**Desk Review**

**Introduction**

[*The introduction provides an overview of the topic, the context of the desk review, and its objectives or research questions. It should also briefly explain the significance of the topic and the rationale for conducting the desk review.]*

Nigeria’s National Agency for the Control of AIDS (NACA) engaged a technical service organization to implement an ART Data Quality Assessment (DQA) and Patient Folder Audit. This document is a desk review conducted by the technical service organization for the exercise.

The exercise is being guided by the Data Quality Review (DQR) Toolkit developed through collaborated efforts of the World Health Organization (WHO); The Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund); Gavi, the Vaccine Alliance; and the USAID-funded MEASURE Evaluation project. The DQR toolkit contains guidelines and tools for a standardized and holistic approach to routine DQAs in countries (WHO, 2017a, 2017b, 2017c).

With guidance from the DQR Toolkit, this desk review will entail a review of the quality of aggregated HIV program data in Nigeria reported to the national level using standardized data quality metrics (completeness, internal consistency, external comparisons, and external consistency). The selected HIV program indicator for this desk review is the **number (%) of people living with HIV who are currently receiving ART.** The data for this program indicator will be sought from the existing National Health Management Information System (NHMIS) in Nigeria; monthly or quarterly subnational data for the most recent current reporting year and aggregated data for the last three reporting years. This process will help to identify the problems with data completeness, accuracy, and consistency.

This desk review will also entail a review of the HIV data quality management system in Nigeria. This will include the system’s functionality, the key actors, DQA tools in use by the key actors, general findings and recommendations from past DQAs and accessibility of the DQA reports.

**Methodology**

*[This section should describe the methods used to search, select, and analyze the relevant documents or data sources for the desk review. This may include details on the types of documents or data sources reviewed, search strategies, inclusion and exclusion criteria, and any specific analytical approaches applied.]*

Method for selecting documents reviewed:

- Journal articles.

- DQA reports of HIV program implementers.

- Other grey literature.

- Nigeria’s HIV program data in the last 5 years (assessed from the National Data Repository/NDR)

Inclusion criteria:

- Documents related to HIV program DQAs

Exclusion criteria:

- Documents unrelated to HIV program DQAs

**Review of the Documents / Data Sources**

*[This is the main body of the desk review, where the findings from the reviewed documents or data sources are discussed and synthesized. It is typically organized thematically, chronologically, or by the type of data source, depending on the research question and the available documents or data sources. Each theme or category should be presented with a clear heading, and the documents or data sources should be critically analyzed and compared to identify patterns, trends, and key insights.*

*3.1 Theme 1 / Category 1*

*3.2 Theme 2 / Category 2*

*3.3 Theme 3 / Category 3*

*... ]*

Enter text below!

**The Nigerian HIV data quality management system:** Nigeria has a functional HIV data quality management system coordinated centrally by the Federal Ministry of Health (FMoH) through the National Agency for the Control of AIDS (NACA). Other key actors in this system include:

* Government actors: NASCP, State Ministries of Health and corresponding departments and agencies (SASCPs), local government authorities, public health facilities (primary, secondary and tertiary).
* Global health program implementers including CDC, DOD, The Global Fund, USAID and WHO
* Private sector: Private health facilities acrss the country
* CSOs

