



# **Implementing the HIV Quality Assured Cycle Using Innovative Strategies: Cameroon Perspective**

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# Outline

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- Introduction
- Innovative approach for implementing HIV Rapid test Quality Improvement Initiative (HIV-RTQII)
- Results
- Challenges and lessons learned
- Conclusions

# Introduction

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- About 20 million inhabitants; 4.3% HIV prevalence
- Scale up of PMTCT and option B+ is a priority
- 595 Sites enrolled in HIV rapid test proficiency testing program – pass rate below 50%
- About 6% of people tested still receive false negative results and 2% receive false positive results
- 18% of HIV infected women received false negative results in last ANC survey

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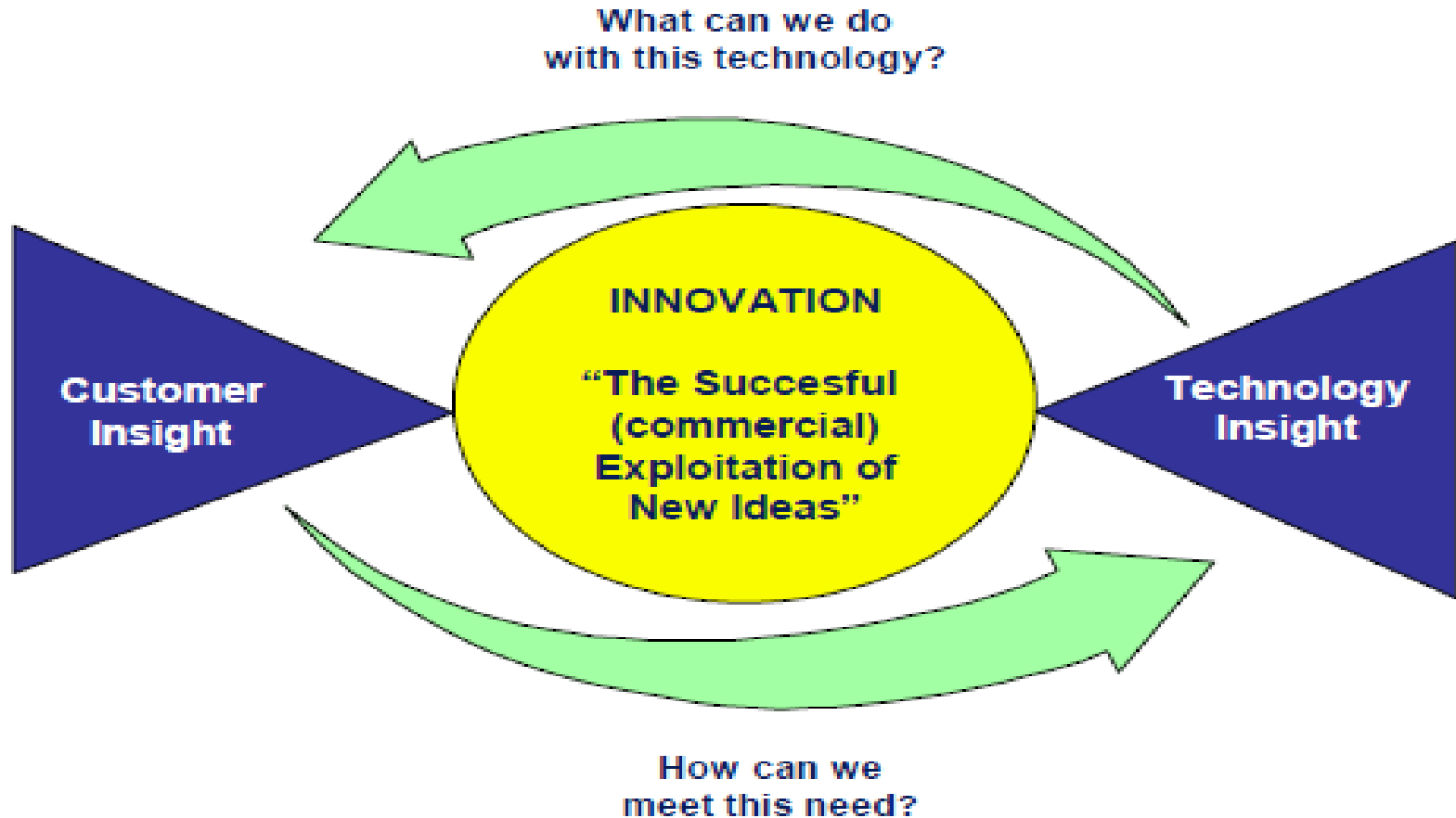
# **Innovative Approach for Implementing HIV Rapid Test Quality Improvement Initiative**

**(The use of Quality Corps Volunteers)**

**Mid-May to September, 2014**

# Key Elements of Innovation

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# Five Pillars of HIV Rapid Test Quality Improvement Initiative

