



# Towards shared patient data: harmonization of District Health Information System data for nationwide reporting



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## Introduction

- o In Kenya, as in many developing countries, multiple uncoordinated demands for health data by the Ministry of Health (MoH) and implementing partners burden health facility workers and divert resources from patient care.
- o To facilitate coordinated collection of health data, the Kenya MoH has begun entering clinic-level HIV/AIDS data and other health indicators into a national District Health Information Software 2 (DHIS-2) system, urging partners to adopt DHIS-2 for reporting.
- o Concerns about data quality have hindered its adoption and DHIS-2 remains underutilized.
- o Beginning July 2012, Family AIDS Care and Education Services (FACES) established a collaborative program of DHIS-2 data quality monitoring and strengthening activities in partnership with the MoH.
- o The goal of this study was to evaluate the success of that collaboration in readying DHIS-2 data for FACES reporting use.

## Methods

### Setting:

- o FACES is a comprehensive, family-centered HIV prevention, care and treatment program funded by the Centers for Disease Control and President's Emergency Plan for AIDS Relief (PEPFAR).
- o FACES partners with the Kenya MoH to provide HIV services to >100 clinics in Nyanza Province and Nairobi.
- o Data for this study was collected at three district hospitals in Nyanza Province.

### Intervention:

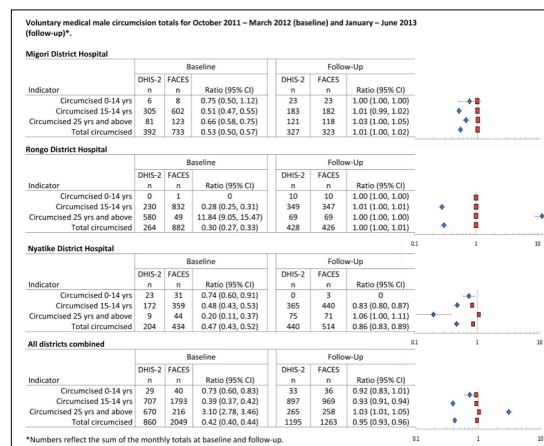
- o Voluntary medical male circumcision (VMMC) monthly monitoring figures were prepared independently by the office of the District Health Records Information Officer (DHRIO) and the FACES District Monitoring & Evaluation (M&E) Officer for district hospitals in Migori, Rongo and Nyatike districts. Figures were cross-compared and discrepancies harmonized through counter-checks against clinic registers.
- o Discussion sessions between the FACES M&E Officer and DHRIO identified understaffing as a primary barrier to better DHIS-2 data completeness. In response FACES hired a Health Records Information Technician (HRIT) to support data entry into DHIS-2 at each DHRIO office.
- o FACES District M&E Officers conducted on-the-job mentorship and continuing data entry skills training with the DHRIO and HRIT.

### Measurement and Analysis:

- o The ratio of data in DHIS-2 to the FACES M&E system was calculated for each VMMC indicator during a baseline period before the collaboration began (October 2011 – March 2012) and a follow-up period after the collaboration was underway (January – June 2013).

## Results

- o Harmonization uncovered large discrepancies between DHIS-2 and FACES VMMC figures at baseline. Comparing DHIS-2 to FACES, the total numbers circumcised were reported as: 392 vs. 733 at Migori District Hospital (ratio=0.53); 264 vs. 882 at Rongo District Hospital (ratio=0.30); 204 vs. 434 at Macalder District Hospital (ratio=0.47); and 860 vs. 2049 overall across all districts (ratio=0.42; 95%CI 0.40, 0.44).
- o VMMC figures were more similar across databases when queried again after harmonization was underway. Total numbers circumcised were reported as: 327 vs. 323 at Migori District Hospital (ratio=1.01); 428 vs. 426 at Rongo District Hospital (ratio=1.00); 440 vs. 514 at Macalder District Hospital (ratio=0.86); and 1195 vs. 1263 overall across all districts (ratio=0.95; 95%CI 0.93-0.96).



## Conclusions

- o A collaboration between the Kenya MoH and an implementing partner resulted in better data alignment for reporting.
- o National and programmatic resources should be channeled towards similar harmonization efforts and on-going quality assurance activities to support broad implementation of DHIS-2 across Kenya.

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