



**USAID**  
FROM THE AMERICAN PEOPLE

**USAID ASSIST Project**  
Applying Science to Strengthen  
and Improve Systems

## CASE STUDY

### Improving retention of children in HIV treatment in Uganda

With support from the United States Agency for International Development (USAID) Applying Science to Strengthen and Improve Systems (ASSIST) Project, a team of health care workers from 47 health facilities and one hospital in 40 districts (48 sites) in Uganda used quality improvement methods to improve retention of HIV-positive children under age 14 on antiretroviral therapy (ART). Dramatic improvements were noted, from 30% of children under age 14 retained on ART in March 2013 before the start of intervention activities to 94% by end of January 2014.

#### Background

Currently 7.3 percent of Uganda's population is living with HIV (Government of Uganda, 2012). Approximately 2.5 million people are infected with HIV in Uganda, including more than 900 children who become infected every year.

Good quality of care is one of the key elements of the right to health. The Ministry of Health (MoH) in Uganda emphasizes quality and patient safety to ensure efficient and effective utilization of resources at all levels of health care. HIV care is no exception to this intention, and in the last decade the Government of Uganda has rapidly scaled up HIV care services to HIV-infected clients at lower level health facilities (levels III and IV) in collaboration with health development partners. However, imbalances in access to equitable services for certain client categories, as for example children, still exist.

In order to contribute to minimizing this inequity, in 2013 the USAID ASSIST Project worked with nine in-country USAID implementing partners (IPs) in 48 HIV treatment centers located in 40 districts in Uganda to improve HIV care and treatment for both adults and children. The work involved a structured improvement approach, called collaborative improvement, where sites worked independently to test out changes in the HIV care and treatment changes and then come together periodically to share results and to learn from each other about which changes were successful and which ones were not. The aim of the improvement collaborative is to ensure access to the entire cascade of HIV care services for both children and adults ranging from client identification through enrollment into care, initiation on ART, retention on ART, and retention in care for those that are not ART-eligible, to improve clinical outcomes for clients in care and treatment across the continuum of response.

#### Interventions

Together with district-based implementing partners, USAID ASSIST identified 48 HIV care centers across Uganda with noticeable challenges in implementing comprehensive HIV care. Following the selection of these facilities, the USAID ASSIST team conducted training in quality improvement for health workers from the selected facilities, and ASSIST, IP staff, together with health unit staff conducted a baseline assessment of the facilities on a common set of indicators to measure HIV performance and service provision gaps in quality of care processes. Gaps in services provision that were noted through the baseline survey included: low uptake of HIV counseling and testing; poor linkages of those testing positive, including HIV-infected babies, into HIV care; poor linkages of HIV/TB co-infected patients to ART; and poor TB treatment completion and cure rates.

MARCH 2014

This case study was produced for review by the United States Agency for International Development (USAID) and authored by Humphrey Megere and Silvia Holschneider of University Research Co., LLC (URC). The case study was prepared by the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project, made possible by the generous support of the American people through USAID. The USAID ASSIST Project's support for improving HIV care in Uganda is supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). The project is managed by URC under the terms of Cooperative Agreement Number AID-OAA-A-12-00101. For more information on the work of the USAID ASSIST Project, please visit [www.usaidassist.org](http://www.usaidassist.org) or write [assist-info@urc-chs.com](mailto:assist-info@urc-chs.com).

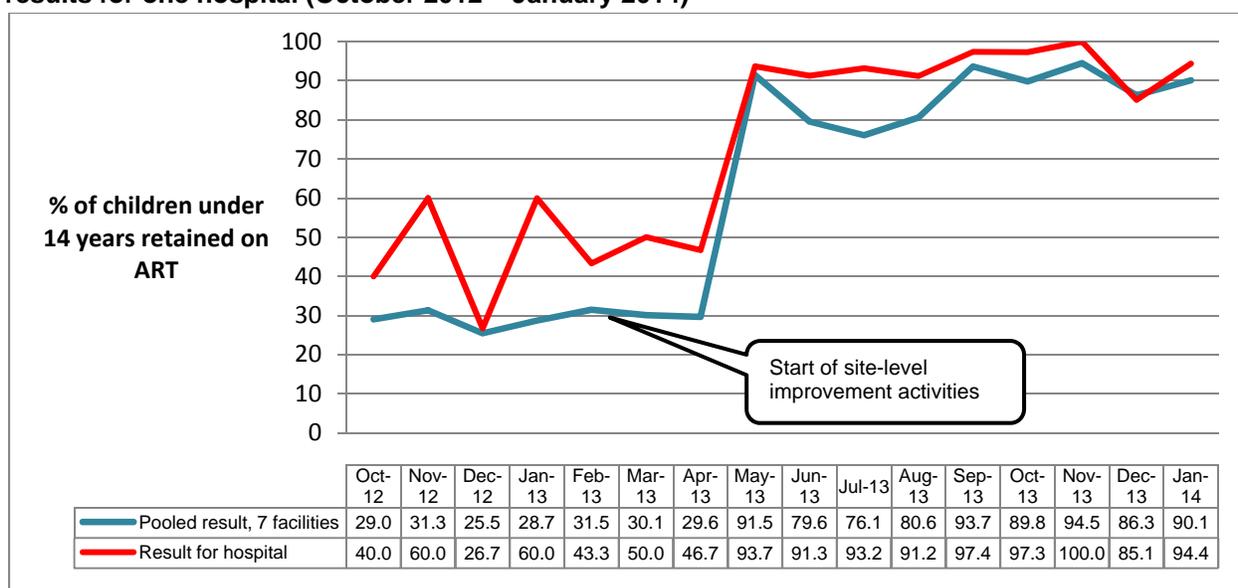
Seven health facilities (six health centers and one hospital) had gaps with retaining children on ART and chose to initiate improvement efforts towards improving children’s retention on ART by working on improving clinic appointment keeping for all children under age 14. To support sites in addressing these gaps, ASSIST, district MOH staff, and implementing partners provided monthly on-site coaching to the quality improvement teams.

Motivated by the support received through the coaching visits, facility-level teams tested several changes towards improving appointment keeping. Initially all facilities assigned a specific staff member to track the health facility’s performance on clinic appointment keeping for children. After this, they introduced other changes. The changes that were noted to be successful included: Pairing mother-baby HIV clinic cards; community follow-up of children missing clinic appointments by expert patients; synchronizing children’s clinic appointment dates with those of their HIV-infected parents or guardians; and engaging the TB DOTS officers to offer home visits and follow-up of children with missed appointments and treatment adherence issues.

## Results

Dramatic improvements were noted at the seven facilities that chose to work on improving retention of children on ART, from 30% of children under age 14 retained on ART in March 2013 just before the start of intervention activities to 94% by end of January 2014 (Figure 1). All children who tested HIV-positive are enrolled in ART, irrespective of their CD4 cell count.

**Figure 1: Percentage of children under 14 years retained on ART, Pooled results for 7 facilities vs. results for one hospital (October 2012 – January 2014)**



In addition, other benefits resulted from the improvement interventions at the participating HIV care centers among which were: improvement in clinic data management and HIV client flow at the clinics; shortened client clinic time and improved clients’ satisfaction; reduction in providers’ fatigue and improved providers’ morale since they were able to complete their clinic tasks in a more timely fashion.

## Lessons Learned

Implementing simple interventions, often at minimal cost, at HIV care centers can result in improvements in patient care processes that are capable of making significant contributions to improve retention in care for HIV clients, especially children. ASSIST is now working to spread what we have learned about improving children’s retention in care to other facilities in Uganda with similar gaps in retention of children on ART.