## Policy Engagement

- Develop and implement policy
- Engage stakeholders & advocate

## Human resources development & certification

- Train and certify
- Create network of testers

## Proficiency testing

- Participate in PT program (DTS)
- Analyze data for corrective actions

## Standardized logbook

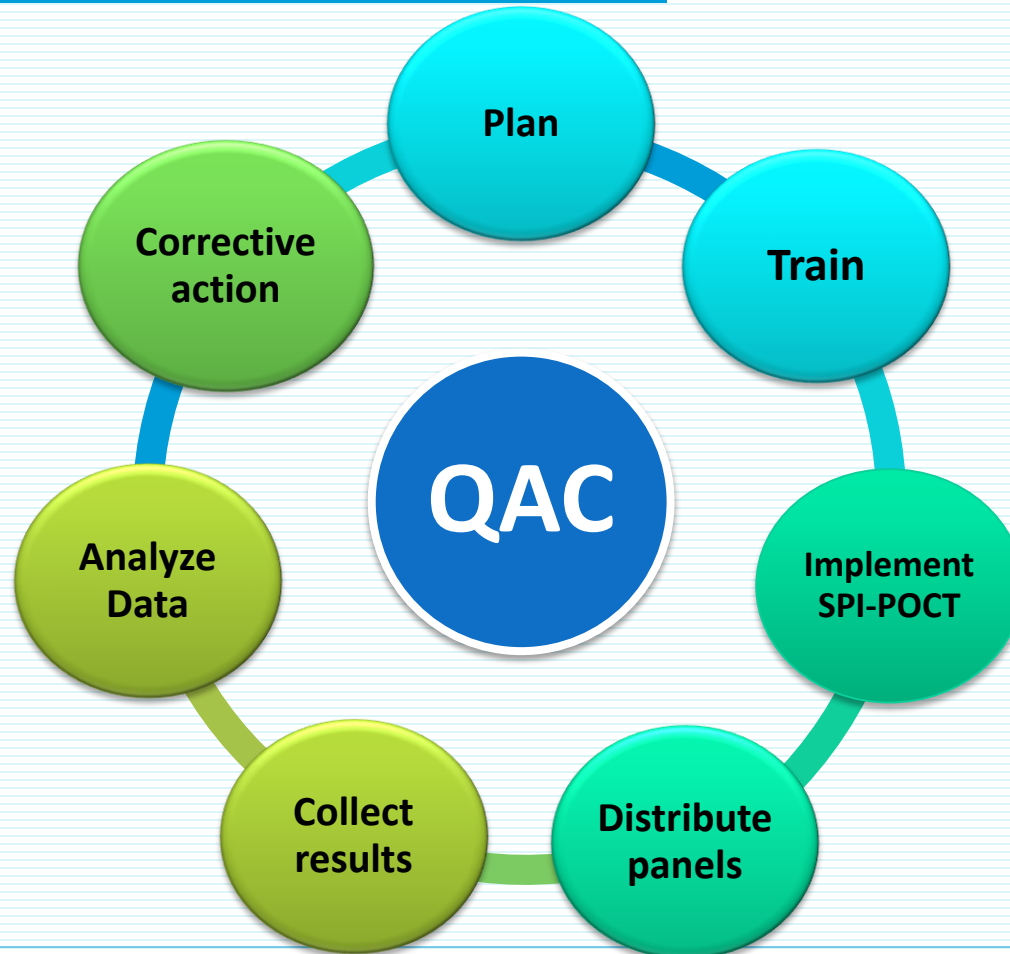
- Implement use of standardized logbook
- Analyze logbook data regularly for corrective actions

## Lot testing & post market surveillance

- Implement lot verification & PMS

# Cameroon's Experience in Implementing the Quality Assurance Cycle

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# QAC Implementation Strategy



**1** Engage Ministry of Health



**2** Identify local partner and train trainers (TOT)



**3** Recruit and train Volunteer Quality-Corps



**4** Identify sites for pilot program



**5** Panel distribution



**6** Supervision and corrective action



# 1. Engage Ministry of Health and Stakeholders

- Initiative endorsed by MOH
- Ministry proposed MOH Q-Corps hybrid
- MOH drafted memo to Regional Health Bureaus
- MOH established badges for Q-Corps to facilitate access to facility
- 9 MOH Q-Corps selected



## 2. Identification of Local Partner and TOT

- Experience in laboratory program implementation
- Excellent collaboration with MOH and other lab stakeholder
- Identified 04 Staff as master trainers



### 3. Recruitment of Q-Corps

1	2	3	4
Local partner advertised recruitment of Q-corps in national newspaper	Ninety (90) applications received	Panel review and selection	31 volunteer Quality-Corps recruited



Launch of RT-QII by MOH



Training of 31 QCs

# Training of Quality Corps

- Proficiency testing using DTS
- HIV logbook
- Site visits
- Electronic data entry
- **SPI-POCT checklist**



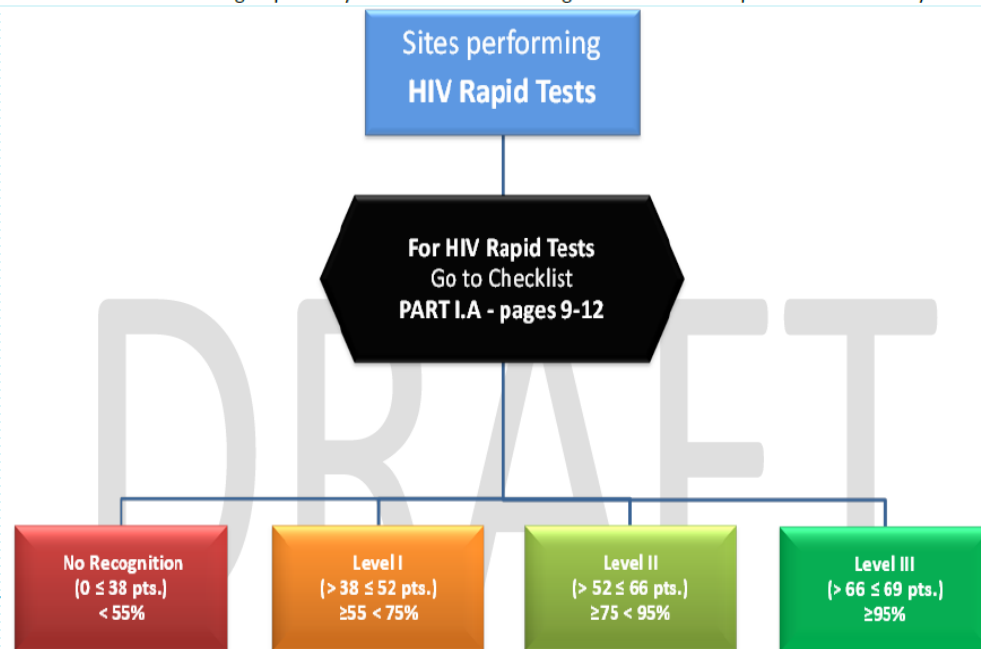
# SPI-POCT Checklist

- Based on ISO Standards for POCT
- Two parts – HIV RT and instrument based POCT
- Similar to SLIPTA checklist for laboratories

