Building Capacity in Analysis and Use of District HIV/AIDS Data: *Workshop Report, Nakuru County-Kenya, August 2013*

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Background

The AIDS, Population and Health Integrated Assistance project in Rift Valley, APHIAplus Nuru ya Bonde, is a five-year program (2011-2015)] supported by the United States Agency for International Development (USAID). APHIAplus Nuru ya Bonde works to improve health outcomes and impacts through sustainable country-led programs and partnerships.

The project works to increase the use of quality services, products and, information and address social determinants of health to improve the wellbeing of communities in five out of the 14 counties in Rift Valley region of Kenya — Baringo, Nakuru, Narok, Laikipia and Kajiado.

One of the key mandates of APHIAplus Nuru ya Bonde project is to strengthen capacity to record, report and use of data for decision-making at the county, district, facility and community levels.

The project works with Civil Society Organizations (CSOs), the District Health Management Teams (DHMTs) and other national level partners to strengthen the Health Management Information System [HMIS]. To achieve this, the project uses four key approaches that include mentorship, making available the standard data collection and reporting tools, enhancing coordination, and improving data quality and use.

In August 2013, APHIAplus Nuru ya Bonde in collaboration with the Nakuru County Health Management Team organized an introductory data analysis and use workshop. The workshop targeted nine District Health Information Officers (DHRIOs) and District HIV/AIDS and STI Coordinators (DASCOs) from each district. HIV activity managers, facility managers and HRIOs from three facilities — Nakuru provincial hospital, Gilgil and Molo district hospitals — also attended.

Representatives from the Division of Health management Information System (HMIS), National AIDS and STI Control Programme (NASCOP], the agency that coordinates management of HIV/AIDS programs in Kenya, and DHMTs attended the two-day workshop.

APHIAplus Nuru ya Bonde M&E staff, the Head of M&E at NASCOP, County Health Records Officer and a representative of the Division of HMIS facilitated the workshop.

Key M&E Strategies

Key strategies to strengthen recording, reporting and data use
- Building the capacity, knowledge and skills of Monitoring and Evaluation Officers to provide technical assistance;
- Ensuring standard reporting tools are available at data collection points;
- Building the capacity of health care workers and community volunteers to use the tools;
- Creating demand for use of data for decision making and improving data quality.

Objectives

Specific objectives of this introductory workshop were to:
- Build capacity of county and district health staff in data analysis, presentation, use and interpretation.
- Contribute to standardizing the types of analysis county and district teams can do with their routine data.
- Generate hypotheses for further investigation, which may feed into the county data analysis plan.

Approach

The workshop followed a participatory process, combining intense practical exercises, presentations of best practices and frameworks for routine data analysis. Case studies derived from actual HIV prevention, care and treatment data for July 2012 to June 2013 period from the District Health Information Systems [DHIS] formed the basis for discussions.

Workshop Opening Remarks and Presentations

The workshop was officially opened by Dr. Benedict Osore, the County Director of Medical Services. In his remarks, he acknowledged the national level for building M&E capacity at county level.

He reported that from the analysis of key health indicators in 2008, it was difficult then to establish magnitude of events. He cited the extent of sexual and gender based violence during the post-election violence in 2008 from the available data from Nakuru PGH. Recent analysis have indicated an improvement, however, there was still need for better results. Dr. Osore also noted that that so far all hospitals had embraced technology for data management and should therefore use the information available to improve efficiency in service delivery.

He emphasized the need to go beyond reporting requirements to focus on data analysis and sharing, which is key in promoting best practices to address health challenges. In addition, he recommended the allocation of resources for operation research targeting coverage, uptake of services and missed opportunities for service provision.

Finally, the County Director of Medical Services reiterated the need for conducting quarterly information sharing and review forums at facility, districts and departmental level.

An overview of APHIAPlus Nuru Ya Bonde project was presented followed by a presentation on DHIS2 system updates including how to navigate, view and verify data. The presentation covered pivot tables, data visualizer, graphs and GIS.

The participants appreciated the different ways in which data is presented in DHIS2 and particularly the fact that they could identify sites and outliers in the data.

The final presentation on different ways of presenting routine

HIV data illustrated general frameworks for monitoring HIV/AIDS programs including the cascade analytical framework and how this can be used to identify opportunities for service improvement.

The participants appreciated the cascade framework and its utility in determining if HIV/AIDS interventions were working. [Fig. 1.]

