Acknowledgements
This country report was prepared by University Research Co., LLC (URC) for review by the United States Agency for International Development (USAID) under the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project, which is funded by the American people through USAID’s Bureau for Global Health, Office of Health Systems. The project is managed by URC under the terms of Cooperative Agreement Number AID-OAA-A-12-00101. URC’s global partners for USAID ASSIST include: EnCompass LLC; FHI 360; Harvard University School of Public Health; HEALTHQUAL International; Initiatives Inc.; Institute for Healthcare Improvement; Johns Hopkins Center for Communication Programs; and WI-HER LLC.
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

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<th>Description</th>
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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired immunodeficiency syndrome</td>
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<tr>
<td>ANC</td>
<td>Antenatal care</td>
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<td>ART</td>
<td>Antiretroviral therapy</td>
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<tr>
<td>ASSIST</td>
<td>USAID Applying Science to Strengthen and Improve Systems Project</td>
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<tr>
<td>CHW</td>
<td>Community health worker</td>
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<td>DHMT</td>
<td>District Health Management Team</td>
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<td>ENC</td>
<td>Essential newborn care</td>
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<tr>
<td>FY</td>
<td>Fiscal year</td>
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<tr>
<td>GOB</td>
<td>Government of Burundi</td>
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<td>HCI</td>
<td>USAID Health Care Improvement Project</td>
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<tr>
<td>HCT</td>
<td>HIV counseling and testing</td>
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<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>PEPFAR</td>
<td>U.S. President’s Emergency Plan for AIDS Relief</td>
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<tr>
<td>PHA</td>
<td>People with HIV/AIDS</td>
</tr>
<tr>
<td>PHMT</td>
<td>Provincial health management team</td>
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<tr>
<td>PMTCT</td>
<td>Prevention of mother-to-child transmission of HIV</td>
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<tr>
<td>PNLS</td>
<td>National Program for the Fight against AIDS and Sexually Transmitted Infections</td>
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<tr>
<td>Q</td>
<td>Quarter</td>
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<tr>
<td>QI</td>
<td>Quality Improvement</td>
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<tr>
<td>SIMS</td>
<td>Site Improvement Monitoring System</td>
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<tr>
<td>TPS</td>
<td>Technicien de Promotion de la Santé</td>
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<tr>
<td>URC</td>
<td>University Research Co., LLC</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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1 Introduction

With funding support from the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR), the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project began work in Burundi in January 2013, building on a prevention of mother-to-child transmission of HIV (PMTCT) service delivery assessment and human performance technology assessment conducted in 2012 under the USAID Health Care Improvement Project (HCI). The project is working with the Ministry of Health (MOH) to improve the uptake and quality of PMTCT services for mothers, their partners, and their infants and to improve retention of mothers and infants along the PMTCT cascade. Specifically, ASSIST is collaborating with the MOH, Government of Burundi (GOB), and other USAID implementing partners to: 1) provide technical assistance at the national, provincial, and district levels to service providers and managers to implement improvement activities relating to PMTCT service integration within existing maternal, newborn, and child health and HIV services; 2) apply collaborative improvement methods that improve uptake of PMTCT services, retention of mothers and infants along the PMTCT cascade, and quality of PMTCT services; and 3) support the MOH to address human performance factors to enhance providers’ productivity, motivation, and compliance with standards. In addition to the GOB and MOH, ASSIST is working in closely collaboration with FHI360, Pathfinder International, Management Sciences for Health (Supply Chain Management Systems), MEASURE Evaluation, Abt Associates, EngenderHealth, and local non-governmental organizations to address these health care gaps.

During fiscal year (FY) 2014, ASSIST continued to support the sites in four provinces the project supported in FY13. In March 2014, four additional provinces were visited to introduce the USAID ASSIST Project as a new partner. In June 2014, ASSIST began to develop materials to support the extension of improvement work into the new sites in the eight provinces. In addition, a community quality improvement (QI) demonstration project was launched in Giteranyi District in the first quarter of FY14 as a pilot phase in order to strengthen the community system to support community health worker (CHW) activities to improve the quality of PMTCT services.