**Findings from review of documents:**

| **Data.FI Nigeria DQA Comprehensive Report\_TR-22-28\_FINAL.docx** | **Summary**: Provides an in-depth evaluation of the HIV/AIDS data management processes and practices in Nigeria. The report outlines the objectives, scope, methodology, findings, recommendations, and action plan for improving data quality in HIV/AIDS programs | **Data Accuracy and Completeness:**Although the data accuracy and completeness levels were satisfactory, there were discrepancies between data sources, and certain data elements had missing or inconsistent information. | **Data Timeliness:** The data submission timelines were not always met, leading to delays in data reporting and analysis. | **Data Confidentiality and Security:** While the existing data confidentiality and security measures were adequate, there were some gaps in data access controls and data backup processes. | **Data Management Capacity:** Limited human resources and inadequate training have hampered the data management capacity in the HIV/AIDS program. | **Recommendations**  Strengthen data validation processes and tools to ensure data accuracy and completeness.  Improve data timeliness by enforcing deadlines and streamlining the reporting process.  Enhance data confidentiality and security through proper access controls and regular data backups.  Strengthen the capacity of data management personnel by providing regular training and support. |
| --- | --- | --- | --- | --- | --- | --- |
| **document\_221203\_081124.pdf** | **Summary:** This document is an assessment report on HIV/AIDS data quality in Nigeria, focusing on data management, data reporting, and data usage. It evaluates the strengths and weaknesses of the existing system and provides recommendations to enhance data quality. | **Data Management:** The data management system was fragmented and lacked standardization, leading to inconsistencies and inefficiencies in data collection and storage. | **Data Reporting:** The reporting process was prone to delays and inaccuracies due to incomplete and untimely data submissions. | **Data Usage:** There was limited utilization of the data for decision-making and program improvement, partly due to the lack of confidence in data quality. |  | **Recommendations**  Establish a standardized and integrated data management system to enhance data quality and efficiency.  Strengthen the data reporting process through training and adherence to guidelines.  Promote data usage by building trust in data quality and demonstrating the value of data-driven decision-making. |
| **MEL-Nigeria-OVC-HIFASS-DQA-Report-11-3-17** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_SERVE)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were gaps in data accuracy and completeness due to missing source documents and incompletely filled source documents. | **Data Timeliness:** Data were reported across the reporting levels in a timely manner however, date stamps were not available on the archived data. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision | **Recommendations**  Strengthen data validity by improving capacity for proper documentation and communication channels for change management. |
| **MEL-Nigeria-OVC-SMILE-DQA-Report-10-30-17** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_SERVE)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were gaps in data accuracy and completeness due to incompletely filled source documents. | **Data Timeliness:** Unclear and undocumented reporting timelines across reporting levels. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision. | **Recommendations**  Strengthen data validity by improving capacity at the service delivery level for improved data management processes. |
| **MEL\_OVC\_STEER\_DQA\_Report\_11-1-17** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_SERVE)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were gaps in data completeness due to incompletely filled source documents. There were also gaps in data accuracy due to incorrectly filled source documents, errors in data verification as well as poor documentation of the data change management process. | **Data Timeliness:** Poor adherence to data reporting timelines. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision. | **Recommendations**  Strengthen data validity by improving capacity at the service delivery level for improved data management processes. |
| **FY18 HIV DQA Final Report\_STEER \_100218** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_HIVSTAT)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were gaps in data completeness due to incompletely filled source documents. There were also gaps in data accuracy due to incorrectly filled source documents, errors in data verification as well as poor documentation of the data change management process. The bugs in the OVC electronic data management system contributed to the inaccuracy of the data. | **Data Timeliness:** Poor adherence to data reporting timelines. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision. | **Recommendations**  Strengthen data validity by improving capacity at the service delivery level for improved data management processes. |
| **FY18 HIV DQA Final Report\_SIDHAS OVC \_100218** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_HIVSTAT)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were incomplete, incorrect and missing entries noted in the source documents. Trascription errors were also observed in the electronic database due to poor supervision during data entry. The bugs in the OVC electronic data management system contributed to the inaccuracy of the data. | **Data Timeliness:** Poor adherence to data reporting timelines. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision. | **Recommendations**  Strengthen data validity by improving capacity at the service delivery level for improved data management processes.  Strengthen supervisory efforts for data reporting and data review processes at the service delivery level. |
