

STAR-E Annual Report PY4

STAR-E

October 1, 2011 – September 30, 2012

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

ANNUAL REPORT

FOR THE PERIOD

1 October 2011 – 30 September 2012

District-Based HIV/TB Program

Cooperative Agreement # 61 7-A-00-09-00006-00

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government (USG).

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ACRONYMS AND ABBREVIATIONS

ABC	Abstinence, Being Faithful, and Using Condoms	MMS	medicines management supervisors
ACP	AIDS Control Program	MOH	Ministry of Health
ANC	Antenatal care	MOLG	Ministry of Local Government
ART	Antiretroviral therapy	MSH	Management Sciences for Health
ARV	Antiretroviral (drugs)	MTCT	mother-to-child transmission
AZT	Azidothymidine	NGO	nongovernmental organization
BCC	Behavior change communication	NLF	National LQAS Facilitator
CaCx	Carcinoma of the cervix	NMS	National Medical Stores
CB-DOTS	Community Based Directly Observed Treatment Support for TB	NTLP NVP	National Tuberculosis and Leprosy Program nevirapine
CDR	Case detection rate	OTC	outpatient therapeutic centers
CICT	Client-initiated counseling and testing	PBF	performance-based financing
CME	Continuing medical education	PCR	polymerase chain reaction (testing)
CPT	Cotrimoxazole preventive therapy	PEPFAR	US President's Emergency Plan for AIDS Relief
CSF	Civil Society Fund	PHA	people living with AIDS
CSO	Civil society organization	PICT	provider-initiated counseling and testing
CSW	Commercial sex worker	PLWH	people living with HIV
DBS	Dried blood spots	PMTCT	prevention of mother-to-child transmission
DBTA	District-based technical assistance	PNFP	private not-for-profit
DHIS	District Health Information Systems	PwP	prevention with positives
DHO	District health officer	PY	project year
DHT	District health team	Q	quarter
DLFP	District laboratory focal person	SA	supervision area
DTLS	District TB and leprosy supervisor	SCHW	sub-county health worker
EID	Early infant diagnosis	SCM	supply chain management
eMTCT	Elimination of mother-to-child transmission of HIV	SDS	Strengthening Decentralization For Sustainability (project)
EQA	External quality assessment	SI	strategic information
FBO	Faith-based organization	SMC	safe male circumcision
FP	Family planning	SMP	Stop Malaria Project
FSG	Family support group	SO	strategic objective
HAART	Highly active antiretroviral therapy	SOP	standard operating procedure
HC	Health center	SPAI	service performance assessment and improvement
HCT	HIV counseling and testing	SPARS	Performance Assessment and Reward/Recognition Strategy
HFA	health facility assessment	SPEAR	Supporting Public Sector Workplaces to Expand Action and Response against HIV/AIDS (project)
HMIS	Health Management Information System/s		
HU	health unit		
ICF	intensified case finding	STAR-E	Strengthening TB and AIDS Response in Eastern Uganda (project)
IEC	information, education, and communication		
IMAI	integrated management of adult illness	STI	sexually transmitted infection
IMCI	Integrated management of childhood illness	SUNRISE	Strengthening the Ugandan National Response for Implementation of Services for Orphans and Other vulnerable Children
IMPAC	Integrated management of pregnancy and childbirth		
IP	Implementing partner		
IR	intermediate result	SURE	Securing Ugandans' Right to Essential Medicines
IRCU	Inter-Religious Council of Uganda	TASO	The Aids Support Organization
ISM	information sharing meeting		
JCRC	Joint Clinical Research Centre	TOT	trainer/ing of trainers
JMS	Joint Medical Stores	UHSBS	Uganda HIV Sero-Behavioral Survey

LATH	Liverpool Associates In Tropical Health	USAID	US Agency for International Development
LQAS	Lot Quality Assurance Sampling (survey)	USD	US dollars
LTAG	LQAS Technical Advisory Group	USG	US Government
M&E	monitoring and evaluation	UVRI	Uganda Virus Research Institute
MAKSP H	Makerere School of Public Health	VHT	Village Health Team
MARP	most-at-risk population	VMMC	voluntary medical male circumcision
MDR	multidrug-resistant	WHO	World Health Organization
MGLSD	Ministry of Gender, Labour and Social Development	YCC	Young Child Clinic

BACKGROUND

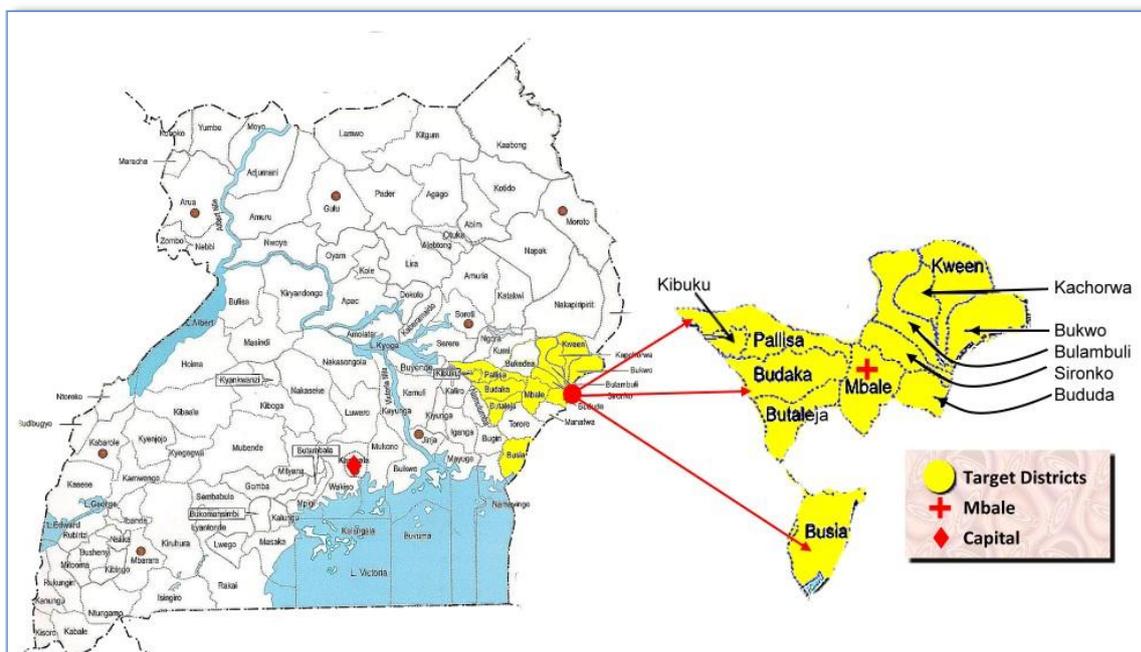
The Strengthening TB and HIV & AIDS Response in Eastern Uganda (STAR-E) is a five-year project funded by the US Agency for International Development (USAID) that was awarded on March 9, 2009, to Management Sciences for Health (MSH) through Cooperative Agreement 617-A-00-09-00006-00. The mandate of STAR-E 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 (as projected for the year 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 social services.

The STAR-E project'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 general objective of the project is to increase access to, coverage of, and utilization 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 are to:

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

Map 1: STAR-E Project Districts' Geographical Coverage



STAR-E is implemented by a consortium of four partners: MSH as lead partner, the Joint Clinical Research Centre (JCRC), the Inter-Religious Council of Uganda (IRCU), and Liverpool Associates in Tropical Health (LATH)

EXECUTIVE SUMMARY

During project year four (PY 4) the project districts, health facilities (both public and private not-for-profit), community groups, and networks that create demand for available HIV/TB services received comprehensive support from STAR-E through technical, financial assistance, and commodities for quality health services delivery. Quarterly integrated mentorships and coaching, technical supportive supervision (involving the Ministry of Health [MOH] and regional staff) were conducted in each of the 12 district health facilities. The project directly procured and distributed medical supplies and other capital items, and also coordinated efficient functioning the district supply chain for pharmaceutical and laboratory commodities.

The project has maintained close working relationship with other USAID-funded IPs and strong coordination with the Strengthening Decentralization for Sustainability (SDS) project. A number of coordination meetings were participated in, notably: the review of the initial District Management and Improvement Plans for Mbale and Kapchorwa, the national LQAS information sharing workshop, the closure of Northern Uganda Malaria, AIDS and TB Project (NUMAT) project, etc. We supported all the 12 districts to attend national-level meetings such as the national data sharing and Quality Improvement Framework launch conferences. All the District Health Management Information System (HMIS) focal persons and biostatisticians from the 12 districts were trained on the application of the District Health Information Systems II (DHIS II) software as well as the revised HMIS tools. The project made a massive procurement of all the revised HMIS tools, projected to last 18 months for all health facilities, from hospitals to HC IIs.

