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*Applying Science to Strengthen  
and Improve Systems*

## USAID ASSIST Project

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# Uganda Country Report FY15

**Cooperative Agreement Number:**

AID-OAA-A-12-00101

**Performance Period:**

October 1, 2014 – September 30, 2015

**DECEMBER 2015**

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## Abbreviations

AE	Adverse events
AIDS	Acquired immunodeficiency syndrome
AMTSL	Active management of the third stage of labor
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral
ASSIST	USAID Applying Science to Strengthen and Improve Systems Project
CMS	Central Medical Store
COR	Continuum of Response
CPHL	Central Public Health Laboratories
CQI	Continuous quality improvement
CSO	Civil society organization
DBS	Dried blood spot
DHO	District Health Officers
DM	Diabetes mellitus
EID	Early infant diagnosis
EmONC	Emergency management of obstetric and neonatal complications
eMTCT	Elimination of mother-to-child transmission of HIV
ENC	Essential newborn care
EPCMD	Ending Preventable Child and Maternal Deaths
FP	Family planning
HBB	Helping Babies Breathe
HC	Health center
HCI	USAID Health Care Improvement Project
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSD	Health Sub-district
HSSIP	Health Sector Strategic and Investment Plan
HTC	HIV testing and counselling
ICF	Intensified case finding
IMCI	Integrated management of childhood illness
IMNCI	Integrated management of newborn and childhood illness
IMM	Integrated management of malaria
MCH	Maternal and child health
MNCH	Maternal, newborn, and child health
MMR	Maternal mortality rate
M&E	Monitoring and evaluation
MGLSD	
MOH	Ministry of Health
MUAC	Mid-upper arm circumference
NACS	Nutrition assessment, counselling, and support
NHP II	National Health Policy II
NMS	National Medical Stores
NQIF	National Quality Improvement Framework
OPD	Outpatient department
OVC	Orphans and vulnerable children

PE/E	Pre-eclampsia/eclampsia
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PHFS	Partnership for HIV-Free Survival
PLHIV	Persons living with HIV
PMTCT	Prevention of mother-to-child transmission of HIV
PPH	Post-partum hemorrhage
PTL	Preterm labor
QAD	Quality Assurance Department
QI	Quality improvement
RH/FP	Reproductive health/family planning
RRH	Regional Referral Hospital
RTI	Respiratory tract infection
SAM	Severe acute malnutrition
SCORE	Sustainable Comprehensive Responses
SDS	Strengthening Decentralization for Sustainability
SLAMTA	Strengthening Laboratory Management towards Accreditation
SMC	Safe male circumcision
SMGL	Saving Mothers Giving Life
TB	Tuberculosis
TWG	Technical working group
UCG	Uganda Clinical Guidelines
UPHS	Uganda Private Health Support Program
URC	University Research Co., LLC
USAID	United States Agency for International Development
USG	United States Government
VCPC	Village Child Protection Committee
VMMC	Voluntary medical male circumcision
VHT	Village health team
WHO	World Health Organization

# 1 Introduction

The USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project began working in Uganda in October 2012 by building on the work of the USAID Health Care Improvement Project (HCI). ASSIST in Uganda is supporting the Ministry of Health (MOH), districts, implementing partners (IPs), and health facilities to improve the HIV continuum of response, improve the quality of safe male circumcision services, improve tuberculosis (TB) case detection and treatment, and implement the Partnership for HIV-Free Survival (PHFS) initiative. The project also supports the MOH to use improvement methods to improve maternal and newborn health services, integrate family planning services into primary care and referral facilities, and apply lessons learned from pilot facilities to other sites. ASSIST is also working to improve TB services through improving intensified case finding (ICF); ensuring every TB patient receives a complete TB care package at USAID ASSIST-supported health facilities; and increasing the proportion of TB patients that receive a complete TB and or TB/HIV care package. In addition, ASSIST is working with the Ministry of Gender, Labor and Social Development (MGLSD) to coordinate and oversee implementation of national orphans and vulnerable children (OVC) quality improvement plans and strategies and working with them and implementing partners to apply standards to improve services for orphans and vulnerable children. ASSIST’s work in Uganda is funded by the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR).

## Scale of USAID ASSIST’s Work in Uganda



## Scale of USAID ASSIST’s Work in Northern Uganda



## 2 Program Overview

What are we trying to accomplish?	At what scale?
<b>1. Support the MOH to coordinate and institutionalize quality improvement in the health sector</b>	
<ul style="list-style-type: none"> <li>Support the institutionalization of quality improvement (QI) into the health sector through providing direct technical support to the Quality Assurance Department (QAD) of MOH in overseeing and coordinating QI activities</li> </ul>	<ul style="list-style-type: none"> <li>National</li> </ul>
<b>2. Support the MGLSD to coordinate and oversee implementation of national OVC quality improvement plans and strategies</b>	
<ul style="list-style-type: none"> <li>Improve coordination of QI activities in MGLSD</li> <li>Support MGLSD in supervising and mentoring district and lower structures, implementing and monitoring use of the national toolkit for OVC quality assessments, and instituting quality improvement interventions</li> <li>Train district, sub county, and lower level committees to deliver quality OVC services</li> </ul>	<ul style="list-style-type: none"> <li>National, 14 districts</li> </ul>
<b>3. Build capacity of USG implementing partners to improve quality of HIV and AIDS, TB, MNCH, nutrition, and OVC services</b>	
<ul style="list-style-type: none"> <li>Build capacity of IPs for delivery of quality HIV and AIDS Continuum of Response (COR) interventions through basic training, joint work plans, joint coaching, and learning sessions</li> <li>Build capacity of IPs for delivery of quality safe male circumcision services</li> <li>Build capacity of IPs to deliver quality EMTCT and nutrition services (PHFS)</li> <li>Build capacity of IPs to deliver quality TB services</li> <li>Build capacity of IPs to deliver quality maternal and newborn services under the Saving Mothers Giving Life (SMGL) initiative</li> <li>Build capacity of partners to integrate family planning (FP) into SMGL activities</li> <li>Build the capacity of USG implementing partners and civil society organizations (CSOs) to deliver quality OVC services</li> </ul>	<ul style="list-style-type: none"> <li>8 USG IPs in 56 health facilities (HFs), 30 villages and 45 districts</li> <li>10 IPs in 49 HFs and 40 districts</li> <li>4 USG IPs in 22 HFs in 6 districts in the demonstration phase and 47 COR sites</li> <li>1 IP in central region and 16 HFs</li> <li>15 IPs in 20 high-volume HFs in the demonstration phase and 10 additional sites and one new IP in the scale-up phase</li> <li>15 IPs in 18 sites in the SMGL demonstration districts</li> <li>2 IPs and nine CSOs in the 4 demonstration districts and same two IPs and another 9 CSOs in 10 scale-up districts</li> </ul>
<b>4. Improve HIV Continuum of Response</b>	
<ul style="list-style-type: none"> <li>Improve the processes of HIV testing, linkage to pre-ART care, ART eligibility assessment, ART initiation, and ART retention</li> <li>Support roll-out of QIF&amp;S</li> <li>Ensure that HIV-positive adults and children are retained in care, including the TB/HIV co-infected and receive standard treatment through better care organization, health workers' decision support systems, and patient self-management.</li> <li>Document and share improvement work</li> </ul>	<ul style="list-style-type: none"> <li>8 USG implementing partners in 56 facilities within 45 districts</li> <li>1 health region</li> <li>30 villages in 3 districts and three health facilities implementing HIV CoR activities</li> </ul>
<b>5. Improve quality and safety of safe male circumcision (SMC)</b>	

What are we trying to accomplish?	At what scale?
<ul style="list-style-type: none"> <li>Support MOH efforts to improve the quality of SMC services</li> <li>Generate and share new knowledge related to SMC through conducting research and value-added of knowledge management strategies, and developing change packages, success stories, cases studies and blogs</li> </ul>	<ul style="list-style-type: none"> <li>49 health units in 40/112 districts located in all the regions of the country</li> </ul>
<b>6. Ensure that HIV-exposed babies are alive, thriving and free from HIV at 18 months of age</b>	
<ul style="list-style-type: none"> <li>Ensure that HIV-exposed babies are alive, thriving and free from HIV at 18 months of age</li> <li>Generate, document, and share new knowledge on PHFS</li> </ul>	<ul style="list-style-type: none"> <li>22 facilities in six districts, 47 CoR sites</li> </ul>
<b>7. Improve the quality of TB care</b>	
<ul style="list-style-type: none"> <li>Improve the process of intensified case finding (ICF) to identify TB suspects, evaluate TB suspects, and screen household contacts for active TB</li> <li>Ensure every TB patient receives a complete TB care package at USAID ASSIST-supported health facilities</li> <li>Increase the proportion of TB patients that receive a complete TB and or TB/HIV care package that includes: standard TB drugs, HIV testing, drug adherence assessment, and treatment response assessment.</li> <li>Generate new knowledge regarding improving TB care through harvesting and systematically documenting best practices</li> </ul>	<ul style="list-style-type: none"> <li>Central region in 16 KCCA health facilities.</li> <li>(Phase 1 in 6 and Phase 2 in 10 facilities)</li> <li>16 QI teams.</li> </ul>
<b>8. Reduce maternal and newborn morbidity and mortality (SMGL western Uganda)</b>	
<ul style="list-style-type: none"> <li>Improve early detection and management of prolonged and obstructed labor using a partograph</li> <li>Improve routine delivery of the essential newborn care package, targeting early neonatal infection, hypothermia, hypoglycemia, and bleeding.</li> <li>To develop and disseminate knowledge management products</li> </ul>	<ul style="list-style-type: none"> <li>30 facilities in 4 districts</li> </ul>
<b>9. Integrate family planning into MNCH and ART services</b>	
<ul style="list-style-type: none"> <li>Improve health education and individual counselling</li> <li>Improve availability of FP contraceptives, skilled health care workers, and privacy for counselling and dispensing of contraceptive methods</li> </ul>	<ul style="list-style-type: none"> <li>18 sites in 4 SMGL districts of western Uganda</li> <li>Working with the MNCH, maternity, OPD, and ART clinics, targeting women 15-49 years</li> </ul>
<b>10. Improve the wellbeing of vulnerable children</b>	
<ul style="list-style-type: none"> <li>Improve the quality of OVC care</li> </ul>	<ul style="list-style-type: none"> <li>4 demonstration and 9 scale-up districts; 45 villages</li> </ul>
<b>11. Northern Uganda Program</b>	
<ul style="list-style-type: none"> <li>Improve HIV/AIDS Continuum of Response</li> <li>Improve the quality of TB care</li> <li>Improve quality of malaria prevention and treatment services</li> <li>Improve PMTCT services</li> <li>Increase access to family planning services</li> <li>Improve the nutrition status of people infected and affected by HIV</li> <li>Improve the quality of SMC services</li> <li>Improve laboratory services</li> <li>Improve community services to HIV, PMTCT, MNCH/FP, malaria</li> </ul>	<ul style="list-style-type: none"> <li>15 districts</li> <li>131 facilities</li> <li>49 high-volume facilities</li> <li>82 low-volume facilities</li> </ul>

What are we trying to accomplish?	At what scale?
and TB	
<b>12. SMGL Program in Northern Uganda</b>	
<ul style="list-style-type: none"> <li>Reduce maternal and newborn morbidity and mortality</li> </ul>	<ul style="list-style-type: none"> <li>20 sites in phase I</li> </ul>
<b>13. Improve antenatal care</b>	
<ul style="list-style-type: none"> <li>To improve quality of ANC services including prevention, detection, initial management and referral of obstetric complications in a demonstration district</li> </ul>	Jinja District in Uganda <ul style="list-style-type: none"> <li>10 intervention facilities, 9 control facilities</li> </ul>
<b>14. Improve quality of integrated pre-eclampsia/eclampsia (PE/E) and preterm labor care (PTL)</b>	
<ul style="list-style-type: none"> <li>To improve PE/E and PTL care through developing an integrated package of intra- and postpartum PE/E, PTL care interventions along a primary and referral continuum of care for improved maternal and neonatal outcomes in a demonstration district</li> </ul>	Jinja District in Uganda <ul style="list-style-type: none"> <li>10 intervention facilities, 9 control facilities</li> </ul>
<b>15. Improve and sustain high-quality newborn resuscitation services</b>	
<ul style="list-style-type: none"> <li>As part of the Resuscitation Working Group of the Newborn Technical Reference Team contribute to development of a HBB country case study</li> <li>To assess the quality of basic resuscitation services in Uganda and inform a broader strategy to improve the quality of basic newborn resuscitation services at scale</li> </ul>	<ul style="list-style-type: none"> <li>Uganda, sample of facilities TBD</li> </ul>
<b>16. Child health and immunization</b>	
<ul style="list-style-type: none"> <li>Improve the Integrated Management of Childhood Illness (IMCI) for children in outpatient settings in a demonstration sample of facilities focusing on care for pneumonia, diarrhea, and newborn infection/sepsis early recognition, management, and referral</li> </ul>	<ul style="list-style-type: none"> <li>Northern Uganda, sample of facilities TBD</li> </ul>
<b>17. Refining a chronic care model in Uganda to improve HIV/AIDS outcomes</b>	
<ul style="list-style-type: none"> <li>Improved care for PLHIV through the implementation of an adapted, chronic care model.</li> </ul>	3 facilities in Nakaseke District

= Improvement Activity
  = Cross-cutting Activity

### 3 Key Activities, Accomplishments, and Results

#### **Activity 1. Support the MOH to coordinate and institutionalize quality improvement in the health sector**

##### **BACKGROUND**

To accelerate quality and safety improvements in health and health services through implementation of identified interventions, the MOH in Uganda has developed the National Quality Improvement Framework (NQIF) and Strategic Plan 2010-2015. The framework and strategic plan provide a common framework for all public and private health institutions, partners and stakeholders to coordinate, plan, mobilize resources, implement, monitor and evaluate quality improvement initiatives in Uganda in order to “ensure provision of high quality health services and contribute to the attainment of good quality of life and well-being at all levels of health care”.<sup>1</sup>

In contributing to institutionalization of quality improvement in Uganda, USAID ASSIST is supporting the implementation of the National Health Sector Quality improvement Framework (NQIF) 2010-2015 in the Rwenzori Health Region of western Uganda. The overall goal of the work in the Rwenzori Region was to

<sup>1</sup> “Health Sector Quality Improvement Framework and Strategic Plan 2010-2015.” Ministry of Health. Republic of Uganda. Available at: <http://health.go.ug/docs/HSQIFS.pdf>

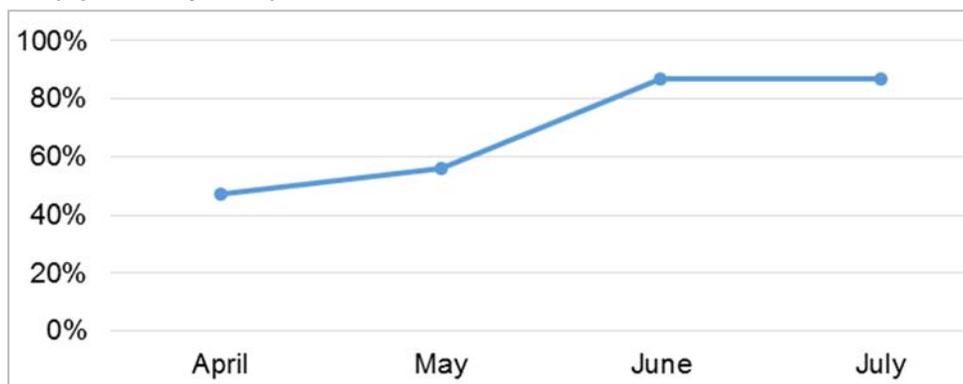
demonstrate the implementation and sustainability of quality improvement through the structures and methods of the national health sector quality improvement framework. Specifically the roll-out was to: 1) Establish and functionalize the quality improvement coordination structures at all levels (regional, district, Health Sub District (HSD )and facility) within the Rwenzori Region; 2) Spread the application of QI beyond HIV/ART care to other health service areas; and 3) Document emerging knowledge for purposes of guiding quality improvement implementation in Uganda.

## **KEY ACCOMPLISHMENTS AND RESULTS**

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- **Held a harvest meeting to systematically capture experiences of the district QI committees (QICs) in implementing quality improvement through the structures of the National Quality Improvement Framework** (Nov 2014). The information captured is to be used to develop a guide for NQIF implementation at district level and a set of case studies on functionalization of district QICs.
- **Conducted a regional QI coordination meeting for the Rwenzori Region** (Feb 2015). During the meeting, regional QI roles were discussed to create common understanding in reaction to the observations made at the harvest meeting in November 2014. A positive development was the fact that Kabarole District included a session on the QI strategy in the induction training for 80 new health workers in February 2015.
- **ASSIST supported the MOH Quality Assurance Department to hold a quarterly QI coordination meeting** (Feb 2015). During the meeting, the Ministry was able to review the composition of the membership; some inactive members were replaced and new members seconded to the committee. ASSIST presented the findings and recommendations from the health care improvement information market research study to the MOH QAD technical working group (TWG). The next step is for these recommendations to be approved by the eHealth TWG.
- **ASSIST worked with the MOH to take stock of certified national QI trainers.** Uganda now has 84 certified national QI trainers.
- **ASSIST supported the MOH to conduct technical support supervision for two quarters in Northern and Eastern Uganda** (Oct-Mar 2015). All three regional QI committees have been formed. All 27 districts have formed district QI committees. About 46.5 % (194/417) of the targeted health facilities have QI teams; however most of these QI committees are not functional (i.e., could not access the minutes of meetings, very few had selected QI projects and were monitoring them on documentation journals).
- **National level leading the spread of PHFS guidance documents.** At the national level, the MOH took the lead in sharing the three PHFS guidance documents/change packages that had been developed by ASSIST in 2014 and in getting buy-in from PMTCT stakeholders. The change packages were shared with the MCH technical working group in the MOH and subsequently with District Health Officers (DHOs) at the national PMTCT stakeholders' meeting held from February 26-28, 2015.
- **Regional quality improvement committee in the Rwenzori Region convened and reviewed progress on the implementation of the regional QI project for increasing access to chronic care for hypertension and diabetes mellitus (DM).** By July 2015, nine out of the 16 health sub districts spread across the seven districts in the region had at least one newly established hypertension/DM clinic, with about 420 registered new clients in total. Additional improvements were also seen in other service areas, such as malaria management and nutrition. For instance, at Rukunyu HC IV in Kibale District, the proportion of children between 6 and 59 months of age seen at the outpatient department who were assessed for malnutrition increased from 47% in April 2015 to 87% by end of July 2015 (**Figure 1**).

**Figure 1: Percentage of children 6-59 months seen at OPD assessed for malnutrition, Rukunyu Health Center (April – July 2015)**



- **Consulting MOH-QAD: Institutionalization of QI in the health sector.** MOH-QAD provided technical support/coaching in April 2015 to South Western districts of Uganda and Karamoja districts. Some of the noted practices included: Most of the districts, health sub districts, and health facilities have quality improvement teams; all facilities have an improvement aim they are working on; most of the DHOs are conducting quarterly performance review meetings and they possess the relevant policies such as National Health Policy II (NHP II), Health Sector Strategic and Investment Plan (HSSIP) and M&E for HSSIP, Uganda Clinical Guidelines (UCG) 2012, Health Management Information System (HMIS) forms and the NQIF.
- **National QI capacity-building meetings** (Jun 2015): Supported QAD in the following capacity-building meetings: Collaborated with Save the Children to hold national QI trainings for 32 health workers in the districts of Bundibugyo, Ntoroko, and Kasese. Supported the QAD in carrying out CQI training for 28 mid-level managers from facilities supported by the Uganda Health System Strengthening Project (UHSSP). Also supported a training of district leaders on the Health Facility Quality of Care Assessment Program that is being undertaken by the QAD.
- **QAD supported the process of the review of the 2010/11-2014/15 NQIF and Strategic Plan led by Professor John Ovretveit** (Aug 2015). This involved the planning and coordination of all the field visits to health facilities across the north, east, west, and central regions of the country. The exercise also involved coordination of the meetings that the consultant held with all the major national stakeholders in QI initiatives in the country.
- **During the reporting period, ASSIST supported and actively participated in a Technical Working Group of the MOH that is developing an information system to support the WHO code reporting on migration of health workers.** The system is to track Ugandan health workers from the training institutions, their stock, and their attrition, together with the dynamics of the health workforce.

## **Activity 2. Support to the MGLSD to coordinate and oversee implementation of national OVC quality improvement plans and strategies**

### **BACKGROUND**

USAID ASSIST organized a series of meetings with the MGLSD to plan the spread of QI activities to 10 more districts. The spread districts were selected and a joint work plan developed. ASSIST also participated in MGLSD meetings with the aim of providing a QI perspective to OVC interventions planned.

### **KEY ACCOMPLISHMENTS AND RESULTS**

- **Facilitated a partners' meeting** (Oct 2014): chaired by the MGLSD and attended by Sustainable Comprehensive Responses (SCORE), Uganda Private Health Support Program (UPHS), ASSIST, and SUNRISE, the partners discussed spread of OVC improvement activities to 10 new districts. A joint work plan for the quarter was agreed on, and the partners and Ministry committed to participation.
- **Conducted a stakeholders' meeting targeting local government leaders from the 10 spread districts** (Oct 2014). The meeting was attended by 37 local government leaders, three officers from UPHS and SCORE, and four MGLSD officers. ASSIST discussed the QI spread strategy and roles of

all the stakeholders, and the district teams committed to participating in the QI activities and allocation of resources whenever possible.

- **Districts:** ASSIST engaged the districts to activate the district improvement teams to work on improving reporting through the OVC MIS and selected performance indicators. Teams were supported to make improvement plans to ensure better coordination of the service providers and compile performance indicators to inform the district about services for vulnerable children. Districts that have improved in reporting have used the quarterly service providers' meeting, phone calls, and supervision to get the reports from CSOs (Bugiri and Nakasongola). Other districts have used the chief administration's office to write to CSOs to remind them of their obligation to report.
- **Institutions:** ASSIST conducted three quarterly assessment and developed performance indicators for improving processes of care for children in institutions. Work at the four institutions focused on improving adherence to national standards, and we have moved on to work with institution teams to improve process of care to ensure children are resettled back to communities in at least six months.
- **USAID ASSIST held a planning meeting with the MGLSD to review the QI plans in relation to MGLSD priorities (May 2015).**
- **Together with the MGLSD, met with the two new regional OVC implementing partners (Catholic Relief Services and World Education) to discuss the implementation of QI activities (July 2015).**
- **Facilitated support supervision field visits by the commissioners in the Department of Children and Youth to the districts and communities to share progress and encourage buy-in by leadership.**

### **Activity 3. Build capacity of USG implementing partners to improve quality of HIV and AIDS, TB, MNCH, nutrition, and OVC services**

#### **BACKGROUND**

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During FY15, ASSIST focused on spreading improvement activities and lessons learned from four demonstration districts and 24 districts to 10 districts and 45 villages supported by two partners (SCORE and UPHS).

#### **KEY ACCOMPLISHMENTS AND RESULTS**

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- **ASSIST staff participated in organizing a QI workshop for six Strengthening Decentralization for Sustainability supported districts (Feb 2015).** During the two-day workshop, ASSIST shared with the project's supported districts the experience of QI implementation with specific emphasis on the district coordination role. The participants were introduced to key QI tools such as the documentation journal, the QI reporting template, QI minutes template, the team evaluation form, and action planning template. It is hoped that the IP will continue to support the districts to utilize the tools for QI implementation.
- **On-site coaching, peer-to-peer learning sessions, and meetings were conducted for the different technical areas (Apr-Sept 2015).** These were jointly carried out with the respective implementing partners and helped to build capacity of the USG partners in implementing QI activities.

### **Activity 4. Improve the HIV Continuum of Response**

#### **BACKGROUND**

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Starting October 2014 - March 2015, the USAID ASSIST Project supported six implementing partners (STAR E, STAR EC, STAR SW, UPHS, Mildmay, and Walter Reed) to implement quality improvement initiatives in 56 health facilities in 46 districts of Uganda in the HIV Continuum of Response (COR). The 56 facilities for joint support with USG partners are all providing HIV care at level of HC IIIs and IVs and general hospitals.