Scale of USAID ASSIST’s Work in Burundi
2 Program Overview

<table>
<thead>
<tr>
<th>Activities</th>
<th>What are we trying to accomplish?</th>
<th>At what scale?</th>
<th>Improvement Activity</th>
</tr>
</thead>
</table>
| 1. Implementing a PMTCT improvement intervention in eight provinces | • Improve uptake of PMTCT services (by mothers, infants, and partners)  
• Improve retention of mothers and infants along the PMTCT cascade  
• Improve quality of PMTCT services  
• Strengthening Community System to improve the performance of CHWs to provide quality of PMTCT services at the community level | 8 of 17 provinces  
12 of 12 health districts in the 4 initial provinces  
Facilities: 70 of 150 PMTCT sites in the 12 initial districts  
Community health system: 24 sub-collines surrounding 6 of 15 facilities in Giteranyi District  
Qi teams: 70 facility teams; 24 community teams  
Coverage: 5,608,308/10,557,259 inhabitants | x |

3 Key Activities, Accomplishments, and Results

**Activity 1. Implementing a PMTCT improvement intervention in eight provinces**

**BACKGROUND**

As in many other sub-Saharan African countries, the HIV pandemic in Burundi continues to be a growing public health threat. The HIV prevalence among the general population is 1.4%, with infection rates higher among women than men (1.7% versus 1%), resulting in more than 80,000 people, including 19,000 children under the age of 15, living with HIV infection. Although PMTCT availability has increased in recent years, coverage remains inadequate: in 2012, the overall PMTCT coverage was estimated at 41%, while the rate of transmission of HIV from mother to child was estimated at 24.7%. The challenges are severe: only one in three antenatal care (ANC) facilities in the country offer PMTCT services; only 60% of women deliver in health facilities; and only 32% of women receive any postnatal care.

In an effort to improve the national response to HIV/AIDS, Burundi has drafted national HIV strategic plans with the objective of defining clear priorities to guide the interventions of various donors. The most recent plan, 2012-2016, was prepared with technical assistance from PEPFAR, which sets realistic objectives for prevention, treatment, care and support in Burundi. In addition and in response to these PMTCT challenges, the GOB has renewed its focus on eliminating new pediatric HIV infections and developed a National Elimination Plan for PMTCT, 2012-2016 (*Plan d’élimination de la transmission du VIH de la mère à l’enfant au Burundi*). This plan focuses on systematically increasing HIV counseling and testing (HCT), integrating PMTCT services across antenatal health facilities nationwide, and mobilizing male participation in ANC visits. Since Burundi is a Global Health Initiative focus country, USAID support for PMTCT is part of larger assistance to the GOB in the health sector.

ASSIST’s work in Burundi is built on previous HCI successes and is continuing and reinforcing these interventions as well as initiating new approaches. ASSIST’s work in Burundi uses a collaborative improvement approach in collaboration with the MOH and implementing partners.

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2 Demographic Health Survey, 2010
ACCOMPLISHMENTS

- **Conducted site coaching visits in four provinces: Kayanza, Kirundo, Muyinga, and Karusi.** During FY14, coaches conducted coaching visits in all 70 PMTCT sites. Visits were conducted by district coaches and either National Program for the Fight against AIDS and Sexually Transmitted Infection (PNLS) or ASSIST technical staff and were carried out in 30 sites (Q1), 21 sites (Q2), 28 sites (Q3), and 8 sites (Q4) to assess and support the functionality of QI teams. The coaching visits throughout the year were focused on collecting change ideas tested that resulted in favorable improvements. The change ideas will ultimately be collated into a package of best practices to be shared with sites in all eight provinces. The objective of this work is to develop the competencies of the coaches in improvement and coaching skills to help sites address other areas identified as gaps in the baseline assessment (i.e., retention, clinical care).

- **Organized a refresher training for district coaches in the four initial provinces (Nov 27-29, 2013).** With the technical assistance of Mr. Sabou Djibrina, Quality Improvement Advisor from the Regional Office in Niger, ASSIST Burundi and the MOH organized a three-day workshop for the district coaches to strengthen their capacities to address improvement gaps identified during coaching visits.

- **Organized refresher training on QI process for provincial and district management teams and hospital management in the four initial provinces.** During March 2014, in collaboration with the PNLS, ASSIST organized a refresher training on the QI process for provincial and district management teams and hospital directors in the four initial provinces in which ASSIST was working; the 24 participants included MOH and PEPFAR/USAID Mission representatives. This training was organized in order to reinforce the capacity of medical doctors, chiefs of the District Health Offices, and the Provincial Office of Health as well as hospital directors on the collaborative approach for improvement of PMTCT activities. It was also an opportunity to discuss their roles and responsibilities in the coordination of improvement activities at each level -- district and provincial health management teams (DHMT, PHMT) and hospital -- with the objectives of encouraging them to integrate those activities in their respective activity plans at each level.