Fig. 1. PMTCT Cascade framework presentation
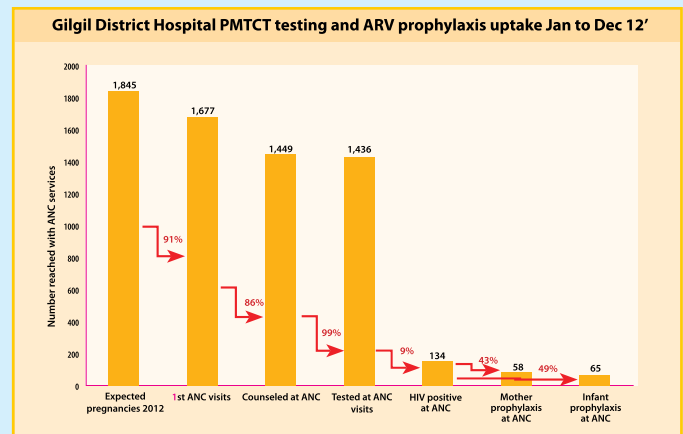
Group Work

Participants were divided into four groups each with case studies and a copy of the County Data Analysis Workbook containing data extracted from DHIS [Fig. 2.] They were tasked to work on two case studies using the routine data for Nakuru County for the period July 2012 and June 2013.
The data was from 375 health facilities in nine districts.
The objective of the exercises was to identify how well the different interventions were working e.g. HIV testing and counseling by analyzing Nakuru county HIV/AIDS routine data.
Below are two case studies that formed part of the group work:

Case Study 1 Group Assignment

Each of the four groups was asked to use data for 12 months from July 2012 to June 2013 of HIV testing and counseling [HTC] data to chart the overall trend in HTC Nakuru County by testing points, quarter, age and sex and respond to the following questions:

- What proportion of HIV positive tests are from DTC, VCT etc. How does this compare with 2009 national data of DTC 39%, VCT 32%, PMTCT 17% and TB 11%?
- What changes have been seen from the last 6 months in 2012 compared to the first 6 months of 2013?

Findings for Case Study 1

Key findings as indicated in Fig. 3 and 4 below were as follows:

- There was a steady increase in HTC uptake among male and female children from the Jul-Sep 12' to the Apr-Jun 13' quarter and a decline in testing among males and females aged above 15 years from the Oct-Dec 12' to the Apr-Jun 13' quarter [Fig. 3].

- Uptake for both female adults and children was higher compared to males [Fig. 3] .

- Findings indicate the need to formulate strategies to deliberately target males both below and above 15 years with HTC to increase uptake among this group in the county.

- While the national level had DTC with the highest proportion of HIV positive tests at 39%, VCT had the highest at county level at 34% [Fig. 4.] .

- TB HIV positives tests were the least among all tests at both national [11%] and county level [15%] even though the county level rates were slightly higher [Fig. 4.] .

Fig. 3.
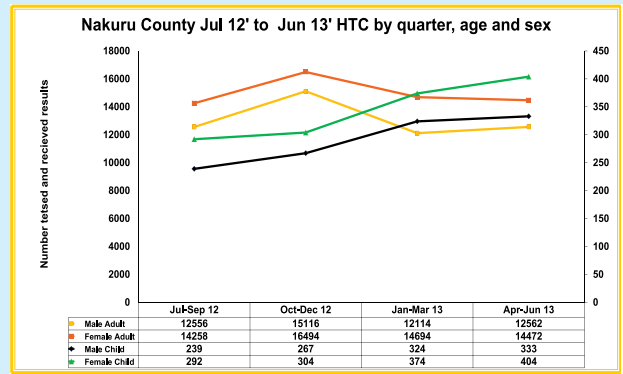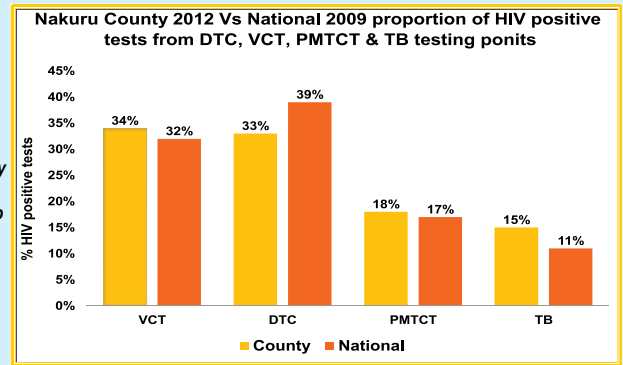*HTC quarterly performance by age and sex group presentation*

Nakuru County Jul 12' to Jun 13' HTC by quarter, age and sex

	Jul-Sep 12	Oct-Dec 12	Jan-Mar 13	Apr-Jun 13
Male Adult	12556	15116	12114	12562
Female Adult	14258	16494	14694	14472
Male Child	239	267	324	333
Female Child	292	304	374	404

Fig. 4.
HTC Nakuru County verses National performance group presentation

Nakuru County 2012 Vs National 2009 proportion of HIV positive tests from DTC, VCT, PMTCT & TB testing ponits

County: VCT 34%, DTC 33%, PMTCT 18%, TB 15%
National: VCT 32%, DTC 39%, PMTCT 17%, TB 11%

Workshop participants in a group exercise.

