

STAR-E Annual Project Progress Report – PY6

Management Sciences for Health

October 2013 – September 2014

Key word(s): Annual Report

This report was made possible through support provided by the US Agency for International Development and the USAID Uganda, under the terms of Cooperative Agreement Number 617-A-00-09-00006-00 and the opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development.

Strengthening TB and HIV&AIDS Response in Eastern Uganda (STAR-E)
Management Sciences for Health
200 Rivers Edge Drive
Medford, MA 02155
Telephone: (617) 250-9500
<http://www.msh.org>

Strengthening TB and HIV & AIDS Response in Eastern
Uganda (STAR-E) Project

**ANNUAL REPORT FOR THE PERIOD
October 2013 – September 2014**



USAID
FROM THE AMERICAN PEOPLE



STAR-E PROJECT, EASTERN UGANDA
District-Based HIV/TB Program

Cooperative Agreement # 617-A-00-09-00006-00

ANNUAL REPORT FOR THE PERIOD
October 2013 – September 2014

Management Sciences for Health
Plot #36 Bunghokho Road
Senior Quarters
Mbale, Uganda



TABLE OF CONTENTS

LIST OF FIGURES, TABLES, AND MAPS	ii
ACRONYMS AND ABBREVIATIONS	iii
EXECUTIVE SUMMARY	v
Introduction.....	1
INTERMEDIATE RESULT AREA 1: Increasing Uptake of Comprehensive HIV & AIDS and TB Services.....	2
IR 1.1 Increasing Uptake and Access to HIV Counseling and Testing Services.....	2
IR 1.2 Increasing Uptake of Prevention of Mother-to-Child Transmission of HIV.....	5
IR 1.3–6 Increased Uptake of Comprehensive Services to Prevent Sexual Transmission of HIV.....	7
IR 1.7 Increasing Uptake of Pediatric HIV & AIDS Services	16
IR 1.8 & 1.9 Increasing Uptake of Care, Treatment, and Support Services.....	19
IR 1.10 Increased Uptake of TB and TB/HIV Services	21
INTERMEDIATE RESULT AREA 2: Decentralized Service Delivery System Strengthened for Improved Uptake of Quality HIV/TB Services.....	24
IR 2A: LQAS Survey Institutionalized at the National Level to Support and Coordinate District-Level Implementation.....	24
IR 2.1 Strengthening Human Resources for Health.....	30
IR 2.2 Strengthen Laboratory Capacity.....	31
IR 2.3 Strengthen Commodities Management.....	32
IR 2.4 Strengthening the District HMIS, Monitoring and Evaluation, and Operations Research	33
INTERMEDIATE RESULT AREA 3: Quality HIV/AIDS and TB Services Delivered in All Supported Health Facilities and Community Organizations and Activities.....	37
IR 3.1 Improving Quality of Care.....	37
IR 3.2 Strengthening Clinical Mentoring Systems	38
INTERMEDIATE RESULT AREA 4: Networks, Linkages, and Referrals.....	39
IR 4.1 Participating in Networks at the National/International Level	39
IR 4.2 Participating in Networks at the Regional/District Level.....	40
IR 4.3 Linkages at the Community Level	40
INTERMEDIATE RESULT AREA 5: Increasing Demand for HIV & AIDS and TB Services.....	40
INTERMEDIATE RESULT AREA 6: Establish and Strengthen Orphans and Vulnerable Children (OVC) Referrals and Linkages in the Districts.....	42
Finance, Administration, and Grants.....	43
ANNEX 1: PY6 Data on the Continuum of Response	45
ANNEX 2: SMC Dashboard	47
ANNEX 3: %age of Individuals who know at least two benefits of HCT, STAR-E LQAS, 2009 – 2014.....	48
ANNEX 4: OVC Facility Assessment and Results poster.....	54
ANNEX 5: Summary update of health facilities renovated under Phase.....	55
ANNEX 6: Renovation updates in pictures	56

LIST OF FIGURES, TABLES, AND MAPS

Figures

<i>Figure 1: STAR-E Geographical Area of Operation in Eastern Uganda</i>	1
<i>Figure 2: Trend in uptake of HCT compared to targets since 2010</i>	3
<i>Figure 3: Distribution of HIV among those who tested as couples across PY6 (HIV sero-discordant and HIV concordant positives and negatives)</i>	4
<i>Figure 4: Trends in HCT uptake across the four quarters in PY6 compared to annual target</i>	4
<i>Figure 5: Trend in newly pregnant mothers tested for HIV and who received results compared to set targets, 2010-2014</i>	6
<i>Figure 6: Proportion of mothers who received their HIV test results during last pregnancy 2010-2014</i>	6
<i>Figure 7: HIV prevalence rates among pregnant women (PMTCT setting) and general population outside ANC setting (HCT setting)</i>	7
<i>Figure 8: SMC monthly targets and results at STAR-E-supported sites, 2014</i>	14
<i>Figure 9: Number of infants initiated on ARV prophylaxis compared to target over the four quarters of PY6 (Total=1,034; Target=4,004, %Achievement=26%)</i>	18
<i>Figure 10: DNA-PCR tests done on infants six weeks to 18 months over the four quarters of PY6</i>	18
<i>Figure 11: Number of children under 15 enrolled on ART</i>	18
<i>Figure 12: New clients enrolled on treatment across the four quarters in PY6, compared to overall targets</i>	20
<i>Figure 13: Active clients on treatment across program years, 2010 – 2014 (Annual Target = 30,633)</i>	20
<i>Figure 14: 2009-2014 trend of TB treatment success rate in the Eastern region compared with the national target</i>	22
<i>Figure 15: 2009–2014 trend of TB case detection rate in the Eastern region compared with the national target</i>	23
<i>Figure 16: Submission of drug orders to National Medical Stores between cycle six of the 2013/2014 fiscal year and cycle two of the 2014/2015 fiscal year drug delivery schedules</i>	32
<i>Figure 17: Average scores for Busia and Sironko facilities between visit one and visit four</i>	33
<i>Figure 18: Completeness score for submission of HMIS reports by quarter, PY5 and PY6, for Eastern region and the national level</i>	35

Tables

<i>Table 1: Summary of PY 6 Annual Results for Core Indicators</i>	ix
<i>Table 2: Estimate of the need for SMC service provision met in the Eastern region, 2014</i>	15
<i>Table 3: Training activities conducted by STAR-E</i>	30
<i>Table 4: The DHIS 2 league table ranking of the 12 districts out of the 112 in the entire country</i>	34
<i>Table 5: Status of Cost Share</i>	44
<i>Table 6: Chart of PBGs and disbursements in Uganda shillings</i>	44

ACRONYMS AND ABBREVIATIONS

AIC	AIDS Information Center
AIDS	acquired immune deficiency syndrome
ANC	antenatal care
ART	antiretroviral therapy
ARV	antiretroviral medicine
ASSIST	Applying Science to Strengthen and Improve Systems
ATGWU	Amalgamated Transport and General Workers Union
CB-DOTS	community-based DOTS
CD4	cluster of differentiation 4
CDR	case detection rate
CPHL	Central Public Health Laboratory
CSO	civil society organization
CSW	commercial sex worker
DBM	district-based mentor
DBS	dried blood spot
DHMT	district health management team
DHO	district health officer
DHT	district health team
DLFP	district laboratory focal person
DMC	district management committee
DOP	district operational plan
DQA	data quality assessment
DTLS	district TB and leprosy supervisor
EID	early infant diagnosis of HIV
eMTCT	elimination of mother-to-child transmission of HIV
FSG	family support group
HAART	highly active antiretroviral therapy
HC	health center
HCT	HIV counseling and testing
HFA	health facilities assessment
HIV	human immunodeficiency virus
HMIS	health management information system
HRH	human resources for health
ICF	intensified case finding
IEC	information, education, and communication
JCRC	Joint Clinical Research Centre
JMS	Joint Medical Stores
LATH	Liverpool Associates in Tropical Health
LF	linkage facilitators
LQAS	Lot Quality Assurance Sampling
M&E	monitoring and evaluation
MARPs	most-at-risk populations
MDR-TB	multidrug-resistant TB
MEEPP	Monitoring and Evaluation of Emergency Plan Performance
MGLSD	Ministry of Gender, Labor, and Social Development
MMS	medicines management supervisor
MOH	Ministry of Health
MOLG	Ministry of Local Government
MSH	Management Sciences for Health
MTCT	mother-to-child transmission
NGO	nongovernmental organization
NLF	national LQAS facilitator
NMS	National Medical Stores
NU-HITES	Northern Uganda Health Integration to Enhance Services
OPD	Outpatient department
OVC	orphans and vulnerable children
PBG	performance-based grants

PCR	polymerase chain reaction [testing]
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PITC	provider-initiated HIV testing and counselling
PLHIV	People living with HIV
PMTCT	prevention of mother-to-child transmission
PwP	prevention with positives
PY	project year
QI	quality improvement
RUTF	Ready-to-Use Therapeutic Foods
SCHW	subcounty health worker
SDS	Strengthening Decentralization for Sustainability [Project]
SIMS	Site Improvement and Monitoring System
SLMTA	Strengthening Laboratory Management Through Accreditation
SMC	safe medical circumcision
SMS	short message service [technology]
SPAI	service performance assessment and improvement
SPARS	supervision, performance assessment, and reward/recognition strategy
STAR-E	Strengthening TB and AIDS Response—Eastern Region
TASO	The AIDS Support Organization
TB	Tuberculosis
TOT	training of trainers
TSR	treatment success rate
TWG	technical working group
UBOS	Uganda Bureau of Statistics
USAID	United States Agency for International Development
VHT	village health team
VIA	visual inspection with acetic acid
WHO	World Health Organisation

EXECUTIVE SUMMARY

Strengthening TB and AIDS Response – Eastern Region (STAR-E) is a USAID-funded project in Uganda implemented by Management Sciences for Health (MSH). MSH's partners include the Joint Clinical Research Centre (JCRC), the Inter-Religious Council of Uganda (IRCU), Resources for Policy Exchange (RPX), and Liverpool Associates in Tropical Health (LATH). STAR-E's mandate is to support comprehensive HIV & AIDS and TB services in the 12 districts of Eastern Uganda (Budaka, Bududa, Bukwo, Bulambuli, Busia, Butaleja, Kapchorwa, Kibuku, Kween, Mbale, Pallisa, and Sironko) with a total population of 2,513,539.

This report summarizes activities in project year six (PY6), from October 2013 - September 2014, during which time STAR-E has continued to work with the 12 supported districts and 154 health facilities in Eastern Uganda with a focus on sustaining its previous gains. PY6 activities have included strengthening clinical laboratories so that health facilities continue to offer quality services such as HIV counseling and testing (HCT), prevention of mother-to-child transmission of HIV (PMTCT), treatment, and other diagnostic capabilities to increase the quality, demand, and uptake of HIV and TB services. STAR-E supported Uganda's Ministry of Health (MOH) policy of scaling up Option B+ and ART services to a wider community of mid-Eastern Uganda through training of health workers and accreditation of more health facilities to offer these services to the community. Scale-up of safe medical circumcision (SMC) continued. To further enhance sustainability and local ownership, the project continued to fully engage local district governments, which has led to significant achievements in a number of other areas as highlighted in the following sections.

HIV Counseling and Testing (HCT)

The project provided support to 154 health facilities (the annual and life of project target) that continued to offer quality HCT. All the supported facilities have integrated provider-initiated testing and counseling (PITC) into routine care. In PY6, STAR-E-supported sites were able to test and provide results to 459,019 individuals, reaching 90 % of the annual target. This brings the cumulative HTC achievement to 1,658,152 (105%) against the life-of-project (LOP) target of 1,573,910.

Couples HCT was a particular challenge, with the project realizing only 45% of its annual target. This is primarily due to the stigma around men testing for HIV and their fear of getting tested with their spouses. In response, the project has worked on approaches such as radio programs, individualized invitation letters to male spouses, certificates to couples that test together, and mobilization through village health teams (VHTs) to attract more men to get tested with their spouses.

Prevention of Mother-to-Child Transmission of HIV (PMTCT)

The prevalence of HIV among those tested has fallen among the general population from 3.7% in 2010 to 2.3% as of the end of PY6; the prevalence among pregnant women has almost been stable from 2.3 in 2010 to 2.9 by the end of PY6. Over the course of PY6, the project reached 123,905 mothers against the annual target of 125,852 and then surpassed the LOP target of 423,272 for the number of newly pregnant women tested for HIV by 14%.

One challenge facing facilities was that Nevirapine syrup stock levels often ran low. To prevent this, the STAR-E logistics advisor sent regular reminders to the MOH. Another challenge was that

continued underreporting; health workers have numerous competing tasks and have not always been able to update registers in a timely manner. This is possibly contributing to lower reported numbers.

Other Prevention

STAR-E distributed 4,142,980 male and female condoms across the 12 supported districts through different outlets. In the area of safe medical circumcision (SMC), Uganda licensed the use of the PrePex device, used for non-surgical circumcision, during the last half of PY6. STAR-E was able to train the SMC teams at Masafu Hospital and Busia HC IV on use of this new tool. A total of 74,389 eligible males underwent SMC over the course of PY6, meeting 83% of the annual target, and contributing to a cumulative total that has surpassed the LOP target by 2%. Additionally, the project reached 8,010 individuals from most-at-risk populations (MARPs) with HIV-prevention services, surpassing the annual target by 70%.

Care and Treatment

STAR-E enrolled 7,977 new HIV-infected clients into chronic care during PY6. The project supported chronic care at both the facility and the community levels, emphasizing the project's strategy of full participation of people living with HIV to assist fellow clients in accessing services. The assiduous work of linkage facilitators and case managers has continued in providing referral for further services, adherence to counseling, follow-up, and psychosocial support.

The project-supported antiretroviral therapy (ART) sites registered 6,903 new clients, bringing the total number of active clients on ART to 15,207. STAR-E enrolled 687 children under the age of 15 years into ART, which is 83% of the annual target of 827 children.

STAR-E strengthened all the supported ART sites through integrated mentorships and supported them to access medicines and commodities from the respective warehouses. The project also began the rollout of the new Uganda ART guidelines and by close of FY2014 38 sites had received training in the new guidelines. The remaining 116 sites will receive training on the new guidelines in Q1 of PY7. The rollout of the new ART guidelines has been used as a vehicle to fast track paediatric HIV care and ensure that HIV-exposed infants are tested and started on treatment.

TB

The TB treatment success rate reached 84% in the STAR-E-supported mid Eastern Uganda, very close to the national target of 85%. Progress toward meeting targets for TB-HIV indicators has been good: the proportion of TB patients tested for HIV was 94%, while the proportion of TB-HIV co-infected patients started on co-trimoxazole and ART was 100% and 74% respectively. The TB case detection has, however, dropped to 41%. This is mainly attributed to the national estimation of expected Tb cases that does not take into consideration regional variations.

Health System Strengthening

In FY2014, the Lot Quality Assurance Sampling (LQAS) project component completed the 2013 consolidated LQAS report, shared the 2013 survey experiences, and planned for the 2014 surveys. STAR-E's LQAS team also provided technical support for district surveys to implementing partners (IPs) working in 60 districts. The project also conducted a third round of health facility assessments using MoH approved tools and sixth round of LQAS community surveys, which informed programming for next year.

STAR-E collaborated with IPs, districts, and other partners to hold a national information meeting to share experiences and good practices. This meeting also provided opportunities to discuss strategies for the institutionalization of LQAS methodologies.

During the reporting period, STAR-E increased its support from 100 to 135 reporting laboratories in the 12 districts. The support included mentorships, sample referrals, providing equipment such as microscopes, and external quality assurance and data management activities. Ten facility laboratories were renovated/or remodeled out of the planned 11 units. Renovation of the final facility will be completed in Q1 of PY7.

The project also contributed to the national sample referral system by making three hospital laboratories (Masafu, Pallisa, and Kapchorwa) fully operational as hubs that can be used by seven out of the 12 supported districts in December 2013. STAR-E equipped each of these hubs with a CD4 FACSCount™ machine, a hematology analyzer, and a chemistry analyzer, making it possible to process tests within their catchment area.

STAR-E has continued its support for supply chain management activities in the 12 districts, including support supervision, mentorship, and the adoption of the new supervision performance assessment and recognition strategy (SPARS). The project focused its efforts on supervising the medicines management supervisors (MMS) responsible for managing commodities at the peripheral level.

STAR-E also continued to support the quality and use of strategic information at district and facility levels in diverse ways, including mentorship, support supervision, and on-the-job training of health workers on the use of the MOH-revised health management information system (HMIS) tools. The project also conducted a third round of health facility assessments using MoH-approved tools as well as a sixth round of the LQAS community survey, which informed programming for next year.

In terms of documenting best practices, STAR-E presented two oral presentations and three poster presentations at the International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA) conference in December 2013 as well as one poster presentation at the International AIDS conference in August 2014 on decreasing adverse events following male circumcision. The ICASA presentations focused on integrating cervical cancer screening into HIV/AIDS programming and on Uganda Demographic Health Survey (UDHS) and LQAS data on various indicators. The poster at the international AIDS conference focused on follow-up of SMC clients.

Quality improvement (QI) activities continued to focus on SMC, ART, PMTCT, and TB services and indicators in these program areas have been reviewed on a monthly basis. The project supported the rollout of a national QI framework to all districts. Other specific activities included capacity-building and coaching of health workers; integrated support supervision of QI teams and technical support for their QI-related activities; and collaboration with the MOH and other IPs on conducting joint QI mentoring in selected facilities and evaluating their performance over time. Twenty-four facilities have received support to implement the QI/5S framework.

Networking/collaborations: The project continued to engage and support networks and collaborations. STAR-E has collaborated with the Strengthening Decentralization for Sustainability (SDS) project to ensure that districts receive the funding they need to implement their activities. At the facility level, the project has continued to offer technical support to family support groups (FSGs) formed in PY5. The FSGs have been key vehicles for peer support of families affected by HIV. The

project's 264 linkage facilitators have continued to support service delivery through ensuring that linkages are functional as clients go through the continuum of response.

Strategies to **increase the demand** for health services have been through 11 civil society organizations (CSOs) that were engaged through grants to mobilize communities for various services. In the project has worked with various radio stations to host radio talk shows and air radio spots.

Vulnerable Children Linkages

During PY6, STAR-E trained 558 health workers, linkage facilitators, community development officers, and representatives from community-based organizations (CBOs) in orphans and vulnerable children (OVC) identification and linkages. STAR-E identified health facility OVC focal persons in all 154 project-supported health facilities to provide oversight on the identification, registration, and linkage of OVC to services within and outside the facility. The project also supported the training of health workers from the original 36 ART sites in child and adolescent counseling with the objective of improving OVC enrolment and retention in care, as well as to improve the quality of OVC care itself. As an additional incentive, the project distributed 445 pairs of donated TOMS Shoes to the OVC.

Table I: Summary of PY 6 Annual Results for Core Indicators

Indicators	PY6 Q4 Results	PY6 Results to date (Q1-4)	Annual Target	% of Annual Target Achieved	Cumulative Achievement through PY6	Life of Project Target	% Achieved
HIV Counseling and Testing (HCT)							
Individuals tested and received HIV result	118,285	459,019	512,510	90%	1,658,152	1,573,910	105%
Individuals who tested and received HIV result as couples	7,543	28,534	62,845	45%	52,057	168,985	31%
Outlets providing HCT	154	154	154	100%	154	154	100%
Prevention of Mother to Child Transmission & Early Infant Diagnosis (EID)							
Pregnant women tested for HIV at antenatal clinic (new)	37,240	123,905	125,852	98%	480,224	423,272	113%
HIV+ pregnant women who received ARVs for PMTCT	713	3,211	4,753	68%	12,683	20,516	62%
Outlets providing Option B+	154	154	154	100%	154	154	100%
HIV-exposed infants given ARV prophylaxis at birth	270	1,033	4,004	26%	5,049	15763	32%
HIV-exposed infants tested for HIV-PCR	409	1,623	4,004	41%	6,579	15763	42%
Chronic HIV care							
New HIV patients enrolled in chronic care	1,994	7,977	23,630	34%	Not available*	Not available*	—
New pregnant HIV+ women enrolled	366	1,509	4,753	32%	Not available*	Not available*	—
CD4 tests performed	7,150	30,296	46,000	66%	67,869	69,000	98%
Outlets providing clinical care services	154	154	154	100%	154	154	100%
Individuals reached with Prevention with Positives	3,975	27,073	31,738	85%	31,048	31,738	98%
Antiretroviral Treatment (ART)							
New patients enrolled on ART	1,732	6,903	9,654	72%	17,803	18,974	94%
Current ART clients (total)	15,207	15,207	30,633	50%	15,207	30,634	50%
Outlets providing ART	137	137	154	89%	137	154	89%
TB & TB/HIV							
TB case detection rate	43%	41%	70%	59%	N/A	N/A	—
TB treatment success rate	84%	84%	85%	88%	N/A	N/A	—
TB patients tested for HIV	94%	94%	100%	94%	N/A	N/A	—
Most-at-Risk Populations (MARPs)							
Individuals in MARPs reached with HIV prevention services	3,930	8,010	4,700	170%	14,585	11,500	127%
Condoms distributed	647,013	4,142,980	2,458,512	169%	8,238,130	6,150,000	134%
Safe Medical Circumcision							
Men circumcised	10,208	74,389	90,000	83%	184,105	181,120	102%
Outlets providing SMC	19	20	21	95%	20	21	95%
Orphans and vulnerable children (OVC) linkages							
OVC referred to services within communities	497	4,969	8,524	58%	4,969	8,524	58%
Children < 15 years under care	2,230	2,230	8,524	26%	2,230	8,524	26%

The project will operate for five months and oneweek in PY7 before it closes on March 9, 2015.

Introduction

The Strengthening TB and HIV & AIDS Response in Eastern Uganda (STAR-E) is a six-year project funded by the US Agency for International Development (USAID) that was awarded on March 9, 2009, to Management Sciences for Health (MSH) through Cooperative Agreement 617-A-00-09-00006-00. MSH's partners include the Joint Clinical Research Centre (JCRC), the Inter-Religious Council of Uganda (IRCU), Resources for Policy Exchange (RPX), and Liverpool Associates in Tropical Health (LATH). STAR-E's mandate is to support comprehensive HIV & AIDS & TB services in the 12 districts of Eastern Uganda (Budaka, Bududa, Bukwo, Bulambuli, Busia, Butaleja, Kapchorwa, Kibuku, Kween, Mbale, Pallisa, and Sironko). The total population within the project service area is estimated at 2,513,539, according to projections for 2012 from the 2001 housing and population census. In addition to supporting HIV/TB service delivery, the STAR-E project has a national mandate to institutionalize and support the application of Lot Quality Assurance Sampling (LQAS) in all districts of Uganda that host USAID-funded implementing partners (IPs) supporting delivery and improvement of HIV and health and social services.

