Data Quality Assessment during Supervision (DQA-S) for Preventive Chemotherapy of Neglected Tropical Diseases:

GUIDANCE FOR IMPLEMENTATION
DRAFT FOR FIELD-TESTING
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Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ALB</td>
<td>Albendazole</td>
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<tr>
<td>CDD</td>
<td>Community Drug Distributor</td>
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<td>DQA</td>
<td>Data Quality Assessment</td>
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<td>DQA-S</td>
<td>Data Quality Assessment during Supervision</td>
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<td>GAVI</td>
<td>Global Alliance for Vaccines and Immunization</td>
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<td>LF</td>
<td>Lymphatic Filariasis</td>
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<td>IVM</td>
<td>Ivermectin</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MDA</td>
<td>Mass Drug Administration</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>NTDs</td>
<td>Neglected Tropical Diseases</td>
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<tr>
<td>PC</td>
<td>Preventive Chemotherapy</td>
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<tr>
<td>PPES</td>
<td>Probability Proportional to Estimated Size</td>
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<tr>
<td>PSU</td>
<td>Primary Sampling Unit</td>
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<td>SDP</td>
<td>Service Delivery Point</td>
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<td>SOP</td>
<td>Standard Operating Procedures</td>
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<td>SSU</td>
<td>Secondary Sampling Unit</td>
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<td>TSU</td>
<td>Tertiary Sampling Unit</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>VF</td>
<td>Verification Factor</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Glossary

The following terms are used throughout this document and the DQA-S tool.

**Service Delivery Point:** Service delivery for NTDs may include prevention of NTDs through PC (SAFE for trachoma), management of morbidity and disability prevention, and/or treatment of cases, among other possible interventions. The Service Delivery Point (SDP) refers to the lowest administrative level, school or fixed point where an intervention benefiting a population (i.e., service delivery) occurs. For PC diseases, these are typically communities, villages, or schools where PC has taken place and treatment data are compiled from the treatment registers or tally sheets by the Community Drug Distributors (CDD), teachers or health workers.

**Intermediate data aggregation level:** This refers to administrative levels, lower than the national level but higher than the drug distribution level, where PC data aggregation takes place. The number of intermediate aggregation levels may vary between countries. The DQA-S tool provides for up to 4 intermediate levels with intermediate level 1 representing the next level after community, followed by level 2, etc. For example, data may be sent from villages (SDP) to a health facility where the data are first aggregated (Intermediate Aggregation Level [IAL 1]), then to a district (IAL 2), followed by a region (IAL 3), and then data are sent to the national level.
Source documents: Data collection tool(s) where service delivery is first recorded. For PC NTDs, these may include treatment registers, PC tally sheets, inventory records at the distribution level, etc. For other NTDs, these may include patient records, etc.

Documentation/Report Availability: Percentage of source documents/reports that can be retrieved.

Documentation/Report Timeliness: Percentage of source documents/reports that were compiled/submitted by the due date.

Documentation/Report Completeness: Percentage of source documents/reports that contain all required data for indicators.

Verification Factor: Ratio of recounted value of the indicator to the reported value. Measures the accuracy of reported data.
Section 1: Overview

OBJECTIVE OF DATA QUALITY ASSESSMENTS DURING SUPERVISION

The quality of preventive chemotherapy (PC) data for neglected tropical diseases (NTDs) received by national programmes is often incomplete, not timely, and of questionable accuracy. A data quality assessment (DQA) can be conducted by national NTD programs in collaboration with implementing partners as a stand-alone activity to assess the quality of reported data and the reporting system, and to enable programmatic adaptation to strengthen the system based on those findings.

National NTD programs are encouraged to conduct a DQA at least once every 3-5 years. However, NTD staff can also leverage existing supervision visits to assess the quality of data and the reporting system. During these visits, supervisors can review PC data using a structured approach, discuss the status of best practices around data management with the individuals responsible for compiling data, and create a plan to take action to improve the reporting system. By utilizing existing visits to conduct a Data Quality Assessment during Supervision (DQA-S), supervisors can gain an understanding about the status of reporting system without additional cost.

While this guide and the DQA-S tool describe the complete DQA-S process, supervisors may decide to incorporate parts of the DQA-S into routine supportive supervision. For example, some of the DQA-S questions can be included in supportive supervision checklists.

Whether the complete DQA-S or a select part of it is implemented, the objective is the same: to equip supervisors with a standardized framework to assess the quality of reported data and the reporting system as part of supervision, which they can use to provide feedback to NTD staff and to strengthen the reporting system.

OVERVIEW OF DQA-S STEPS

The steps for the DQA-S include:

1. **Identify** which supportive supervision visits should incorporate a data quality assessment component. (Section 2 of this guide)
2. **Train** central - and district-level supervisors to conduct DQA-S, or to incorporate aspects of a DQA-S into their routine supportive supervision visits. (Section 2)
3. **Utilize** DQA-S questionnaire during selected supportive supervision visits. (Section 3)
4. **Provide feedback** during selected supportive supervision visits based on DQA-S results. (Section 3)
5. **Synthesize findings** across multiple DQA-S sites, identify best practices and challenges, and make evidence-based changes to data reporting system and processes. (Section 3)

Section Two: Planning and Logistics

2.1 WHERE SHOULD A DQA-S BE CONDUCTED?

A DQA-S can be conducted in any district or sub-district where there are questions about the quality of the reported data or the reporting system. For example, a district or sub-district might be selected if a coverage evaluation survey showed a large discrepancy between reported and surveyed coverage, or if there have been questionable, inconsistent, late, or incomplete data reported over time. Selecting the sites for DQA-S is a purposive process, rather than randomly selecting sites to assess.

