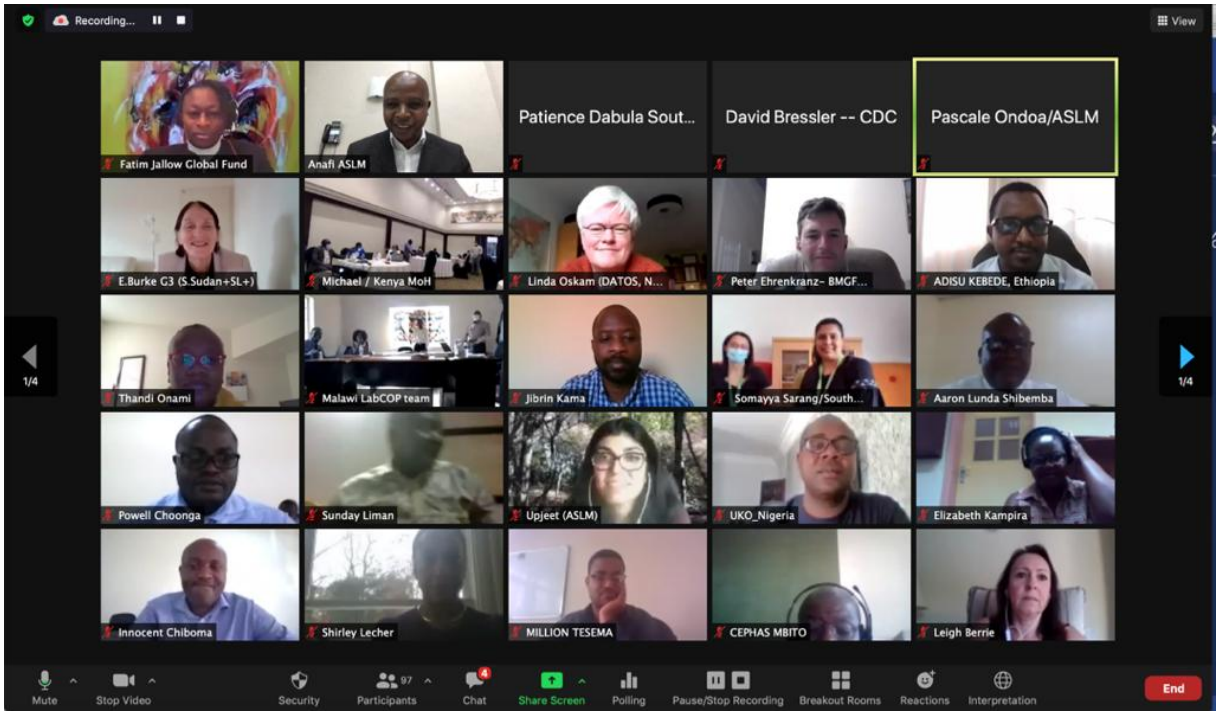
LabCoP Fourth Annual Meeting (Virtual)

MEETING REPORT

24-25 November 2020
14:00-18:00 (East Africa Time)



Strengthening laboratory systems:
Towards and beyond scaling up HIV viral load testing

Acknowledgments

The LabCoP would like to express our deepest appreciation to the Bill and Mellinda Gates Foundation for their generous funding of LabCoP.

We extend our sincere thanks to the facilitators and presenters of the following organisations: The Global Fund, World Health Organization (WHO), WHO African Region, Africa Centres for Disease Control and Prevention, United State President's Emergency Plan for AIDS Relief (PEPFAR), US Centers for Disease Control and Prevention, Clinton Health Access Initiative, National Health Laboratory Service (South Africa), International Treatment Preparedness Coalition, DATOS and ASLM.

A special thanks goes out to the members of LabCoP's country teams that participated, namely: Cameroon, Democratic Repblic of the Congo, Eswatini, Ethiopia, Kenya, Malawi, Nigeria, Sierra Leone, South Africa, South Sudan, Tanzania, Uganda, Zambia, and Zimbabwe,

I. Background

The Laboratory Systems Strengthening Community of Practice (LabCoP) project is an initiative that supports knowledge 'co-creation' and exchange to accelerate the scale-up of high-quality laboratory services in sub-Saharan Africa. LabCoP is funded by the Bill & Melinda Gates Foundation and convened by the African Society for Laboratory Medicine (ASLM), with scientific and technical support from ICAP at Columbia University, and Project ECHO at the University of New Mexico. LabCoP was launched in 2017, with an initial focus on scaling up HIV viral load testing (VLT) services. Since its launch, LabCoP has connected with 14 countries'[1] ministries of health designated teams, including more than 250 individuals, to find solutions to laboratory system bottlenecks and challenges preventing the optimum utilization of diagnostic tests for positive clinical and public health outcomes.

To date, LabCoP has facilitated multidisciplinary discussions and South-to-South interactions through various formats and platforms (ECHO, WhatsApp, face-to-face meetings, country visits), resulting in the identification and creation of best practices along the VLT cascade, from demand creation to test result utilization.

