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For more information on the work of the USAID ASSIST Project, please visit www.usaidassist.org or write assist-info@urc-chs.com.

Recommended citation

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Abbreviations

ANC  Antenatal care
ART  Antiretroviral treatment
ASSIST USAID Applying Science to Strengthen and Improve Systems
CHW  Community health workers
CSI  Child Status Index
DHMT District Health Management Team
GHI  Global Health Initiative
GOB  Government of Burundi
HCI USAID Health Care Improvement Project
HIV/AIDS Human immunodeficiency virus/Acquired immunodeficiency syndrome
HMT Health management team
HR  Human resources
HRH Human resources for health
HTC HIV testing and counseling
KM  Knowledge management
MOH Ministry of Health
OVC Orphans and vulnerable children
PEPFAR U.S. President’s Emergency Plan for AIDS Relief
PHMT Provincial Health Management Team
PMTCT Prevention of mother-to-child-transmission
PNDS National Plan for Health Development
PNLS National Program for the Fight Against AIDS/STIs
QI  Quality improvement
SCMS Supply Chain Management System
STI Sexually transmitted infections
TB  Tuberculosis
USAID U.S. Agency for International Development
1 Introduction

More than 89,000 people in Burundi are living with HIV. The HIV prevalence in the country is reported to be 1.3%. HIV treatment coverage is low, with only 67% of people eligible for antiretroviral treatment (ART) accessing it. In 2012, an estimated 1,300 infants were born with HIV (UNAIDS 2013). The Government of Burundi (GOB) is committed to improve treatment coverage, especially for women living with HIV, and to scale up prevention of new HIV infections among children. In an effort to improve the national response to HIV and AIDS, Burundi with technical assistance from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), has drafted a national HIV strategic plan (2012-2016) with the objective of defining clear priorities to guide the interventions of various donors. Recognizing that Burundi is a Global Health Initiative (GHI) focus country, the U.S. Government intends to build on the successes achieved and lessons learned thus far in the country as well as globally to support the Government’s health priorities.

Although the current National Plan for Health Development (PNDS) 2011-2015 has explicitly highlighted quality needs, quality is related to a traditional vision without a continuous, methodological and structured approach. Since FY12, PEPFAR-Burundi requested technical assistance from the USAID Health Care Improvement Project (HCI) and provided funding to ensure that prevention of mother-to-child-transmission of HIV (PMTCT), antiretroviral therapy (ART), and orphans and vulnerable children (OVC) services offered in Burundi respond to quality requirements and that quality is introduced to both technical content and managerial practices at all levels of the health care system.

Under HCI funding, a baseline assessment was conducted in the first quarter of FY13 with the goal of identifying strengths and weaknesses of HIV and AIDS services in Burundi to inform the design of an improvement program. Twenty-one (21) sites located in four northern PEPFAR-assisted provinces (Kirundo, Muyinga, Kayanza, Kiruzi) were selected in close collaboration with the Ministry of Health (MOH) and the National AIDS Control Program (PNLS). Data were collected through interviews with health providers and register and medical chart reviews. Key results and recommendations of this assessment were:

- Documentation was poor for ART adherence, counselling, and for key PMTCT and HIV care and treatment indicators.
- While initial CD4 count was available for the majority of patients whose records were reviewed, CD4 counts were available for only a minority at follow-up.
- Integration of PMTCT services with antenatal care (ANC) was low for timely enrollment; the proportion of women whose partners were tested was also very low.
- The frequency of HIV testing for pregnant women was not standardized across sites and in line with national guidelines. Few sites were conducting serologic testing for exposed infants. Voluntary testing and counseling can be done at facilities during antenatal care; referring women to labs risks patient loss.
- Patient flow for clinical care was more complicated than necessary and should be simplified to minimize loss to follow-up. Referring pregnant women for prophylaxis risks patient loss. Few sites were initiating ART for pregnant women and exposed infants according to guidelines. Although lab work prior to treatment initiation is beneficial, making it a requirement means excluding those who cannot afford it. Tuberculosis (TB) screening and TB treatment was not prevalent.
- Documentation was cited as the only means to ensure that HIV-positive women and their infants are enrolled in PMTCT. Additional measures should be implemented, as documentation alone does not ensure follow-up. Data were not used for quality improvement or to ensure that HIV-positive women and their infants are enrolled in PMTCT.
- Lack of ART for women and newborns at facilities should be addressed. Lack of TB medications at ART sites constitutes a serious barrier to treatment.

