



## Malawi EMPOWER Activity

# USAID Expanding Malawi HIV/AIDS Prevention with Local Organizations Working for an Effective Epidemic Response (EMPOWER)

## STANDARD OPERATING PROCEDURE (SOP) FOR ROUTINE DATA QUALITY ASSESSMENTS (VIRTUAL RDQA)

Developed by Malawi EMPOWER M&E Unit



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THE SCIENCE OF IMPROVING LIVES

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# I. INTRODUCTION

## I.1 PURPOSE

Data quality assurance is an integral part of the United States Agency for International Development (USAID) Expanding Malawi HIV/AIDS Prevention with Local Organizations Working for an Effective Epidemic Response (EMPOWER) M&E system to ensure that data not only meets the USAID/PEPFAR and GoM standards of data quality, but also accurately measures project performance. These standard operating procedures (SOPs) provide guidance on the methods and processes for conducting (virtual) Routine Data Quality Assessments (RDQA) based on United States Government (USG) Regulations and USAID policy (ADS 203). In addition, the SOP provide a comprehensive package of everything needed to conduct (virtual) RDQAs, in efforts to maintain the USAID's five data quality standards, validity, reliability, precision, timeliness and integrity. The SOP also contain the tools that support the assessment processes at each stage.

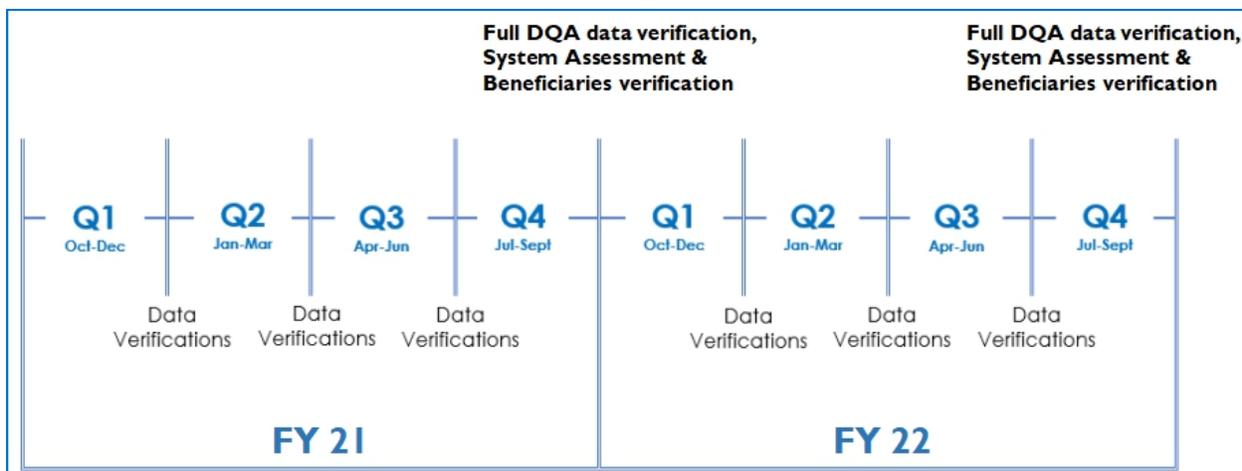
As with all the Malawi EMPOWER data quality control and verification efforts, the RDQA processes shall observe the *PEPFAR Technical Guidance* in context of the COVID-19 pandemic. These SOPs shall be disseminated to all technical M&EL and local partner staff to guide with virtual RDQA processes.

## I.2 SCOPE

Malawi EMPOWER adapted and customized verification tools that had been used successfully for the FHI 360 EpiC/Linkages Across the Continuum of HIV Services for Key Populations Affected by HIV (LINKAGES) AGYW project, to suit project specific needs and the objectives of the quarterly assessments. The RDQA tools in these SOP are therefore designed to assess both **the system that produces the data** and verify **the quantity and quality of the reported data**. The week-long verification exercises shall be at two levels of the two local partners, with each local partner assigned not more than two days.

As specified in the Malawi EMPOWER M&EL plan, assessments will be conducted in the second month of a reporting quarter to ensure that data reported to USAID is accurate. High quality data will be defined as achieving 100% data accuracy between the reported and actual (verified) values.

Figure I below shows the RDQA schedules.



## 2. OBJECTIVES OF RDQA

**2.1 Assess** the ability of the strategic information (SI) systems to collect, manage and report quality data for PEPFAR and program indicators, and measure performance and capacity overtime.