LabCoP supports member countries to collect baseline information on their respective national VLT cascade performance and in 2018 LabCoP identified four common areas of weakness: demand creation, result utilization, network optimization and waste management. With input from partners and stakeholders, participating countries have developed and implemented demand creation and result utilization action plans to address these two critical priority weaknesses. Member countries can incorporate these action plans into their 'United State President's Emergency Plan for AIDS Relief' (PEPFAR)-funded country operational plans (COP), whenever possible.

Each year, countries self-assess their progress against yearly action plans using a standardized scorecard. LabCoP usually gathers its members for a face-to-face meeting annually to review progress made and discuss emerging priority areas for intervention with global and local laboratory stakeholders. Annual face-to-face meetings are a key milestone in the LabCoP strategy. Due to the movement restrictions as a measure for containing the COVID-19 pandemic, LabCoP convened a virtual meeting in 2020.

II. Meeting Goals and Objectives

The broad goals of the annual meeting included: assessing the progress of LabCoP countries' action plans and the outcome of ongoing interventions; discussing laboratory system strengthening across diseases through reviewing challenges and best practices in maintaining routine viral load (VL), early infant diagnosis (EID) and tuberculosis (TB) testing during the COVID-19 pandemic; and introducing upcoming LabCoP themes addressing the entire laboratory system.

[1] Cameroon, Democratic Republic of Congo, Ethiopia, Eswatini, Kenya, Malawi, Nigeria, Sierra Leone, South Africa, South Sudan, Tanzania, Uganda, Zambia, and Zimbabwe.

The objectives of the meeting were to:

1. Review and evaluate country progress towards implementing VL systems strengthening action plans and achieving scale-up of VLT services, using data from the 2020 structured self-assessment
2. Assess proposed actions plans and link them to the PEPFAR Country Operational Plan 2021 (COP21) and the Global Fund funding cycle
3. Review and assess the progress in VLT demand generation campaigns supported by ASLM in collaboration with the International Treatment Preparedness Coalition (ITPC)
4. Discuss larger laboratory system issues (beyond HIV) including how the COVID-19 pandemic has accelerated the need to integrate testing across disease areas and discuss new interventions to strengthen the laboratory network

III. Expected Outcomes

The expected outcomes of the meeting included the following:

- Dashboard presentation of aggregated and individual country data on progress towards the VL scale-up across the 7 domains of the VLT cascade self-assessment tool and action plans to address identified gaps linked to COP21
- Update of LabCoP strategic decision tool with best practices in maintaining routine HIV/TB testing while surging capacity for COVID-19 testing
- Outline of new topics aimed at strengthening the management of laboratory networks
- Report of general meeting detailing all communications and deliberations of the meeting

IV. Meeting Overview

The two-day virtual meeting was held on 24-25 November 2020 from 14:00-18:00 (East Africa Time) on both days (approximately four hours per day). It was hosted via Zoom and attendees included global experts, funders, and LabCoP team members from 13 countries, namely Cameroon, Democratic Republic of Congo, Ethiopia, Eswatini, Kenya, Malawi, Nigeria, Sierra Leone, South Africa, South Sudan, Uganda, Zambia, and Zimbabwe. All country teams were

Nqobile Ndlovu, Chief Executive Officer of ASLM, opened the LabCoP Fourth Annual Meeting.

led by their respective Ministry of Health representative(s), with additional participants from PEPFAR agencies, implementing partners, civil society and educational institutions, as appropriate. There were 358 unique Zoom connections on Day 1 and 321 unique Zoom connections on Day 2.

The meeting was organized into five sessions, including a panel discussion and breakout sessions for group work. Country teams were clustered together for group work based upon their VL self-assessment scores as well as common successes, challenges and language (e.g., Francophone countries were grouped together). During group work, country teams identified key areas of weakness and their root causes (Day 1) and prioritized interventions to help develop 'fundable' action plans (Day 2).[2] Also, the three countries new to LabCoP – Cameroon, Nigeria, and Eswatini – had an opportunity to be oriented to the community and project activities as a whole.

A summary of each session and key takeaways follows below. All meeting materials and PowerPoint presentations can be accessed via the shared conference folder, and a detailed agenda can be found in Appendix A.

V. Session Summaries and Key Takeaways

Session One: Introduction and Opening Plenary

Session One set the stage for the annual meeting. It was opened by Nqobile Ndlovu (ASLM Chief Executive Officer), followed by a brief presentation on conference objective and expected outcomes by Pascale Ondoa (ASLM Director of Science and New Initiatives). The session included key achievements and updates on the work of LabCoP in 2020; provided an overview of next steps for routine VL testing and EID based upon the 2020 WHO treatment guidelines; and addressed the impact of COVID-19 on HIV/TB diagnostics in Africa.