In January 2013, technical assistance to help the Ministry of Health of Burundi close the gaps identified in the baseline assessment transitioned to the USAID Applying Science to Improve Systems (ASSIST)
Project. In Burundi, USAID ASSIST is working in close collaboration with the GOB, the MOH, other USAID implementing partners (e.g., FHI 360, MEASURE Evaluation, SCMS, Engender Health), and local NGOs to provide technical assistance at the national, provincial, and district levels to service providers and managers to implement improvement activities relating to PMTCT service integration with existing MNCH and HIV services.

In FY13 the work took place in 70 sites in all 13 districts in the four target provinces of Kayanza, Kirundo, Muyinga, and Karuzi. As part of support to Burundi’s HIV strategy, ASSIST supported the GOB to improve PMTCT clinical practices, to address performance factors in human resources for health (HRH), and to help the country to improve its documentation and management of information. In FY14, ASSIST will support Burundi to spread the best-practice interventions to four more USAID-supported provinces.

2 Program Overview

<table>
<thead>
<tr>
<th>What are we trying to accomplish?</th>
<th>How will we know?</th>
<th>At what scale?</th>
</tr>
</thead>
</table>
| 1. Implement a PMTCT improvement intervention in four provinces in the Northern Region of Burundi | • Proportion of pregnant women attending ANC visits  
• Proportion of pregnant women covered by PMTCT services  
• Proportion of HIV-positive women receiving care and treatment  
• Proportion of newborns of positive women tested at adequate periods  
• Proportion of HIV-positive children receiving care and treatment  
• Proportion of partners of women enrolled in PMTCT services tested for HIV | 13 districts in 4 out of 17 provinces  
70 sites (of 115 PMTCT sites)  
2,669,858 inhabitants (of 9,420,248) |

3 Key Activities, Accomplishments, and Results

Accomplishments and Results

Activity 1. Implement a PMTCT improvement intervention in four provinces in the Northern Region of Burundi

- Developed a change package with expert stakeholders based on the quality gaps identified in the baseline assessment.
- Conducted meeting of 20 supervisors in the four provinces on the creation of QI teams and the monitoring plan for implementation of the change package (Quarter 2).
- Collected baseline data at 70 sites. In February 2013, baseline data were collected in all 70 facilities for a retrospective period of seven months (from July 2012 to January 2013).
- Conducted coaches’ training on improvement, data measurement, and documentation (March 2013). In July 2013, ASSIST organized a refresher session for coaches on integration of changes in human resource performance management and the reinforcement of the community health system. During September 2013, in collaboration with the PNLS, ASSIST conducted a training session for new coaches from PNLS (6) and District Health Management Teams (DHMT) (14). Participants were trained on basic QI principles and the collaborative approach.
- Created 70 QI teams and job descriptions for all health care workers involved in PMTCT in all 70 target sites. A QI orientation workshop was held in December 2012. QI teams met on a weekly basis to discuss QI implementation.
- Held three learning sessions for the 70 sites implementing PMTCT QI activities. One session per province was organized and a total of 178 participants attended the learning sessions, including site representatives, coaches and members of District and Provincial Health Management Teams. The main objective of the sessions was to strengthen the capacity of key stakeholders in PMTCT.
improvement. In collaboration with the PNLS, participants were trained on: QI principles and improvement models; building a QI team and its functions; making and analyzing detailed process diagrams to generate ideas for change and improvement plans; human resource performance factors; quality indicators; and creating a monitoring plan. Sites also shared their experiences through presentations. During the learning sessions, the participants chose the best sites per district and province, per predefined criteria.