During PY 4, MSH agreed with USAID to refocus its interventions in key critical areas of combination prevention targeting MARPS: Voluntary Male Medical Circumcision (VMMC); prevention of mother-to-child transmission (PMTCT); care and treatment; pediatric HIV; TB and strategic information. This process culminated in key changes in the original PY 4 work plan, followed by budget realignment and submission to USAID. We also revisited the timing of implementation of some of the activities until FY2013. Activities such as refurbishment of health facilities and Round II Performance based grants have not been implemented.

LQAS institutionalization has taken great strides. During PY 4, STAR-E supported a total of 73 districts in the application of community LQAS. This was done in close coordination with the SDS project because a majority of districts receive their funding for this activity through SDS. Key accomplishments for the year were provision in four regional meetings of guidance on quality assurance (QA) for all SDS-funded, district-led LQAS activities, as well as direct provision of assistance by IPs to non-SDS districts; implementation of the 2012 LQAS community survey; and coordination of data entry and subsequent remittal to the LQAS central database.

In terms of programmatic outputs, the project maintained its focus on comprehensive HIV and TB services delivery. The overall performance for each of the program areas is summarized in table I below.

HIV testing and counseling (HTC) remains as one of the key services for both HIV prevention and linkage into care and treatment, and it is happening in 163 health facilities, all of which implement provider-initiated counseling and testing (PICT). Implementation of PMTCT activities occurred in 154 health facilities. The two programs are entry routes to the care, treatment, and laboratory monitoring activities undertaken during the reporting period. The project also supported TB and TB/HIV collaboration interventions across all the districts.

The main challenges encountered during PY 4 were the delayed procurement of supplies and consumables for VMMC and HCT for the private sector and renewal of round II of performance-based financing (PBF).

Table I: PY 4 Results Summary for Core Indicators

HCT (facility and community)	Result	Target	% target achieved	Comments	MARPs	Results	Target	% of target achieved	
Tested	340,242	340,432	99.9%	Target achieved. Implementation targeted to MARPs, couples and hard-to-reach areas.	Reached ABC messages	36,717	51,200	71.7%	The game changer to more effective interventions reduced on coverage.
Tested positive	9,040	13,956	64.8%	The target was based on 5.3% prevalence, later lowered to 4.1% (MOH, 2012). Actual is 3.0% in HUs and 1.6% at community.	No. of condoms distributed	696,443	500,000	139.3%	
PMTCT (141 sites)					TB				
Tested (97% of new ANC)	91,259	114,949	79.4%	Improved PICT efforts. More demand creation needed.	TB case detection rate	51%	65%	78.5%	Slow progress due to limited diagnostic facilities
Tested positive	3,361	3,802	88.4%	HIV prevalence is lower than expected (3.7%) among pregnant mothers.	Treatment success rate	81%	90%	90.0%	
Received ARVs for PMTCT	3,141	3,802	82.6%	Relatively high coverage for actual tested positive (93.4%).	% TB patients receiving; HTC	99.5%	100%	99.5%	Integration of TB and other clinics has been achieved to a greater extent. CPT is affected by frequent stock-outs, while ART is affected by low ART service coverage vis-a-vis TB treatment sites.
ART					• CPT • ART (317/424)	100.00% 75%	100% 100%	100.0% 75.0%	
Patients enrolled	3,184	2,469	129.0%	Improved TB/HIV and PMTCT collaboration contributed to higher enrolment on ART.	Chronic care				
VMMC					Current on care	32,989	31,584	104.5%	Assessed annually with a cumulative target of 31,584
# men circumcised	30,915	70,000	44.2%	Great efforts amidst stock outs of essential medical supplies. Optimal output from current strategy that depends on existing facility health workes	Newly enrolled	12,431	17,758	70.0%	
					CD4 test performed	9,944	31,584	31.5%	Combines tests done at ART sites and those referred to JCRC

					HIV+ pregnant enrolled	2,223	3,802	58.5%	Majority of sites refer mothers to high-volume sites, but they never reach them.
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Table 2: STAR-E PMP Indicators Measured Using LQAS Survey

Indicators	Results
Percentage of mothers of babies of one year and below who deliver in the hands of a trained health worker	53.3%
Percentage of women and men aged 15–24 years who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission, disaggregated by sex	M: 40.4% F: 32.2%
Percentage of population age 15+ years who can identify at least three symptoms of TB, disaggregated by sex	M: 66.8% F: 60.1%
Percentage of individuals in the project area aged 15–49 years who know about the 3 main HIV prevention methods	28.7%
Percentage of individuals in the project area aged 15–24 years who had high risk sex in the last 12 months and used a condom	67.1%
Percentage of males and females aged 15–24 years who had sex before the age of 15 years, disaggregated by sex	M: 12.0% F: 7.7%
Percentage of males and females aged 15–49 years who had a non-marital or non-cohabiting sexual partner in the last 12 months	23.8%
Percentage of adults aged 15–49 years who had sex with more than one sexual partner in the last 12 months	17.2%
Percentage of adults aged 15–49 years who had sex with more than one sexual partner in the last 12 months and reported to have used a condom at the last sexual intercourse	53.5%

PROGRESS TOWARD INTERMEDIATE RESULTS (IRS)

IR 1: Increasing Uptake of Comprehensive HIV & AIDS and TB Services

1.1 Increasing Uptake and Access to HIV Counseling and Testing Services

Introduction

HIV counseling and testing forms a key entry point to all HIV/AIDS-related services. Based on the results of the recently concluded 2011 National AIDS Indicator Survey, 66% of women reported to ever being tested for HIV and received their results, a marked increase from 13% in 2004–05. Similarly, HIV testing among men has increased from 11% in 2004–05 to 45% in 2011. Overall, 72% of pregnant women reported prior testing and receiving their results during antenatal care. In spite of these marked improvement in HCT uptake, HIV prevalence has risen from 6.4% in 2005 to 7.3% as of 2011, indicating that HIV transmission is increasing. It is important to link those who have been tested to care and treatment services and other services such as VMMC, PMTCT, and prevention with positives (PwP). Even though the number of people ever tested for HIV has increased, there are still gaps in having universal access to HCT. Some of the challenges to having more people tested for HIV include stigma, lack of access to services, missed opportunities, and complacency among patients.

During PY 4, STAR-E has continued to build district and health facility capacity, attending to the procurement and supply chain mechanism to ensure availability of HCT commodities, supporting outreach activities, facilitating districts and partners to reach out to most-at-risk populations (MARPs) and the geographically hard-to-reach populations, and supporting external QA and community mobilization and sensitization on the value and benefit of HCT. The HCT models promoted by STAR-E include provider-initiated counseling and testing (PICT) at health facilities, couple HCT (CHCT) at both the facility and community level, HCT in antenatal settings, and VCT, especially in outreaches. An integrative approach has been used to promote HCT so that those who test positive for HIV are linked to services for care and treatment, PMTCT, SMC, early infant diagnosis (EID), and services for psychosocial support. Now “testing for a reason” is being embarked on by all service outlets to ensure that those who test negative or positive for HIV are all linked to services that would enhance HIV care and treatment, and prevention, respectively.