<u>Key Takeaways from Session One:</u>

- **The LabCoP was initially formed to accelerate the scale-up of HIV viral load testing. It will now expand to also include a broader focus on laboratory systems strengthening.** Since its inception, LabCoP has grown in size (14 countries as of November 2020), strength, and scope. There are several new LabCoP initiatives underway for 2021 and onwards, including a new monitoring and evaluation (M&E) sub-community practice, a Laboratory Network Leadership and Mentorship course (LabNetLead), and continued mobilization of LabCoP for the COVID-19 response.

- **The WHO is in the process of finalizing its 2020 guidelines which will be released in the first quarter (Q1) of 2021, and numerous updates to existing recommendations are under consideration.** In addition to updates on point-of-care (POC) EID and POC VL, the treatment

[2] A summary of groupwork is not included in this report as not all countries shared their groupwork during Report back on both days. In addition, country areas of weaknesses as well as interventions to address them are unique to each country context. Lastly, group work during the meeting was the first step in a larger process of country teams developing fundable action plans for 2021.

failure algorithm is being re-considered. There will likely be an increased emphasis on task shifting for specimen collection and testing and diagnostic integration in the 2020 guidelines.

- **The COVID-19 pandemic has had adverse impacts on HIV molecular testing.** These include increased test result turn-around times; increased stockouts of lab consumables; delayed activation of POC EID sites; reduced client attendance for EID/VL testing; and reduced human resources. COVID-19's impact on VL testing has been variable across countries, but there are indications that testing volumes are returning to pre-COVID-19 levels in some countries.

- **Efforts are underway to strengthen Africa's COVID-19 diagnostic capabilities.** These include Africa Centre for Disease Control and Prevention (CDC)'s Partnership for Accelerated COVID-19 Testing (PACT) Initiative, which seeks to expand COVID-19 testing capacity rapidly; establish Africa-wide pooled procurement, including storage and distribution via hubs; deploy 1 million health workers for contact tracing; and standardize and deploy new technologies for surveillance to help open up economies.

- **Mutualizing diagnostic resources has been a key enabler for COVID-19 testing in Africa.** This includes leveraging previous investments in the influenza network; using HIV and TB diagnostic platforms for COVID-19 testing; expanding testing to sub-national labs, academic and research institutions and veterinary laboratories; and engaging the private sector.

- **Although laboratory systems and networks have been strengthened across Africa in the last 10-15 years, these efforts have largely been disease-specific and thus not optimized to address emerging and re-emerging infectious diseases.** Moving forward to both address the challenges posed by the COVID-19 pandemic and to strengthen the continent's diagnostic capacity, there is an urgent need to focus on integrated laboratory system strengthening efforts (systems vs. disease-specific approach); establish multiplex polymerase chain reaction detection capacity; strengthen human resource capacity; promote local manufacturing of diagnostics; and accelerate international health regulation (IHR) implementation (laboratory components).

- **Diagnostic integration is an especially important strategy for moving forward.** This includes device sharing; systems integration (integration of sample collection networks, supply chain, quality assurance, data connectivity, and waste management); as well as service integration.

Session Two: Measuring Our Progress: The LabCoP Country VL Testing Cascade Self-Assessment

Session Two began with a presentation on synthesized results from the 2020 HIV VL cascade self-assessment scorecard across all LabCoP countries followed by a highlight of South Africa's VL best practices. Country teams then joined one of five Parallel Breakout Groups to discuss their self-assessments and prioritize areas for improvement. The session closed with a report during the plenary.

Key Takeaways from Session Two:

- **Based on the results of the HIV VL cascade self-assessment, the strength across LabCoP countries reporting data (n=12) is at the level of leadership and management.** Most countries have national laboratory systems that are coordinated and supported by technical working groups, national plans and/or M&E frameworks to support the effective scale-up of VL testing. Critical gaps **across LabCoP countries include sample transportation; waste management and biosafety; and national data on VL testing and antiretroviral therapy (ART), with an emphasis on data availability, access, and use (Figure 1).**

Figure 1: HIV VL self-assessment scores by domain, country, and year (2019 vs. 2020)

