Common EQA Mistakes - A provider Perspective

Experience from East African Regional External Quality Assessment Scheme (EA-REQAS)

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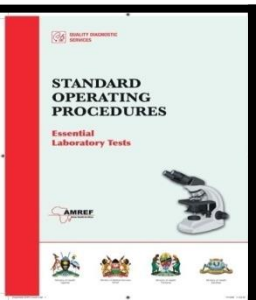
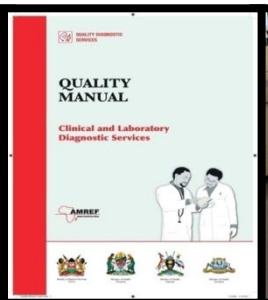
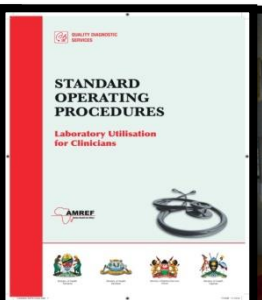


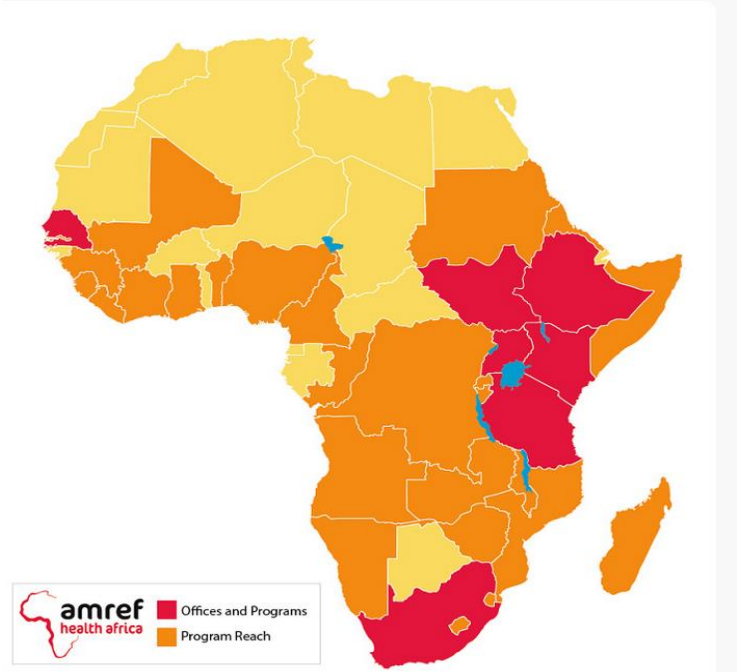



Overview of Amref Health Africa

- Leading health development INGO in Africa
- Headquartered in Africa, with 59 years of experience
- 7 countries in Africa and 11 on Europe and North America
- 11 country offices in Europe & North America.
- Each year reaching > 11million people through 150 health projects in 35 countries of Africa with $100m funding

Where We Work



Headquartered in Nairobi, Kenya, our work reaches **millions of beneficiaries** across Sub-Saharan Africa through our program offices in **Ethiopia, Kenya, Senegal, South Africa, South Sudan, Tanzania and Uganda**. Our reach includes:

- Angola
- Benin
- Burundi
- Cameroon
- Congo
- Cote D'Ivoire
- Democratic Republic of Congo
- Eritrea
- Ghana
- Guinea
- Lesotho
- Liberia
- Malawi
- Mali
- Mozambique
- Namibia
- Nigeria
- Rwanda
- Sierra Leone
- Somalia
- Sudan
- Swaziland
- Zambia
- Zimbabwe

11% of World Population

24% of World Disease Burden

3% of World Health workers!