Planned activities in PY 4

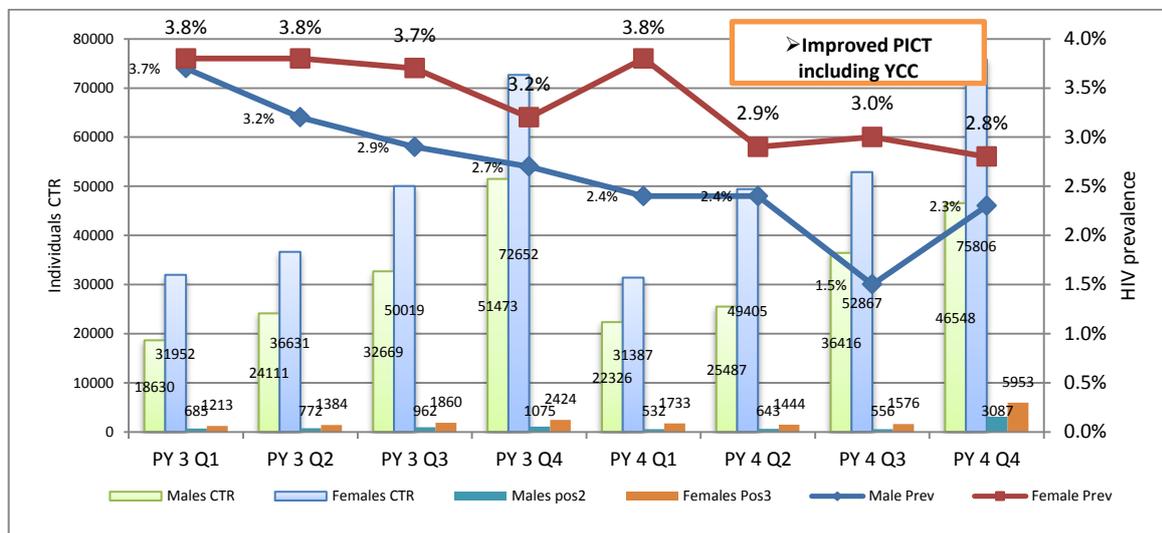
- Scale up HCT services to an additional 100 sites
- Fast-track procurement of buffer HIV-testing kits for community HCT as well as support the districts' supply chain management
- Increase community mobilization for HCT among couples and MARPs
- Continue linkages for people counseled and tested for HIV with other services, including social support groups for prevention with positives, PMTCT, care and treatment, and SMC for HIV-negative men
- Continue mentorship for health workers to promote PICT and client-initiated counseling and testing (CICT), with clear targets at all levels
- Promote the “Know Your HIV Status Together” campaign through partners of HIV-positive female clients and “HCT for a Reason”
- Promote good management practices of medical wastes
- Create demand through civil society organizations (CSOs) and Village Health Teams (VHTs)

Achievements

The project's annual target for HTC was 340,432 individuals counseled and tested for HIV and given their results, with a target to identify 13,956 new individuals living with HIV or AIDS. Overall in PY 4, the project reached 340,242 individuals (99.9% of the target) with HCT services, of which 9,040 (90.4%) tested HIV positive. This gives an HIV sero-positivity rate of 2.7%, lower than the 2011 general population-based National AIDS Indicators Survey

results of 4.1% for the eastern region. And both figures indicate a marked drop from the national HIV Sero-Behavioral Survey 2004–05, which put this region at a prevalence of 5.3%. Of the 340,242 individuals reached with HCT, 1,794 (0.58%) presented as couples.

Figure I: Trends of HCT Coverage and HIV Prevalence



Source: STAR-E database

As indicated in Figure I, there has been a steady increase in the number of individuals reached with HCT services across all four quarters of PY 4. The enablers of this performance were availability of HIV testing kits in all testing points throughout the quarter (no reported stock-outs), continuous mentorship and supervision of HCT from the trained district staff, promotion of PICT up to level II health facilities, more community mobilization through radio, use of people living with AIDS (PHA) networks to mobilize more couples at family levels, use of peer educators to mobilize MARPs for HCT, monthly review meetings at facilities that discuss and generate solutions to bottlenecks in services delivery, and HCT campaigns during the Young Child Clinics (YCCs). During PY 4, the project had planned to extend HCT services to an additional 100 sites. This process has been slow, and only 22 additional sites have been reached.

Challenges in HCT services delivery

1. Performance-based grants would motivate community volunteers to enhance door-to-door mobilization targeting couples, but they have not been renewed.
2. Most districts that receive funds from SDS for HCT outreaches received the funds late.
3. The planned training of 60 PICT trainers of trainers (TOTs) did not take place due to budgetary constraints.

Activities for next quarter PY 5

- Train/mentor 280 health workers in PICT to support scale-up of Option B+ rollout.
- Conduct mentorship and supportive supervision visits through district-based teams targeting 241 facilities to enhance services integration.
- Engage civil society organizations and other partners to reach out to couples, MARPs, and hard-to-reach communities.
- Work closely with religious leaders and institutions, PHA networks, peer educators, and volunteers to sensitize and mobilize communities to increase uptake of HCT.
- Run and support HCT targeted at tertiary institutions to link youth to VMMC services.

- Support three districts to conduct HCT outreaches at busy spots, such as market days, to commemorate world events days (e.g., World AIDS Day, World Water Day, and Day of the African Child).
- Procure buffer stocks of testing kits and consumables to back up supplies from National Medical Stores (NMS).
- Support meetings at health facilities to ensure that targets and quality are being maintained.
- Support external quality assurance chain between Uganda Virus Research Institute (UVRI) and health facilities.
- Further details on HCT performance across districts are presented in Appendix I.

1.2 Increasing Uptake of Prevention of Mother-to-Child Transmission Services

Throughout PY 4, the project PMTCT objective has been to reduce mother-to-child transmission (MTCT) through the four prongs, which include: (1) primary prevention of HIV in the general population; (2) prevention of unwanted pregnancy in HIV-infected women; (3) prevention of vertical transmission through antiretroviral (ARV) prophylaxis and safe infant feeding practices; and (4) provision of care, treatment, and support to HIV-positive women and lactating mothers.

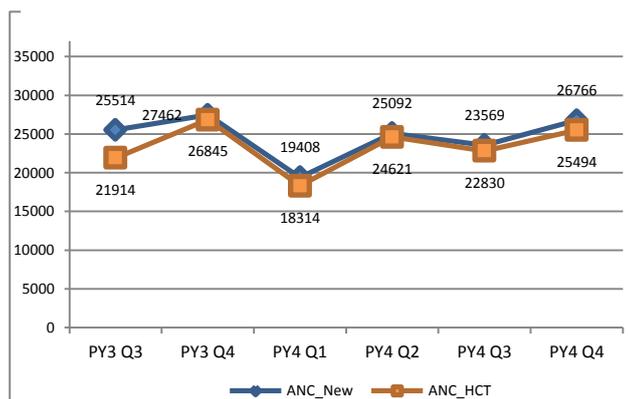
The project PY 4 target was to have 241 PMTCT service outlets across the 12 districts in order to increase access and be able to reach 116,700 new ANC (antenatal care) mothers. The hospitals, HC IVs, and HC IIIs provide comprehensive PMTCT packages, while some HC IIs provide part of the PMTCT package. HCT in antenatal care settings was expected to identify 7,101 HIV-positive mothers, with 100% of them supported to access prophylactic ARVs and when eligible, antiretroviral therapy (ART). The project targeted to build capacity of health workers in supported sites through regular scheduled mentorships and supportive supervision. Other activities such as integration of family planning services into postnatal care and ART services, couple counseling, risk reduction counseling, retesting HIV negative women during labor and postnatal periods were supported to proactively identify positive mothers at any interaction with the health care system in the region.

Efforts to ensure retention of mother-baby pairs were made to strengthen the support environments around them through the rollout of Family Support Groups (FSGs). The project targeted to work with 10 CSOs that work with VHTs to mobilize communities to ensure that all pregnant women attend ANC early enough and test together with their husbands.

Project performance on HCT and PMTCT targets in PY 4

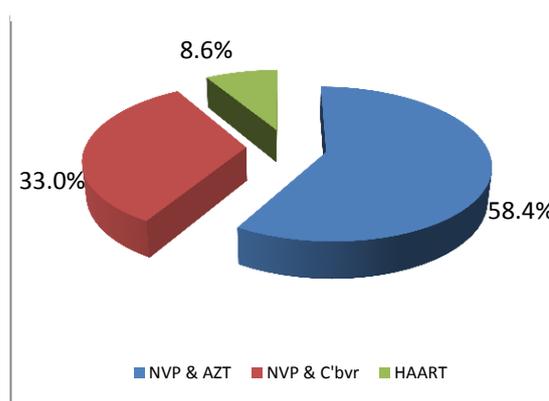
The project has managed to reach 91,259 new mothers with HCT services, which is 78.2% of the annual target of 114,949. The number of pregnant mothers who tested positive was 3,361, which contributes a percentage of 54.4% of the target, placing the annual prevalence among pregnant women at 4.2%. The Uganda AIDS Indicator Survey 2011 findings placed the regional prevalence at 4.1%. This proportion could have been a more realistic target for the year. Of the positives, 1,293 mothers came in already knowing their positive status, a proportion of 33.4%. The number of women placed on Option A PMTCT interventions was 3,684, or 95.2% of the HIV-positive women. This number includes the mothers who are captured in labor and given AZT+3TC. Deliveries by HIV-positive mothers were 1,161 out of the total of 37,947 deliveries, a prevalence of 3.1% of all deliveries. The number of exposed infants who were given nevirapine (NVP) at birth to reduce mother-to-child transmission of HIV was 981 out of the recorded 1,161 deliveries, or 84.4% of deliveries. STAR-E is working with the facilities and districts to continuously improve on the quality of data reported

Figure 3: Trends of HIV Counseling and Testing in Antenatal Care by Quarter



Source: STAR-E database

Figure 2: Prophylactic Antiretroviral



Regional and national level achievements

1. STAR-E sponsored the national stakeholders meeting of District Health Officers (DHOs), IPs, and development partners in Kampala, for Option B+ PMTCT roll-out planning process.
2. The project supported 9 district staff members' participation in the PMTCT TOTs for clinical mentoring, PMTCT monitoring and evaluation (M&E) tools, and data quality assurance by MOH
3. STAR-E participated in MOH development and reviews of PMTCT community strategy, focusing on male involvement, Family Support Group national guidelines/facilitator's manual, and the Option B+ Country Operation Plan.
4. The project met with the Uganda Private Midwives Association on collaborative efforts to close knowledge gaps in the private sector and ensure all pregnant women in ANC are provided PMTCT-EID care services.

