In November 2018, David Bressler and Thomas Stevens from the International Laboratory Branch CDC Atlanta introduced the topic of management of biological waste, including waste from HIV VL testing. The two subject matter experts explained that by 2020, more than 30 million HIV VL tests will have been performed globally. It is estimated that 924,000 litres of effluent chemical waste and 2,102,100 kg of solid waste will be produced annually, with negative consequences on the environment and human health.

Dealing with increasing amounts of waste is challenging in resource-limited settings, requiring system improvement approaches. It also requires immediate solutions such as using charcoal to solidify liquid waste for easy transportation or excess water to minimize the toxicity of liquid waste, if pouring it down the drain is the only option. Countries shared interesting examples of how domestic funds can be mobilized to support waste management.

Watch the November ECHO Session on ASLM’s YouTube channel here.

Between September and December 2018, LabCoP’s ECHO sessions covered a large part of the viral load (VL) testing cascade and underlying systems, from ‘demand creation’, to ‘results utilization’ up to ‘management of biological waste’.

In September 2018, Solange Baptiste, Executive Director, and Helen Etya’ale, Program Coordinator from the International Treatment Preparedness Coalition (ITPC) discussed increasing demand creation for routine viral load testing (RVLT). They described the stepwise process to capacitate and empower communities to demand RVLT. Using case-study examples from Zambia, Mali and Pakistan, the presenters emphasized that HIV treatment education and community mobilization are critical components of demand creation for both access to optimal HIV treatment, and for the use of RVLT. Country teams were introduced to ITPC’s Community Demand Creation Model. This model offers a novel approach to increase demand for RVLT. More information about the ITPC model can be found here.

Watch the September ECHO Session on ASLM’s YouTube channel here.

ECHO sessions in October and December 2018 focused on results utilization of unsuppressed patients. In October 2018, Dr Rituparna Pati from Adult HIV Treatment Team, Division of Global HIV & TB at the United States Centers for Disease Control and Prevention (CDC) highlighted the different roles and responsibilities at the facility that support the timely response to non-suppressed VL results. These included: monitoring the return of VL results to the facility, flagging results that require action, entering results into patient charts, and communicating with healthcare providers and with patients to ensure the timely notification of results that need action. In December 2018, Dr Fiona Musiime from Baylor College of Medicine Children’s Foundation in Uganda highlighted the specific challenges of managing unsuppressed children and adolescents. She explained the importance of counselling healthcare providers to ensure that children and adolescents receive adequate doses of medication corresponding to their weight. Dr Musiime also explained how support from case conferences/switch committees with the clinical staff can help minimize delays in making appropriate decisions when managing children and adolescents. The group discussed optimizing the use of recommended first-line regimens, like Lopinavir-based regimens, in children below 3 years of age as a way to reduce the risk of virological failure associated with transmitted HIV drug resistance.

Watch the October ECHO Session on ASLM’s YouTube channel here.

Watch the December ECHO Session on ASLM’s YouTube channel here.
In 2018, LabCoP gathered members from 11 countries at two well-attended, high-level meetings. The first meeting was held in Kampala, Uganda, from 15-17 October 2018, and the second commenced in Abuja, Nigeria, on 9 December 2018, as a full-day satellite session at the ASLM2018 conference. The goals of these two complimentary events were to provide guidance to LabCoP countries on identifying critical gaps in their viral load (VL) testing cascade, formulating action plans that incorporate best practices and successful solutions identified or shared within LabCoP, and translating action plans into funded interventions through existing funding sources.

The meeting in Kampala was the first ever face-to-face meeting of LabCoP. It was co-convened by ASLM and the World Health Organization (WHO). The meeting was supported by the Ministry of Health of Uganda and the Makerere University Monitoring and Evaluation Technical Support Program (METS) and gathered over 200 stakeholders from the 11 LabCoP member countries. Among them were policymakers, clinicians, and representatives from civil society, laboratories, and the United States (US) Centers for Disease Control and Prevention (CDC) country teams. Also in attendance were global stakeholders, including representatives from WHO headquarters, the WHO Regional Office for Africa (AFRO), the US CDC, US President’s Emergency Plan for AIDS Relief (PEPFAR), the Global Fund, the Clinton Health Access Initiative, UNITAID, ICAP at Columbia University, the International Treatment Preparedness Coalition (ITPC), and the Bill and Melinda Gates Foundation. Based on the results of countries’ self-assessments of their VL cascade and underlying laboratory systems, the most critical gaps were determined to be: demand creation, laboratory network optimization, results utilization and waste management. Through group work and discussion, demand creation and results utilization were further prioritized for interventions, and action plans were formulated with input from donors and stakeholders. The first drafts of the action plans were informed with the most promising best practices identified and upcoming opportunities for funding.