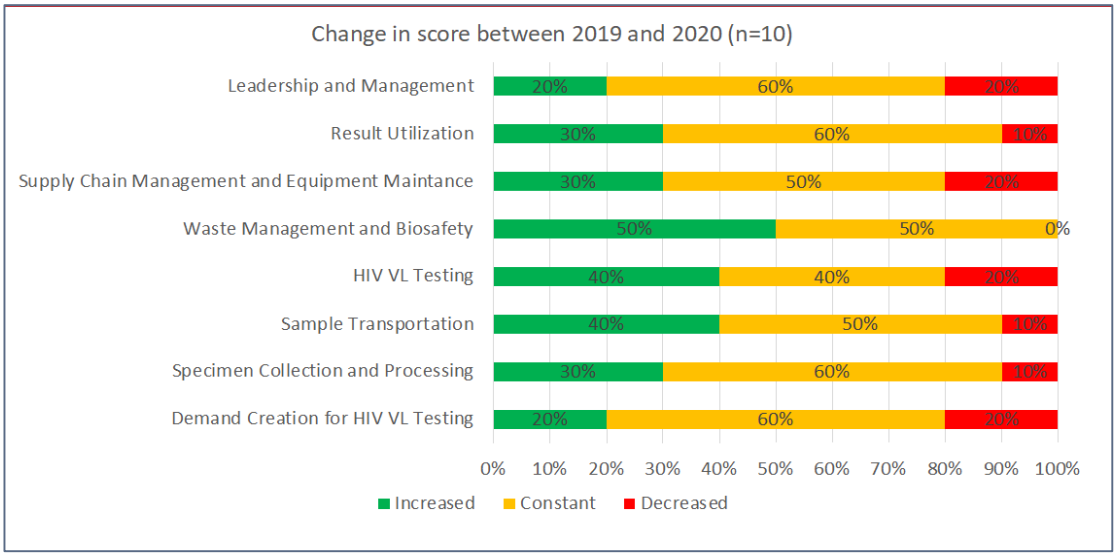
Domain*	Country											
	Cameroon	Congo (DRC)	Ethiopia	Kenya	Malawi	Nigeria	Sierra Leone	South Africa	South Sudan	Uganda	Zambia	Zimbabwe
Demand Creation for HIV VL Testing	3	2	3	3	1	3	3	4	1	2	4	3
Specimen Collection and Processing	1	3	3	4	3	4	2	4	2	3	3	3
Sample Transportation	2	2	3	2	2	3	3	4	1	3	3	2
HIV VL Testing	2	2	3	4	3	2	1	4	2	4	2	3
Waste Management and Biosafety	2	2	2	2	3	2	3	4	2	4	2	3
Supply Chain Management and Equipment Maintance	2	2	3	3	2	2	2	3	2	4	2	2
Result Utilization	2	3	2	3	3	2	2	4	2	4	3	2
Leadership and Management	4	4	3	4	4	3	3	4	2	3	4	3

*** The score are interpreted as follows;**

1 (RED)-Poorly defined processes; **2 (YELLOW)**-Processes understood but poorly documented; **3 (LIGHT GREEN)**-Key processes documented and are managed in accordance with agreed-upon metrics, and **4 (DARK GREEN)**-Processes well defined and there is a deliberate process optimization/improvement

- **Based on the annual country self-assessments, and comparing 2019 and 2020 self assessment reports there has been notable improvement in scores for waste management and sample transportation.** Waste management and biosafety scores increased in five of the 10 countries (50%) while sample transportation scores improved in 40% of the countries as illustrated in Figure 2 below.

Figure 2: Percent of countries reporting an increase, constancy, or decrease in VL self-assessment score between 2019 and 2020, by domain



- **There still exists a gap in the ability to track suppressed clients.** While countries have data at the national level to track the cascade for routine viral load testing, almost all countries are having challenges tracking at national level interventions and outcomes in the VL cascade for patients with a non-suppressed VL test result as shown in Figure 3 below.

Figure 3: Availability of data at the national level to track VL testing capacity and VL cascades

Indicators	Cameroon	Congo (DRC)	Ethiopia	Kenya	Malawi	Nigeria	Sierra Leone	South Africa	South Sudan	Uganda	Zambia	Zimbabwe
# of VL testing Labs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# of VL testing Machines	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Testing capacity	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# VL tests done	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
List of companies	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes
Estimated # of PLHIV	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tx_Curr	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# on 1st line	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# eligible VL test	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
# received VL test	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# Virally Suppressed	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
# on less intense model of HIV care	Yes	No	No	No	No	No	No	No	Yes	No	No	No
# Not suppressed received EAC	Yes	No	No	No	Yes	No	No	No	Yes	No	No	Yes
# Not suppressed h ada follow-up VL test	Yes	No	No	No	Yes	No	No	No	Yes	No	Yes	No
# re-suppressed	Yes	No	No	No	Yes	No	No	No	Yes	No	No	Yes
# Switched	Yes	No	No	No	No	No	No	No	No	No	Yes	Yes

- **As a country highlight of best practice, South Africa presented the results of its VL cascade self-assessment.** South Africa has produced excellent results across all domains of the Rapid Self-Assessment Checklist for National Lab Systems & Viral Load Testing Scale-up, except the ability to track indicators for clinical utility of VL results. eLABS, which is funded by PEPFAR, has been critical to South Africa's success. eLABS is a mobile and web-based application wherein clinicians

submit sample pick-up requests, track logistics, and retrieve test results. eLABS has been scaled up for use in 1402 South African clinics to improve HIV VL test results turn-around time. Other enablers included Results for Action Reports which assist healthcare workers with the identification and management of people living with HIV, as well as targeted support to health facilities and viral load testing laboratories to strengthen the clinic-laboratory interface.