Programmatic achievements



Integrated mentorship during the ART clinic in Pallisa Hospital

Didactic and onsite capacity-building:

1. The project trained 38 health workers as top-up training in Option A PMTCT to address the gaps created by staff turnover and transfers.
2. The project conducted integrated PMTCT-EID mentorships to 141 sites in Q1 and Q2 to enable onsite skills transfer, which later began to roll out to poorly performing sites to ensure quality PMTCT implementation throughout the region. The standard MOH mentorship guide covered aspects of family planning integration, Option A, EID M&E. Because of the policy

shift toward Option B+, the project slowed down on its bid to extend PMTCT services to a total of 141 sites. This will be pursued in PY 5.

Community PMTCT and psychosocial support: The project piloted formation of Family Support groups in 12 sites, with current enrollment at 10–50 mothers for PMTCT groups and 50–400 clients for the general ART care. This model was piloted to address the psychosocial challenges faced by mothers and the ART clinic clients. It provided a way of helping the project to interact directly with its beneficiaries and to reduce on the loss to follow-up of mother-baby pairs and other clients. So far this has registered great success.

Challenges faced during implementation

1. **Access barriers:** Delayed scaled up of PMTCT services to 100 HC IIs due to policy shift to Option B+.
2. **Weak demand creations** for ANC/PMTCT services due to delayed renewal of PBFs.

3. **Slow Family Planning** uptake among HIV-positive (at 33.4% of new ANC mothers already knowing their positive HIV status) and 30% HIV+ve deliveries. There is need to study the influencing factors.
4. **Changing implementation framework** such as shifts from Option A to Option B+, reduced HIV prevalence at 4.1% (2011 Uganda National AIDS Indicator Survey), launch of community PMTCT initiatives like the Family Support Groups for mothers and a male involvement strategy. The project had to re-think its PY 4 targets.
5. **Male involvement** in PMTCT was still low, though some progress has been made in couple counseling through our sub-grantees AIC.
6. **PMTCT reporting** from the facilities and feed back to the districts was noted to be challenging. This is to be addressed in project year five for timely report submission and data utilization to assist programming.
7. **Loss to follow-up of mother baby pairs** was noted to be high, with most mothers not coming back after the first visit which could be a result of poor counseling messages by health workers.



Strategy for PY 5

The project goal for PY 5 is to contribute to the virtual elimination of MTCT through a fully functional four-pronged approach. Planned activities include:

1. Roll out of FSGs to all the supported sites,
2. Help to ready the sites for accreditation for Option B+,
3. Joint target setting, ensure proper documentation, timely data collection and reporting.
4. Mixed methods training to ensure 100 percent Option B+ roll-out and,
5. EID functional care points, zero facilities with stock-out of PMTCT commodities,
6. Integration of FP services at all ANC/PNC/ART sites,
7. Effective linkages and referrals from lower-level units for HIV-exposed infants and HIV-positive mothers.

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

Throughout the year, community-based volunteers (CBVs), including religious leaders, continued to sensitize community members on HIV and TB prevention approaches, with a strong focus on risky behaviors and practices such as domestic violence, multiple concurrent sexual partners, early marriages, and harmful traditional practices like those associated with traditional circumcision. They promoted combination prevention approaches such as VMMC, HCT, risk reduction behaviors, condom use and PMTCT in order to reduce new infections. The sensitization sessions were integrated in various religious and other community functions such as pre-wedding and wedding ceremonies, church confirmation classes, burial ceremonies, home visits, and community meetings. The home visiting strategy resulted into more men being reached.

In addition, religious leaders conducted pastoral visits to the sick in their homes and also in health facilities, and during the process they prayed for them, counseled them, and encouraged them to ensure good nutrition, and



Left: A CBV sensitizing a couple in Butallejja District. Right: Live testimony by a discordant couple.

proper hygiene as well as drug adherence for those on HIV treatment. In some cases, they provided the sick with material support in form of food, sugar, soap, etc. This created happiness and helped to restore hope among many clients.

As part of the HIV prevention sessions and in a bid to fight stigma and discrimination, religious leaders and other



Left: Akello Gemma Frances, a spiritual leader, interacts with clients at Pallisa Hospital.
Right: Rev. Christopher Wataka interacts with clients at Busiu HC IV, Mbale District.



CBVs involved HIV-positive individuals and couples in discordant relationships to share their testimonies on positive living. They carried out effective referrals for different services and strongly promoted male involvement in antenatal clinic (ANC). Regular routine monitoring and supportive supervision were done.

Parent-to-child communication skills for HIV prevention

The volunteer trainers of parent-to-child communication skills continued to sensitize and train parents on positive parenting. This was done in homes, schools, and places of worship with a purpose of impressing upon parents the dangers of marrying off their children at an early age and the advantages of supporting their children to study.

Reports from teachers' representatives among the parent-to-child communication trainers, namely Silver Kuku and Ben Wanambwa of Butebo and Bushiika sub-counties, respectively, indicate that there is a reduction in the number of early pregnancies and school dropouts among the girl pupils. The demand for training in parent-to-child communication skills is quite high in the community.



Margaret Katongole, sensitizing parents in Nakaloke, Mbale district

Performance review meetings at community level

The STAR-E team conducted joint quarterly performance review meetings targeting religious leaders, trainers of parent-to-child communication trainers, and PHAs. Members shared experiences, achievements, challenges, etc., and during the process, they learned from each other. The STAR-E team used review meetings as an opportunity to further build capacity of community volunteers to address identified performance gaps. The team also provided important information, for example HCT outreach schedules and SMC schedules, which guided volunteers in their community mobilization efforts. In addition, relevant IEC materials were distributed during the meetings.



Left: The IIC Iki-Iki HC III in Budaka District of TA to CBVs during a review meeting. Right: Rev. Gilbert Mudiru, distributes IEC material during a review meeting at St. Luke Church, Sironko.

Lessons learned

- Providing spiritual support to the sick helps to give them courage to face the future with greater confidence and hope.
- Positive parenting helps children to realize their self worth and to be focused in life; it also promotes joy, happiness, peace, and harmony in the family.
- Capacity-building motivates people and boosts their confidence.
- Use of visual aids enhances the learning process.

Challenges

- Maintaining a spirit of voluntarism among community-based volunteers continued to be a great challenge, and this had a direct bearing on the attainment of project set targets.
- The situation was further affected by not funding the CSOS under the PBF mechanism.

Promoting risk reduction among MARPS

The project continued to work with commercial sex workers (CSWs), truck drivers, fisher folks, and prisoners. The CSWs are located in the districts of Busia, Mbale, Sironko, Kapchorwa, and Bukwo. The truckers are in Mbale and Busia Districts; the fisher folks are in Busia, along the shores of Lake Victoria, and in Pallisa, along the shores of Lake Kioga. We worked in two landing sites in Busia—Majanji and Nalyoba—and three in Pallisa—Darajja, Opeta, and Kasodo. STAR-E trained Peer Educators, and they continue to reach out to the MARPs with messages of HIV/TB prevention. They carry out condom use demonstrations, distribute condoms, and make referrals for HCT, SMC, sexually transmitted infection (STI) check-ups, and other HIV/TB-related services. Altogether, there are 150 Peer Educators among the fisher folks, and 180 among the CSWs. STAR-E also collaborates with CSOs such as the Amalgamated Transport and General Workers Union (ATGWU) to support MARPs prevention activities.

In response to the identified performance gaps, STAR-E conducted refresher trainings for all the Peer Educators among the fisher folks and CSWs. Use of combination prevention approaches was emphasized and PMTCT and SMC were given due prominence during the training.