**2.2 Compare** the quantity of the reported aggregate selected PEPFAR indicators in DREAMS (DHIS2) data, vis-a-vis values in Data for Accountability, Transparency and Impact (DATIM).

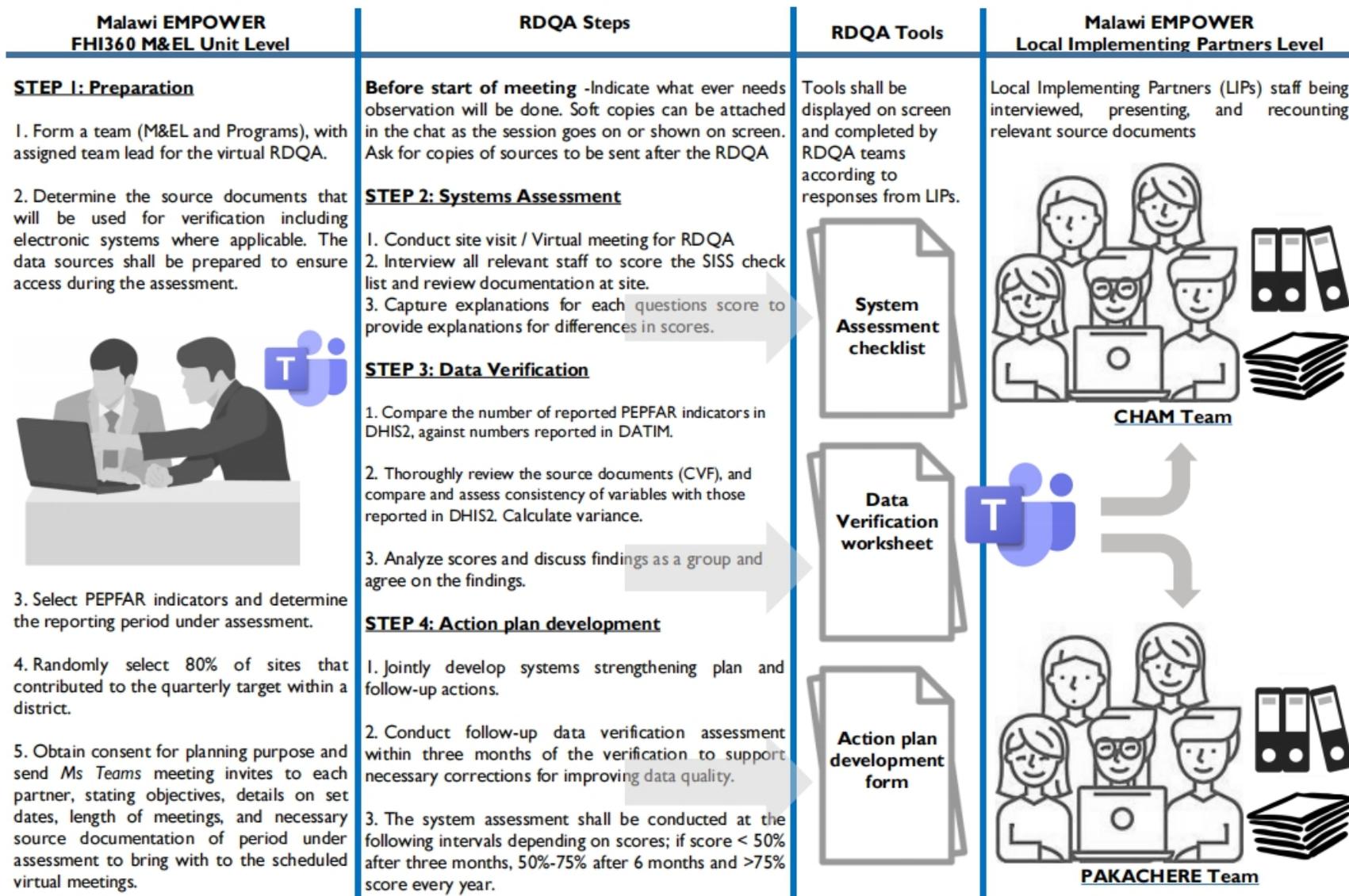
**2.3 Compare** the quality and accuracy of reported AGYW data on clinic visit forms, against the shared database (DHIS2) as reported by the local implementing partners.

**2.4 Make corrective** measures with action plans for strengthening the data management and reporting system and improving data quality.

