# Improving Data Quality for HIV Implementation in Akwa Ibom, Nigeria: Adaptation of the Ottawa Hospital Innovation Framework

### Authors

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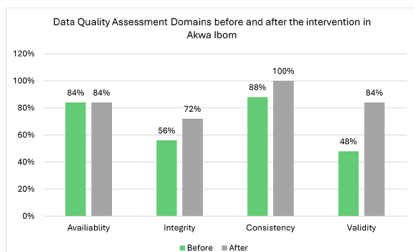[7]National Agency for the Control of AIDS (NACA), Abuja, Nigeria

## Background

Data quality is essential for effective monitoring and evaluation of HIV programs [1,2], but many health facilities in Nigeria face challenges in reporting quality data. The PEPFAR/USAID-funded Accelerating Control of the HIV Epidemic in Nigeria Project adopted The Ottawa Hospital Innovation Framework [3], a five-step simplified quality improvement approach, to improve data quality standards. This study reports the outcome of this intervention.

## Description

To define the problem, Data Quality Assessment (DQA) was conducted for July-September 2022, in October 2022 at 25 high-volume health facilities in Akwa Ibom State, Nigeria. Data availability, integrity, consistency, and validity were assessed using a program-adopted Data Verification/Validation Tool, with a benchmark score of 95-105% as passed. Root-cause analyses by the project quality improvement team for scores outside the benchmark revealed that gaps in data quality were due to low staff capacity a high staff attrition rate, new staff hires with limited experience, poor collaboration between government and project staff, and stock-out of data capturing tools. A health systems strengthening intervention to improve data quality included implementing corrective actions from the DQA, central daily/monthly gap profiling with feedback for immediate corrections, structured monthly capacity building sessions, team building efforts, peer-to-peer learning, use of bi-monthly tools inventory reporting systems, and site-supportive supervisory visits. Data validity, the most failed DQA domain, was monitored weekly using a resilience dashboard. To evaluate the intervention, another DQA was conducted for January-March 2023, in April 2023, and the mean number of domains passed per site was compared pre- and post-intervention using t-test.

## Lessons Learnt

Overall, 69% (69/100) domains were passed at baseline DQA (data availability: 84% (21/25), integrity: 56% (14/25), consistency: 88% (22/25), validity 48% (12/25)). Post-intervention, the domain pass rate was 85% (85/100), with better scores in 3 domains: data integrity: 72%, consistency: 100%, and validity: 84%. Data availability remained at 84%. The mean number of domains passed per site improved from 2.76 ± 1.26 to 3.4± 0.81 (p=0.054).



Data Quality Assessment Domains before and after the intervention in Akwa Ibom

> " Consistent quality improvement using evidence-based strategies has the potential to improve data quality

## Conclusions

A simplified quality improvement approach focused on improving data quality using evidence-based strategies, led to improvement in data validity of the HIV implementation program. However, strategies to address data availability can be further strengthened and implemented.

### References

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