During the PY 4, 7,050 CSWs were reached by Peer Educators and their partners with HIV/STI prevention messages in the districts of Busia, Bukwo, Sironko, and Mbale. In Busia, Mbale, and Bukwo, most of the CSWs' sex partners are truck drivers. Gradually, some CSWs in Bukwo/Kapchorwa ceased CSW activities and either resorted to getting married or embarked on alternative ways of generating income, such as selling second-hand clothes.

Truckers are targeted mostly in Busia and Mbale, their stopover points while in transit. We continued to reach truckers with a combination prevention approach addressing HCT, condom use, VMMC, STI prevention, etc. A total of 5,997 truckers were reached during the year, and they received condoms and poster, fliers, and counseling flip charts to truckers through their administration offices. A total of 22,243 fisher folks and their sexual partners and 1,976 prisoners were reached in PY 4 with combination prevention. Prisoners are predominantly in Mutufu and Maluku Regional Prison in Sironko and Mbale districts, respectively.

Challenges

- Follow-up of most MARPs is very difficult because they do not have permanent locations; they are mobile.
- CSWs are stigmatized because of the nature of their work, and they are not free to reveal their true identities, which makes it difficult for social workers to help them. On the other hand, some health workers themselves stigmatize and discriminate against sex workers.

Promotion of HIV prevention through prevention with positives intervention

Prevention with Positive interventions were mainly promoted through an integrative approach. Our focus in PY 4 has been on combination prevention for all PLHIV, but especially for HIV sero-discordant couples. Prevention with

positives aims at reducing new infections, maintaining well-being, delaying disease progression, and reducing the vulnerability of PLHIV to different infections.

A minimum package of PwP services was offered at the health facility level through health workers and volunteers running the HIV clinics. Community PwP was extended through PLHIV Peer Educators, who acted as role model couples and case managers. Between Q1 and Q4, a total of 32,895 (M=10,879, F=22,016) were reached with PwP services at the facility level, while in the community, a total of 29,988 (M=12,803, F=17,185) PLHIV were reached with different PwP services. In Q4 alone, 17,466 (M=7,178, F=10,288) PLHIV were reached with services of PwP at the community level. The figures include both the old and new cohorts who have ever been reached with the minimum package of PwP at different points in time, either in groups or on an individual basis.



Case manager at Nabiganda HC III gives a health talk to clients on positive living on a clinic day

Key topical issues addressed were

1. **Testing, disclosure**, discordance and the importance of care and treatment. The messages are given during clinic days and followed up on in the community by the case managers and PLHIV volunteers.
2. **Promoting healthy behaviors among PLHIV clients**
3. **Preventing opportunistic infections for PLHIV** through health promotion, sanitation, referrals, and daily intake of cotrimoxazole. PACE, supported clients in some ART sites with home care kits. In Kibuku HC IV, 600 home care kits were provided to PLHIV to promote positive prevention.
4. **Nutritional education and counseling for PLHIV** which involved counseling and educating clients on the nutritional requirements of PLHIV and their importance. Expert clients previously trained in food security by local organizations educated their peers on ways of achieving food security and addressing common nutritional problems. Food demonstrations were held in hospitals and HC IVs serving as OTCs (Outpatient Therapeutic Centers) to teach mothers and caregivers of malnourished children living with HIV how to prepare a nutritious meal for children using locally available foods. Nutritionists trained by STAR-E at Mwana Mugimu conducted the food demonstrations, and supervision was done by clinical mentors.
5. **HIV treatment and ARV adherence with emphasis** on adherence, managing side effects of ARVs and septrin, and having treatment buddies. Monthly treatment support meetings at major ART sites and quarterly meetings in pre-ART sites were held to support treatment adherence and reduce loss to follow-up. During the reporting period, all 141 health centers were supported to carry out at least one treatment support meeting per quarter. Partners in both discordant and concordant positive relationships were appropriately counseled and assisted to make a care plan. Routinely, discordant couples were retested to determine sero-conversion and to help them access proper counseling and care.



Mentoring on VIA procedure



Mentoring health workers on screening for CaCx and STIs

6. **Sexual and reproductive health counseling and education for PLHIV:** Both male and female condoms were made available in 141 sites, and PLHIV were freely availed the condoms of their choice and educated on how to use them. During this project year, 32,000 clients were able to access the condoms, and a total of 420,000 pieces of male condoms were given out to PLHIVs alone. Counseling for STIs and FP during clinic days as well as during cervical cancer screening was done. Reproductive health partners such as Marie Stopes provided long-term methods such as tubal ligation free of charge on a programmed basis to those who needed them. This helped to meet family planning needs among PLHIV.

At the beginning of the project year, we facilitated the training of 32 health workers in cervical cancer screening using the Visual Inspection with Acetic Acid (VIA) procedure. Four of these trainees were clinical mentors from the project. We supported six hospitals and nine HC IVs with consumables for CaCx screening. To ensure quality, we facilitated senior midwives from Mbale Regional Referral Hospital (MRRH) to conduct supportive supervision and mentorship of the trainees at all the screening sites. During PY 4



(Left) Director Technical guiding health workers on CaCx. (Right) A midwife from MRRH mentoring a clinician on CaCx screening at Pallisa Hospital

2,780 women were screened for cervical cancer and had a breast examination; 60 women were referred for cryotherapy at MRRH and 220 were diagnosed with and treated for different STIs with their sexual partners. Two STAR-E-supported districts are currently participating in the national HPV vaccination program.

7. Meaningful involvement of people living with HIV/AIDS

STAR-E continued to work with and support PLHIV in the provision of HIV/TB prevention, treatment, care and support services across the districts. A number of PLHIV have been trained in palliative care under the STAR-E-Hospice Africa Uganda partnership, and they played a great role in providing care to fellow PLHIVs who needed it both in their communities and in the health centers where they are based. The 46 case managers continued to play leadership roles and provided support to other PLHIV in the community, working alongside other peer educators to provide education and counseling on positive living, as well as demonstrating and distributing condoms. In places like Pallisa and Busia, they worked hand in hand with MARPs and were generally involved in sensitizing and referring communities for SMC, cervical cancer screening, TB, eMTCT, and HCT services.

8. **Gender and people living with HIV:** STAR-E continued to promote the provision of comprehensive sexuality education for all women, men, girls, and boys both in and out of school. This included giving them factual information on knowing one's body and human rights, and talking openly about harmful social norms and practices in a way that enables women and girls to decide whether, when, with whom, and how to have sex. This is happening through prevention programs like medical male circumcision, case managers' activities, and promotion of condom use to vulnerable women.

Condom information, education, communication, and distribution

The project initiated promotion of the female condom, along with the male condom, as part of comprehensive prevention interventions for PLHIV, the MARPs, and the general population. At the beginning of PY 4, STAR-E received a consignment of 80,000 pieces of the female condom, which were allocated to major ART sites, mainly hospitals, and among the MARPs—mainly CSWs, the truckers, and the fishing communities.

Over the reporting period, a total of 17,000 pieces of the female condom were distributed to approximately 120 CSWs, 100 truckers, 400 discordant couples, and 160 fisher folks. The major sources of the male condom were the



Gender & PHA advisor supporting a case manager to educate a client on the female condom in Pallisa Hospital during a supportive supervision exercise

Ministry of Health through National Medical Stores and Uganda Health Marketing Group, from which we secured 178,000 pieces of the male condom Q4. The peer educators among PLHIV, CSWs, truckers, youth, and fisher folks played a great role in manning and carrying out demonstrations in the community, with emphasis on correct and consistent use for efficacy. These sensitization sessions occurred even during SMC campaigns and operations, and condom use was still emphasized even for circumcised men for combination prevention. Even for PwP, both male and female condoms were provided to PLHIV, and HIV-negative men were urged to take up circumcision. Overall, in PY 4 we distributed 696,443 pieces of male condoms to different sectors of the community.