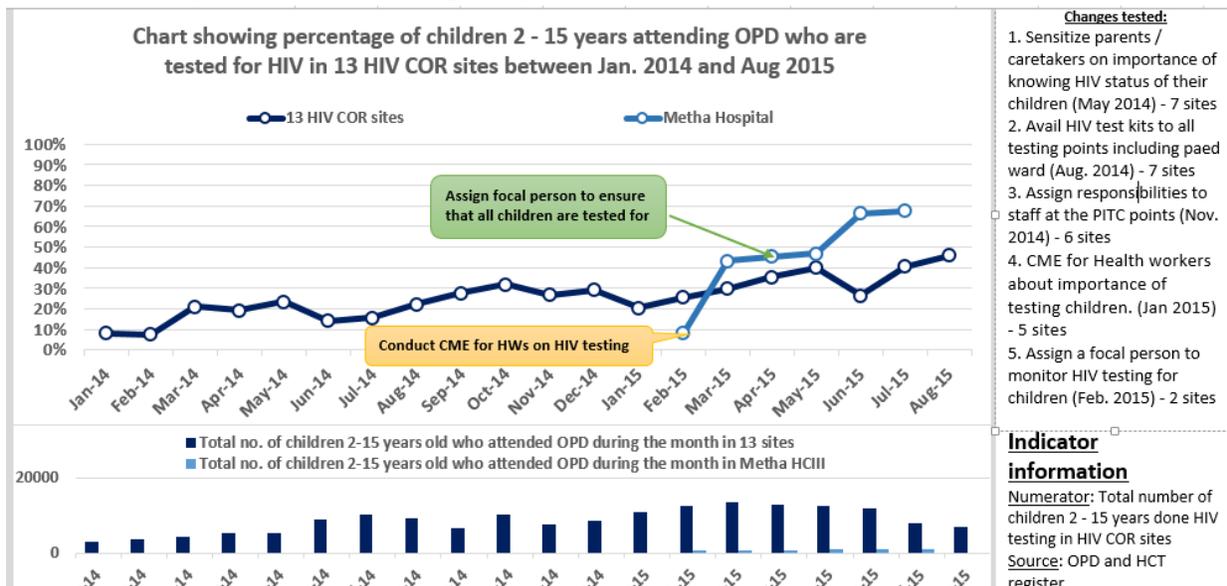
Community level support has been provided to ART clients at three selected facilities to ensure that they remain in care at all times. This support entails linkage to community resources to support patients to identify and address individual, social, and economic barriers to retention in care, community-level follow-up, and referrals. The community interventions were implemented in 18 villages that contributed 30% of all missed HIV visits in three high-volume peri-urban facilities.

## KEY ACCOMPLISHMENTS AND RESULTS

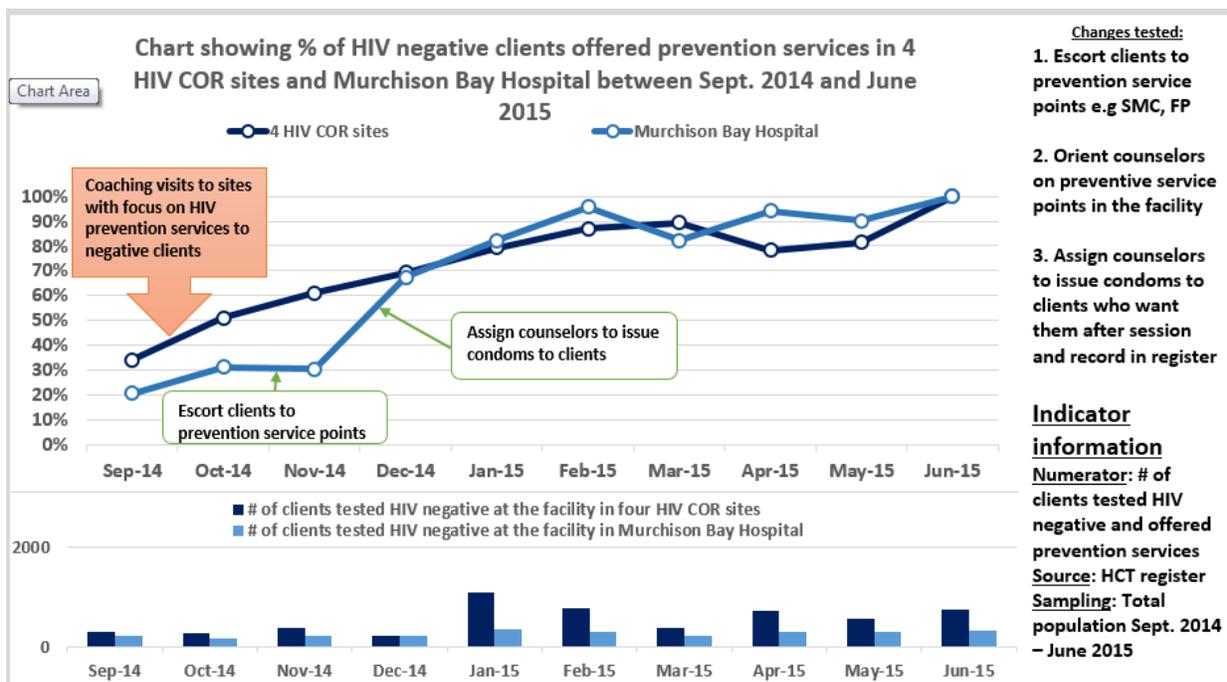
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- **Conducted joint coaching visits:** ASSIST conducted monthly facility-level coaching visits in the 56 facilities with the IPs and the DHTs in the 46 districts of Uganda. At these coaching sessions facility based HIV care providers were supported by the coaching team to identify quality gaps in the continuum of response to HIV cascade and apply modern QI methods to the gaps. The engagement of the district and IP in the joint coaching was aimed at building capacity in the district for sustainability. .
- **Learning sessions and harvest meeting:** ASSIST supported four peer-to-peer learning sessions for the facility QI teams and a two-day harvest meeting. Fifty-nine (59) QI teams members representing 31 health facilities participated in the harvest meeting, and a total of 195 health workers participated in the learning sessions
- **Stakeholders meeting: To disseminate the products of ASSIST work on improving the continuum of response to HIV, ASSIST** conducted the one-day stakeholders' meeting, attended by 113 participants, including the IPs, MOH, DHOs, health facility in-charges and representatives of facility QI teams. Four summarized, easy-to-use change packages on the different sections of the CoR to HIV were shared and participants guided on their use.
- **For the community-level work, ASSIST conducted monthly village level coaching visits in 18 villages and three health facilities in three districts (Kamuli, Bugiri and Mitooma) in East Central and South Western regions** (Nov 2014-Sept 2015). ASSIST and IPs worked with expert patient teams in three health facilities to improve linkage of patients to community-level resources and appointment-keeping. Community-level teams were facilitated to improve pre-appointment follow-up visits for patients on ART. As a result; 112 Village Health Team (VHT) members and 30 facility-based expert clients and linkage facilitators were reached with improvement skills. ASSIST also worked with community-level improvement teams in 18 villages to improve community-level follow-up for HIV patients on ART. At health facilities, ASSIST staff worked with expert patient teams to improve appointment-keeping and linkage of HIV patients to community level resources.
- **Conducted a learning session for 13 community improvement teams in two districts in East Central region. Fifty-five (55) participants attended, 36 of whom were community-based personnel comprising VHTs and expert patients/community support agents** (May 2015). Two villages shared changes tested to improve community-based self-management support for patients and retention of mother-baby pairs in eMTCT. As a result, the self-management changes were adopted by 11 additional villages.
- **Held a knowledge handover for 12 spread communities in East Central region in which practices on linking patients on ART and pre-appointment follow-up visits were shared** (July 2015). Twenty-two (22) VHTs, 36 expert patients, 12 local leaders, and 8 health workers benefited.
- **Improving HIV testing among children** As shown in **Figure 2**, site teams have been supported to start testing changes to improve HIV testing for children under 15 years in outpatient departments (OPD) and the pediatric wards so as to improve identification of HIV-positive children and initiate them on ART. The ASSIST staff supported the facility teams to identify gaps, collect baseline data, and identify changes to be tested. The facility teams tested the changes, and the implementing partners provided logistics like the HIV test kits. This work was conducted in 13 sites: Irongo HCIII, Iganga Hospital, Kigandalo HCIV, Magada HCIII, Kamuli Hospital, Namwiwa HCIII, Nankandulo HCIV, Bugiri Hospital, Kitwe HCIV, Metha Hospital, Masafu, Daban, and Busia HC IV. Following the implementation of some changes, HIV testing among children under 15 years in Metha Hospital improved by 60% between Feb 2015 and July 2015, while in the 13 sites a 20% improvement was observed (**Figure 2**).
- **Improving preventive care among HIV-negative clients.** The HIV Continuum of Response can only be completed if HIV-negative clients are provided with preventive services to remain negative. Services include condom distribution, VMMC, and youth corner and post-test clubs where behavior change activities are conducted. **Figure 3** summarizes the result from four COR sites (including Murchison Bay) compared with the results for Murchison Bay Hospital.

**Figure 2: Percentage of children 2-14 years attending OPD who had an HIV test, 13 HIV COR sites and Metha Hospital (Jan 2014 – Aug 2015)**

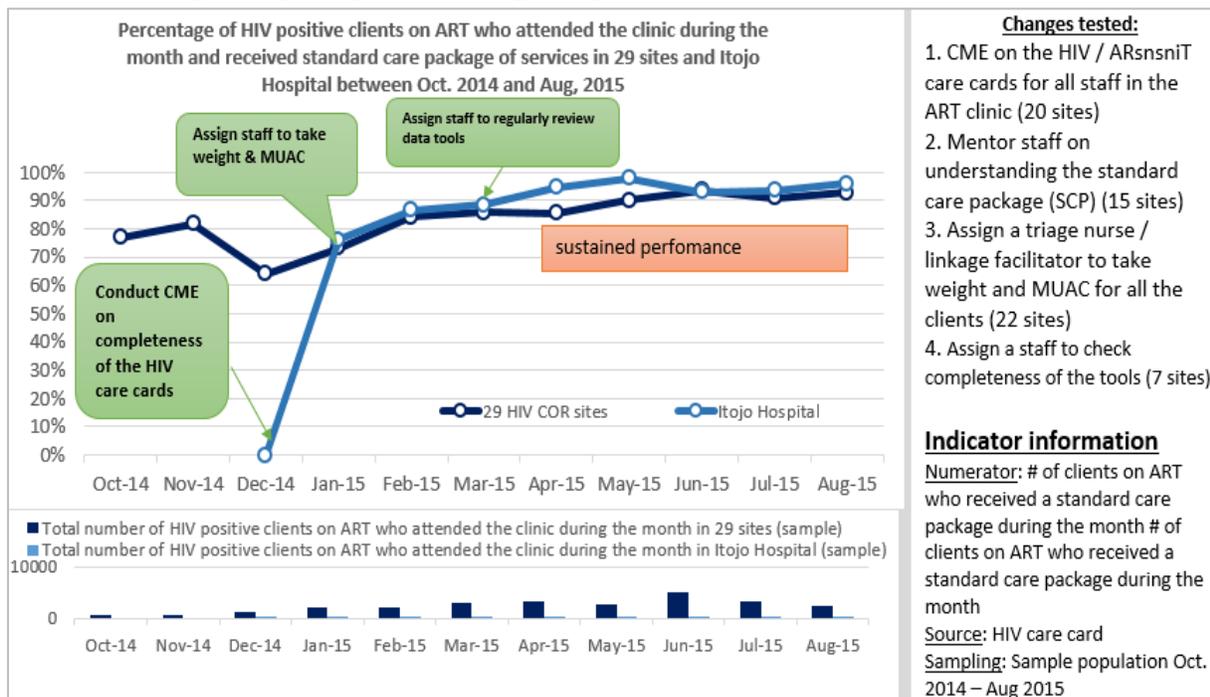


**Figure 3: Percentage of HIV-negative clients provided with prevention services, Kuluva, Buginyanya, Murchison Bay, and Kasanda hospitals (Jul 2014- June 2015)**



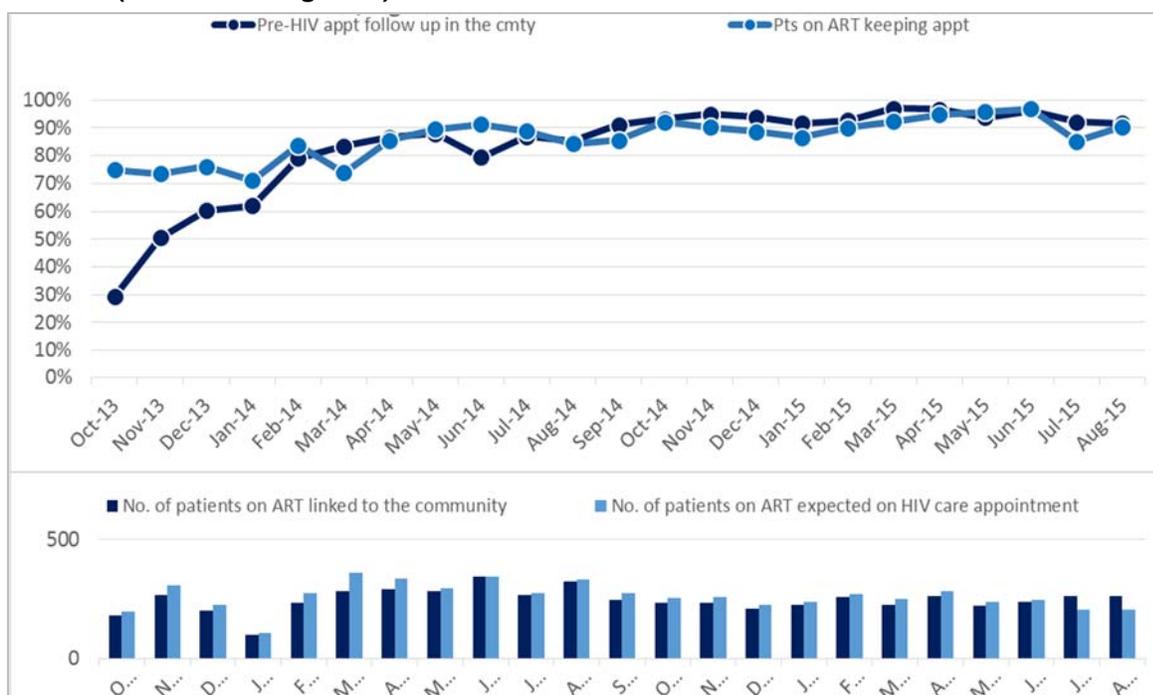
- **Improvement of HIV-positive clients on ART in clinic attendance who received a standard care package.** The percentage of HIV-positive clients on ART who attended the clinic and received a standard care package of services in 29 sites improved from 77% in October 2014 to 93% in August 2015 as shown in **Figure 4**.

**Figure 4: Percentage of HIV-positive clients on ART who got standard care package of services in 29 sites and Itojo Hospital, (Oct 2014-Aug 2015)**



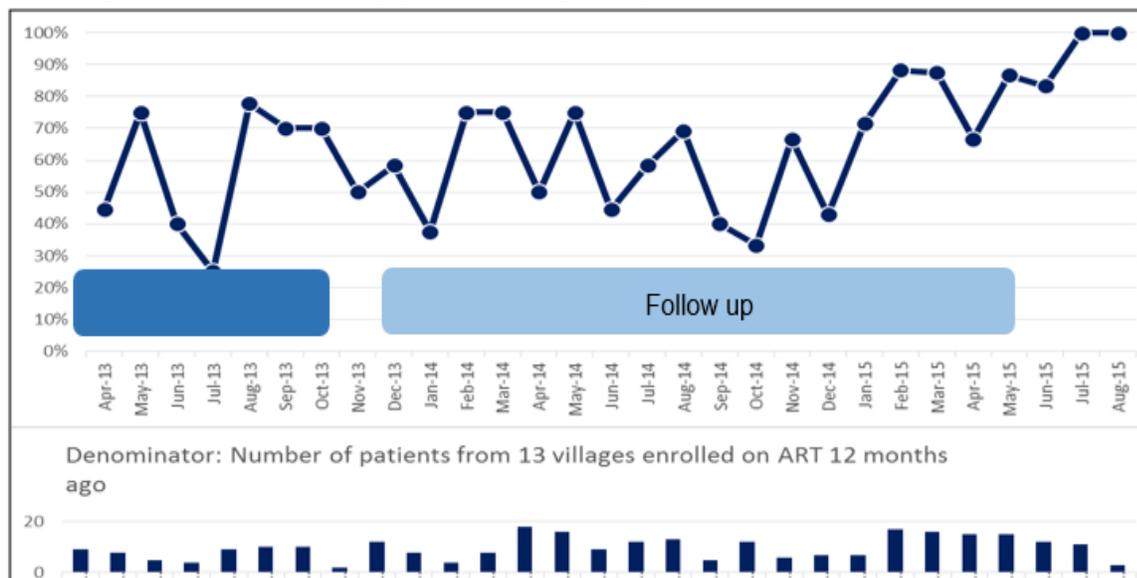
- **Figure 5 shows the results of following up HIV patients on ART in the community.** As a result of the improvement work: 1) 180 community personnel and 30 facility-based expert clients were reached with improvement skills; 2) the number of PLHIV linked to community level care and support improved from 181 in Oct. 2014 to 842, of whom 798 (95%) are still active on ART. Pre-appointment follow-up visits and appointment-keeping for patients in the targeted communities also improved.

**Figure 5: Percentage of HIV patients on ART followed up in the community, 18 villages, and three districts (Oct 2013 – Aug 2015)**



- Retention of patients on ART at 12 months after enrollment also improved (**Figure 6**). This is mainly due to linkage of patients scheduled for ART appointments to community personnel, community pre-appointment follow-up reminders, and development of self-management plans to address retention barriers, e.g., nutrition, lack of transport.

**Figure 6: Percentage of patients on ART retained 12 months after enrollment in 13 villages targeting two hospitals in two districts (April 2013-Aug 2015)**



## SPREAD OF IMPROVEMENT

Throughout the year, PHFS work was spread to 34 COR sites that implemented changes to improve mother-baby pair retention from August 2014 to August 2015. The sites include: Bukinda HCIII, Nyakibale Hospital, Kihihi HCIV, Mitooma HCIV, Ishaka Hospital, Kabwohe HCIV, Ruhoko HCIV, Family Health Resource Centre, and Bushenyi HCIV in the South West region. In the Central region: Kinyara HC III, Nsambya Police Maternity, Murchison Bay Hospital and Kyotera Medical Centre. In the East Central region: Irongo HCIII, Iganga Hospital, Kigandalo HCIV, Kamuli Hospital, Namwiwa HCIV, Nankandulo HCIV, Bugiri Hospital, Kakira Hospital and Mehta Hospital. In the Eastern region: Busiu HCIV, Kapרון HCIV, Buginyanya HCIII, Kamuge HCIII, Masafu Hospital, Lunyo HCIII, Dabani Hospital, Busolwe hospital, Kibuku HCIV. The changes that have been tested to improve retention of mother-baby pairs in the health facilities include:

### Changes adopted from PHFS work:

- Pair mother and baby cards together
- Synchronize mother and baby appointment dates
- Mentorship of staff on completion of early infant diagnosis (EID) register, EID cards and other relevant documents
- Assign focal person to check all registers and tools for accuracy and completeness
- Home visits by peers to clients who miss their appointments

### Changes tested by HIV COR site teams:

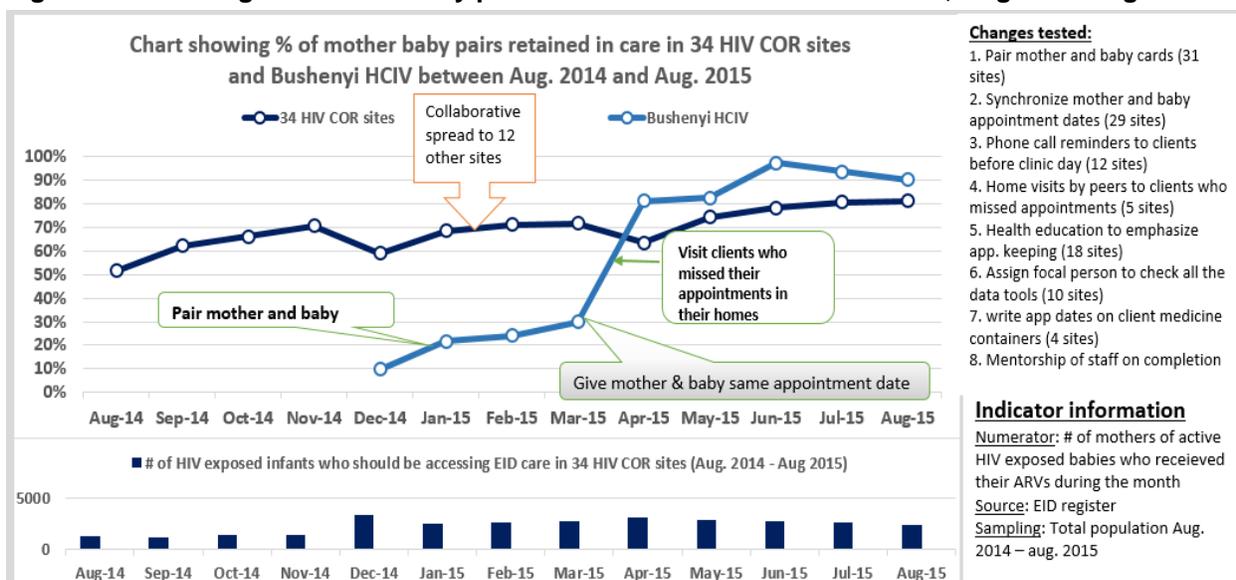
- Pair mother and baby cards
- Synchronize mother and baby appointment dates
- Phone call reminders to clients before clinic day
- Home visits by peers to clients who missed appointments.
- Health education to emphasize appointment keeping
- Assign focal person to check all the tools
- Write appointment dates on client medicine containers
- Mentorship of staff on completion of tools

To isolate the effects of gender interventions on increasing retention rates of HIV-positive mothers and

their babies, 20+ clinics utilized gender-related interventions, including: encouraging male partner involvement, involving male community leaders/volunteer health workers, utilizing family support groups, and offering male-focused services.

The improvements achieved in the 34 COR sites are shown in **Figure 7**.

**Figure 7: Percentage of mother-baby pairs retained in care in 34 COR sites, Aug 2014-Aug 2015**



- **Spread HIV community interventions to 12 out of 84 villages in the catchment of two health facilities in the East Central Region and 10 out of 55 health facilities in the Northern Region.**
  - **June 2015:** Two health facilities that had retained less than 85% of patients on ART in May 2015 were identified in East Central Region to spread community support to improve retention of patients in care. An assessment at these facilities revealed that 245 HIV patients on ART had missed an appointment between January and May 2015. Twelve out of 84 villages contributed 40% of patients who missed a visit and were selected for spread. Long distance to health facilities was the main barrier cited for patient living in distant villages about 3-5 kms from health facilities. For villages in close range, forgetfulness was the main reason.
  - **June 2015:** Held one learning session targeting 10 health facilities assigned to the community collaborative in northern Uganda. Changes that improve linkage and community level follow up for patients were shared. First the teams will work to trace mother-baby pairs lost-to-follow up and later work on improving their retention.
  - **July 2015:** Held a knowledge handover session for the 12 spread communities in East Central Region in which practices on linking patients on ART and pre-appointment follow-up visits were shared. The meeting attracted 22 VHT members, 36 expert patients, 12 local leaders, and eight health workers. A list of changes tested in the 18 demonstration villages was shared with the new teams.

