



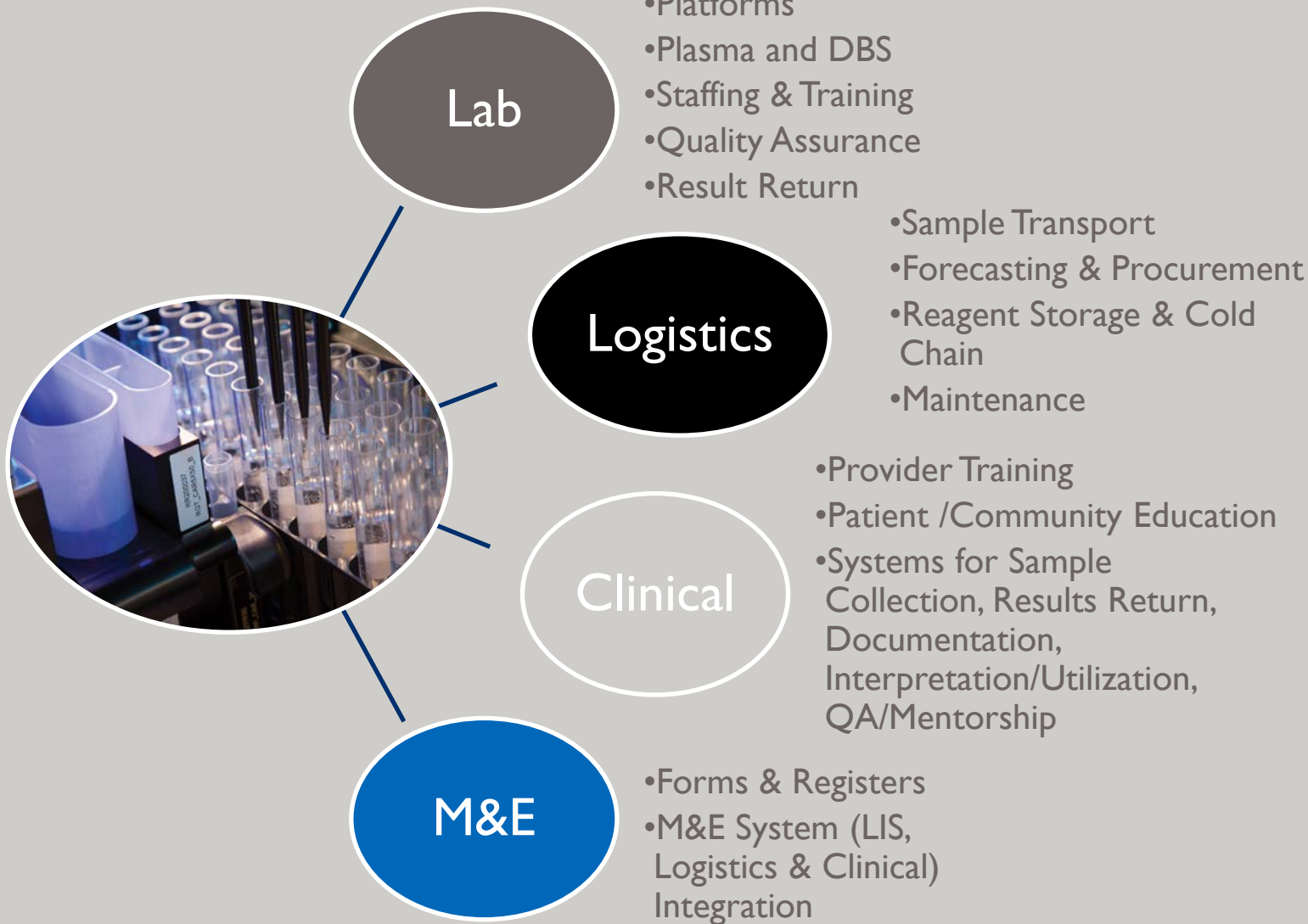
Using a Network Approach for Effective VL/EID Scale Up