## Stepwise Process for Improving the Quality of HIV-Related Point-of-Care-Testing (SPI – POCT)

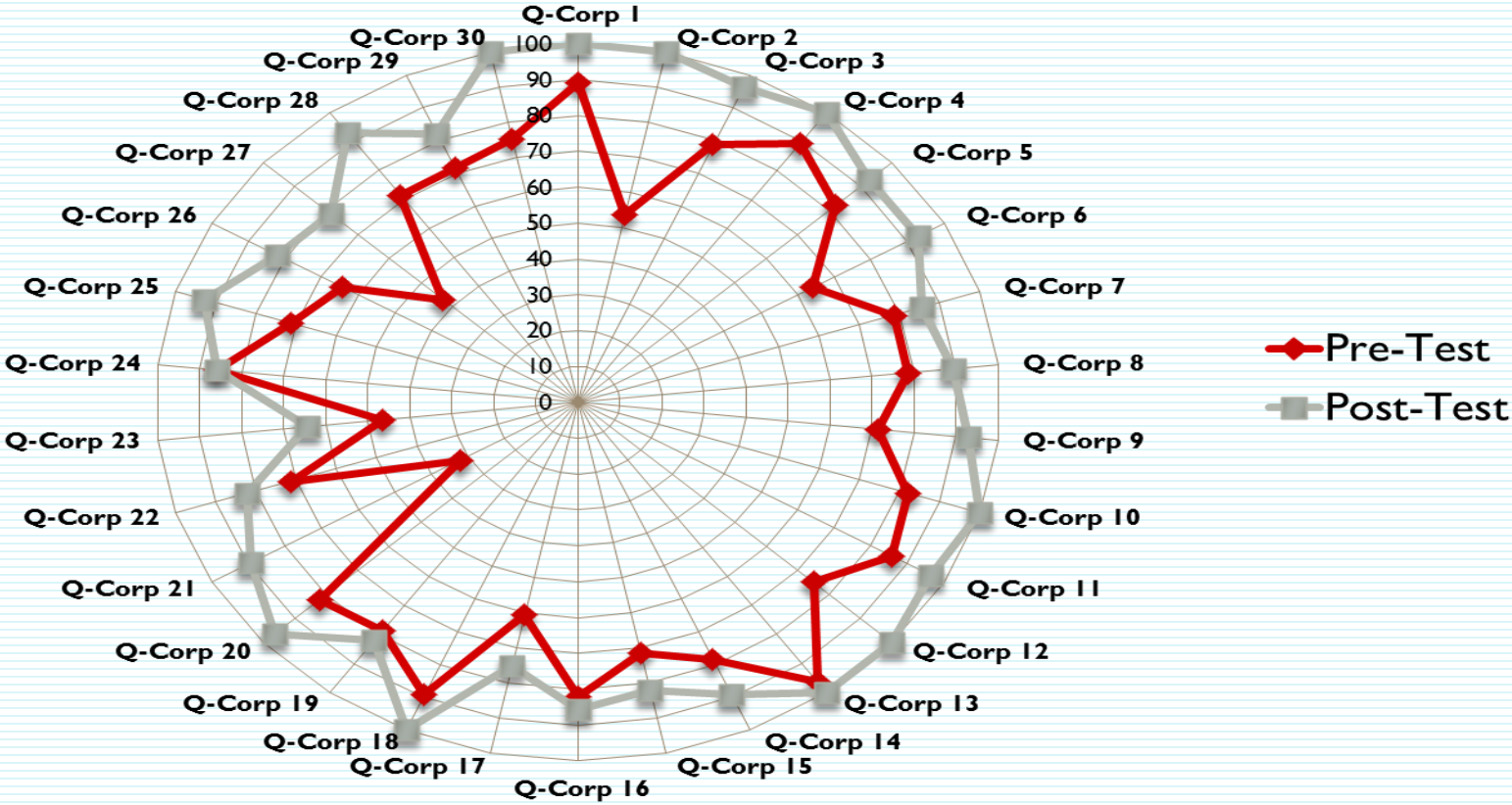
### PURPOSE

The Stepwise Process for Improving the Quality of HIV-Related Point-of-Care-Testing (SPI -POCT) checklist for use in HIV-related testing is primarily intended for use as a guide to assist and promote consistency in the