## IMPROVEMENT IN KEY INDICATORS

Activity	Indicators	Baseline	Last value	Change (percentage points)
Improve HIV continuum of response (facility)	% of newly tested HIV-positive linked and enrolled into HIV care, during review period	70% (May 2013)	76% (Aug 2015) 53 sites	6
	% of HIV-positive pre-ART clients started on ART in a month (15+ yrs)	79% (May 2013)	93% (Aug 2015) 53 sites	14
	% of HIV-positive pre-ART clients started on ART in a month (0-14 yrs)	40% (May 2013)	100% (Aug 2015) 53 sites	60

Activity	Indicators	Baseline	Last value	Change (percentage points)
	% of HIV-positive on ART that have been retained in care (15+ yrs)	77% (May 2013)	78% (Aug 2015) 54 sites	1
	% of HIV-positive on ART that have been retained in care (0-14 yrs)	84% (May 2013)	83% (Apr 2015) 54 sites	-1
	% of HIV-positive on ART that are clinically well (0-14 yrs)	50% (Mar 2014)	69% (Aug 2015) 53 sites	19
	% of HIV-positive on ART that are clinically well (15+ yrs)	65% (May 2013)	73% (Aug 2015) 54 sites	8
	% of TB/HIV co-infected clients that are on ART	63% (May 2013)	93% (Aug 2015) 54 sites	30
	% of TB/HIV co-infected clients completing TB treatment	41% (May 2013)	73% (Aug 2015) 54 sites	32
	% of HIV-positive pregnant mothers keeping clinic appointments	88% (May 2013)	90% (Aug 2015) 54 sites	2
	% of HIV-positive lactating mothers keeping clinic appointments	85% (May 2013)	91% (Aug 2015) 54 sites	6
<b>Improve HIV continuum of response (community)</b>	% of HIV patients on ART linked to community services	0% (Sept 2013)	96% (June 2015)	96
	% of HIV patients on ART followed up for appointment reminders in the community	29% (Oct 2013)	96% (June 2015)	67
	% of HIV patients on ART in the targeted villages who kept HIV appointments per month	54% (Oct 2013)	97% (June 2015)	43
	% of HIV patients on ART with challenges that set self-management plans	0% (Feb 2015)	49% (June 2015)	49
	% of HIV patients on ART who set self-management plans and addressed challenges *. <i>*data for 2 villages testing changes</i>	0% (Feb 2015)	26% (April 2015)	26
	Number of HIV patients ever enrolled into community care	858 (March 2015)	886 (June 2015)	-

## **Activity 5. Improve quality and safety of voluntary medical male circumcision**

### **BACKGROUND**

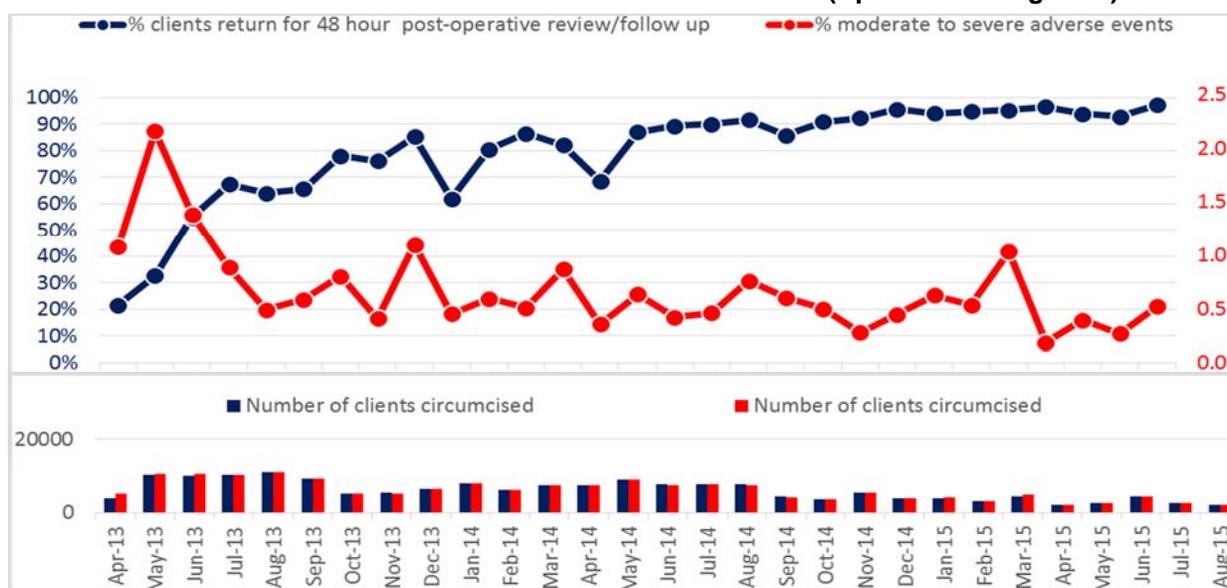
The safe male circumcision (SMC) component of the ASSIST HIV work started in December 2012. At the beginning, ASSIST provided intensive technical support to the MOH and to 30 facilities (three facilities supported by each of 10 USG IPs). Since beginning the work, the number of SMC IPs has been reduced to eight because one closed and one had its funding suspended. In June 2014, we expanded our intense support to 19 additional health facilities, totally 49 facilities receiving intensive technical support from ASSIST.

### **KEY ACCOMPLISHMENTS AND RESULTS**

- Improved the follow-up of clients at 48 hours post-operatively and reduced the rate of adverse events.** At the beginning of the QI support, only 10% of clients were returning for review. This was so because the service providers did not think it was important and thus did not inform the clients to return for review. The providers were sensitized on the importance of follow-up and thus changed the message from return if you have a problem to come back for bandage removal and review of the wound. **Figure 8** shows that the percentage of clients who returned for review within 48 hours after circumcision improved from 32% in February 2013 to 100% in August 2015. The figure also shows the percentage of clients who experience moderate to severe adverse events (AE) after circumcision. At the start of technical assistance, few AEs were identified because staff did not know how to grade them and would only record the severe AEs. After sensitization and mentorship in recognition, grading, and reporting of AEs, the rate of AEs reported worsened (April – May 2013). Teams tested

changes including reviewing each adverse event to understand why it occurred and how it could be prevented from recurring, improving client follow-up, and conducting health education for minors. The rate since July 2013 has been maintained below 1%. There is an inverse relationship between client follow-up and rate of adverse events. The team also worked to increase female partner involvement in SMC which had previously been identified as a barrier affecting outcomes. ASSIST has worked with implementing partners to create an awareness-raising campaign about the importance of female partner involvement and to provide education sessions and services tailored to females in addition to male patients.

**Figure 8: Percentage of clients reviewed within 48 hours and number of clients who experience moderate to severe adverse events after circumcision in 30 sites (April 2013 – Aug 2015)**

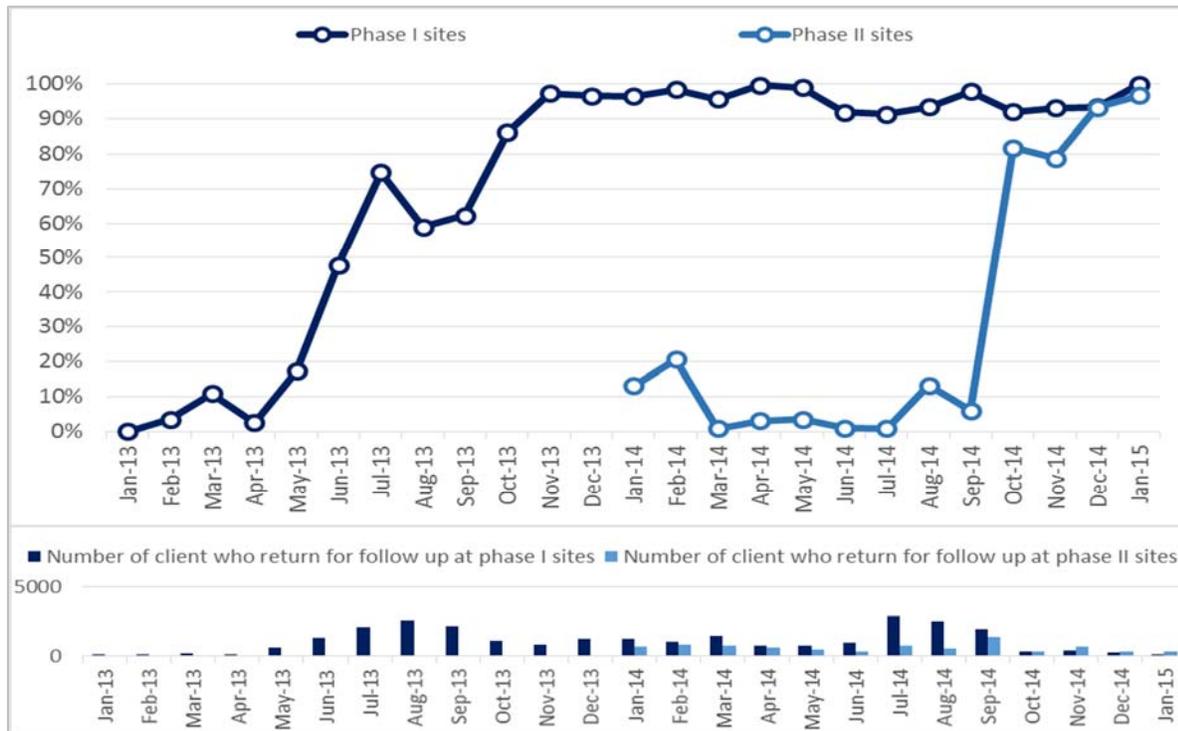


- **Improved percentage of SMC clients who returned for follow-up at phase 1 (the first 30 sites) and phase 2 (scale-up sites).** Figure 9 shows the scale-up of technical support provided from nine health units to 13 health units in northern Uganda. It shows that whereas improving client follow-up at the phase I sites took time, at the phase II scale-up sites, it took a much shorter time, which is consistent with other literature on scale-up. The rapid improvement in the phase II sites was achieved through sharing the lessons learned from the phase I sites.

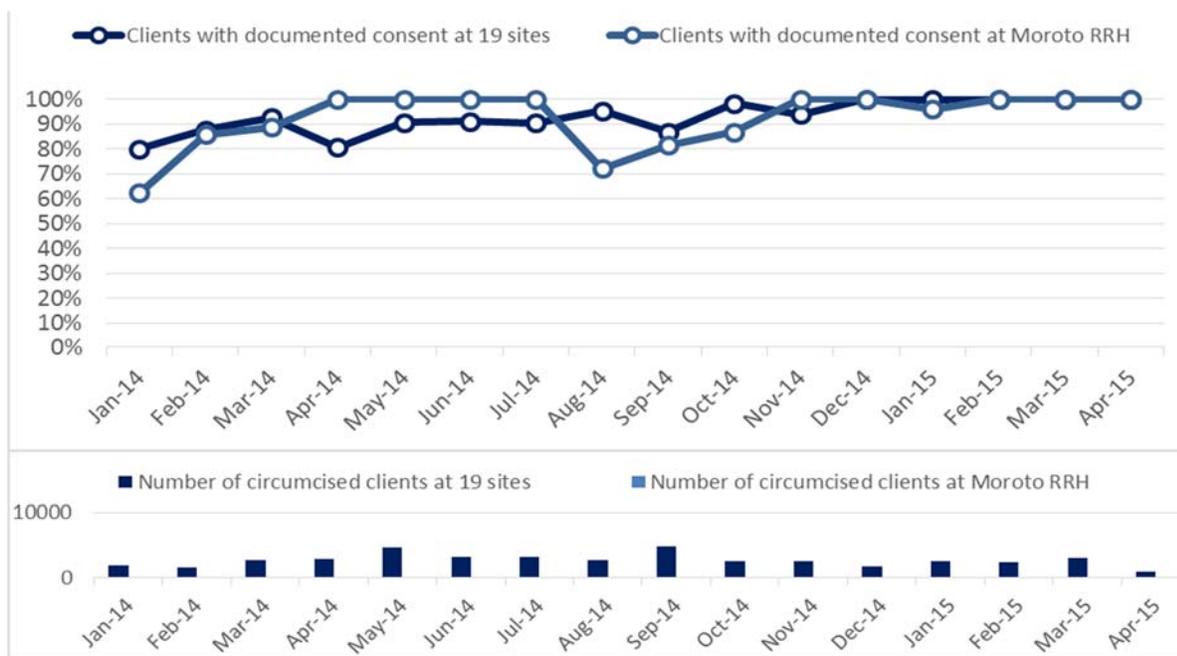
## SPREAD OF IMPROVEMENT

- Conducted quality improvement training for the new sites: After completion of the baseline assessment of new sites, it was noted that all the teams needed to be trained in quality improvement. A three days training was conducted and the main objective was to give teams knowledge in implementing improvement projects. In total 80 health facility based staff were trained.
- Continued to support the new 19 site teams to correctly complete and use the new versions of the MOH data tools that were recently availed at the sites by the implementing partners. Supported the teams at the new facilities to collect data on the performance indicators and supported them with their improvement projects. The teams were also availed the compilation of tested changes from which they identified the changes to test to improve on the gap areas in their facilities.
- **Improving documentation of consent for circumcised clients in 19 sites of spread.** The graph below shows the percentage of circumcised clients with documented consent in the 19 sites of spread. There has been improvement in the documentation of consent among circumcised clients from 80% January 2014 to 100% April 2015 (see Figure 10). At Moroto Regional Referral Hospital (RRH), documentation of consent among circumcised clients has also improved from 63% in January 2014 to 100% in April 2015 following orientation of staff on importance and documentation of consent and also use of reminders.

**Figure 9: Percentage of SMC clients who return for follow-up, 9 phase I sites and 4 phase II sites in Northern Uganda (Jan 2013 – Jan 2015)**



**Figure 10: Percentage of clients with documented consent at 19 spread sites compared to one site (Jan 2014-Apr 2015)**



## IMPROVEMENT IN KEY INDICATORS

Activity	Indicators	Baseline	Last value	Change (percentage points)
<b>Improve quality and safety of safe male circumcision (SMC)</b>	% of circumcisions that meet the minimum quality standards	10% (May 2013)	70% (May-15)	60
	% of circumcised clients that experienced moderate to severe adverse events	0.5% (Oct 2012) N.B This was from 8 sites with gross under reporting	0.5% (30 initial sites) 0.4% (20 scale up sites)	-
	% of clients that were counselled, tested, and received HIV test result within SMC setting	73% (Oct 2012)	100% (30 initial sites) 99% (20 scale up sites)	27
	% of clients that are assessed for sexually transmitted infection prior to circumcision	81% (Jan 2013)	100% (30 initial sites) 100% (20 scale up sites)	19
	% of SMC clients with documented informed consent prior to circumcision	83% (Jan 2013)	100% (30 initial sites) 100% (20 scale up sites)	17
	% of clients of safe male circumcision that return for review within 48 hours after circumcision	58% (Oct 2012)	97% (30 initial sites) 91% (20 scale sites)	39

### **Activity 6. Ensure that HIV-exposed babies are alive, thriving, and free from HIV at 18 months of age**

#### **BACKGROUND**

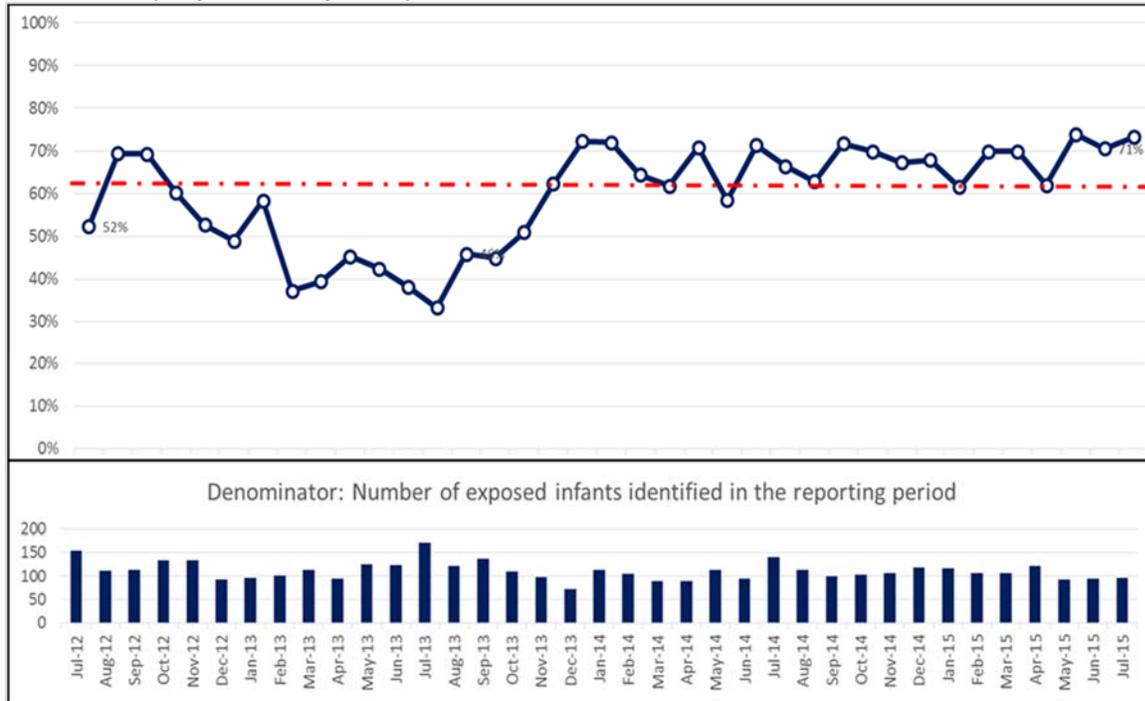
One of the goals of the PHFS work is to contribute to national and global learning and ensure that the lessons learned from the demonstration phase are scaled up and spread at both national and global levels. Between October 2014 and March 2015, the ASSIST team started spreading key learning from the demonstration sites to spread sites within six districts and to other sites in the Continuum of Response collaborative. The key learnings were spread through the change packages that were developed. In April 2015, ASSIST started providing direct technical support to health facilities in Northern Uganda in 15 districts through collaborative improvement, coaching visits, and peer-to-peer learning sessions. Part of this support included the provision of quality elimination of mother-to-child transmission (eMTCT) services to HIV-positive mothers and their babies. This year the PHFS had two main areas of focus: improving the 'special visits' and the spread of improvement work. The spread work was three-pronged:

- i) National level spread: through Ministry of Health structures
- ii) Supporting implementing partners to spread to additional sites
- iii) Spreading to other sites in the COR collaborative

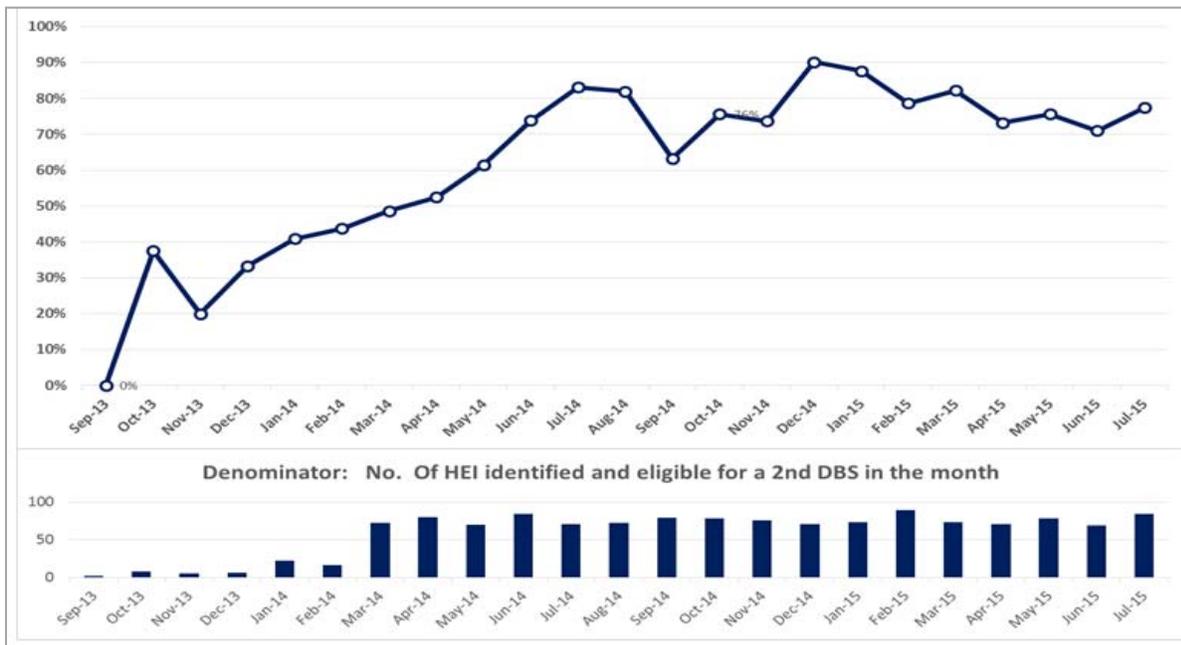
#### **KEY ACCOMPLISHMENTS AND RESULTS**

- **Held PHFS coaches' meeting on spread (Oct 2014).** The meeting was attended by both district and regional coaches, the MOH, and implementing partners. The purpose of the meeting was to determine the roles of the coaches in the spread phase, agree on what indicators would be measured for spread, and understand how the change package was going to be applied in the spread phase.
- **Harvest meeting on the special visits:** Since October 2014, PHFS sites have been supported to improve the care provided at special visits at six weeks for the 1<sup>st</sup> dried blood spot (DBS), the six weeks post-breastfeeding cessation test, and the final rapid test at 18 months. In July 2015, a harvest meeting was held for the 22 PHFS demonstration sites to synthesize the changes which led to improvement in these three areas. **Figures 11-13** show the progress made by all the 22 sites to improve monitoring the status of HIV-exposed babies at the different stages.

**Figure 11: Percentage of HIV-exposed babies who receive their first DNA/PCR test at 6 weeks, 22 PHFS sites (July 2012-July 2015)**



**Figure 12: Percentage HIV-exposed babies who receive their second DNA/PCR test, 22 PHFS sites (Sept 2013 – Jul 2015)**



**Figure 13: Percentage of HIV-exposed infants who get their final rapid test for HIV at 18 months, 22 PHFS sites (June 2013- July 2015)**

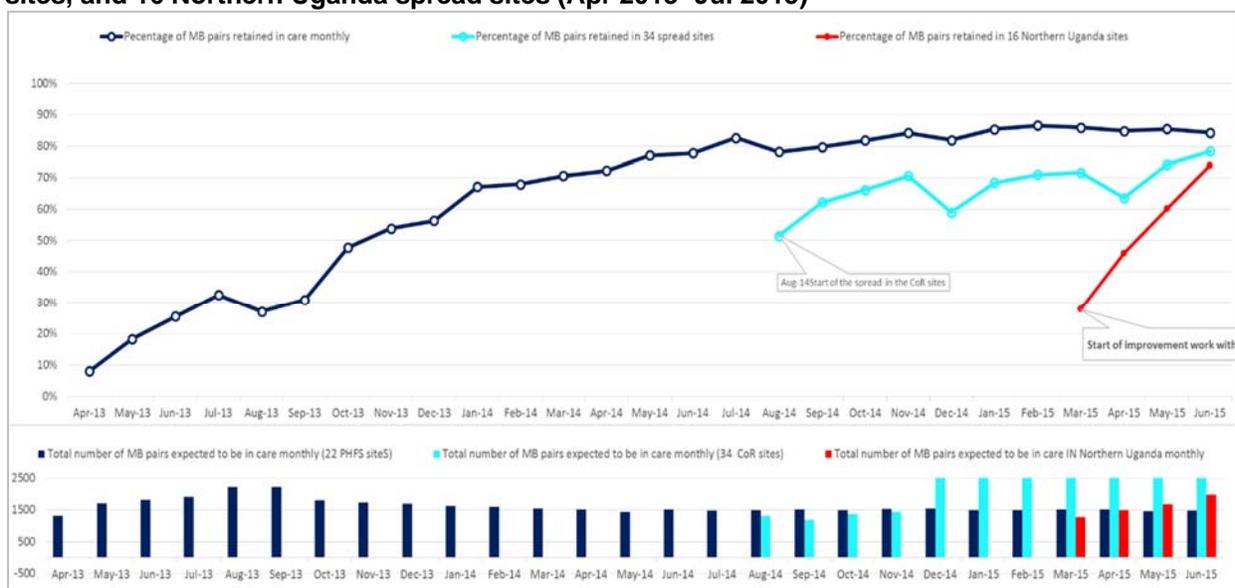


- In order to improve “special visits” where specific services are offered to HIV-exposed infants at specific times (i.e., at 6 weeks - 1<sup>st</sup> DBS, 13.5 months - 2<sup>nd</sup> DBS, and at 18 months - HIV rapid test), improvement teams should:
  - Set up a system that enables the health worker to identify which babies are due for the different tests (e.g., generate a list of babies due for testing each month, indicate in the EID register when the baby will be due)
  - Set up a system that supports HIV-positive mothers to bring their babies back for testing (e.g., giving the exact appointment dates, giving mothers cards with dates)
  - Have a mechanism for finding mother-baby pairs who miss tests (e.g., use of expert clients and mentors to find babies who miss their appointments, set up phone calls reminders to mothers, etc.).