- **Tested changes.** Changes tested included:
  
  o Materials describing the advantages of partner testing posted at all gathering venues
  o A female community leader sensitized women on the advantages of going for their first ANC visit early in their pregnancy, as well as the importance of HIV testing and counselling (HTC) among couples
  o A male community leader organized outreach activities for men providing information on the advantages of HTC among couples
  o Increasing the number of days facilities offer ANC per week
  o Giving pregnant women unique identification numbers throughout their pregnancy (ANC, HTC, maternity, postnatal care)
  o Providing incentives (e.g., soap) to community health workers (CHWs) who accompany the couple to ANC activities
  o Sites introduced a system where instead of giving the ANC cards and the mosquito nets to pregnant women at their first ANC visit, the facility asked women to ask their partners to come in to collect the cards and the nets. This provided a good opportunity for partners who agreed to come to the health centers to go for HTC.
  o Providing HTC during the ANC visit and providing HIV results on the same day of the ANC visit
  o Providing ANC to all pregnant women regardless of their reason to go to the health facility
  o Nurses assisting CHWs in their PMTCT community outreach activities and providing information on the advantages of early ANC to clients

Results show improvements in partners tested for HIV and number of pregnant women tested for HIV: The percentage of women enrolled in ANC whose partners were tested for HIV increased from 0.2% in September 2012 to 17% in September 2013 (Figure 1). Figure 2 shows that the gap between women receiving ANC services and getting tested for HIV continued to decrease from the baseline throughout the improvement period.

**PMTCT Improvement Strategy**

The improvement collaborative approach is being implemented. QI teams were created in the targeted sites. Learning sessions between QI teams and onsite visits were organized. QI teams were formed in the 70 facilities, and ASSIST provided technical support during learning and coaching sessions. The collaborative approach is implemented in close collaboration with the PNLS.

Refining clinical protocols to match the ‘gold standard’ of PMTCT care is expected to increase the number of pregnant women who are enrolled in PMTCT services, to raise the level of adherence to treatment, and to expand access to also reach women’s husbands and children.

To support Burundi in strengthening its health system to deliver HIV and primary care services throughout the country, the project also addressed system challenges and human resources performance as key elements to maintaining quality of care.

**Spread Strategy**

ASSIST’s strategy for sustaining results focuses on involvement of all levels of the health system in implementation of the collaborative approach. ASSIST will continue working in the first four targeted provinces by supporting the MOH, the Provincial and District HMTs to implement PMTCT quality improvement activities, and then spread to other districts and facilities within the same provinces. The project will also provide support to the MOH to scale up to four new provinces.
Figure 1: Percentage women from ANC facilities whose partners are tested for HIV (July 2012 – Sept. 2013)

Examples of changes tested:
1. Advantages of partners testing posted at all gathering venues
2. A male leader sensitizes the men on the advantages of HTC among couples
3. Each woman who comes for ANC receives an invitation to give her partner
4. Couple comes for ANC receives motivation such as soap, pen, etc.

<table>
<thead>
<tr>
<th># women from ANC whose partners are tested for HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>7  4  4  2  7  4  130 211 200 396 334 345 701 828 1130</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th># pregnant women from 1st ANC visit tested for HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1915 2199 1896 2244 2201 1978 5523 4888 5124 5331 4160 3453 5204 5343 4718</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% women from ANC whose partners are tested for HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 0 0 0 0 2 5 4 7 8 10 13 15 24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th># of Sites</th>
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<tbody>
<tr>
<td>65 66 66 66 66 66 68 68 68 69 69 60 59 66 66 64</td>
</tr>
</tbody>
</table>

Figure 2: Number of pregnant women seen during 1st ANC visit and number of pregnant women tested for HIV, from baseline (July – Dec. 2012) to ongoing improvement period (Jan. – Sept. 2013)

Examples of changes tested:
1. HTC done in ANC room and result given in the same room on the same day
2. Increase the number of days of ANC per week
3. ANC provided to all pregnant women regardless of reason of presence at HF
4. CHW assisted by nurse sensitizes the community on the advantages of early ANC

<table>
<thead>
<tr>
<th># pregnant women from 1st ANC visit tested for HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>4117 5893 3496 5765 5841 5510 8673 5020 5551 5901 4975 4054 5893 5168 4959</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th># pregnant women tested during ANC visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953 2248 1945 2278 2261 2019 5518 4686 5124 5331 4158 3434 5154 5165 4454</td>
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<table>
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<tr>
<th># of Sites</th>
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<tr>
<td>66 67 67 67 67 68 68 68 69 69 60 60 66 66 64</td>
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</table>

- **Conducted site coaching visits:** Coaches visited all 70 sites (4 visits). ASSIST staff accompanied the coaches on visits to 13 sites (Quarter 4).

