Using Informatics Tools for Viral Load scale-up

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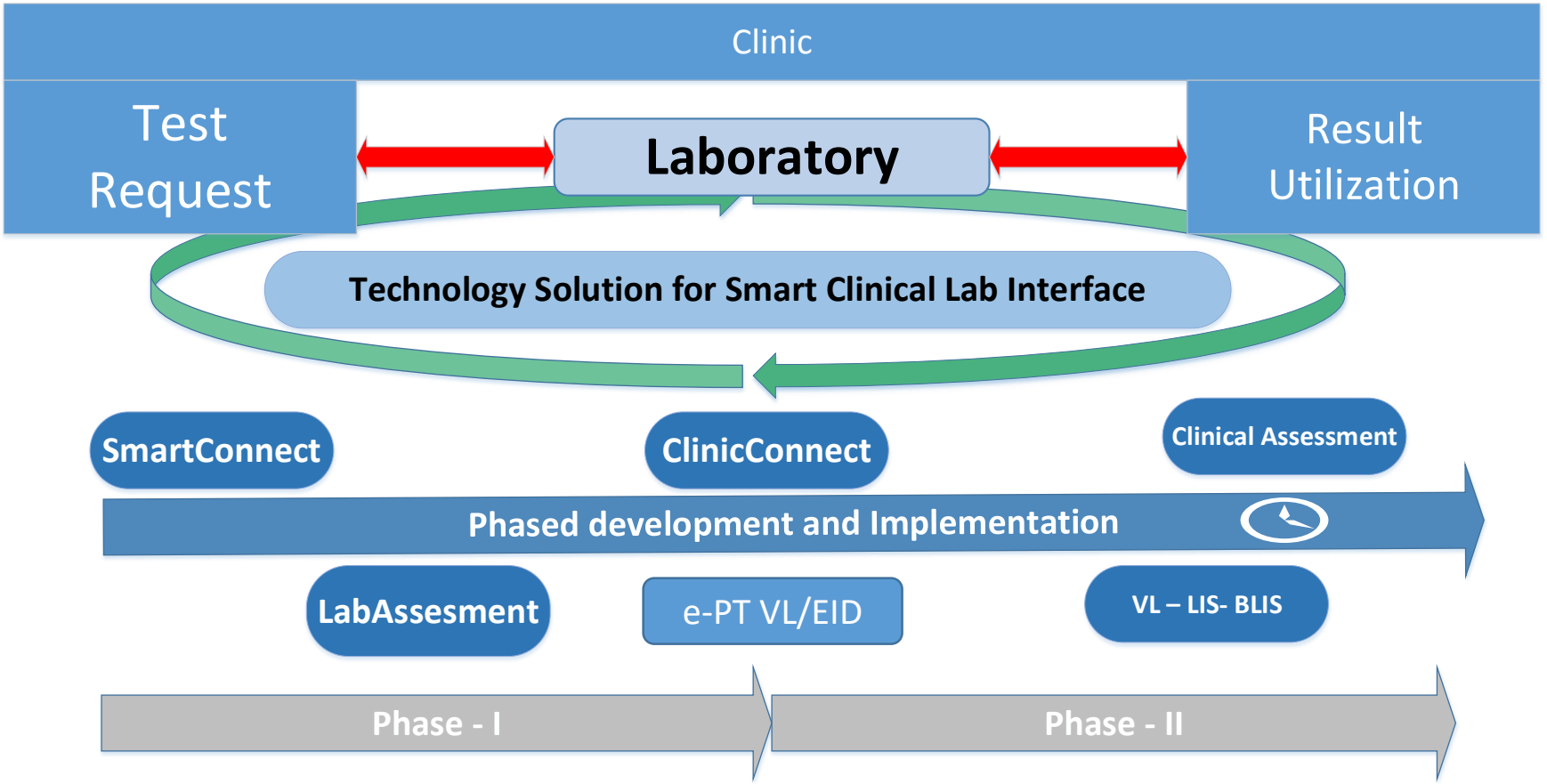
VL Scale-up and Testing Volume