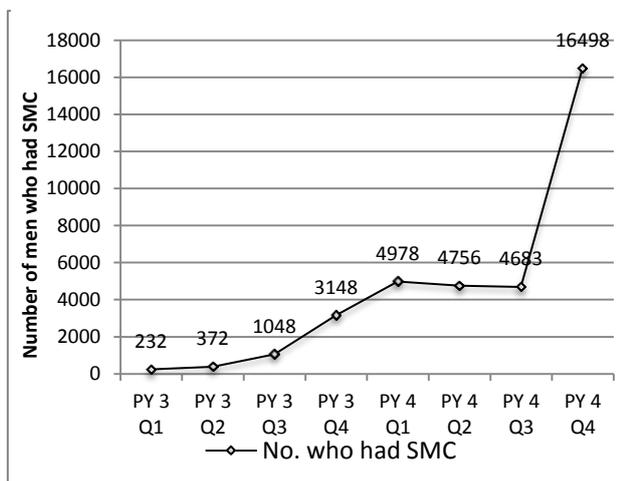
Voluntary medical male circumcision

Voluntary medical male circumcision (VMMC) services were supported in all 12 districts through demand creation, provision of supplies, and facilitation of district-based teams to deliver safe male circumcision services. STAR-E is supporting 22 sites in this region to offer VMMC. There are between two and three teams at each of these sites that have been trained to carry out the procedure. In PY 4 there was a gradual scale-up plan, with 30,915 males getting VMMC out of a set target of 70,000 (See Table 3). Part of the challenge was the slow scale up from Q1 to Q4 which involved getting more teams trained and procuring more supplies. Given the Q4 performance, we are optimistic we can achieve our PY 5 target.

Table 3: Safe Male Circumcision Achievement, PY 4

District	# Circumcised
Budaka	2,791
Bududa	456
Bukwo	118
Bulambuli	0
Busia	5,764
Butaleja	9,853
Kapchorwa	308
Kibuku	3,417
Kween	227
Mbale	2,761
Pallisa	4,980
Sironko	240
Total	30,915

Figure 4: Trends of Safe Male Circumcision Achievements



Overall, seven new teams were trained and community dialogue meetings were held in seven districts. Furthermore, the project procured and distributed essential inputs for VMMC. Mentorship through the regional hospital was supported and district review meetings were conducted. Social mobilization was done through radio, religious leaders, and community leaders. However, it was not possible to conduct surgical camps due to budgetary constraints.

Challenges facing the implementation of SMC

- High resistance to changing from traditional to medical circumcision in 7 of 12 districts.
- Health workers unable to work on a large number of clients because of other health care tasks.
- Intermittent shortages of essential supplies, especially of anesthetics (lignocaine and bupivacaine). Fortunately, USAID took up and centralized the procurement of these items.

Planned activities for the next quarter

- VMMC outreach in underserved areas and increase VMMC clinic days from one to five a week to.
- Work with SPEAR project to deliver VMMC services to prisons, primary teacher training colleges, and police.
- Intensify community mobilization in the traditionally circumcising areas during the *Imbalu* festivals.
- Support the regional referral hospital to conduct quality control activities.
- Quantify and procure the necessary commodities for VMMC.
- Recruit and train five dedicated SMC teams in the five non-traditionally circumcising districts of Busia, Butaleja, Budaka, Kibuku, and Pallisa. Each team will be trained to use the MOVE model and will conduct outreaches in locations not easily reached by the current facility teams.
- Negotiate performance agreements with 5 private sector facilities across the 12 districts for the provision of VMMC services. Some preliminary assessment of capacity within the sector was done during PY 4.
- Expand partnerships with other NGOs and IPs—beyond working together with the SPEAR project—in correctional facilities and schools, including subcontracting AIDS Information Centre to conduct SMC outreaches on a fortnightly basis.

1.7 Increasing Uptake of Pediatric HIV & AIDS Services

This year, the project's focus has mainly been on the following:

1. Training more health workers in pediatric HIV care and treatment
2. Strengthen the capacity of health workers to through coaching, mentorship, and technical support visits.
3. Integrating nutrition activities into our care package
4. Supporting health facilities to follow up HIV-exposed and -infected children

Addressing the pediatric health care red flags (indicators still lag behind the quarterly targets)

STAR-E trained a total of 70 health workers in the national curriculum of pediatric HIV care and treatment. They will coach other health workers who did not have an opportunity to be part of the training. The project also conducted a joint and integrated mentorship and supervision exercise as explained under PMTCT above.

Because of low postnatal care (PNC) attendance, missed opportunities for a DNA PCR test among HIV-exposed and -infected children were identified. These were mainly due to lack of PICT at the entry points, and hence the need for integration into the PNC, YCC, EID, and PITC services, initially in six health units. Upon confirming the effectiveness of the model, it was rolled out to all 141 health facilities. Through continuous coaching and mentorship, the referral of clients has been strengthened, more infants identified, and the number of HIV exposed infants receiving a DNA PCR is now above 50% of the set target.

In order to improve on the retention of the HIV-exposed and -infected infants, the use of appointment books was emphasized, especially at early infant diagnosis clinics, to help the health workers better organize themselves on clinic days. The health workers are able to tell how many clients they are expecting on any given day, can easily identify those who missed their appointments and initiate immediate follow-up, and also know to prepack the drugs for expected patients, thus reducing their waiting time.

Nutrition activities were integrated into the HIV/TB program this year. Meetings were held with the regional nutritionist to plan for this. An orientation meeting was held for the staff that the project trained in nutrition curriculum. These staff members were trained to train the health workers in all facilities up to HC IIIs in assessment

for and referral of a child with malnutrition. Fourteen additional Outpatient Therapeutic Centers were added and remain active; this makes a total of 44 OTCs.

The project also supported four district health staff and six STAR-E members to attend the 6th National HIV & AIDS Paediatric Conference in Kampala, Uganda. The pediatrics advisor made an oral presentation there, and also continued to represent the project at national-level meetings organized by the MOH and other stakeholders.

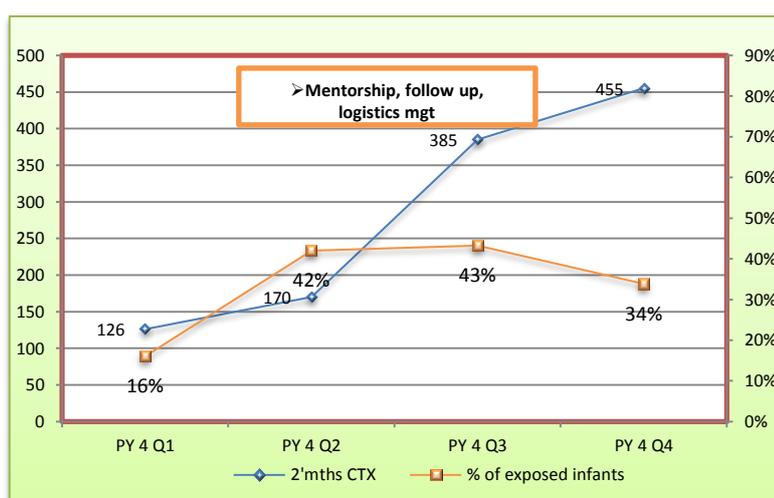
Table 4: Performance of Key Pediatrics Indicators for Infants below 18 Months

Indicator	PY 4 target	Achieved	Actual exposure in PY 4	% Achieved	Comment
Number of infants born to HIV-positive women who received an HIV test within 12 months of birth	3,802	1,774 (46.7%)	3,361	52.7%	Tremendous efforts to follow up majority of exposed infants through the established community linkages. However, many remain unreachable.
Number of exposed infants started on CTX prophylaxis within 2 months of birth	3,802	1,136 (30%)	3,361	33.8%	There is a tendency for mothers to present late for PNC and YCC.

Table 5: Pediatric HIV/AIDS Performance among Children above 18 Months and below 18 Years

Indicator	PY 4 target	Achieved	%	Comments
Number of children <18 years who tested for HIV using rapid tests	51,065	78,244	153%	A major breakthrough largely attributed to VMMC campaigns
Number of HIV-positive children <15 years newly enrolled on ART	371	301	81.2%	Proactive identification of exposed infants and initiation on ART

Figure 5: Trends of Exposed Infants Given CPT within 2 Months



Results: This year, 1,774 HIV-exposed infants had their first DNA PCR test done by 12 months of age, representing 46.7% of the annual target and 53% of all HIV-exposed infants identified during the reporting period. Of these, 155 tested positive, and all were linked to care and enrolled on ART. The total number of children in chronic care is 3,065, and of these, 615 children under 15 years are on ART, and 301 of those on ART were newly enrolled in PY 4.

Challenges

1. Follow-up of children who have missed their appointments remains a challenge, especially in border districts like Busia.
2. Now that we are due to roll out Option B+ PMTCT, there will be a great need for training in pediatric HIV care and treatment because a massive scale-up of pediatric HIV interventions is anticipated.
3. Intra-district staff attrition and transfers remain a challenge.

