

EQAFRICA

STRENGTHENING AFRICAN HEALTHCARE THROUGH NATIONAL NETWORKED EQA

Vancouver
October 2015



Introduction

- Based in Vancouver
- Hands-on EQA provider experience
- Secretariat to Oneworld Accuracy Collaboration
- Help national groups start or improve EQA programs
- ~ 40 national groups, including our own PHAC



Collaboration

In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.

Charles Darwin



Overview

1. EQAfrica
2. Collaboration Model
3. OASYS (Oneworld Accuracy System)
4. EQAfrica Projects
5. Invitation



1. EQAfrica

EQAfrica

- 54 national EQA programs
- Provided by national stakeholders
- Conceived to serve public health
- Managed on a single informatics system
- Shared by professionals, scientists + economists
- Identify and prioritize stepwise improvement



Benefits

- Move from EQA to EQI – Improvement
- Eliminate duplicative, expensive IT silos
- Reduce sample costs + shipping costs
- Increase N across borders
- Open data model for public health collaboration



EQAfrica Training Centres

Make ASLM Collaborating Centres into EQAfrica Training Centres

Train, mentor + collaborate with national EQA peers

1. Ethiopian Public Health Institute (Addis-Ababa)
2. Institute of Human Virology Nigeria (Abuja)
3. National Health Laboratory for QA Training Center (Dar es Salaam)
4. West African Network of Excellence for TB, AIDS, Malaria (Dakar)
5. National Health Laboratory Services (Johannesburg)
6. Kenya Medical Research Institute (Nairobi)

Endorsed Concept of EQAfrica Training Centre



2. Collaboration Model



Mission

To achieve universal testing accuracy for improved healthcare for all people.



Collaboration Members

- National EQA providers, not participants
- EQA driver, not passenger
- Provide comprehensive EQA
- Using Collaboration samples or their own samples
- All managed on OASYS (Oneworld Accuracy System)



Funding Model

- Simple, fair + transparent
- Secretariat acts as group purchaser + shipper
- Samples + shipping at cost
- Members save as Collaboration expands
- Agreed informatics fee within every budget

African Members

- Ethiopian Public Health Institute (Addis-Ababa)
- Institute of Human Virology Nigeria (Abuja)
- Centre for Integrated Health Processes (Abuja)
- AfriQualab (Dakar)
- Human Quality Assessment Services (Nairobi)
- Ministère de la Santé Publique de la Côte d'Ivoire (Abijan)
- National Public Health Reference Laboratory (Accra)
- National Reference Laboratory Rwanda (Kigali)
- National Health Laboratory for QA Training Center (Dar es Salaam)
- Swaziland Health Laboratory Services (Mbabane)
- National Health Laboratory Services (Johannesburg) – viral load pilot
- Zimbabwe Ministry of Health (Harare)
- Zambia Ministry of Health (Lusaka) – prospective