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MOE-2013

Components of Successful VL/EID Scale Up



VL/EID cycle

- Sample collection



- Sample referral



- Result use

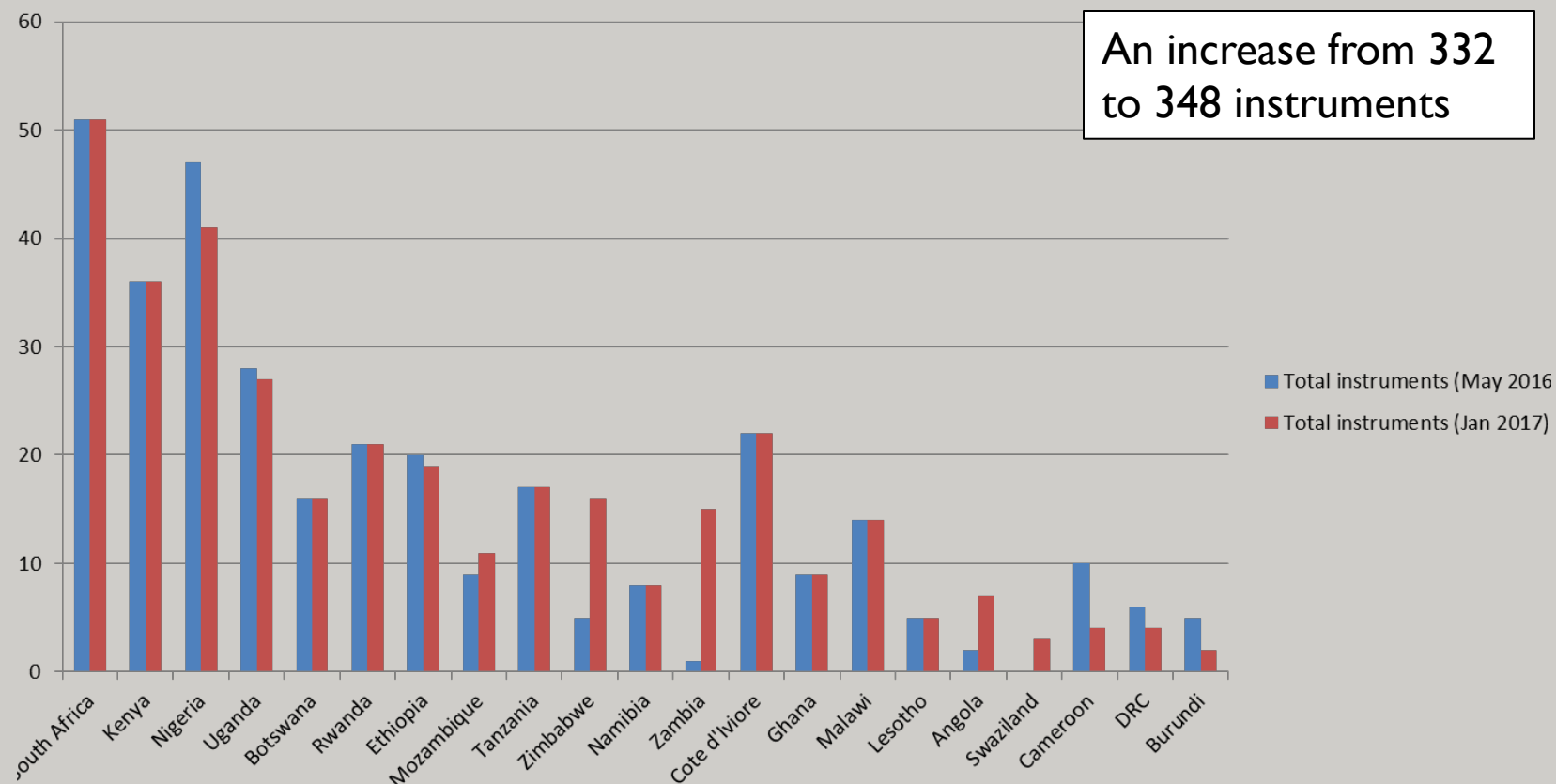


- Result return



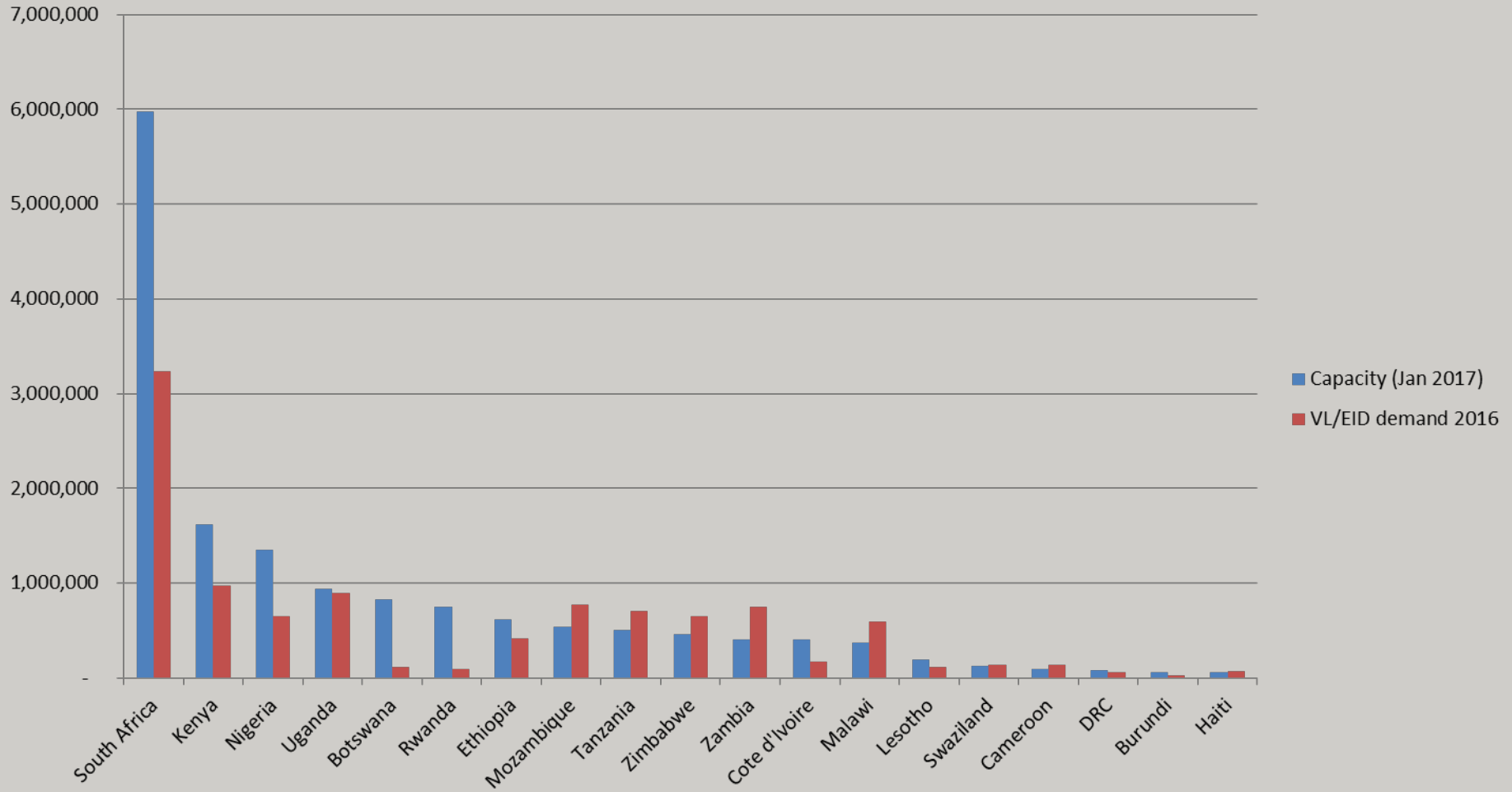
Network footprint: Total reported Abbott/Roche systems by country (Africa) 2016

(Source: Abbott/Roche)