- **Conducted the fourth and fifth learning sessions for 70 QI teams from the four initial provinces (Q1-2).** ASSIST Burundi conducted the fourth learning session for 70 QI teams from Kayanza, Kirundo, Muyinga, and Karusi provinces. Mr. Sabou Djibrina provided support and technical assistance. A total of 160 participants attended the session, including site QI team representatives, coaches, and members of district and provincial health management teams. The main objective was to strengthen the capacity of key stakeholders in the process of implementing the PMTCT improvement collaborative and sharing experiences through presentations by sites and feedback related to the previous coaching visits. During this learning session, change ideas were collected to identify the practices which produced the best results. At the time of this learning session, the participants chose the best sites per district and province based on predefined criteria. Change ideas were collected in order to help identify those that really produced better results. The fifth learning session was conducted in August 2014 in collaboration with the MOH. Each of the 70 QI teams was represented by two members. Provincial health managers, district health managers, and one coach per health district also participated in the session. The main objective was to share change ideas tested by each site, analyze improvements obtained, and validate data that showed evidence of improvement. The session provided the opportunity to discuss recommended next steps for teams, including the development of the final package of best practices and strategies which will be used to inform the extension phase in new sites in the four expansion provinces.

- **Extended the collaborative improvement work into the new PEPFAR provinces (Gitega, Ngozi, Bujumbura, and urban Bujumbura).** During March 2014, ASSIST staff conducted briefing visits to the provincial and district management chiefs in the four new provinces. During these visits, the following was achieved: presentation of ASSIST as a new partner in the province, introduction of the USAID ASSIST Project and its technical role within the PEPFAR program in Burundi, the QI collaborative approach, and proposed next steps.
• **Initiated community QI activities within Giteranyi Health District as pilot site (Muyinga Province).** In the first quarter, after the collection and the analysis of basic information for mapping groups in communities surrounding health facilities in Giteranyi District, ASSIST Burundi started its community activities by organizing a community coaches’ training and community groups’ orientation session. Mr. Ram Shrestha, from ASSIST headquarters, provided support and technical assistance. Sixteen community coaches were trained. For the community groups’ orientation session, a total of 68 community group members including local leaders and community workers attended. During the community coaches training and orientation session, 24 community committees were created, and community QI indicators were identified.

• **Conducted the first learning session for community committees in Giteranyi District.** In April 2014, in collaboration with the MOH, ASSIST conducted the first learning session for the 24 community committees located in the Giteranyi District where ASSIST is implementing community health systems activities. Sixty-eight participants attended the session, including 30 community committee representatives as QI team members, four Technicien de Promotion de la Santé (TPS) (who serve as community coaches), 15 community health workers, three chiefs of collines, eight participants from the health centers covered by the collaborative approach, six MOH representatives, and two commune and provincial representatives. The main objective of the session was to strengthen the capacity of community committee members and other key stakeholders in the process of strengthening the community health system and increase their understanding of the roles that existing community groups can play in improving health outcomes. Participants were trained on quality improvement principles and community improvement models; how to build a community quality improvement team and its functionality; information flow; data gathering; and experience sharing through the presentation of drawings that illustrate the network of groups that make up each community health system. During this learning session, the participants selected indicators which will be collected monthly and help in measuring improvement.

• **Provided technical assistance to community committees in the pilot district of Giteranyi.** During the second half of FY14, the community coaches continued coaching visits to the community committees corresponding to sub-collines. Coaching visits were conducted to eight community committees by teams of community coaches (TPS) and PNLS or ASSIST technical staff. The coaching visits focused on the data collection tool and how to identify and test changes.

• **Developed documents for the extension into the new sites in the eight provinces.** In June 2014, ASSIST Burundi with the technical assistance from Dr. Justin Mandala, FHI360
Technical Advisor for PMTCT, began developing basic documentation for the extension into the new sites in the eight provinces. The package of documents included: 1) the final change package from phase I; 2) development of dissemination strategies; and 3) definition of the provisional package of changes for phase II. The development of these documents continued through the end of the fiscal year. The documents are expected to be finalized and validated during the first quarter of FY15.