- During group work, 13 countries reviewed their VL cascade data, identifying at least three challenges and analyzing their root causes.

Session Three: Funding Opportunities and Priorities

Session three focused on the funding priorities of key global health donors (PEPFAR and the Global Fund) as well as additional sources of funding, including domestic financing, that countries can leverage for VL scale-up and laboratory systems strengthening activities.

Key Takeaways from Session Three:

- **PEPFAR COP 2021 guidance is currently being finalized and will be released in mid-December 2020.** The PEPFAR funding cycle runs from 1 October to 30 September of each year. PEPFAR funding can be utilized for a variety of interventions and activities to support and strengthen HIV testing; VL coverage and suppression, even among pregnant women and children; EID among infants < 2 months CD4 testing; as well as TB diagnosis in adults, children and infants.

- **Diagnostic network optimization and integration increase access to testing and network efficiencies:** Diagnostic integration and network optimization enable more effective allocation of funding, reduce cost and enable more transparent pricing. Countries can include COVID-19 mitigation strategies in their COP 2021 proposals (e.g., specimen collection that allows for social distancing; streamlining clinic flow to minimize interaction with multiple clinic providers; increased use of mobile testing or POC testing at the community level, etc.)

- **The revised Global Fund application (2020-2022 allocation cycle) encourages applications on strengthening national laboratory systems rather than disease-specific systems.** The Global Fund has issued guidance to this effect, activities related to strengthening national laboratory systems that support more than one disease are encouraged and can be included in the Laboratory Systems Module of the application. Supported interventions include national laboratory governance and management structures; infrastructure and equipment management systems; quality management systems and accreditation; information systems and integrated specimen transport networks; and laboratory supply chain systems.

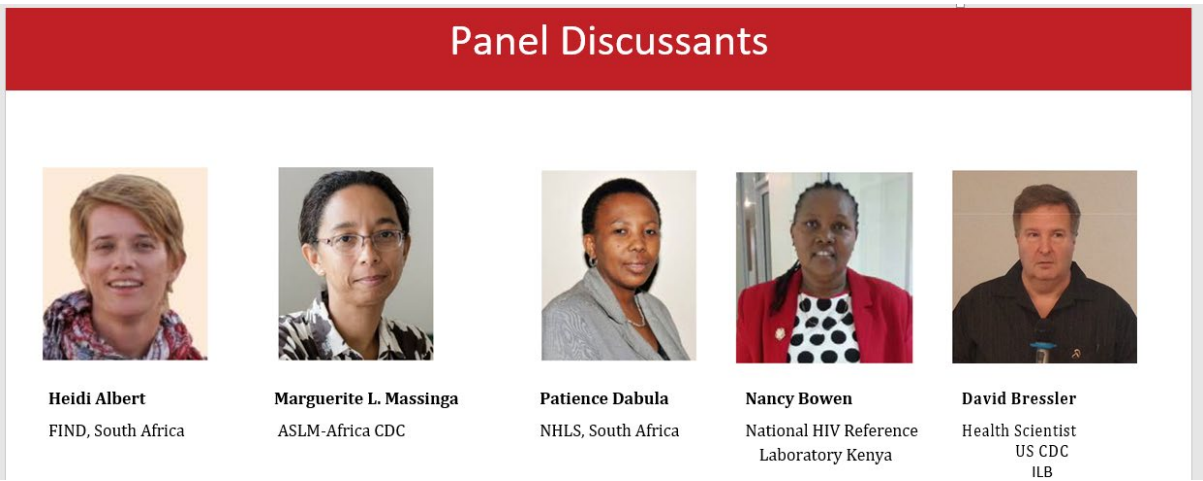
- **There is also an additional $9 million US dollars over three years available for the National Laboratory System and Health Security through the Global Fund's Catalytic Investments/Strategic Initiatives.** This fund is held centrally at the Global Fund and can be used to unblock grant bottlenecks and to support the establishment of a robust and integrated laboratory network and system to enhance the investments made around disease programs (Note: These funds cannot be used for implementation). Funding will be allocated across three sub-components: laboratory peer-to-peer mentoring and learning ($ 7 million across 15 countries); strengthening laboratory governance ($ 1.7 million), and global public goods/tools for laboratory services ($ 300 thousand). Countries have been prioritized for the various sub-components of this initiative, and there may be scope for additional funding including targeted TA for laboratory systems strengthening.

- To influence country applications to the Global Fund, country teams are advised to be engaged at all stages of the grant application and grant-making process, from early discussions/negotiations on program split, proposal writing through grant implementation and reprogramming, if applicable.

- In addition to Global Fund and PEPFAR funding, country teams are also highly encouraged to leverage domestic funding attached to national strategic plans for laboratory systems strengthening activities. Also, LabCoP has funds that can be used to support countries with mentorship activities that fall under LabCoP programmatic priorities, and the WHO also has some funding to support waste management interventions.