STAR-E's overall goal is to empower communities in Eastern Uganda to respond effectively to the challenges posed by the HIV & AIDS and TB epidemics. The project's general objective aims to increase access to, coverage of, and use of high-quality, comprehensive HIV & AIDS and TB prevention, care, and treatment services within district health facilities and their respective communities.

The project's specific objectives include:

1. Strengthening district and subdistrict public- and private-sector health facilities, including hospitals and level-III and -IV health centers (HCs)
2. Expanding access to community services
3. Facilitating the establishment of efficient and functioning referral systems within and among health facilities and communities
4. Creating awareness, increase knowledge of service points, and show the advantages of early use of HIV/TB services

Figure 1: STAR-E Geographical Area of Operation in Eastern Uganda



INTERMEDIATE RESULT AREA 1: Increasing Uptake of Comprehensive HIV & AIDS and TB Services

IR 1.1 Increasing Uptake and Access to HIV Counseling and Testing Services

Key Strategies to Achieve Results:

- Opened more sites across the districts improving access to and availability of care
- Institutionalized PITC in health facilities at different entry points
- Mentored and coached HCT service providers
- Promoted family support groups
- Targeted special groups such as most-at-risk populations and those who are hard to reach
- Trained district-based mentors to relieve backlog of ARV-eligible clients
- Conducted district-level orientation sessions for religious and cultural leaders on the HIV/AIDS combination prevention strategy
- Promoted safe medical circumcision

At present a total of 154 health facilities, including all hospitals, Health Center (HC) IVs, HC IIIs, and 30% of HC IIs, provide HCT services through the PITC model. The project reached 105% (1,658,152 out of 1,573,910) of the overall targeted population for HCT, surpassing the project target by 5%. STAR-E reached close to 90% (459,019 out of the targeted 512,510) for PY6.

Main IR 1.1 PY6 Achievements:

- ☐ Tested 459,019 people for HIV
- ☐ 28,534 tested and received results as couples
- ☐ HIV prevalence among individuals tested was 2.3%

The project achieved these impressive results for PY6 despite a number of challenges, including relocation of MOH-trained staff, the erratic supply of testing kits by the ministry to the facilities, and

suboptimal data collection by health facility staff, which might have contributed to possible underreporting. To minimize the effects of these challenges, the project conducted continuous professional development targeting 70 health facilities and reached 441 health workers.

STAR-E aimed to:

- Assess poorly performing sites on the extent to which they have integrated PITC into routine health care;
- Increase the number of health workers at different entry points able to provide PITC services;
- Mentor and coach HCT service providers to ensure quality service provision based on MOH HCT recommended guidelines and protocols;
- Provide technical guidance for addressing the constraints on commodity management and data collection; and
- Address other motivational challenges experienced by service providers in these facilities.

The prevalence of HIV among those tested in the STAR-E program fell among the general population from 3.7 % in 2010 to 2.3 % by the end of PY6. The prevalence among new mothers testing in ANC has remained almost stable from 2.3 % to 2.9 as per project data.

The project has targeted special groups such as MARPs and those who are hard to reach, such as commercial sex workers (CSWs), fisherfolk, and truckers, as well as boda-boda motorcyclists for HCT. This has been possible through a partnership with the AIDS Information Center (AIC), the

Amalgamated Transport and General Workers Union (ATGWU), and some CSOs; however, there has been a challenge around couples' HCT.

Results

The graph in Fig 2 compares the annual achievements in HCT (blue) and the cumulative achievements

Figure 2: Trend in uptake of HCT compared to targets since 2010

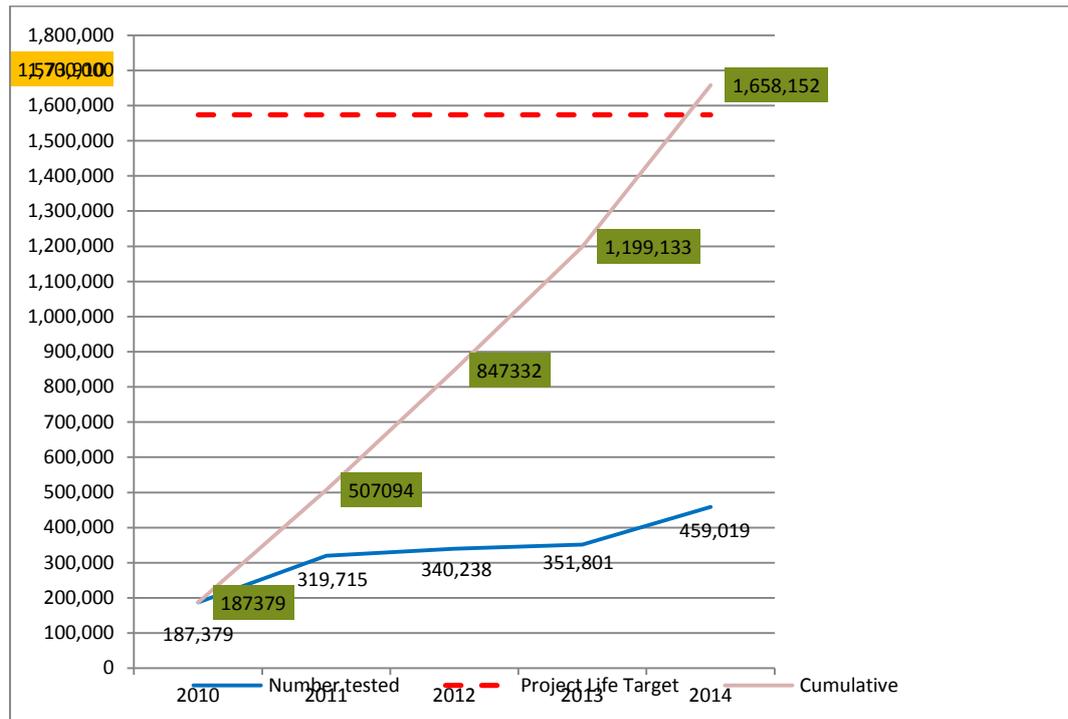


Figure 3: Distribution of HIV among those who tested as couples across PY6 (HIV sero-discordant and HIV concordant positives and negatives)

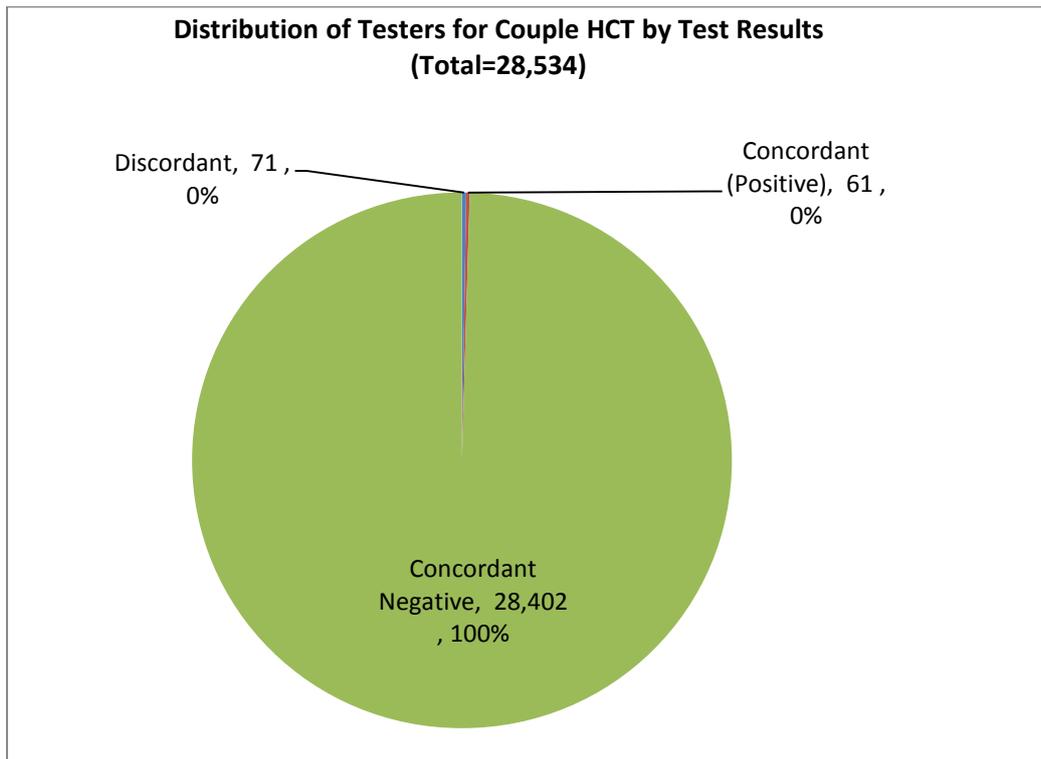
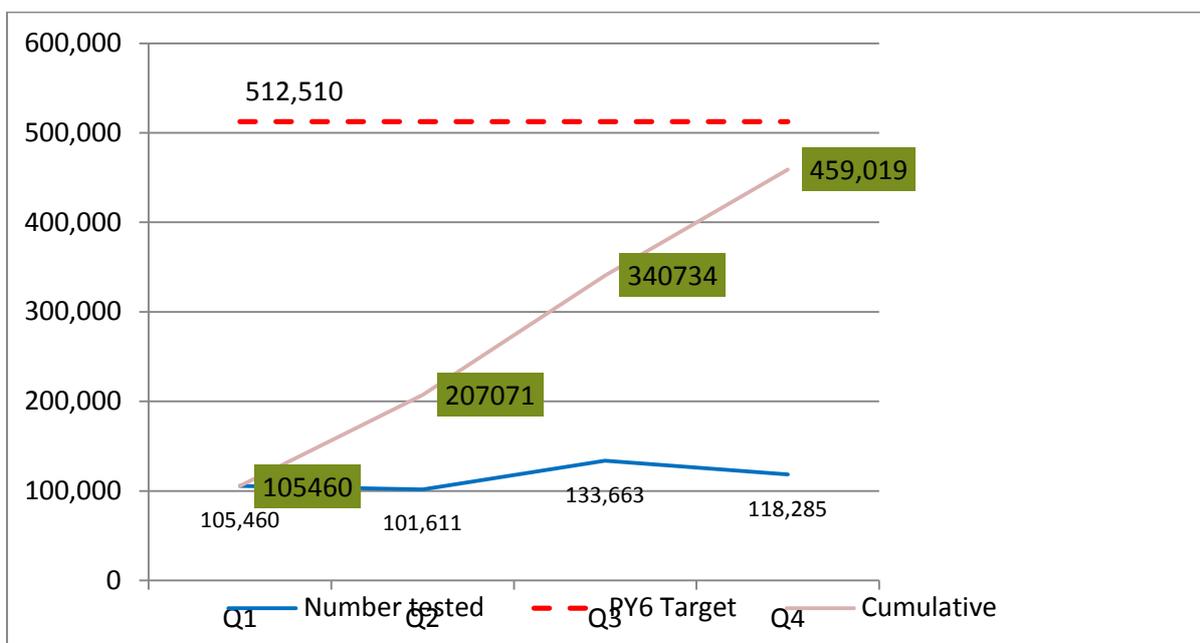


Figure 4: Trends in HCT uptake across the four quarters in PY6 compared to annual target



Challenges

The National Medical Stores (NMS) supplies too few testing kits to cover the number of patients coming in for testing, resulting in stock-outs. Additionally, poor data collection at the facility level

leads to underreporting. Misinterpretation of the terminology used in the indicators at the point of data collection may lead to double counting. The project has continued to support integrated mentorships at facilities that include data recording and management.

IR 1.2 Increasing uptake of strategies for the prevention of mother to child transmission of HIV

Virtual elimination of MTCT remains a key goal of the MOH but requires the support of the districts and health facilities.

Overall the project has provided technical support to 12 districts and 154 sites to provide quality PMTCT interventions. An estimated 1,000 health workers across the 154 facilities who were trained on the essentials of PMTCT in order to provide the necessary services in PY5 received mentorships in PY6. Facilities received MOH registers for data collection and tools for reporting immediately after the training.

Main IR 1.2 PY6 Achievements:

- Tested 123,905 mothers for HIV**
- Enrolled 3,211 HIV+ mothers on Option B+**
- 2,014 HIV+ women accessed family planning services**
- 1,000 health workers trained on PMTCT essentials and now able to provide services**

In PY6, facilities received technical mentorship visits from STAR-E to streamline weekly SMS reporting, monthly HMIS reporting, and enhance other skills and competencies. The MOH provided facilities with various job aids and guided them on standardized messages for communities and PMTCT clients. The Ministry also provided laminated materials for improving patient flow.

The facilities received coaching on family planning (FP) integration because the STAR-E project had noted a high unmet need for FP among HIV-positive PMTCT clients.

Sixty district-based mentors (DBMs), who were trained by STAR-E, provided support to facilities to remove the backlogs of eligible clients not yet started on ARV treatment. The MOH provided yellow stickers for pediatric patients and STAR-E provided orange stickers for adult patient files. The DBMs went through stacks of files and registers to compile lists of those who were eligible but not yet started on treatment, and placed the stickers on these respective files to remind clinicians to immediately start these clients on treatment as soon as they came into the clinic. Those who are eligible include women who are HIV positive and pregnant, all children younger than 15 years, those with TB co-infection, MARPs who have tested positive, other adults who have a CD4 count below 500 cells/micro liter, or those who are positive and in a sero-discordant relationship.

The MOH, through NMS, has stocked facilities with the recommended drugs for PMTCT (Atripla and Nevirapaine syrup) although the facilities sometimes experienced stock-outs of Nevirapine syrup and at times Atripla as well. For ongoing counseling and psychosocial support, most women in the PMTCT program are referred to and enrolled in STAR-E-supported family support groups under the stewardship of clinical staff and linkage facilitators. These groups have helped women to deal with stigma-related issues. They have increased patient retention and provide a forum for adherence counseling.

The STAR-E linkage facilitators have helped link clients to different service points within the facility and they have also worked closely with VHTs to track those who were lost to follow-up at the community level by sharing information on those patients. In addition, the midwives at the facilities now send SMS reminders to clients about their next appointment.

The project worked with 38 facilities to move the early infant diagnosis (EID) care points to the MCH department to create mother/baby care points for easy tracking, reduce the number of missed opportunities, and provide a comprehensive services package. HIV-negative children at 18 months of age are discharged from the program. If a child is HIV positive, the mother/baby pair is transitioned to the chronic care clinic where they continue treatment.

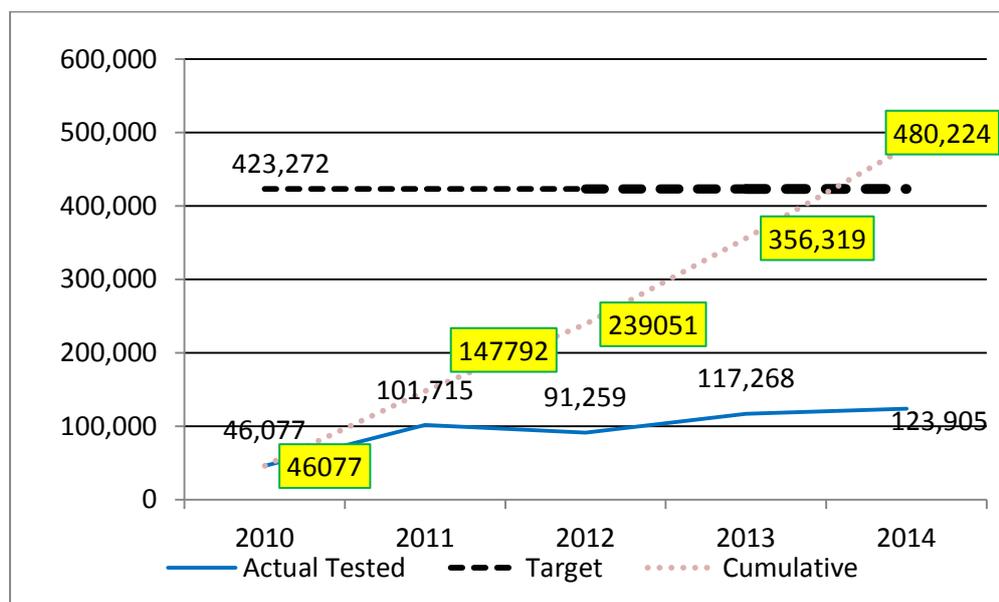
In PY6, the project printed revised PMTCT HMIS tools and disseminated them to facilities.

At the national level, STAR-E continued participating in the PMTCT monitoring and evaluation (M&E) committee meetings, including donors, IPs, and MOH officials who gather every quarter to track progress and share experiences on Option B+ rollout.

Results

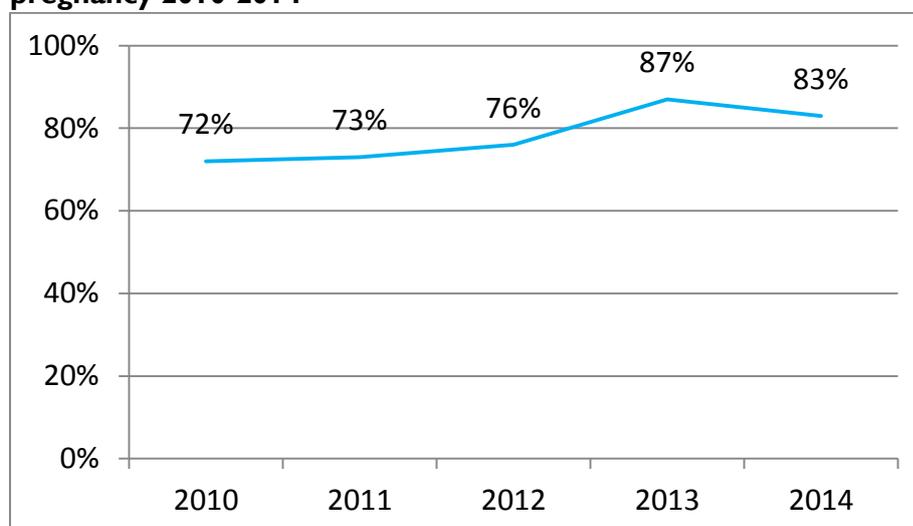
Overall during PY6, STAR-E facilitated testing of 123,905 pregnant women for HIV. Among them, 3,602 tested positive, and 3,211 of these began lifelong treatment. A total of 1,287 positive women had facility-based deliveries, 1,050 exposed infants began co-trimoxazole at two months of age, and 1,033 exposed infants began ARV prophylaxis.

Figure 5: Trend in newly pregnant mothers tested for HIV and who received results compared to set targets, 2010-2014



The LOP target was set for 423,272 mothers tested. The actual number of mothers tested has reached a cumulative level of 480,224, surpassing the target by 13.5 %.

Figure 6: Proportion of mothers who received their HIV test results during last pregnancy 2010-2014



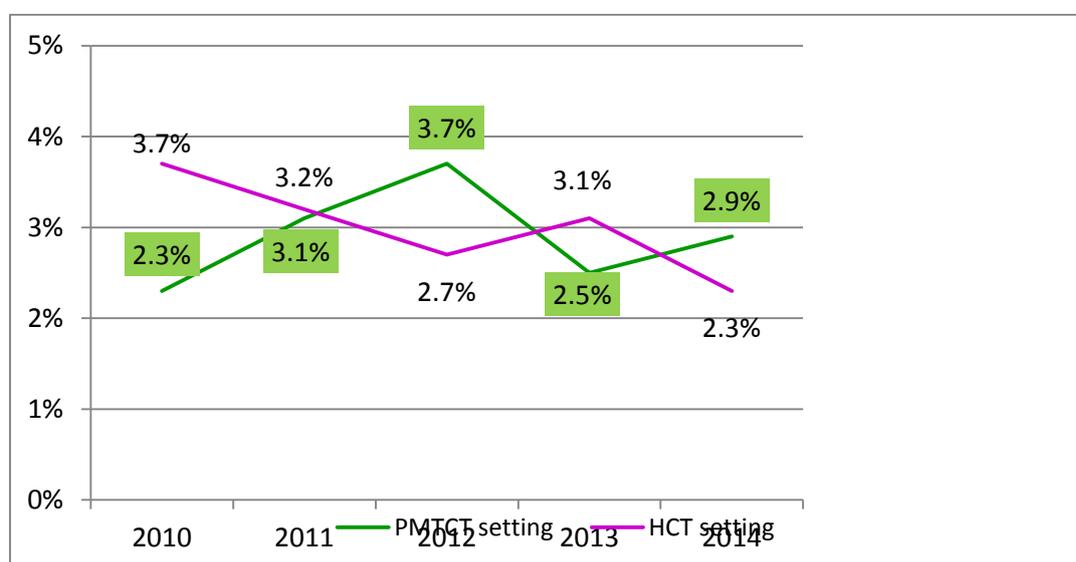
Source: STAR-E LQAS data

LQAS community surveys conducted by STAR-E from 2010 to 2014 show an increasing percentage of pregnant mothers reporting having received their HIV test results during the last pregnancy, from 72% in 2010 to 83% in 2014 (Figure 6). Information from HMIS for the same period corroborates this, indicating that between 93% and 100% of the pregnant women attending ANC at STAR-E-supported facilities received counseling, testing, and their HIV test results.

The prevalence of HIV among those tested has been falling in the general population, from 3.7% in 2010 to 2.3% at the end of PY6, while prevalence increased from 2.3% to 2.9% among pregnant women in the same period (Figure 7). One possible reason for the increased prevalence among pregnant women might be due to greater awareness and demand of HCT by pregnant women because of numerous awareness campaigns that the project has carried out through radio and other approaches

The figure below compares HIV prevalence among HTC testers over time among the general population as well as in the ANC setting for mothers..

Figure 7: HIV prevalence rates among pregnant women (PMTCT setting) and general population outside ANC setting (HCT setting)



Challenges

One challenge seen at the facility level was shortages of Nevirapine syrup. To prevent this, the logistics advisor sent regular reminders to the MOH.

Additionally, underreporting remains a problem; health workers have numerous competing tasks and may not always update registers in a timely manner. Not all mothers who test positive accept to start on treatment.

IR 1.3–6 Increased Uptake of Comprehensive Services to Prevent Sexual Transmission of HIV

Main IR 1.3-6 PY6 Achievements:

- Reached 8,010 individuals from MARPs
- Circumcised 74,389 males
- 2,689 women screened for cervical cancer
- Distributed 4,142,980 condoms

Comprehensive prevention of sexual transmission of HIV

During PY6, STAR-E staff, district health educators (DHEs) and district health officers (DHOs) in the 12 STAR-E districts

conducted district-level orientation sessions for religious and cultural leaders on the HIV/AIDS combination prevention strategy. The project provided these sessions to build awareness of the strategy and to strengthen leadership capacity to speak out responsibly about HIV/AIDS. STAR-E aimed to enable them to have a powerful impact at the community level, as well as to ensure a sustainable response to the challenge of HIV/AIDS. Participants received information about the HIV/AIDS situation in their respective districts and continued to sensitize community members on HIV/AIDS prevention with an emphasis on the combination prevention strategy. They focused their efforts on the particular drivers of the HIV epidemic in their respective districts and continued to campaign against multiple and concurrent sexual partners by encouraging mutual faithfulness among couples. Leaders encouraged youth to abstain from sex and wait until they are older to have their sexual debut.