What we do; Strategic Health Priorities

- Maternal, Reproductive & Child Health
- Non Communicable Diseases
- Infectious diseases (HIV/AIDS, TB, Malaria, cholera and others)
- Water & Sanitation
- Medical & Diagnostic Services

Overview of EA-REQAS concept

- **2001 - 2003:** MoH Kenya, Mainland Tanzania, Zanzibar & Uganda, Amref & WHO Geneva established **EA-REQAS**
- **Regional meetings** (Arusha 2003; Zanzibar 2006; Kampala 2009; Nairobi 2010) - critical resolutions & recommendations:
  - Sharing **standards & materials**
  - Strengthening **national QA bodies**
  - Determining **critical tests** to be assessed
  - Selecting **reference laboratories** for material preparation
  - Developing **Standard Operating Procedures** (SOPs) for participants & material preparation
  - **East African Regional External Quality Assurance Committee** (EA-REQAC) formed
  - AMREF appointed as **Regional Coordinating Centre** (RCC)

EA-REQAS participating HFs

Total: 559 facilities 2 surveys per year

158	**Kenya**
326	**Tanzania**
45	**Uganda**
21	**Zanzibar**
9	**Burundi**

5–8 facilities per County/District

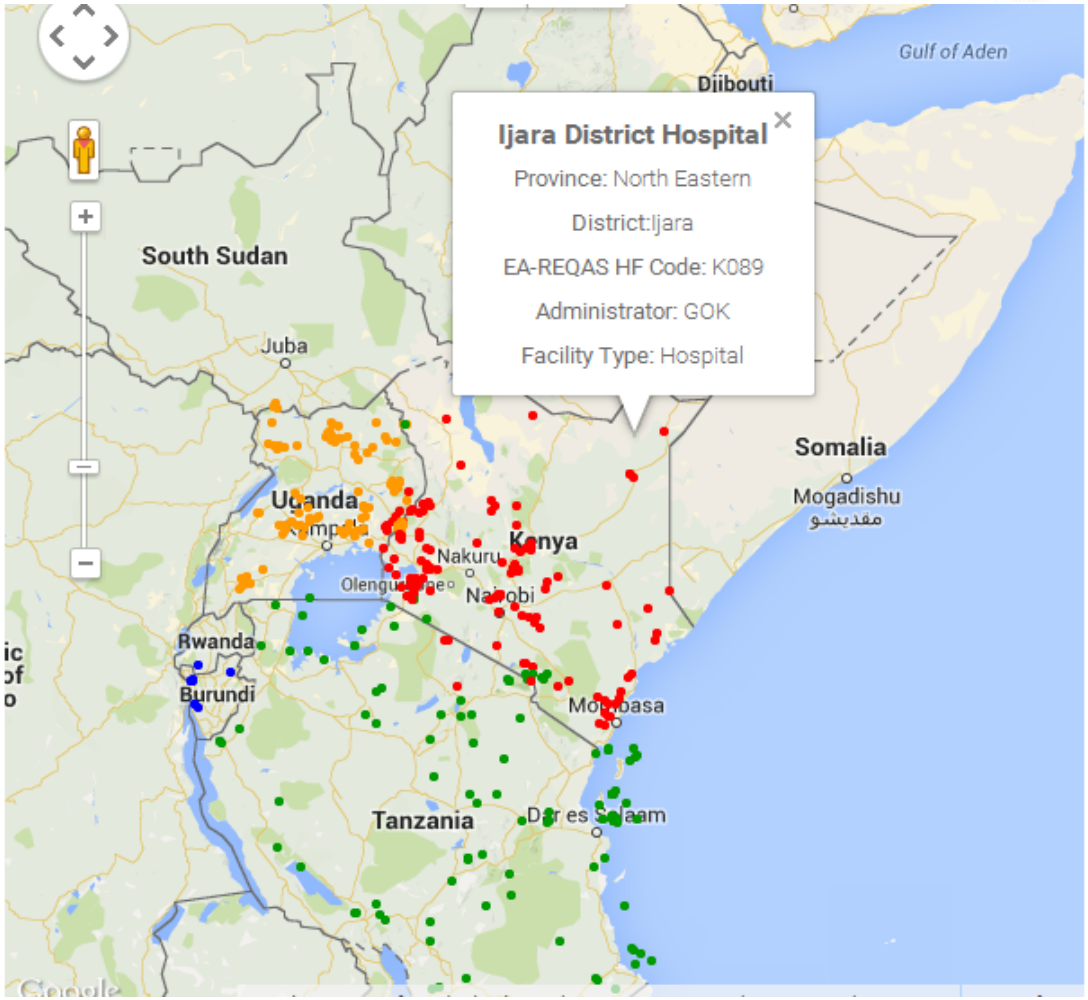
County hospital

Sub-county hospital

2-3 HCs (government)