- Rapid VL Scale-up

  Kenya 2017 - 1,220,000 will be expected on treatment

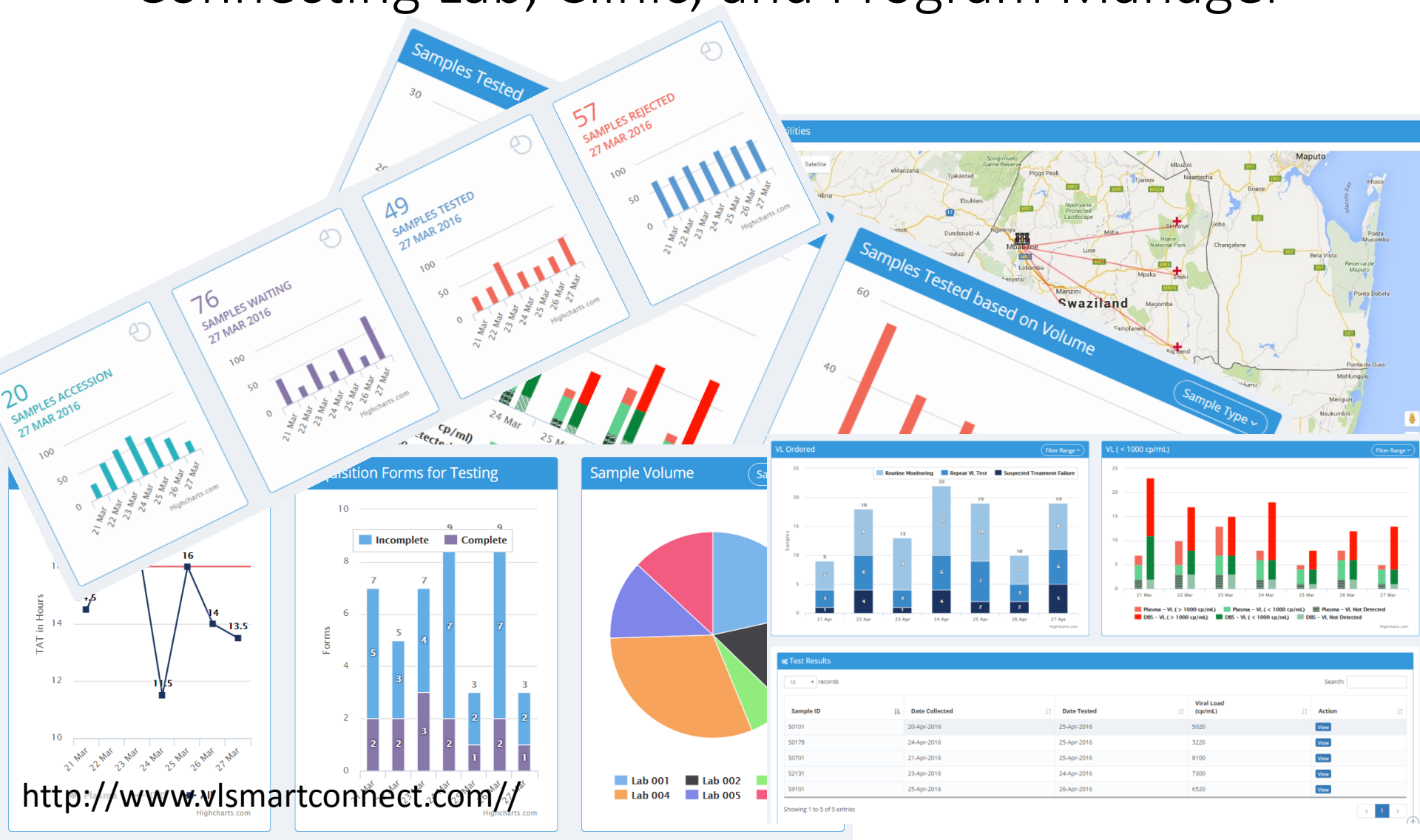
  - Managing these data on paper base system
  - Managing ART patient on paper based system for next 30 years

