## STRENGTHENING THE KENYA HEALTH MANAGEMENT INFORMATION SYSTEM (HMIS) FOR MONITORING AND EVALUATION OF THE APHIA II NYANZA PROJECT

(AIDS, Population, and Health Integrated Assistance, June 2006-December 2010)















## **INTRODUCTION**

Despite marked progress in many areas over the past decades, Kenya continues to grapple with challenging health problems and issues of health service delivery. At the end of 2005, the United States Agency for International Development (USAID) issued a series of Requests for Applications (RFAs) covering assistance to the health sector for the entirety of Kenya, through separate agreements for all provinces. The proposed assistance programs were titled APHIA II (AIDS, Population and Health Integrated Assistance). EngenderHealth led the consortium that submitted the winning proposal for Nyanza Province. Other partners include the Academy for Educational Development, the Christian Health Association of Kenya, the Inter Diocesan Christian Community Services, and the Program for Appropriate Technology in Health. The project is slated to run from June 2006 through December 2010, with an initial budget of US\$21 million, which has since been increased to US\$36 million.

APHIA II Nyanza now works with Kenya's Ministry of Health, as well as faith- and community-based organizations and other agencies, to reduce the risk of HIV transmission and the fertility rate in Nyanza. Specifically, the project focuses on the following three objectives:

- Improve and expand facility-based HIV and AIDS, tuberculosis, reproductive health/family planning, malaria, maternal and child health, and male circumcision services
- Improve and expand civil society activities to increase healthy behaviors
- $\bullet$  Improve and expand care and support for people and families affected by HIV and AIDS



## **BACKGROUND AND STRATEGY**

Monitoring and evaluation of health programs funded by international donors and working with the Kenya Ministry of Health (on issues such as HIV and AIDS, malaria, child survival, and others) have historically been highly vertical, using both international programmatic data tools and Ministry of Health tools in a parallel, overlapping fashion. This was a burden for health workers required to implement both sets of tools within these programs.

The winning consortium of partners on the APHIA II Nyanza Project, including EngenderHealth, was aware of this issue and incorporated it into the project design from the beginning. The project proposal asserts both the need to "involve stakeholders in planning for, collecting, and using data for decision making" and the need to design activities to "build the capacity of partners to develop, implement, and evaluate their own programs." This implied strengthening the Kenya Ministry of Health's Health Management Information System (HMIS), including building the capacity of health workers.

To ensure success in this area, **APHIA II Nyanza collaborated with the Ministry of Health to identify indicators for the national HMIS to track.** The project then developed a plan to work with the Ministry to generate data that would serve the needs of both the Ministry of Health and the project. **The plan was based on the strategy of rolling out revised data registers to all health facilities, training health workers to use these registers in their work**, and following up to ensure that they were using the registers properly and collecting high-quality data. **This approach creates symbiosis and economies of scale**.

The APHIA II Nyanza Monitoring and Evaluation (M&E) Unit planned the use of the following three database systems related to the Kenya HMIS to manage data for decision making:

- The Health Facility Service Delivery Database System
- The Kenya HIV/AIDS Program Monitoring System (for reporting on indicators of the President's Emergency Plan for AIDS Relief [PEPFAR])
- The Training Track System (covering training for all three project activity areas).

"Supporting a national system for project monitoring and evaluation is a worthwhile effort that ensures an effective symbiotic partnership and also results in a sustained, effective and strengthened national Health Management Information System."

## IMPLEMENTATION

"We have been neglected for a long time. No one has ever thought that we need to be supported. Thank God APHIA II Nyanza came to work with us, to support us to build our [national system].

– District Health Records and Information Officer, Nyando District Once the project was launched in June 2006, a monthly forum known as the Provincial HMIS Steering Team was created for the Provincial Health Records and Information Officer, District Health Records and Information Officers (DHRIOS), and APHIA II Nyanza M&E Unit staff members. The creation of this team was significant, because at the time there was no structure at the provincial level that allowed for participatory planning and review of health information management or the review of challenges and prioritization of support interventions. Earlier attempts by previous projects had perpetuated vertical interventions.

The Provincial HMIS Steering Team now discusses data trends and data quality issues for the previous month, as well as DHRIO supervision of health facilities and health workers. To reinforce the link, DHRIOs submit their data to the APHIA II Nyanza Project for project reporting. This has ensured consistency in reporting HMIS data.

#### Health facility-based activities

The Health Facility Service Delivery Database System (linked to Objective 1, above) uses Ministry of Health summary tools to capture data for the project. The project provides support to DHRIOs each month to help them collect data and supervise data collection at health facilities. These project data are captured in an access-based system, transformed into Excel format, and then entered quarterly into the Kenya HIV/AIDS Program Monitoring System for sharing with USAID. Since DHRIOs are responsible for collecting both Ministry of Health and project data, these data are now identical in both systems.

#### HIV and AIDS activities

The Kenya HIV/AIDS Program Monitoring System is an access-based indicator monitoring database used to manage, monitor, and evaluate PEPFAR-supported HIV and AIDS prevention and treatment programs. This system operates through in-country implementing partners who manage specific data and forward them to the national level, where U.S. Government program managers automatically aggregate the data.

#### Capacity building

To operationalize the above systems and support HMIS data management capacity, APHIA II Nyanza has supported the **training of 240 health care workers on all revised Ministry of Health HMIS registers**. An additional 248 received training on specific registers relevant to health facility services. **Specific tools** for which health care workers have received training **include registers for family planning**, **immunization**, **antiretroviral treatment**, **and prevention of mother-to-child transmission of HIV**.