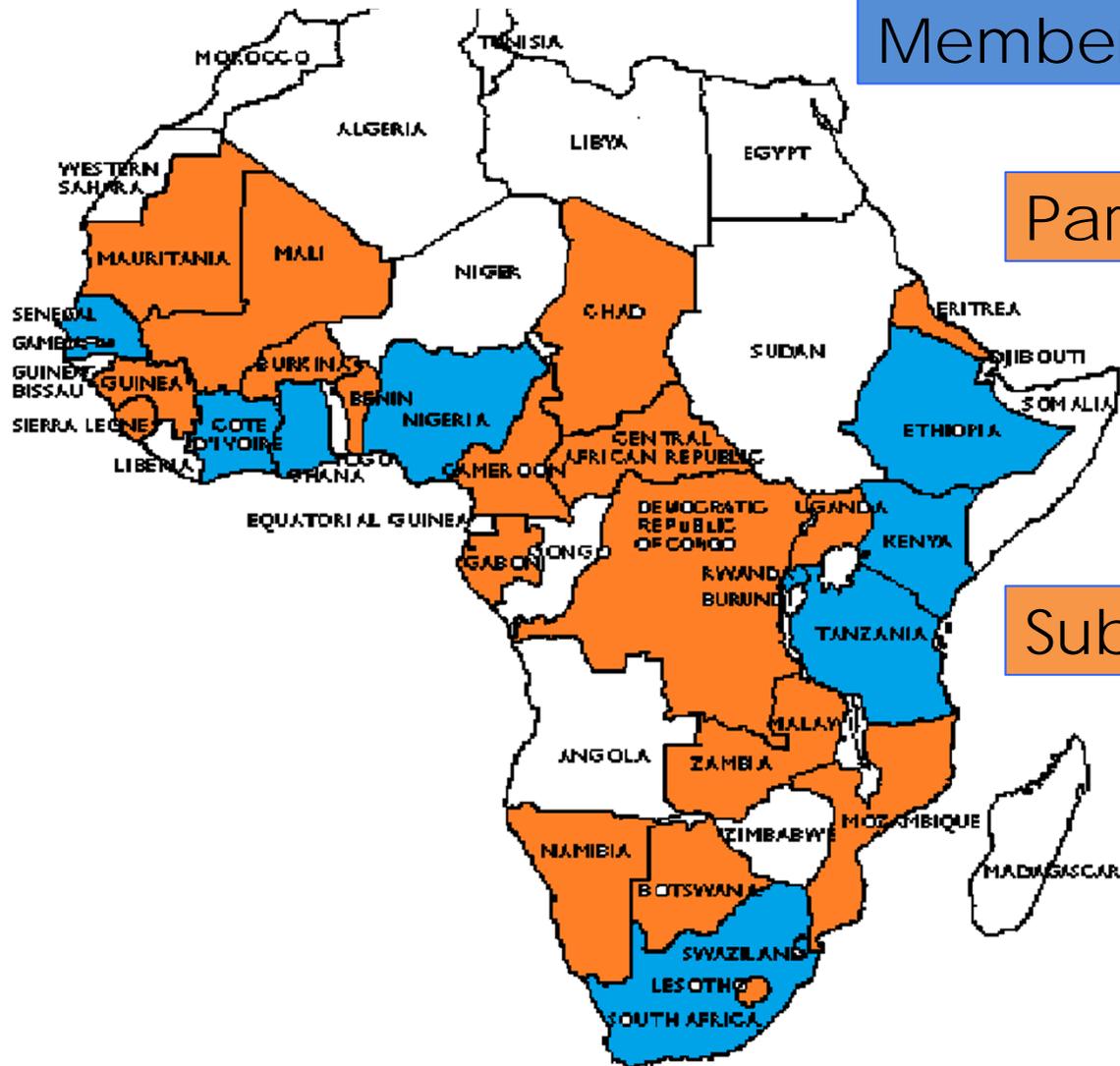


African Participation

Members 13

Participants ~ 1,500

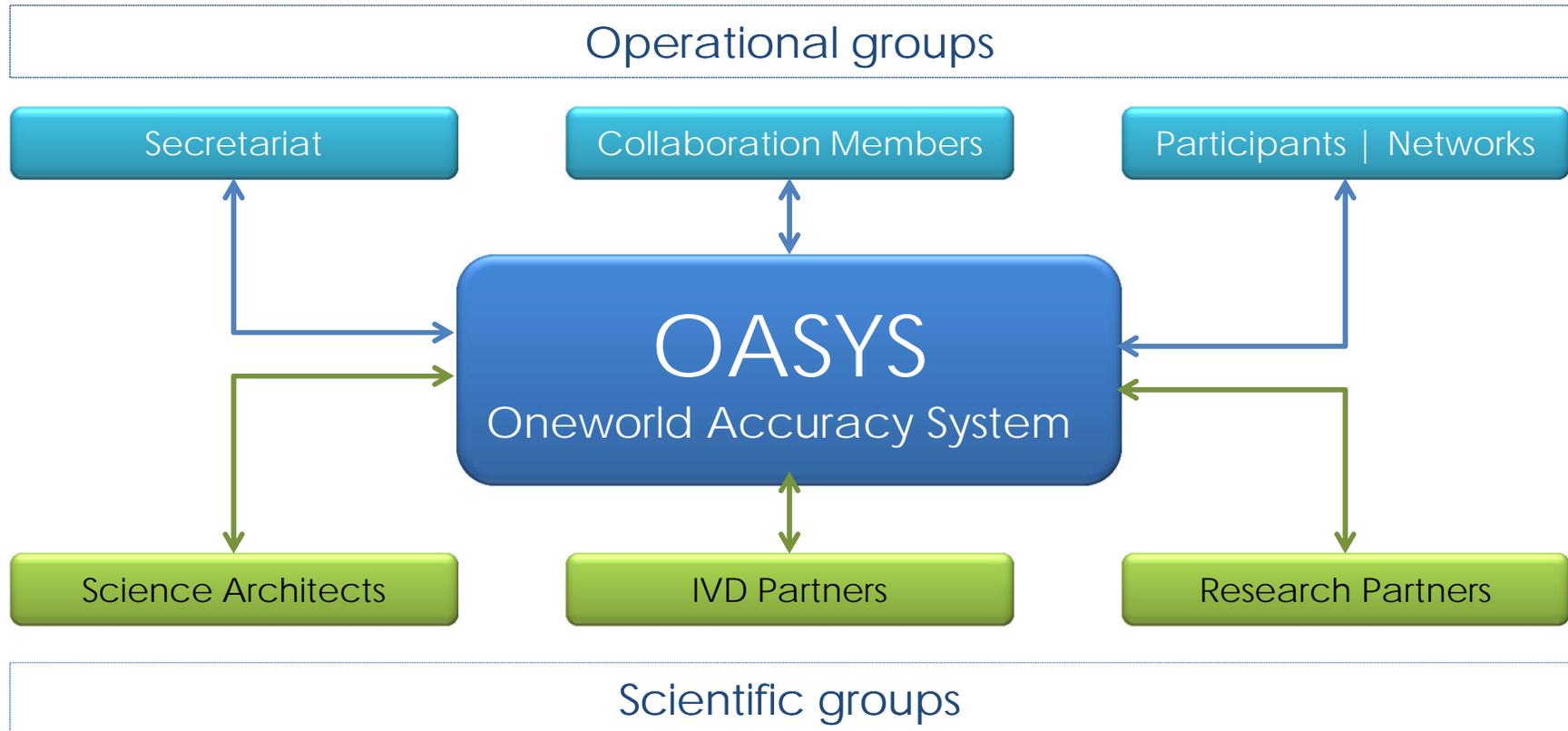
Subscriptions ~ 5,000



3. OASYS (Oneworld Accuracy System)



Accuracy Ecosystem



EQA Data Complexity

6,000,000	test results assessed
309,852	samples / year
28,879	program subscriptions
22,852	users
16,527	reagent systems + assays
4,989	participants
2,705	analytes
352	networks
256	programs
133	countries
38	EQA providers
37	blood screening networks
5	languages
4	science architects
1	informatics system



4. EQAfrica Projects



POC Connectivity in Zimbabwe

- London School of Hygiene & Tropical Medicine
- Zimbabwe Ministry of Health & Child Welfare
- Direct device to OASYS transmission of EQA results
- 4 different CD-4 devices with 3 participants
 - Alere Pima
 - CyFlow Green
 - BD FACSCalibur
 - BD FACSCount



Slide Rechecking in Ethiopia

- Ethiopian Public Health Institute
- Malaria + TB blind slide rechecking programs
- Supported by national guidelines
- Managed manually
 - ~ 100,000 malaria slides rechecked
 - 3,000 malaria microscopy sites
 - 55 slide rechecking sites
 - Inefficiencies preclude a national report card

Slide Rechecking in Ethiopia

- Manage these programs in OASYS
- Streamline compliance with guidelines
- Efficiencies for microscopy sites + rechecking sites
- Facilitate national report card + education