Improving Lab-Clinical Interface – Last 90



Under development

SmartConnect
Connecting Lab, Clinic, and Program Manager



http://www.vlsmartconnect.com/

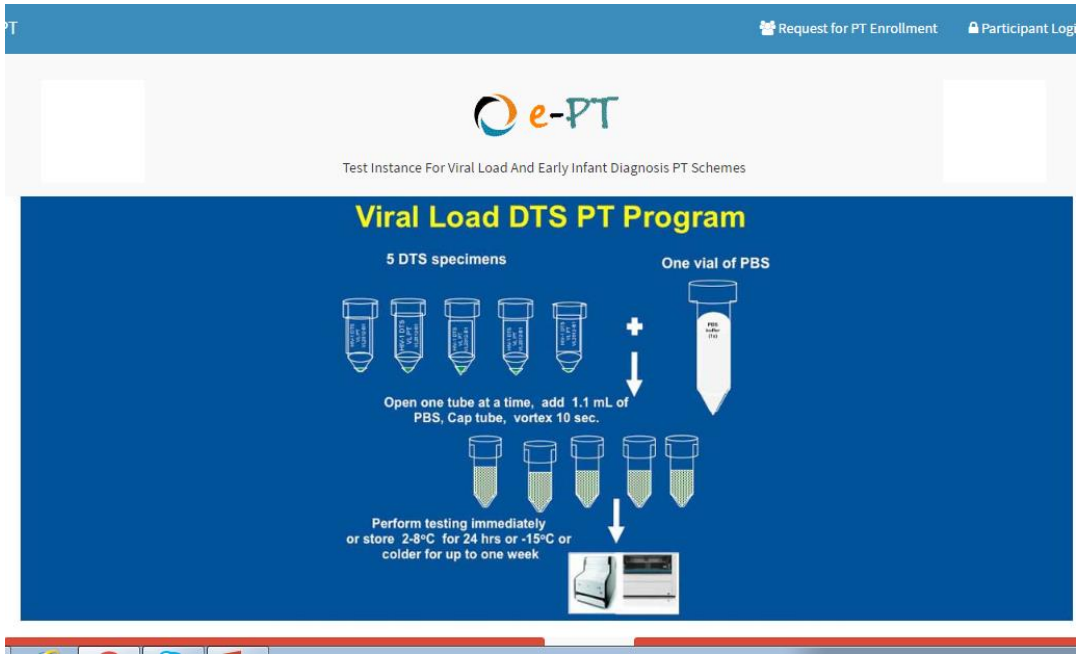
Answering questions such as:

- Are there particular sites which have particularly poor rates of virologic suppression?
- Do virologic suppression rates vary by regimen?
- As a measure of quality of viral load services, what percent of samples collected are rejected due to improper or insufficient collection? What percent of samples collected are rejected due to incomplete/incorrectly filled out requisition forms?
- What percent of pregnant or breastfeeding women on ART are virologically suppressed?
- Are there sample backlogs at a given VL test site? Are there any reagent shortages in a given VL test site?
- Are there differences in VL suppression rates between plasma and DBS samples?
- Are there any delays on specific sites/routes during sample transport?
- Are there any specific causes of sample rejections at VL labs?
- Are there large numbers of tests being re-ordered due to rejected samples?

Under Testing

PT Program for VL/EID

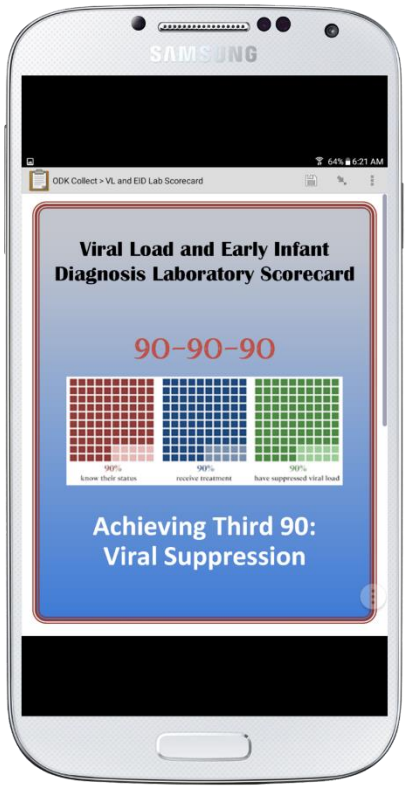
- Web based data management tool for VL/EID PT program.
- Currently testing for ILB VL/EID process.
- https://ept.vlsmartconnect.com/