The religious leaders also provided psychosocial support through prayer and by offering some material items to sick individuals and their families. They advised and encouraged HIV clients to adhere to treatment and to join family support groups for continuous health education and psychosocial support. STAR-E provided the leaders with IEC materials to help transfer knowledge and skills to the community. This education helped community members to make informed decisions based on personal choices, and contributed to the increase in uptake of HIV/AIDS prevention, treatment, care, and support services. Teamwork among religious leaders of different denominations, as well as among religious leaders and health workers, was further strengthened.



Orientation on the HIV-combination prevention strategy for cultural leaders of the Bamasaba Cultural Institution

To further enhance coordination, advocacy, and linkages among religious leaders and health service providers to effectively deliver quality HIV/AIDS services, STAR-E and the Inter Religious Council of Uganda (IRCU) organized three consultative meetings for 118 religious leaders and health workers from the STAR-E-supported districts. Participants reflected on their various roles in the fight against HIV/AIDS, discussed challenges they faced during the referral process, and proposed recommendations for possible action. Considering the current trends of the HIV epidemic and the limitations by some religious leaders to promote some scientifically proven HIV/AIDS prevention measures, participants appreciated the need for effective referral systems. They developed district-specific action plans which they have since been implementing in an attempt to respond to the identified challenges and gaps in the referral process. By conducting joint district-level meetings, religious leaders were able to continue sharing information on HIV/AIDS activities in their respective communities while health workers shared information on the uptake of various HIV/AIDS services (PMTCT, SMC, HCT, condom distribution, etc.) in their facilities. In particular, the group was able to highlight and discuss the discrepancies they were seeing between the set targets and actual performance in each facility.

HIV prevention dialogue sessions for boda-boda cyclists

During this project year, STAR-E mapped locations, leadership, population size, and HIV risk factors among boda-boda taxi cyclists. A majority of the boda-boda cyclists are youth who are out of school with extra daily disposable income, mostly single, and often have multiple sexual partners. STAR-E, together with the Mbale District Health Department, conducted five dialogue sessions targeting 165 leaders of various boda-boda gathering spots within the Mbale municipality. The aim was to create awareness of the HIV epidemic and, more importantly, the risk factors for infection. STAR-E provided participants with various information, education and communication (IEC) materials, such as posters, brochures, and dildos to demonstrate effective condom use in sensitization sessions for their peers. Condoms were also distributed. Additionally, STAR-E linked the boda-boda leaders to its partner, ATGWU, which conducted several HCT outreaches during which many boda-boda cyclists and their sexual partners were referred to other services such as SMC, PMTCT, sexually transmitted infection (STI) screening, and HIV treatment, or to receive condoms.

Community Dialogue Sessions on HIV-Combination Prevention Reduce Vulnerability of Boda-Boda Cyclists to HIV Infection in Mbale District

Mbale district has a population of about 28,000 motorcycle taxi riders locally known as *boda-boda* cyclists who carry passengers to earn a living. They are exposed to HIV by engaging in casual sex with commercial sex workers, school girls, and married women. The biggest risk factor for contracting HIV for these men is lack of consistent use of condoms for casual sex because they tend to trust their female counterparts and do not regard themselves to be at risk for HIV.

“As a boda-boda cyclist, having more than one sexual partner makes me a strong man and a very good sexual performer,” said one boda-boda, who gave his name as Abubaker. “I usually put on two to three condoms to guard against the risk of condom tear. The condoms are of poor quality, very weak indeed.” Many boda-boda cyclists also expressed fear of seeking HCT services.

Following the five dialogue sessions organized by STAR-E and the Mbale District Health Department within Mbale municipality, knowledge of condom use has improved, the riders have fewer sex partners, and they share information with their families. “We thank STAR-E for saving our lives,” said one of the group leaders, Mohammed Bwayo. We lacked HIV related knowledge. We were using condoms wrongly and exposing ourselves to HIV. We now have a regular supply of condoms through our association. We also thank STAR-E for linking us to service providers. We drew up an HCT outreach program which is still running. During each HCT outreach, between 90 and 100 individuals access HCT services open to all.”

Rider Patrick Nabunena said, “The dialogue session was an eye-opener to review my sexual lifestyle. From five, I now have only one sex partner. [With] my financial expenses down now I can concentrate on educating my children.”



Dialogue sessions for school girls

Analysis of the 2013 LQAS survey results revealed that the percentage of youth who perceive low or no risk of getting HIV/AIDS infection stood at 23% and that the percentage of youth who have their first sexual debut at age 15 or younger was on the rise. In response, STAR-E and the Mbale District Health Department conducted dialogue sessions on HIV/STDs and pregnancy prevention for young girls in seven senior secondary schools within Mbale municipality. The project reached 1,461 young girls (976 day scholars and 485 hostel girls).



School girls analyze a diagram illustrating the dangers of being part of a sexual network. They were encouraged to abstain from sex.

Promoting Risk Reduction Among Key Populations

During PY6, STAR-E's HIV-prevention efforts continued targeting most MARPs, particularly CSWs and their clients, in the general population as well as truck drivers and fisher folk with combination prevention strategy-driven activities. Interventions included promoting safer sexual behavior through reducing the number of sexual partners, correct and consistent condom use, regular HIV testing to be able to access care and treatment if found positive, regular STI checks, ensuring complete treatment for any STI found, and, for the male MARPs, considering SMC.

In particular, STAR-E partnered with AIC to conduct integrated outreaches targeting fishing communities at four landing sites in Busia district and five landing sites in Pallisa district. First, the project oriented 263 peer educators from among the fisher folk in these areas on the combination prevention strategy. These educators then conducted one-on-one and group sessions with their peers on HIV prevention. Subsequently, STAR-E and AIC organized integrated outreaches in these same areas that reached 2,028 fisher folk with information about HIV counseling and testing services, SMC, FP services, condom promotion activities, and other behavior change communication (BCC) activities such as film shows. In these outreaches, 50,400 male and 2,000 female condoms were distributed to the fisher folk.

Best Practice on Sexual Prevention: Targeting the Gishu Community Every even year the Gishu hold traditional male circumcision ceremonies, called *Imbalu*, to initiate boys into adulthood. The traditional circumcisions are held in the two subregions of Bamasaba and Sabinu in the Eastern region but starts with a launch in Mutoto that lasts a full month. It is marked with festivities and attracts thousands of people, including traditional leaders, circumcisers, candidates for circumcision, and their parents. Young men who are traditionally circumcised are told they are now men and can start sexual activities. The project seized the opportunity the week of the launch of *Imbalu* in Mutoto to promote safe sex, safe male medical circumcisions, and HCT. In total, 1,132 people took an HIV test, 51 young men opted for safe male medical circumcision, 91,874 male and 1,000 female condoms were distributed, 15 people were screened for STIs, and 412 women were offered cervical cancer screening.

The STAR-E project continued to participate in condom coordination meetings with other IPs and to receive condoms from the MOH through UHMG for distribution to the districts. To boost the project's condom programming, STAR-E procured and distributed dildos to condom distribution

outlets across the 12 supported districts in order for these outlets to provide demonstrations on proper use and handling. The project also received vagina models from the MOH and distributed them to HC IVs, hospitals, and some PBF awardees, including ATGWU, for female condom demonstrations. During PY6, STAR-E distributed 4,142,980 male and female condoms across the 12 supported districts through both traditional and nontraditional distribution outlets.

Although female condoms have existed for a number of years women still shy away from them because of tradition, which often leaves issues regarding sexuality to men. This gender dimension has affected the uptake of female condoms among groups such as CSWs and rural women. In most cases, the female condom is picked up out of curiosity rather than the desire to actually use it. This has been exacerbated by the lack of models for demonstrating female condoms.

Prevention with Positives

The project worked with peer educators among people living with HIV (PLHIV), linkage facilitators, and case managers to promote Prevention with Positives (PwP) interventions in the communities and in the health facilities. The principle of positive living is integrated into the comprehensive care plan for PLHIV, which also includes PMTCT, condom distribution, and adherence counseling. In order to eliminate new HIV infections among children, STAR-E strengthened PMTCT interventions through regular mentorships and tested expectant mothers for HIV at first contact with the health facility. Those who tested positive for HIV were started on treatment regardless of their CD4 count, while those who tested negative were retested and counseled on safer sex practices. The project promoted safer sex by providing all health facilities, PLHIV offices, and community distribution outlets with enough supplies of both male and female condoms for easy access by the users.

Cervical Cancer and Breast Cancer Screening

The project continued to support cervical cancer screening and breast examinations in nine health facilities. The health workers integrated the screening into maternal health and HIV/AIDS services at the facilities. Mbale Regional Referral Hospital remained the referral point for cases with precancerous lesions. During PY6, STAR-E took advantage of internationally recognized days, such as World Cancer Day and International Women's Day, and organized integrated screening services in two key districts: Busia and Butaleja. In both cases, there was HCT, condom distribution, as well as screening for cervical cancer, diabetes, and high blood pressure. In PY6, 2,689 mothers were screened for cervical cancer, and 59 cases of precancerous lesions were referred to Mbale Regional Referral Hospital for further management.

The lack of cryotherapy guns at screening sites was a challenge for mothers who cannot afford to go to the referral hospital, and this endangers their lives even further.

Honoring Commemorative Days to Boost Cancer Screening

Accessing cervical cancer screening services or even related information remains a challenge for many Ugandan women and girls, despite the availability of cheap screening methods and same-day results. But conducting an integrated screening outreach on internationally recognized days has proven to yield good results.

In Uganda, as in most of sub-Saharan Africa, cervical cancer often goes undiagnosed until advanced stages of the disease. Up to 80% of Ugandan women fall into this category, according to the country's Association of Obstetricians and Gynecologists.

STAR-E promotes cervical cancer screening through visual inspection with acetic acid (VIA). The project recognized the need to add value to ongoing care for women living with HIV/AIDS, and in 2011 introduced cervical and breast cancer screening in 12 health facilities directly under its support. Since then, the intervention has expanded to include all women, regardless of their HIV status.

On International Women's Day on March 8, 2014, STAR-E conducted an integrated service delivery outreach in Nabiganda, one of Butaleja district's underserved communities. The project delivered a variety of health services, including general medical exams, HIV screening, diabetes and high blood pressure testing, and condom demonstration and distribution. HCT provided an entry point to cervical cancer screening.



All women who attended the screening session had to be counseled and tested for HIV. STAR-E gave a health talk on cervical cancer, focusing on the risk factors, signs and symptoms, as well as related myths. Women had a chance to ask questions and receive answers. Three health workers did the actual screening, while clinicians conducted registration and provided medical consultation to the screened women, and linked them to the outpatient department for treatment.

Overall, STAR-E screened 475 women for cervical and breast cancer. Among them were five new HIV-positive cases and four with known HIV-positive status. The remaining 466 were HIV negative. The project referred three of the 466 women to Mbale Regional Referral Hospital (MRRH) on suspicion of breast cancer, while two had abnormal growth on their breasts and were also referred to MRRH. STAR-E referred eight cases of uterine/cervical prolapse to MRRH for further medical care. Only one VIA-positive case was referred to MRRH for cryotherapy.

Safe Medical Circumcision

During PY6, STAR-E continued the scale-up of SMC services as one of the proven HIV-prevention interventions. In the Eastern region of Uganda, where it is commonly performed as a process of initiating the youth into maturity every even year, SMC is a culturally familiar concept. Its uptake as a

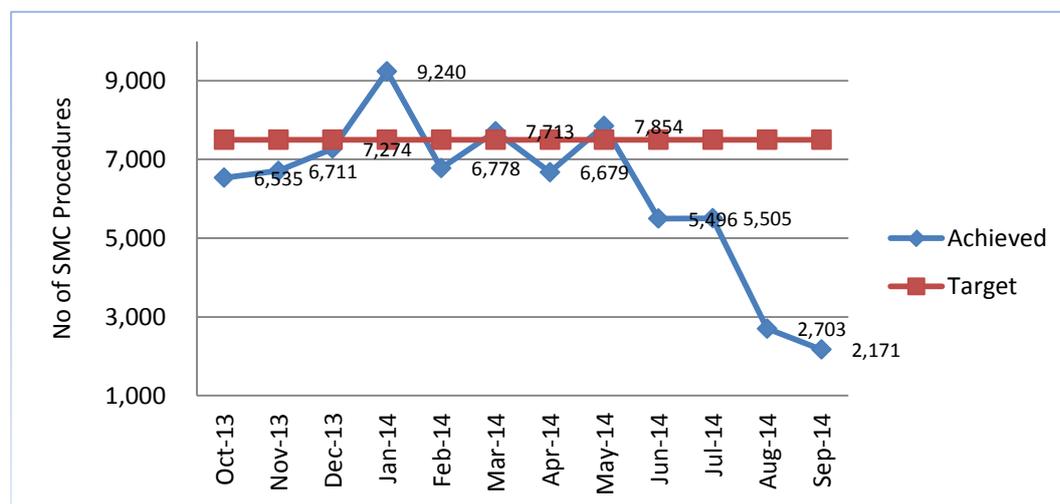
cultural practice has certainly influenced the “reservoir” of potential beneficiaries of SMC. The 2011 AIDS Indicator Survey showed that 53% of sexually active men in the mid-Eastern region self-reported being circumcised; the LQAS 2013 survey conducted by STAR-E in the region found that 73% of youth 15–24 years old reported being circumcised. The target assigned to STAR-E for PY6 was 90,000 individuals to be provided with the option of circumcision, of which the majority was expected to come from the five non-circumcising districts.

In PY6, the project continued to provide SMC commodities (centrally procured through USAID) to 20 health facilities for the delivery of both static and outreach SMC services. However, the major mode of delivery has been through the STAR-E recruited SMC dedicated teams which are set up and equipped to function purely as an outreach service. The five dedicated teams are comprised of four clinical officers (surgeons), four theater nurses (assistant surgeons), and two counselors each. They are deployed to the five non-circumcising districts of Busia, Butaleja, Pallisa, Kibuku, and Budaka. LQAS data informs outreaches by the team, targeting areas with low SMC prevalence as well as hard to reach areas and hotspots with key populations. The teams camp for one to two weeks at a site depending on the demand generated and the size of the catchment area. Mobilization for the service is done the week leading up to the outreach through the VHT structure and the local leadership in the area.

In this project year STAR-E paid increased attention to the quality of SMC services provided through quarterly external quality assessments (EQAs) done by the facility teams themselves, together with STAR-E clinical mentors and technical advisors. In a few selected sites, the STAR-E team has worked with the Applying Science to Strengthen and Improve Systems (ASSIST) project to help facility teams work on areas of weakness. In PY6 one of STAR-E’s sites, Budaka HC IV, was the subject of a combined national and President’s Emergency Plan for Aids Relief (PEPFAR) data quality assessment (DQA). The site was found to have acceptable data validity. The quarter four EQA dashboards are attached in Annex 4.

Fig 8 below compares uptake of SMC per month against the set monthly targets.

Figure 8: SMC monthly targets and results at STAR-E-supported sites, 2014



In PY6, the project provided SMC to 74,389 males, representing 83% of the annual target of 90,000 individuals. The marked decline in the latter half of PY6 arose from administrative actions taken to suspend support to Kaderuna HC III in June 2014 following a forensic audit that showed fraudulent accountability documentation for funds received as well as inflated outputs. In addition, support to MOH health facility outreaches was suspended in August 2014 to prevent further fraud. As a result, for most of the last quarter in PY6, the project depended on outputs from the STAR-E SMC-dedicated teams. Cumulatively the project has so far provided 184,276 male circumcisions,

exceeding the LOP target of 181,120 by 1%.. In terms of meeting the public health goal of reaching 80% of eligible males by 2015 - Table 2 below shows that in the STAR-E-supported districts, approximately 67% of the SMC need has been met.

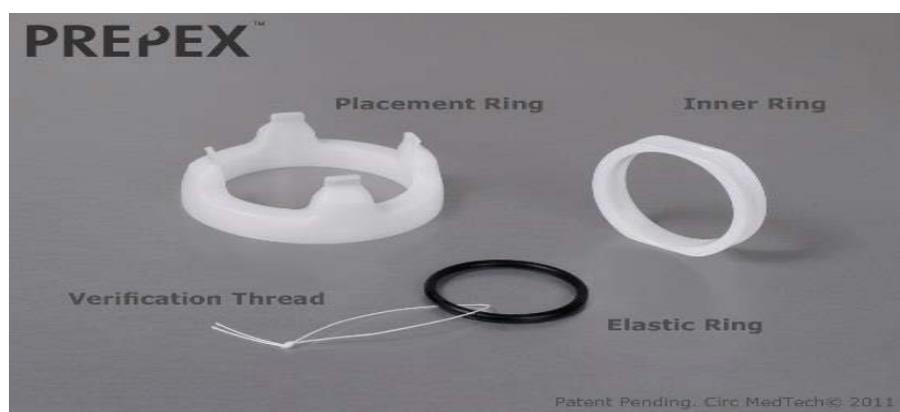
Table 2: Estimate of the need for SMC service provision met in the Eastern region, 2014

Projected 2013 regional population	Male population (48.7%, UBOS)	Males eligible (46.4%, UBOS)	Already circumcised (53%, AIS)	In need of SMC	Provided with SMC (2010-14)	% of need met
2,608,100	1,270,145	589,347	312,354	276,993	184,276	67%

Using the mathematical modeling developed by Njeumehli E et al.* for HIV infections averted by SMC, it is estimated that for Uganda between 19 and 40 circumcisions are required to avert one HIV infection. In the Eastern region this would mean that STAR-E has contributed to averting between 4,600 and 9,600 new HIV infections through the implementation of the SMC program.

Introduction of nonsurgical methods for SMC:

During the last half of PY6, Uganda licensed the use of the PrePex device (picture shown below). STAR-E trained SMC teams at Masafu hospital, Busia HC IV, and the Busia dedicated team in August 2014 on this new tool. STAR-E conducted the facility-based training with the Makerere University Walter Reed Project and the Ministry of Health. The use of PrePex is well suited to low-resource settings as it requires no injected anesthetics, no sutures, no incisions, and is simple to use (applied in five minutes compared to 30 minutes of surgery). The trained teams were able to successfully place and remove 92 devices in the months of August and September 2014.



The picture above shows a prepex device

Challenges

The greatest challenge to the SMC program during PY6 was the discovery of fraudulent practices at some sites which are still the subject of an ongoing forensic audit. As a means of mitigating identified risks, all support towards the health facilities was suspended on August 1, 2014. The STAR-E SMC dedicated teams remain the main vehicle for the scale-up of SMC in the supported districts, and their operations are being reviewed and strengthened to ensure integrity of the data reported and the resources used. The health facility teams have, however, been encouraged to continue providing

* Njeuhmeli E et al. (2011). Voluntary medical male circumcision: Modeling the impact and cost of expanding male circumcision for HIV prevention in Eastern and Southern Africa. PLoS Med 8:e 1001132.

a static service even without additional support. Addressing the gaps in SMC EQAs in these facilities has been transitioned to the facility QI teams to track and monitor in addition to the SMC teams.

IR 1.7 Increasing Uptake of Pediatric HIV & AIDS Services

In PY6, STAR-E focused on coaching, mentorship, support supervision, and training in specific program areas to sustain the quality of pediatric services provided at the 138 ART-accredited sites to ensure that HIV-exposed infants and HIV-infected children receive quality and comprehensive service along the 10-point care package.

In order to increase the uptake of EID services, PITC was institutionalized in health facilities at different entry points to ensure that mothers of children younger than 18 months were tested, HIV exposed infants were identified and referred accordingly, children under 18 months who are not with their biological mother were tested, and that all children over 18 months exposed to HIV were tested for HIV. STAR-E trained regional supervisors from the districts on using dashboard tools to gauge facility performance on the tracked indicators and to correct poor performance. The project also emphasized use of exposed infant charts and registers at the facilities to help health workers capture data and know the next steps in managing exposed and HIV-infected infants. During the year, the project also worked closely with the Central Public Health Library (CPHL)-MOH to ensure that children younger than 18 months whose first DNA PCR test result was positive are followed up using the MOH exposed infant follow-up form and are initiated on ART.

The project continued to support nutrition integration into comprehensive HIV care and treatment services offered in the health facilities. STAR-E procured and distributed measurement tools, such as mid-upper arm circumference tapes, to health facilities for screening children for malnutrition. Thirteen OTC sites supported by the project also received nutrition technical support supervision aimed at imparting knowledge and skills to the health workers operating the OTC sites as well as other staff from the MCH department, ART clinics, pediatric wards, and outpatient departments (OPDs), and improving reporting and ordering for RUTF. The rates of accurate data reported to the M&E department of the project improved and demand for the therapeutic food from the OTC sites increased.

STAR-E was actively involved in rolling out the revised Uganda 2014 ART guidelines to the 38 ART sites. The preparatory process for the site-based ART guidelines rollout began with trainings (training at the national level, regional supervisors training, and training for the DBMs). Site-based rollout of the guidelines to 38 sites followed. The project also procured MOH job aids for site-based rollout of the revised ART guidelines to the remaining 100 ART-accredited sites and 16 PMTCT sites. Ten teams of DBMs from the pool of 60 DBMs conducted a three-day, site-based training, and as part of the training placed MOH yellow stickers on children's files to highlight that they were eligible for ART. These children were then followed up, brought back to the health facility, and initiated on ART.

During the rollout, STAR-E established mother/baby care points at the 38 ART sites to keep mother/baby pairs in care. In total, 564 (357 clinicians, 41 nursing assistants, 54 linkage facilitators, 27 counselors, 37 laboratory assistants, and 48 records assistants, subcounty health workers, and health inspectors) were trained on the revised ART guidelines. For reference, the project also left at the sites copies of MOH job aids (consolidated guidelines on the use of ART drugs for treating and preventing HIV infection February 2014); Summary of the National ART Guidelines, February 2014; ART dosing charts; Addendum to the ART Guidelines; and the National Training Curriculum for the Rollout of the Revised HIV Care and Treatment Guidelines 2014 - Facilitators Manual).

Main IR 1.7 PY6 Achievements:

- ❑ **138 ART sites received pediatric HIV mentorship**
- ❑ **678 children newly enrolled in ART**
- ❑ **Provided nutrition technical support supervision to 13 outpatient therapeutic clinics (OTC) and 141 non-OTC sites**
- ❑ **Rollout of new ART guidelines to 38 ART sites**
- ❑ **564 health professionals trained on new ART guidelines**



Coaching session during site-based ART guideline rollout: Participants identifying files of children eligible for ART, according to the new guideline (all children < 15 years) at Pallisa Hospital.