The December meeting in Abuja was a direct follow-up of the discussions initiated in Kampala. Around 70 participants from the 11 countries presented their progress toward finalizing their action plans, from the perspective of submitting them for funding through the PEPFAR Country Operational Plan 2019 (COP19) and/or the Global Fund reprogramming cycles. Once again, key stakeholders for HIV VL, including ICAP, the Office of the US Global AIDS Coordinator (OGAC), WHO, WHO/AFRO, CDC and the Global Fund, provided hands-on guidance to the country groups. Dr George Alemnji from OGAC explained the timelines for negotiations and preparation of the general guidance for COP19 and confirmed that HIV VL demand creation and result utilization were part of the focus areas of the COP19. Countries were encouraged to have their plans ready by the first quarter of 2019. A clear schedule for follow-up and support from the LabCoP core team was agreed upon with the aim of advocating for the participation of laboratory stakeholders in COP19 discussions at the country level.

The meeting in Abuja was also an opportunity for the 11 member countries to provide feedback and input on two draft recipes for the LabCoP Cookbook, one addressing HIV VL demand creation and the other addressing result utilization. Thanks to funding from the Bill and Melinda Gates Foundation, LabCoP members were offered the opportunity to attend the four-day ASLM2018 conference, centered around preventing the next pandemic, which provided a unique chance to learn more about the most recent developments in laboratory medicine in Africa and to network with their peers. One of the highlights of the ASLM2018 closing ceremony was the ‘premiere’ of LabCoP’s new promotional video, featuring the work done so far within our Community of Practice.

These recent LabCoP meetings illustrate a shift from collectively identifying and sharing best practices for HIV VL scale up, toward effectively addressing gaps along the VL testing cascade to improve patient outcomes.

‘Around 70 participants from the 11 countries presented their progress toward finalizing their action plans, from the perspective of submitting them for funding...’
**EXPERT EXPERIENCE:**

**Norah Vere**

Recently, ASLM sat down with Norah Vere, Medical Laboratory Scientist with the National Microbiology Reference Lab in Zimbabwe, to discuss Zimbabwe’s HIV viral load (VL) programme, and how it has benefited from ASLM’s LabCoP.

**ASLM:** How has the viral load testing cascade self-assessment tool introduced at the LabCoP Uganda meeting helped Zimbabwe identify the gaps within the country’s viral load program?

**Vere:** The viral load testing cascade assessment tool helped the team to objectively review successes and challenges within the VL program. Some of those successes were the participation of VL laboratories in external quality assurance, enrolment and recognition in the SLIPTA program, and accreditation of the national reference lab. It highlighted the areas that needed more work towards achieving the set targets, like waste management and improved turn-around-time of test results.

**ASLM:** How are Demand Creation and Results Utilization a challenge for Zimbabwe’s viral load program?

**Vere:** Viral load monitoring targets were not met in the last 2 years despite the country having increased laboratory capacity for VL testing. Some of the identified contributing factors are a delayed switch from targeted to routine VL monitoring by some facilities, low patient treatment literacy and an over reliance on plasma VL testing, instead of using dried blood spots, which limits the coverage for VL testing. Challenges with result utilization seem to be centred around a lack of clarity on the processes to be followed when results get back to the facility, long turnaround time for results, interpretation of the results and tracking of patients to ensure that subsequent follow up actions are done for both the virally suppressed and unsuppressed.