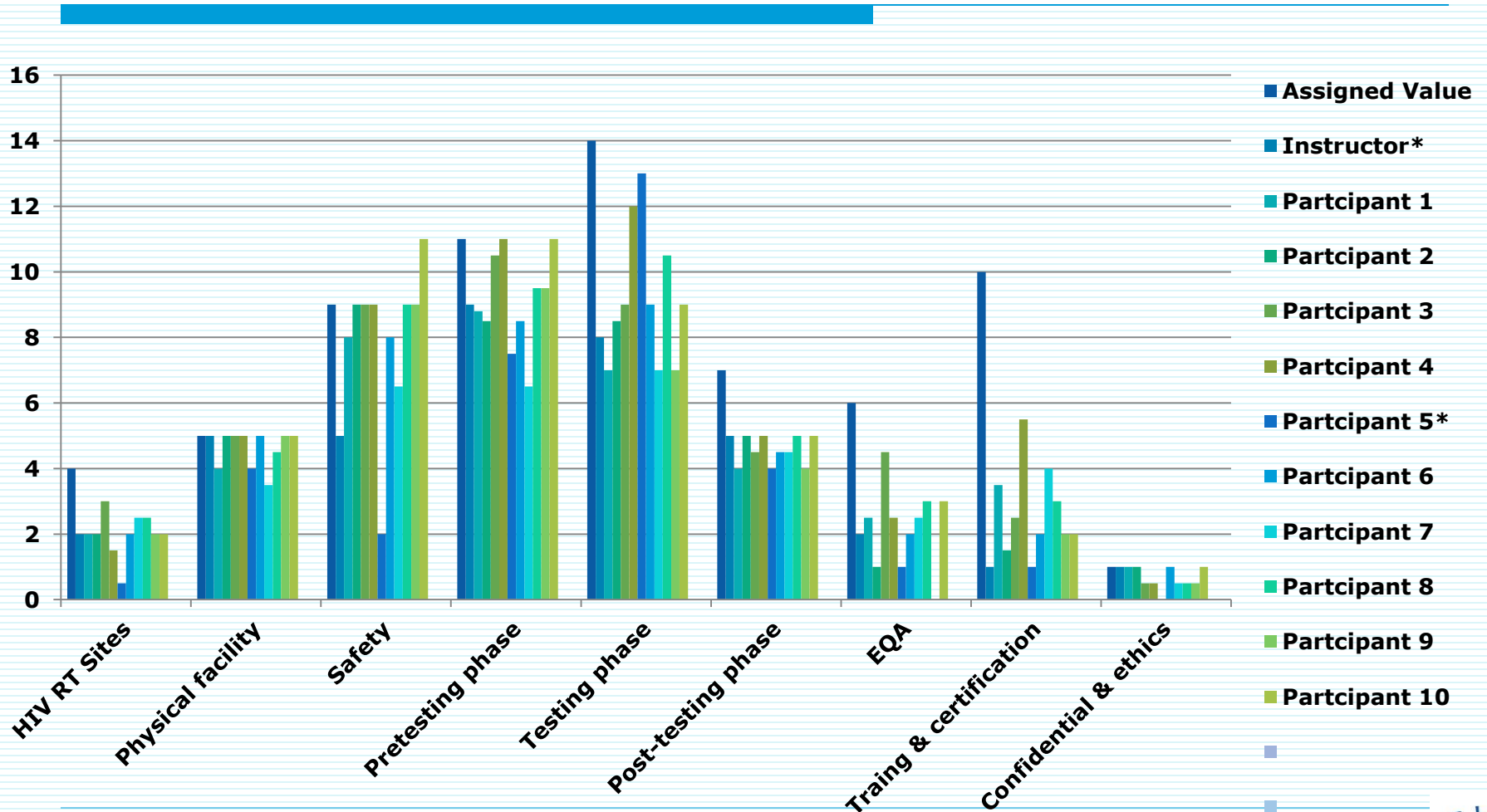




# HIV RTQII Training – Pre and Post Written Assessment Individual Scores (N=30)



# Performance of Quality Corps on Use of SPI-POCT Checklist (N=10) – Site A



# Certificate of Achievement

This certificate is awarded to  
**ANNA GWANFOGBE KADAA**

For successfully completing the core elements on the HIV Rapid Test Quality Cycle and is therefore certified as a Master Trainer. This certificate is valid 2 years as from the date of issuance.

Awarded this 9<sup>th</sup> day of May, 2014



Signature of Center for Disease  
Control and Prevention

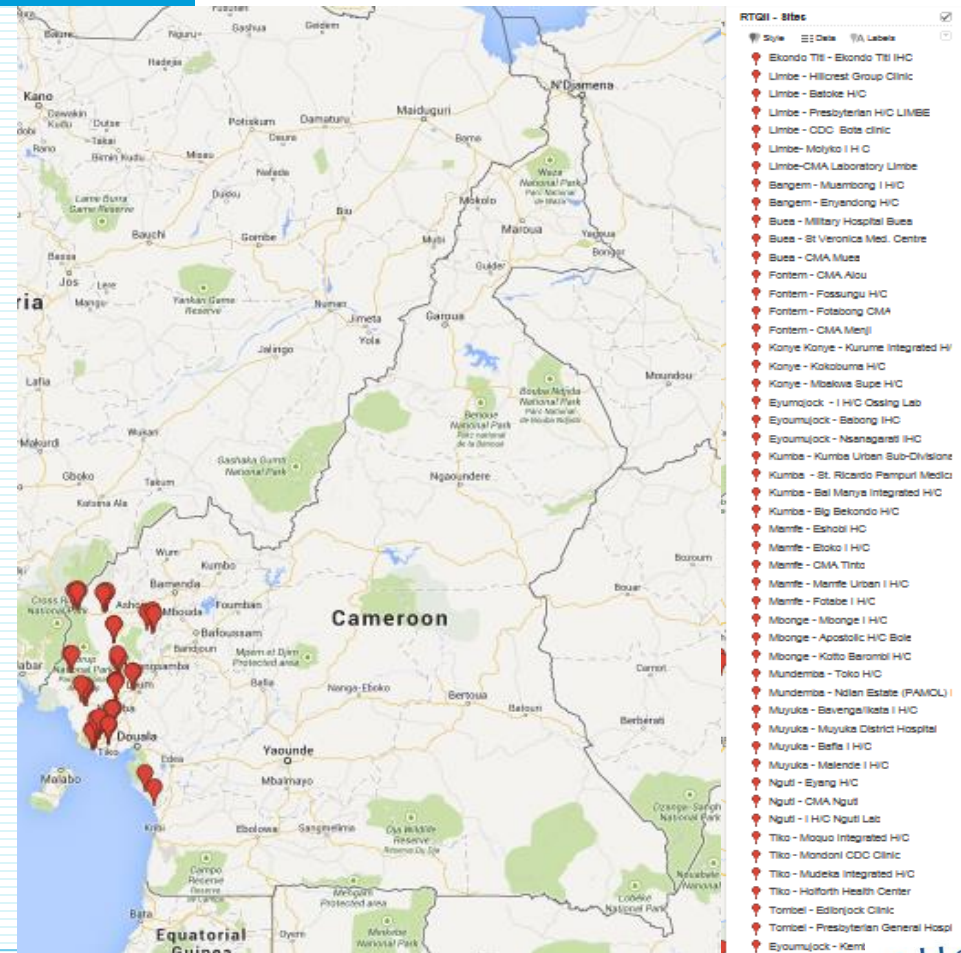


Signature of CADU



# 4. Identification of Pilot Sites

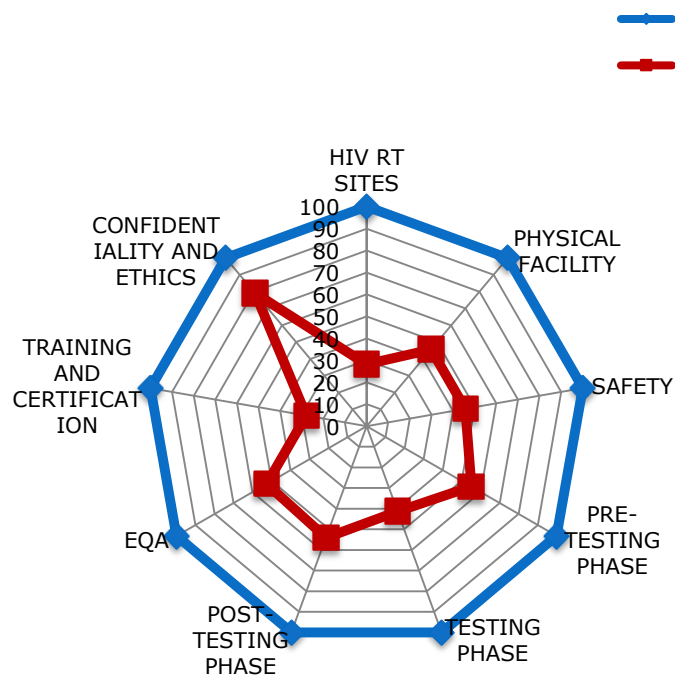
- 75 sites selected to pilot HIV-RTQII
- SPI-POCT checklist administered and data obtained from 73/75 sites
- Proficiency testing panels distributed to 50 sites