A MOH yellow sticker being placed on a file of a child found eligible for ART at Pallisa Hospital.

Pediatric and adolescent counseling is important in addressing retention in care and treatment among patients, as well as adherence to drugs. Therefore, the project organized child and adolescent workshops. Trainers in child and adolescent counseling from the AIDS Support Organization (TASO) centres conducted two-day workshops in 37 ART sites. This focused on disclosure issues and psycho social support for children. The workshop targeted the clinicians, counselors, and linkage facilitators who actively participate in the daily running of the ART clinics. To further strengthen retention in HIV care and treatment, the project also distributed a donation of TOMS Shoes to children (ages 0 – 18 years) and PMTCT mothers enrolled at the 38 ART sites. The project distributed the shoes as the children and their mothers came for their clinic appointments as incentives.

Results

The number of exposed infants initiated on co-trimoxazole by two months of age during the year was 1,389, while the total number of infants initiated on ARV prophylaxis at birth was 1,034. The total number of first and second DNA PCR tests done was 4,004, and the number of children under 15 years initiated on treatment was 678 compared to the annual target of 827 (82%) for PY6.

Figure 9: Number of infants initiated on ARV prophylaxis compared to target over the four quarters of PY6 (Total=1,034; Target=4,004, %Achievement=26%)

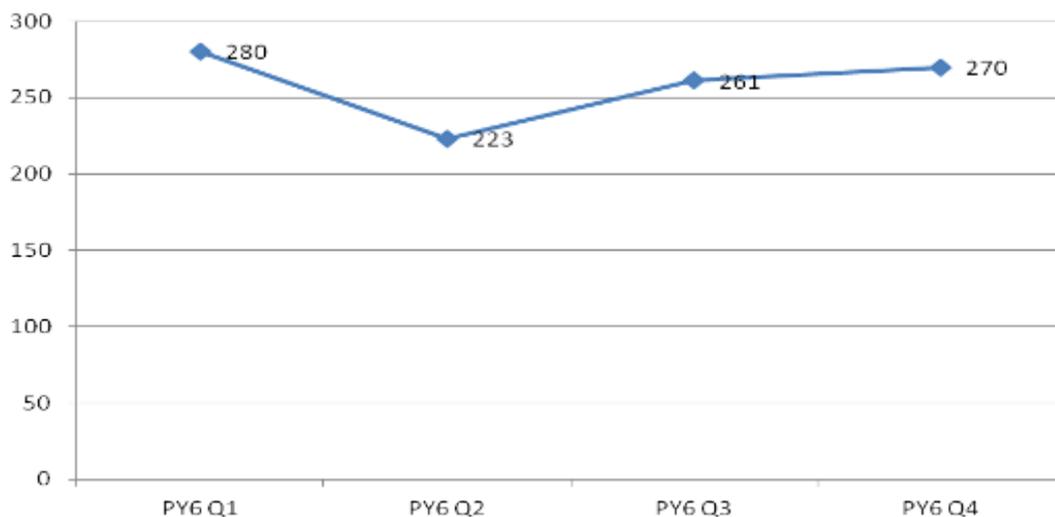


Figure 10: DNA-PCR tests done on infants six weeks to 18 months over the four quarters of PY6

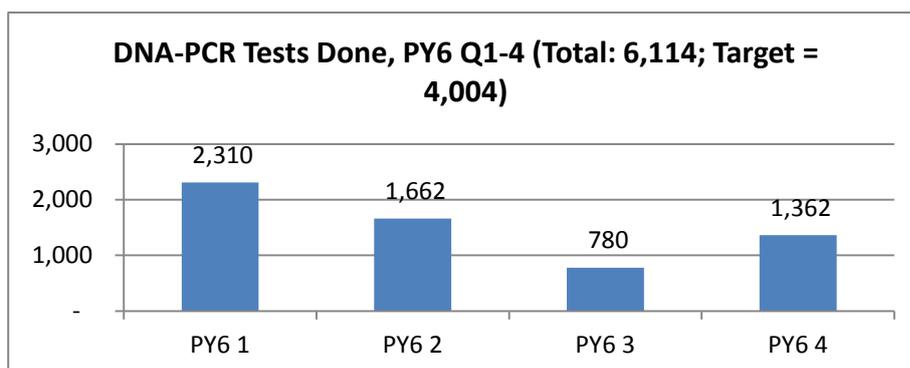
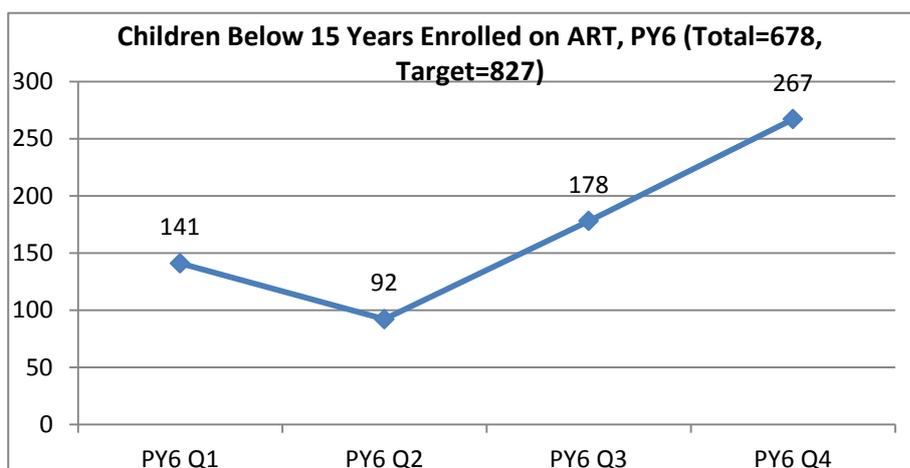


Figure 11: Number of children under 15 enrolled on ART



Challenges

A delay in the procurement of the remaining MOH job aids and training materials posed a challenge, as there was only one vendor provided by the Ministry to print the materials. Additionally, there were stock-outs of RUTF at Mbale hospital, and consequently there was an inadequate supply available to the OTC sites that the hospital supplies. There are still less than 50% deliveries in health units as well as low PCR coverage. All this leads to low coverage of HIV children in care.

IR 1.8 & 1.9 Increasing Uptake of Care, Treatment, and Support Services

The project is mandated to increase access to care, treatment, and support services in the 12 districts that it supports in Eastern Uganda in partnership with local district authorities, the MOH, and USAID. As of now, 154 health facilities provide comprehensive HIV care and treatment and

Main IR 1.8-9 PY6 Achievements:

- **154 facilities supported on care and ART services**
- **7,977 new enrolments into care**
- **6,903 new enrolments into ART**

support services. At each of these facilities a family support group provides an interactive forum for peer-to-peer psychosocial and adherence support and to use as a network to help follow up with those who have stopped treatment. At each of these sites there are at least two linkage facilitators who are volunteer

PHAs to support intra-facility and facility-to-community linkages to ensure that there are minimized missed opportunities for HCT, EID, PMTCT, care, and treatment.



TOT for the new treatment guidelines being conducted by MOH officials in Mbale.

National medical stores have been responsive in supplying the required drugs for management of opportunistic infections and ARVs. However, at times patients are kept for an unnecessarily long time on waiting lists because often the drugs supplied are fewer than those ordered and projected by the health facilities. In the first two quarters of PY6, drug supplies were not sufficient, but the situation improved in the last two quarters of PY6.

In PY6 a total of 7,977 newly diagnosed HIV-positive clients were enrolled into care, 6,903 newly diagnosed eligible clients were enrolled on treatment, and 15,207 active clients are now currently maintained on treatment.

Overall, by the end of PY6, the project had reached 94% of the LOP projected total of new clients to be enrolled on treatment (17,803 out of the LOP of 18,974). It is anticipated that the overall project target for clients enrolled on ART will be surpassed by the end of the project in early 2015. This progress is due to accrediting new ART sites after a rigorous process of staff training, mentorship, and continuous quality improvement interventions.

Results

Figure 12: New clients enrolled on treatment across the four quarters in PY6, compared to overall targets

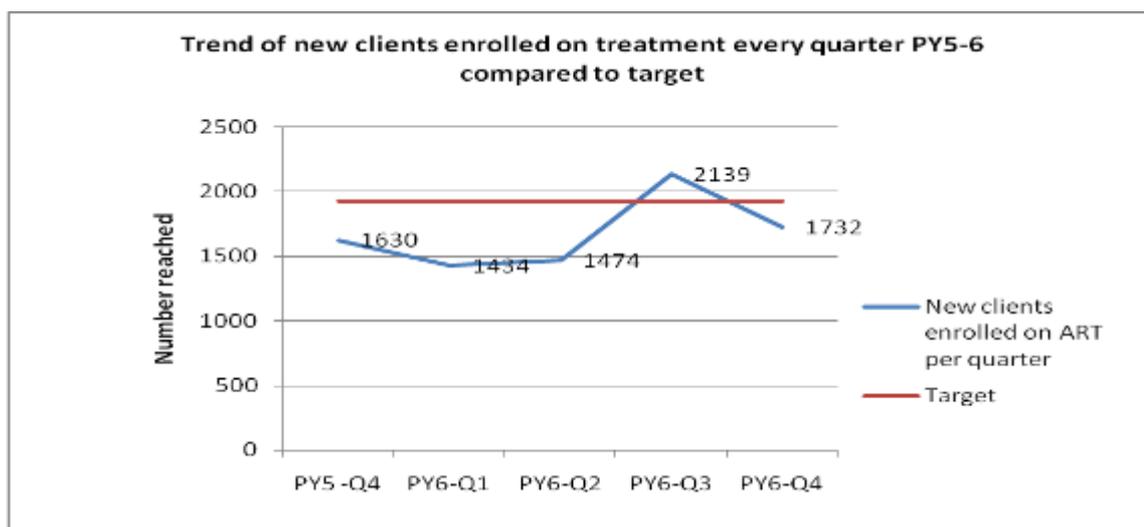
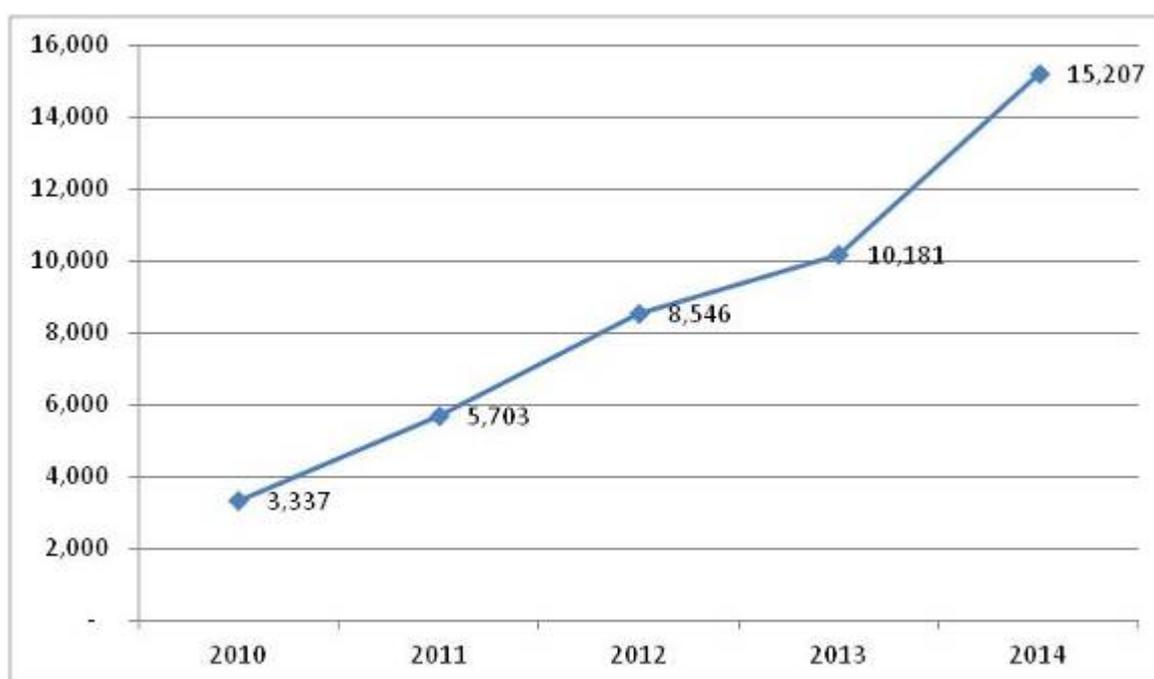


Figure 13: Active clients on treatment across program years, 2010 – 2014 (Annual Target = 30,633)



Challenges

The new treatment guidelines recommend looking at the viral load for monitoring a patient's response to treatment but the modalities for accessing viral load testing have not been fully worked out by the MOH.

The supply of ARVs from NMS is too small to fulfill the need of what is requested by facilities and therefore clients are kept on waiting lists longer. MMSs are closely monitoring the forecasting, projections and ordering to ensure there are enough drugs at health facilities and by facilitating cross borrowing among facilities.

Facilities are often overwhelmed by the sheer number of clients, and the new guidelines bring an extra challenge relate to MARPs and children eligible for treatment. Task shifting has helped in bridging the human resource gaps. Discussions with DHTs are ongoing to adjust to the changes and to be able to track MARPs initiated on treatment.

IR 1.10 Increased Uptake of TB and TB/HIV Services

Main IR 1.10 PY6 Achievements:

- ❑ **145 sites offering TB treatment**
- ❑ **84% TB treatment success rate**
- ❑ **94% of all registered TB patients tested for HIV**
- ❑ **99% of TB/HIV co-infected patients started on co-trimoxazole**
- ❑ **73% CB-DOTS coverage**

In PY6, STAR-E's TB/HIV interventions built upon the achievements of previous years; the project supported poorly performing districts and aimed to reduce TB prevalence to 176/100,000 by 2015.

By the end of PY6, the TB treatment success rate had reached 84% in the STAR-E-supported region, close to the national annual target of 85%. The proportion of TB patients

tested for HIV was 94%, while the proportion of TB-HIV co-infected patients started on co-trimoxazole was almost 100% and ART was 74 %. Community-based DOTs (CB-DOTs) coverage was at 73% compared to the annual target of 85%. TB case detection remained low at 30.6%, short of the national set annual target of 70 %.

The project printed intensified case finding (ICF) guides, TB registers, and related job aids, and disseminated them to health workers in the 154 STAR-E-supported health facilities. The project sensitized VHTs and peer educators to refer presumptive TB cases to diagnostic facilities. By supporting the mentorship of the health workers by the district supervisors, the project ensured that presumptive TB, TB Unit, and laboratory registers were used appropriately.

The CB-DOTS program was consolidated through the joint efforts of the SDS program, which provided the subcounty health workers (SCHW) with transport refunds in nine districts, and STAR-E, which supported the SCHWs in the three new districts (Bulambuli, Kibuku, and Kween). As part of the project's sustainability strategy, STAR-E supported the respective district TB supervisors and laboratory focal persons to undertake support supervision for the SCHWs to ensure that they participated actively in the follow-up of the TB patients, including ensuring that patients completed sputum testing at two, five, and eight months.

STAR-E supported the districts to continue surveillance for multidrug resistant TB (MDR-TB), including contact tracing. STAR-E continued to strengthen the health facilities' capacity to detect drug-resistant TB suspects and supported sample referrals by using already available resources such as the project district-based vehicles, motorcycles, and carrier boxes procured in previous years to transport these samples.

The project, through mentorship visits, ensured functional PITC in all the health facilities, and promoted the use of ICF guides in HIV care clinics and integration of TB and HIV co-treatment for the co-infected. STAR-E supported the quality improvement teams established in PY5 to oversee implementation of selected infection control activities. The project worked with the districts to support these QI teams to conduct TB infection control assessments at their health facilities and also provided technical assistance towards addressing infection control challenges using the continuous quality improvement approach.

Budaka, Bududa, Bukwo, Bulambuli, Butaleja, Kibuku, and Kween districts benefited from targeted assistance from the project during PY6 that improved their performance. STAR-E provided diagnostic equipment, addressed human resources issues, and assisted them to improve their reporting and ordering for drugs and supplies from the NMS.

The districts that have prisons, namely Busia, Kapchorwa, Mbale, and Pallisa, received technical support to institutionalize and encourage ICF, DOTS, and TB infection control. STAR-E provided this support through the health facilities near these prison facilities to ensure sustainability.

The STAR-E-supported districts also benefited from targeted assistance for the high-volume facilities (hospitals, HC IVs, and HC IIIs) aimed at enhancing the competency of the care providers in tracking child contacts of diagnosed TB patients. Key staff in these facilities received in-service orientation through supportive supervisions. The project supported reproducing and disseminating simplified algorithms for diagnosing childhood TB within the supported districts.

In line with guidance from the MOH, the project continued to support supervision and mentorship activities for TB and TB/HIV to address the gaps in knowledge, skills, and practices among health care providers. The project supported the quarterly meetings held at district and zonal levels where DTLs, laboratory focal persons, and STAR-E program staff convened to review district-specific performance in case detection, treatment success, and TB/HIV collaborative activities. These meetings also served as fora to identify cross-cutting challenges in TB programming and to prepare zonal- and/or district-specific action plans for follow-up in the subsequent quarter. Additionally, the meetings provided a forum for updating DHOs and other technical officers on national priorities.

The project continued to participate in national coordination committees for TB and TB/HIV collaborative activities. The project was represented in national TB meetings and events convened by the national TB program and TB/HIV coordination committee.

Results

Figure 14: 2009-2014 trend of TB treatment success rate in the Eastern region compared with the national target

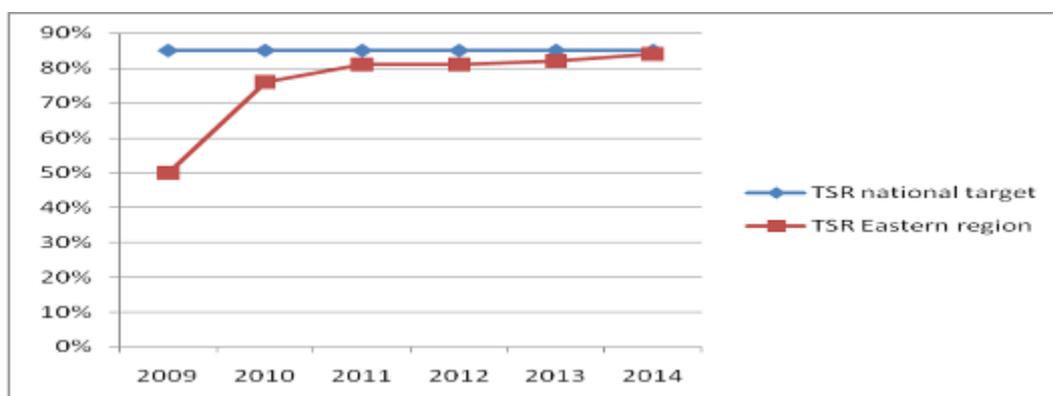
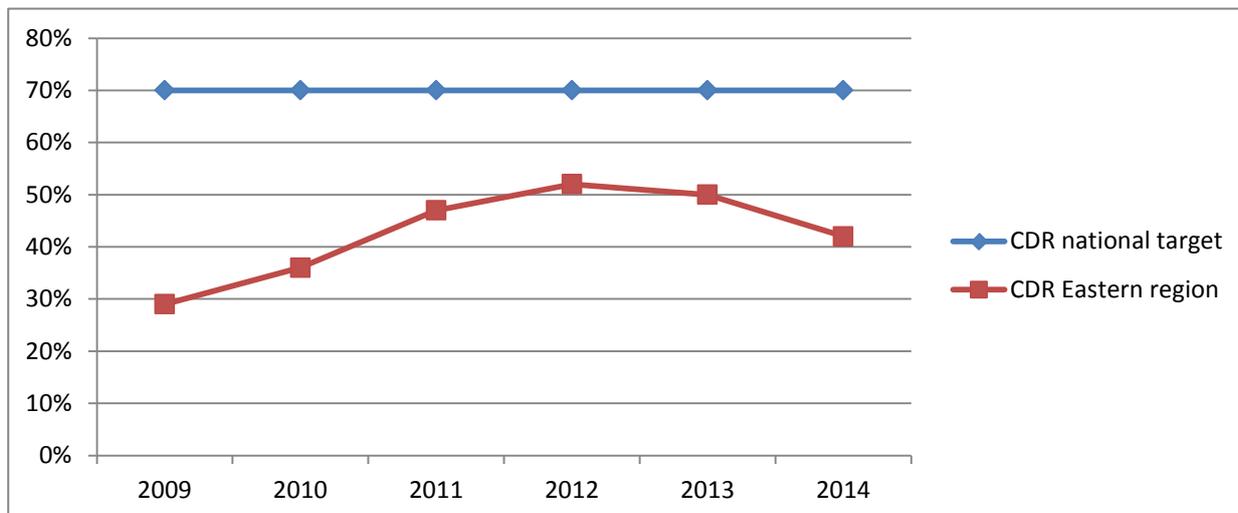


Figure 15: 2009–2014 trend of TB case detection rate in the Eastern region compared with the national target



There was an overall improvement in all of the key indicators in PY6 compared to PY5 except for the TB case detection rate, which showed a downward trend not only in the Eastern region but also at the national level.

Challenges

There were several challenges in PY6, which included low case detection and case holding; low public/community awareness about the TB disease; health workers only diagnosing those who present obvious symptoms and signs of TB; under-utilization of the ICF approach; and suboptimal implementation of the CB-DOTS strategy. Other challenges included inadequate implementation of infection control activities; nonadherence to the known schedules for sputum-smear microscopy; low and inconsistent access to diagnostic services; stock-outs of medicines for treatment of TB; and problems with data collection, records management, and reporting.

In order to address these challenges commitment is needed from the district health management teams. These teams need to set targets for the health facilities and ensure that the health workers they supervise work towards achieving these targets. The facility-based health workers need to be mentored on a more regular basis not only to remind them of their duties, but also to inform them about any changes in TB management.

