Session 15
Interpretation and Dissemination of Findings, & Action Planning to Improve Data Quality

Data Quality Review (DQR) Data Verification and System Assessment Workshop
Learning Objective

To learn how to interpret and document DQR findings and disseminate results. Specifically, by the end of the session you will:

• Know and understand DV/SA survey output and what it says about HMIS or program data quality

• Know the standard template for a data quality improvement plan

• Understand mechanisms for ensuring funding and implementation of action plans

• Appreciate the importance of designing feasible interventions to address data quality shortcomings

• Understand the difference between systematic data quality problems and site-specific problems

• Understand how to devise, budget and monitor implementation of data quality improvement plans
Interpreting Results

- Once the data are cleaned and analyzed (i.e. you have populated and reviewed the DV SA Chartbook for facility and district levels) you will need to review the findings with subject matter experts to assure the plausibility of the findings.

- A Data Validation and Report Writing Workshop is often held to invite program and data managers from the various health programs (e.g. Maternal Health, Immunization, HIV/AIDS, TB, and malaria) to come review and discuss the findings.

- Program and data managers know best the dynamics of service delivery for their specific health programs and are best situated to review and interpret the data.

- Plan accordingly and ensure the right mix of expertise is represented in the group. This is a critical step as you won’t want to finish writing your final report and have an expert who wasn’t consulted challenge the results.
Bringing together the Desk Review and DV/SA

• The review meeting is a great time to bring the data verification and system assessment results together with the findings of the DQR Desk Review.

• Remember that the Desk Review is an analysis of previously reported aggregate data in the HMIS. Thus far, the DV/SA assessment and the desk review have been being conducted in parallel. Now we can bring the findings together to try and find intersections in the results.

• Data verification is a measure of Internal Consistency, one of the Domains of data quality examined on the Desk Review.

• Are there findings from the data verification exercise that help explain findings of the desk review (incompleteness, extreme values, inconsistencies over time, or between related indicators)?
Final Report

• The validated results of the DQR should be written up in narrative form as a report, with graphics depicting results to support the narrative.

• Graphics can be cut and pasted from the DV/SA Chartbooks. Key survey findings should be included as well as recommendations for interventions to address shortcomings in data quality.

• The report should include findings from the Desk Review as well.

• The report should be disseminated to all staff expected to participate in health-sector planning initiatives (e.g. health sector review) several weeks prior to the planning event.

• Other stakeholders – such as donors, technical assistance organizations, relevant national and international NGOs, private-sector bodies (e.g. universities, civil society organizations), and concerned ministries – should receive copies of the report.
Final Report

• The report should contain the following sections:

• Overview – to place the assessment and findings in the proper context for the reader

• Methods – to describe how the assessment was designed, especially departures taken from the standardized methodology

• Results – what was found in the DQR DV/SA, including:
  • Completeness and timeliness of reporting
  • Verification factors for tracer indicators
  • Distribution of discrepancies among health facilities
  • Reasons for discrepancies
  • Reasons for missing source documents and reports
  • System assessment findings

SESSION 15
Interpretation and Dissemination of Findings, & Action Planning to Improve Data Quality
Final Report

- Discussion – to let the reader know why highlighted results are important
- Recommendations – to let the reader know what possible remedies can be applied to rectify data quality problems. Also facilitates the drafting of the Data Quality Improvement Plan.
Link to planning

• The results of the Data Verification and System Assessment should be available for use during the annual health sector planning events.

• Ideally, the data verification was scheduled far enough in advance that the results are validated and compiled into a report for use at the planning event.

• But not too far in advance that the findings are no longer relevant.

• If the report is ready with findings and recommendations highlighted (e.g. executive summary) the issues uncovered on the assessment are more likely to receive consideration (and funding!) and then be addressed in the current budgetary cycle.
Data Quality Improvement Plan

• Based on the results of the data DQR (data verification, system assessment, desk review) the Data Quality (or HMIS) Technical Working Group (TWG) should lead the development of a Data Quality Improvement Plan (DQIP), an action plan for system strengthening, ensuring the involvement of relevant stakeholders.

• The DQIP should map out interventions designed to address problems found on the assessment and improve the quality of data.

• The plan should identify responsible agencies with appropriate staff to implement the plan, the timeline, and resources required to ensure completion.
Data Quality Improvement Plan

• If sufficient funding is not available within the current budget, the DQR coordinating group should conduct advocacy among the donor community to raise the necessary funding.

• Interventions to improve the quality of data should be prioritized so that those with the highest likelihood of success, and those making the greatest impact on overall data quality, should be implemented first.

• Interventions should have a basis in reality. Budgets should be realistic. Responsible agencies / personnel should be available and willing to take on the interventions (and should buy-in to the strategy).

• Timelines should be doable. The DQIP should not be a wish list!
## DQIP – Example 1

<table>
<thead>
<tr>
<th>Data quality finding</th>
<th>Evidence of finding (interpretation)</th>
<th>Remedial measures</th>
<th>Scope</th>
<th>Timeline</th>
<th>Responsible</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of understanding of indicator compilation techniques at health-facility level for PMTCT/HCT</td>
<td>Systematic over-counting of HCT indicator values in some districts (as revealed by data verification)</td>
<td>Improved supervision and mentoring in affected districts Emphasis on indicator compilation during pre-service and in-service training -Ensure that printed copies of indicator definitions and compilation procedures are available in health facilities</td>
<td>Regions 2, 7, 10</td>
<td>One year (2015), then re-evaluate</td>
<td>-District health information officers or their designates (whoever is conducting supervision at the facility) -Pre-service, in-service curriculum design team (HMIS unit at national level)</td>
<td>-District health information budgets -HMIS training budget (2015 allocation) -MOH nurse training (2015 budget) Global Fund Round 9 HSS grant</td>
</tr>
</tbody>
</table>
**SESSION 15**

**Interpretation and Dissemination of Findings, & Action Planning to Improve Data Quality**

---

**DQIP – Example 2**

<table>
<thead>
<tr>
<th><strong>Data quality finding</strong></th>
<th><strong>Evidence of finding (interpretation)</strong></th>
<th><strong>Remedial measures</strong></th>
<th><strong>Scope</strong></th>
<th><strong>Timeline</strong></th>
<th><strong>Responsible</strong></th>
<th><strong>Resources</strong></th>
</tr>
</thead>
</table>
| Source documents are not available for data verification | A significant proportion of service delivery for malaria could not be verified because of the non-availability of source documents  
- poor record-keeping/archiving of reported results | -Districts should work with affected health facilities to develop sound storage areas (closet or cabinet with locking mechanism in a cool, dry place)  
- shelves should be built using locally-available materials | Identified health facilities in Region 2 (districts 4 and 6) and Region 9 (districts 27 and 34). | 2015, then re-evaluate | District health management teams; facility in charge; Regional Health Authority (facilities management unit) | 2015 Facilities Management Budget  
- Global Fund Round 9 HSS grant |
Questions

• Who should lead the analysis and interpretation of DV/SA results?
• What should be done with the analyzed results of the DV/SA?
• How can we ensure that DV/SA results are used to improve data quality?
Practice

• Your Facilitator will provide example Data Verification and System Assessment output (e.g. Chartbooks, Final Reports)

• Practice identifying priority problems and crafting interventions to improve the situation.

• Practice costing interventions and estimating personnel requirements.

• Create a timeline for the interventions – is it realistic?

• You have 80 minutes.