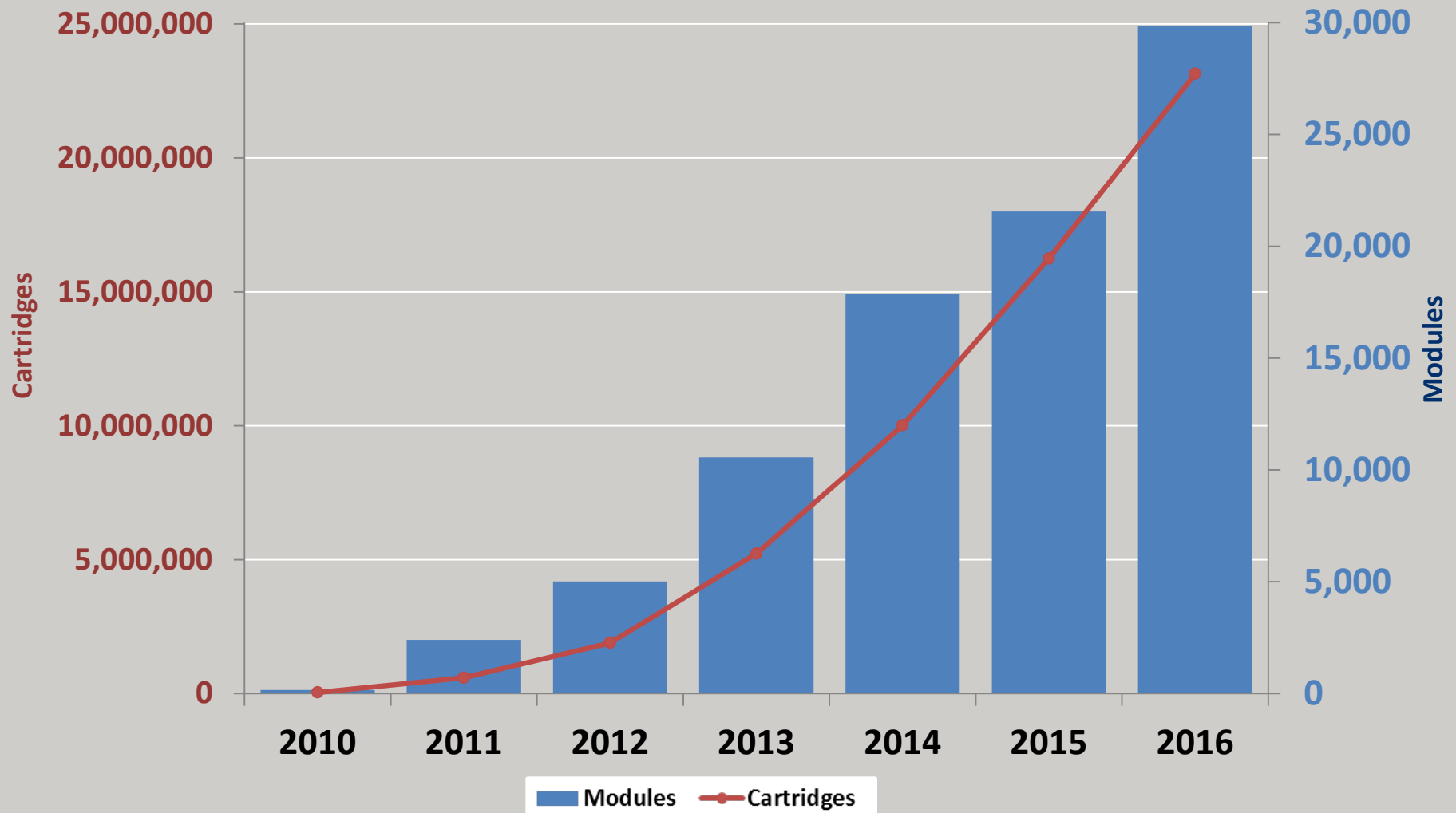
Included: Rwanda (10) and Tanzania (5) new Abbott platforms to be installed 2016
 Nigeria's PEPFAR capacity reduced – pivot to II labs, not adjusted

Network Footprint: VL/EID demand vs total molecular capacity (2016)



Capacity (8 hrs/day) – Instrument counts provided by Roche/Abbott (Jan 2017)
VL/EID demand – 2016 EID targets + 2016 tx_current (total VL need)

Global Cumulative number of GeneXpert instrument modules and Xpert MTB/RIF cartridges procured under concessional pricing



As of 31 December 2016, a total of 6,659 GeneXpert instruments (comprising 29,865 modules) and 23,140,350 Xpert MTB/RIF cartridges had been procured in the public sector in 130 of the 145 countries eligible for concessional pricing.