Session Four: Best Practices in Maintaining Routine HIV and TB Testing while Scaling-Up COVID-19 Testing (Panel Discussion)

Session Four began with a panel discussion on best practices in maintaining routine HIV and TB testing while scaling up COVID-19 testing. Topics covered included mutualizing resources from HIV/TB programmes for the COVID-19 response; pooled procurement; country-level data use; diagnostic network optimization and integration; and innovations in waste management. The panel discussion was followed by group work whereby country teams expanded Day 1's work, reviewed areas prioritized for improvement and developed action plans for 2021, in alignment with priorities of the funding agencies.



Key Takeaways from Session Four:

- The COVID-19 pandemic represents an opportunity to revolutionize HIV and TB diagnostic services as well as strengthen the laboratory system and diagnostic network as a whole.

- Numerous good/best practices have emerged as countries have adapted to the challenges posed by the COVID-19 pandemic. These include the use of HIV and TB devices for COVID-19 molecular testing; the sudden willingness of manufacturers to open 'closed' platforms to

additional assays; the leveraging of investments in diagnostic network optimization for their COVID-19 response by countries; the national prioritization of the COVID-19 response at the highest levels of leadership (e.g., the creation of presidential task forces for COVID-19); the workforce training/capacitation as well as the addition of work shifts (evening, weekend, etc.) and secondments to support the national response to COVID-19 pandemic; and the pooled procurement of laboratory consumables through initiatives such as Africa Medical Supplies Platform, the Access to COVID-19 Tools (ACT) Accelerator Initiative, and the Diagnostic Consortium.

- **Countries that had a clear picture of their laboratory networks through previous diagnostic network optimization (DNO) efforts were better placed to mutualize existing resources when COVID-19 hit.** They could easily identify where spare testing/device capacity was located. COVID-19 pandemic also brought to light the limitations of many pre-existing DNO activities which have mostly focused on a single disease, rather than taking a more comprehensive, multi-disease, and systems approach. Beyond supporting integrated testing through single platforms (such as using HIV instruments to test for COVID-19), DNO can also be used to mutualize various resources (including the workforce or specimen transport routes) so that across the country, diagnostic services will cover the majority of the population and the full panel of essential diseases.

- **South Africa had early success with scaling up COVID-19 testing.** The scale up of COVID-19 testing was enabled by three main factors: 1) strong country leadership, communication, and direction; 2) understanding and leveraging the strength of the existing system while simultaneously strengthening areas that needed attention (e.g., the NHLS/NPP developed an electronic tool to identify which platforms were available in the public and private sector); and 3) effective management and use of data to inform decision-making.

- **COVID-19 has brought the African continent together through initiatives such as the Africa Medical Supplies Platform (AMSP) and the ACT-Accelerator Diagnostics Consortium,** two important initiatives which complement and enhance each other. The AMSP portal is an online marketplace and pooled procurement mechanism for critical COVID-19 medical equipment and supplies in Africa. Developed as part of Africa CDC's PACT Initiative, AMSP was developed to ensure cost-effectiveness and transparency in the procurement and distribution of COVID-19 related supplies. The ACT Accelerator, convened by WHO and partners, is a global collaboration to accelerate the development, production, and equitable access to COVID-19 tests, treatments, and vaccines. COVID-19 has also underscored the need to strengthen domestic manufacturing capacity for diagnostics; where there are local suppliers that can develop and manufacture COVID-19 tests and commodities, then AMSP can also be engaged.

- **The scale-up of HIV VL testing and surge for COVID-19 testing has impacted the entire spectrum of waste management.** Within this context, the volume of guanidinium thiocyanate (GTC) waste associated with HIV VL, COVID-19 and EID molecular tests continue to be a challenge. The International Laboratory Branch of the CDC has been focused on identifying solutions to GTC

waste for the past three years. There are a variety of methods that countries can consider for disposing of VL and EID molecular waste with varying environmental, public health, and cost implications. These include using different materials such as charcoal and sawdust to make it easier to dispose of cartridges by high-temperature incineration; identifying ways to encapsulate both liquid and solid waste into chemical matrixes that can be safely disposed into currently used landfills; moving of waste to countries with resources and infrastructure to deal with the waste (transboundary movement; a more expensive but also a more environmentally friendly option); as well as utilizing chemical neutralization and precipitation. CDC is currently reviewing the strengths and weaknesses of country strategies around waste management to develop guidelines. CDC has also worked with PEPFAR to have waste management strategies included in COP guidance.

Session Five and Closing: LabCoP Moving Forward: New Initiatives

Session five focused on new LabCoP initiatives, including work with civil society partners; the work of the M&E sub-group; and the laboratory network leadership course. The meeting closed with an award ceremony and closing remarks from partners.

Key Takeaways from Session Five:

- **When we speak of effective community demand creation, knowledge is power.** Having a strong understanding of the issues, challenges, and systems associated with HIV, CD4, and VL testing and developing awareness campaigns and knowledge infusion methods and tools is critical for community-driven demand creation and advocacy efforts. ITPC works with civil society and communities to infuse knowledge and support the development of community-led demand creation plans and initiatives, through small grants and M&E support to monitor activities and results.