## SPREAD OF IMPROVEMENT

- **Supported IPs TASO and SPRING to spread the PHFS work to additional sites within the six demonstration districts (Oct 2014 – present).** The IPs have been supported to scale up the PHFS interventions to additional sites. The IPs were provided with the change packages and a list of coaches to support the sites. ASSIST has also provided direct support by facilitating learning sessions and knowledge handover meetings between the old and new sites. Currently SPRING has spread the PHFS work to 31 sites in three districts, and TASO has spread to 39 sites in three districts.
- **ASSIST is spreading the key learnings from the PHFS work directly to health facilities supported under the Continuum of Response (Oct 2014 – present).** The change packages have been shared with the improvement teams at these sites, and 34 of these focused on the retention of mother-baby pairs in care. The progress made in improving the retention of mother baby pairs in the 22 demonstration sites, 34 COR spread sites, and 16 spread sites in Northern Uganda is demonstrated in **Figure 14** below.

**Figure 14: Percentage of mother-baby pairs retained in care at 22 demonstration sites, 34 COR sites, and 16 Northern Uganda spread sites (Apr 2013- Jul 2015)**



## IMPROVEMENT IN KEY INDICATORS

Activity	Indicators	Baseline (April 2013)	Last value (July 2015)	Change (percentage points)
<b>Ensure that HIV exposed babies are alive, thriving and free from HIV at 18 months of age</b>	% of HIV-negative women retested for HIV as per national guidelines	12% 5 sites	82% 22 sites	70
	% of HIV-exposed babies who were given ART prophylaxis	12% 15 sites	100% 22 sites	88
	% of HIV-positive pregnant women initiated on ART	83% 20 sites	100% 22 sites	17
	% of HIV-positive mothers who receive feeding counselling at each visit	24% 15 sites	100% 22 sites	76
	# of HIV-positive mothers who receive maternal nutrition counselling at each visit	23% 15 sites	100% 22 sites	77
	% of exposed infants reporting to be adhering to recommended infant and young child feeding practices	73% 20 sites	98% 22 sites	25
	% of HIV-positive pregnant and lactating mothers who receive nutrition assessment every month	20% 19 sites	100% 22 sites	80
	% of exposed infants who receive nutrition assessment every month	32% 16 sites	99% 22 sites	69
	% of HIV-positive mothers who are found to be malnourished	0.88% 11 sites	0.4% 22 sites	-0.48
	% of exposed infants found to be undernourished and receive therapeutic or supplementary feeding support	100% 3 sites	67% 22 sites	-33
	% of HIV-positive mothers found to be undernourished and receive therapeutic or	0% 22 sites	29% 22 sites	29

Activity	Indicators	Baseline (April 2013)	Last value (July 2015)	Change (percentage points)
	supplementary feeding support	1 site	22 sites	
	% of exposed infants who are found to be malnourished	5% 1 site	0.48% 22 sites	-4.52
	% of mother-baby pairs retained in care each month	8% 1 site	88% 22 sites	80

## **Activity 7. Improve the quality of TB care**

### **BACKGROUND**

Over the last 12 months, USAID ASSIST has worked with TRACK TB in 16 KCCA facilities: six during Phase 1 and 10 during Phase 2. The improvement projects focused on: 1) TB detection, 2) TB treatment success, 3) TB case notification, 4) Increasing HIV re-tests among TB/HIV negative patients, 5) TB contacts tracing, 6) Increasing provision of HIV care package to TB patients, and 7) TB treatment response monitoring.

### **KEY ACCOMPLISHMENTS AND RESULTS**

- **TB case identification was enhanced at phase II sites by screening patients using intensified case finding (ICF) tools at all waiting areas at the health facility.** In the community, household contacts of TB patients in the intensive phase were targeted. Community case identification through screening all household contacts in the community by visiting contacts at their homes and organizing community meetings/outreaches was done by community supporters. They also carried out sputum sample collection from the communities during outreach and delivered them to the health facility laboratory for evaluation. The combined effort of health providers and community supporters led to an increase in the proportion of household contacts evaluated for active TB from 0% to 62%.
- **Monthly coaching was done at all 16 facilities to support teams that strengthen TB/HIV co-management and ensure that TB patients who start treatment, complete it and are cured of TB (Jun–Aug 2015).** Facility-implemented changes for treatment initiation are put in practice every time patients are due for two, five, six, and eight follow-up sputum examinations. These changes include setting up phone call reminders to patients and reminding them about the dates they are due for a follow-up test. Health workers shared educational messages in the community and at the health facility to patients about the dangers of not completing TB treatment. During coaching, with the support of a regional coach, teams were also supported to roll out isoniazid (INH) preventive therapy so they can minimize spread of TB among TB contacts. On some occasions, telephone coaching was done to support teams improve TB care.
- **TB frontline health workers at 16 health facilities were trained on site by ASSIST staff working with TRACK TB and KCCA trainers on isoniazid preventive therapy (May 2015).** This specifically focused on how to use the QI methodology to incorporate INH in TB care as a preventive measure.
- **ASSIST facilitated a one-day quality improvement orientation for TRACK TB project officers and KCCA mentors engaged in supporting sites improve TB care services (Aug 2015).** The purpose of this workshop was to support building knowledge and skills of the participants in QI methods so they can conduct independent, focused coaching. About 15 staff participated in the training and developed improvement plans to support sites better. The project supported TRACK TB to conduct the 2<sup>nd</sup> learning session for all 16 health facilities engaged in improving TB care in June 2015.
- Starting in September 2014, health providers from Kisugu HC III started discussion with two community supporters about how they could get involved in identifying and screening household contacts to patients enrolled in TB care (Sept 2014). This was later scaled up to all the other facilities. Community supporters conduct home visits and education and conduct TB screening of household members; those confirmed to have TB are enrolled on treatment. The community supporters sometimes collect sputum samples from the community from the TB suspects and take them to the laboratory for testing.

## **Activity 8. Reduce maternal and newborn morbidity and mortality (SMGL Western Uganda)**

### **BACKGROUND**

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Uganda's maternal mortality ratio stands at 438/100,000 live births<sup>2</sup> which is substantially higher than the 162/100,000 needed to achieve Millennium Development Goal 5 in 2015. Most of the maternal deaths occur in the first 24 hours from the onset of labor, and yet high-impact, low-cost, evidence-based interventions exist that can be employed to reduce this. Among these interventions are active monitoring of progress of labor, active management of third stage of labor (AMTSL), and prompt management of complications such as hemorrhage, prolonged/obstructed labor, pre-eclampsia/eclampsia (PE/E), abortion complications, and infection. Similarly, over half of the total newborn deaths occur in the first week of life, mainly in the first 24 hours. The common causes of neonatal deaths in Uganda include birth asphyxia, infections, and complications of pre-term birth, accounting for 90% of all newborn deaths<sup>3</sup>. ASSIST has supported 20 high-volume facilities in the four Saving Mothers Giving Life (SMGL) implementing districts to improve the processes of maternal and newborn care services through improving partograph utilization, use of AMTSL during delivery, and provision of a package of essential newborn care and has systematically documented emerging best practices and lessons learned.

During FY15, ASSIST built on the QI work done in the 20 demonstration facilities to scale up lessons learned to an additional 10 facilities in the four SMGL learning districts and 20 facilities in the six new SMGL scale-up districts. ASSIST is also supporting sites to increase male involvement through improved couple counseling and to track male involvement at maternity and young child/postnatal care clinics. In addition to improving services around child birth, ASSIST is working with the MOH and Jinja District to improve and ensure provision of a complete antenatal care package including detection and management of infections, especially malaria and syphilis, along with pre-eclampsia and eclampsia and malnutrition, with focus on anemia, at 10 intervention sites in Jinja.

### **KEY ACCOMPLISHMENTS AND RESULTS**

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- **Conducted coaching visits:** District coaches conducted two independent coaching visits in December 2014 and January 2015 to 30 facilities of the four SMGL implementing districts of Western Uganda. USAID ASSIST conducted one joint coaching visit with the district coaches in the 20 facilities of the four SMGL implementing districts in November 2014. QI teams were supported to perform maternal and perinatal death reviews during the site visits. Teams were supplied with Maternal and Perinatal Death Review books from the MOH and supported to report to the MOH through the DHOs.
- **Conducted three monthly QI TWG meetings** involving Baylor Uganda, PACE, IDI, UHSC, and ASSIST (Oct. and Nov. 2014, Jan 2015). ASSIST shared MOH QI tools (documentation journals and reporting forms) with the partners and conducted a joint coaching visit in 8 facilities of Kibale District with IDI (Nov 2014).
- **Conducted a peer-to-peer learning/stakeholders meeting involving facility and district health leaders in SMGL improvement work** (Feb 2015). This involved frontline health care providers, facility in-charges, and DHO representatives. During this meeting, knowledge cafes were organized, and successful changes harvested with evidence of improvement from the 30 demonstration facilities.
- **Conducted a SMGL stakeholders meeting for the six SMGL scale-up districts of Northern Uganda** (Feb 2015). This involved the technical and political leadership of the 6 SMGL phase II implementing districts. Leaders were oriented about the SMGL initiative, discussed the mode of implementation, and the roles of the different stakeholders in the SMGL initiative.
- **Capacity building of staff in MNCH services** (Mar 2015). Trained 10 medical officers and 96 midwives from 20 facilities of the 6 SMGL districts of northern Uganda in essential obstetrical and newborn care integrated with quality improvement approaches during two five-day trainings in the first two weeks of March 2015.
- **After two and half years of improvement work in 20 demonstration facilities of the four SMGL**

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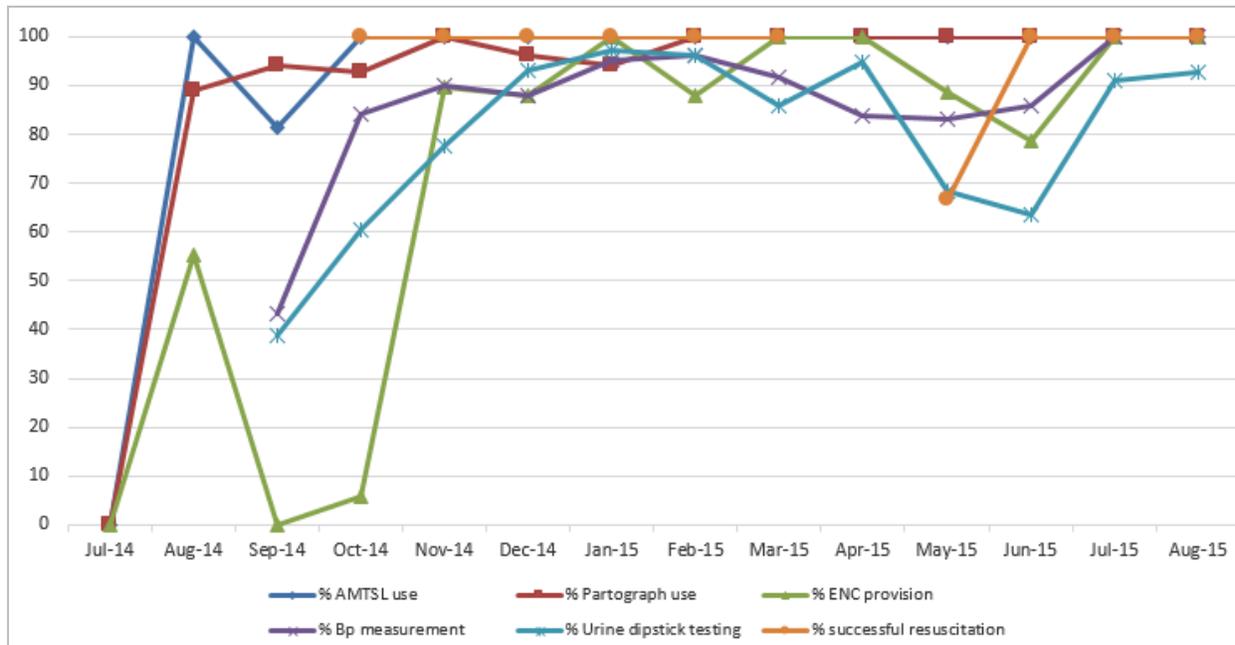
<sup>2</sup> Uganda Demographic and Health Survey (UDHS), 2011.

<sup>3</sup> Ministry of Health. Situation analysis of newborn health in Uganda. Current status and opportunities to improve care and survival. Kampala: Government of Uganda. Save the Children, UNICEF, WHO:2008.

implementing districts of western Uganda, a harvest meeting was conducted in June 2014 and a package of best practices and lessons learned was developed. These were scaled up to 10 HCIIIs in the same four SMGL implementing districts. This package included: application of all the three components of 3<sup>rd</sup> stage of labor to prevent post-partum hemorrhage (PPH), adherence to partograph use to detect and manage prolonged/obstructed labor, routine screening for pre-eclampsia through blood pressure measurement and urine dipstick for proteinuria, routine delivery of a package of essential newborn care, and resuscitation of all asphyxiated babies at birth. This was spread in a phased approach.

- o **Figure 15** shows the progress achieved in one of the spread sites in Kyenjojo District. Butunduzi HCIII has exhibited a faster uptake of best practices through monthly onsite support of the local district coaches and replication of best practices from the demonstration facilities.

**Figure 15: Successful spread of MNCH best practices at Butunduzi HC III (July 2014 – Aug 2015)**



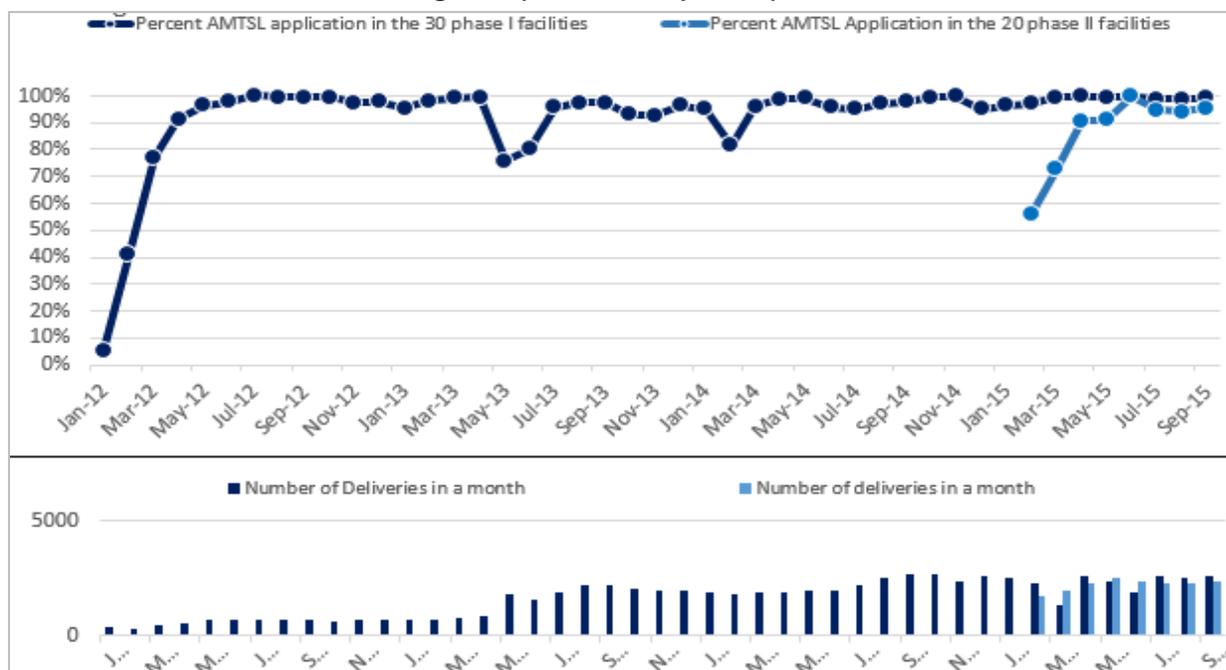
- The northern region of Uganda, where SMGL phase II is being implemented, has a facility-based maternal death rate of 143/100,000. Like the rest of the country, the top causes of maternal deaths are postpartum hemorrhage, hypertensive disorders of pregnancy, and uterine rupture.
- **The ASSIST SMGL Phase I work focused on tackling these same problems and has evidence-based and tested changes that have led to prevention of maternal and newborn deaths.** Starting in February 2015, USAID ASSIST built on the learning gained on what was effective in terms of improvement in SMGL phase I and is supporting improvement teams in northern Uganda to adopt the changes that led to improvement and also test new changes to attain further improvements and impact.
- **In improving the quality and completeness of the antenatal care package including detection and management of pregnancy-related conditions, ASSIST carried out the following activities:**
  - o Meeting with the contact person at the MOH and the Jinja District Health Office to share plans and gain a buy-in for the work
  - o A training of eight data collectors has been carried out to introduce them to the indicators for monitoring improvements made in antenatal care and also to the data tools that are to be used in during the data collection process.
  - o A situation analysis on the quality of antenatal care and complications management; skilled providers' knowledge and confidence in managing pre-eclampsia and eclampsia conditions and logistics availability was done. Clients attending antenatal care were also interviewed to assess their understanding of the different procedure done by the skilled providers and benefits during

antenatal clinics. This was carried out at 19 health facilities (10 intervention and 9 non-intervention sites) within Jinja District.

## SPREAD OF IMPROVEMENT

Having learnt how to prevent post-partum hemorrhage through improving AMTSL application at birth in 30 facilities of Western Uganda and packaging it in a change package, in February 2015, the best practices like pre-packing oxytocin in a syringe for mothers in second stage of labor were spread quickly to 20 facilities in northern Uganda during the Phase II of SMGL implementation, as shown in **Figure 16**.

**Figure 16: Improving AMTSL application at 30 phase I SMGL facilities and 20 phase II SMGL facilities, Western and Northern Uganda (Jan 2012-Sept 2015)**



## IMPROVEMENT IN KEY INDICATORS

Activity	Indicators	Baseline	Last value	Change (percentage points)
<b>Reduce maternal and newborn morbidity and mortality</b>	% application of AMTSL during delivery	5% (Jan 2012) 10 sites	99% (Aug 2015) 29 sites	94
	% use of a partograph for labor monitoring	4% (Jan 2012) 10 sites	88% (Aug 2015) 28 sites	84
	% delivery of a complete package of essential newborn care	1% (Jan 2012) 10 sites	92% (Aug 2015) 29 sites	91
	% of asphyxiated babies successfully resuscitated	67% (Aug 2013) 20 sites	90% (Aug 2015) 29 sites	23
	% screening for pre-eclampsia during labor/delivery	48% (Nov 2013) 20 sites	90% (Aug 2015) 25 sites	42

### **Activity 9. Integrate family planning into MNCH and ART services**

#### BACKGROUND

Globally, family planning (FP) is recognized as a key life-saving intervention for mothers and their children (WHO 2012). In Uganda, the unmet need for FP has increased to 34% with the maternal mortality rate

(MMR) at 438/100,000 and 6.4% HIV prevalence (UDHS, 2011). Sixteen women die every day due to childbirth-related complications. Reducing unintended pregnancy among HIV-positive women of reproductive age is one of the four crucial components of effective elimination of mother-to-child transmission of HIV programs according to WHO. Thus incorporating FP and HIV care with other health care services increases access to life-saving services and improves health outcomes. Provision of family planning information and services helps individuals as well as couples make informed decisions that will help them prevent unintended pregnancies and sexually transmitted diseases, including HIV. Lessons learned in the integration of FP into MNCH and HIV care will be used to rapidly improve FP services in the scale-up sites.

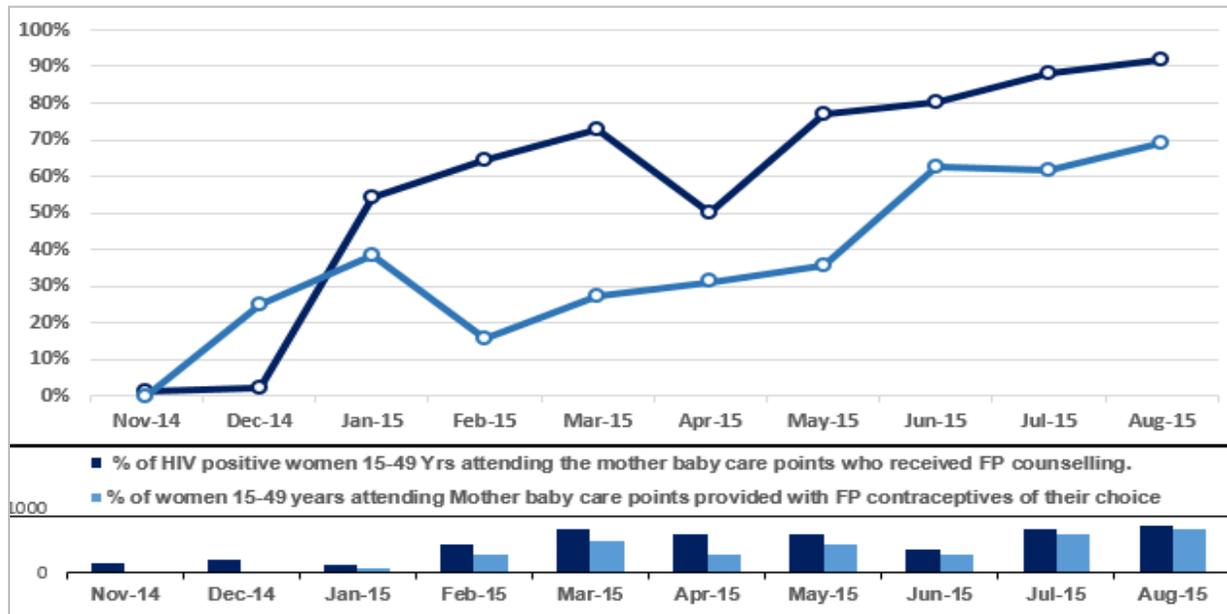
## KEY ACCOMPLISHMENTS AND RESULTS

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- **During the year, 18 sites have been supported to test and implement changes aimed at improving provision of family planning counselling and contraceptives to HIV-positive mothers attending the mother-baby care points.** However, only 10 out of 18 of these facilities implemented the changes. At the FP harvest meeting held in July 2015, ASSIST staff and facility health workers who had tested these changes reaffirmed to others the importance of integrating family planning services into HIV care. Ten sites demonstrated great improvement within the six months of introduction of these changes. Changes introduced included: group education/counselling on use of modern contraceptives to HIV-positive mothers at the mother-baby care points; assigning experienced VHT members who double as peer mothers (women using FP contraceptives in the eMTCT program with HIV-negative babies) working in the MNCH department to carry out group education at the mother-baby care points and share their experiences and success in using FP contraceptives; dispensing short-term contraceptive methods at the mother-baby care points before ARV refills are made; and having peer mothers escort HIV-positive mothers from the mother-baby care point to the family planning clinic for long-term contraceptives.
- **Key results:**
  - 78% (14/18) of ASSIST-supported sites have fully integrated family planning services into HIV care through the mother-baby care points.
  - 100% of the participating sites have not run short of family planning contraceptives for the past six months.
  - 78% (14/18) of the supported sites currently have more than five staff trained and are providing all temporally family planning contraceptives including long term methods; 23% (4/18) have a minimum of three staff trained and able to provide FP contraceptives.
- **Figure 17 shows that the proportion of women receiving FP counselling at 10 mother-baby care points stands at 92% (680/740) by the end of August 2015 compared to 30% at the end of March 2015. The proportion of women provided with a family planning method of their choice at the mother-baby care point has improved from 10% in Jan 2015 to currently 69% (469/680) by end of August 2015.**
- Changes introduced to improve family planning education/counselling among women attending the immunization and postnatal clinics included:
  - Provision of FP/RH health services at the immunization clinic before vaccination of the babies starts (this change was introduced in April 2014 at all the supported sites).
  - Use of village health team members who are already using family planning contraceptives to conduct group education and share their experiences in using contraceptives starting May 2014.
  - Conducting two group education talks to reduce on those who miss the morning session started in June 2014 across all sites.
  - Provision of family planning contraceptives during the EPI outreach activities starting July 2014
  - Conducting community sensitization and education sessions aimed at addressing the misinformation regarding the use of modern contraceptives starting August 2014.
  - Allocation of midwives to provide family planning/reproductive health services to women referred from the immunization and postnatal clinics in October 2014.
  - In November 2014, FP contraceptives were dispensed at the same service point as immunization.
- As a result, the percentage of women 15-49 years attending the immunization and postnatal clinics who received FP counselling and were provided with a modern contraceptive method of their choice

improved from 41% in Sept 2014 to 67% in March 2015 in 13 SMGL participating sites.