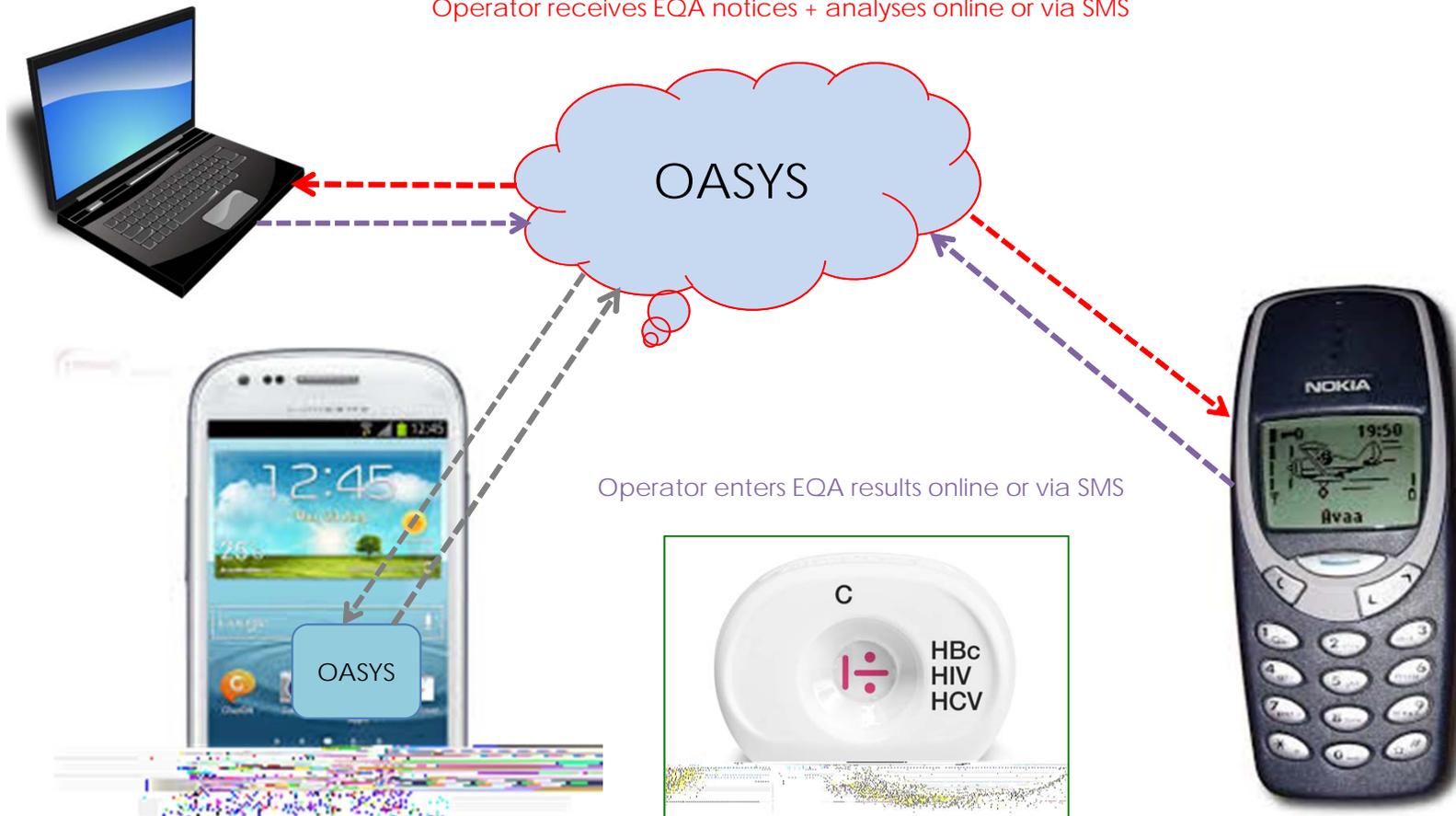
SMS Connectivity in Tanzania

- National Health Laboratory QA Training Centre
- Use OASYS to manage EQA for ~ 175 core labs
- Manually manage EQA for HIV rapid test sites
 - 2 test events x 5 samples
 - 6,000 test sites
 - 12,000 shipments
 - 60,000 samples + EQA results
 - 1,165 hours of data entry (@ 70 seconds each result)
 - TAT measured in months

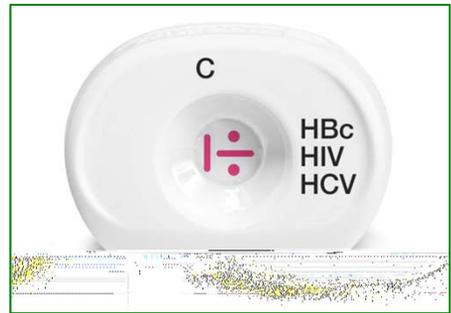


SMS Connectivity in Tanzania

Operator receives EQA notices + analyses online or via SMS



Operator enters EQA results online or via SMS



Operator tests on POC device

Smart phone app will be developed later



5. Invitation

Collaborate

Connect

Bundle

Analyze

Fund



EQAFRICA

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Thank you