1-2 FBO

1-2 private



Website: www.eareqas.org

EA-REQAS Achievements

Assessment of laboratory technical expertise

Measure level of cooperation and interaction between clinical, laboratory & public health staff

- **17** distributions of EQA materials by 2016
- Up scaling; **195** to **559** HFs in the Region
- **16** composite reports finalised
- **4** reference documents (SOPs) finalised & distributed to participating HFs
- **5** learning materials prepared & distributed to participating HFs
- **13** draft SOPs for material preparation in final stages of completion

Range of PT panels

PT PANELS	PANELS PRODUCED
TB microscopy	• Sputum smears for AFB
Haematology	• Preserved blood lysate for HB measurement • Peripheral blood films for blood cell morphology
Malaria	• Blood slides for malaria parasites
HIV serology	• Serum for HIV screening test
Syphilis serology	• Serum for syphilis screening
Microbiology	• Smears for Gram stain
Parasitology	• Stool and urine helminth ova • Blood films for *Borrelia* • Blood films for trypanosomes • Blood films for microfilariae

Key successes

- Use of Online Technology to improve on efficiency & accessibility (www.eareqas.org)
- HFs participating in 10 or more surveys have shown a significantly higher mean performance compared to those participating in 5 or less surveys. (mean ±SD=60.6 ±7.9 and 53.8 ±13.9 P=0.0001)
- Individual HF achieving scores of ≥ 80% have increased from zero in survey 1 to 25% (83 facilities) in survey 16.

Certificates are awarded to HFs that participate in both surveys in a year

EA-REQAS
East African Regional External Quality Assessment Scheme

Certificate of Annual Participation

YEAR 2013

is hereby awarded to

EA-REQAS Hospital

for successfully participating in the
East African Regional External Quality Assessment Scheme
(EA-REQAS)

Mr Mamo Umuro
Head, National Public Health Laboratories
Ministry of Health
Kenya

Dr Jane Y Carter
EA-REQAS – Regional Coordinating Centre
Amref Health Africa Headquarters

EQA-K005-C001

Sources of errors in EQA

Errors

Qualitative

- False positives
- False negatives

Quantitative

- Low estimates
- High estimates

Laboratory sources

- Reagents,
- Calibration; Equipment
- Outdated SOPs.
- Clerical/transcription errors; mistakes in transcribing data from an instrument onto the PT result form
- Technical errors; incorrect dilutions or poor diluents' quality.
- Sample stability; longer storage before testing in poor conditions

Provider sources

- Improperly standardized specimen
- Transportation - deterioration during transport
- Grading; consensus vs standard laboratories

Major challenge - Non-response to a survey

Reasons given for non-return of results: a telephone survey in Kenya

- Did not receive materials – despite supervisor confirming delivery
- Staff transfer – no handing over & new person not aware of the Scheme
- Results sent to wrong place e.g. NPHLS office – cannot be traced
- Misplacement of results within the laboratory/lost after dispatch
- Heavy work load – staff alone in the laboratory
- Blame game – not aware, passing the buck, communication breakdown
- Lack of funds to send results back to coordinating centre
- No electricity – despite this, they were offering laboratory services
- Clinician took too long to respond to their sections; not readily available due to work load

Remedial Actions & Way forward

- Regular national meetings to discuss performance
- Engagement/sensitisation meetings with all EQA stakeholders
- Training of QA officers & supervisors on PT reports, areas of poor performance and remedial action
- Facilitation for QA officers to conduct remedial action for selected poorly performing sites
- Linkage of database to NPHLs database to provide information & reports
- More learning materials to address noted gaps across surveys
- Regional meeting of all countries to share experiences


EAST AFRICAN REGIONAL EXTERNAL QUALITY ASSESSMENT SCHEME

Thank you