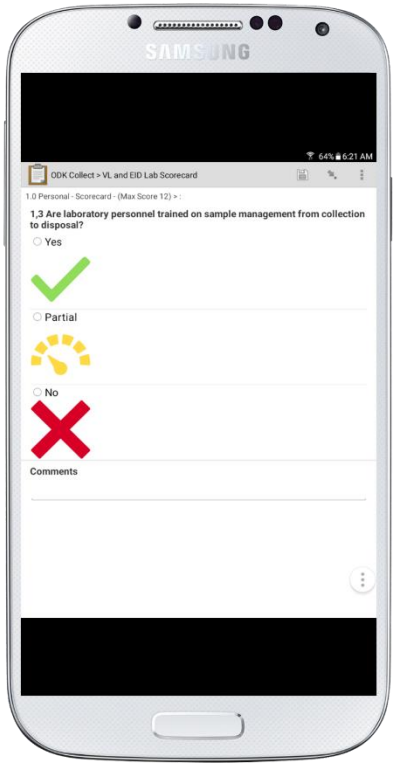


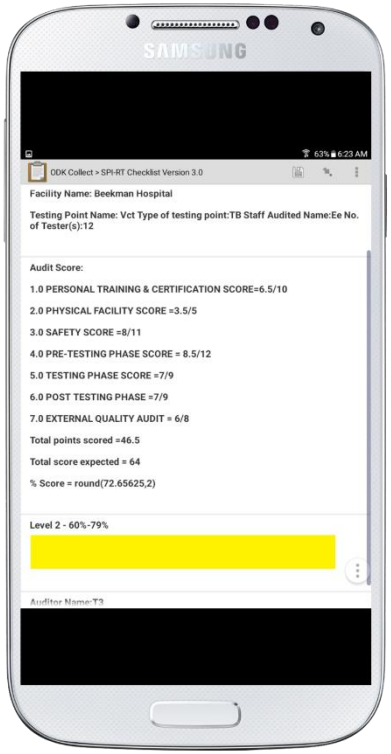
Under Implementation

VL/EID Lab Scorecard Continuous Quality Improvement

- Using Tablet to assess Laboratory to support VL & EID







VL/EID Score Card

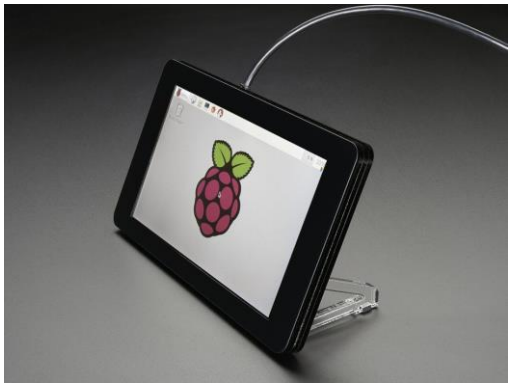
- Tested in Cameroon
- Currently testing check list in Tanzania in three VL Labs.
- Update checklist based on feedback and modify tablet checklist
- Tablet checklist will be available for use by end of this month