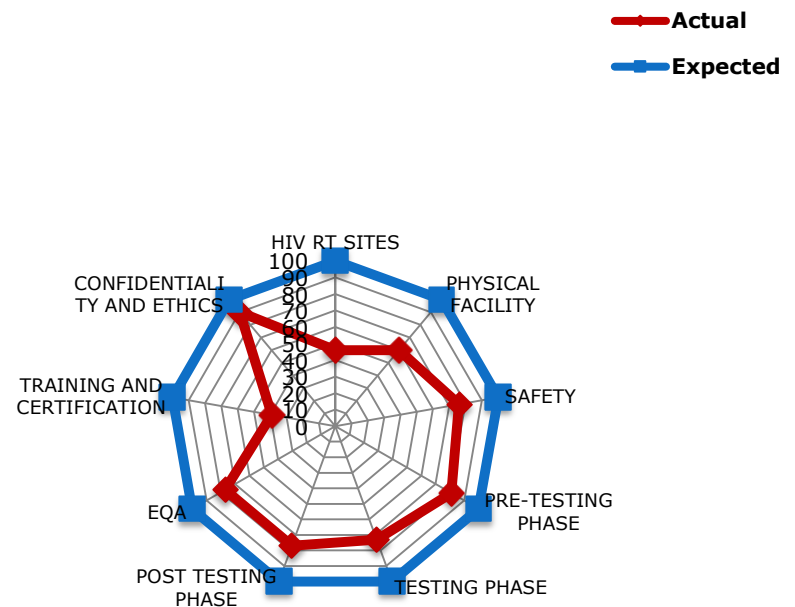
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# **SPI-POCT RESULTS**