| **FY18 HIV DQA Final Report\_LOPIN 1\_092818** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_HIVSTAT)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were incomplete, incorrect and missing entries noted in the source documents. Trascription errors were also observed in the electronic database due to poor supervision during data entry.The bugs in the OVC electronic data management system contributed to the inaccuracy of the data. | **Data Timeliness:** Poor adherence to data reporting timelines. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision. | **Recommendations**  Strengthen data validity by improving capacity at the service delivery level for improved data management processes.  Strengthen supervisory efforts for data reporting and data review processes at the service delivery level. |
| **FY18 HIV DQA Final Report\_LOPIN 2\_092818** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_HIVSTAT)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were incomplete, incorrect and missing entries noted in the source documents. Trascription errors were also observed in the electronic database due to poor supervision during data entry. The bugs in the OVC electronic data management system contributed to the inaccuracy of the data. | **Data Timeliness:** Poor adherence to data reporting timelines. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision. | **Recommendations**  Strengthen data validity by improving capacity at the service delivery level for improved data management processes.  Strengthen supervisory efforts for data reporting and data review processes at the service delivery level. |
| **FY18 HIV DQA Final Report \_LOPIN 3\_082818** | **Summary:** The document is a report of a DQA exercise conducted on OVC HIV data **(OVC\_HIVSTAT)** in Nigeria using the Measure Evaluation rotuine DQA tool. The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were incomplete, incorrect and missing entries noted in the source documents. Trascription errors were also observed in the electronic database due to poor supervision during data entry. The bugs in the OVC electronic data management system contributed to the inaccuracy of the data. | **Data Timeliness:** Poor adherence to data reporting timelines. | **Data Confidentiality and Security:** The system in use for data management had password access to ensure confidentiality as well as inbuilt error and quality checks. | **Data Management Capacity:** There are adequate human resources with clear responsibilities at each level of reporting. However, there are gaps in data management capacity particularly at the lowest level of reporting requiring routine onsite mentoring and supervision. | **Recommendations**  Strengthen data validity by improving capacity at the service delivery level for improved data management processes.  Strengthen supervisory efforts for data reporting and data review processes at the service delivery level. |
| **2018 HIV DQA Report\_SIDHAS, Comp HIV 2** | **Summary:** The document is a report of a DQA exercise conducted on HIV data in Nigeria using the Measure Evaluation rotuine DQA tool.The HIV indicators assessed include **PMTCT\_STAT, PMTCT\_EID, PMTCT\_ART, HTS\_TST, TX\_NEW and TX\_CURR.** The report details an assessment of the M&E system generating the data as well as results of facility level data verification. The data were also assessed using the USAID 5 data quality standards: validity, reliability, integrity, precision and timeliness. | **Data Accuracy and Completeness:** There were no data accuracy and completeness issues identified during the exercise. | **Data Timeliness:** Data were reported across reporting levels in a timely manner, with good adherence to the reporting timelines. | **Data Confidentiality and Security:** The system in use for data management is passworded with access to only a few dedicated staff. The system also has built-in checks to prevent manipulation of the data. | **Data Management Capacity:** The human resource managing the data management system understand their roles and responsibilities and adhere to data management SOPs. However, there’s room for data management capacity improvement at the lower reporting levels. | **Recommendations**  Improve capacity of staff at lower reporting levels through routine supervisory efforts and on-site mentoring.. |
| **FY 19 HIV Data Audit Report 18Oct2019 Final** | **Summary:** The document is a report of a Data Audit exercise conducted on HIV data in Nigeria using a customized Microsoft Excel tool.The HIV indicators assessed include **HTS\_TST, HTS\_INDEX, TX\_NEW, TX\_CURR, TX\_PVLS, and OVC\_HIVSTAT POS.** The report details the concurrence rates at the various service delivery sites (Reported count at selected site/Validated count at selected site x 100). The report also contains highlights of the data quality issues identifed during the audit exercise. | **Data Accuracy and Completeness:** The exercise identified various data accuracy and completeness issues across reporting levels however, of all the indicators, TX\_CURR data had the least accuracy and completeness issues. The reporting for TX\_PVLS across reporting partners was not standardized. The bugs in the OVC electronic data management system contributed to the inaccuracy of the OVC indicator data. | **Data Timeliness:** Data were reported across reporting levels in a timely manner, with good adherence to the reporting timelines. | **Data Confidentiality and Security:** The system in use for data management is passworded with access to only a few dedicated staff. The system also has built-in checks to prevent manipulation of the data. | **Data Management Capacity:** The human resource managing the data management system understand their roles and responsibilities and adhere to data management SOPs. However, there’s room for data management capacity improvement at the lower reporting levels. | **Recommendations**  Improve capacity of staff at lower reporting levels through routine supervisory efforts and on-site mentoring.  Develop a SOP to guide the reporting of the TX PVLS indicator,disseminate same to all reporting levels. Develop a SOP to guide the timely filing of pharmacy order forms  in the client folders, especially for devolved clients who obtain their  medication within community facilities but their health records are domiciled in the health facility.  Conduct routine internal data audit exercises to detect and remediate issues relating to data transcription errors from client folder to LAMIS, missing client folders, use of temporary client folders, alterations on source documents without an authorizing signature and incompletely and  inaccurately filled PMM tools. |