INTERMEDIATE RESULT AREA 2: Decentralized Service Delivery System Strengthened for Improved Uptake of Quality HIV/TB Services

Key Strategies to Achieve Results:

- Strengthening HMIS through training and coaching and supply of tools and equipment
- Infrastructure support through remodeling health facilities
- Use of commodity strengthening strategies
- Institutionalized Lot Quality Assurance Sampling (LQAS) at the national level to support and coordinate district-level implementation
- Transferred the health facility assessment (HFA) process to the MOH
- Trainings supported rollout of new ART guidelines
- Strengthened laboratory capacity with 3 functional laboratory hubs
- Supported supply chain management

IR 2A: LQAS Survey Institutionalized at the National Level to Support and Coordinate District-Level Implementation

In this period, the LQAS component focused on key elements of LQAS institutionalization and sustainability of LQAS in the country. The focus was on the transition from STAR-E LQAS coordination to the establishment of a central institutional home for the coordination of LQAS, the institutionalization of a quality health facility assessment program, and the proper use of the data from the LQAS processes at various levels. The activities were implemented around the key result areas of the component:

- *Result Area 1: Institutionalization of LQAS methodology at national level*
- *Result Area 2: A functional web-based HFQAP database at the MOH*
- *Result Area 3: Management, coordination, and monitoring of STAR-E LQAS activities and processes*
- *Result Area 4: Documenting the STAR-E LQAS legacy*

Main IR 2A PY6 Achievements:

- **Transferred HFA process to MOH**
- **HFA tools rolled out to the 12 STAR-E districts**
- **60 districts completed the 2014 survey**
- **Completion of OVC facility assessments in six STAR-E districts**
- **Determined the institutional home and coordination of LQAS will sit in the Ministry of Local Government (MOLG), and began working with them on this**

The major accomplishment in PY6 was the transfer of the health facility assessment (HFA) process to the MOH. The ministry adopted the HFA tools and process, which it adapted to rejuvenate the “Yellow Star” program. The Quality Assurance Department (QAD) of the MoH, supported by STAR-E and other partners, used the previously developed STAR-E HFA tool as a basis for establishing standards, indicators, and the score sheet for health facility quality assessments. Stakeholders endorsed the process, referred to as the Health Facility Quality Assessment Program (HFQAP), in a meeting held in April 2014. The process aims to establish a continuous stepwise approach to quality of care assessments, accreditation, and eventually improvement in the quality of care in health facilities down to the HC II level. The tools were tested in the two districts of Mitooma and Jinja in July 2014 under the field direction of the assistant commissioner, QAD. The experiences and lessons on the tool and the training program were immediately captured before they were rolled out in the 12 STAR-E districts in September 2014. The district staff received a five-day training on quality improvement principles and the tool modules before data collection began. The assistant commissioner, QAD, physically supervised all field activities.

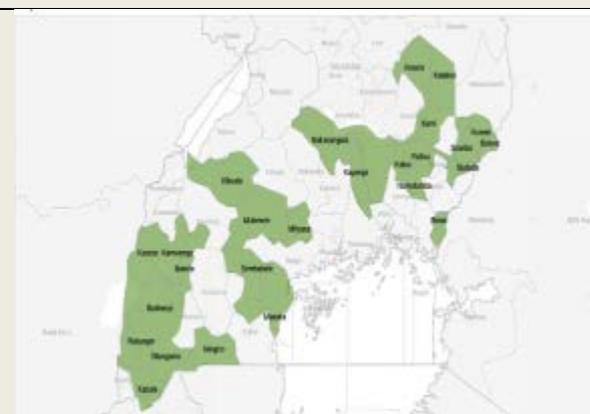


STAR-E staff monitoring the HFQAP process (left) and participating in a feedback session after the facility assessment (right).

In 2014, more districts continued to demonstrate their capacity to manage the LQAS processes on their own. The STAR-E LQAS team only directly supported the NU-HITES project region (15 districts) to complete its second round of LQAS community surveys. Sixty districts completed the 2014 surveys, out of which 35 received funding from SDS for the districts' LQAS processes. Staff in most districts received only a two- to three-day refresher training as there were few new participants.

As part of the response to the challenge of minimal use of the LQAS and HFA data within the districts, the LQAS team held three regional five-day data management trainings in Eastern, Southwestern, and Northern Uganda respectively in December 2013. The trainings were organized in conjunction with IPs and were aimed at building the capacity of the districts to manage and analyze their LQAS and HFA data and complete the district reports. Thirteen previously trained and certified NLFs were engaged to support the district trainings. District staff were introduced to concepts of data management and data entry screens, and they practiced data entry and analysis. At least one senior person on the fourth day of the training joined each district team to discuss data use experiences and strategies and how they would ensure continued use of the results moving forward. The district teams completed action plans to guide their immediate actions for analysis, report preparation, and sharing the 2013 and 2014 data. In these trainings participants continued to highlight major hindrances to data management and use, which included limited sharing and dissemination of the data, poor quality data and/or incomplete reports, and political interference, which overruled evidence-based planning and decisions.

Data Use Summary: Map showing districts that responded on use of LQAS data and broad areas of use



1. **Planning:** Development and integration of LQAS data into districts' development plans
 2. **Policy:** Incorporating LQAS data in the development of bylaws and ordinances.
 3. **Budget:** Resources allocated to various sectors, such as health, community-based services, or selected groups.
 4. **Advocacy and mobilization:** In order to allocate resources to key services and priority infrastructure projects, guidance was given during district budget conferences and within district budget framework papers
- ***A summary report of the assessment is available*****

Immediately after the district LQAS survey summary reports were completed, 15 districts were supported to undertake SPAI-Lite: eight under NU-HITES, three under STAR-E, and four under

STAR-EC. SPAI-Lite facilitates building the capacity of districts to immediately use LQAS survey results to identify the most glaring under-performing service indicators and develop short-term action plans that are implemented within three to six months using locally available limited resources. Key outputs of this process are the district performance improvement action plans and monitoring plans. All of the districts that undertook SPAI-Lite prioritized the improvement of HIV/AIDS services because it is the core area of intervention for the supporting IPs.

The LQAS team supported the Kasese district to undertake a district-led HFA. The DHO led the process and is a master trainer, having received training in all of the three LQAS processes (LQAS, HFA, and SPAI). Another district-based NLF supported him. It is a commendable example of a sustainable district-led process that Kasese completed all three processes within a period of three months.

The LQAS team also supported the completion of OVC facility assessments in six STAR-E districts (Butaleja, Kibuku, Kapchorwa, Mbale, Pallisa, and Sironko). The Ministry of Gender, Labour, and Social Development (MGLSD), the ministry responsible for providing policy direction and guidance for OVC services, spearheaded the process. The district-led process, conducted in December 2013, was aimed at assessing the capacity of OVC care and support systems and focusing on inputs and processes that ensure delivery of quality OVC services. The MGLSD and STAR-E LQAS conducted the training, the district staff collected the data over the course of five days, after a two-day training. Staff entered data at the district level and reports immediately completed reports with the support of STAR-E LQAS. The results were shared with OVC partners and at the national child protection working group, generating discussions focusing largely on how to share and ensure use of the results, and raising resources to intervene in the identified service gaps. The districts' reports were presented at the National Strategic Program Plan of Intervention review meeting held in July 2014 (see sample results and processes in the posters in Annex 5 and Annex 6).



Mission Director at the NSPPI review meeting

The exercise helped to update the inventory of OVC service providers, which was last updated in 2011. The districts pledged to immediately use the field lessons and results during routine support supervision, while the MGLSD is interested in adopting the assessment tool as a performance assessment tool.

“This approach is helping us to get quick data about OVC service centres and their functionality. This will help in quickly addressing performance gaps and promoting centres of excellence in serving OVC.”

- Paul Malingha Mweru, Acting Probation and Senior Welfare Officer, Butaleja district

Other accomplishments included the completion of the 2013 consolidated LQAS survey report of the 66 districts that undertook the surveys. Six IPs (NU-HITES, SMP, STAR-E, STAR-EC, STAR-SW, and STRIDES) supported the surveys, while the SDS project provided funds to 35 districts for LQAS activities through its district Grant A. Program managers from the MOH, MoLG, MGLSD, and IPs provided commentaries on the survey results, district and regional performance, as well as the trend analyses. The MoLG provided the endorsement for the report. The report was widely circulated and results disseminated for use by various stakeholders at various levels by STAR-E

STAR-E LQAS shared various products from the 2013 survey data available in the central database. Key products prepared included:

- A sneak preview of the LQAS 2013 survey results
- The summary results booklet
- Charts and posters that are displayed in the districts to disseminate and communicate the results to district leaders and technical staff to ensure continued use of the results
- District results summary reports, including more user-friendly district supervision areas summary results charts, used to communicate survey results on the population categories surveyed to district and lower local governments (subcounty, parish, and CSO)
- Fliers with results for the different service areas
- Success stories
- A 27-minute documentary highlighting the three LQAS processes (LQAS, HFA, and SPAI) and data use experiences, as well as three training clips to support the communication and training of the three LQAS processes
- Documentation of key elements of the institutionalization and strategies for continuing LQAS in support of services delivery. STAR-E LQAS' partner, LATH, led the process to complete a document entitled "*Institutionalizing and Sustaining Lot Quality Assurance Methodology in Uganda: How close are we?*"

The reports and materials were distributed in conjunction with IPs at various events, both in print and on CDs. The LQAS website was redesigned and continues to be a platform for sharing LQAS materials and results.

As part of technical support for M&E in the country, the LQAS component participated in UAC M&E TWG activities, providing LQAS 2013 results to be included in the country HIV/AIDS progress report. The LQAS team presented four abstracts focusing on LQAS processes, data use, and experiences at the International AIDS Society in July 2014 in Melbourne, Australia. Partners continue to provide feedback on the usefulness of the results in planning and taking action, and all of these experiences have been documented as success stories.

Additionally, LQAS work was published in international journals, including:

- "*Putting the C back into the ABCs: A multi-year multi-region investigation of condom use by Ugandan youths 2003-2010.*" in PLOS ONE journal and available online at <http://dx.plos.org/10.1371/journal.pone.0093083>.
- "*Understanding delivery practices of Ugandan mothers past, present, and future: A cross-sectional and longitudinal study in multiple districts*" PLoS Medicine.
- "*Can health workers reliably assess their own work: A test retest study of health workers conducting lot quality assurance sampling survey in Uganda*" in Health Policy and Planning.
- A paper comparing UDHS and LQAS 2011 survey data on 13 variables is under preparation now by LATH.

As part of ensuring institutionalization of LQAS processes, the LQAS team held meetings with the Uganda Bureau of Statistics (UBOS) and the MOLG to discuss elements of coordination and continuity at the central level and the hosting of the LQAS database. While earlier efforts had focused on UBOS, in April 2014 UBOS recommended the MOLG as the best institution to coordinate LQAS application because of its mandate. The MOLG pledged to provide guidance and technical support. The LQAS team then immediately shifted attention to working with the MOLG. The permanent secretary established a multi-sectoral TWG involving other ministries and partners to oversee the transfer of STAR-E LQAS activities related to supporting the districts' undertaking LQAS surveys and management of the LQAS surveys database.

STAR-E, working with MOLG, organized the second national information-sharing meeting in September 2014 under the theme "*Consolidating lessons and best practices for institutionalizing LQAS & HFA as simple monitoring tools for social sector services.*" Attending IPs, ministries, government institutions, CSOs, and selected districts shared their experiences and lessons on continued support and sustainability of LQAS and HFA activities. Districts shared information on progress made in

implementing the recommendations from the first meeting, held in March 2012. Generally there was consensus and appreciation of the usefulness of LQAS surveys in providing routine data for district annual planning and action taking. The districts reported improvement of services as a result of using LQAS survey data. A key outcome from the September 2014 meeting included MOLG's commitment to support the central coordination of the processes, and to ensure that districts had the required resources and readiness to host the LQAS database. It was noted that the district leadership, both political and technical, is crucial in ensuring use of the data for evidence-based planning, sustainability of the use of LQAS methodology, and mobilization of the required resources for the surveys.

In PY6, the LQAS component hosted two Global Health Corps (GHC) fellows. The fellowship, which ended in July 2014 focused on managing LQAS data to produce the required products and on innovative ways of sharing and disseminating the results. One fellow had a poster on data visualization that STAR-E presented at the International AIDS Society Conference.

Civil Society Organizations Embrace LQAS

Civil society organizations (CSOs) in several districts in Uganda have commended the LQAS community surveys as important sources of data for their programming. The surveys are a source of up-to-date community-level data for monitoring service delivery within the districts and for use in planning and budgeting.



Michael Toskin, project coordinator of KICOMPE, a community-based organization (CBO) in Kapchorwa district, said it was able to win project funding because it used community-level data from LQAS surveys. *“When we applied for the STAR-E grant we were able to get it because we had concrete data. We had used LQAS data to write our problem statement,”* Toskin said. He also noted that his staff has participated in the district LQAS surveys and the dissemination of results.

In Mbale, the district welfare and probation officer reported sharing LQAS survey results on OVC indicators with TASO and World Vision. TASO partly used this data for its new project targeting OVC.

COMIC Relief, an NGO funded by Makerere School of Public Health working in Pallisa district, has also used LQAS survey data to target maternal health interventions. The Pallisa district chief administrative officer, Isa Mbooge, noted that the district shared the 2012 LQAS results with COMIC Relief on health center deliveries. As a result, the NGO identified Kameke Health Centre, which had only 20 deliveries per month, for assistance. Most of the women were going to Traditional Birth Attendants (TBAs). Consequently, the project introduced the idea of using motorcycle taxis (*boda-boda*) ambulances and deliveries at the health center increased from 20 to 80 per month.

In Kayunga district, the program manager for the Joint Action for Health and HIV (JAHH) NGO, Abdalla Madada, reported using LQAS data for a proposal submitted to the Civil Society Fund (CSF). JHH is responsible for scaling up comprehensive HIV prevention through community engagement activities such as HIV/AIDS sensitization and awareness creation. *“We used LQAS data to write a proposal which we submitted to CSF and it was funded. The three-year project is implemented in five subcounties of Ntenjeru county,”* Madada said.

Florence Nakayi, executive director of Joint Efforts for Youth Uganda (JOY-Uganda), a CBO working in Mpigi district, also praises the usefulness of LQAS data. The program focuses on Livelihoods and health for key populations such as fishermen, commercial sex workers, out-of-school youth, and *boda-boda* riders.

“LQAS data was so useful to us during the time we were bidding for a project under the Civil Society Fund in 2013,” she said. *“We were required to use district-specific data and when we approached the district they provided LQAS survey data. This enabled us to write our problem project proposal and we won the project. We are currently implementing the three-year project in Kamengo and Kituntu subcounties.”*

Challenges

The prioritization of establishing the institutional home and the rollout of HFQAP affected implementation of some activities, such as the training of the fourth batch of NLFs. This affected the selection of NLFs and building the capacity of districts in northern Uganda and the east-central regions that do not have NLFs.

The LQAS team initiated a process of integration of LQAS into district routine activities, after a study visit to India. Sensitization and consultative meetings were held with Mityana and Pallisa districts, clarifying the integration process and agreeing on routine activities and responsibilities. However, the consultations revealed scanty routine activities and districts did not have the funds to implement these activities to support the integration strategy. The planned integration of LQAS surveys into routine supervisory activities was therefore dropped.

IR 2.1 Strengthening Human Resources for Health

Main IR 2.1 PY6 Achievements:

- 38 facility teams from each of the ART-accredited sites trained on new ART guidelines
- 458 from all 154 sites trained on OVC programming

Trainings during PY6 supported the rollout of the new ART guidelines (national and regional trainer of trainers, or TOT, trainings; facility-based trainings by district-based mentors; national new HMIS tools TOT trainings). STAR-E held child and adolescent counseling trainings in order to improve retention in care in the PMTCT/EID program. The full range of trainings offered during PY6 is indicated in the table below. The listed trainings do not include mentorship activities at supported sites.

Table 3: Training activities conducted by STAR-E during PY6

Training Subject	Designation of Health Workers Trained	No. Trained
Regional TOT for supervisors - new ART guidelines	Clinicians drawn from the regional referral hospital, the districts, and the STAR-E project	10
Regional TOT for district-based mentors - new ART guidelines	Medical officers, nursing officers, midwives, clinical officers, laboratory focal persons, QI focal persons	60
Facility-based training - new ART guidelines	Health workers based at each of the ART-accredited health facilities	564
National TOT - new HMIS tools	STAR-E PMTCT advisor and senior data specialist	2
Open MRS training	Clinicians and records clerks at four ART sites (Busiu HC IV, Muyembe HC IV, Bududa hospital, and Kibuku HC IV)	8
Use of data - upgraded DHIS2	Biostatisticians from each district	12
CQI/5S training	Health workers at 24 high-volume sites and each district QI focal person	60
Child and adolescent counseling in HIV/AIDS programming	Health workers and linkage facilitators at 37 facilities	370
OVC programming	Health workers, linkage facilitators, and VHTs at 154 facilities	458
PrePex training for SMC providers	Health workers from two facilities and members of the Busia dedicated SMC team	36
Maintenance and handling of CD4, hematology and chemistry analyzers	Laboratory personnel from the three hubs (Kapchorwa, Pallisa, and Masafu hospitals)	12

IR 2.2 Strengthen Laboratory Capacity

Main IR 2.2 PY6 Achievements:

- Increased support coverage from 100 to 135 laboratories
- 10 laboratories renovated and remodeled
- 4 laboratories made into hubs

During the reporting period, STAR-E increased its support from 100 to 135 reporting laboratories in the 12 districts. Of particular significance, the project was able to finish renovating and/or remodeling ten facility laboratories out of the planned 11 units in Phase I and these 10 are now in use. The remaining unit is due to be completed in early PY7. Annex 7 shows the list of renovated facilities.

The project also contributed to the national sample referral system by making three hospital laboratories (Masafu, Pallisa, and Kapchorwa) fully operational in December 2013 as hubs to be used by seven out of the 12 supported districts. Each of these hubs was fully equipped with a CD4 FACSCount™ machine, hematology analyzer, and chemistry analyzer, making it able to process tests from its catchment area. Through the SDS project, seven laboratory personnel were recruited to cover staffing deficits in the three laboratories. STAR-E recruited a bike rider for each hub to transfer the samples and provided support for operational costs at each hub (fuel and maintenance for the motorcycle, fuel for a backup generator, a computer and printer set, and stationery items). Then in August 2014, the project worked with Busolwe hospital to begin functioning as a hub to improve access for Butaleja district. The districts no longer refer samples for analysis to the JCRC reference laboratory in Mbale (with the exception of viral load tests), demonstrating the impact of the hub system. During PY6, STAR-E procured and distributed 15 microscopes which were the remaining number needed to reach 135 fully functional laboratories, and also assisted some of the laboratories with equipment repairs (i.e. microscopes, Pima™ CD4 machines, and air conditioning units).

The project supported quarterly hub review meetings, including staff from the catchment areas, to review performance of the hubs as well as to discuss any challenges that quarter. Additionally, the project continued bi-annual meetings with DHOs and district laboratory focal persons (DLFPs) for the 12 project-supported districts in which districts' performances were reviewed. STAR-E developed a tool for tracking findings and actions taken by DLFPs during their monthly mentorship visits at facilities and submitted the summary reports to each DHO for review. Other capacity-building initiatives included quarterly Strengthening Laboratory Management Through Accreditation (SLMTA) trainings and mentorships at each of the three original hubs; training of lab staff in the maintenance of hematology and chemistry analyzers, as well as BD FACSCount™ machines; and support for quarterly EQA programs in TB microscopy, blood smears, and HIV testing.

The project has on several occasions helped health facilities access laboratory commodities through redistribution from heavily stocked facilities, as well as aiding in the collection of supplies allocated to the supported facilities from the national warehouses. STAR-E printed and, in partnership with the districts, distributed laboratory-specific HMIS tools (registers and order books) for 100 of the functional laboratories in order to improve on correct data collection and timely reporting.

Challenges

- There was a national stock-out of HIV testing kits during part of quarter one in PY6 which affected HCT performance at many health facilities. The project worked with districts to redistribute kits among health facilities (based on consumption) and in some cases assisted in the borrowing of stock across districts. The project also worked with NMS to track timeliness of orders and delivery of supplies, and shared this analysis with the DHOs and DLFPs.
- While the project has invested in printing and distributing laboratory data tools, collecting quality HIV consumption data at facility level has remained a problem. This is because both the HCT and daily consumption books have been posted in the lab section, so it makes it difficult for a lab person working alone to complete both sets of records. The solution will be to get health facility teams to work more collaboratively.

IR 2.3 Strengthen Commodities Management

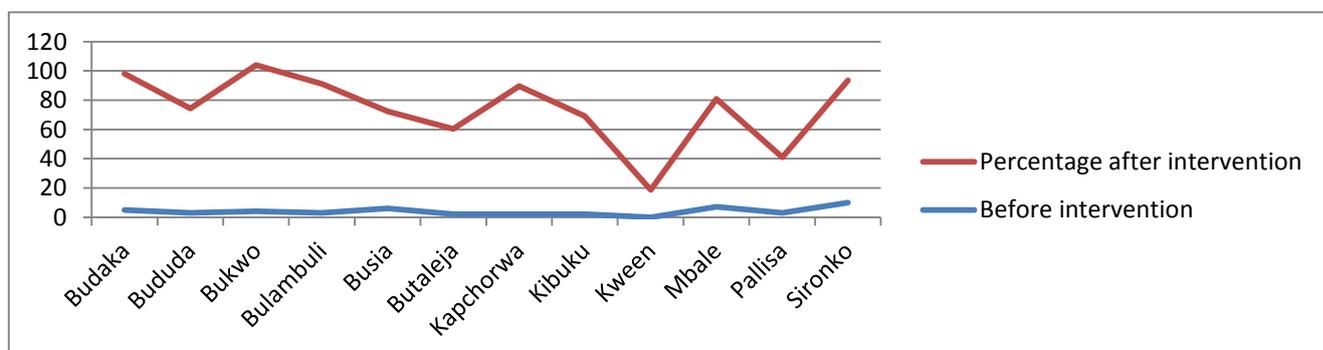
Main IR 2.3 PY6 Achievements:

- Created simple tool for MMSs to document findings and interventions
- Implemented SPARS in 5 districts
- 50% improvement in performance assessment scores in the 5 districts

During PY6, STAR-E maintained its support to the 12 project districts in supply chain management activities, including support supervision and mentorship at facility level. The key innovation during the period was the development of a strategy and a simple tool for MMSs to document their findings and interventions during visits to lower-level health facilities. The project tagged MMSs in a district to a specific number of facilities

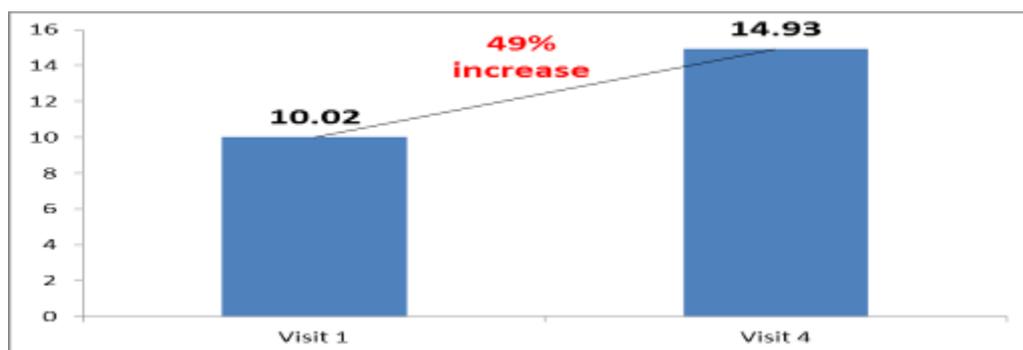
to visit every two months with STAR-E support. The tool focuses on evidence of correct quantification of orders and completeness and timeliness of order forms. Each facility visit also documents what practical actions the MMS has taken in support of the facility and what actions remain with the facility staff to be addressed. Each MMS then completes a bimonthly summary report with measurable outputs to be signed off by their respective DHO. Use of this tool has helped the districts improve on the timeliness and completeness of their EHMS orders. The intervention was introduced during cycle 6 of the 2013/2014 fiscal year drug delivery schedule. The latest assessment was completed for cycle two of the 2014/2015 fiscal year. The intervention culminates in a quarterly information-sharing forum involving all MMSs, their DHOs, and the regional NMS representative, as well as IPs such as the SURE project.