**Figure 17: Percentage of HIV-positive women attending mother-baby care points who received FP counselling and FP method of choice, 10 sites of 4 SMGL districts, Western Uganda (Nov 2014-Aug 2015)**



## Activity 10. Improve the wellbeing of vulnerable children

### BACKGROUND

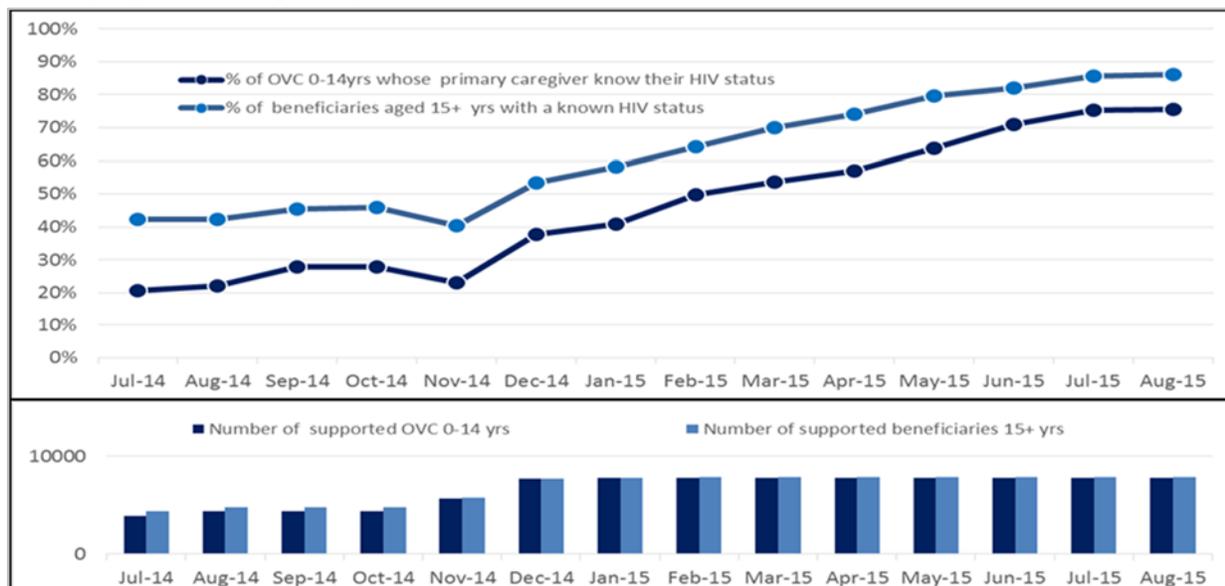
This activity helps to demonstrate use of QI to improve services for orphans and vulnerable children and their families. Joint QI activities are conducted to guide the improvement teams to identify quality gaps and test possible changes to close the gaps in OVC service care. USAID ASSIST facilitates the documentation of lessons learned and disseminates the lessons learned to more stakeholders in effort to improve care across more service providers. During this reporting period, ASSIST focused on spreading improvement activities and lessons learned from four demonstration districts and 24 villages to 10 districts and 45 villages supported by two partners (SCORE and UPHS).

ASSIST organized joint QI activities with the MGLSD, UPHS, and SCORE to 18 civil society organizations (CSOs) in 14 districts and 79 village child protection committees (VCPCs) in 11 sub counties to support them use QI methods and improve services for OVC and their families. Bi-monthly coaching and one learning sessions were conducted to support improvement teams at CSO and village levels to identify gaps and test and implement changes to improve services across the core program areas for the improved wellbeing of the OVC and their families.

### KEY ACCOMPLISHMENTS AND RESULTS

- Conducted three coaching sessions to both demonstration and spread CSOs** (Apr, Jun and Aug 2015). At both the demonstration and spread CSOs, focus was on increasing the percentage of supported beneficiaries with known HIV status through spreading of emerging changes associated with improvement across all CSOs as well as supporting CSOs to spread the changes from ASSIST-supported sub-counties to more areas of operation. Ten improvement teams (KIFAD, Agape, SEPSPEL, KORD, RUDFA, IDO, Katente, AOET, Comboni, and COVOID Bushenyi) have registered improvements in this area as shown in **Figure 18**.

**Figure 18: Percentage of OVC 0-14 years and beneficiaries 15+ years with known HIV status at 10 CSOs (July 2014 - Aug 2015)**



- **Support for the improvement teams focused on spread of changes from three CSOs to all other CSOs as well as increasing access to HIV testing and counseling (HTC) services among OVC 0-14 years.** By end of August 2015, 10 CSOs had registered significant increase in percentage of OVC 0-14 years whose primary caregiver knew their HIV status to 76% (5,908/7,820) from 54% (4,188/7,820) in March 2015. Similarly among the supported beneficiaries 15+ years, the proportion with known HIV status increased from 70% (5,474/7,827) in March 2015 to 86% (6,739/7,829) in August 2015. The gap between children 0-14 years and beneficiaries 15+ years with known HIV status has decreased from 16% in March 2015 to 10% in August 2015. Changes tested include: tracking those not tested through VSLA; making a written referral to the nearest testing unit (SEPSPEL), asking mother to bring along their children for community immunization outreaches (COVOID), use of VHTs to refer and follow OVC to testing centers (Katente), conducting HTC during weekends (Comboni), and conducting HTC in schools (AOET).
- **Responded to gender gaps** in school re-integration for male and female vulnerable children and gender issues identified in economic strengthening efforts, including the potential increase of gender-based violence.

### SPREAD OF IMPROVEMENT

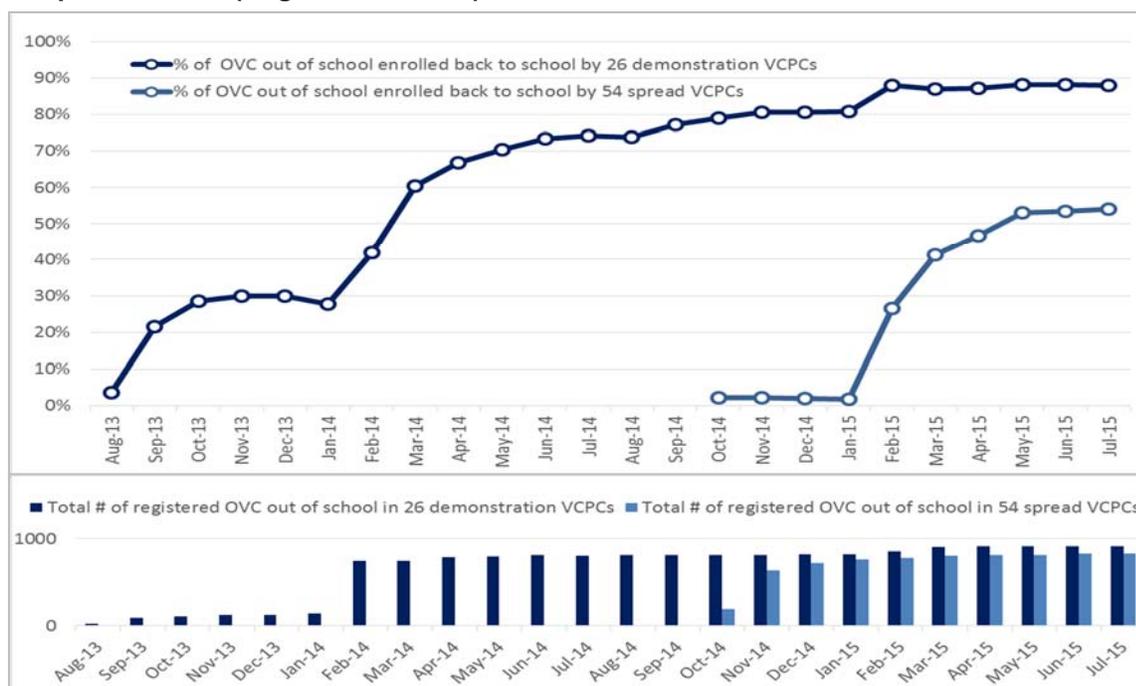
In this reporting period, support for the improvement teams focused on spread of changes from 3 CSOs to all other CSOs; as well as increasing access to HTC services among OVC 0-14 years. By end of Aug 2015, 10 CSOs had registered significant increase in percentage of OVC 0-14 years whose primary caregiver knew their HIV status to 76% (5908/7820) from 54% (4188/7820) in March 2015. Similarly among the supported beneficiaries 15+ years, knowledge of HIV status improved from 70% (5474/7827) in March 2015 to 86% (6739/7829) in August 2015. The gap between children 0-14 years and beneficiaries 15+ years with known HIV status has decreased from 16% in March 2015 to 10% in August 2015. Changes tested include; tracking those not tested through VSLA not making a written referral to the nearest testing unit (SEPSPEL), asking mother to bring along their children for community immunization outreaches (COVOID), use of VHTs to refer and follow OVC to testing centers (Katente), conducting HTC during weekends(Comboni), and conducting HTC in schools (AOET).

- Conducted sub-county based village child protection committee learning and sharing meetings in June 2015: The VCPC of the 79 villages (12 supported sub-counties) were brought together at their respective sub-counties to share experiences on identifying and linking OVC to services of need. A total of 231 participants attended the meetings, including three committee members per VCPC, community development officers, and parish chiefs. Participants shared changes tested to ensure more children out of school were supported to enroll back in school; and linkage to services of need.

Across the village committees, poverty among vulnerable households was identified as the most significant challenge that affects their access to essential services. Village committees were encouraged to work with the community development officer to support household economic strengthening activities such as VSLAs. 20 out of the 79 VCPs have established VSLAs with 171 households servicing 280 children participating.

- The VCPC has been effective in identifying, linking and follow up of the vulnerable children to ensure they receive services they need. In the 26 demonstration supporting 3539 OVC, 73% have been linked to service and of whom 93% were confirmed to have received the services by end of July 2015. Similarly in the 54 scale-up villages supporting 4514 OVC, 42% have been linked of whom 93% have been confirmed to have received services. By July 2015, school enrollment of OVC who were out of school has increased to 88% (804/914) in the 26 villages and 54% (447/827) in the 54 villages. See **Figure 19**.

**Figure 19: Increase in vulnerable children enrolled back in school, 26 demonstration VCPCs and 54 spread VCPCs (Aug 2013-Jul 2015)**



## IMPROVEMENT IN KEY INDICATORS

Activity	Indicators	Baseline	Last value	Change (percentage points)
To improve the wellbeing of vulnerable children	% of OVC with birth registration certificates	3% (July 2013) 2 CSOs	60% (Aug 2015) 12 CSOs	57
	% of OVC 0-14 years whose primary caregiver knows their HIV status	18% (Aug 2014) 4 CSOs	60% (Aug 2015) 18 CSOs	42
	% of beneficiaries 15+ years with a known HIV status	42% (Aug 2014) 4 CSOs	72% (Aug 2015) 17 CSOs	30
	% of vulnerable households in saving groups saving regularly (spread CSOs)	48% (Aug 2014) 5 CSOs	92% (Aug 2015) 8 CSOs	44

Activity	Indicators	Baseline	Last value	Change (percentage points)
	% of vulnerable children identified and linked to needed services by the Vulnerable Child Protection Committees (VCPCs) in demonstration sites	4% (Aug 2013) 2 villages	73% (July 2015) 26 villages	69
	% of vulnerable children linked and received needed services by VCPCs in spread sites	1% (Oct 2014) 13 villages	42% (July 2015) 54 villages	41
	% of children out of school re-enrolled back to school by VCPCs in demonstration sites	3% (Aug 2013) 2 villages	88% (July 2015) 26 villages	85

## **Activity 11. Northern Uganda Program**

### **BACKGROUND**

Started in April 2015, the USAID ASSIST Northern Uganda program is expected to apply four broad strategies to ensure sustained quality of health services in all targeted sites in 15 districts. These are:

- Technical training in all health areas, building the capacity of health workers to provide quality malaria, TB, HIV, RH/FP and MNCH services through technical trainings based on MOH curricula and national scale-up plans, guidelines and revised policies.
- Ensuring availability of essential supplies and commodities: ASSIST will support health facilities to submit timely and adequate orders of essential health commodities to National Medical Stores (NMS) and Joint Medical Stores.
- Coordinating with USAID's Strengthening Decentralization for Sustainability project (SDS) for joint district support supervision.
- Continuous quality improvement (CQI) to achieve actual improvement at the site level, complemented by the collaborative improvement approach, which enhances a learning environment to facilitate rapid dissemination of successful and best practices among a large number of sites. Site level QI teams at high-volume sites will be supported to test and implement changes through monthly coaching visits.

### **KEY ACCOMPLISHMENTS AND RESULTS**

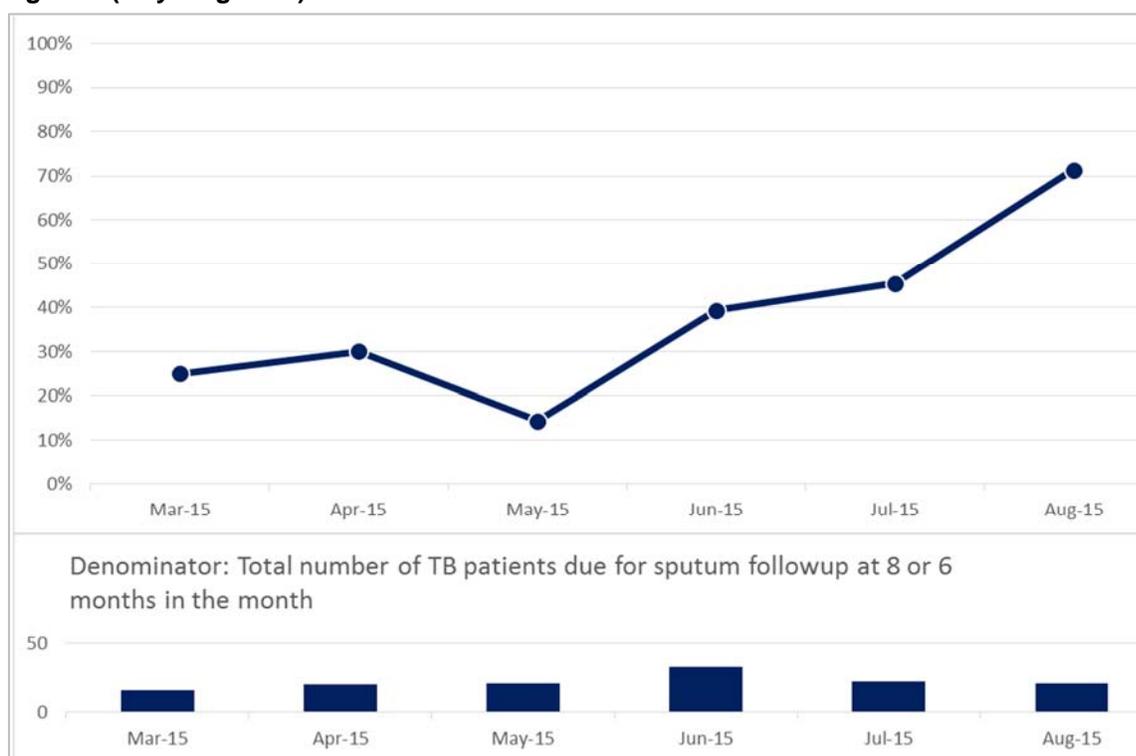
**Improve HIV/AIDS care and treatment:** ASSIST partnered with the MOH to improve service delivery with the aim of ensuring that all people with HIV in 15 districts of Northern Uganda access the care and treatment they require to remain clinically well. Working with 10 collaborative sites and 9 COR sites, the continuum of response model ensures that prevention, care, and treatment services are delivered along the HIV care cascade.

- ASSIST trained 14 regional trainers in pediatric and adolescent HIV care and treatment and organized a regional stakeholders meeting to scale up these services within the region. As a result, HIV collaboratives were established with 10 sites. Two learning sessions were held with these 10 sites in the HIV collaborative and one for the 9 COR collaborative sites.
- Monthly integrated coaching visits to the 49 intense support sites have been ongoing. By end of August 2015, 49% (35 sites) of clients who were due for a CD4 testing received the test, an increment from 22% (27 sites) in March 2015.
- Data quality improvement was initiated at 82 light support sites through quarterly coaching visits.

**Improve the quality of TB care:** ASSIST is working in collaboration with the district health leadership to improve TB care services in 15 districts of Northern Uganda, specifically to increase TB case notification and case detection rate through improved processes for intensified case finding (ICF) at facility and community level; increase TB treatment success rates; and improve TB-HIV collaboration. Efforts to achieve these objectives are being directed to 49 intense and 82 light support facilities across the 15 districts by leveraging the community, laboratory and HIV clinical care structures.

- **Established functional QI teams in 12 TB collaborative facilities**, and all teams have received targeted TB coaching visits as well as one TB learning session. At these facilities, clients are educated about the dangers of TB, importance of adherence, appointment keeping, and routine and timely TB sputum analysis. Missed appointments are followed up by the community linkage facilitators. At the facility, clients are counselled every time they visit and reminded about their next appointment dates. Clients due for sputum monitoring at eight months are routinely generated and linked to the laboratory. **Figure 20** shows improvements in TB cure rates that are also reflective of improved data management.
- Improving TB-HIV data quality at the ASSIST-supported sites was done through monthly integrated coaching visits to the 49 intense sites and quarterly coaching to 82 light support sites.

**Figure 20: TB cure rates in 5 TB collaborative sites in Apac, Lira, and Dokolo districts, Northern Uganda (May-Aug 2015)**



**Improve the quality of malaria prevention and treatment services:** ASSIST focused on reducing the malaria epidemic in Northern Uganda that started in March 2015 with specific emphasis on diagnosis and management of malaria cases. This involved capacity building for health workers in the 15 districts, training 566 frontline health care workers in integrated management of malaria (IMM) and 60 in rapid malaria diagnostic test (RDT) use. To have a sustained response at the community level, 257 health worker master trainers were trained, who later trained 7964 VHTs on mass fever treatment (MFT) in 72 high-prevalence malaria sub counties across the 10 post-IRS districts. ASSIST is currently conducting VHT mentorship to ensure quality of mass fever treatment.

- At the facilities, malaria case management involved supporting 10 post-IRS districts to quantify and distribute two rounds of 50,760 doses of artemether/Lumefantrine, 4494 Artesunate injectable vials, 25950 RDTs, emergency malaria drugs, and commodities.
- Malaria improvement work spread to 10 additional intense sites. Six sites set up 'RDT corners' at ANC to scale up testing for pregnant women and prompt treatment for confirmed cases. Children under five children receiving diagnosis and treatment of malaria were managed, with emphasis on the triage system.
- **Improving improving malaria case management for under-fives at Dr. Ambrossoli Hospital:** The malaria QI team at the OPD at Dr. Ambrossoli Hospital in Kalongo observed that due to a lack of

a triage system for children under five presenting with signs and symptoms of malaria in OPD, a number of under-fives presenting with danger signs developed complications such as seizures while waiting in line. A number of changes including, orientation of all OPD staff on assessment of malaria danger signs, recording of temperature for all under-fives on arrival to promptly identify hyperpyrexia, issuance of red cards to all mothers with under-fives to ease identification and immediate linkage to a clinician, and introduction of a counter book to record all identified under-fives linked to a clinician.

These changes led to an increase in under-fives attending OPD that are promptly linked to a clinician for review from 0% in April 2015 to 84% in August 2015.

**Improve PMTCT services:** The program supports 49 intense support sites and 82 light support sites with a focus on 15 PMTCT/early infant diagnosis collaborative sites. The teams have prioritized areas for improvement using the PHFS change package to improve retention of mother/baby pairs in care and reduce incidence of HIV amongst exposed infants.

- Supported setting up of functional mother-baby care points in the facilities and ensuring that testing is done within the ANC clinic. This led to an improvement in mother-baby pair retention.
- A total of 1,188 infants who were born to HIV-positive women in cohort May to September 2015 received a virological HIV test, with a 1.9% positivity rate.
- Option B plus weekly reporting has markedly improved from 24% to 92% reporting.
- Two peer-to-peer learning sessions for improvement teams in 15 collaborative sites were held. The purpose of these learning sessions was to facilitate spread of lessons learnt from the PHFS initiative and enable teams to prioritize areas for performance. Coaching visits to intense and light support sites were held monthly and quarterly, respectively.
- 12 sites are pre-testing the longitudinal ANC register which will be rolled out to other health facilities.

**Reduce maternal and newborn morbidity and mortality:** ASSIST is working in 20 collaborative sites using high-impact, low-cost, evidence-based interventions: active monitoring of progress of labor, AMTSL, and prompt management of complications such as hemorrhage, prolonged/obstructed labor, pre-eclampsia/ eclampsia, abortion complications, and infection.