## 3. PROCESS OF THE (VIRTUAL) RDQA

This section of the guidelines provides guidance on recommended methods and process to complete the (virtual) RDQA. It is divided into four phases: 1. Preparation, 2. Systems assessment, 3. Data verification, 4. Action plan development. Each phase provides specific steps that should be followed and includes the forms that must be filled out on each stage of the RDQA.

In Figure 2 below we present the methods and processes required to complete a successful (virtual) RDQA.



## **3.1 PREPARATION OF RDQA**

### **3.1.1 RDQA TEAM COMPOSITION**

The STA-ME&L at the FHI360 MEL unit level shall lead the virtual RDQA processes, with program teams also taking key part in the quarterly assessments. The FHI360 M&EL unit with access to the DREAM database, shall particularly lead processes on one end, and local partners shall on the other end have all the source documents (Clinic Visit forms), properly arranged in labeled folders as per *Filing SOP*, for the reporting period under assessment. All the recounting of CV forms shall be done by a particular local partner under assessment.

For the site selection, the RDQA team shall randomly select 80% of the sites that contributed to the quarterly target within a district, eighty percent being a fair representation of sites per districts. Under normal circumstances, all face to face verifications would be conducted where DREAMS club participants usually meet. However, for virtual assessments all processes shall be via Microsoft Teams, where RDQA team shall assess consistencies of the reported numbers vis-a-vis databases and actual forms, while LIPs will do the recounting of forms.

Prior to the virtual assessment meetings, the RDQA teams will have sent separate meeting invites to each partner, stating objectives, details on set dates, length of meetings (maximum of two days per local partner), and necessary source documentation of period under assessment to bring with to the scheduled virtual meetings. Local partner staff shall hence present the source documents under assessment and show in chart box or attach the recounted source documents for components under assessment. All virtual RDQA exercises conducted shall be recorded with all members taking part well notified. All recordings shall be filed in the shared drive accordingly, as per the *Digital filing system SOP*.

### **3.1.2 KEY MATERIALS TO HAVE IN ADVANCE OF THE RDQA**

- a) Clinic Visit Forms (in properly arranged and labeled lever arc folders).
- b) Strategic Information System Standards (SISS) Assessment checklist
- c) Data verification worksheet
- d) Access to DHIS2 and DATIM (FHI360 M&EL unit level)
- e) The last quarterly report submitted by LIPs that contribute data for those indicators

## 3.2 SYSTEM ASSESSMENT

The aim of system assessment is to assess the ability of the SI systems to collect, manage and report quality data for PEPFAR and program indicators, and measure increased performance and capacity overtime. Systems assessment enables quantitative and qualitative assessment of the relative strengths and weaknesses of functional areas of the SI systems. Once at the site or virtual meeting, invited local partner teams shall be interviewed to score the systems assessment checklist and review the documentation. The RDQA teams shall adequately capture explanations for each question's score to provide explanations for differences in scores. See *Annex A* for the generic systems assessment checklist.

## 3.3 DATA VERIFICATION - RDQA CHECKLIST

The first step of the data verification processes enables a quantitative comparison of reported PEPFAR indicators in DREAMS database, vis-a-vis the aggregate numbers reported in DATIM. The RDQA teams with access to DHIS2, will compare the values of selected PEPFAR indicators (HTS\_TST, HTS\_SELF, HTS\_TST\_POS, TX\_NEW AND TX\_CURR), reported in DREAMS (DHIS2), to see if they reflect the same values as reported in DATIM, for the same reporting period under assessment. The verification checklist enables RDQA teams to assess and quantify the performance over time. See *Annex C* for checklist used for this step.

The second step after comparing the aggregate numbers, is a granular review of Malawi EMPOWER source documents (Clinic Visit Forms), and comparing with those reported in shared database (DHIS2), to particularly assess if selected variables of; *Age, Gender, Date of enrollment, and services received*, are consistent with each other. The last step under verification is to analyze the checklist scores and discuss findings as a group and agree on the findings. See *Annex B*.

## 3.4 ACTION PLAN DEVELOPMENT

The last step, involves RDQA teams agreeing on interpretation and use of results and joint development of follow-up actions. After the virtual RDQA, checklists shall be consolidated and a virtual joint meeting shall be set to agree on interpretation and use of results and joint development of follow-up actions. Follow-up data verification assessments shall be conducted within three months of the verification to support the necessary corrections for improvement. The verifications should be conducted at the following intervals depending on the score; if score < 50% after three months, 50%-75% after 6 months and >75% score every year See *Annex D* joint of plan action.