- **Research study conducted.** “Factors associated with HIV testing among male partners of women in antenatal care”. In February 2014, data collectors for the study were trained, and a pre-test study data collection tool was conducted. The objective of this research study is to determine the barriers and inhibitors to engaging male partners in antenatal care (ANC). Data collection was completed; analysis will continue into FY15.

- **Engaged with MOH and partners throughout the year.** During FY14, ASSIST Burundi participated in meetings, workshops, and key events organized by the MOH and partners in order to strengthen collaboration and improvement efforts. These activities included the following:
  
  - Participated in meetings of the National AIDS Control Council, PNLS, the PEPFAR/USAID team, and its implementing partners which focused on the coordination of HIV activities in Burundi (January and April 2014).
  
  - Participated in a dissemination workshop of the new WHO PMTCT guidelines and a validation workshop of the roadmap on decentralization of ARV treatment organized by the PNLS (March 2014).
  
  - Attended a coordination meeting of the health partners organized by Kayanza’s provincial health management team (March 2014).
  
  - Participated in the training on supervision of HIV activities organized by PNLS (May 12-14, 2014).
  
  - Contributed to the elaboration of the new HIV National Strategic Plan 2014-2017 (July 2014).
  
  - ASSIST Burundi received delegates from the Ministry of Home Affairs and the Ministry of External Affairs who wanted to see how the project operates and the nature of its assistance in the health sector (July 21-22, 2014).
  
  - Participated in the training on the Site Improvement Monitoring System (SIMS) organized by PEPFAR (September 14-19, 2014).

**RESULTS**

**Improvement in Key Indicators**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Indicators</th>
<th>Baseline July 2012</th>
<th>Last value August 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementing a PMTCT improvement intervention in eight provinces</td>
<td>Proportion of pregnant women tested during ANC visits</td>
<td>47% (69 sites)</td>
<td>99.8% (69 sites)</td>
</tr>
<tr>
<td></td>
<td>Proportion of partners tested (husbands or partners of enrolled women in PMTCT services)</td>
<td>0% (69 sites)</td>
<td>51% (69 sites)</td>
</tr>
<tr>
<td></td>
<td>Number of exposed children tested at 18 months</td>
<td>9 (69 sites)</td>
<td>20 (69 sites)</td>
</tr>
</tbody>
</table>

- Improvements were observed in the proportion of women in ANC whose partners were tested for HIV (Figure 1) and in decreasing the gap between the number of pregnant women enrolled in the first ANC visit and those who were tested for HIV (Figure 2).
- Historically, sites were not tracking the number of children exposed to HIV. Therefore, sites did not know how many children required follow-up testing. QI teams tested changes and created a mechanism for tracking and follow-up exposed children, and improvements were observed (Figure 3).
- Improvements were observed in the documentation of PMTCT services before delivery (Figure 4).
Figure 1: Percentage of women from ANC whose partners are tested for HIV, 69 sites, 12 districts, 4 provinces (July 2012 – Aug 2014)

Figure 2: Closing the gap between the numbers of pregnant women enrolled in the first ANC visit and those who have been tested for HIV, 69 sites (July 2012 – Aug 2014)
SPREAD OF IMPROVEMENT

During the demonstration phase, the sites identified changes that could be used for spread of improvement in other new sites. The validation of these changes will be done through a workshop with PMTCT stakeholders at all levels (health district, health province, central level) and partners in the demonstration phase (coaches and site providers). A dissemination strategy will be developed to operationalize this final change package in the new sites.

The spread sites will be selected in other sites not covered by the collaborative during the demonstration phase in the same four targeted provinces (Kayanza, Kirundo, Muyinga, and Karusi), and other sites in the four new provinces (Ngozi, Gitega, Bujumbura Rural, and Bujumbura Mairie). Spread agents will be selected among the coaches, providers, supervisors, and health officials who have expressed interest and enthusiasm in QI during the demonstration phase. Their role will be to support the new coaches identified in the new provinces.
4 Sustainability and Institutionalization
USAID ASSIST works closely with all levels of the health system in Burundi to ensure the sustainability of improvements achieved. ASSIST’s strategy of joint supervision and coaching visits with the PNLS prepares for the ownership of the approach by the MOH counterparts.

Coaching visits were held jointly with coaches selected from DHMTs and PHMTs. QI teams were encouraged to incorporate discussions about the PMTCT improvement work in other meetings outside of QI team meetings in their sites (e.g., health facility committee meetings or health district coordination meetings).