DHRIOs and data clerks from nine project-supported districts have undergone training on computers and statistical applications. In both 2008 and 2009, the project M&E Unit provided support to the Ministry of Health for the development of its Annual Operation Plan in 14 districts, at the level of US\$130,000 in 2008 and US\$195,000 in 2009.

APHIA II Nyanza has also supported HMIS data management capacity by:

- Funding the purchase of computers and printers in two new districts (Masaba and Rongo)
- Strengthening and improving data sharing with DHRIOs in supported districts during monthly strategic information meetings
- Organizing meetings with health-care workers at sites offering antiretroviral treatment for HIV and AIDS, to discuss challenges and provide ongoing training on revised HMIS tools
- Providing DHRIOs from the nine project-supported districts with a quarterly supply of stationery, pens, and printer toner
- Providing the Rongo District DHRIO with office furniture and seven other districts with filing cabinets
- Supporting the reinforcement of windows and doors to protect furniture and equipment supplied to the Rongo District DHRIO office

The project M&E Unit monitors activity results by:

- Collecting and analyzing performance data to influence project decision making and resource allocation
- Communicating results achieved or not achieved in all three areas of activity (see the three Objectives above) to improve performance
- Ensuring that data quality and integrity are maintained through technical assistance activities

## OUTCOMES TO DATE

As APHIA II Nyanza nears the end of Year 3, it is clear that the project has accomplished a great deal in the area of strengthening the national HMIS for project monitoring and evaluation. The project has established well-functioning database systems covering all three areas of activity: health facility-based activities; community strategy; and community-based care and support for people and families living with HIV and AIDS. These systems now capture many important health service statistics, including HIV and AIDS services (antiretroviral treatment, palliative care, prevention of mother-to-child transmission, and tuberculosis diagnosis and treatment), family planning, reproductive health (including male circumcision), maternal and child health, child survival (including immunization), and others.

To date, 18 DHRIOs have received training in data management, while 895 people have received training in strategic information. Nearly 400 health care workers have benefited from training on the use of HMIS registers, while 10 districts have received support for systems strengthening in the form of materials and supplies. Table 1 on page 7 summarizes these figures. APHIA II Nyanza support for health care workers, DHRIOS, and the Provincial Health Records and Information Officer has improved data quality and use within project districts. Project-supported districts now have significantly improved HMIS reporting rates, increasing from an average of 68% in 2007 to 93% in 2009, as summarized below in Table 2.

Table 1: APHIA II Nyanza Project: Indicators Related to Strengthening the Kenya HMIS for Project Monitoring and Evaluation, 2007–2009

Indicator	Current cumulative total
No. of people trained on strategic information	895
No. of health care workers trained to use HMIS registers	389
No. of districts supported with materials and supplies for systems strengthening	10

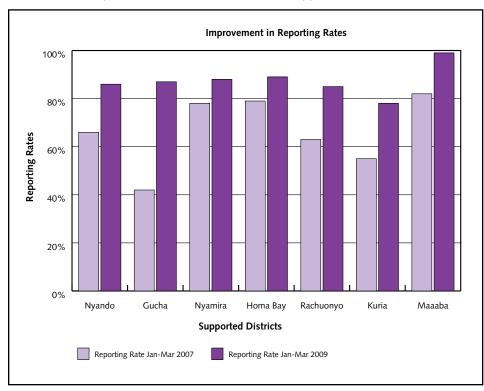


Table 2: HMIS Reporting Rates in APHIA II Nyanza-Supported Districts, 2007–2009

# SUSTAINABILITY AND RECOMMENDATIONS

Looking forward toward the APHIA III Project, which will begin in 2011, APHIA II Nyanza plans to continue strengthening Kenya's HMIS system by computerizing antiretroviral treatment sites so that data are more accurate and available in real time. DHRIOs will receive support for strengthening information, communications, and technology, with the goal of linking districts to the province. The project will also promote continuous mobility for DHRIOs to provide ongoing support to health facilities, to improve and maintain data quality.

The current engagement with decentralized Ministry of Health structures including the Provincial Health Management Team, the District Health Management Teams, and capacity-building focal points such as the DHRIOs—will help sustain the streamlined HMIS well beyond the end of the project. Health facility staff members now have the capacity to use relevant tools and work within a framework for support supervision. Routine HMIS meetings will continue to provide a forum for sharing challenges and identifying solutions.

APHIA II Nyanza experience with strengthening the Kenya HMIS system has yielded the following recommendations:

- Relevant programs should strengthen existing HMIS Systems rather than create new ones.
- Decentralized HMIS departments at provincial and district levels (in the case of Kenya, the Provincial Health Records and Information Officers and the DHRIOs) should receive regular assistance to support health facilities with reporting-related challenges. These departments need reasonable funds to provide this service.
- Programs should establish and support a coordination forum to meet on a regular basis (e.g., monthly) to share experiences on information management.

For further information, contact: aphia@aphianyanza.org Writer: Albert Kombo © 2009 EngenderHealth

#### APHIA II Nyanza Project

Dr. Job Obwaka, Project Director 1st Floor, ABC Place, Waiyaki Way, Westlands P. O. Box 57964-00200, Nairobi. Tel: (+254-20) 4444922, 4444778, 4449471 Fax: (+254-20) 4447022

The circulation of this publication is made possible through APHIA II Nyanza, which is managed by EngenderHealth, with generous support from the American people through the United States Agency for International Development (USAID) under the terms of cooperative Agreement No, 623-A-00-06-00020-00. The contents do not necessarily reflect the views of USAID of the United States Government.

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