ClinicConnect
Reaching Patients

Design Phase

Using Mobile Phones

Using Raspberry pi Computer costing $35



Under Testing

Affordable LIS for VL

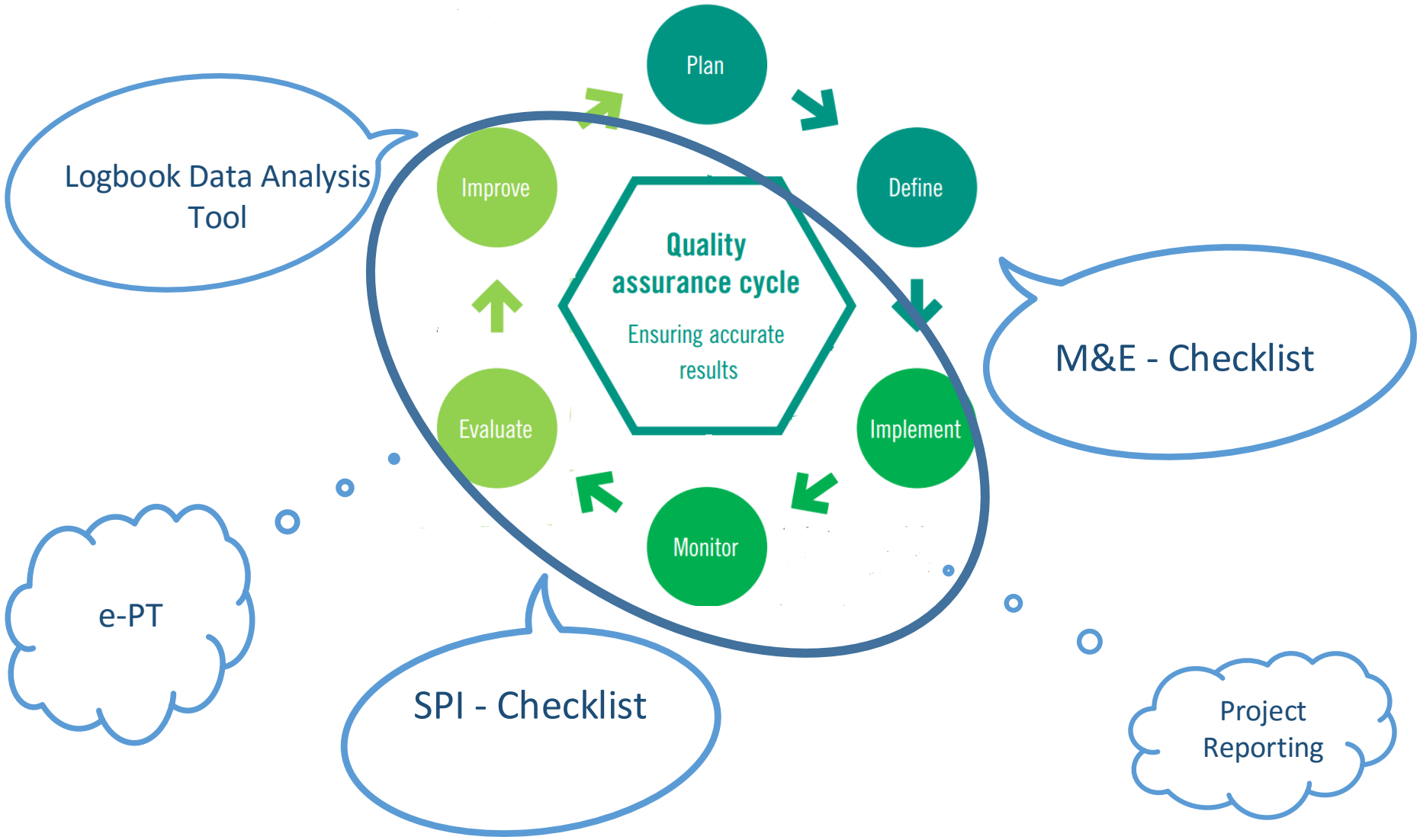
- Implement simplified sample management system for VL Laboratory
- Enhance BLIS (Basic Laboratory Information System) to support VL testing
- Instrument Automation and linking BLIS with EMR for result reporting
- Creating interface with SmartConnect and ClinicConnect for lab clinic interface.