Figure 16: Submission of drug orders to National Medical Stores between cycle six of the 2013/2014 fiscal year and cycle two of the 2014/2015 fiscal year drug delivery schedules



STAR-E also implemented the Supervision, Performance Assessment and Reward Strategy (SPARS) approach in five (Busia, Bududa, Budaka, Kibuku, and Sironko) of seven non-SURE-supported districts. The remaining two districts, Kween and Bulambuli, were reduced to one MMS (instead of the usual two trained MMSs that are required) due to staff attrition. Therefore, they could not fully implement the facility mentorship visits and performance assessment as needed. Of the five districts, Busia and Sironko have reached the minimum of five visits and are now due for evaluation by the National Drug Authority. Their average performance is indicated in Figure 17 below.

Figure 17: Average scores for Busia and Sironko facilities between visit one and visit four



There was an almost 50% improvement in scores between the baseline and the fourth visit. However, the maximum attainable score is 25 per visit and there is still a lot of room for improvement.

The project provided specific logistics management mentorship as part of the ongoing rollout of the new ART guidelines. Phase one of the rollout focused on 37 high-volume sites and was completed. Phase two is still ongoing and spreads out to the lower-level, newly accredited sites.

Challenges

Supervision, leadership, staff attrition, and ownership of results remain the greatest challenges. All of these are human resource constraints and will remain STAR-E's main focus as the project draws to a close. The approach used with the MMSs does, however, show encouraging results.

IR 2.4 Strengthening the District HMIS, Monitoring and Evaluation, and Operations Research

Strengthening the District HMIS

During PY6, strategic information activities at both the program and district levels focused on improving availability, quality, and use of health data. STAR-E procured and distributed HMIS forms 108 (inpatient report) and 105 (outpatient report) to health facilities. STAR-E mentored the newly deployed biostatisticians to improve data management.

Main IR 2.4 PY6 Achievements:

- Supported all the 12 newly-deployed district biostatisticians to improve availability, quality, and use of health data
- Completed submission of over 94% of HMIS reports into DHIS2
- Finalized entry of historical data into OpenMRS in four pilot high-volume ART sites
- Conducted quarterly DQA in all 34 high-volume ART sites

STAR-E visited all of the 12 supported districts to discuss the DHIS league table which ranked their performance based on completion and submission of routine HMIS reports. Poor results were brought to the attention of the DHOs and the HMIS focal persons which prompted STAR-E to support the district health teams in PY6 to offer facility mentorship to

districts in need of help. The mentorship inspired remarkable levels of commitment to improving the capture of patient information as well as data recording and reporting by the facility teams. The facilities are now more knowledgeable about which periodic HMIS reports they have to compile and submit. The project and district staff agreed on action plans and both pledged to make an effort to promptly improve the rate of collection and submission of HMIS 105, 106 (quarterly HIV/TB report), and 108 forms, which are the three reports used in computing the reporting rate rankings. Table 4 compares the rankings of the districts in two consecutive financial years, 2012/13 and 2013/14.

Table 4: The DHIS2 league table ranking of the 12 districts out of 112 in the entire country across two financial years

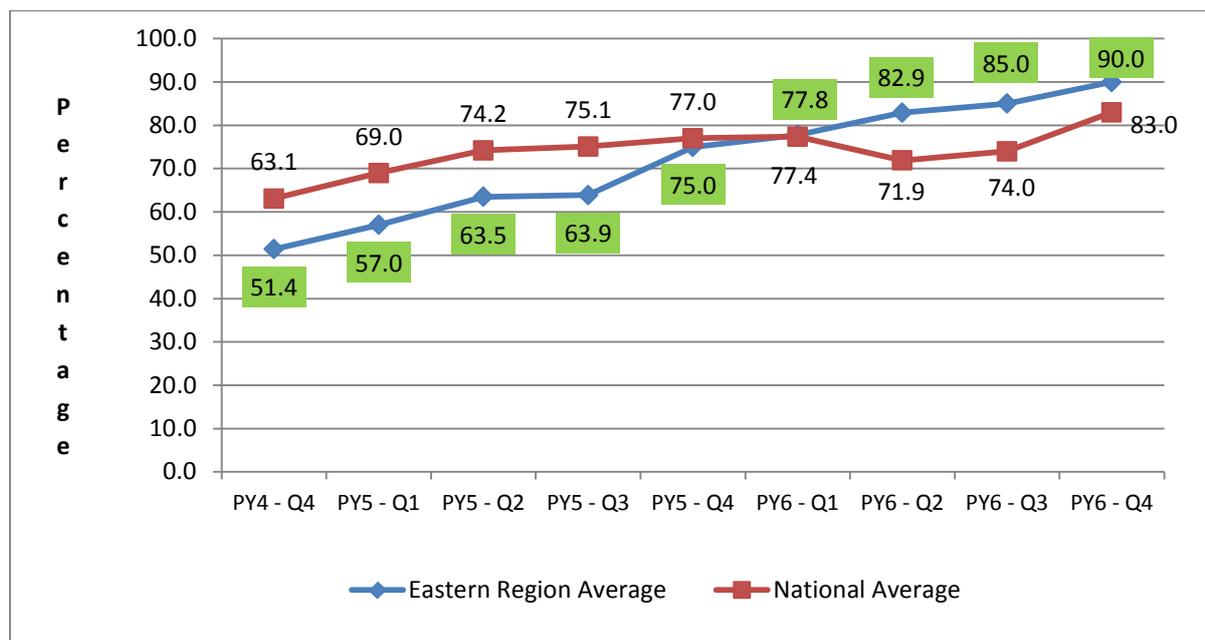
District	2012-2013 Ranking out of 112* districts (X)	2013-2014 Ranking out of 112 districts (Y)	Difference (X-Y)	Comments
MBALE	82	65	17	Improved
BUDAKA	98	86	12	Improved
BUDUDA	104	51	53	Great improvement
SORONKO	56	83	-27	Declined
BULAMBULI	108	46	62	Great improvement
KAPCHORWA	40	45	-5	Declined
KWEEN	103	106	3	Declined
BUKWO	48	1	47	Great improvement
BUTALEJA	63	57	6	Improved
BUSIA	81	82	-1	Declined
PALLISA	80	69	11	Improved
KIBUKU	75	95	-20	Declined

*Ranking number one is considered the highest, with number 112 considered the lowest

The project provided additional technical support to Bulambuli and Kibuku districts, which were two examples of particularly poor-performing districts in the DHIS league table in the 2012/2013 report. The STAR-E team, alongside the DHOs and HMIS focal person, visited facilities in these districts to address issues on data completeness and accuracy and to discuss on-site solutions to address the problem. This support helped Bulambuli district to greatly improve its ranking from position number 108 to 46 in the subsequent financial year.

Overall, as a result of STAR-E's support, districts have shown improvement in the completeness of reports submitted and uploaded into the DHIS2 during PY6, thereby improving the aggregate score in the DHIS2 league table. The aggregate result for the reporting quarter for the Eastern region was above the national average by the end of PY6 as shown in Figure 18 below.

Figure 18: Completeness score for submission of HMIS reports by quarter, PY5 and PY6, for Eastern region and the national level



There has been a significant improvement in the reporting rate across all districts, whose average reporting into the DHIS2 for the region increased from 77.4% in quarter one to over 90% in quarter four of PY6 in HMIS 009a, I05, I08, and I06a data sets.

STAR-E uploaded more facilities and more users' phone contacts into the Option B+ SMS weekly reporting system to expand the pool of health workers enabled to report. The project continued to download weekly data reports from the database and shared with the project district-based staff to monitor the reporting rate and identify gaps in reporting, discrepant data, and existing stock-outs of supplies.

STAR-E participated in the national HMIS training of trainers that took place in Jinja in March 2014. This training presented the revised version of the HMIS tools and the strategy to roll them out at district and facility levels. Modifications to these tools included assigning the HMIS coding number to all forms for easy reference, additional and more detailed information contained in the HIV client card and in some registers, a different age categorization for periodic reporting, and the revival of a more elaborate cohort analysis for ART clients.

The project conducted a DQA to compare SMC reported data with what is recorded in the registers to verify the completeness of SMC cards, and help health workers to correctly categorize SMC clients. STAR-E also carried out a DQA on quarterly and monthly data in high-volume ART facilities (36 in total) in all the supported districts. These DQAs involved the district biostatisticians and involved visiting high-volume health facilities to compare data from the quarterly reports with those recounted from the registers. Many indicators were underreported, ranging from a discrepancy of less than one percent up to 34%. There were also some indicators which were over reported, ranging from a discrepancy of 5.9% to 58.2%. Results were discussed and more frequent support supervision and coaching will continue to be provided to the sites with the highest variance to improve their record- keeping.

As a continued effort to ensure quality and sustainable district monitoring and evaluation systems, STAR-E distributed complementary HMIS tools to supported facilities. These tools included file folders, box files, suspension files, and 12 hard disk backup drives for the district biostatisticians in each of the project-supported districts to protect the data. STAR-E procured and distributed 15 file shelves to facilities that have an increasing number of patients in HIV/AIDS care in the region. These

sites included Namatala HC IV, Bungokho Mutoto HC III, Sironko HC III, Buginyaya HC III, Pallisa Hospital, Butaleja HC III, Bushiyi HC III, Busia HC IV, Kaserem HC III, Chemon HC III, Chesower HC III, Masafu Hospital, Busetta HC III, Iki-Iki HC III, and the Sironko biostatistician's office. STAR-E also procured and distributed the HMIS 108 and HMIS 105 forms, HMIS manuals, and HMIS databases to project-supported health facilities. The project trained district biostatisticians on how to generate information from DHIS2 using pivot tables and on how to present this information in the form of tables and charts to use as tools for sharing information with the DHMTs.

Monitoring and Evaluation

During PY6, the project continued updating the STAR-E Performance Monitoring Plan with results achieved in 2014. At the same time, the project continued completing templates to monitor achievements on a quarterly basis versus the district-specific targets. By working with the technical team, the strategic information department continued to improve the data collection tools for linkage facilitators, as well as those in use by subgrantees under the performance-based financing mechanism.

Despite the funding challenges, STAR-E planned and coordinated data collection for the 2014 LQAS community survey in all of the 12 STAR-E-supported districts. By the end of PY6, data collection had been finalized, data entered and merged, and preliminary analysis outputs shared with the districts for dissemination and use in planning and decision-making.

In July 2014, three STAR-E staff participated in a short internal training on GIS software applications that aimed at building their capacity to use geospatial data to display project results. The USAID Uganda Mission facilitated the training. This is expected to enable STAR-E to generate and share better quality information products for decision-making, planning, and advocacy.

The project continued to offer M&E support to the performance-based CSO grantees by designing the data collection and reporting tools to be used, reviewing them, and finally disseminating them to the grantees for use. The strategic information department within STAR-E played a critical role in ensuring that the M&E systems and capacity of the grantees were further built to enable collection and reporting of credible and high-quality data. The strategic information department actively participated in the quarterly data validation for the subgrantees' data.

In preparation for end-of-project activities, such as end-of-project reporting and evaluation, the STAR-E strategic information department will ensure that the project's databases are easily accessible for those purposes. The activities included downloading and locally storing annual performance data from Monitoring and Evaluation of Emergency Plan Performance (MEEPP) databases (PPEPMIS and HIBRID). The department also spearheaded gathering key documents in one place, such as project annual and quarterly reports, and contract documents. The department also initiated the documentation of the legacy of the project in PY6.

Operational Research

During PY6, STAR-E continued to conduct operations research on retention of mothers enrolled into Option B+, which commenced in August 2013. The objectives of this study are: (a) to determine the rate of treatment retention over time among pregnant/postpartum mothers enrolled into the Option B+ strategy in eastern Uganda, particularly after crucial milestones such as delivery and cessation of breastfeeding; and (b) to determine variables associated with treatment retention (e.g. age, parity, clinical staging, community support, health-system related factors, etc.). The findings are expected to inform Option B+ programming in eastern Uganda, and in particular inform formulation of strategies to improve retention of mothers on Option B+ as a way of contributing to zero new HIV infections among unborn babies and infants. The project has entered all data collected so far into a customized database. By the end of PY6, STAR-E had collected seven rounds of follow-up data.

Challenges

STAR-E encountered a number of challenges while collecting data for this operations research. For instance, most of the facilities were not populating the client cards and clients were being followed using mothers' passports. The most updated data tool was the dispensing log; however, this does not have data on most variables of interest to this study. STAR-E saw these data management problems in most facilities, and this has interfered with the data collection. Exposed infant registers were also not constantly updated in most facilities, and dispatch forms had to be used to obtain unrecorded HIV test results. As a preliminary indicator of success in STAR-E's programming regarding Option B+, the project found a large number of exposed infants to be negative at their first PCR testing.

Midwives in most facilities have attributed the failure Option B+ clients to return to stigmatization of HIV patients and a lack of disclosure to partners. They also indicated that delays in the collection of dried blood samples and the return of the test results are the main challenges within the EID sections. These statements will be validated in any further follow-up studies. A preliminary report on the study is being prepared and will soon be shared internally for comments. The final data collection round for the study will take place during the first week of November 2014 and thereafter the final data will be analyzed in the same month.

INTERMEDIATE RESULT AREA 3: Quality HIV/AIDS and TB Services Delivered in All Supported Health Facilities and Community Organizations and Activities

Key Strategies to Achieve Results:

- Trained and coached health workers at 154 sites
- Conducted quality improvement work
- Conducted trainings on national guidelines, such as ART

IR 3.1 Improving Quality of Care

Main IR 3.1 PY6 Achievements:

- Trained health workers from 24 facilities on QI/5S
- Disseminated the National Quality Improvement Framework and Strategic Plan 2011/2012-2014/2015 to the districts
- Collaborated with MOH and ASSIST project to conduct joint QI mentorship

The quality improvement component of the STAR-E project has been conducted in line with the national QI goal of improving the quality of health care and patient safety while ensuring efficient use of available resources as outlined in the National Quality Improvement Framework and Strategic Plan 2011/2012-2014/2015. The STAR-E project, as mandated by the MOH, disseminated this framework in PY6 through district-based meetings involving all stakeholders at this level and with

representation from all the health facilities, both public and private.

During PY6, the main project efforts have been geared toward improving the quality of service delivery across all intervention areas. These included:

- capacity-building (a comprehensive QI/5S training was conducted for 24 facilities) and coaching of health workers;
- integrated supportive supervision with the district QI focal persons of the facility QI teams; and
- technical support for their QI-related activities.

STAR-E has collaborated with the MOH and other implementing partners, in particular the Applying Science to Strengthen and Improve Systems (USAID/ASSIST) project, in conducting joint QI mentorship in selected facilities and evaluating their performance over time. STAR-E has also

conducted learning sessions with the MOH and ASSIST, who have often given technical guidance throughout this period. STAR-E was also represented during the quarterly national QI/5S coordination meetings.

The assessment of quality services is based on routine MOH HIV indicators generated by all supported facilities; these indicators constitute the HIV continuum of response (COR). The COR is a model used to identify issues and opportunities related to improving the delivery of services to HIV-infected people across the entire continuum of care. Its main objectives are to increase the proportion of individuals who know their HIV sero status, to increase the referral of HIV-infected people to care and treatment services, and ultimately to slow disease progression and improve the quality of life of HIV-infected individuals. By examining the proportion of PLHIV engaged in each of the stages of the HIV care continuum, service providers, in their QI team meetings, can pinpoint where gaps may exist in connecting clients to care and they can put into practice service improvements that better support individuals along the continuum of care. By identifying gaps, access to and coverage of ART services is likely to improve along with ART adherence.

The project collected baseline data for the period of January to June 2014 from 24 facilities, two facilities in each of the 12 STAR-E-supported districts. This was done so that these facilities receive intensive technical support and can act as model sites for others to learn from for the purpose of sustainability since the project is ending soon. The data included HIV diagnosis, PITC, linkage and enrollment to care for those testing positive, eligibility assessments, and ART services provided to those who are eligible. Data findings indicated that health facilities need to make more efforts to institutionalize PITC, given that previously health workers were more focused on outreaches which may end along with the project. In addition, the health workers have been encouraged to make sure all TB/HIV co-infected patients are started on ART, and that all those who start TB treatment have the periodic sputum testing performed while on treatment to avert MDR-TB. In PMTCT, EID linkages need to be improved to make sure that all HIV-exposed and positive infants are linked to care and treatment, which will greatly contribute to PMTCT.

Challenges

- Although facility personnel embrace quality improvement, they have not carried it out well because of their many responsibilities. Nonetheless, many important activities have been taking place in the facilities, such as dissemination of the new ART and TB guidelines and the Health Facility Quality Assessment Program (HFQAP).
- Staff attrition rates at the facilities continue to affect the teams, especially in terms of transfers within the districts. For example, a health staff member who has prior knowledge, training, and experience in QI/5S is transferred and is not necessarily replaced with a comparable one in regards to training. This has been a challenge for the regular implementation of QI/5S activities, hence the need to have a critical mass of health workers trained in QI/5S.
- Facility and district QI/5S reporting to the MOH is still through implementing partners, and health workers perceive it as project work. It would be beneficial if the MOH integrates QI/5S reporting into the general HMIS reporting system. This will enhance sustainability of QI/5S through the health care system.

IR 3.2 Strengthening Clinical Mentoring Systems

Main IR 3.2 PY6 Achievements:

- **Ensured 100 newly accredited ART sites were fully functional**
- **Rolled out new ART guidelines to 38 ART sites**

During PY6, the project primarily focused on two interventions: getting the 100 newly accredited ART sites fully functional and providing clients with care, and getting the new national ART guidelines rolled out at both the old and newly accredited ART sites. STAR-E's schedule for the rollout was pushed

out by two months by MoH but because of inclusive planning with the MOH team and use of DBMs,

the project was able to complete this activity in 38 high-volume sites by the end of PY6 with the remainder of the sites to be completed in PY7.

STAR-E's innovation was to increase its pool of DBMs from 36 to 60 health workers and train them for rolling out the new ART guidelines by providing a regional TOT using MOH facilitators. The DBMs are medical officers, clinical officers, nursing officers, midwives, quality improvement focal persons, DTLs, and DLFPs who have shown an aptitude for providing good care in their own facilities. The pool of 60 DBMs has ensured that up to 15 teams exist within the 12 districts to provide concurrent three-day facility-based mentorship visits to sites for training them on the implementation of the new ART guidelines. STAR-E has developed a schedule with the districts and provided support for the teams to move from facility to facility. Up to 50% of the DHOs in the 12 supported districts are trained DBMs and are cognizant of what needs to be done and how to do it. STAR-E technical staff select days on which to join the teams only for the purposes of quality assurance. This activity is therefore largely district driven and demonstrates one of the greatest legacies of the project - leaving behind a sizeable pool of trained and confident clinical mentors in HIV/AIDS care who are managed by the districts.

The project has also learned two key lessons during the period. The first is the need to integrate mentorship visits to cut across multiple program areas as opposed to running parallel interventions for each program area. This has been made easier as national tools in HIV care have become more integrated over time. Towards the end of PY6 STAR-E was introduced to the Site Improvement and Monitoring System (SIMS) tools by PEPFAR for both health facilities and community service points. These are considered a priority and will need to be institutionalized rapidly.

The second lesson is that the best vehicle for implementing and tracking action plans required at facility level is the quality improvement team at the facility. STAR-E will continue to invest in the functionality of these teams whose scope goes beyond HIV care. Similarly, the project has brought in the DHT to adopt QI as a standing item in at least one of the team's monthly meetings, so that the district provides support to facility QI teams and tracks their performance. This is one of the sustainability measures that the project will continue to support and reinforce in PY7.

INTERMEDIATE RESULT AREA 4: Networks, Linkages, and Referrals

Key Strategies to Achieve Results:

- Participated in national planning meetings for the rollout of the new ART guidelines
- Supported the network of linkage facilitators, case managers, and community-based volunteers in strengthening networking and linkages between the health facility and the community
- Mentored linkage facilitators and OVC focal persons on OVC identification and linkage

Main IR 4 PY6 Achievements:

- STAR-E participated in national meetings for rollout of the new ART guidelines and the TB HMIS tools, and in the PMTCT TWG

IR 4.1 Participating in Networks at the National/International Level

During the reporting period, the project participated in the following key national events:

- National planning meetings for the rollout of the new ART guidelines, which are recommended by the World Health Organisation; national meetings to plan for the rollout of the new TB HMIS tools, as well as the PMTCT TWG tracking the implementation of Option B+.
- Joint PEPFAR/USAID field activities, including the pediatric HIV technical support supervision at Buhehe HC III in Busia district as one of the selected sites for the exercise (Quarter 2); a DQA for SMC activities in Budaka HC IV (Quarter 3); a PEPFAR portfolio review exercise that was conducted in the Eastern region (Quarter 3); the District Operational Plan (DOP) roundtable responsible for developing indicator milestones for DOP II, per USAID's

invitation (Quarter 4); and the introduction of the use of the SIMS tools in Pallisa hospital (Quarter 4).

IR 4.2 Participating in Networks at the Regional/District Level

STAR-E continued to provide technical assistance to the districts in preparation for integrated support supervision exercises and extended DHMT meetings using Grant A funding from the SDS project in the nine original districts (and with STAR-E funding in the three new districts of Kibuku, Bulambuli, and Kween). During this period, the districts of Busia, Bududa, and Butaleja initially had their grants suspended due to accountability queries by SDS but funding for all of their health activities resumed by the end of PY6. The project also had a review meeting with all districts, regional Ips, and the MOH regional performance monitoring team to assess achievements made during PY6 and to identify priorities for PY7.