In order to institutionalize improvement approaches, refresher trainings on the QI process were conducted to improve capacity of PHMTs, DHMTs, and hospital management in the four initial provinces. It was also an opportunity to discuss their roles and responsibilities in the coordination of improvement activities at each level, to encourage them to integrate those activities in their respective activity plans at each level.

5 Knowledge Management Products and Activities
- ASSIST Burundi, with technical assistance from the regional office, continued to develop basic documents for extension of improvement work to new sites in eight provinces: (i) development of the final package of changes tested in phase 1; (ii) development of dissemination strategies; and (iii) definition of the provisional package of changes for phase 2.
- ASSIST Burundi produced a success story which shows how people applied knowledge acquired during a training session. The success story was published as a blog in French and English on the ASSIST Knowledge Portal (https://usaidassist.org/blog/le-travail-du-centre-de-sant%C3%A9-de-kinyami-au-niveau-communautaire).

6 Research and Evaluation
- Drafted protocol for “Factors associated with not returning to health centers among pregnant women who tested positive for HIV”. Study planned for FY15.
- Increasing male participation has been identified as a potentially critical strategy to enhance PMTCT uptake in PEPFAR countries. A baseline assessment conducted by HCI in 2012 revealed low HIV testing among male partners of pregnant women in Burundi, with only 6% of pregnant women tested for HIV during ANC reporting that their partners had also been tested. To inform the selection of changes for testing in the PMTCT collaborative, ASSIST designed a study to enhance the QI intervention package by identifying factors that promote or inhibit HIV testing among male partners of women seeking antenatal care. Findings will inform the development of a package of best practices to promote male testing, which is seen as a proxy for male participation in PMTCT programs. The study, “Factors associated with HIV testing among male partners of pregnant women,” will address the following research questions:
  - What socio-demographic factors are associated with being tested for HIV among partners of women in ANC?
  - What are the individual and structural factors that are associated with testing among partners of women enrolled in ANC?
- In the last quarter of FY14, began data analysis and reporting for the study. Dr. Astou Coly, Senior QI Advisor for Research and Evaluation, travelled to Burundi to provide technical assistance. She conducted preliminary analysis for the study. A total of 504 women and 360 men (including 360 couples) were interviewed to assess factors associated with male involvement in maternal and child health services in Burundi. Analysis and the study report will be finalized in FY15.
- In order to meet USAID ASSIST requirements of validating 25% of improvement indicators, in FY14 Dr. Coly travelled to Burundi where she:
  - Provided support for the development of a data quality assessment tool to monitor the quality of data collected at the facility level. The tool is currently being pretested and is expected to be used during coaching visits.
o Provided input on baseline assessment reports drafted by the Burundi and Niger teams.
o Planned data collection to meet the project’s research and evaluation mandates in Burundi (validation, use of control group, and economic analyses). A prospective controlled study will be conducted during FY15 to meet all three requirements. Intervention sites will be selected from the new spread sites.
o Discuss other potential studies to be conducted in FY15. The Burundi team is interested in conducting a study to quantify retention in PMTCT programs in Burundi, as very little data are available on this topic. Study design and data collection methods were discussed. The feasibility of this study will be determined by the availability of funds.

7 Gender Integration Activities
- During FY14, the ASSIST team in Burundi worked to address gender gaps within the PMTCT program. In order to increase male partner testing, the following activities were tested and initiated: 1) letters sent inviting male partners to visit the health care facility; 2) desirable incentives given to couples; and 3) male community leaders were educated on the advantages of HIV testing and counseling among couples.
- ASSIST Burundi conducted a study related to the factors influencing HIV testing among partners of pregnant women attending the first ANC visit. The results of this study will guide our strategy to be implemented in order to address gender-related factors.

8 Directions for FY15
In FY15, due to FY14 funds being obligated late, the project is still implementing some of the FY14 activities. ASSIST will continue to support previous sites and to begin spreading the best practices and tested changes into new sites in both the original four provinces and in the additional four USAID-supported provinces (Ngozi, Gitega, Bujumbura Rural, and Bujumbura Mairie). In addition, ASSIST will also begin to prepare to expand the content of the collaborative improvement interventions (phase 2) to other areas identified as gaps in the baseline assessment, such as retention in care and quality of clinical care.