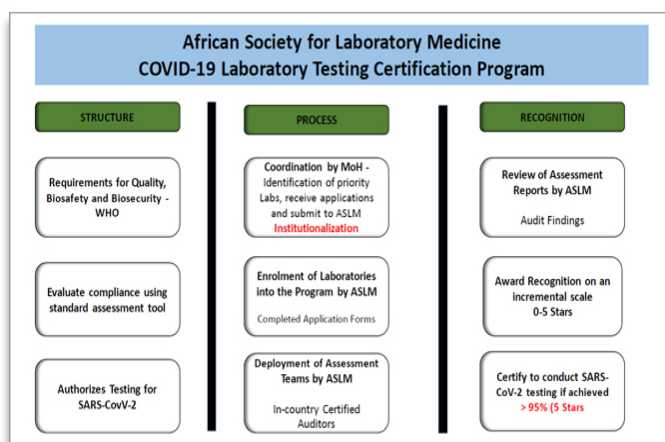
* pooled sensitivity increased, and specificity decreased with lower CD4 cell count
Source: Bjerrum et al., Cochrane systematic review 2019

Unselected PLHIV: stratification by settings		
Patient population	Pooled Sensitivity*	Pooled Specificity*
All settings	35%	95%
Inpatients	62%	84%
Outpatients	31%	95%

* pooled sensitivity increased, and specificity decreased with lower CD4 cell count
Source: Bjerrum et al., Cochrane systematic review 2019

A slide from Dr Casenghi's February presentation on the GLI guide for the practical implementation of LF-LAM assay

The number of diagnosed TB cases decreased by over a million from 2019 to 2020 due to the COVID-19 pandemic. During [this panel discussion](#), experts called for more attention to TB in the context of COVID-19 and drew attention to the Global Fund's allocation of funds that are accessible to governments for the bi-directional testing of these two respiratory infections.



A slide from Dr Maruta's COVID-19 Laboratory Testing Certification Program presentation during the April session

COVID-19 diagnosis: The Africa CDC partnered with the private sector to develop the Trusted Travel platform. Through a certification programme, the platform, discussed in [this session](#), creates a network of recognised COVID-19 testing laboratories. ASLM is implementing this programme through the training and certification of auditors.

As COVID-19 variants of concern emerge, there

is the need to keep up with innovations by diagnostic manufacturers. This quarter, we had updates on new products from three manufacturers, namely, [Thermo Fisher Scientific](#), [Abbott](#) and [Beckman Coulter Inc.](#)

Case studies from Nigeria, India, and Rwanda, examined in [this session](#), demonstrated that digital tools significantly increase the efficiency that uptake is good and linked to responsive health systems adequately equipped to implement data-driven interventions. However, there is a need to address the limited capacity to use digital

solutions at the lowest levels of care due to underlying health systems challenges.

Funding and systems strengthening: The Global Fund's C19 Response Mechanism laboratory intervention packages advise countries to **regularly** undertake various readiness and system maturity assessments such as the LABNET Assessment. The Global Fund has developed a readiness approach, covered in [this session](#), that **guides** the stepwise implementation of laboratory capability to prevent, detect and act upon existing and emerging diseases.

Watch all LabCoP ECHO session recordings [here](#).

M&E ECHO Sessions Roundup

ECHO sessions relevant to monitoring and evaluation (M&E) in this quarter included topics like indicators for laboratory programme monitoring and evaluation, HIV viral load (VL) data management systems and dashboards, and an overview of the World Health Organization (WHO)-The Joint United Nations Programme on HIV and AIDS (UNAIDS)-The United States President's Emergency Plan for AIDS Relief (PEPFAR)-Global Fund joint tool for assessing and strengthening the quality of VL testing data within HIV programmes and patient monitoring systems.

Indicators reliably assess the progress made by a programme towards attaining its results. The [session](#) on indicators focused on WHO-recommended indicators for tracking the cascade of clients with suppressed and unsuppressed HIV VL. The session also covered both routine and non-routine VL data collection, as well as the analysis of VL testing coverage and outcomes at the site and above-site levels using either the cohort or cross-sectional approach and reporting.