IR 4.3 Linkages at the Community Level

The project continued to support the network of linkage facilitators, case managers, and community-based volunteers in strengthening networking and linkages between the health facility and the community. The project continued to build the capacity of different cadres of volunteers and health workers in different areas. During the reporting period, STAR-E trained 164 health workers, 294 linkage facilitators, 60 subcounty community development officers, and 36 community-based organizations in OVC identification and linkage. The project also worked very closely with CSOs that were awarded performance-based grants (PBGs) to conduct community-facility referrals for increased uptake of services. The PBG awardees also trained a network of community linkage facilitators to reinforce the efforts of the health facility linkage facilitators in identifying and referring clients for different HIV/TB/OVC services. The project participated in key networking meetings, such as the quarterly condom coordination meeting. In order to improve and increase access to basic care packages, PACE and STAR-E projects coordinated training for linkage facilitators, VHTs, and health workers from selected health centers. This networking contributed to increased access for clients to basic care packages for positive living. The project took part in the sustainability conference that was organized by SPEAR for other IPs in Mbale.

INTERMEDIATE RESULT AREA 5: Increasing Demand for HIV/AIDS and TB Services

Key Strategies to Achieve Results:

- Mobilized the population to promote positive health-seeking behaviors and to demand services
- Used project-supported radio programs to educate communities on PMTCT and EID
- Partnered with community service organizations and other groups to support VHTs and create demand

The project has continued to mobilize the population to promote positive health-seeking behaviors and to demand services. One such event was the “six tent model” week at Butebo in Pallisa district where integrated HIV/AIDS and TB services were provided following a massive mobilization campaign in May 2014. Other partners joined the demand creation and service provision campaign including Marie Stopes Uganda, AIC, and UHMG. The social mobilization events culminated in the provision of services at Butebo HC IV. At the end of this campaign week, 56 people received TB screening, 114 people underwent SMC, 151 women received cervical cancer screening, 580 people received HCT, 8,404

Main IR 5 PY6 Achievements:

- Conducted 35 talk shows on local radio stations to create awareness
- Held “six tent model” week for integrated HIV/AIDS and TB services
- 7,760 reached with TB messaging

male and 342 female condoms were distributed, and 17 patients who had defaulted from care and treatment were tracked down by linkage facilitators and linked into care.



Attendees at the Butebo integrated outreach lining up to register for consultation or an appointment with a clinician

During PY6, 11 CSOs were engaged under the PBG arrangement and they recruited 1,114 VHTs and expert clients across the project's 12 districts. The VHTs and expert clients were oriented on the combination prevention strategy and EID PMTCT processes. They used this information to create demand for these services in the 12 districts and to link and refer patients to health facilities for these services.

During the weeks leading up to the commemoration of World TB Day 2014, the project and MOH used a film van to mobilize the population across the five districts of Butaleja, Kapchorwa, Bududa, Pallisa, and Kibuku for HIV- and AIDS-related services, reaching 7,760 people with TB messages. The focus was to explain signs and symptoms of TB, the meaning of contact tracing, DOTs, and where to seek TB services. These districts were selected because they ranked lowest in TB performance and coverage indicators as reflected by LQAS results.

During PY6, project-supported radio programs educated communities on PMTCT and EID. Six local FM radio stations across the project area aired 35 radio talk shows in local languages, including Lumasaba, Lunyoli, Lugwere, Sabiny, and Lusamia. The district health officials, including DHOs, district health educators, district HIV/AIDS focal persons, district PMTCT focal persons, and ART clinic in-charges facilitated these talk shows. The hosts were guided by talking points on the different program areas developed through a consultative process with the technical advisors, the Communication for Healthy Communities project, and the health promotion division of the MOH. The management of two additional local FM radios in the region, Ebenezer and Gold FM, offered free airtime to the project of one hour every week to air health messages targeting their listeners. Talk shows were interactive, with many callers from among the listeners seeking clarifications on PMTCT, EID, and different aspects of TB control.

INTERMEDIATE RESULT AREA 6: Establish and Strengthen Orphans and Vulnerable Children (OVC) Referrals and Linkages in the Districts

Key Strategies to Achieve Results:

-
- Conducted touch-base meetings with key OVC IPs and relevant district and community offices in order to integrate OVC linkages into HIV/TB interventions
- Supported the training of health workers from the original 36 ART sites in child and adolescent counseling with the objective of improving OVC enrolment and retention in care, as well as to improve the quality of OVC care itself
- Identified OVC focal persons in all 154 project-supported health facilities to provide oversight on the identification, registration, and linkage of OVC to services within and outside the facility

Main IR 6 PY6 Achievements:

- **Trained 558 people (health workers, linkage facilitators, CBO representatives, and others) in OVC programming**
- **Child counseling spaces created and supplied in 36 ART sites**
- **108 trained in provision of basic care packages**
- **445 pairs of TOMS shoes distributed to 445 OVC**

During the reporting period, STAR-E conducted touch-base meetings with key OVC IPs and relevant district and community offices in order to integrate OVC linkages into HIV/TB interventions. The training of 558 health workers, linkage facilitators, community development officers, and representatives from community-based organizations in OVC identification and linkages followed the touch-base meetings. Health facility OVC focal persons were identified in all 154 project-supported health facilities to provide oversight on the identification, registration, and linkage of OVC to services within and outside the

facility. In order to improve data and information flow and management, the project provided OVC registers, policy documents, referral forms, and other M&E reference documents to the health facilities. The project supported the training of health workers from the original 36 ART sites in child and adolescent counseling with the objective of improving OVC enrolment and retention in care, as well as to improve the quality of OVC care itself. The project created child counseling spaces/centers in these 36 ART sites and procured an assortment of play items including footballs, building blocks, toy cars, and teddy bears. STAR-E also provided water vessels, basins, and packed juices to motivate mothers to keep their children's appointments. This is also seen as an opportunity for OVC caretakers and young positives to derive peer psycho-social support.

In partnership with PACE, STAR-E trained 108 health workers and VHT and linkage facilitators in provision of basic care packages, which include insecticide-treated nets, water guard tablets, and water vessels. Priority households for distribution include those which have OVC. The project also supported health facilities to order, in a timely manner, RUTF, which has helped to combat malnutrition among OVCs. The project received a donation of shoes from TOMS Shoes, which were distributed to 445 OVCs. Through the network of linkage facilitators, OVCs are linked to services within their health facility, as well as other services in the community, such as legal services, education, and economic strengthening.

Despite these achievements, some key challenges undermined effective OVC referrals and linkages to the many different services offered in the community. The community had a lot of expectations for services which were beyond the mandate of the project. Very few organizations are active on the ground, and they did not have the capacity to absorb all the OVCs that were referred to them. Therefore, the community had unmet needs. Although other IPs had mapped OVC service providers, there was little information about what services they offered, which presented a challenge in referrals. Other service providers have dropped out or become inactive since the mapping exercise was done. The districts of Kween, Bulambuli, and Kibuku did not have support from SDS for child protection-related activities, neither did they have functional OVC structures at the community level. This gap frustrated the project's efforts towards strengthening OVC interventions in these communities. With the introduction of the health facility OVC focal persons, however, STAR-E is hoping for an improved and a more streamlined OVC referral and linkage process to and from different service points.

Finance, Administration, and Grants

Health Facility Renovations

In order to achieve the objective of increasing access to, coverage of, and use of quality comprehensive HIV/TB, care, and treatment services, STAR-E conducted a thorough facility condition assessment across all the 12 districts of operation in which 32 health facilities were identified as being in critical need of renovation. Based on budgetary constraints, STAR-E prioritized 17 facilities for refurbishment.

On January 30, 2014, USAID approved (through modification #13) a two-phase renovation of the 17 health facilities.

Phase I involved the renovation of 11 facilities (Buginyanya, Buwasa, Budadiri, Buhehe, Nakaloke, Nabiganda, and Kameke health centers; and Bududa, Busolwe Kapchorwa, and Pallisa general hospitals), all of which have been completed and handed over to the respective local district governments. They are all still under the observation period and thus final payments have not been made yet. The one exception is Busolwe Hospital, which is due to be completed by the end of October 2014. Renovations under Phase I are summarized in Annex 7 and photos of two of the refurbished sites are included in Annex 8.

Cost Share Update

During PY6, STAR-E collected a cost share total of \$1,598,653 out of which \$1,031,255 has been booked at the MSH home office for reporting to USAID, and \$567,398 has been compiled by the field team and will be sent to home office for review and booking. STAR-E will reach the cost share ceiling target by March 9, 2015. The status of cost share to date is indicated in the table below.

A complete transformation of sites in two districts:

The renovations of Budadiri HC IV and Bududa Hospital are two examples of some of the most significant transformation seen amongst the 11 facilities renovated this year.

The old OPD block at Budadiri HC IV is the biggest and oldest structure in the district of Sironko. It was built during the colonial period in the 1950s and was a state-of-the-art facility then. However, there was no upkeep on the structure..

As it was too expensive and too old to renovate, the local government opted to build a new but smaller block to house the OPD and converted the old block into a meeting hall for the ART clinic because of its size. Because of the dire state of the old block, STAR-E selected this site as a beneficiary of its renovation program.

The newly renovated block now has a new 10,000-liter rainwater harvest system and solar power as an alternative to the national grid. It has also been remodeled and repartitioned to provide ART treatment and counseling rooms, a pharmacy, and an ultra-modern laboratory that will be turned into a regional hub once it is fully equipped.

The renovation of the massive Bududa Hospital OPD block in Bududa district is perhaps the most noteworthy of all of the refurbishments.. Built in the early 1960s with hardly any maintenance done since, it had been condemned and left as a dumping ground for any broken or unwanted equipment in the hospital as the pictures will show in Annex 8.

After STAR-E's renovation, it is now the best building on the entire Bududa Hospital compound with a newly refurbished laboratory, pharmacy, and counseling and treatment rooms. It has a 3KVA solar power system as an alternative to the highly irregular national power grid, fully functional bathrooms supplied by a constant flow of gravitational water, and a 30,000-liter rainwater harvest system.

Table 5: Status of Cost Share

Category	Cost Share Target	Realized to Date	%age
LOP Ceiling	6,068,276	5,189,057	86%
Spent-to-date as of August 2014	5,359,647	5,189,057	97%

Grants and Subcontract Management

In PY6, STAR-E had three local subawardees, JCRC, IRCU, AIC, whose contracts are still ongoing, and one standard provision grant to ATGWU whose subaward originally was due to end on June 20, 2014. However, USAID approved a no-cost extension and they finish work on October 31, 2014. STAR-E disbursed a total of UGX 740,013,248 during the year across all the subgrantees, including ATGWU. STAR-E conducted compliance checks and technical support visits to the subgrantees to ensure proper management and that work was aligned with the project goals.

Performance-Based Grants (PBGs)

In April 2014, USAID approved Round II of PBGs for the project which includes 12 selected grants to be carried out by 11 CSOs in the 12 districts of STAR-E operation. STAR-E successfully rolled out the 12 PBGs, and the first data validation exercise for the period ending in June 2014 was conducted in July 2014. Both the amounts disbursed and the results are summarized in the table below:

Table 6: Chart of PBGs and disbursements in Uganda shillings

No.	Grantee	40% initial disbursement	Qtr. I validation score (%)	Payment following the data validation scores	Total disbursed to date
1	Friends of Christ Revival Ministries (FOC-Rev)	43,067,200	76%	20,456,920	63,524,120
2	Multi Community Development Initiative(MUCOBADI)	38,294,400	70%	16,275,120	54,569,520
3	Uganda Muslim Rural Development Association	78,120,000	76%	37,107,000	115,227,000
4	Uganda Muslim Rural Development Association				
5	Youth and Women In Action-Uganda (YAWIA)	39,020,880	84%	18,534,918	57,555,798
6	Kadama Widows Association (KWA)	39,843,200	61%	16,933,360	56,776,560
7	Coalition for Health Promotion & Social Development (HEPS-Uganda)	37,899,800	44%	14,212,425	52,112,225
8	The Salvation Army Uganda (TSA-Uganda)	39,537,600	77%	18,780,360	58,317,960
9	Hope After Rape	38,395,800	80%	18,238,005	56,633,805
10	Kapchorwa Integrated Community Mobilisation Programme (KICOMPE)	40,478,480	77%	19,227,278	59,705,758
11	Church of Uganda – Sebei Diocese	38,139,200	81%	18,116,120	56,255,320
12	CARITAS – Tororo Diocese	39,304,800	86%	18,669,780	57,974,580
Total		472,101,360		216,551,286	688,652,646

ANNEX I: PY6 Data on the Continuum of Response

FY 2014 STAR-E Project Targets	
Total Pre-ART Care new + current Adults	47,779
Total Pre-ART Care new + current Children	6,826
Total Pre-ART	54,604
Total ART new + current Adults	26,565
Total ART new + current Children	3,799
Total ART	30,633
Total Care	85,237
TB Screening - 90%	76,713
TB Treatment - 3%	2,301
ART New Naïve	9,654
PMTCT HAART	4,753
STAR-E Project Results	
No. of sites	154
Chronic Care Indicators	
Total newly enrolled in care - PY5	8,089
Total number in care - Q1, PY6	27,954
Total number in care Q4, PY6	36,852
Number of children below 15 yrs current in HIV care in Q4, PY6	2,230
Number newly enrolled into care in PY 6	7,977
Number of children <15yrs newly enrolled into HIV care in PY6	667
%age of HIV positive individuals linked into care from HTC	74%
Number on co-trimoxazole prophylaxis Q4	18,584
Total number of patients screened for TB Q4	16,788
Total number of TB suspects	-
Total number found with active TB in PY6	501
Number received basic care kits in the QTR	-
Number of HIV-positive clinically malnourished clients who received therapeutic or supplementary food	97
Progress in Meeting Annual Chronic Care Targets	
% newly enrolled into care in Q4, PY 6	22%
% of children in care	6%
%age on co-trimoxazole Prophylaxis	50%
%age of patients screened for TB	46%
%age of TB suspects	0%
%age of patient found with active TB	3%
% achievement for care target	43%
% achievement of children enrolled in care - newly	10%
(Lost) / Transfers into care	921

Treatment Indicators	
Total newly enrolled onto treatment in Q1, PY 6	1,434
Total number on treatment in Q1, PY 6	11,756
Total number current on ART in Q4, PY 6	15,207
Number of children <15 yrs current on ART in Q4, PY 6	1,233
Number newly enrolled on ART in PY6	6,903
Number of children <15yrs newly enrolled on ART in PY 6	678
Number of HIV-positive individuals started on Option B+	3,211
%age of TB/HIV co-infected started on ART	74%
Progress in Meeting Annual Chronic Care Targets	
% of clients on ART	41%
% of Children on treatment	8%
% of Children in care that are on ART	55%
% of client new on ART in the quarter	45%
(Lost) / Transfers into ART	(3,452)
% of patient on treatment	41%
% achievement for ART naïve target	72%
% achievement of children newly enrolled on ART	7%
% achievement for B+ target	68%
Median CD4 for ART naïves this QTR	218

ANNEX 2: SMC Dashboard FY2014 Q4

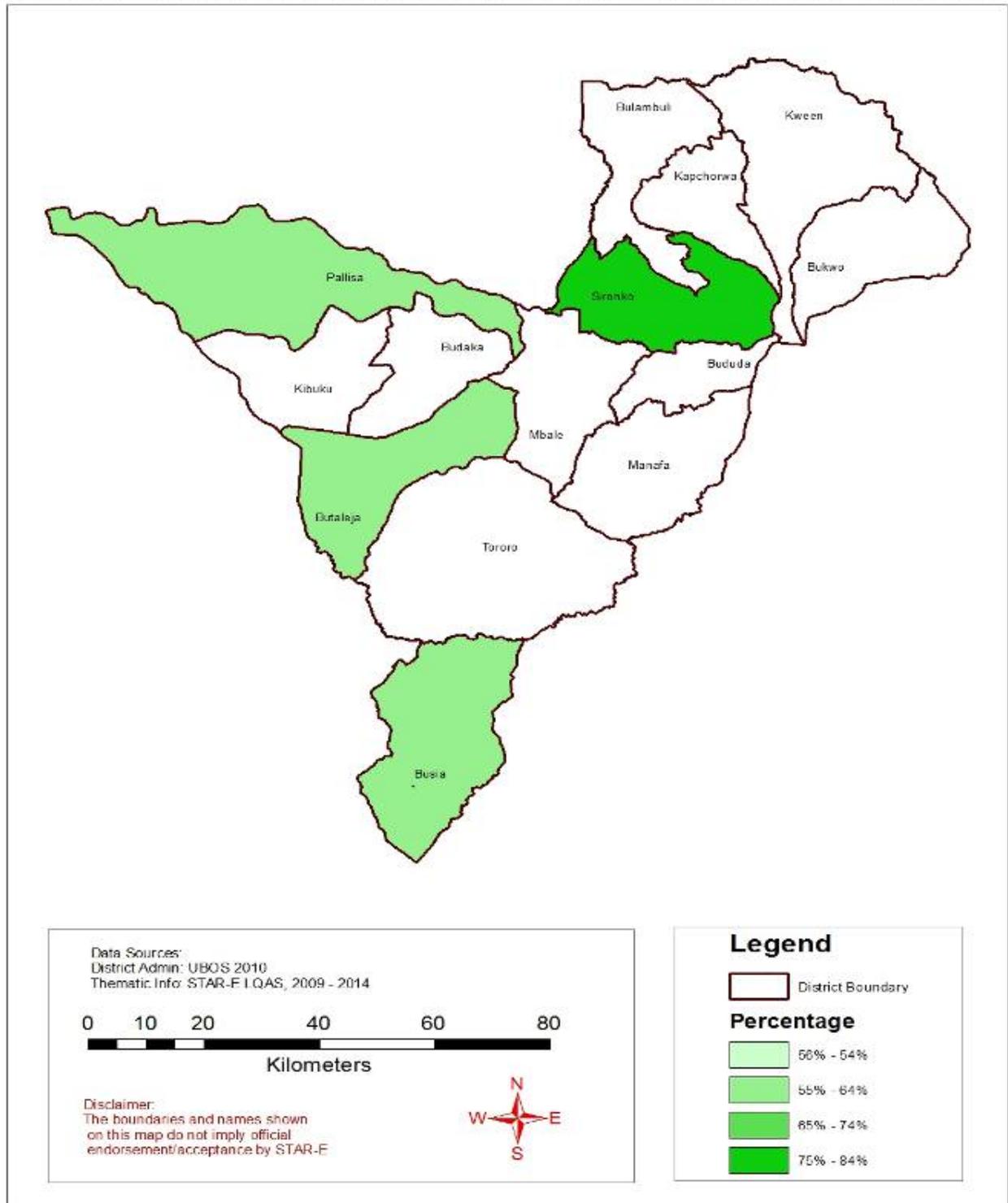
KEY:

		
>80% - Good	50 - <80% - Fair	<50% - Poor

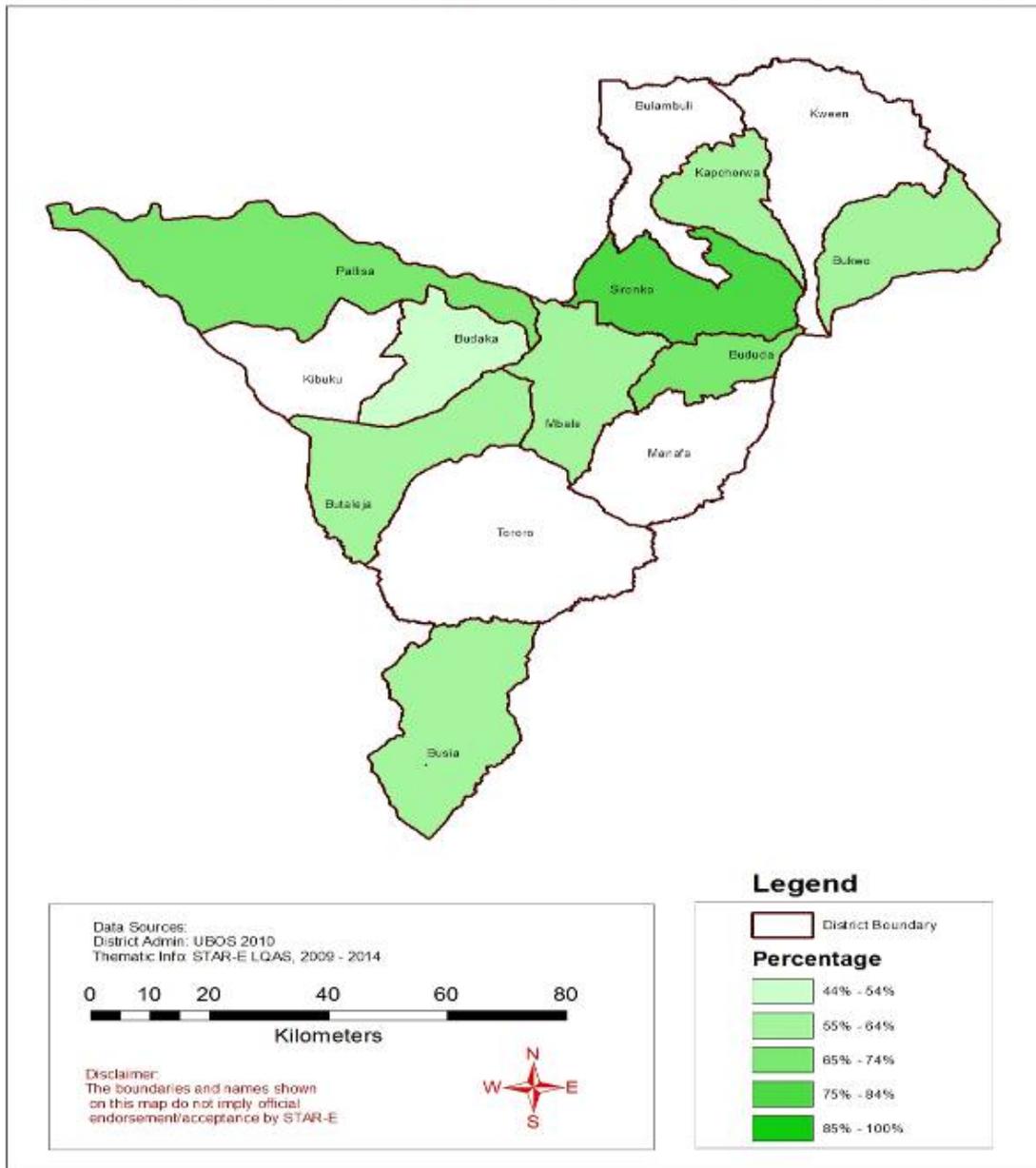
Health Unit	Management systems	Supplies, equipment	Registration group education and IEC	Individual counselling & HIV testing	Male circumcision surgical procedure	Monitoring & Evaluation	Infection Prevention
Budaka HCIV							
Budadiri HCIV							
Busolwe Hospital							
Kapchorwa Hospital							
Kibuku HCIV							
Bufumbo HCIV							
Buwasa HCIV							
Busia HCIV							
Masafu Hospital							
Dabani HCIV							
Bulumbi HC III							
Butebo HCIV							
Pallisa Hospital							
Kaproron HCIV							
Bukwo HCIV							
Bududa Hospital							
Bukwo Hospital							
Nabiganda HCIII							