**Discussion**

*[This section integrates the findings from the reviewed documents or data sources and provides a deeper analysis of their implications for the research question or objective. It should highlight the key insights, identify gaps or inconsistencies in the documents or data sources, and discuss potential explanations for these gaps or inconsistencies.]*

Introduction

This desk and literature review aims to assess the data quality of HIV/AIDS programs in Nigeria by examining the two documents provided: "Data.FI Nigeria DQA Comprehensive Report\_TR-22-28\_FINAL.docx" and "document\_221203\_081124.pdf." The review will summarize the findings of these reports, identify key issues, and offer suggestions for improvement.

Document 1: Data.FI Nigeria DQA Comprehensive Report\_TR-22-28\_FINAL.docx

Summary:

The Data.FI Nigeria Data Quality Assessment (DQA) Comprehensive Report provides an in-depth evaluation of the HIV/AIDS data management processes and practices in Nigeria. The report outlines the objectives, scope, methodology, findings, recommendations, and action plan for improving data quality in HIV/AIDS programs.

Key Findings:

Data Accuracy and Completeness: Although the data accuracy and completeness levels were satisfactory, there were discrepancies between data sources, and certain data elements had missing or inconsistent information.

Data Timeliness: The data submission timelines were not always met, leading to delays in data reporting and analysis.

Data Confidentiality and Security: While the existing data confidentiality and security measures were adequate, there were some gaps in data access controls and data backup processes.

Data Management Capacity: Limited human resources and inadequate training have hampered the data management capacity in the HIV/AIDS program.

Recommendations:

Strengthen data validation processes and tools to ensure data accuracy and completeness.

Improve data timeliness by enforcing deadlines and streamlining the reporting process.

Enhance data confidentiality and security through proper access controls and regular data backups.

Strengthen the capacity of data management personnel by providing regular training and support.

Document 2: document\_221203\_081124.pdf

Summary:

This document is an assessment report on HIV/AIDS data quality in Nigeria, focusing on data management, data reporting, and data usage. It evaluates the strengths and weaknesses of the existing system and provides recommendations to enhance data quality.

Key Findings:

Data Management: The data management system was fragmented and lacked standardization, leading to inconsistencies and inefficiencies in data collection and storage.

Data Reporting: The reporting process was prone to delays and inaccuracies due to incomplete and untimely data submissions.

Data Usage: There was limited utilization of the data for decision-making and program improvement, partly due to the lack of confidence in data quality.

Recommendations:

Establish a standardized and integrated data management system to enhance data quality and efficiency.

Strengthen the data reporting process through training and adherence to guidelines.

Promote data usage by building trust in data quality and demonstrating the value of data-driven decision-making.

Conclusion:

Both documents highlight the need for improvements in data quality for HIV/AIDS programs in Nigeria. Key issues include data accuracy, completeness, timeliness, confidentiality, security, and capacity. Addressing these issues through the recommendations provided will help to enhance data quality and ultimately support better decision-making and outcomes in the fight against HIV/AIDS in Nigeria.

Enter text below!

**Recommendations (optional)**

*[Based on the findings and discussion, this section may provide recommendations for further research, policy, or practice. Recommendations should be actionable and linked to the specific issues or insights identified in the review.]*

Enter text below!

**Conclusion**

[The conclusion should summarize the main findings of the desk review and emphasize their significance for the research question or objective. It should also highlight the implications of the findings for practice, policy, or future research and identify any limitations of the review.]

Enter text below!

**References (optional)**

*[If applicable, this section should list all the sources cited in the desk review, following the appropriate citation style (e.g., APA, MLA, IEEE). Make sure to include all the relevant information for each source, such as the authors, title, publication date, and publication details.]*

Enter text below! (APA Citation and reference)

World Health Organization. (2017a). Data quality review: module 1: framework and metrics.

World Health Organization. (2017b). Data quality review: module 2: desk review of data quality.

World Health Organization. (2017c). Data quality review: module 3: data verification and system assessment.