Planning Phase

Tools for Clinical Assessment

- Develop tools to support clinical assessment for VL Scale up
- Develop Dashboard for analysis of assessment and assist in corrective action
- Provide programmatic support to identify bottleneck in viral suppression

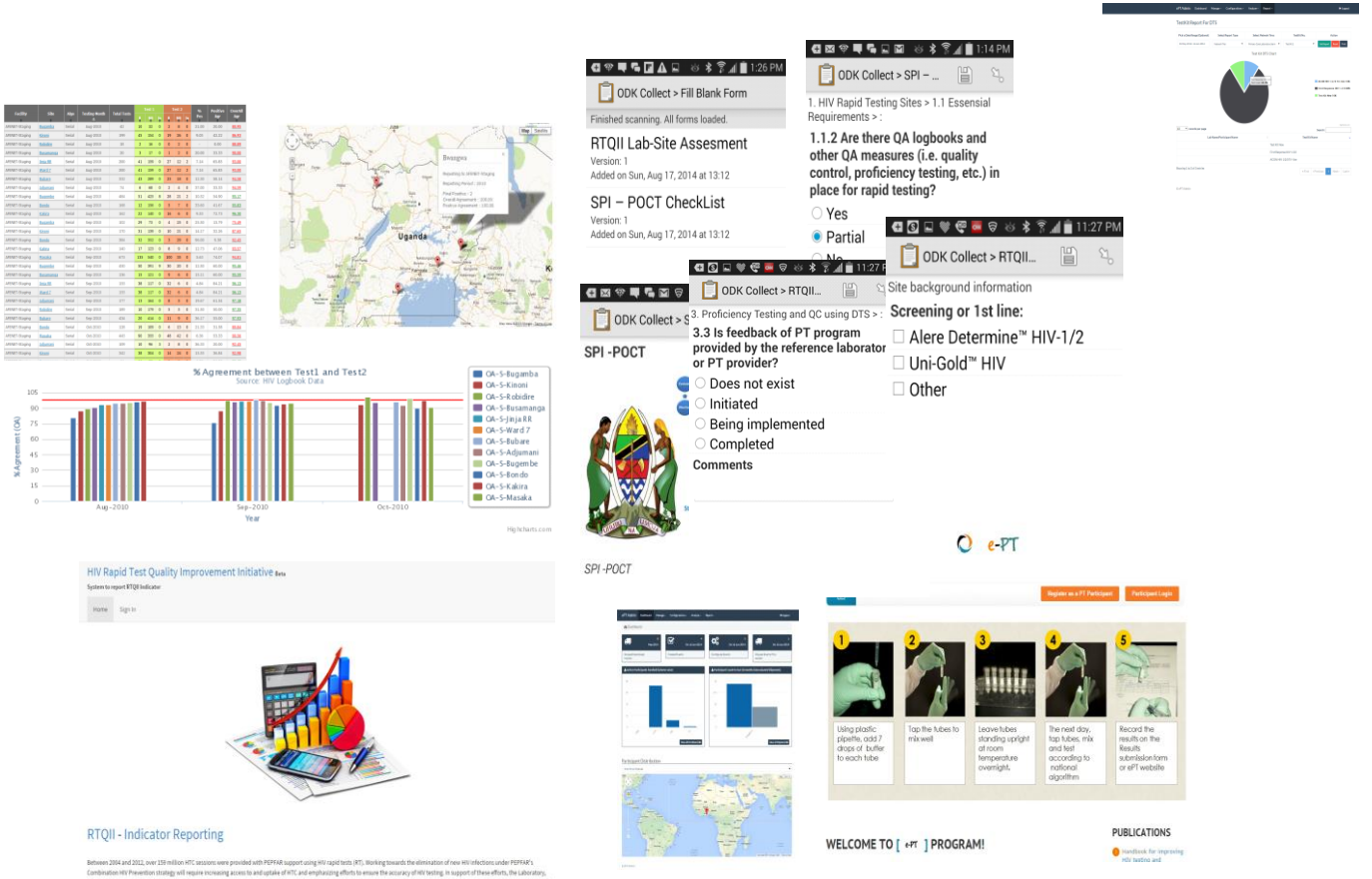
Other e-Tools for Laboratory - RTQII



Completing Quality Cycle – First 90

Implemented

- Cameroon
- Malawi
- Tanzania
- Zambia
- Ethiopia ?
- Kenya
- Uganda
- Jamaica
- South Africa
- Cambodia
- Nigeria




Questions?