- **Conducted community QI activities assessment within Giteranyi Health District as pilot site (Muyinga):** ASSIST began community activities in Giteranyi health district located in Muyinga province. During the last quarter of FY13, existing community groups were identified and their activities mapped. The database is now available while the analysis is ongoing.
Improvement in Key Indicators

<table>
<thead>
<tr>
<th>Activity</th>
<th>Indicators</th>
<th>Baseline</th>
<th>Last value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Implement a PMTCT improvement intervention in four provinces in the</td>
<td>Proportion of pregnant women tested (during ANC visits)</td>
<td>47% (July ‘12)</td>
<td>91% (Sept.’13)</td>
</tr>
<tr>
<td>Northern Region of Burundi</td>
<td>Proportion of pregnant women covered by PMTCT services</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Proportion of HIV positive women receiving care and treatment</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Proportion of newborn of positive women tested at adequate periods</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Proportion of positive children receiving care and treatment</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Proportion of partners tested (husbands or partners of enrolled women in</td>
<td>0% (July 2012)</td>
<td>24% (Sept. 2013)</td>
</tr>
<tr>
<td></td>
<td>PMTCT services)</td>
<td>(54 sites)</td>
<td>(64 sites)</td>
</tr>
</tbody>
</table>

NA = Not available until FY14

What Are We Learning?

- Involving coaches/supervisors at different levels of the health care system (through coaching visits, facilitating meetings, training, and communication) has created enthusiasm for and a sense of ownership of the improvement work.

- The sustainability of the achievements of the collaborative approach depends on the membership and ownership of the approach by managerial structures. While the officials in charge at the provincial and district levels were initially hesitant to participate in the improvement work, we progressively involved the District and Provincial Management Teams in the implementation of the collaborative. Coaches of QI teams were selected from district supervisors and managers of DHMTs and PHMTs who regularly participated in learning sessions and trainings.

- Sites do not have the habit of analyzing the data that they collect before it is transmitted. We discovered that analyzing the data with QI team representatives during learning sessions and coaching visits helps them understand the importance of improving documentation in the QI process.

4 Sustainability and Institutionalization

USAID ASSIST worked closely with all levels of the health system in Burundi to ensure the sustainability of the achievements of the collaborative approach. Working with the DHMTs and PHMTs in the supervision and coaching of QI teams allowed for ownership of the approach by the MOH counterparts and will ensure the sustainability of results. The project will help the MOH to develop plans to spread this approach to sites not currently involved in the pilot phase.

In order to sustain the results, QI teams were encouraged to incorporate discussions about the QI collaborative in other meetings outside of QI team meetings in their sites (e.g., health committee meetings or coordination meetings of health facilities).

Throughout the year, ASSIST encouraged the involvement of other MOH programs in the improvement work, including the HIV/AIDS program, the National Health Information System, and the Human Resources Department to ensure the institutionalization of the project. This built clear national ownership and coordination through the HIV/AIDS program. USAID ASSIST is also fostering ownership at the district and health facility management levels.
5 Knowledge Management Products and Activities

In June 2013, the Burundi ASSIST staff participated in the knowledge management (KM) training for field staff in Abidjan on KM concepts and techniques. During FY14, the project will develop KM strategies to incorporate KM into our improvement work.

6 Directions for FY14

- Continue implementing improvement activities (documentation, HCT, and human resource performance) in all 70 targeted sites in the four provinces.
- Expand collaborative interventions to other topic areas identified as gaps in the baseline assessment (i.e., retention, clinical care).
- Integrate health workforce performance management interventions as part of improving PMTCT services.
- Scale up the PMTCT collaborative approach in other sites within the same provinces and in four new provinces.
- Implement the community QI approach in the pilot district (Giteranyi Health District in Muyinga province).
- Conduct a study to identify factors associated with testing among male partners of women seeking antenatal care in Burundi.
- Organize stakeholders’ meeting to disseminate best practices from the PMTCT collaborative and community QI pilot intervention.