# SPI-POCT – HIV Rapid Test Section (N=73)

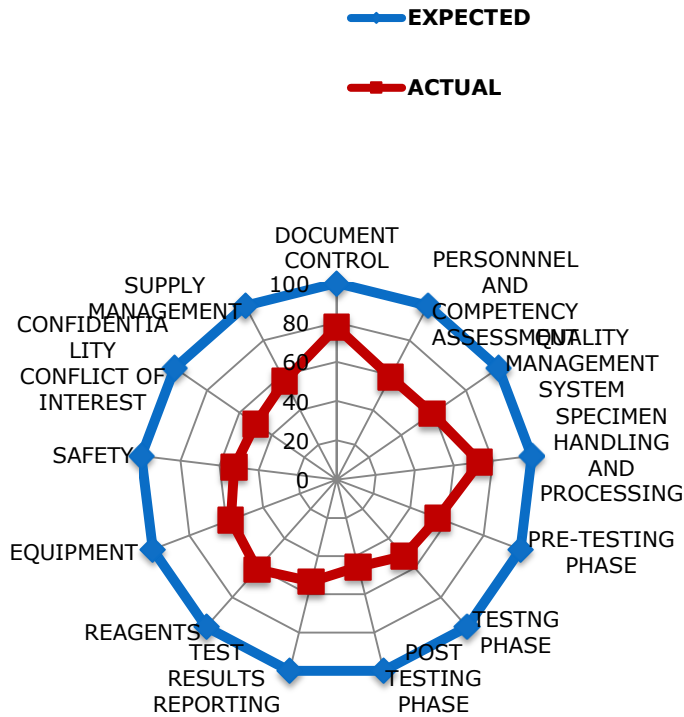


June 2014

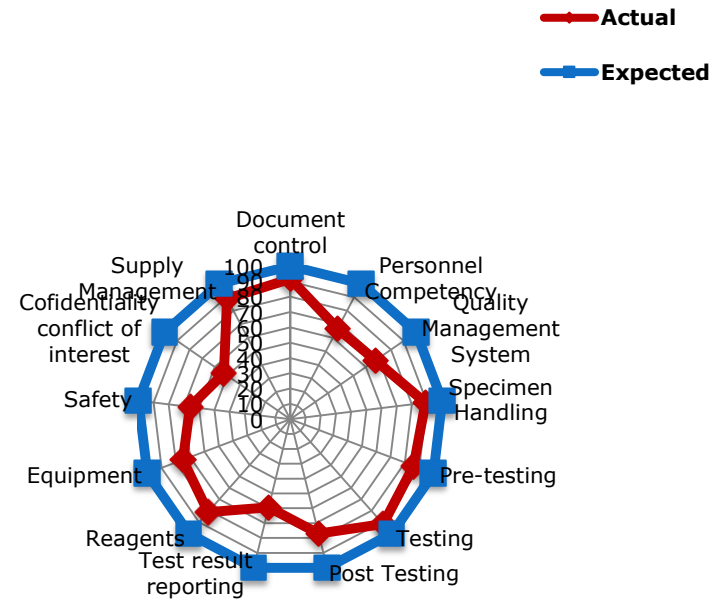


September 2014

# SPI-POCT – Other HIV Related POCT (N=10)

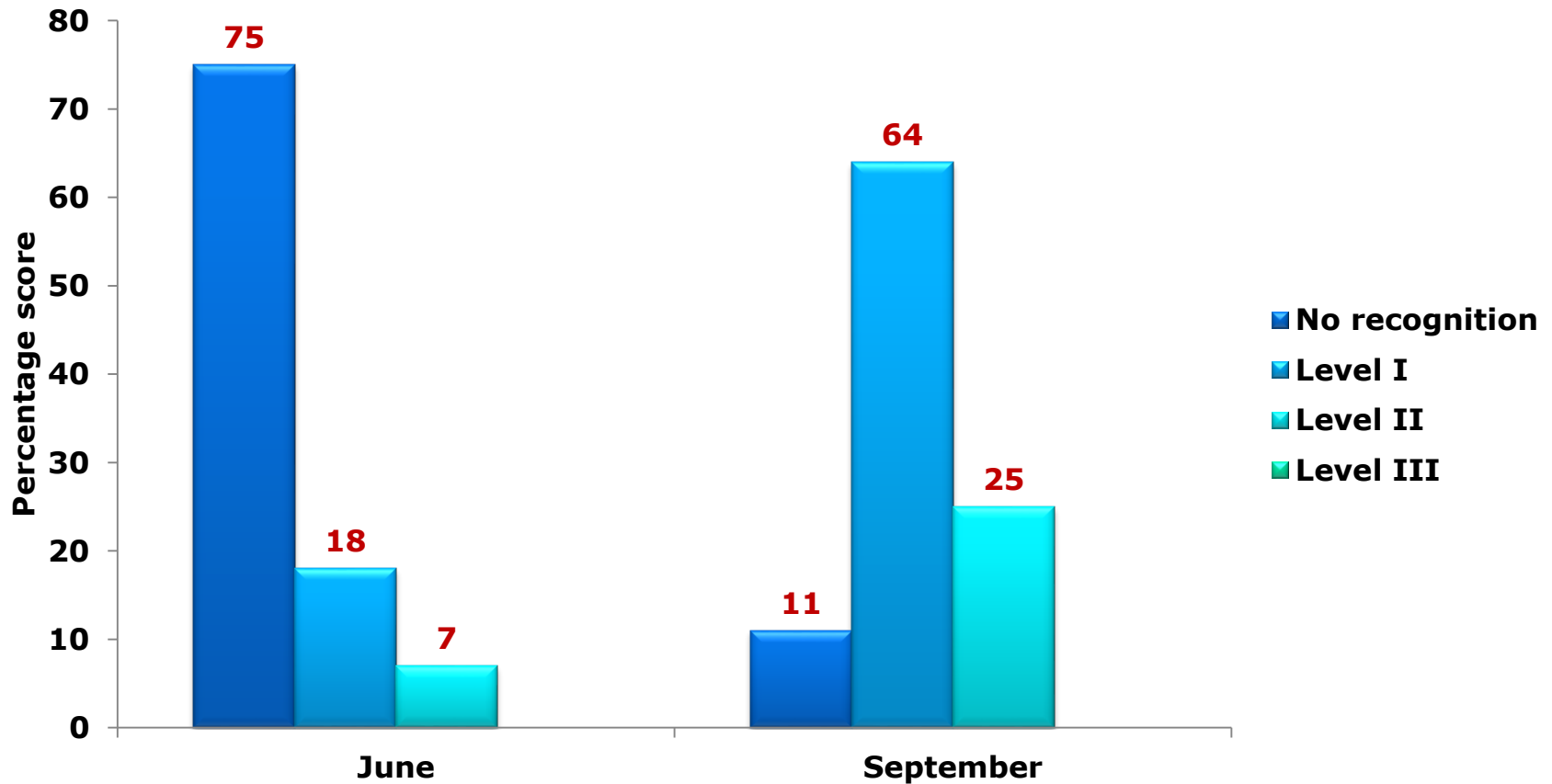


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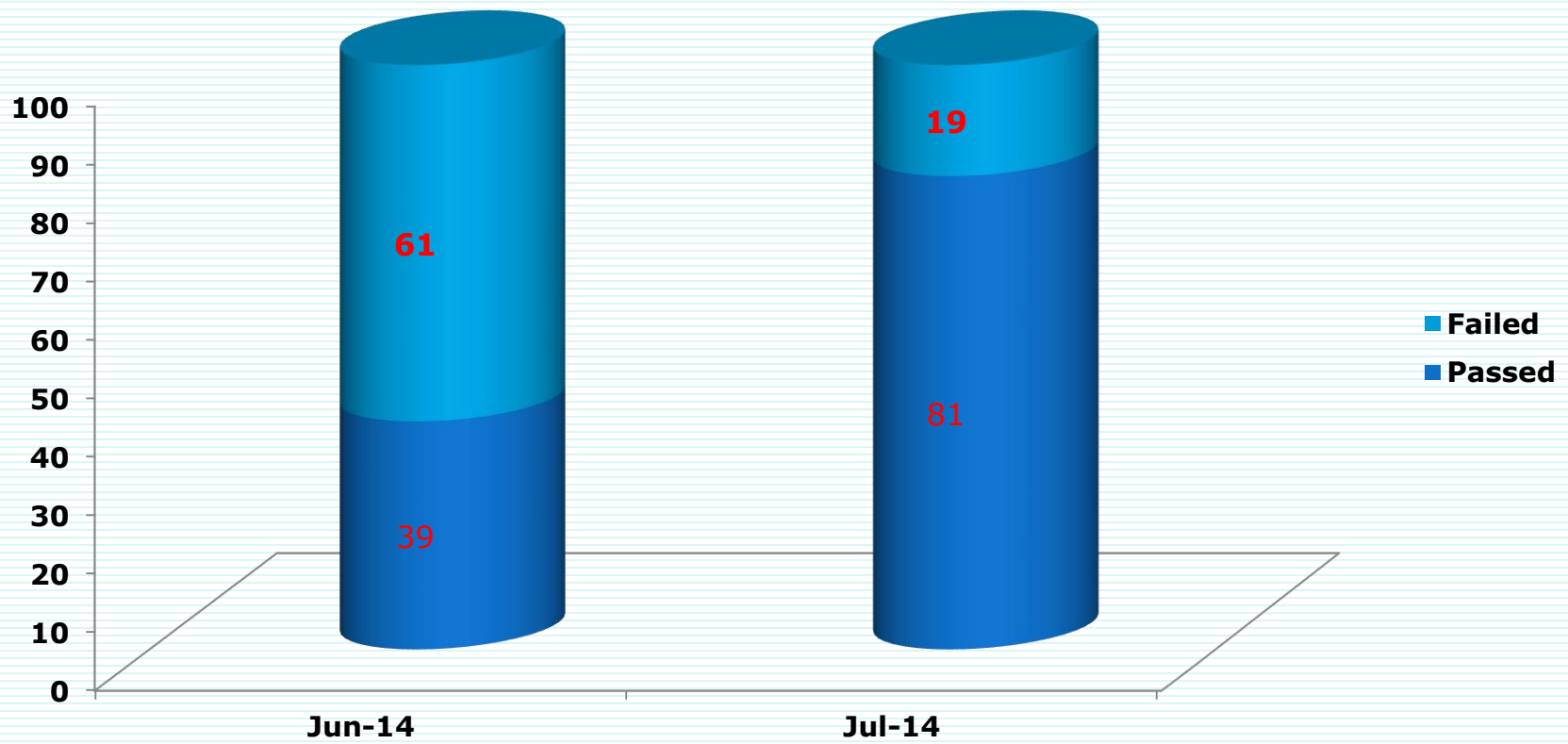
# Trends in SPI-POCT Rating