- **LabCoP is establishing an M&E sub-community of practice.** All countries have been asked to nominate a sub-team for the M&E sub-community of practice. Training to be conducted in collaboration with partners (CDC, WHO, CHAI, ICAP, etc.) will be convened from January-April 2021. The training will provide guidance and considerations to country teams as they develop, review, or strengthen their laboratory M&E systems. It will promote learning and sharing amongst countries and culminate in a face-to-face workshop in May or June 2021 (COVID-19 permitting).

- **A Laboratory Network Leadership (LabNetLead) training and mentorship course is expected to commence in early 2021.** The course aims to introduce laboratory network leaders to essential concepts and activities to design, optimize, lead and manage functional, high-quality laboratory networks. The course, being developed with help from DATOS, will be provided on a country-by-country basis and will run for four months. Course materials are currently being developed

and finalized. Mentors will be trained in Q1 of 2021, and the course will be piloted in Q2 of 2021.

VI. Meeting Summary

In closing, ASLM and partners reiterated the value of LabCoP and the collective achievements of the LabCoP community in scaling up VL testing; responding to the significant challenges posed by COVID-19 and; strengthening laboratory systems and diagnostic networks in Africa. LabCoP has built a strong foundation upon which to build and advance this work in 2021.

Three Key Takeaways from the Meeting:

- **Mutualizing diagnostic resources has been a key enabler and critical strategy for COVID-19 testing in Africa.** To sustain pre-COVID-19 public health gains, there is an urgent need to apply these principles more broadly and scale-up testing across disease areas.

- **COVID-19 pandemic presents a unique opportunity to both revolutionize HIV and TB diagnostic services and strengthen the laboratory system and diagnostic network more broadly.** The COVID-19 pandemic has exacerbated pre-existing gaps in laboratory systems, simultaneously highlighting the urgent need for both diagnostic network optimization and diagnostic integration.

- **What gets measured gets done**. Strong monitoring and evaluation tools and systems are needed to track and measure progress; identify gaps, and support laboratory system strengthening and improvement. To achieve this, ASLM LabCoP is working with country teams to establish an M&E sub-community of practice. This sub-community of practice will be a forum for subject matter experts from partner organizations (e.g., US CDC, ICAP at Columbia University, WHO) and member country teams to discuss common challenges, share best practices, and co-create knowledge to address the M&E needs of countries scaling up VL testing.

VII. Next Steps

1. Countries will develop 2021 action plans based on groupwork outputs and identified areas of prioritization, linked to funding opportunities.
2. LabNetLead will commence in early 2021.
3. The M&E sub-community of practice and M&E training will be kickstarted in Q1 of 2021.

Appendix A: Meeting Agenda

LabCoP 4th Annual Meeting (Virtual)

Strengthening Laboratory Systems:
Towards and Beyond Scaling Up HIV Viral Load Testing

AGENDA

Day 1 - Tuesday 24 November 2020

Time	Session	Facilitator/Presenters
	Session 1 | Introduction and Opening Plenary	Anafi Mataka (ASLM) Eileen Burke and Fatim Jallow (The Global Fund)
14.00 – 14.05	Opening remarks	Nqobile Ndlovu (ASLM)
14.05 – 14.10	Conference objectives and expected outcomes	Pascale Ondoa (ASLM)
14.10 – 14.20	The ASLM laboratory system strengthening community of practice (LabCoP): Achievements, updates and way forward in the era of COVID-19	Collins Otieno (ASLM)
14.20 – 14.30	Group Activity/Poll	ALL
14.30 – 14.45	WHO recommendations: Key diagnostic considerations	Lara Vojnov (WHO)
14:45 – 15.00	COVID-19 diagnostic situation in Africa: Mutualizing diagnostic resources to respond to health threat. Key coordinated recommendations and next steps	Yenew Kebede Tebeje (Africa CDC)
15.00 – 15.15	Impact of COVID-19 on HIV testing services	Zack Panos (CHAI)
15.15 – 15.30	Discussion Group Activity/Poll	ALL
	Session 2 | Measuring our progress: The LabCoP country self-assessment of the VL testing cascade	Getachew Kassa (ICAP) Heather Alexander (CDC)