ANNEX 3: %age of individuals who know at least two benefits of HCT - STAR-E LQAS, 2009 – 2014

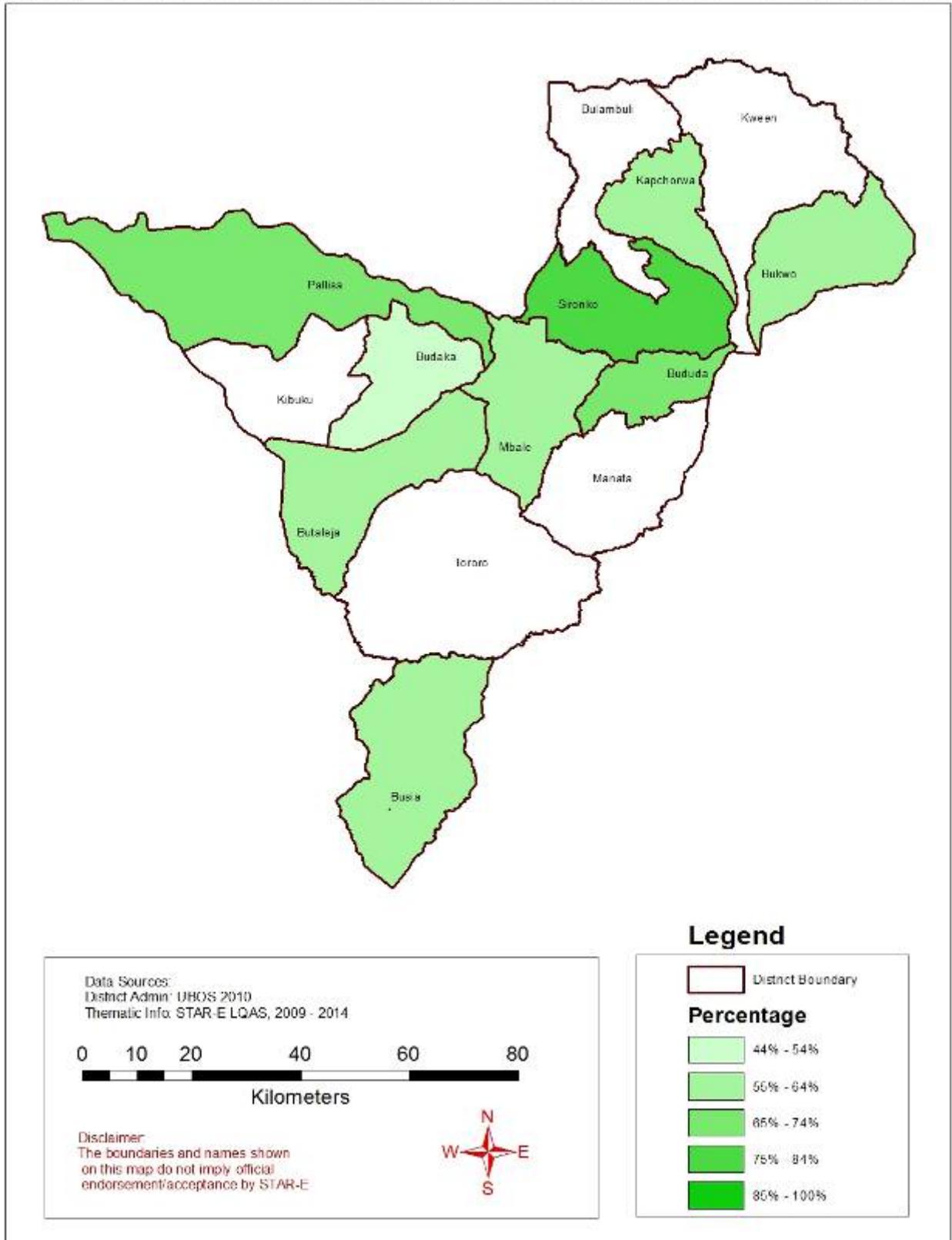
Percentage of Participants with Knowledge of at least Two Benefits of HCT, LQAS Community Survey, 2009



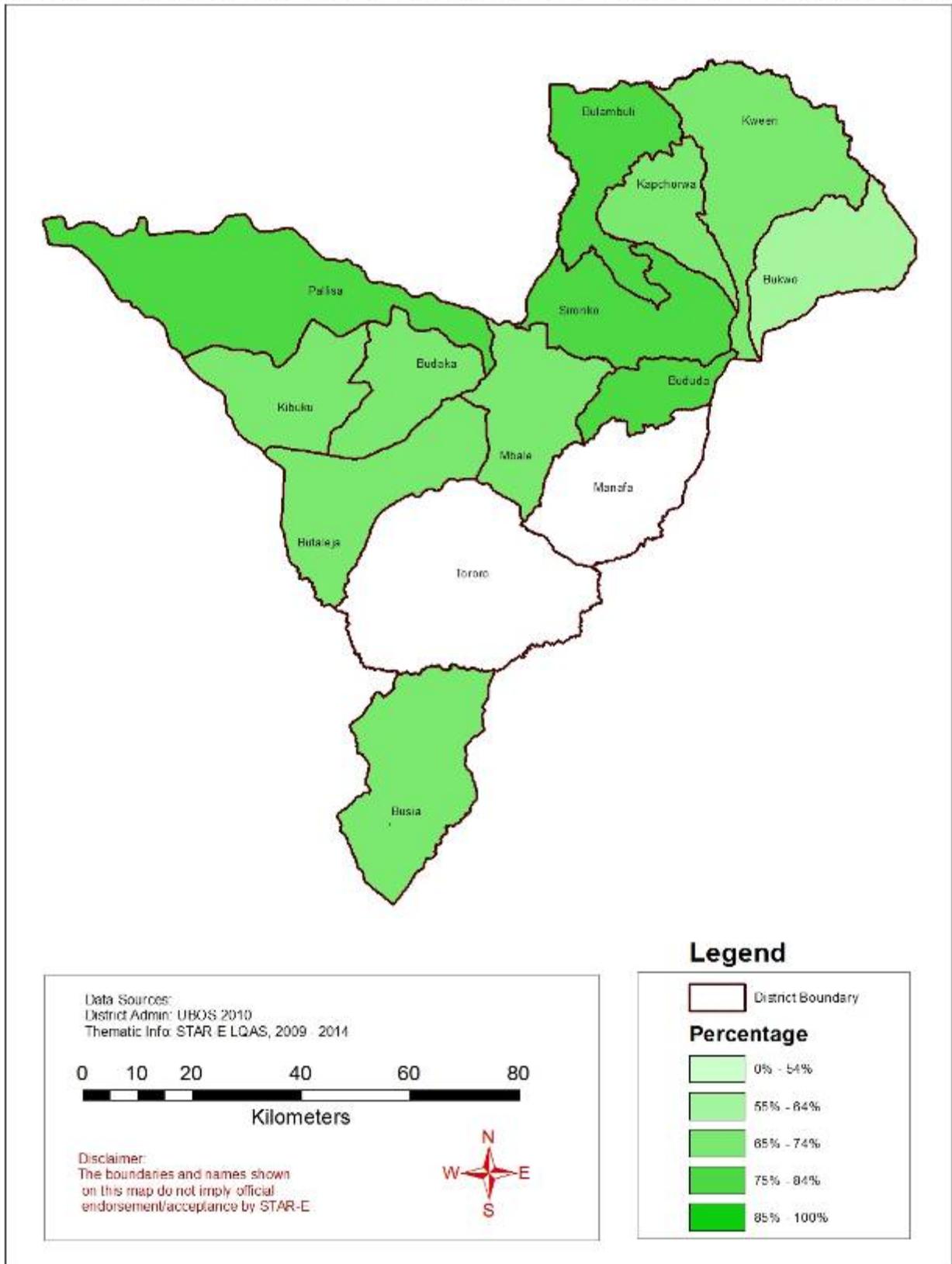
Percentage of Participants with Knowledge of at least Two Benefits of HCT, LQAS Community Survey, 2010



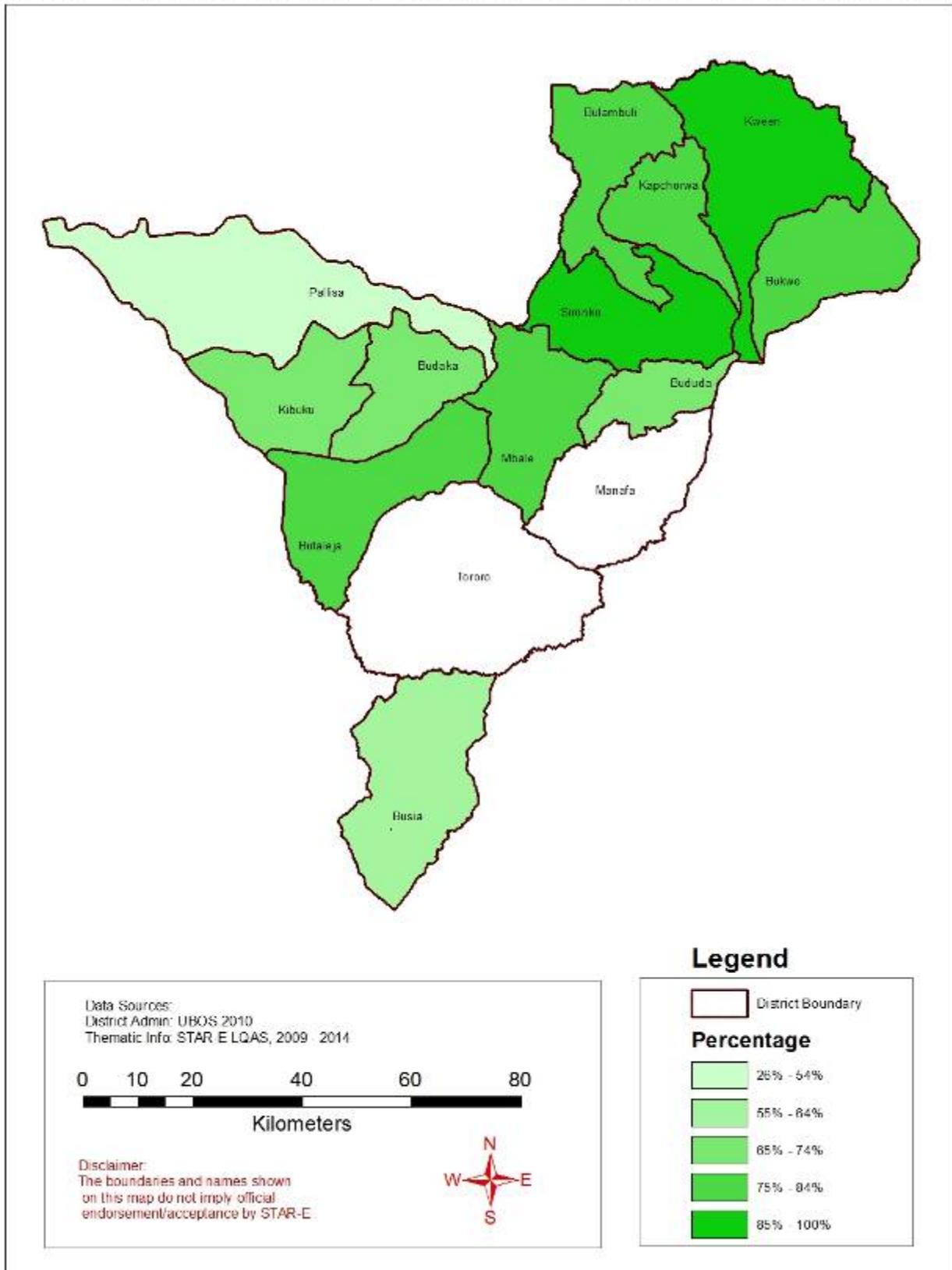
Percentage of Participants with Knowledge of at least Two Benefits of HCT, LQAS Community Survey, 2011



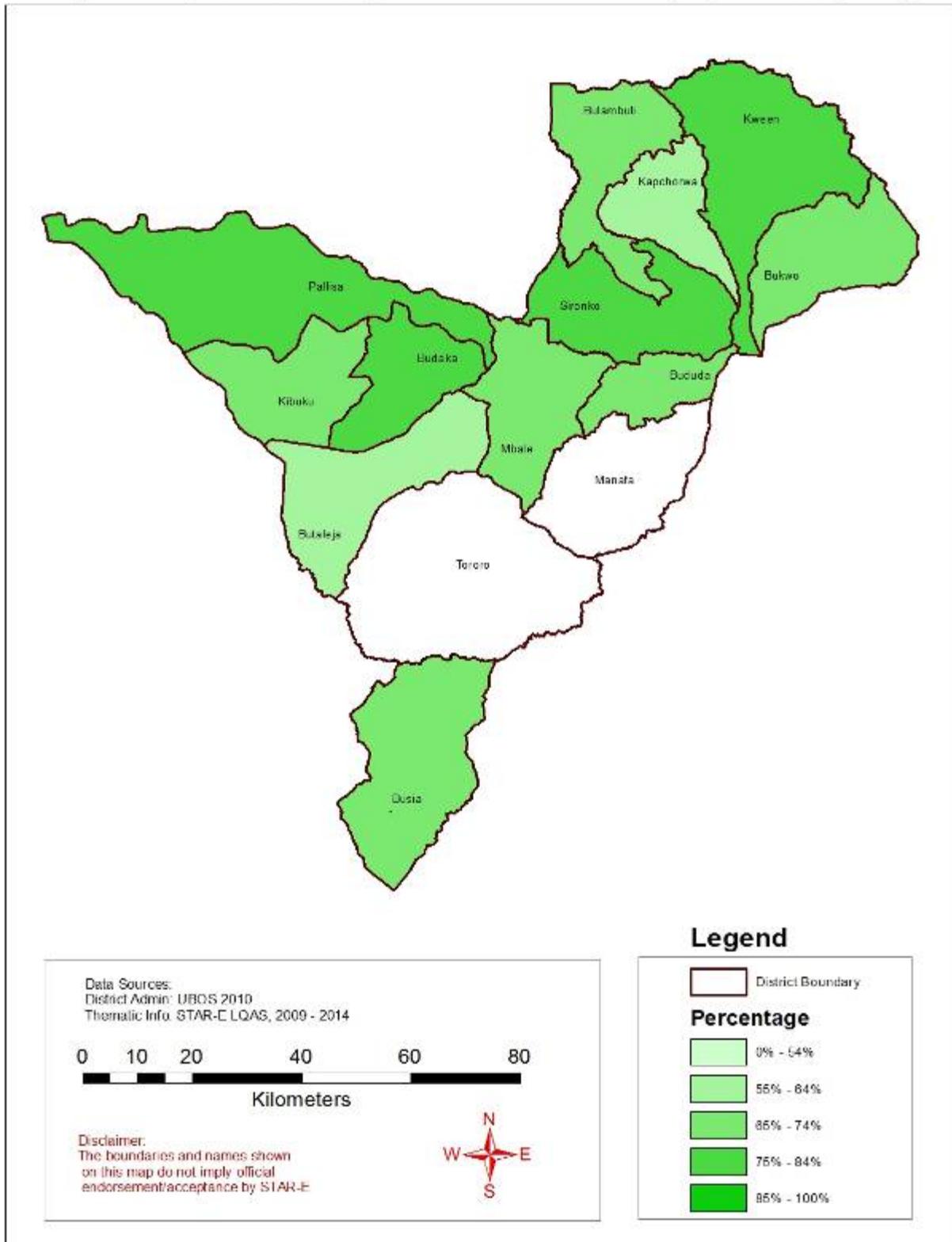
Percentage of Participants with Knowledge of at least Two Benefits of HCT, LQAS Community Survey, 2012



Percentage of Participants with Knowledge of at least Two Benefits of HCT, LQAS Community Survey, 2013



Percentage of Participants with Knowledge of at least Two Benefits of HCT, LQAS Community Survey, 2014



ANNEX 4: OVC Facility Assessment and Results Poster




OVC-Facility Assessment and Results

By Dr. Agnes Kobusingye, STAR-E Project




Definition

- OVC Facility Assessment (FA) assesses **readiness** of an OVC service delivery point (**FACILITY**) to offer quality care and support services to OVC
- Readiness** refers to whether the facility has what is required to offer quality services; inputs and selected processes without going into details of observing how services are offered and the outcomes of the services

OVC Service Point

- refers to a place where the OVC directly get a service based on Core Program Areas (CPA's)(District Probation Office, Sub-county chief and DCO, Family protection Unit of Police , NGOs, CBOs, FBOs, Self help Projects)
- The assessment excludes specialized institutions such as orphan homes, remand homes and children courts

Objectives of OVC-FA

- To build the capacity of districts staff in assessing and supervising the OVC service points
- To provide complementary data on OVC care and support service delivery at district and national levels

- Knowledge, availability and utilization of OVC policies and guidelines**
- Existence and functioning of the systems and structures of the service points** (Management, coordination, linkages, & referrals)
- Capacity of OVC care and support service providers** (premises, equipment, personnel, technical support, monitoring and supervision)
- Care and support services to OVC by CPA and Quality Standards**

Methodology

- Complete census (all eligible OVC service points are targeted)
- Use updated list of service providers from OVC MIS
- District staff collect data in a team of two
- The most senior person at the facility is interviewed

District-led process

- Process starts by briefing district leaders for buy-in and leadership
- Districts select data collection teams, update OVC service providers list and schedule the training and data collection

- PSWO leads the process; a data collection team has 2 district staff
- STAR-E LQAS working with MGLSD trains districts staff and supervise data collection
- Data entry immediately after exercise by the district staff

Coverage

- OVC-FA has so far covered 6 districts- Mbale , Sironko, Butaleja, Kibuku , Pallisa and Kapchorwa

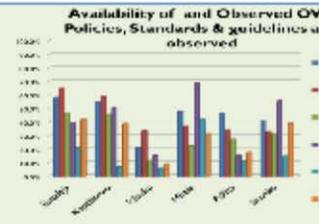
Experiences in using data

- OVC-FA has been used by districts to quickly update service provider inventory (all 6 districts)
- Increased direct delivery of services to OVC by CDOs and other extension workers through teamwork and inter-sectoral collaboration (Sironko)
- All CDOs were provided with a compendium of child laws to enable community sensitization and sharing with CSDs.(Mbale)
- 25 Staff in the key Sectors of Education, Health, Police and Community have undergone training in child protection services hence increased reporting

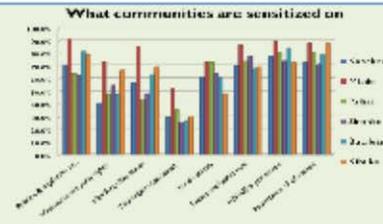
Summary of Facilities Assessed and Areas of assessment

	District Offices & S/C	CPU of Police	NGO/CBO/FBO	Total
Kapchorwa	16	4	23	43
Mbale	23	9	35	67
Pallisa	20	2	51	73
Sironko	22	2	38	62
Kibuku	11	2	20	33
Butaleja	13	3	28	44
Total	99	22	195	322

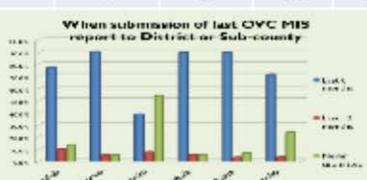
Availability of and Observed OVC Policies, Standards & guidelines and observed



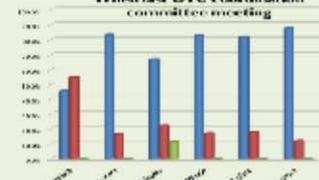
What communities are sensitized on



When submission of last OVC MIS report to District or Sub-county



When last OVC coordination committee meeting



Existence of minutes of last 2 meetings



ANNEX 5: Summary update of health facilities renovated under Phase I

Item No.	Name of Health Facility	Date of Award	Total Payment to-date (Ex-VAT)		Scope of Renovation	Status/Remarks
			UGX	USD		
1	Budadiri HC IV	3/3/2014	158,119,908	\$62,577.07	Old OPD block (includes laboratory & ART clinic)	100% completed, observation period concluded on 9/30/14
2	Buginyanya HC III	3/3/2014	118,855,598	\$47,490.50	OPD block (includes laboratory & ANC/MTY)	100% completed, observation period concluded on 9/24/14
3	Buhehe HC III	3/3/2014	142,609,020	\$56,471.45	Old OPD block (includes laboratory, ART clinic, pharmacy)	100% completed, observation period concluded on 10/4/14
4	Buwasa HC III	3/3/2014	43,336,534	\$17,307.92	OPD block (includes laboratory)	100% completed, observation period concluded on 9/30/14
5	Kameke HC III	3/3/2014	96,146,314	\$38,042.39	OPD block (includes laboratory, pharmacy, and ART clinic)	100% completed, observation period concluded on 9/5/14
6	Kapchorwa Hospital	4/4/2014	9,386,491	\$ 3,646.15	Main laboratory plumbing and ART clinic laboratory	100% completed, observation period concluded on 9/24/14
7	Nabiganda HC III	3/3/2014	81,435,394	\$32,311.80	OPD block with laboratory remodeling	100% completed, observation period concluded on 9/5/14
8	Nakaloke HC III	3/3/2014	128,003,046	\$50,553.68	Old OPD block (with laboratory, pharmacy, and ART clinic)	100% completed, observation period concluded on 9/24/14
9	Pallisa Hospital	3/3/2014	13,530,224	\$ 5,407.64	Laboratory expansion and remodeling	100% completed, observation period concluded on 9/5/14
10	Busolwe Hospital	3/3/2014	5,450,117	\$ 2,180.05	Rain water harvesting system	Delayed, completion expected by 9/30/14
11	Bududa Hospital	5/7/2014	184,388,093	\$72,467.70	Old OPD block (including laboratory, pharmacy, and family ART clinic)	100% completed, observation period concludes on 10/30/14
	Total		981,260,739	\$388,456.35		

ANNEX 6: Renovation updates in pictures

Bududa Hospital

BEFORE **AFTER**



Figure 1: Panoramic view of Bududa Hospital



Figure 2: Old OPD block - view from the gate



Figure 3: View from LHS of the subject block



Figure 4: Far-end of waiting area



Figure 5: Pharmacy



Figure 6: Inspection of the completed works by the RDC, CAO, and other district officials, as well as the construction consultant, STAR-E DCOP, and DFA.



Figure 7: The RDC cutting the tape to formally open the renovated OPD block.

Buhehe Health Centre III (Busia District)

BEFORE

AFTER



Figure 1: The old community building (OCB)



Old community building, remodeled, renovated, and transformed into a health facility service block.



Figure 2: Rear left side view of the OCB





Figure 4: The interior hall of the OBC viewed from the right side. The hall was split into a large laboratory complete with a phlebotomy/reception room and washroom, counseling and clinical rooms, drug store and drug dispensing room, and a large waiting area.

Waiting area