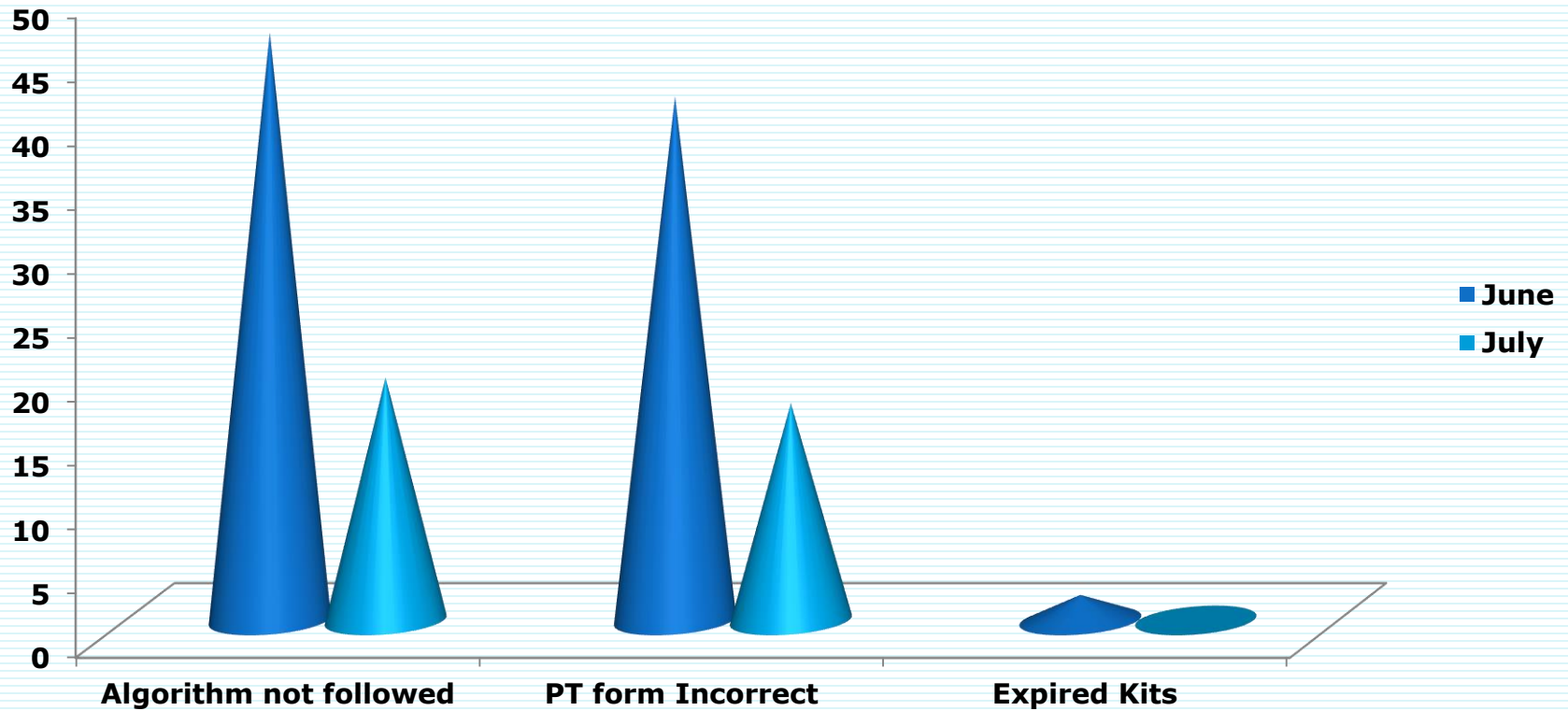
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# PT DATA ANALYSIS