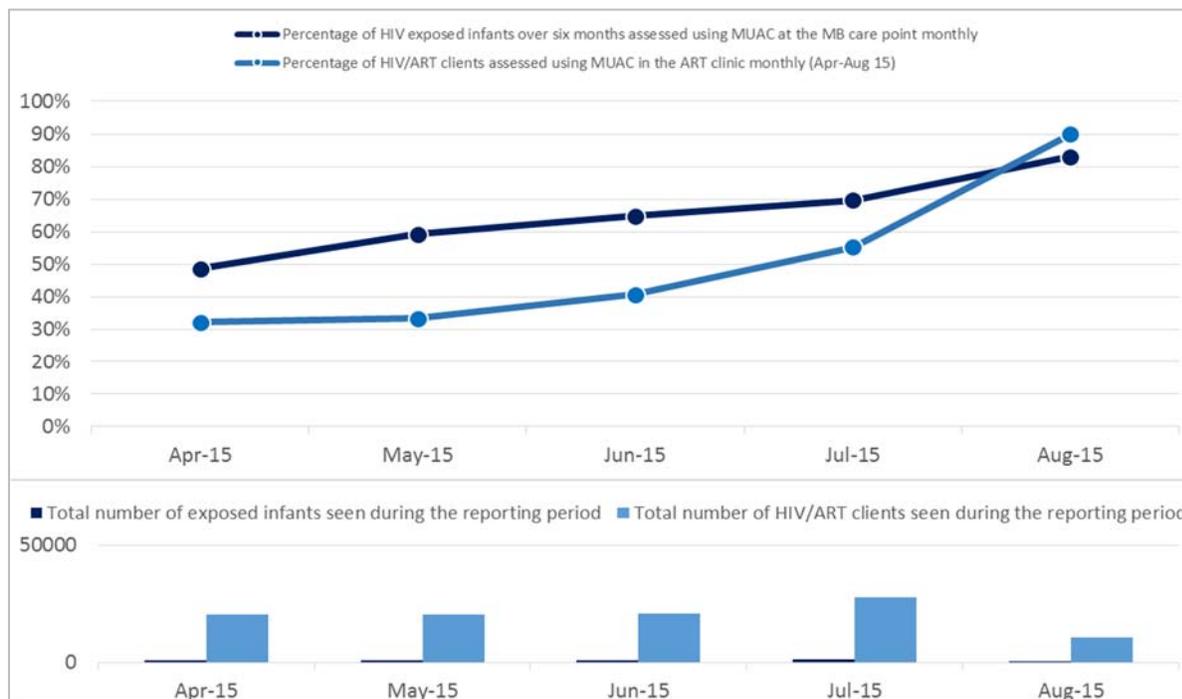
- Improved neonatal outcomes at general hospitals in the region (Anaka and Apac hospitals and Dokolo HC IV) by establishing neonatal care rooms/areas within the maternity units with the existing resources and equipment. ASSIST has worked with the facility staff to identify these areas to manage sick newborn babies and premature babies that need special attention and care. We also provided protocols, guidelines, and job aids for maternal and neonatal care in the facilities.
- Improved maternal outcomes with reduction in postpartum hemorrhage through onsite coaching/mentorship on AMTSL and provision of oxytocic drugs to all mothers within one minute of delivery. This was possible by finding alternative methods of storing oxytocin in units that didn't have refrigerators.
- Improved partograph use among the collaborative sites (from 31% in Feb – 55% in August 2015) has led to better and earlier recognition and prompt management of obstetric complications. Obstructed labor cases have reduced from 6% in Feb. 2015 to 3.1% in August 2015, and use of AMTSL has increased from 55% in Feb to 94% in Aug 2015.
- Improved maternal outcomes with functional theaters at three health centers in the region (Ogur, Amach, and Lalogi HC IV). The final inspection of the two theatres was done and are now ready for use. Staff from these facilities have been re-oriented at Lira Regional Referral Hospital to enhance their skills and knowledge needed to functionalize the theatres.

**Increase access to FP services:** ASSIST carried out a situational assessment in 23 sites of nine districts to determine the scale of FP services provided in Northern Uganda. The assessment showed that these sites provide the whole range of modern FP methods, however none of the sites offered integrated FP services at the different entry points (post-natal care/young child clinic, Maternity ward, Gynecology ward, mother-baby care points, and HIV clinics). In addition, less than 20% of the staff in these facilities had received a refresher FP training in the past one year. ASSIST plans to support facilities to integrate FP services at the five different entry points mentioned above.

**Improve the nutrition status of people infected with and affected by HIV:** ASSIST is supporting nutrition assessment, counselling, and support (NACS) in selected health facilities in Northern Uganda.

- ASSIST has established 11 nutrition collaborative improvement sites.
- ASSIST has conducted a series of coaching and mentorships whereby regional and district coaches visit health facilities on a monthly basis. Between July and October 2015, a total of 417 health workers received on-job training on how to provide NACS during the monthly coaching visits.
- ASSIST facilitated three peer-to-peer learning sessions amongst sites teams, and these were attended by 42 health workers and 20 district nutrition focal persons.
- Technical support was provided to USAID/PIN-supported sites to build capacity of health workers in integrated management of acute malnutrition. In September 2015, coaching and mentorship focusing on integrated management of acute malnutrition (IMAM) was conducted in seven health facilities that receive RUTF from PIN with support from USAID, reaching 35 health workers.
- Services provided: Nutrition assessment using mid-upper arm circumference (MUAC) is taking place at key contact points mainly ANC clinic, ART clinic, and EID care points since April 2015. Between April and September 2015, 47,190 pregnant women received nutrition assessment; 64,851 PLHIV received nutrition assessment in the ART clinics, and 3,757 children received nutrition assessment at the mother-baby care points in 36 health facilities. Clients who are identified through routine nutrition assessment as having severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) with HIV/TB receive RUTF for treatment of malnutrition. A total of 2,567 malnourished clients in 36 health facilities have received treatment for malnutrition between April and September 2015. Nutrition counselling on both maternal and infant and young child feeding is done and recorded in integrated nutrition registers. During August –September 2015, 3,125 mothers in 18 health facilities received maternal nutrition counselling, and 2476 received infant and young child feeding counselling.
- **Figure 21** shows how as a result of the above interventions, health workers are increasingly assessing HIV-exposed infants using MUAC as well as HIV/ART clients.

**Figure 21: Percentage of HIV-exposed infants over six months and HIV/ART clients assessed using MUAC in 34 sites in Northern Uganda (Apr – Aug 2015)**



**Improve the quality of SMC services:** ASSIST supports districts to initiate, coordinate, and spread SMC QI activities to all sites providing these services.

- SMC coaching visits to 20 health facilities were conducted to support site-level SMC QI teams to address quality gaps and develop improvement projects. Twenty-six district-based SMC QI coaches were also trained to support sites providing the service in their respective districts.

- To improve compliance to the minimum standards of SMC as prescribed in the SMC quality standards, ASSIST provided copies of relevant policy guidelines and reference documents (SMC policy, patients' charter, health sector quality improvement framework and strategic plan, the national safe male circumcision health care waste guideline, toolkit for VMMC health care waste, emergency response protocols for SMC, adverse event guidelines for SMC, SMC for HIV prevention communication strategy and client feedback assessment forms).

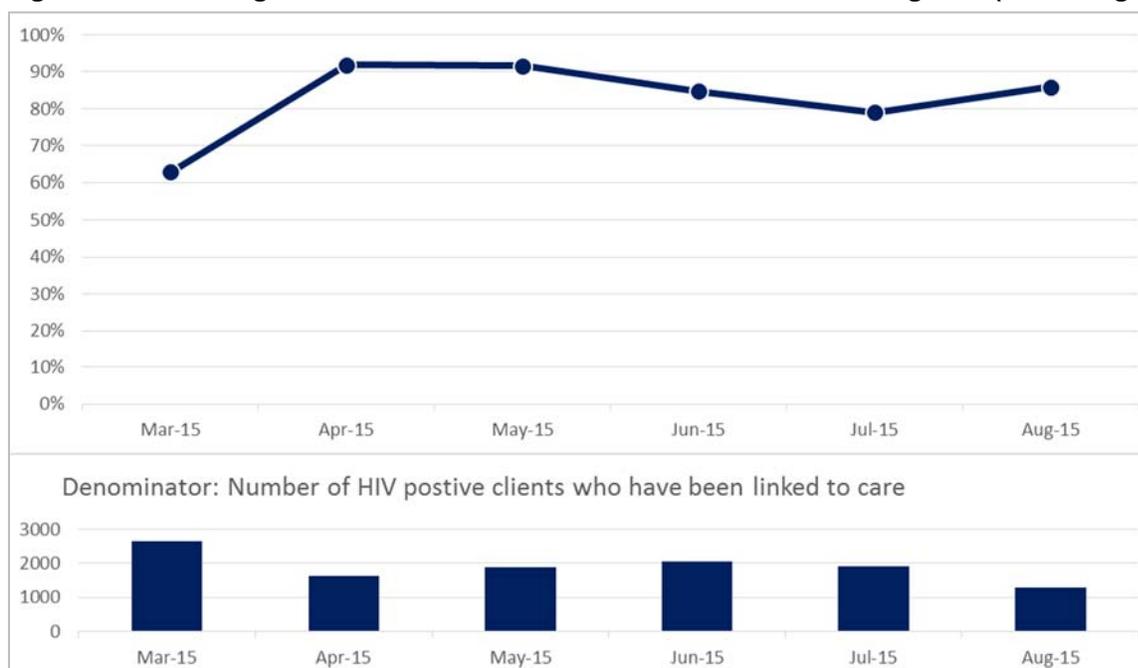
**Improve laboratory services:** ASSIST has built the capacity of hubs and provides on-site technical assistance to improve the quality of laboratory services provided at the lower level laboratories in accordance with the national standards.

- A total of 11 hubs (6 established and 5 designated) have been provided with targeted training on use of high-output equipment, mentorship based on Strengthening Laboratory Management towards Accreditation (SLAMTA) approaches, and improvement coaching.
- High-output FACSCount CD4 machines were installed and are in use at four of five (75%) established hubs. The percentage of hub-supported health facilities whose samples were run at the hub laboratories increased from 43% in April to 54% in August 2015.
- The project improved lab function through training in CD4 testing using the FACSCount CD4 machine for four established hubs: in all 445 health frontline workers from 15 districts were trained on viral load DBS sample collection and packaging in collaboration with MOH – Central Public Health Laboratories (CPHL). This has translated to improved assessment and monitoring of PLHIV: 8,817 viral load samples have been collected for PLHIV on ART out of a targeted 7,722 as of early September 2015.
- Increase in CD4 tests done from 376 in March to 1944 in July 2015 across 35 intense support sites supported by the six established hubs.
- Laboratories in the region need accreditation, therefore two regional SLAMTA mentors and 23 laboratory personnel from the 11 collaborative sites participated in SLAMTA training conducted by MOH – CPHL to improve the functionality and quality of tests. They have so far conducted two follow-on SLAMTA mentorship visits to 11 hubs.

**Improve community services:** ASSIST conducted collaborative community-based coaching and learning sessions to improve enrollment and retention of PLHIV into care and treatment as well as to increase access to prevention and curative services through improved client/patient knowledge.

- A total of 10 community collaborative improvement sites were established with functional QI teams.
- Two targeted coaching visits to the community collaborative sites were conducted, and one community collaborative learning session was held.
- There has been an increase in mother-baby pair retention. A case in point is Mucwini HCIII's story. At Mucwini HCIII, the community QI team observed that there was high number of lost mother-baby pairs. They agreed to serially test the following changes: 1) generate a list of lost mother-baby pairs for follow-up by linkage facilitators; 2) issue all reached mother-baby pairs new appointment dates; and 3) document all follow-up outcomes. In July 2015, 23 mother-baby pairs expected to be in care were lost after routinely generating a list of mother-baby pairs for follow-up by the linkage facilitators; as agreed, these were duly followed up through home visits. Eleven mother-baby pairs returned to care at the facility, yielding a 48% return-to-care rate after follow-up for the month of July. For those mother-baby pairs that did not return, two HIV-exposed infants were found dead, four mother-baby pairs had moved homes, and six didn't return despite follow-up, allowing the facility to account for each pair.
- **Results:** Improved linkage of HIV-positives into care (63% in March to 86% in August 2015) (**Figure 22**), and higher retention of PLHIV on ART, rising from 84% (March 2015) to 86% (June 2015).

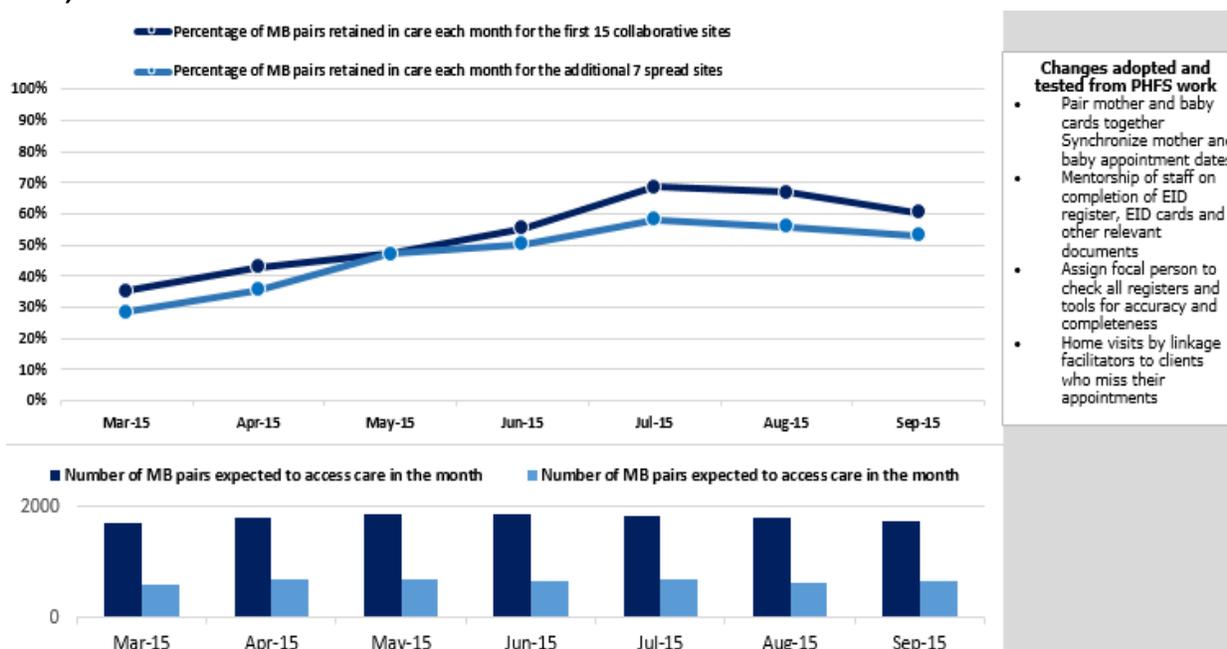
**Figure 22: Percentage of PLHIV linked to care in 137 sites in Northern Uganda (Mar – Aug 2015)**



### SPREAD OF IMPROVEMENT

Lessons learnt from the 15 PMTCT collaborative sites on improving mother-baby pair retention were spread to seven additional sites. **Figure 23** below shows some of the results and changes that were implemented to achieve the results.

**Figure 23: Increase in mother-baby pairs retained in care in 22 sites in Northern Uganda (Mar-Sept 2015)**



#### Changes adopted and tested from PHFS work

- Pair mother and baby cards together
- Synchronize mother and baby appointment dates
- Mentorship of staff on completion of EID register, EID cards and other relevant documents
- Assign focal person to check all registers and tools for accuracy and completeness
- Home visits by linkage facilitators to clients who miss their appointments

## IMPROVEMENT IN KEY INDICATORS

Activity	Indicators	Baseline	Last value	Change (percentage points)
Northern Uganda Program	% of pregnant mothers assessed using MUAC in ANC	64% (Apr 2015) 31 sites	87% (Aug 2015) 10 sites	23
	% of clients assessed in ART clinic using MUAC	32% (Apr 2015) 31 sites	89% (Aug 2015) 10 sites	57
	% of HEI above 6 months assessed using MUAC	49% (Apr 2015) 31 sites	83% (Aug 2015) 10 sites	34
	Partograph use	31% (Feb 2015) 18 sites	69% (Aug 2015) 20 sites	38
	% of newborns successfully resuscitated	63% (Feb 2015) 19 sites	86% (Aug 2015) 20 sites	23
	% of newborn cases that get ENC package	57% (Feb 2015) 18 sites	82% (Aug 2015) 20 sites	25
	% of mother-baby pairs retained in care	36% (Mar 2015) 30 sites	76% (Aug 2015) 22 sites	40
	% of TB clients with accurate and complete data in the TB register	0% (Mar 2015) 5 sites	73% (Aug 2015) 5 sites	73
	% of pulmonary TB cases provided follow-up sputum test at two months	56% (Mar 2015) 5 sites	80% (Aug 2015) 5 sites	24

### Activity 12. SMGL Program in Northern Uganda

#### BACKGROUND

The Saving Mothers Giving Life (SMGL) initiative implemented in six northern Uganda districts (Lira, Gulu, Apac, Nwoya, Pader, and Dokolo) is addressing all three delays associated with maternal and newborn deaths, including seeking appropriate care, reaching care in a timely manner, and receiving high-quality, timely care at the health facility. Community interventions have been implemented to address the 1<sup>st</sup> and 2<sup>nd</sup> delays whereas the 3<sup>rd</sup> delay is addressed by improving the quality of maternal and newborn health care services provided in 118 public, private non-profit, and private health facilities. A staged scale-up approach, initially focusing on improving quality of care at facilities with high volumes of deliveries and scaling up to additional facilities in stages is utilized. Stage 1 of implementation started by the third quarter of FY15 in 20 high-volume facilities (two regional referral hospitals, three general hospitals, eight HCIVs, and seven HCIIIs) that accounted for 64.4% of deliveries in FY14. However, implementation of the pregnancy outcomes monitoring system (POMs) in all complex EmONC facilities brought on board additional three facilities (Gulu independent hospital, Gulu military hospital, and the 5th division military hospital, Pader). Implementation in stage 1 included building a team of mentors, trainers, and QI coaches at the regional levels of Gulu and Lira. Establishment of regional, district, Health sub district and facility quality improvement committees/teams in line with the national QIF and strategy has also been ongoing.

#### KEY ACCOMPLISHMENTS AND RESULTS

**Ensuring quality of maternal, neonatal, and child health content:** Conducted monthly onsite technical and quality improvement coaching visits using a team of regional mentors and coaches (gynecologists, pediatricians, improvement coaches and district health team representatives).

- Two regional mentorship teams from the regional referral hospitals of Gulu and Lira and consultants from Gulu University and Lira University have been set up and are supported by USAID ASSIST to conduct monthly mentorships in their catchment areas (districts and health facilities).

- Forty district-based coaches in the six districts were trained and engaged in monthly coaching visits to build their coaching skills and act as spread agents during the scale-up phase.
- Five onsite mentorship visits were conducted to address knowledge and skill gaps in maternal and newborn care services, focusing on clean and safe deliveries, active labor monitoring, active management of third stage of labor, routine screening and management of pre-eclampsia, resuscitation of asphyxiated babies, provision of an essential newborn care package, and preterm care.
- Established three Neonatal Intensive Care Units (NICUs) in Lira and Gulu regional referral hospitals (RRHs) and Lacor Hospital to address skills gaps through onsite mentorship visits. In addition, supported the establishment of four additional NICUs at Anaka Hospital, Apac Hospital, PAG HCIV, and Kwera HCIII.
- Organized a placement for two theater teams of Ogur and Amach HCIVs of Lira District consisting of a medical officer, midwife, anesthetist, theater nurse, theater assistant, and theater cleaners from each facility to Lira RRH lasting five days. This was aimed at freshening their surgical skills and theater standard operating procedures.

**Improving processes of MNCH service provision:** Improvement teams at the 20 sites were supported to adapt changes from SMGL phase I, test, and implement changes through monthly onsite coaching visits.

- Three onsite coaching visits were conducted to address process gaps in maternal and newborn care services in the 20 facilities of the six SMGL northern districts. Focus was put on supporting teams to adapt best practices from SMGL phase I and test additional changes that will lead to improvement in maternal and newborn care processes.
- One peer-to-peer learning session was conducted for 20 SMGL facilities to share best practices and spread learning among participating teams.
- ASSIST supported the distribution of MOH maternal and perinatal death audit books to 10 health facilities of SMGL northern districts and supported the improvement teams in the 20 supported health facilities to conduct maternal and perinatal death reviews. USAID ASSIST provided technical support to the district Maternal and Perinatal Death Review (MPDR) committees of Apac and Gulu districts.

**Ensuring an effective health system support structure:** ASSIST established QI structures at the health facility levels in line with the National QI Framework and Strategic Plan. Capacity of these structures was strengthened, and they are being used in mentoring and coaching to ensure quality health services are provided and sustained.

- Twenty facility improvement teams have been established in the 20 supported facilities to lead the improvement of maternal and newborn care services. The teams have initiated improvement projects and are monitoring indicators to assess their own performance.
- The six SMGL districts meet monthly to review HMIS and MPDR reports from facilities and are developing action plans to address identified gaps.
- Functionalizing Health Center IVs: A team consisting of DHO Gulu, Director of Gulu RRH, Gulu RRH theater team, and the USAID ASSIST team visited Lalogi HCIV, Gulu District, to identify and address factors hindering the functionality of the theater. During the visit, a roadmap was developed that will lead to initiation of operations at Lalogi HCIV.

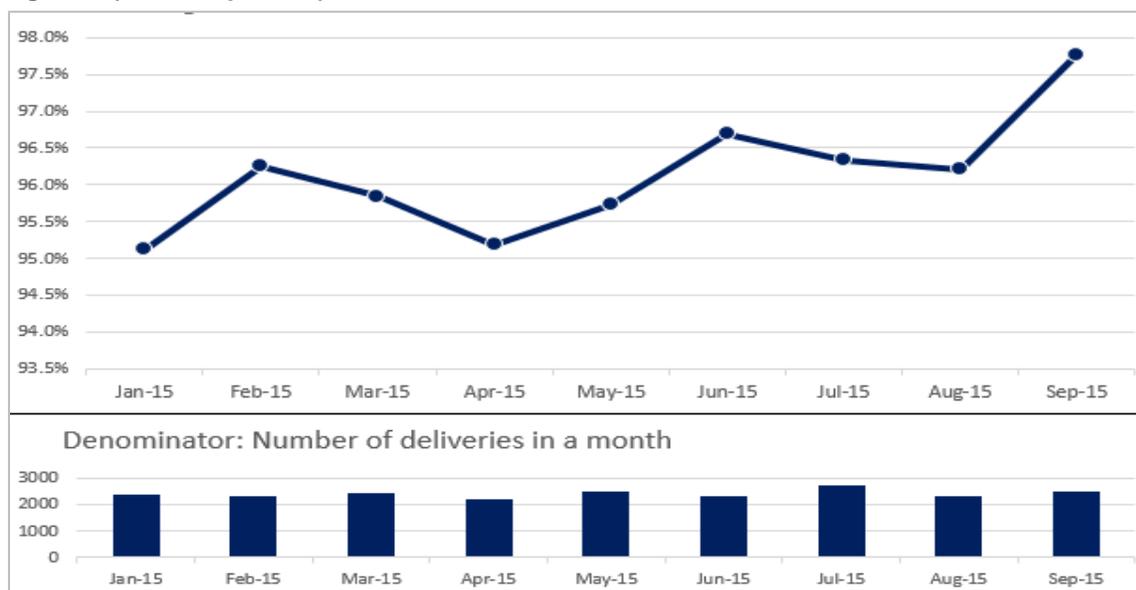
**Human performance:** Engaged the district and facility leadership of the six districts through joint on-site coaching visits to provide supportive supervision to MNCH staff in health facilities.

- The competences of staff have been strengthened through onsite mentorships to build key skills in maternal, newborn, and child health services.
- Facility teams have been empowered to schedule and conduct continuous professional development sessions to continually build staff knowledge and skills.
- Facility in charges have also been supported to redistribute drugs from other neighboring sites with adequate stocks in case of stock-outs.

**Health system gaps and linkages:** USAID ASSIST has collaborated with the Child Health and Reproductive Health divisions of the Ministry of Health through sharing reports and participating in technical working groups to provide guidance from the ASSIST-supported MNCH improvement work in the SMGL initiative.

- Nationally, ASSIST has engaged the Reproductive Health Division of the MOH to support the MNCH work in the six SMGL implementing districts of Uganda.
- At the district level, the leadership of the six districts has been engaged through joint onsite coach visits to identify and address system gaps in MNCH services.
- At facility level, ASSIST has strengthened the quality of data collected to track progress and monitor quality of care, including maternal and perinatal death reviews.
- There is a steady increase in the proportion of deliveries resulting in live births in the 23 health facilities, from 95% in January to 98% in September (**Figure 24**). This trend is mainly due to strengthened focus on partograph use in health facilities and on clean and safe delivery practices through onsite mentorships.

