Global Fund M&E and Data Quality Tools & Initiatives: Harmonization with the Task Force Framework

Dr. John Puvimanasinghe

4th Meeting of the WHO Global Task Force on TB Impact Measurement
Geneva, 17-18 March, 2010
Summary of Tools & Initiatives

**Tools:**
- M&E Systems Assessment (MESS tool)
- Data Quality Assessment – Primary data verifications
  - OSDV (On-site Data Verification)
  - DQA (Data Quality Audit)
  - RDQA (Routine Data Quality Assessment)

**Assesses:**
- Accuracy of Data
- Reporting Performance
- Systems Assessments
Initiatives during Grant Life Cycle

- Monitoring and Evaluation assessment
- Implementation of strengthening measures
- Routine LFA data verifications
- External Data Quality Audit (DQA) - any time during grant lifecycle
M&E System Strengthening (MESS) Tool

Objective - To strengthen M&E Systems and to guide strategic investments in M&E (5-10% of the overall grant budget)

- To identify M&E capacity gaps and corresponding strengthening measures, including Technical Support;

- To ensure that investments in M&E are based on identified weaknesses and contribute to the strengthening of the National Systems (avoiding parallel reporting systems);

- To enhance the quality of programmatic data; to improve program implementation to support PBF.
Content and Structure

The M&E Systems Strengthening Tool assesses 3 areas:

**M&E Strengthening Tool**

1. M&E Plan

2. Data management capacities of the Program Management Unit (PR)

3. Data collection and reporting systems per program area
M&E System Strengthening Cycle

1. Assess the M&E system
2. Develop costed action plan to strengthen M&E system
3. Implement strengthening plan
4. Follow up
On-site Data Verification (OSDV)

Objective: To ensure the data quality of important programmatic results and to provide an overall statement on the quality of data within the grant portfolio;

VOI: OSDV are a component of the LFA’s verification of implementation (VOI);

Routine exercise: at least once a year per grant;

MPI: the implementation of OSDV in grants has been identified as a Management Performance Indicator (MPI) of the Global Fund.
# OSDV Implementation in 2009

<table>
<thead>
<tr>
<th>Global Fund Regions</th>
<th>Number of Grants Eligible for OSDV in 2009</th>
<th>Number of OSDV Conducted in 2009</th>
<th>Implementation Rate for 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Africa and Indian Ocean (EAIO)</td>
<td>58</td>
<td>50</td>
<td>86%</td>
</tr>
<tr>
<td>East Asia &amp; Pacific (EAP)</td>
<td>49</td>
<td>44</td>
<td>90%</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia (EECA)</td>
<td>48</td>
<td>45</td>
<td>94%</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean (LAC)</td>
<td>42</td>
<td>38</td>
<td>90%</td>
</tr>
<tr>
<td>Middle East &amp; Northern Africa (MENA)</td>
<td>40</td>
<td>32</td>
<td>80%</td>
</tr>
<tr>
<td>Southern Africa (SA)</td>
<td>49</td>
<td>34</td>
<td>69%</td>
</tr>
<tr>
<td>South &amp; West Asia (SWA)</td>
<td>51</td>
<td>44</td>
<td>86%</td>
</tr>
<tr>
<td>West &amp; Central Africa (WCA)</td>
<td>66</td>
<td>53</td>
<td>80%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>403</strong></td>
<td><strong>340</strong></td>
<td><strong>84%</strong></td>
</tr>
</tbody>
</table>
Data Quality Audits (DQA)

Objective: To provide an in-depth assessment of data quality and M&E systems in selected grants and/or programs;

Auditor: To maintain independence, DQAs are conducted by external auditors contracted by the Global Fund;

Risk Management Approach: 15-20 DQAs are conducted annually on selected ‘Top-25’ grants and on other identified grants

DQA Tool: Developed by the Global Fund & Partners. It assesses data accuracy, the reporting performance and the underlying M&E System of the grant.
DQA Conceptual Framework

- **Dimensions of Quality**
  - Accuracy, Completeness, Reliability, Timeliness, Confidentiality, Precision, Integrity

- **Functional Components of a Data Management System Needed to Ensure Data Quality**
  - I. M&E Structure, Functions and Capabilities
  - II. Indicator Definitions and Reporting Guidelines
  - III. Data-collection and Reporting Forms / Tools
  - IV. Data Management Processes
  - V. Links with National Reporting System

- **Data Management Processes**
  - VI

- **Data-quality mechanisms and controls**
  - VII

- **Data Management Processes**
  - II

- **Quality Data**
  - Accuracy, Completeness, Reliability, Timeliness, Confidentiality, Precision, Integrity

- **M&E Unit**

- **Intermediate Aggregation Levels (e.g., Districts, Regions)**

- **Service Points**

- **Reporting Levels**
Outputs of the DQA

STRENGTHS and WEAKNESSES of the Data-collection and Reporting Systems
Outputs of the DQA

ACCURACY, TIMELINESS, AVAILABILITY and COMPLETENESS of reported Data

Total and Adjusted District Verification Factors from DQA

<table>
<thead>
<tr>
<th>Total Verification Factor</th>
<th>IAL #4</th>
<th>IAL #3</th>
<th>IAL #2</th>
<th>IAL #1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.22</td>
<td>1.07</td>
<td>1.03</td>
<td>0.95</td>
</tr>
</tbody>
</table>