# PT Performance Rate (N=47)



# REASONS FOR UNSATISFACTORY RESULTS



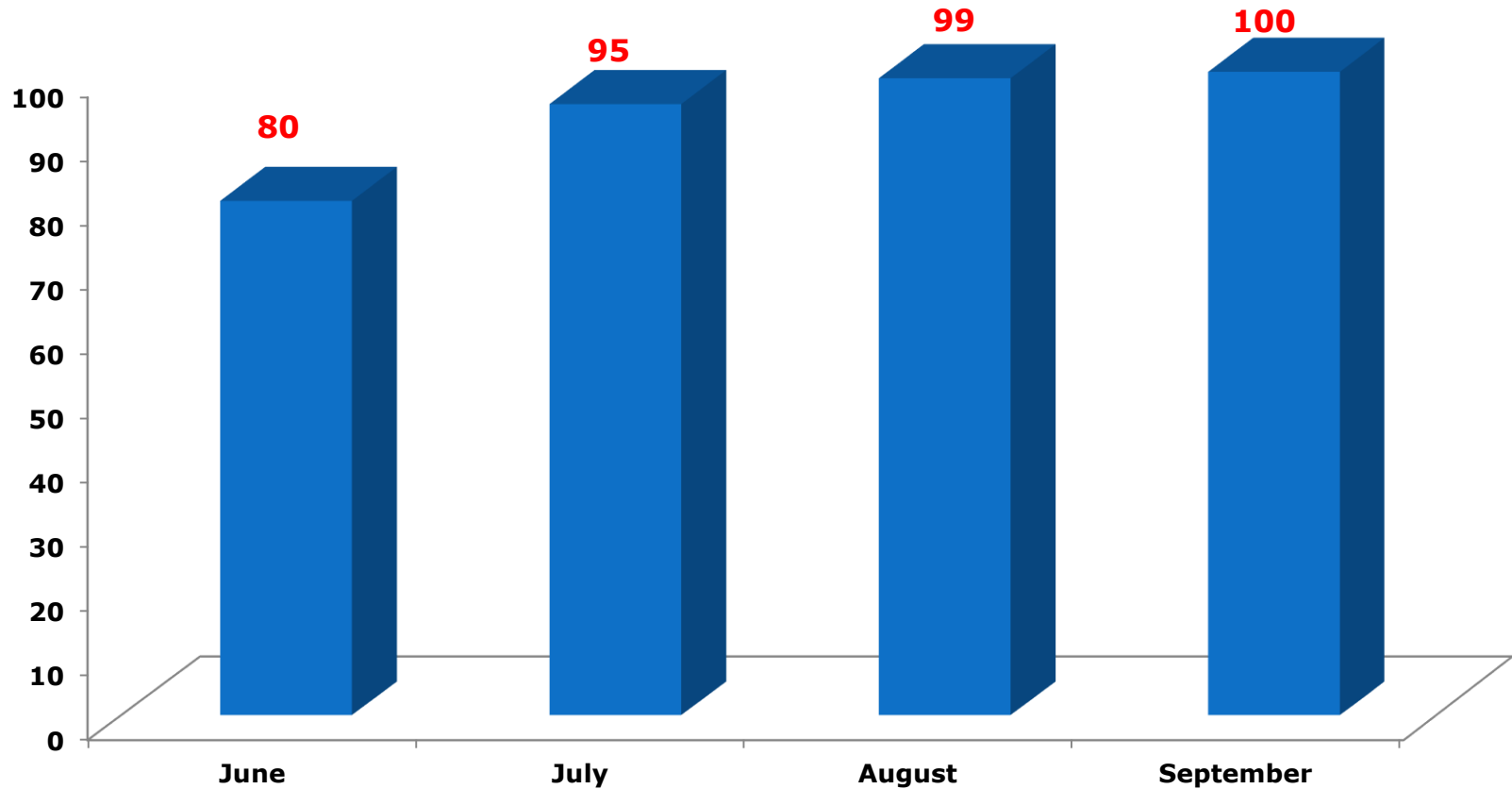


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# LOGBOOK DATA ANALYSIS

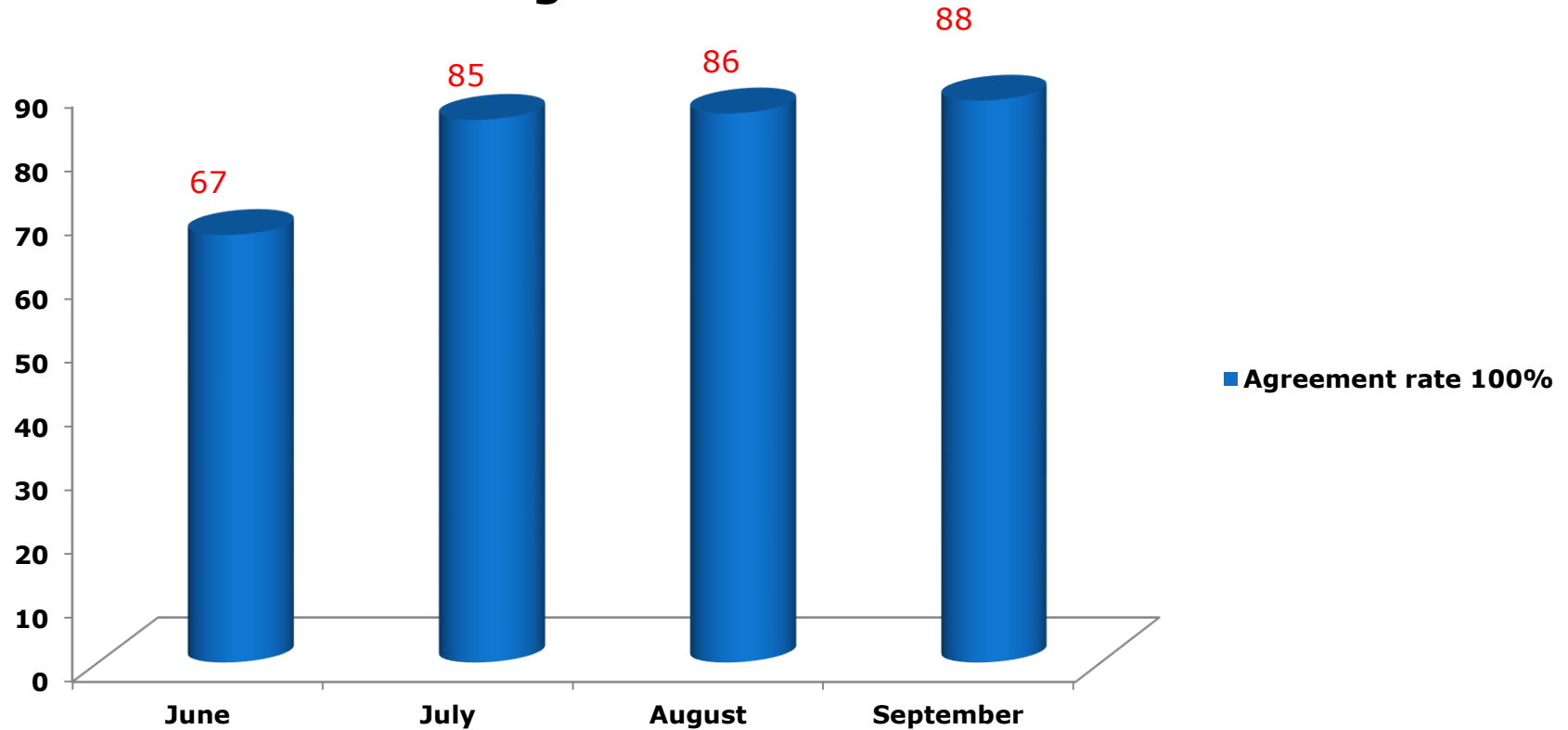
# Sites with Logbooks

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# Site Performance

Agreement rate 100%



## In Cameroon, Improving HIV Diagnoses through a Volunteer Quality Corps

Cameroon has an HIV prevalence rate of 4.3% in adults, [1] one of the highest in West and Central Africa, with an average of 34,754 new HIV infections annually. [2] Despite increasing access to antiretroviral drugs, Cameroon is not on track to meet the Millennium Development Goal of halting and reversing the spread of HIV/AIDS by 2015. [3] While health education and treatment are essential, access to reliable, accurate HIV rapid tests is also critical. False positive and false negative results can have a detrimental impact on treatment options and the spread of the virus, raising significant public health concerns. Global Health Systems Solutions (GHSS), an NGO based in Cameroon, has attempted to address the recurrence of inaccurate HIV rapid test results in the country. Though GHSS implemented measures to conquer this problem of inaccuracy, it discovered a central obstacle to its goal: a lack of human resources. To ensure the generation of high-quality test results, it is necessary to strengthen the capacity of clinical laboratories

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<http://www.aslm.org/stay-informed/press-room/lab-culture-newsletter/>.

# Challenges

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- Lack second Line testing reagent
- Difficult access to some facilities
- Improper filling of the logbook
- Site temporary shutdown and staff unavailable



**Q-Corp on the way to Ekok Integrated Health Centre in Eyumojock**



**Crossing a bike under a tree that fell across the road**



# Lessons Learned

- Review potential of Q-Corps intervention
- Exploiting the usage of available local resources
- Review training package to include more hands-on
- Enthusiasm and satisfaction of quality corps

.....Glad to be a pioneer Q-corps and contribute to ensure accurate HIV testing

.....Training improved my knowledge on QA



# Conclusions

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- Significant reduction in turn around time – **30 days to 5 days**
- Improvement in the performance of site and testers – **PT (39 - 81%), Agreement Rate (67 - 85%)**
- Timely reception of logbook data for analysis
- Onsite provision of supplies and corrective actions
- SPI-POCT rating – **Level 1 (18 - 64%), Level 2 (7 - 25%)**
- MoH engagement is indispensable
- Initiative is feasible and profitable

# Acknowledgement

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## Cameroon

- MOH/Lab Directorate
- PEPFAR Team
- CDC Cameroon
- GHSS
- CADU
- Laquintinie Hospital Douala

## USA

- OGAC
- PEPFAR HQ
- CDC Atlanta





***Remember the strategy of the thirsty vulture!***

# THANK YOU!

No one can achieve the right things in life  
through a wrong approach.