Data: Cepheid

PEPFAR VL/IVT Scale Up Strategy: Network Approach

- A dynamic understanding of the functionality of the national laboratory network and supportive systems (agnostic of disease type or program area), which informs efficient and effective program growth and instrument expansion.
- Requires baseline mapping of the laboratory network and systems, identification of functional instruments, and current utilization rates.
- A all-inclusive per test cost structure spread across all instruments of the same brand within the network and available to all stakeholders to include:
 - Cost options that account for existing instruments with new contract models (eg. Leasing and rentals) that facilitate network expansion;
 - Inclusive service and maintenance;
 - Data solutions for patient result transmission, instrument / user performance;
 - Network staff training and consistency;
 - Additional technology support (barcoding, sample processing, and workflow);
 - Enhanced commodity management strategies to ensure reagent availability;

Network Approach to VL/EID Scale Up

- Planning and procurement must be coordinated among agencies / donors in country.
- Development of and adherence to supply plans. (**National quantification / forecast / supply plan development**)
- Data is key to asset management. Contractual requirements for data sharing via frameworks. (downtime / protocols / specimen type / etc.)
- Reagent rental / bundling of services (including connectivity) into contracting is **priority**.
- Development of and adherence to criteria for placement of additional machines or higher throughput platforms
- Integration of POC platforms into current networks.

POC integration considerations:



- Alere Q – new technology, no historical data associated with instrument lifespan and a clear understanding of maintenance strategy
- GeneXpert – existing TB challenges with maintenance – new strategy required!
- Site appropriateness and the need to understand conventional network impact
 - Recognize there will be shifts in commodity demands
- There is a need for robust data feeds to monitor commodity replenishment and instrument failures
- Ensure a coordinated POC introduction strategy (program, laboratory, logistics)

LabEQIP: Laboratory Efficiency and Quality Improvement Planning Tool



LabEQIP 0.27

Show Map Show Chart Optimize Database Settings LabEQIP Help

Home

MASTER DATA


- Sites
- Test Sites Info
- Referral Linkage
- Transit Time Override
- Test Type
- Facility Type
- Facility Level
- Equipment Type
- Country HR Req.'s
- Patient Numbers

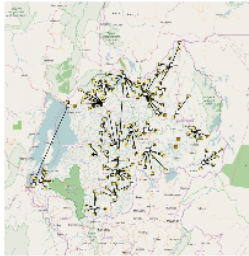
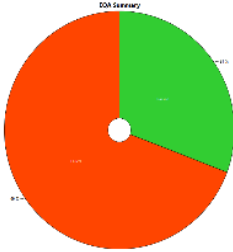
TEST DATA

- EQA Test CD4

OUTPUT DATA

- Optimization Runs
- Optimization Summary
- Optimization Results
- Optimization Test Sites

 Laboratory Efficiency and Quality Improvement Planning





Map  Chart 

Quick Reports: Maps

- [HIV Patients Distribution](#)
- [Equipment Utilization](#)
- [EQA Performance](#)