% Available Reports from DQA

<table>
<thead>
<tr>
<th>M&amp;E Unit</th>
<th>IAL #4</th>
<th>IAL #3</th>
<th>IAL #2</th>
<th>IAL #1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.75</td>
<td>0.83</td>
<td>0.92</td>
<td>0.80</td>
</tr>
</tbody>
</table>

% On Time Reports from DQA

<table>
<thead>
<tr>
<th>M&amp;E Unit</th>
<th>IAL #4</th>
<th>IAL #3</th>
<th>IAL #2</th>
<th>IAL #1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.75</td>
<td>0.73</td>
<td>0.88</td>
<td>0.88</td>
</tr>
</tbody>
</table>

% Complete Reports from DQA

<table>
<thead>
<tr>
<th>M&amp;E Unit</th>
<th>IAL #4</th>
<th>IAL #3</th>
<th>IAL #2</th>
<th>IAL #1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.50</td>
<td>0.67</td>
<td>0.72</td>
<td>0.70</td>
</tr>
</tbody>
</table>
## Results of the 25 DQAs up to Date

<table>
<thead>
<tr>
<th>Data Quality Rating</th>
<th>Country / Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>HIV</strong></td>
</tr>
<tr>
<td>No Data Quality Issues</td>
<td>Belarus</td>
</tr>
<tr>
<td></td>
<td>The Philippines, Niger, China, Yemen</td>
</tr>
<tr>
<td></td>
<td>China, Gambia, Sri Lanka, Cote d’Ivoire, Vietnam</td>
</tr>
<tr>
<td>Some Data Quality Issues</td>
<td>Mali, Dominican Republic, Haiti, Comoros, South Africa, Burundi, Swaziland, Thailand, Tanzania</td>
</tr>
<tr>
<td></td>
<td>Tajikistan</td>
</tr>
<tr>
<td></td>
<td>Rwanda, Nigeria, Ghana, Indonesia, Multi-country (Andean Region)</td>
</tr>
<tr>
<td>Major Data Quality Issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Need expressed for a simplified tool for programs/projects to use for self assessment, capacity building and to prepare for external audits.

Two components:

1). Systems assessment
2). Data verifications
RDQA Summary Statistics – Level Specific Dashboard

Global Dashboard - Overall Summary Statistics

Data Management Assessment - Global Aggregate Score

- M&E Structure, Functions and Capabilities
- Links with National Reporting System
- Indicator Definitions and Reporting Guidelines
- Data Management Processes
- Data-collection and Reporting Forms / Tools

Data and Reporting Verifications - Global Aggregate Score

- % Available: 88%
- % On Time: 62%
- % Complete: 73%
- Verification Factor: 89%
Harmonizing approaches for TB Data Quality Assessment
## Task Force Framework

| DATA QUALITY | TRENDS
Do surveillance data reflect trends in TB incidence and mortality? | ARE ALL TB CASES AND DEATHS CAPTURED IN SURVEILLANCE DATA? |
|--------------|------------------------------------------------------------------|----------------------------------------------------------|
| • Completeness  
• No duplications, no misclassifications  
• Internal and external consistency | • Analyse time-changes in notifications and recorded deaths alongside changes in case-finding, case definitions, HIV prevalence and other determinants of changes in TB incidence and TB mortality | • "Onion" model  
• Inventory studies  
• Capture re-capture studies  
• Prevalence surveys  
• Innovative operational research |
| IMPROVE surveillance system | EVALUATE trends and impact of TB control | UPDATE estimates of TB incidence and mortality |

TB notifications $\approx$ TB incidence  
TB deaths in VR system $\approx$ TB mortality

If appropriate, CERTIFY TB surveillance data as direct measure of TB incidence and mortality
What information do the tools capture?

<table>
<thead>
<tr>
<th></th>
<th>MESS</th>
<th>DQA</th>
<th>RDQA</th>
<th>OSDV</th>
<th>WHO Workbook</th>
</tr>
</thead>
<tbody>
<tr>
<td>M&amp;E Plan</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Mx Capacity</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>?</td>
<td>√</td>
</tr>
<tr>
<td>Data reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicators</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Formats</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timeliness</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Completeness</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Misclassification</td>
<td>±</td>
<td>±</td>
<td></td>
<td>±</td>
<td></td>
</tr>
<tr>
<td>Internal Consistency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>External Consistency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Duplication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing Cases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>±</td>
</tr>
</tbody>
</table>
Summary of Harmonized Approach

- **MESS** – Systems assessment

- **Data Quality Assessment** – Primary data verification
  - OSDV; RDQA and DQA
    - Reporting
      - Availability, Timeliness, Completeness and accuracy
    - Systems
      - Roles & responsibilities
      - Standardization – formats and definitions
      - Data management processes

- **WHO Workbook** – Secondary data verification
  - Missing cases
  - Trend analysis
  - Planning (Qualitative information on M&E plan and Data Mx capacity)
• Thank you