Time	Session	Facilitator/Presenters
15.30 – 15.45	Update on the HIV VL cascade self-assessment	Michael Maina Waweru (ASLM)
15.45 – 15.55	Country Highlights	Lucia Hans (South Africa)
15.55 – 16.05	Country Highlights	Nigeria
16.05 – 16.30	Discussion	ALL
16.30 – 17.20	**Parallel Breakout Groups I**: Identifying areas of weaknesses and their root causes [3] • **Group 1**: South Africa, Kenya, Uganda • **Group 2:** Zambia, Zimbabwe, Malawi, • **Group 3:** South Sudan, Sierra Leone, Eswatini • **Group 4:** DRC, Cameroon • **Group 5:** Nigeria, Ethiopia, Tanzania	Facilitators: **Group 1:** Lara Vojnov (WHO) & Collins Otieno (ASLM)/ George Alemnji (PEPFAR) **Group 2:** Shirley Lecher (CDC), Michael Maina (ASLM) & Thandi Onami (BMGF) **Group 3:** Peter Ehrenkranz (BMGF), Eileen Burke (Global Fund) & Fausta Mosha (WHO-AFRO) **Group 4:** Pascale Ondoa/Samba Diallo/ Luc Christian Gwom (ASLM) **Group 5:** Getachew Kassa (ICAP), Fatim Cham (Global Fund), & Clement Zeh (CDC)
17.20 – 18.00	Report back from group work (select countries)	

Day 2 - Wednesday 25 November 2020

Time	Session	Facilitator/Presenters
14.00-14.10	**Recap of Day 1**	Anafi Mataka (ASLM)

[3] The following questions will guide the discussion in **Parallel Breakout Groups Session I**: What are the top 3 areas of weaknesses identified by the self-assessment tool? What are the reasons behind these weaknesses? Did COVID-19 cause any problems?

Time	Session	Facilitator/Presenters
		Luc Christian Gwom (ASLM)
	Session 3 | Funding opportunities and priorities	Clement Zeh (CDC) Smiljka de Lussigny (Unitaid)
14.10-14.25	PEPFAR Laboratory Priorities in Country Operational Plan (COP) 2021	George Alemnji (PEPFAR)
14.25-14.40	Update on Global Fund funding 2021	Eileen Burke and Fatim Cham (The Global Fund)
14.40-14.45	Other funding	Pascale Ondoa (ASLM)
14.45-15.00	Discussion Group Activity/Poll	ALL
	Session 4 | Best practices in maintaining routine HIV and TB testing while scaling up COVID-19 testing (**Panel discussion)**	Fatim Cham (Global Fund) Raiva Simbi (Zimbabwe)
15.00-15.40	Highlights of best practices - Framing presentation	Anafi Mataka (ASLM)
	Topics for Panel discussion: • Mutualizing resources from HIV/TB programmes to COVID 19 response • Innovations and updates on waste management • Pooled procurement of medical products • Country level data use • Diagnostic network optimization and integration	Nancy Bowen (Kenya) Dave Bressler (CDC) Marguerite Massinga Loembe (ASLM-Africa CDC) Patience Dabula (South Africa) Heidi Albert (FIND)
15.40-15.50	Discussion	ALL
15.50-16.40	**Parallel Breakout Groups II**: Prioritizing key interventions and aligning with priorities from funding agencies [4] • **Group 1:** South Africa, Kenya, Uganda • **Group 2:** Zambia, Zimbabwe, Malawi,	**Group 1:** Lara Vojnov (WHO) & Collins Otieno (ASLM)/ George Alemnji (PEPFAR) **Group 2:** Shirley Lecher (CDC), Michael Maina (ASLM) & Thandi Onami (BMGF) **Group 3:** Peter Ehrenkranz (BMGF), Eileen Burke (Global

[4] The following questions will guide the discussion in **Parallel Breakout Groups Session II:** What are the 2-3 priority interventions to tackle each of the 3 highlighted areas of weaknesses (from Day 1)? Are these interventions aligned with the recommendations of PEPFAR, Global Fund or other main funding agencies?

Time	Session	Facilitator/Presenters
	• **Group 3:** South Sudan, Sierra Leone, Eswatini • **Group 4:** DRC, Cameroon • **Group 5:** Nigeria, Ethiopia, Tanzania	Fund) & Fausta Mosha (WHO-AFRO) **Group 4:** Pascale Ondoa/Samba Diallo/Luc Christian Gwom(ASLM) **Group 5:** Getachew Kassa (ICAP), Fatim Cham (Global Fund), Clement Zeh (CDC)
16.40-17.15	Discussion	ALL
	Session 5| LabCoP moving forward: New initiatives and closing	Nqobile Ndlovu (ASLM) Thandi Onami (BMGF)
17.15-17.25	Empowering civil society to demand the laboratory tests that count	Solange Baptiste/Bactrin Killingo (ITPC)
17.25-17.35	What gets measured gets done: M&E sub-CoP	Michael Maina Waweru (ASLM)
17.35-17.45	Lab systems strengthening from facility to network – Laboratory network leadership course	Linda Oskam (DATOS)
	Closing Plenary	
17.45-17.55	Group Activity/Poll Awards and Recognition	Anafi Mataka (ASLM) Upjeet Chandan (ASLM)
17.55-18.00	Evaluation	ALL
18.00-18.10	Closing remarks	ITPC PEPFAR GF WHO WHO-AFRO ICAP Africa CDC BMGF ASLM