**Figure 24: Percentage of live births delivered in 23 health facilities, 6 SMGL districts, Northern Uganda (Jan – Sept 2015)**

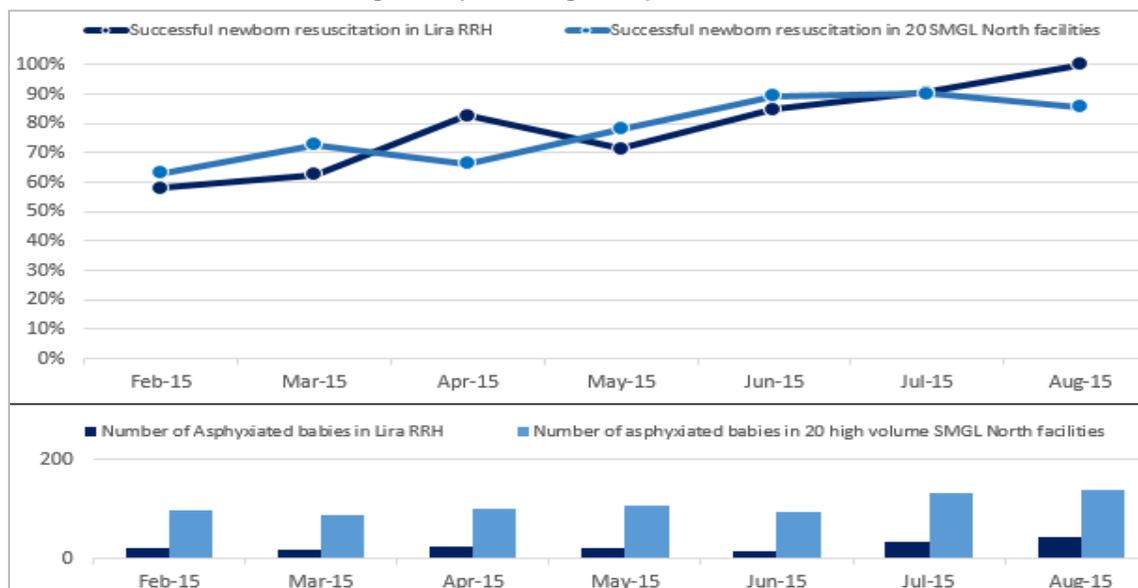


- With focus on building skills in neonatal resuscitation, there has been an increase in the proportion of babies born with birth asphyxia who are successfully resuscitated, as shown in **Figure 25**.
- **Figure 26** shows that use of uterotonic drugs within the first minute of birth has increased from 72% of deliveries in January 2015 to 98% of deliveries by the end of September 2015.

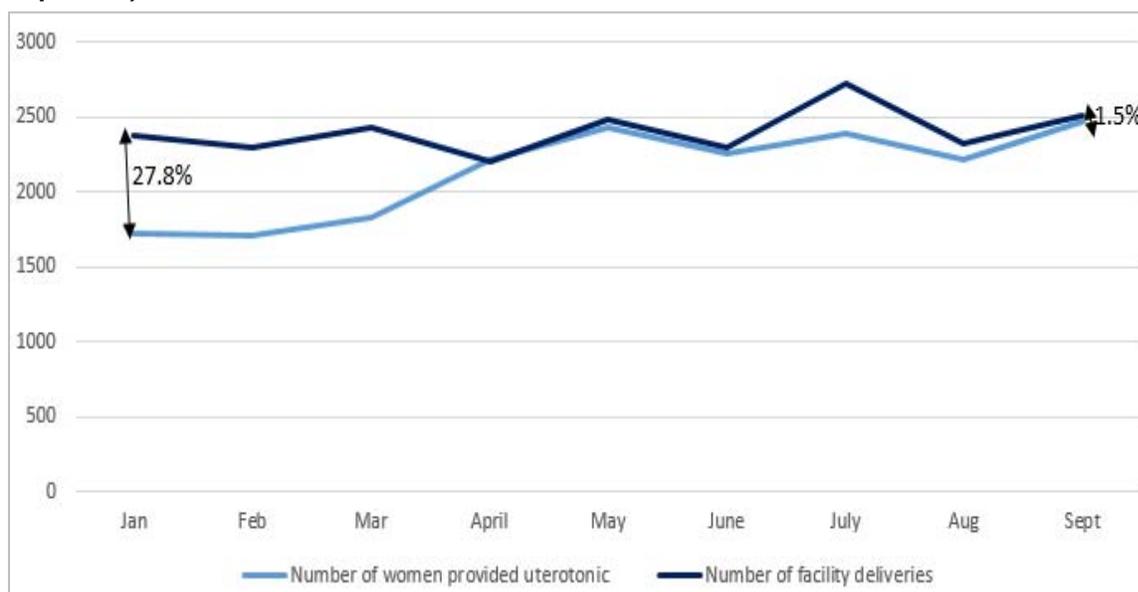
### SPREAD OF IMPROVEMENT

Twenty sites have been implementing lessons learnt from the phase I SMGL sites for most of FY15, and spread to the entire region (118 sites) is being planned for FY16.

**Figure 25: Proportion of newborns not breathing at birth successfully resuscitated, 20 sites, 6 SMGL districts in Northern Uganda (Feb- Aug 2015)**



**Figure 26: Administration of a uterotonic drug at delivery to prevent PPH, 23 facilities (Jan 2015- Sept 2015)**



### IMPROVEMENT IN KEY INDICATORS

Activity	Indicators	Baseline	Last value	Change (percentage points)
SMGL North	% application of AMTSL during delivery	56% (Feb 2015) 19 sites	94% (Aug 2015) 20 sites	38
	% use of a partograph for labor monitoring	31% (Feb 2015) 18 sites	69% (Aug 2015) 20 sites	38

Activity	Indicators	Baseline	Last value	Change (percentage points)
	% delivery of a complete package of ENC	57% (Feb 2015) 18 sites	82% (Aug 2015) 20 sites	25
	% successful resuscitation of asphyxiated babies	63% (Feb 2015) 19 sites	86% (Aug 2015) 20 sites	23
	Postpartum hemorrhage rate	0.7% (Feb 2015) 18 sites	1.0% (Aug 2015) 20 sites	0.3
	% of obstructed/prolonged labor cases	6% (Feb 2015) 18 sites	3.2% (Aug 2015) 20 sites	-2.8
	% screening for pre-eclampsia during labor/delivery	30% (Feb 2015) 18 sites	52% (Aug 2015) 18 sites	22

### **Activity 13. Improving antenatal care**

#### **BACKGROUND**

There is strong evidence supporting the benefits of antenatal care interventions, when effectively administered, on the health of the pregnant woman and fetus and on the prevention of obstetric and neonatal complications. However, significant quality gaps persist in ANC services in low-resource settings, which contribute to a high burden of maternal morbidity and mortality.

While much progress has been made to refine a basic platform of ANC best practices [e.g., intermittent preventive therapy (IPT) for malaria, routine screening for preeclampsia and eclampsia (PE/E) and pre-term labor risk factors], the poor quality of ANC services in many low- and middle-income countries continues to increase women's risk of serious maternal morbidities and mortality (e.g., severe anemia, malaria, TB, syphilis, gestational diabetes, PE/E) as well as the risk of poor outcomes for their newborns. ASSIST and other partners are gaining important experience in improving the quality of ANC services.

In Uganda, ASSIST is working with the MOH, Jinja District, and health facility teams to contribute to the reduction in maternal mortality through ensuring quality primary care ANC services including ANC health promotion best practices and antenatal prevention, detection and management of obstetric complications and maternal morbidities especially, pre-eclampsia.

#### **KEY ACCOMPLISHMENTS AND RESULTS**

- Shared work plans with district officials and participating facilities' staff and coordinated proposed plans and interventions with the central MOH Maternal Health Care Department officials (June 2015).
- Conducted an initial scoping visit with a sample of Health Centers IV and Health Centers III and the Jinja Referral Hospital (June 2015).
- Developed and field-tested quantitative indicators as well as data collection instruments (Jun–Jul 2015).
- Trained a cadre of four regional QI coaches as data collectors for the baseline assessment. The ASSIST team conducted a baseline assessment and trained data collectors in each of the 10 participating facilities designed as intervention sites, as well as in a similar number of control facilities (Sept 14-18, 2015).

### **Activity 14. Improve quality of integrated pre-eclampsia/eclampsia (PE/E) and preterm labor care (PTL)**

#### **BACKGROUND**

Preeclampsia and eclampsia (PE/E) are major risk factors for pre-term delivery and contribute to almost 14% of maternal deaths globally. Similarly, preterm birth and its complications contribute to 14% of global neonatal deaths. While major progress has been made in refining and demonstrating the efficacy of high-impact intervention bundles for PE/E (MgSO<sub>4</sub>), preterm labor (antenatal corticosteroids) and management of the pre-term neonate (kangaroo mother care), significant barriers remain around the

effective integration and implementation of these intervention bundles along a continuum of antenatal, intra- and postpartum care and primary to referral-level services. In particular, early recognition of complications at household and primary levels and effective referral and counter-referral continue to represent major challenges for improving outcomes for mothers with PE/E and their term and premature neonates.

ASSIST and other partners have started to build substantial experience in improving early detection and case management of PE/E, PTL, and the preterm neonate in several USAID MNCH-priority countries. By improving integrated care of the mother and neonate through reliable and consistent delivery of evidence-based high-impact intervention bundles for PE/E (MgSO<sub>4</sub>), and management of preterm birth (ACS) associated with PE/E in selected facilities of Jinja District of Uganda, the activity will reduce PE/E and prematurity and associated maternal and neonatal mortality and thus, contribute to global Ending Preventable Child and Maternal Deaths (EPCMD) agenda.

The learning from the QI work will be shared thoroughly with the Uganda Ministry of Health, the Jinja and neighboring district management teams and with other USAID and MOH implementing partners, seeking opportunities for scale-up of the integrated model of care to new regions and networks.

## **KEY ACCOMPLISHMENTS AND RESULTS**

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- An initial scoping visit was conducted to a sample of Health Centers IV, Health Centers III, and the Jinja Referral Hospital by Dr. Jorge Hermida and Dr. Connie Namajji (June 2015).
- Quantitative indicators as well as data collection instruments were developed and field tested by the ASSIST team (June-July 2015).
- A cadre of four regional QI coaches were trained as data collectors for the baseline assessment by Dr. Namajji (Aug 2015).
- A baseline assessment was conducted by the ASSIST team plus trained coaches in each of the 10 participating facilities designed as intervention sites, as well as in a similar number of control facilities (Sept 2015).

### **Activity 15. Improve and sustain high-quality newborn resuscitation services**

#### **BACKGROUND**

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Newborn resuscitation is essential in the treatment of birth asphyxia, which causes about 30% of newborn deaths. There has been an increasing investment in building the capacity of countries to provide effective coverage of quality newborn resuscitation services.

Based on several discussions within the Resuscitation Working Group, as well as interest expressed by the Newborn Health Program authorities at the Uganda MOH, Uganda has been selected as a focus country to conduct assessment of Newborn Resuscitation. Uganda's experience with Helping Babies Breathe (HBB) and now HBB+ has the potential to offer important learning for informing a broader strategy to improve effective coverage and quality as part the ongoing rollout of HBB+ in Uganda and across other countries as well.

To support the Ugandan Government's effort to reduce preventable newborn mortality, as part of the broader health agenda, USAID is supporting Uganda's four regions, covering 47% of the total population, through initiating and expanding the Saving Mothers Giving Life initiative. During its first phase, SMGL employed a package of evidence-based interventions which resulted in a 17% decrease in perinatal mortality. Building on the successful approaches of phase 1, in FY15, SMGL expanded in six new districts in Uganda with an increased focus on neonatal health. Within this scope, ASSIST has now been tasked with scaling up the interventions with an increased focus on newborn health (including essential newborn care, HBB, and care for preterm babies) in 30 facilities in the west and 118 facilities in mid-Northern Uganda. At this stage, the project focuses on 20 high-volume facilities in Northern Uganda with plans to scale up the QI interventions to the remaining 98 facilities starting in FY16.

In an effort to inform evidence-based decisions on improved access to and use of high-quality newborn resuscitation services and to guide future improvement practices in Uganda, ASSIST will complement the ongoing assessment of coverage of HBB+ services conducted by MOH by identifying service delivery quality gaps impeding provision of effective basic resuscitation services at the facility level, in prospective SMGL Phase 2-supported facilities.

## KEY ACCOMPLISHMENTS AND RESULTS

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- **ASSIST coordinated with the Uganda MOH Newborn Health Care Program and relevant counterparts in Afghanistan to collect information and develop a country case study for the introduction, development, and future potential of HBB and resuscitation activities** (April 2015). The case studies are part of the broader global documentation of HBB and have been included in the five-year report from the HBB Global Development Alliance to share the lessons learned and the way forward (Development Alliance: Helping Babies Breathe: lessons learned guiding the way (available at: <http://www.healthynewbornnetwork.org/resource/helping-babies-breathe-lessons-learned-guiding-way-forward>).
- **To assess the quality of basic newborn resuscitation services in Uganda, the ASSIST team had a series of discussions during Q4 with representatives of MOH Uganda and the USAID Global Newborn Health team regarding scope of the assessment.** Implementation of the assessment is to be planned in Q1 FY16.

### **Activity 16: Child health and immunization**

#### **BACKGROUND**

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Pneumonia, diarrhea, and malaria are the leading causes of death (14%, 10% and 7%, respectively) in children under five and sepsis is one of the major causes of premature mortality among newborns and young infants (6%) globally. Significant achievements have been made in Uganda during the last two decades in reducing early childhood mortality; under-five mortality rate per 1,000 live births declined from 178 in 1990 to 69 in 2012. This effort was made possible with increased support from USAID, CDC, and UNICEF and the coordinated interventions of key stakeholders, including the Ugandan Government, NGOs, faith-based organizations, and the private sector.

To further contribute to decreasing child mortality, through the core-funded activities, ASSIST has been tasked to assess management of childhood illness at different levels and initiate modest improvement in demonstration facilities. Clinical approaches to identify and manage diseases among children and young infants, such as WHO's Integrated Management of Childhood Illnesses proved to be effective and efficient, particularly in outpatient settings, in ensuring a combined treatment of the major childhood illnesses through improving case management skills of healthcare staff, overall health systems and family and community health practices. IMCI traditionally focuses on the first point of contact with the health system, the first level of trained health workers and primary care clinics. However, growing evidence exists about the poor quality of medical services at primary health centers. The health care providers at these clinics should be able to assess children, including young infants; arrange referrals for hospital admission for those with possible serious infections; and when that is not accessible, offer alternative ambulatory treatment. WHO recommends that infants up to two-months-old with possible severe bacterial infection be treated in the hospital with two injectable antibiotics – penicillin or ampicillin plus gentamicin for at least seven days. Unfortunately, in resource-limited settings, up to 60% of babies with signs of serious bacterial infection do not receive the recommended inpatient treatment because hospitals are not accessible, acceptable or affordable for families. To address this challenge, WHO recently released guidelines on managing possible bacterial infections in young infants in outpatient settings when referral is not possible. In order to increase access to treatment and help save lives of babies, the Uganda MOH intends to be an early adopter of the WHO guidelines.

The activity will support assessment of services and modest implementation of the above-mentioned newly released evidence as part of the child health improvement intervention through a small-scope improvement activity to inform future learning and scale-up. The local context creates significant opportunities to leverage the USAID child health-directed funds managed by the USAID ASSIST Project with concurrent efforts of the project's field-funded SMGL Phase 2 maternal and newborn health interventions in Uganda. For these purposes, the proposed child health direct-funded work will be conducted in select SMGL-2 districts and will be closely coordinated and linked with ongoing SMGL Phase 2 interventions in select facilities.

By focusing on integrated management of newborn and childhood illness (IMNCI) in outpatient settings, particularly at the first point of contact with the health service delivery system through strengthening diagnosis and case management skills of care providers and supporting health system functions, the activity will contribute to a decrease in premature morbidity and mortality among children and thus,

contribute to the global EPCMD agenda. The activity will also support use of simplified outpatient regimens for treatment of serious infections in young infants when hospital care is not available/affordable and will contribute to improved clinical outcomes of sepsis among newborns/young infants.

## KEY ACCOMPLISHMENTS AND RESULTS

- In April 2015, in coordination with the USAID Bureau of Global Health (GH)/Office of Health and Infectious Diseases and Nutrition/Maternal and Child Health (MCH) Division, a draft concept note was developed and shared with relevant USAID/Washington representatives.
- Senior QI Advisor, Dr. Tamar Chitashvili, visited Uganda for detailed planning and coordination in Uganda for ASSIST's MNCH core-funded Child Health Activity (Aug 2-16, 2015). During the visit, in coordination with the ASSIST Uganda field office, the technical team was identified and selected and detailed technical and organizational planning were completed for the activity.
- To understand the main gaps in quality of IMNCI services and to effectively design the intervention, a rapid assessment of IMNCI services was conducted by ASSIST in 10 selected facilities in Gulu and Nwoya districts (level 2, 3, 4 health centers and hospitals) (Aug 2015). The assessment focused on identification of essential quality gaps in delivery of IMNCI services in outpatient settings and key gaps in essential health system functions at the facility level. Dr. Chitashvili and the field team also met with representatives of the district health office (in Gulu) and care providers at different level medical facilities to understand challenges and opportunities for improving the quality of IMNCI services at the facility-level in Gulu and Nwoya districts of Northern Uganda.
- The rapid assessment results revealed significant gaps in the availability of essential inputs and organization of IMNCI service delivery at each and between different levels of care. The main findings are summarized in Table 1 below.

**Table 1: Summary results of IMNCI essential inputs at facility-level, Gulu and Nwoya districts, Uganda, 10 facilities (Aug 2015)**

Key: Available Shortage Unavailable

Key inputs by domains	HCII	HCII	HCII	HCIII	HCIII	HCIII	HCIV	HCIV	GH	RRH
Human resources										
Do not experiencing frequent shortage of provider cadre										
Recent IMCI training	3y	5y	2y	2y	3y	5y	1y	3y	1.5y	1.5y
Recent training in particular high burden child disease	2y	<1y	1y	2y	1-2y	<1y	1y	1-2y	<1y	1y
Physical infrastructure (availability of)										
Running water										
Electricity										
Soap/antibacterial hand wash										
Transportation for referral										
Medications										
Vit A										
Anticonvulsants (Diazepam)										
Antipyretic (Paracetamol)										
Inhaled Bronchodilators										
Oxygen										
Antibiotics <sup>4</sup>										

<sup>4</sup>Clinical signs or diagnosed infections (pneumonia, sepsis, meningitis, Otitis Media)

Key inputs by domains	HCII	HCII	HCII	HCIII	HCIII	HCIII	HCIV	HCIV	GH	RRH
Amoxicillin (oral)	Orange	Green	Green	Orange	Green	Green	Orange	Orange	Green	Orange
Ampicillin (IM or IV)	Red	Green	Red	Orange	Green	Red	Orange	Orange	Green	Orange
Gentamicin (IM or IV)	Red	Orange	Orange	Orange	Green	Green	Orange	Orange	Green	Orange
Benzyl penicillin IM	Red	Orange	Red	Orange	Green	Green	Orange	Orange	Green	Orange
Ceftriaxone IM	Red	Red	Red	Orange	Red	Green	Orange	Orange	Green	Orange
Procaine penicillin IM	Red	Red	Red	Orange	Green	Green	Orange	Orange	Green	Orange
Co-trimoxazole	Red	Green	Green	Orange	Green	Green	Orange	Orange	Green	Orange
Quinolones (ciprofloxacin, norfloxacin, ciprofloxacin): tab/air drops	Orange	Orange	Orange	Orange	Red	Green	Orange	Orange	Green	Orange
Antimalarial drugs	Blue									
Artesunate+Amodiaquine (oral)	Orange	Orange	Green	Orange	Green	Green	Orange	Green	Green	Orange
Artemether-Lumefantrine (oral)	Orange	Orange	Green	Orange	Green	Red	Orange	Orange	Green	Orange
Artesunate (IM)	Red	Orange	Red	Orange	Green	Green	Orange	Orange	Green	Orange
Artesunate (rectal)	Red	Green	Green	Orange	Green	Green	Orange	Orange	Green	Orange
Quinine (IM or oral)	Red	Orange	Green	Orange	Red	Green	Orange	Orange	Green	Orange
Drugs for diarrhea	Blue									
Zinc	Green									
Oral rehydration salts	Orange	Green	Green	Orange	Green	Green	Orange	Green	Green	Orange
Antibiotics for dysentery (Ciprofloxacin, Ceftriaxone)	Orange	Orange	Green	Orange	Red	Green	Orange	Orange	Green	Orange
Drugs for anemia /deworming	Blue									
Iron/Folate tablets	Orange	Green	Green	Orange	Red	Green	Orange	Green	Green	Orange
Mebendazole (in case of Helminthosis)	Orange	Green	Red	Orange	Green	Green	Orange	Orange	Green	Orange
ARV	Green	Green	Red	Green	Orange	Orange	Green	Red	Green	Green
TB drugs	Green	Red	Red	Green	Green	Orange	Green	Red	Green	Green
Drugs/supplements for malnutrition	Blue									
Ready-to-use therapeutic food F75/100	Orange	Red	Red	Orange	Red	Green	Orange	Red	Green	Orange
Vaccines	Blue									
Routine immunization (DTP, MMR)	Green									
Meningococcal	Red									
Pneumococcal	Green									
Rotavirus	Red									
Supplies: syringes, safety boxes, cold chain equipment	Orange									
Nasogastric tubes	Red	Red	Red	Red	Red	Red	Orange	Orange	Green	Green
Diagnostic test/equipment	Blue									
Malaria test kits	Orange									
HIV rapid tests	Orange	Orange	Green	Orange	Green	Green	Orange	Green	Green	Orange
Hemoglobin measurement	Red	Red	Red	Green	Red	Red	Green	Red	Green	Green
Scales (infants, children)	Red	Green	Green	Green	Green	Red	Green	Green	Green	Green
Height measurement	Red	Orange	Orange	Red	Orange	Orange	Red	Orange	Green	Green
Body thermometer	Green	Red	Green	Green						

Key inputs by domains	HCII	HCII	HCII	HCIII	HCIII	HCIII	HCIV	HCIV	GH	RRH
Respiratory rate timers										
Pulsoximeter										
Clinical decision support tools										
IMCI protocol										
Uganda MOH Clinical Guideline										
Job aids on IMCI										
Job aids on particular high-burden diseases										
Patient information materials										
Maternity card										
Child card										
Treatment and counseling documentation in patients' notebooks										

- The rapid assessment of the quality of prevention and treatment of infection among young infants (0-59 days) revealed:**
  - Limited knowledge and awareness on updated evidence-based recommendations
  - No practices observed to provide antibiotics to newborns with risk factors for infection
  - Poor documentation of main symptoms, treatment, and or referral provided in the postnatal/child or outpatient registers to assess the quality of care provided
  - Poor quality of treatment of newborn sepsis
  - Limited availability of transportation for referral, limited access/affordability of inpatient services
- Rapid assessment of the quality of treatment of acute respiratory tract infections (RTI)/ pneumonia revealed:**
  - Limited documentation of symptoms to assess the quality of care provided
  - Poor provider practice on differential diagnosis and assessment of symptoms of RTI cases (e.g. cough or cold vs pneumonia)
  - Antibiotics prescribed for almost all (95%) cases of RTI while not needed to treat upper unspecified causes of RTIs
  - Administration of non-evidence based antibiotics. All RTI cases were treated with Septrin (Cotrimoxazole), even in cases of positive rapid diagnostic test (RDT) for malaria
  - Administration of medications given in incorrect doses (not based on age or weight)
- Rapid assessment of the quality of diagnosis and treatment of malaria revealed:**
  - Poor documentation practices of assessment of children with suspected malaria;
  - Poor quality of diagnosis/differential diagnosis of clinical conditions with fever; RDTs were either unavailable or not used. Because of gaps in quality of differential diagnosis of children presenting with fever, there were frequent cases with joint diagnosis (e.g., clinical malaria/RTI)
  - Poor quality of malaria treatment (children with malaria were treated with Amoxicillin, Septrin Cotrimoxazole, etc.)
- Rapid assessment of quality of diagnosis and treatment of diarrhea revealed:**
  - Limited documentation of symptoms
  - Irrational use of zinc (given to young infants < two months)
  - Non-evidence-based treatment of diarrhea (use of antibiotic in cases of acute watery diarrhea)
  - Limited use and availability of nasogastric tubes for oral rehydration therapy in almost all lower-level facilities (HC II,III, IV)
  - Limited availability of antibiotics to treat dysentery (Ciprofloxacin, Ceftriaxone)
- Rapid assessment of the quality of assessment and treatment of child malnutrition revealed:**
  - Ready-to-use therapeutic food (RUTF) was only available in facilities that implement nutrition programs (mainly HC III and hospital)

- Nutrition assessment (e.g., MUAC, Z-score) practices were very weak in facilities that do not implement nutrition programs; despite the availability of scales, nutrition assessments and referrals to treatment mostly take place only in case of severe/visible malnutrition and or for particular groups of patients (e.g., HIV patients)
- Nutrition assessment and treatment was mainly conducted in facilities that implement feeding programs (e.g., outpatient therapeutic care, supplementary feeding program, and/or inpatient therapeutic care).
- Because of poor documentation practices, the rapid assessment results highlighted an underlying need to assess the diagnosis and treatment of common childhood illnesses through direct observation and informed the main areas of the improvement interventions.