In Figure 2 below we present the methods and processes required to complete a verification of AGYW beneficiaries existence RDQA,

## ANNEX A – STRATEGIC INFORMATION SYSTEMS STANDARDS ASSESSMENT CHECKLIST

<b>Name of Country/CSO</b>	
<b>Names of staff who were interviewed</b>	
<b>Level of data collection (Program/CSO/SDP etc.)</b>	
<b>Date of assessment</b>	
<b>Names of the assessment team</b>	1) _____ 2) _____ 3) _____ 4) _____

**Methodology and Scoring:** This tool is a facilitated self-assessment, using a standards-based checklist. For each standard, a means of verification is suggested which provides a method for objectively verifying the extent to which each standard is met. ***N/A=standard is not applicable, or not available for review purposes, 0=Does not meet, 1=partially meets, 2=Fully meets.*** Ask to verify all documentation.

Key Questions	<i>0=Does not meet, 1=partially meets, 2=Fully meets N/A=standard is not applicable, or not available for review purposes</i>	Comments
<b>Human Resources and Management</b>		
Does your program have adequate and dedicated staff for Monitoring and Evaluation (M& E) (Advisor, M&E officer, Database Manager, Health Informatics officer and at least Data entry clerk (DEC) or equivalent)? <i>NB: For care and treatment sites, at least one DEC for sites with over 1,000 patients currently on Anti-Retroviral Therapy (ART)</i>		
Are there documented job descriptions for all staff in the M&E team?		
Have all the relevant (M&E, implementing partner) staff received initial M&E training using a standard M&E curriculum?		
Does the M&E lead visit all M&E team members for mentorship/technical support/ supervision visit at least twice a year?		
<b>M&amp;E Plans and standard operating procedures</b>		
Does the program have an up to date (annual updates) Monitoring Evaluation and Learning Plan (MELP)/ Performance Monitoring Plan (PMP) which includes a graphic Results Framework or Theory of Change outlining how project/ program goal, intermediate results and		

outcomes or outputs are linked?		
Does the program set targets for key performance indicators to achieve every month, quarter for each intervention?		
Does the MELP have a dataflow chart that clearly demonstrates how data flows and is reviewed from implementation sites to reach program managers and donors/government?		
Does the MELP plan have an organogram describing the organization of the M&E unit in relation to the overall project team?		
Do you have performance indicator reference sheets which include clear operational definitions consistent with PEPFAR MER guidance and relevant national/global indicators (e.g. PEPFAR, PMI, UNGASS, e.tc.)? Check understanding of PEPFAR indicators and PEPFAR type of support?		
Does the program have an up-to-date Data Quality Assessment (DQA) plan available (virtual and in person, annually updated) with SOP and guidelines?		
Has your program provided implementing partner(s)/sites with standard guidelines describing reporting requirements (what to report on, due dates, data sources, report recipients, etc.)?		
Do you have a standard reporting template(s) across all implementing partner(s)/sites use?		
Do you have written clear instructions/guidance on how to complete all data collection tools for implementing partners or service delivery points?		
<b>Data Collection &amp; Management</b>		
Has your program included all required program indicators with required PEPFAR/USAID disaggregations in (manual and electronic) data collection tools?		
Has your program clearly defined the data sources and collection methods for each indicator including indicators earmarked for the national program (government)?		
Does the data collected on the source documents have sufficient precision/detail to measure the indicator(s)?		
Do you have data management guidelines that cover both physical file storage/management and electronic data, if applicable are in place?		
<b>Data Security</b>		
Is there a filing protocol for physical records/registers with client level personal information is in place for		