**ASLM:** How did you identify activities in each thematic area, and how did you determine how to budget for them?

**Vere:** During the LabCoP Face-to-Face Uganda meeting, we chose activities from the Strategic Decision-Making Matrix we all created that outlines priority action items for improvement that were best suited to address our challenges in each of the thematic areas, based on our in-country experience and feasibility of implementation. One such activity was the creation of the SOP for handling viral load results at facility level to improve result utilization. Another was more involvement of Civic Society organizations in demand creation through use of SMS broadcasts to databases of PLHIV to improve uptake of VL. We formulated budgets based on our experience from similar activities that have been done in country and the scope of coverage that the activity is envisaged to cover.

**ASLM:** What has been your experience helping Zimbabwe mobilise other stakeholders to buy into your plan?

**Vere:** The process for mobilizing other stakeholders started with providing feedback of the Uganda meeting to the Ministry of Health, followed by presenting the country’s VL assessment tool results, an overview of the Uganda meeting, and draft work plan to the national viral load technical working group, which includes all stakeholders. By reviewing the VL scale up quarterly updates together with the assessment results and draft work plan, it was easy for the technical working group to clearly see the gaps and buy into implementation of the work plan at a technical level.

**ASLM:** Can you describe your experience helping Zimbabwe advocate for funding of your listed activities?

**Vere:** Advocating for funding is still ongoing and is probably the most challenging aspect of the work plan compared to technical buy in. The process from buy in to funding availability is long for most funders. It may not be possible to change procedures on how funding is allocated and availed, but implementation of the work plan may need to be staggered based on the time frame for the availability of funding.

**ASLM:** What lessons have you learnt during this entire process?

**Vere:** I learnt that the challenges we face are not unique, other countries also have the same challenges, and there is a lot to learn from information exchange in a platform like LabCoP. We hope LabCoP can help in advocating funding modalities for waste management and engage the suppliers of reagents for safer alternatives during manufacturing.
WHAT’S NEW AT LabCoP?

LabCoP is proud to introduce its first promotional video that provides an overview of the program and all the components that LabCoP country teams benefit from. Hear from Program Managers and Country team leaders about how LabCoP has helped their country’s viral load program. See the video on ASLM’s YouTube Channel here.

The LabCoP and entire ASLM community is pleased to welcome Dr Rituparna Pati and Ms Solange Baptiste to the LabCoP Oversight Committee. The LabCoP Oversight Committee provides overall guidance and direction to the project activities and we truly believe that Dr Pati and Ms Baptiste will greatly enhance the committee in their new roles. Dr Pati is an HIV Treatment Technical Advisor at the HIV Care and Treatment Branch, Division of Global HIV and TB, at the U.S. Centers for Disease Control and Prevention. Ms Baptiste is the Executive Director at International Treatment Preparedness Coalition (ITPC) and brings to the table over 15 years of global program management, advocacy and monitoring and evaluation experience. Welcome Dr Pati and Ms Baptiste!

LOOKING AHEAD

March’s ECHO Session will feature a presentation by Jeff Lemaire, Diagnostic Advisor, Innovation and New Technology, at the Elizabeth Glaser Pediatric AIDS Foundation, about practical considerations for implementing point-of-care testing for early infant diagnosis of HIV.

April’s ECHO Session will feature a presentation by Jason William from USAID about laboratory network optimization for optimal access to viral load and early infant diagnosis testing.

Celebrate Lab West Africa 2019 will take place in Monrovia, Liberia from 23-24 April and aims to serve as a platform for West Africa laboratory professionals to share best practices, acquire knowledge and debate innovative approaches for better diagnostic outcomes for Africans. Get more info here.

The 13 Interest Conference takes place in Accra, Ghana from 14-17 May. It brings together scientists involved in HIV treatment, pathogenesis, and prevention research in Africa to share pivotal findings, promote collaboration, and transfer experiences across several fields and many continents and showcases cutting-edge knowledge in the diagnosis and treatment of HIV and the prevention of the HIV-1 infection. Get more info here.

IAS2019 takes place from 21-24 July in Mexico City, Mexico. This biennial conference presents the critical advances in basic, clinical and operational research that moves science into policy and practice. The meeting sets the gold standard of HIV research featuring highly diverse and cutting-edge studies. Get more info here.

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