Case Study 2 Group Assignment

Participants were asked to design a 'cascade' analysis graph for PMTCT which looks at the progression of clients through the different stages of service, from initial HIV tests to treatment and outcomes. They answered the following questions:

- Which component appear to be functioning best, and why?
- What improvements have been seen in the component over the last year?
- Where are the opportunities for improvement?
- What information is missing and what are the data quality issues?
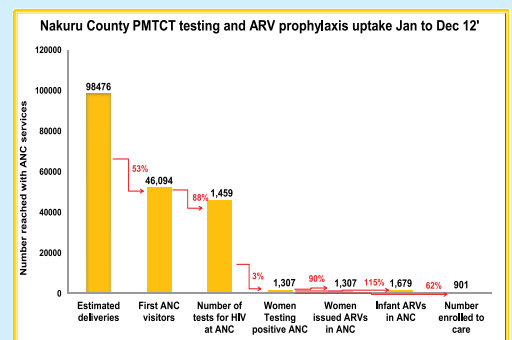
Findings for Case Study 2

- The coverage of ANC services in Nakuru county is 53%
- Of those pregnant women who attended ANC, 88% were reached with HIV testing services
- Only 62% of HIV-positive pregnant women identified through PMTCT were enrolled into care in Nakuru county
- Provision of maternal prophylaxis is working well in Nakuru county, 90% of pregnant women who were eligible for prophylaxis received it.
- The results showing 115% infant prophylaxis provided indicates the need for the reexamination of the quality of

data for data elements used.
- Further, there is need to strengthen the enrollment of HIV positive PMTCT clients into care and coverage of ANC services in Nakuru County.

Fig. 5. PMTCT Cascade group presentation

Nakuru County PMTCT testing and ARV prophylaxis uptake Jan to Dec 12'

Estimated deliveries 98476, First ANC visitors 46,094 (53%), Number of tests for HIV at ANC 1,459 (88%), Women Testing positive ANC 1,307 (3%), Women issued ARVs in ANC 1,307 (90%), Infant ARVs in ANC 1,679 (115%), Number enrolled to care 901 (62%)

District Health Records Officer for Subukia District Judy Machani Presents on behalf of her group.

What participants said

- "It [workshop] enlightened me on importance of correct data collection for higher level decision-making."
- "I will [analyze] and share data reported before submitting to DHIS. I will form a data quality team to be studying reports for decision-making."
- "Verify data critically before submitting them to the next level."
- "Check data for correctness; ensure data presentation to collectors and users."
- "Analyze data within the department before forwarding or entering it in the summary tools."
- "Share data with district health management team and provide feedback to facility in-charges."
- "Clean data in DHIS."
- "Critically look at data to check on quality for good decision-making."
- "Ensure data speaks. Give data presentations in all forums."
- "Data analysis and use of different chart or graphs makes it easy to identify existing gaps and challenges."

Chief facilitator's final word

"The link between analysis and use is very important. The critical question is how we use the data to improve services," said Dr. Mike Merrigan, an M&E Regional Technical Advisor from FHI 360.

Conclusions

The workshop ended with an increased demand among district stakeholders for improvement in the timeliness and completeness of DHIS data. Dissemination of data in a more systematic manner will guide and sharpen the focus of program implementation, and enhance the utility of data for policy making. With effective mechanisms for data quality assurance still in development, improving this area of the M&E system will be highly complementary, and indeed a necessary prerequisite to achieving the objective of making more out of routine data.

Recommendations

- Facilitate analysis and use of data from routine health information systems and community health information system (CHIS)]at facility level and in community health units.
- Ensure results from M&E are used to improve project implementation. (M&E results be presented in ways that facilitate decision-making at the facility, district, county and project level)
- Work with national HIV/AIDS program agencies to identify M&E gaps and share reporting rates.
- Give more time to group work and presentations to allow discussions of the findings.
- Organize a field visit to one of the districts that is performing well in data analysis.

Specific action plans

To address common challenges identified during the workshop, participants developed these action points:

- Regularly clean up data at source ([in the DHIS)], including investigating outliers,
- Harmonize reporting tools to ensure they are aligned to data entry module in the DHIS,
- Share data at facility, sub-county and county levels,
- Develop and disseminate service performance standards,
- Incorporate activities arising from data use into annual work plans and county strategic plans,
- Make data analysis and use for decision-making a routine process,
- Facilities to document reasons for data variance and share with relevant programs.

Nakuru County Health Records Information Officer Luke Kiptoon led in action-planning to strengthen data-driven decision-making