Optimization Output

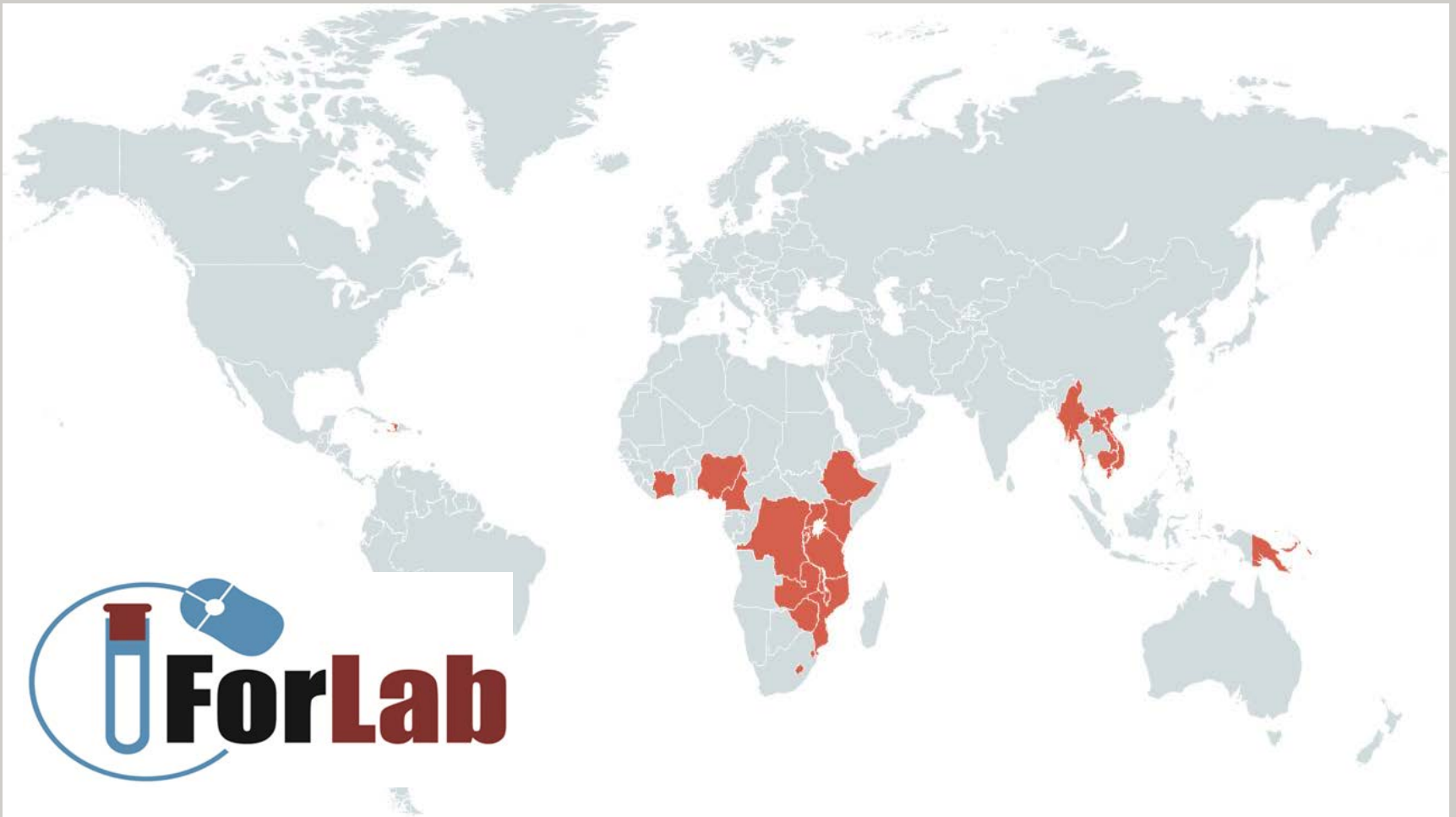
- [Comparison Report](#)

 **USAID** FROM THE AMERICAN PEOPLE  **CDC** CENTER FOR DISEASE CONTROL AND PREVENTION  **SCMS**  **LLamasoft**

- Easy to use, open source tool that can act as a data repository for information relevant to laboratory network performance.
- Link relevant data and provide users with the ability to visualize the system (maps, charts).
- Provide visibility into performance and resources over time to assess the effect of various interventions.
- Provide optimal referral assignments.

Forecasting:

- New version in development



Take Aways!

- Seek a systems/network approach where possible to inform network maintenance and expansion;
- Planning and procurement must be coordinated among agencies / donors in country;
- Reagent rental / bundling of services (including connectivity) into contracting is priority;
- Development of and adherence to criteria for placement of additional machines or higher throughput platforms;
- Integration of POC platforms into current networks;
- Data is key to asset management. Contractual requirements for data sharing (downtime / protocols / specimen type / etc.).

A photograph of a laboratory setup. In the foreground, there are several large, clear plastic beakers. Behind them, a black rack holds numerous glass test tubes, many of which contain a clear liquid. Several black pipettes are positioned vertically in the rack. The background is dark and out of focus, showing more laboratory equipment.

Thank you

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