Planned activities for PY 5 Q1

1. Reproduce and supply all ART facilities with the ART initiation stickers and triplicate EID referral forms
2. Conduct the integrated PMTCT/EID/pediatric and adult HIV care and treatment trainings for all HC IIIs that have been accredited to offer Option B+ HAART
3. Continue to conduct coaching, mentorship, and technical support visits, especially for sites that are newly accredited to offer HAART
4. Follow up infants who miss their appointments. Initially, appointment books will be reproduced for all facilities for the EID care point, ART clinics, and the ANC for the HIV-positive mothers

1.8 Increasing Uptake of Care and Support Services

Chronic Care

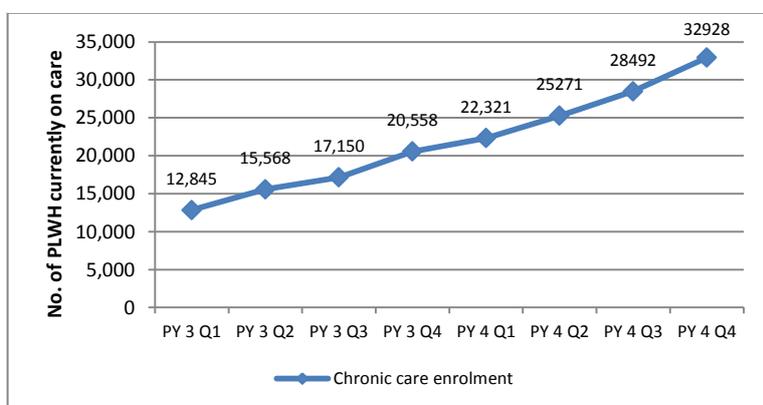
The project is currently supporting 141 facilities to roll out chronic care. The five hospitals and 16 HC IVs provide a full package because they have more resources in terms of trained staff and equipment. The lower facilities, including HC IIIs, have challenges of staffing and necessary equipment and are therefore able to provide only part of the full chronic care package.

PY 4 planned activities

1. Facilitating health facilities to hold monthly meeting to discuss case management challenges.
2. Facilitating health facilities and case managers to follow up patients lost to follow-up.
3. Facilitate transfer samples to where CD4 machines are located, and for hematology and bold chemistry.
4. Facilitating district HIV focal persons and STAR-E clinical mentors to conduct mentorship and continuing medical education (CME) sessions.
5. Establishing Family Support Groups to ensure improved client retention, counseling, and follow-up
6. Cascade palliative care training in all 141 health facilities through the mentorship model.

All these planned activities were attended to and attained, with the exception of training of staff that could not take place due to budgetary limitations.

Figure 6: Trends of Clients on Chronic Care



The project target for care and support for PY 4 was 31,584 unique individuals receiving at least one clinical service. Over the four quarters, a cumulative 32,989 unique individuals were reached with care services, surpassing the set target by 1,405 (4%). The package for chronic care supported across 141 health facilities was in accordance to MOH standard guidelines. In all 12 of the supported districts, cotrimoxazole is procured through NMS by regular orders placed by health facilities.

Challenges facing services for chronic care

- Knowledge gaps in counseling and managing complex opportunistic infections, and the challenges will be greater when Option B+ is rolled out.
- Providing a continuum of care requires good levels of staffing, but with staffing still at 45% of the establishment need and a caseload that has risen to 32,928, clinics are under-resourced and overcrowded.

Task-shifting through use of case managers has helped and improved triage, but often staff members fail to find adequate time to complete the registers, leading to a backlog. The option now being adopted is to ensure longer refill periods (four months) for stable patients and decentralizing refills for cotrimoxazole to lower levels.

- Infrastructure improvement has not matched need, therefore the working environments in some facilities—notably in Budadiri HC IV, Bududa Hospital, and Busia HC IV—is still poor.
- Competing program demands, such as the rapid scale-up of VMMC, put a strain on the available human resources. Plans are underway to use the private sector to complement the public sector on SMC.
- Blood chemistry and hematology test are still a challenge, and the client load is getting older and metabolic diseases are becoming increasingly common.
- Loss to follow-up is still a challenge and is being minimized through formed Family Support Groups and home visits by case managers; it is hoped that when the PBFs are finally renewed, volunteers will also assist in tracking patients.

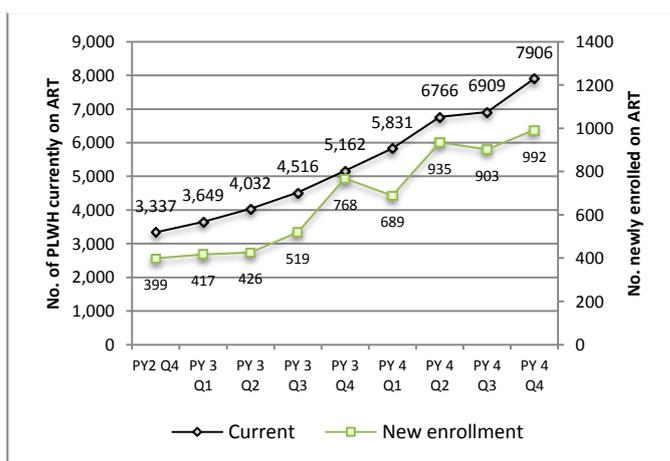
Planned activities for PY 5

1. Strengthen the I4I facilities to offer improved quality of care.
2. Deploy linkage facilitators in all the I4I supported health facilities.
3. Conduct one TOT for CSO technical advisors to ensure sustainability of community linkages.
4. Mentor health workers on palliative and terminal care and care for aging clients.
5. Establish more Family Support Groups at 129 health facilities.
6. Provide airtime to volunteers and service providers so they can track patients through SMS messages.
7. Support facilities for blood samples referral for blood chemistry, hematology, and CD4.
8. Where absolutely necessary, transport samples to JCRC for viral load and resistance testing.
9. In-services training in integrated management of adult illness (IMAI) and integrated management of pregnancy and childbirth (IMPAC) in preparation for transitioning from Option A to Option B+ PMTCT.

1.9 Increasing Uptake of Antiretroviral Services

Antiretroviral therapy has expanded over the years in Uganda, mainly with support from the US President's Emergency Plan for AIDS Relief (PEPFAR), the Global Fund, and the Clinton Foundation. Despite the multiple benefits, however, challenges do exist as the country rolls out ART to reach a larger number of eligible clients and all pregnant women. According to WHO 2012 report, an estimated 520,000 Ugandans living with HIV are in need of treatment, but only 202,800 (39%) among adults are on treatment, while of the 76,000 children below 15 years of age in need of ART, only 13,680 (18%) are being treated. Some of the challenges are related to weak health systems for delivery of ART, including insufficient skills and competency of health workers, infrastructure (physical and equipment), staffing gaps, poor ART monitoring and supervision models, and lack of funds for procurement of ARVs.

Figure 7: Number of Clients newly enrolled and Currently on Antiretroviral Therapy



Planned activities for PY 4

1. Have 24 district-based mentors given an orientation course in IMAI at Infectious Diseases Institute (IDI)
2. Accredit 108 HC IIIs to support implementation of Option B+
3. Conduct mentorship visits to support ART sites through district-based teams

4. Print, distribute, and disseminate a total of 180 (2011) Integrated HIV care MOH guidelines to facilities
5. Support reagents for Coulter Counter machines stationed at three hospitals
6. Conduct mentorship visits through district-based teams (clinical management, HIMS, and laboratory)
7. Support samples referrals for blood chemistry, hematology, viral load where they can be done within the region

In the 12 STAR-E districts, the PY 4 target for new enrollment on ART was 2,684. However, the current caseload has gone up to 7,906 and as of end of Q4 of PY4, 992 new clients were enrolled on ART, compared to 903 in Q3, as shown in Figure 7. Part of the reason for the accelerated enrollment is the improved skills among health workers and the availability of PIMA CD4 machines at 14 new sites, which helped the workers to make quicker decisions and reduced waiting time. Thirty-two ART centers are fully accredited by the MOH to provide ART services, with back-up lab services for blood chemistry and hematology at district hospitals. Clinical mentorship and supervision for better quality ART services has continued to be done regularly through STAR-E and district-based mentors. The bulk of ARVs come through the NMS/ACP and are buffered through the Joint Medical Stores (JMS)/USAID.