proper filing and easy retrievable (where applicable)?		
Are relevant personal data maintained according to national (preferable) or international confidentiality guidelines, including using unique alpha-numerical IDs (where applicable)?		
Is there restricted access to personal identifiable information through providing (where applicable) lockable rooms/filing cabinets?		
Is there restricted access to both the program database and any personal identifiable information through password protected datasets/databases?		
<b>Data Systems</b>		
Does your program have a longitudinal individual level tracker/database to capture, verify, analyze, and present programmer-monitoring data from all levels, including HIV cascade data support, other program data support and finances?		
Does your program use an electronic aggregated database to collate individual level data across the databases and for real time monitoring?		
Does your program implement a UIC to provide individual-level data & track individual beneficiaries along the HIV cascade?		
<b>Data Quality Assurance</b>		
Does your program have a system to ensure standard forms/tools are used consistently within and between partners/site level?		
Is there a system to adjust for double-counting at site level on a quarterly basis?		
100% of the sites are visited at least once a year (where applicable) and more frequently for high volume sites for data quality audits for key indicators?		
Are the data quality problems clearly documented including how these problems have been resolved?		
Is there a clear data reporting schedule that corresponds with donor-specified report periods and program needs?		
Are donor reports submitted on time as scheduled (DATIM, High Frequency Report (HFR and quarterly or annual narrative reports)? Check for evidence.		
<b>Data Analysis &amp; Use</b>		
Does the program conduct regular analysis including trends in performance indicators over time (e.g. real time, daily, weekly, monthly or quarterly or as may be required) - and disaggregated by sex and/or age, location?		
Does the program have a senior staff member (e.g. Program Manager) responsible for reviewing aggregated data prior to release of reports from M&E unit?		
Are there documented procedures to ensure regular (at least monthly) review of M&E data by program/project		

managers and/or COP, M&E staff, other technical staff and partners?		
Does your program document reasons for under- or over-performance (e.g. not achieving important targets)?		
Is there evidence that performance issues (e.g. not meeting targets) are followed up with partners/others and documented?		
Does your program hold at least one data review & interpretation meeting in a quarter at the national/program level involving managers and program/technical staff?		
Does your program hold at least one data review & interpretation meeting in a month with local implementing partners/site level involving partner managers and program/technical staff?		
<b>Learning</b>		
Does your program conduct secondary analysis, document present the lessons learned and facilitate the exchange of information among partners and stakeholders?		
<b>Evaluation</b>		
Does your program conduct mapping, collect and review existing size estimate and mapping data for target populations?		
When applicable, does your program conduct process evaluation or mid-term review, outcome or impact evaluation in line with of implementation phase and donor requirements?		
Does your program facilitate the use of evaluation/mapping data for programming?		
<b>M&amp;E Leadership</b>		
Does your program participate in national/state/province M&E Technical Working Groups (TWG) or other fora accordingly?		
Has your program presented any components of M&E system as abstracts, posters and publications at national conferences or other meetings at least once in two years?		
<b>M&amp;E System Assessment</b>		
Does your program conduct an internal M&E system evaluation for program and implementing partners (where applicable) in initial year of program and annually or as needed thereafter?		
<b>Budgeting</b>		
Is the Monitoring and Evaluation (M&E) budget between 5%-10% of the overall program budget?		
<b>Total Score</b>	<u>          </u> /43	<u>          </u> %

## ANNEX B - DATA VERIFICATION WORKSHEET-1

This worksheet was designed to provide an efficient process for verifying data from a subset of Malawi EMPOWER indicators. It allows one to isolate inconsistencies in data reported by the IP partner to the project, and from the project to USAID.

Local implementing partner	
District	
Name of Facility	
Reporting Period Verified (Three Months)	
Date of assessment	

Column with a list of variables	Source documents available* (No=0, Yes=1)	Source documents complete** (No=0, Yes=1)	Dates of source documents correct*** (No=0, Yes=1)	Number/Results reported (A)			Number/ Results verified (B)			Variance = (A-B) X100 B
				Month 1	Month 2	Month 3	Month 1	Month 2	Month 3	
										M1:
										M2:
										M3:
										Average:
										M1:
										M2:
										M3:
										Average:

## ANNEX C - DATA VERIFICATION WORKSHEET-2

The data verification checklist will enable RDQA teams to compare quantitatively reported PEPFAR indicators, vis-a-vis the aggregate DATIM data reported. It enables a quantitative comparison between recounted values of indicators from DHIS2, and the numbers reported in DATIM during a reporting period under assessment.

Local implementing partner	
District	
Name of Facility	
Reporting Period Verified (Three Months)	
Date of assessment	

	Records	Number/Result	Number/Results	Number/	
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Name of LIP	available* (No=0, Yes=1)	s of reported in DREAMS (DHIS2)	reported <b>(A)</b> (DATIM / Source Documents)	Results verified <b>(B)</b>	<b>Variance =</b> $\frac{(A-B) \times 100}{B}$
HTS_TST					
HTS_SELF					
HTS_TST_POS					
TX_NEW					
TX_CURR					

## ANNEX D - PLAN OF ACTION DEVELOPMENT

	Identified Gaps	Description of action point	Responsible(s)	Timeline	Technical assistance needs
1					
2					
3					
4					
5					
6					
7					
8					
<b>Overall score for systems assessment</b>					