This [session](#) on data management focused on data visualisation, a process of converting raw data/information into easily

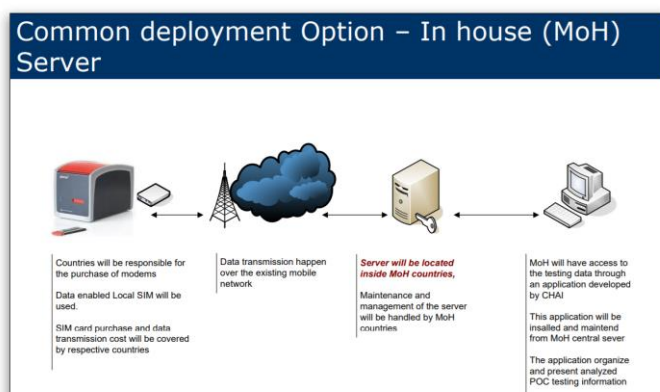
understood visuals that enable fast and effective decision making. The session highlighted the benefits of a national level dashboard as an effective decision-making tool; these benefits include allowing a different perspective of programme data and providing the ability to interact and interpret vast amounts of data, note exceptions/outliers, and analyse and translate data trends and patterns into useful insights. Country teams were apprised of available development and deployment options and potential challenges and solutions. General guidance on the development of dashboards to increase data use for patient management was highlighted, including the availability of laboratory information management systems hardware and software license considerations, the presence of a competent development and maintenance team, and a micro-strategy for data visualisation using business intelligence solutions.

The final [session](#) during the quarter was an overview of the WHO-UNAIDS-PEPFAR-Global Fund joint monitoring tool. The session covered an introduction to the importance of data quality, common VL testing data challenges, and an overview of key recommended approaches for VL testing data quality assurance.

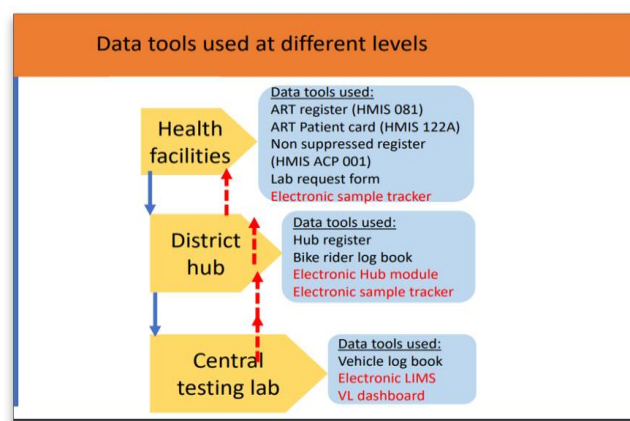
The session also highlighted additional tools included in the module for country adaptation of and follow-up on data quality assurance activities. Countries were encouraged to adopt and customise these tools for use in their data quality audit (DQA) activities, as well as in the revision of their DQA guidelines.

During the period two countries; Uganda and Nigeria shared on respective countries M&E system for VL. The session by [Uganda](#) team highlighted on the countries experience in rolling out monitoring and evaluation systems for VL including their monitoring dashboards that allows for performance tracking at various administrative levels. The session by [Nigeria](#) team gave a background of VL program in the country, progress towards HIV epidemic control, M&E strategy, the National LMIS dashboards and the M&E challenges that country is working toward addressing.

See all M&E ECHO sessions [here](#) on ASLM's YouTube channel.



A slide from the May session about data management, dashboards and connectivity solutions for HIV viral load and early infant diagnosis



A slide from Uganda's April presentation about their experience with HIV viral load monitoring and evaluation

Expert Experience



ASLM recently sat down with Dr Karidia Diallo, Microbiologist with the United States Centers for Disease Control and Prevention, to discuss the significance of electronic return of results in patient treatment.

ASLM: What role does electronic return of results to patients play in achieving the third 95?

Dr Diallo: The purpose of electronic return of results is to reduce turn-around times and educate and involve patients in the management of their health. Patients who understand the importance of viral load will have better adherence to antiretroviral therapy and blood collection appointments, leading to increased demand and better outcomes for patient care.

- In the rural site where the pilot has already started, patients are enthusiastic and willing to enrol, and there is strong buy-in from the facility staff and senior management.
- The study is South Africa Protection of Personal Information Act (POPI Act) compliant. Without compliance with the POPI Act, which strictly enforces the protection of Personal Identifiable Information (PII), no results can be sent to anybody in South Africa.

ASLM: What advice would you give to governments planning to roll out electronic results transmission?

Dr Diallo: I suggest they carry out small-scale pilots and use lessons learned to inform country-wide rollout. During the pilot phase, tools should be developed in the main languages spoken in the country to allow more patients to be enrolled. Rather than copying and pasting blindly from other countries, a device/technology that is adapted to the country's unique settings should be selected to avoid loss of resources and time.

Rather than copying and pasting blindly from other countries, a device/technology that is adapted to the country's unique settings should be selected to avoid loss of resources and time.

ASLM: To what extent has this been implemented in South Africa?

Dr Diallo: South Africa has developed a pilot protocol and has chosen the device that will be used to send test results and educational messages to patients. One rural and one urban site were chosen for the pilot phase. A total of 500 patients will be enrolled and the results analysed to inform country-wide implementation.