## **Activity 17. Refining a chronic care model in Uganda to improve HIV/AIDS outcomes**

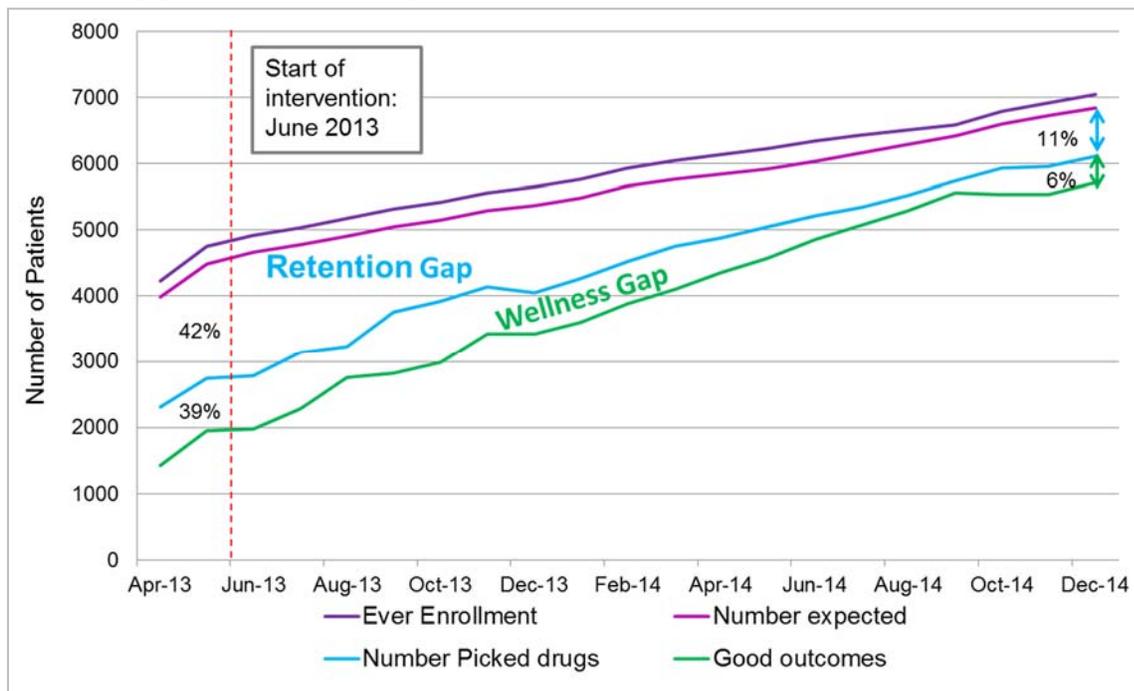
### **KEY ACCOMPLISHMENTS AND RESULTS**

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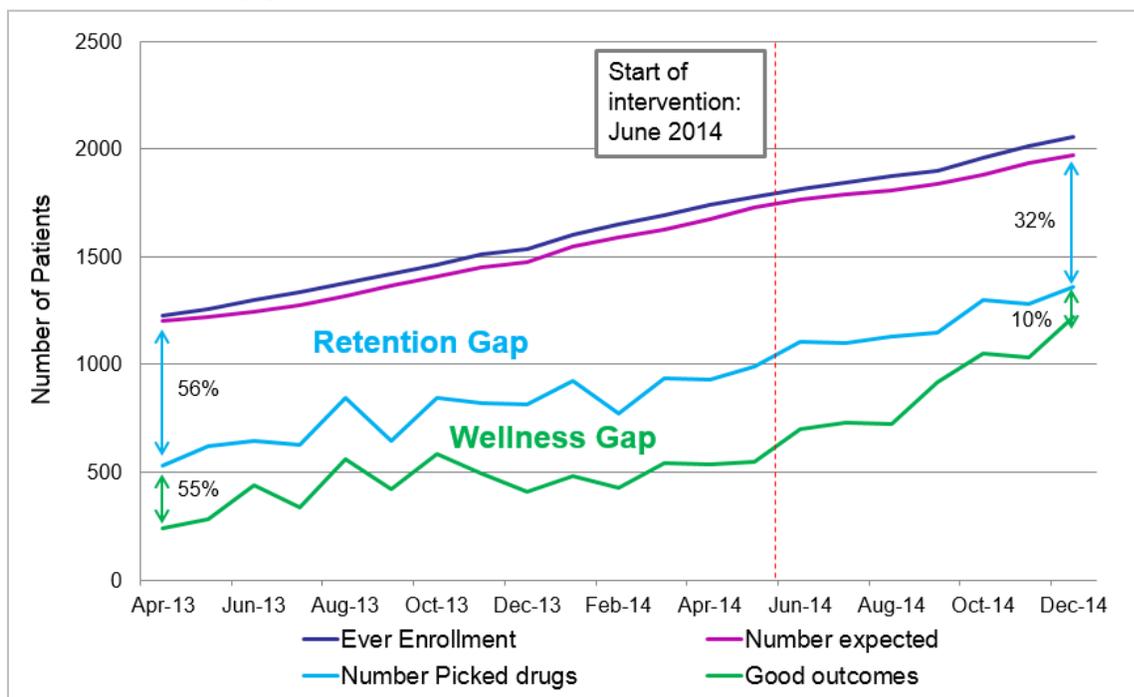
ASSIST is currently completing the final documentation and dissemination of findings from a project designed to improve the management of chronic care with a goal of improving HIV/AIDS outcomes, including diagnosis, retention, and clinical outcomes. This activity was implemented initially in Mityana (18-month intervention) and expanded to Nakaseke (six-month intervention). ASSIST completed improvement work in the two districts in December 2014, and end-line data were collected from all improvement sites during January and February 2015.

- **USAID ASSIST published major results from the chronic care activity in Uganda in a special issue of AIDS** (Massoud, et al. 2015. Improving care for patients on antiretroviral therapy through a gap analysis framework. AIDS, Vol. 29 (Suppl 2). Available at: <https://www.usaidassist.org/resources/improving-care-patients-antiretroviral-therapy-through-gap-analysis-framework>.
  - The article describes an innovative management tool for HIV program managers utilizing a gap analysis framework. The framework helps managers to track three key areas of ART care quality: coverage, retention, and wellness. The Supplement was issued immediately prior to the International AIDS Society meeting, which typically has high readership during the weeks before and after the meeting. We are in the process of finalizing additional knowledge management products.
- **Results in Uganda:** The application of improvement methods led to a reduction in gaps in coverage, retention, and clinical outcomes for patients on antiretroviral therapy in Mityana and Nakaseke districts over their respective intervention periods (**Figures 27-28**). Notably, a tool was developed for goal-setting and action planning which counselors, providers, and expert patients used to assist patients in overcoming challenges to providing good self-care. Furthermore, self-management support groups were formed for patients with similar challenges to share their experiences and provide mutual support.

**Figure 27: Coverage, retention and outcomes of ART patients, Mityana (early intervention) chronic care sites (April 2013 - Dec 2014)**



**Figure 28: Coverage, Retention and Outcomes of ART patients, Nakaseke (late intervention) chronic care sites (April 2013 – Dec 2014)**



## 4 Sustainability and Institutionalization

ASSIST is supporting the MOH in Uganda to coordinate and institutionalize quality improvement in the health sector. To do this, ASSIST helps to convene national quality improvement coordination committee meetings to provide a strategy for institutionalizing QI; supports the review, development, and roll-out of the National Quality Improvement Framework and Strategic Plan 2011-2015; and is working to develop a new QI framework for the MOH. ASSIST is also working with the MOH to develop a national QI performance monitoring plan and indicators and support the development of a national QI training manual and curriculum. At the district level, ASSIST continues to support the MOH by coordinating quarterly mentorship and support supervision visits as well as gathering best practices from the field.

As with the previous ASSIST and HCI work, all MNCH core-funded field activities in Uganda are being planned and led in close collaboration with the MOH and other key stakeholders in order to promote ownership and institutionalization. The officers in charge of the MNCH programs at the MOH and at each of the participating districts are closely involved in all the stages of ASSIST core-funded MNCH field improvement activities, from planning to evaluation. ASSIST is making every effort to make the changes and improvements not dependent on external resources that would not be sustainable after the activity ends. On the other hand, ASSIST MNCH core-funded activities will inform global learning on effective strategies to institute and sustain the best improvement practices in different MNCH clinical areas and settings.

The chronic care model is designed to assess progress toward key ART benchmarks, i.e., diagnosis, retention, and successful clinical outcomes. We tested and refined the chronic care model in Uganda with a broader goal of replicating successful aspects of the model in other countries. This activity also directly supports the sustainability of ART services in Uganda by transferring skills to local improvement coaches and district staff in the study districts of Mityana and Nakaseke.

## 5 Knowledge Management Products and Activities

- A peer-reviewed article was published in PLoS ONE on the results of applying continuous quality improvement (CQI) to VMMC services in Uganda, "Improving the quality of voluntary medical male circumcision through use of the continuous quality improvement approach: A pilot in 30 PEPFAR-supported sites in Uganda." The article can be accessed at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0133369>
- A webinar titled "Rolling out continuous quality improvement in voluntary medical male circumcision: Lessons learned from the USAID ASSIST pilot projects in Uganda, South Africa, Malawi and Tanzania" was conducted. The recording and presentation are available at: <https://www.usaidassist.org/content/webinar-rolling-out-continuous-quality-improvement-voluntary-medical-male-circumcision>
- PEPFAR hosted a webinar on November 19th on the importance of women's role in the success of Voluntary Medical Male Circumcision (VMMC). A recording of the webinar is available at: <http://www.healthcommcapacity.org/hc3resources/webinar-women-voluntary-medical-male-circumcision/>.
- A Guide to Improving the Quality of Safe Male Circumcision was published in February 2015 and is available at: [https://www.usaidassist.org/sites/assist/files/uganda\\_guide\\_to\\_improving\\_the\\_quality\\_of\\_smc\\_a4\\_february2015\\_ada.pdf](https://www.usaidassist.org/sites/assist/files/uganda_guide_to_improving_the_quality_of_smc_a4_february2015_ada.pdf)
- A short report entitled "Ensuring an Effective Continuum of Response and Cascade of Care for Persons Living with HIV in Uganda" was produced in January 2015. It is accessible at: <https://www.usaidassist.org/resources/ensuring-effective-continuum-response-and-cascade-care-persons-living-hiv-uganda>
- A blog was written by Dr. Mirwais Rahimzai entitled "Engaging health workers in improving quality of care key to reduce maternal mortality in Uganda". It was published in May 2015 and is available at: <https://www.usaidassist.org/blog/engaging-health-workers-improving-quality-care-key-reduce-maternal-mortality-uganda>

- A case study on addressing myths and misconceptions to increase uptake of contraceptives was published in May 2015: <https://www.usaidassist.org/resources/addressing-myths-and-misconceptions-increase-uptake-contraceptives-experience-bukuuku>
- In July 2015, guidance and tested changes to improve maternal and newborn care were published: [https://www.usaidassist.org/sites/assist/files/uganda\\_smgl\\_change\\_package\\_july2015.pdf](https://www.usaidassist.org/sites/assist/files/uganda_smgl_change_package_july2015.pdf)
- Five of eight abstracts which were submitted to the ISQua Conference, Doha 2015 were accepted for oral presentation. These abstracts are about:
  - The role of government in fostering health quality improvement in low resource settings; experiences from Uganda during session AP4: Quality and Safety in Developing Countries.
  - Towards and HIV-Free Generation: Putting the Needs and Values of HIV-Positive Mothers and their Babies at the Forefront of their Care during Session B3: Patient-Centered Care.
  - Working with a Cascade Approach to Monitor and Evaluate HIV Chronic Care Outcomes during Session B8: Improving Population Health and Efficiency.
  - Improving community TB case detection in urban settings; a community led intervention during Session CP3: Education and Research in Quality and Safety.
  - Improving Timely Access to ART among TB/ HIV Co-Infected ART Naïve Clients: Successes from High TB/ HIV-Burden Kampala City, Uganda during Session C16: Improving Population Health and Efficiency.
- We also finalized a slide-show video showcasing success with our community TB contact tracing at Kisugu HC III. This slide show has been published and is available on the USAID ASSIST website and on Vimeo at: <https://vimeo.com/130258619>
- Two case studies were developed however are not yet published;-
  - Bridging quality gaps in OVC care.
  - Supporting vulnerable children to return and stay in school: Lessons learned from three village child protection committees in Amuru sub county, Uganda

### **Northern Uganda**

- Orientation for all northern Uganda staff on knowledge management was completed in September 2015. The orientation followed two orientation exercises on products and knowledge management expectations from each team.
- A knowledge management work plan for all technical areas was developed, clearly highlighting the products and activities embedded for the coming year.
- The following abstract was submitted to 3<sup>rd</sup> World congress on integrated care meeting and accepted for poster presentation: 'Reducing cases of Postpartum Hemorrhage by 6% within five months at Dokolo HCIV in Northern Uganda'
- A one-page overview about ASSIST Uganda North activities was developed and shared during the stakeholders meeting that happened at the end of August 2015.
- A total of five success stories were developed as stated below:
  - Competences of health workers and the DHT
  - PMTCT Option B+ reporting improved from 39% to 84%
  - Routine support improves quality of services for patients with Malaria
  - Community linkage facilitators from Mucwini health center III improving the outcome of PMTCT linking and retaining mother-baby pairs into Care
  - Increasing the percentage of mother-baby pairs retained in PMTCT care at Agulurude HCIII

## **6 Gender integration**

The team continued to work towards improving gender integration in SMC by sensitizing clients to come with their partners for SMC. All sites have tried to improve the proportion of clients and their partners attending SMC group education by obtaining a register for capturing all clients who attend group education. Other sites are testing innovations of mobilizing the clients prior to the SMC community outreaches, to come with their partners so that they too can benefit from HIV counseling and testing services. This effort has seen increased uptake of SMC in some facilities.

At Kibuku HCIV, the team realized that partner involvement was not being emphasized during the community mobilization, and the SMC QI team decided to sensitize the mobilizers (VHT members) about the benefit of partner involvement using VHTs to do pre-activity mobilization, including door-to-door mobilization emphasizing the need for women to escort their husbands for SMC for those who are married or cohabiting. The mobilizers would then communicate to the health care workers who provided transport to collect all clients who had accepted to be circumcised including the couples.

Regarding the COR, the ASSIST team collected and analyzed sex-disaggregated data, identified that more women than men were being initiated on ART among TB/HIV co-infected clients, and identified gender issues causing this gap. The team has proposed changes to test to increase ART uptake among males.

In PHFS, more than 20 clinics utilized gender-related interventions: encouraging male partner involvement, involving male community leaders/volunteer health workers, utilizing family support groups, and offering male-focused services. The work is focusing on isolating the effects of gender interventions on increasing retention rates of HIV-positive mothers and their babies.

In the OVC program, improvement teams collected and analyzed sex-disaggregated data and are responding to gender gaps in school re-integration for male and female vulnerable children. The program encouraged caretakers to participate in a savings program that improved their income as well as nutrition and school attendance among children. While monitoring outcomes, WI-HER provided technical support to the ASSIST team so they could identify negative unintended results. The ASSIST team then identified cases of gender-based violence as a negative unintended consequence of the savings program. The ASSIST team received technical support on how to identify cases of gender-based violence and refer them to local NGOs that provide support.

## 7 Directions for FY16

### **Strengthen the health system in Northern Uganda**

The health system in Northern Uganda is generally weak due to the long period of insurgency. For example whereas leadership and governance have improved, shortage of critical human resource, lack of medical products, and poor service delivery are still evident. Efforts have been made to address these issues, for example, primary data collection tools for the HMIS system have been printed and distributed, and all 15 districts in northern Uganda have put in place plans to improve data quality and submission through the DHIS2 system. Health facility staff have been trained on the use of some of the HMIS tools e.g., the integrated nutrition register. Although the basic equipment needed for the region has been quantified, this has not been purchased due to the contractual limitations which ASSIST has in procuring equipment and supplies for service delivery. In FY16, ASSIST will directly support all 15 districts to improve service delivery for MNCH, malaria, TB, and HIV care and treatment. This will be through improving processes of care at health units. ASSIST will also support on-job training on use of data tools and timely reporting by health facilities and districts as well as promote use data to make decisions. ASSIST will support health facilities to rightly quantify and submit timely orders for supplies through the National Medical Store system. Jointly with SDS, we will support health units and districts to strengthen management structures and convening of management meeting such as health unit management committee meeting and DHT meetings. The role of ASSIST will be mainly to advice on content of discussions. ASSIST will identify staffing needs for health units and districts and share them with SDS, who is responsible for recruitment. For old and new staff, ASSIST will identify gaps in skills and knowledge and provide appropriate on job skills building sessions through mentorship, coaching and learning sessions and to improve performance of the human resource. ASSIST will identify funding priorities and share them with the district and SDS, who will be responsible for providing grants.

### **Improve prevention of HIV in Northern Uganda**

In line with UNAIDS 90-90-90 targets, ASSIST's work in Northern Uganda will be to ensure 90% of people with HIV are diagnosed, 90% of those eligible for ART are on sustained ART treatment, and 90% of those on ART are virally suppressed. This activity describes interventions to diagnose and link new HIV cases to care, prevent new HIV infections using known interventions like Option B+ to prevent mother-to-child transmission of HIV, SMC, and other prevention interventions.

- ASSIST, through the Partnership for HIV-Free Survival initiative, has successfully demonstrated that by applying QI to scale up Option B+ and infant and young child feeding practices, the proportion of exposed babies in PMTCT programs discharged as HIV-positive can be greatly reduced. ASSIST will take the lessons learnt from PHFS and share them with health facilities in northern Uganda. Recent studies have shown that HIV-infected pregnant women are also at increased risk of transmitting TB to their infants. TB during pregnancy is also associated with an increased risk of adverse outcomes for the infant, including increased risk of premature birth, low birth weight, and perinatal death. ASSIST will therefore integrate TB diagnostic and treatment services into the antenatal, delivery and postnatal service provision centers.
- ASSIST will work to improve the quality of care and safety of SMC and to roll out tetanus treatment in the SMC program in Northern Uganda.
- According to the ACP semi-annual report for January to June 2014, there were 137,000 new HIV infections in Uganda in 2013. Beyond HTC, PMTCT, and SMC, other prevention activities will be focused on key populations and priority populations. The SDS program will be the primary implementer of these prevention activity. ASSIST will provide technical assistance to SDS.
- Eight of the 15 Northern Uganda districts are scale up districts, where efforts to identify new HIV positive people will concentrate. These are Agago, Apac, Dokolo, Gulu, Kitgum, Kole, Lira, and Oyam. Alebtong, Amolatar, Amuru, Lamwo, Nwoya, and Otuke are the six (of 15) sustained response districts in Northern Uganda. Prevention activities other than HTC will take place at these districts. There is one transition district, Pader. ASSIST will transition Pader District to the Government of Uganda.
- ASSIST partner WI-HER LLC will provide onsite technical support and gender training to new staff working in Northern Uganda on the DREAMS initiative, as well as support all staff in integrating gender in quality improvement. ASSIST and partner WI-HER LLC will also provide support to use sex- and age-disaggregated data as well as gender-sensitive indicators to determine existing gaps and monitor progress on closing them.

#### **Improve care and treatment for pediatric and adult patients with HIV in Northern Uganda:**

In the last decade, the Government of Uganda has been rapidly scaling up HIV care and treatment services to lower health facilities, with support from partners in health development. To build on these efforts, ASSIST will support the MOH to improve service delivery by increasing the number of HIV-positive people identified who are linked to care and treatment, increasing access to ART care for those who are positive and ensuring they receive a standard care package and ensure that all people with HIV in 15 districts of northern Uganda remain virologically suppressed. In the last quarter over 400 health workers in 127 supported health facilities of the 15 districts were trained in the use of viral load to monitor patients on ART in line with the current MOH guidelines. In FY16, priority support will focus on ensuring that 80% of patients on ART in the high ART volume sites have a viral load test and health facilities set up mechanisms to follow up of patients with detectable viral load to ensure adherence support is provided.

The MOH Pediatric and Adolescent 2014 support supervision findings indicate that only 8% of children under five years are being tested at the OPD, and only 15% of children 5-15 years. To contribute to quality HIV care service to this high number of children with HIV, ASSIST will partner with the MOH to scale up testing for children and adolescents to ensure that these children and adolescents with HIV in the 15 districts of Northern Uganda are identified early and linked to care and treatment to achieve and sustain viral suppression.

The proposed strategies to address the above gaps seek to contribute to the 90-90-90 targets, including the identification of positives and linkage to care and treatment in collaboration with SDS, which is detailed in Activity 2 above. Over the next year ASSIST will build on current achievements to increase enrolment of PLHIV in care and treatment and ART. ASSIST will also support the delivery of care and treatment services with the ultimate goal of attaining viral load suppression for children and adults living with HIV.

#### **Improve family health (MNCH, family planning, nutrition, tuberculosis, and malaria):**

- Improving MNCH services in Northern Uganda. The aim of focusing on MNCH interventions is to reduce mortality and morbidity among women and children. ASSIST will manage an MNCH

collaborative to facilitate learning and spread of interventions to improve MNCH. USAID ASSIST will focus on improving the EmONC processes which affect maternal and newborn care; develop community mechanisms which identify and refer mothers and newborns for antenatal and postpartum care; build the capacity of health workers to improve the quality of care provided and work with district leadership to ensure facilities are equipped to provide quality emergency obstetric and newborn care. The lessons learnt from the SMGL community work will be spread to the sites within the MCH collaborative.

- Improving family planning services in Northern Uganda. ASSIST will build the technical capacity of health workers to provide family planning counselling and services; will support facilities to obtain FP commodities, and work health facility teams to integrate family planning into routine HIV and MCH services-specifically at the mother-baby care points.
- Improve nutrition services in Northern Uganda. ASSIST will assume that SDS will procure all the required anthropometric equipment. ASSIST will continue to support the collaborative sites to improve the availability and use of nutrition data, including sex- and age-disaggregated data to determine existing gaps and monitor progress on closing them; and improve nutrition processes.
- Strategies to improve malaria management in Northern Uganda. ASSIST will work with health facility improvement teams to systematically address the gaps identified in the malaria case management, including using sex- and age-disaggregated data to determine existing gaps and monitor progress on closing them. To that effect an improvement collaborative for 12 high-volume, poorly performing sites that are provided with monthly coaching to improve case management and reduce irrational drug use is already in place. Lessons from the collaborative sites will be spread to other health facilities through quarterly coaching visits. ASSIST will continue to provide support to health facilities to improve quantification of essential malaria commodities to ensure availability and continuity of services. To control the malaria epidemic, key interventions will focus at malaria hotspots to ensure; building capacity of health workers and VHTs to provide malaria control services, improving delivery and distribution of essential malaria control supplies and commodities, improving HMIS, DHIS 2 and related reporting and facilitating district level malaria control coordination between stakeholders.
- Strategies to improve management of TB in Northern Uganda. Key interventions will focus on strengthening support structures for TB care, support process improvement, and capacity building. ASSIST will work with the districts and the MOH to map the TB hotspots in the northern region and intensify case identification in these hotspots. The health facilities in these hotspots will be supported through QI and a systems' approach to improve the quality of TB services, including using sex- and age-disaggregated data to determine existing gaps and monitor progress on closing them.



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