2.2 WHEN SHOULD A DQA-S BE CONDUCTED?

If the DQA-S is intended to assess the availability, completeness, and timeliness of reporting, and/or to verify the data, then the DQA-S should be conducted after the NTD data have been reported from the site selected to the next level through the routine reporting channels. However, it is possible for a supervisor to ask some of the systems assessment questions during supportive supervision visits that occur during MDA.
2.3 WHO SHOULD CONDUCT A DQA-S?
Any supervisor who is responsible for ensuring the quality of PC implementation can conduct a DQA-S. This can include central-level MOH, district-level MOH, or implementing partners who conduct supervision. The supervisor should communicate the major findings with the national NTD program, to ensure that any substantial issues and/or best practices identified can be incorporated into programmatic adaptation.

2.4 WHO SHOULD BE THE RESPONDENTS OF A DQA-S?
The respondent of a DQA-S should be the individual responsible for compiling the PC data at that site.

2.5 WHICH INDICATORS SHOULD BE ASSESSED DURING A DQA-S?
The specific indicators to assess in the DQA-S should be determined based on the data concerns of the supervisor. The DQA-S questionnaire only includes 2 indicators to be assessed, as compared to 3-5 with a standard DQA. It is not necessary for the same 2 indicators to be assessed by every supervisor or during every supervision visit.

2.6 TRAIN SUPERVISORS TO CONDUCT A DQA-S
The national NTD program and implementing partners should explain the objective of the DQA-S with supervisors, walk through the DQA-S questions (including the questionnaire and/or the questions that are incorporated into a supportive supervision checklist), and discuss how to interpret the results. During the training, trainers should emphasize to supervisors the importance of providing feedback to those he/she is supervising.

As with the standard DQA, during the training, the national NTD program and implementing partners should define ‘available,’ ‘complete’ and ‘timely’ for the purposes of the DQA-S. For example, you might consider:

a) If a report is submitted in a format different than the template used by the national NTD programme, will this be considered ‘available’?
b) If data were reported over the phone or through SMS, and there is no written record of the data, how will this be considered with regards to ‘available’, ‘complete’ or ‘timely’?
c) Does a report need to have all of the data points filled in to count as ‘complete’? If a report has all of the indicators included in the DQA-S, but is missing other data, will it be counted as ‘complete’?
d) What are the submission deadlines for each level?
e) Does each report template have a space to indicate the date it was submitted? If not, how will you determine ‘timeliness’?

Section Three: Conducting a DQA-S

3.1 REVIEW AVAILABILITY, COMPLETENESS AND TIMELINESS OF REPORTING
The supervisor should identify the indicators to be assessed at this site, and then review available source documents that were submitted to the site being assessed. He/She should answer the questions in the questionnaire related to availability, completeness, and timeliness of reporting. For any incomplete or late reports, the supervisor should discuss with the respondent the reasons.

Efforts should be made to access documents from all the units reporting to the site. If any documents are completely missing, the supervisor should nevertheless go ahead with the assessment.

3.2 DATA VERIFICATION
The supervisor should identify the indicators to be assessed at this site, and then review available source documents that were submitted to the site being assessed. He/She should recount the values that were
reported to that site for the two indicators, and then compare that to the total reported by that site. He/She should calculate the verification factor, which is the recounted value / reported value. Acceptable verification factors are between 0.90-1.10. The supervisor should discuss with the respondent if the verification factor falls out of the acceptable range, to gain an understanding of what caused the discrepancy.

3.3 SYSTEMS ASSESSMENT
The supervisor should then ask the respondent the systems assessment questions in the DQA-S tool. He/She should classify the responses as Yes, No, Partly, or Not applicable, and record the reasons for that classification in the Comments section of the tool.

3.4 PROVIDE FEEDBACK TO RESPONDENT
The supervisor should provide feedback to the respondent based on the overall findings from the DQA-S. This should include both positive and constructive feedback, to ensure that the respondent understands both what is working well as well as areas to improve. If the data are entered into the DQA-S tool, the supervisor can utilize the built-in dashboards to facilitate the identification of key results and to provide feedback.

3.5 SYNTHESIZE FINDINGS FOR PROGRAMMATIC ADAPATION
The supervisor should then synthesize the findings, identifying high priority issues. If the DQA-S was utilized in multiple sites, he/she should also synthesize to recognize patterns over sites and time. If the data are entered into the DQA-S tool, the supervisor can utilize the built-in dashboards to facilitate this data analysis and interpretation. This should include if there are indicator(s)/sites with indicators that had unsatisfactory verification factors or availability, completeness, or timeliness of reporting. The supervisor should communicate high priority issues with the national NTD program in advance of the planning for the next MDA, to ensure that any lessons learned are able to be incorporated into the next year’s approach. It is important to remember that since the sites assessed with the DQA-S were purposively, not randomly, selected, the results are not generalizable across the entire NTD program. That said, they may shed light on systemic issues that can be addressed in multiple areas.

Section Four: Conclusion
A DQA-S can be a useful tool to leverage existing supportive supervision visits in order to assess and provide feedback on data quality and the strength of the reporting system. National programs are encouraged to train supervisors to either use the DQA-S tool or incorporate its components into routine supportive supervision checklists. Supervisors should ensure that they provide feedback to the respondent based on the key issues that using the DQA-S surfaces, and that they communicate with the national NTD program a synthesis of the high priority issues, to facilitate programmatic learning and adaptation.