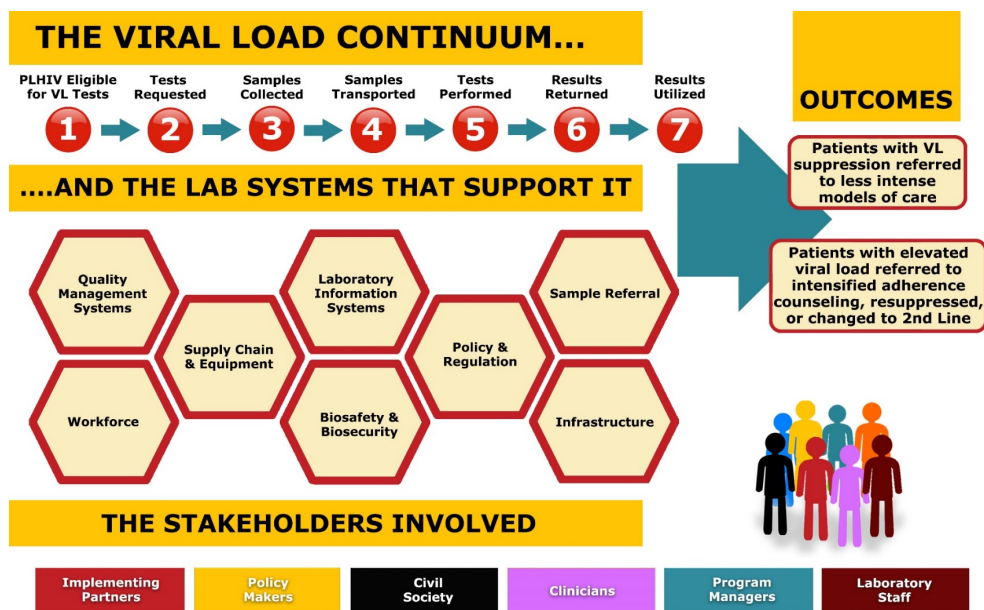


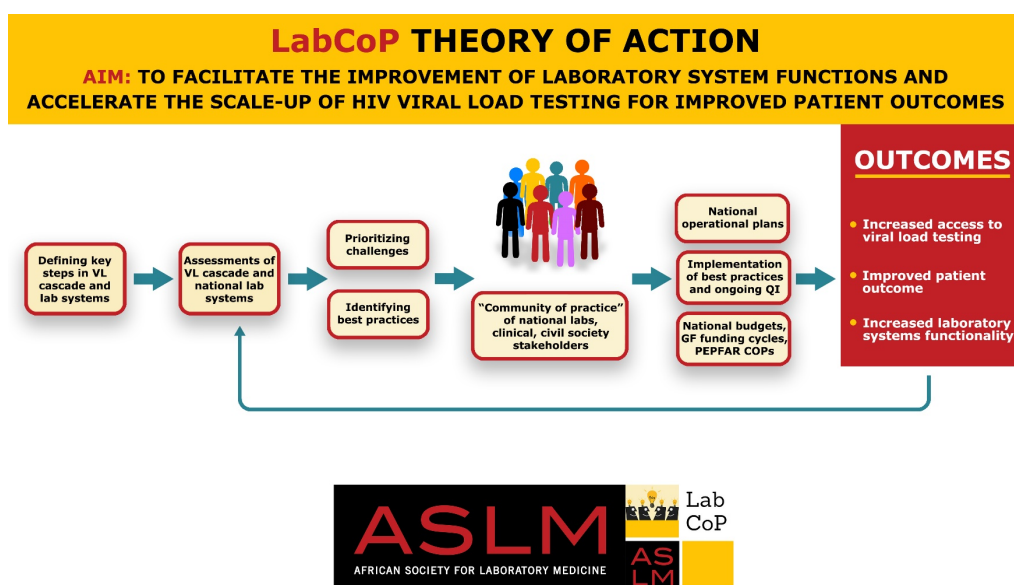
## The Viral Load Testing Cascade and the LabCoP Theory of Action

Scaling up viral load (VL) testing to reach the third 90 of the UNAIDS 90-90-90 targets by 2020 requires a holistic approach, addressing each step of the VL testing continuum from the demand for the test for all eligible patients to the utilization of test results. Bottlenecks and inefficiencies along the VL testing cascade are related to gaps in the underlying laboratory systems, such as sample transportation systems and workforce or supply chain management. Improving VL scale up at the facility level is important; however, systemic issues limiting the impact of VL testing on the third 90, also need to be addressed at the national level, through the involvement of stakeholders from different sectors, ministries and disciplines.

The diagram below depicts the VL testing continuum, how it contributes to better patient management, how it relates to the underlying laboratory systems and how it involves national stakeholders.



Embracing this intricate context, LabCoP aims to help improve laboratory system functions and accelerate the scale of VL for improved patient management, according to the theory of action below.



Since its inception, LabCoP has worked with 11 countries to assess critical gaps along the VL testing cascade and the underlying laboratory systems at the national level. These results contributed to the evidence-based prioritization of most critical challenges needing intensified capacity building through:

1. The creation and dissemination of knowledge, and the adoption of context-specific best practices for quality improvement (QI) through South-to-South exchanges within a multidisciplinary Community of Practice
2. Interventions embedded in national action plans, and effectively linked to existing funding schemes [Presidents Emergency Plan for AIDS Relief (PEPFAR) country operational plans (COP) of Global Fund (GF) funding mechanisms] and available opportunities for technical assistance.

Increasing context-specific resources, knowledge and capacity to scale-up VL testing at the national level, is anticipated to contribute to improved patients' outcomes, towards the achievement of the third 90 and to sustainable improvement of laboratory system functions towards the goals of universal health coverage and international health regulations.