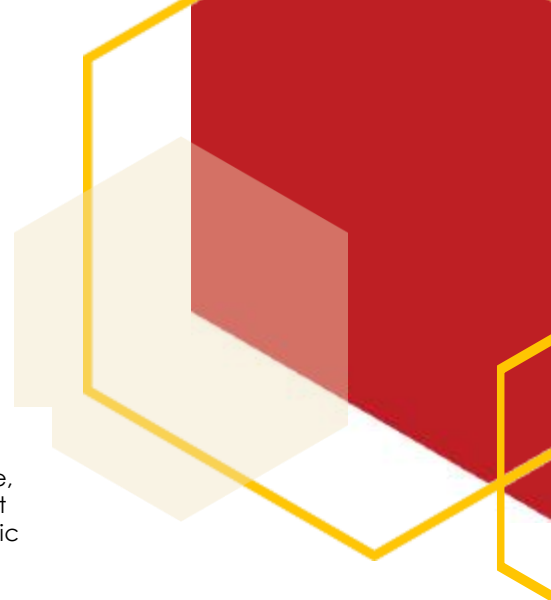
ASLM: What are the main challenges to widespread implementation that still need to be addressed?

Dr Diallo: Because South Africa is still at the pilot phase, large scale implementation challenges have not been experienced. The main challenge is that the study tools are not translated into the local language, thus limiting the participation of people who do not write and/or speak in English.

ASLM: What role can LabCoP play to promote the electronic return of results to patients?

Dr Diallo: I would like to see more ECHO sessions on electronic results return. Countries can share experiences and learn from each other. Electronic results return can improve turn-around times and overcome many challenges with implementing HIV early infant diagnosis and other tests in rural areas.

What's New at LabCoP



LabCoP's New Video

LabCoP is excited to announce the release of our *LabCoP Takes On COVID-19* video that chronicles our hard work and success as a community of practice in supporting SARS-CoV-2 diagnostic efforts across Africa. Watch it [here](#) on ASLM's YouTube channel.

Cookbook Recipe #6

LabCoP recently published the next recipe in its *Cookbook of Best Practices: How to Maintain HIV and Tuberculosis Testing Services During Health Emergencies*. This recipe, developed by ASLM's LabCoP and partners, summarises key considerations and best practices that, when applied, should ensure continued delivery of essential diagnostic services for human immune deficiency virus (HIV) and tuberculosis among other infectious diseases. Read this recipe and more [here](#).

Integration Readiness Assessment Tool

LabCoP is piloting a tool to progressively measure the level of consolidation and coordination of existing diagnostic infrastructure and supportive systems from multiple disease programmes; this assessment is needed to improve and sustain access to laboratory services. The tool will be launched during the LabCoP Satellite session at ASLM2021.

ASLM Collaborating with WHO AFRO

LabCoP is collaborating with the World Health Organization African Region (WHO AFRO) to collect data on the progress of HIV viral load (VL) testing and early infant diagnosis (EID) scale-up among member countries. The country teams will complete the WHO AFRO VL and EID assessment tool during the self-assessment exercise workshops prior to the upcoming annual LabCoP meeting in December.



Looking Ahead

LabCoP Survey

The LabCoP Team invites you to participate in a survey on the effectiveness and contributions of the LabCoP network and its activities in supporting the implementation and scale up of viral load in network countries. Please also share your ideas on directions/focus for LabCoP in the next year and a half of the project. Please participate [here](#).

LabCoP Satellite Session at ASLM2021

Do not miss LabCoP's Satellite Session at ASLM2021 on Thursday, 18 November from 7-9 AM GMT. We will explore the role of diagnostic integration in strengthening laboratory systems and introduce the new integration readiness assessment tool. Presentations will be made by the Bill & Melinda Gates Foundation, the United States Centers for Disease Control and Prevention, the Clinton Health Access Initiative, Global Laboratory Initiatives, UNITAID, WHO, and manufacturers: Abbott, Cepheid, Hologic, and Roche. Register for ASLM2021 [here](#)! ASLM [members](#) get discounts.

LabCoP's 5th Annual Meeting

Save the date for the 5th Annual LabCoP Meeting, held virtually from 1-2 December. This year's theme will be 'Strengthening Laboratory Systems, Viral Load and Other Essential Testing in the Era of COVID-19'. Join your counterparts from across Africa to discuss funding opportunities and priorities, electronic return of results to caregivers, integration of laboratory services and diagnostics, updates from the WHO, the latest on COVID-19 diagnostics and HIV VL scale-up progress among LabCoP countries. We will also give out our annual awards! Register for Day 1 [here](#) and Day 2 [here](#).