Challenges to Providing ART Services

1. Accreditation was delayed to be part of the general accreditation in the plans to roll out Option B+.
2. The cartridges for the PIMA machines are not readily available from NMS or from the open market. There are currently discussions within the MOH to have this resolved.
3. Blood chemistry and hematology can only be done at JCRC and it is hoped that some equipment to handle blood chemistry and hematology tests will be placed at district hospitals in PY 5.
4. The transition to Option B+ envisaged by the government will seriously strain the ART services and is likely to increase the caseload from the current 6,909 to more than 10,000 by next fiscal year. Plans are underway to have HC IIIs accredited to ease pressure that is expected at hospitals and HC IVs.

Planned activities for PY 5

- Give 24 district-based mentors an orientation course in IMAI at IDI
- Support volunteers at ART sites for meetings to improve on their provision PSS
- Accredite 108 new ART sites .
- Support health facilities to track those lost to follow-up and HWKs' motivation allowances.
- Conduct lab mentorship to improve on use of PIMA machines
- Use Family Support Groups as a platform for ongoing psychosocial support and support on adherence

1.10 Increasing Uptake of HIV and TB Services

The project support to TB and TB/HIV activities during the PY 4 was guided by the WHO STOP-TB strategy and our adapted TB Strategy, which spells out the following components:

1. Expand and consolidate high-quality DOTS services in all districts
2. Engage all care providers in TB care
3. Empower people with TB and the communities to participate in TB care
4. Expand and strengthen TB/HIV collaborative activities, address multidrug-resistant (MDR) TB and other challenges in special settings and populations
5. Contribute to the strengthening of health systems
6. Enable and promote operational research

During PY 4, efforts were geared toward consolidation institutionalization of intensified case finding (ICF), increasing and consolidating CB DOTS coverage, enhancing competencies of health workers to diagnose and treat

tuberculosis, and ensuring that diagnostic facilities are functional and perform satisfactorily, as measured on the EQA system of the National Tuberculosis and Leprosy Program, TB-HIV collaborative services,.

Consolidation of directly observed treatment (CB-DOTS)

In PY 4, STAR-E focused on supporting consolidation of high-quality DOTS services in all districts. A mix of facility and community DOTS was used. Building on the achievements of past years, the project provided technical and financial support aimed at ensuring the sub-county health workers (SCHWs)—the pivot of the CB-DOTS undertaking—receive their facilitation and that they play the role of community sensitization and contact tracing. In a few districts some of the sub-county health workers dropped out, and they were replaced.

The baseline proportion of TB patients on CB-DOTs was 50%, and as can be seen in Table 6, the trend of CB-DOTS coverage across the districts by quarter has been improving steadily to an average of 68%. The project provided facilitation to the SCHWs in the form of monthly transport and safari day allowance in the three new districts, namely Bulambuli, Kibuku, and Kween, while for the older districts the finances were remitted through SDS. Supervision is by health facility in-charges and district tuberculosis and leprosy supervisors (DTLS) in order to undertake their core functions.

Table 6: Proportion of TB Patients on DOT (Facility and/or Community DOTS), PY 4

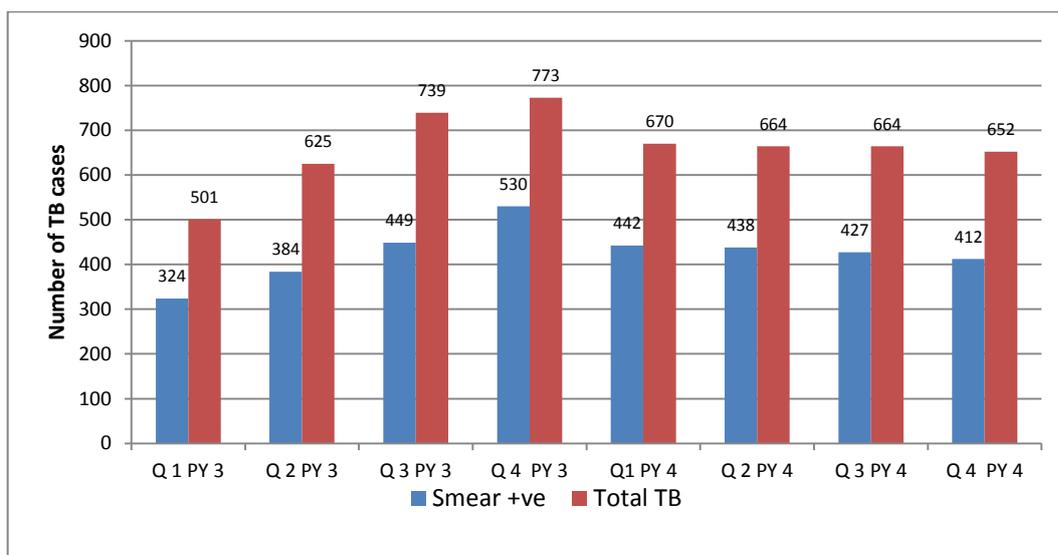
District	Proportion of TB patients on DOT (%)			
	Q1	Q2	Q3	Q4
Budaka	100.0	63.9	62.5	77.3
Bududa	3.0	42.9	78.4	57.4
Bukwo	100.0	100.0	100.0	100.0
Bulambuli	92.7	75.0	62.1	66.7
Busia	51.0	58.0	55.1	58.7
Butaleja	56.0	57.0	55.0	50.0
Kapchorwa	93.8	100.0	100.0	65.6
Kibuku	66.7	69.2	70.6	54.5
Kween	100.0	100.0	100.0	55.6
Mbale	55.5	49.8	59.3	79.2
Pallisa	100.0	100.0	84.8	85.7
Sironko	57.0	71.0	65.4	63.8
Total/ Average	67.0%	66.0%	67.2%	72.2%

Strengthening TB/HIV collaborative activities

During PY 4 all the 100 TB-supported diagnostic and treatment sites were able to provide HIV counseling and testing, although there were some challenges. The proportion of TB patients offered HCT and had their HIV test result recorded in the unit as well as the respective district TB register, averaged 99.5%, way above what was achieved in PY 3 (87%) with district ranges of 80.5 %–100%. It is nationally estimated that 50–60 percent of TB patients in Uganda are co-infected with HIV. Overall, TB-HIV co-infection rate in the STAR-E–supported districts stands at 36% as at end of PY 4. All these were initiated on ART.

The proportion of TB-HIV co-infected patients initiated on cotrimoxazole has been maintained above 95%. However, the coverage of antiretroviral treatment services remains low because of limited access.

Figure 8: Trends of Total TB Cases against Smear-Positive TB over 2 years



Addressing multidrug-resistant TB

In line with the national policy guidelines on multidrug-resistant TB (MDR-TB) surveillance, patients suspected to have MDR-TB had their sputum referred to the National TB Reference Laboratory for culture and sensitivity tests. During the reporting period, the project sourced 100 copies of the multidrug-resistant TB guidelines from the National Tuberculosis and Leprosy Program (NTLP) and disseminated to all DHOs and at least 20 of the 141 supported facilities during facility mentorships involving NTLP, STAR-E project staff and DTLS. A total of 290 health workers were reached with up-to-date information on the provisions in the guidelines.

Furthermore, STAR-E supported the revamping of the TB specimen referral system (TSRS) as part of the MDR surveillance. Carrier boxes and other consumables required were procured and distributed to the districts.



The TSRS coordinator at National TB Reference Lab hands over carrier boxes procured by STAR-E and specimen tubes for TSRS to the in-charge of Butebo HC IV, Pallisa district.

Tuberculosis case detection efficiency

For PY 4, the project aimed to increase the case detection rate from 44.7% at the end of PY 3 to an average of 65%. As seen in Table 7, the project area average CDR rose to 52%, but still short of the target. The SCHWs were supported to focus on contact tracing from an index case, increasing awareness at community

level on signs and signs of TB so that people voluntarily seek for TB screening services, cascading the use of ICF forms further to village levels and private-for-profit facilities so that screening for TB and referral is everywhere. In health facilities, all care points were oriented on use of ICF, all TB suspected cases were entered into health facility TB registers before clinical and lab attention, and triage for suspects was improved. All districts have district TB supervisors who help in reorganizing facilities and reemphasize use of ICF forms at health facilities. The project is supporting 100 TB diagnostic centers and 140 TB treatment centers across the 12 districts.

Table 7: Performance of the Supported Districts, Disaggregated by Quarter, PY 4

District	CASE DETECTION RATE (%)				
	PY 3 totals	PY 4			
		Q1	Q2	Q3	Q4
Budaka	49.5	56.0	54.0	48.0	37.3

Bududa	45.8	32.0	25.4	61.0	66.0	
Bukwo	25.0	45.8	16.7	50.0	25.0	
Bulambuli	60.0	79.0	44.0	41.8	18.8	Gene
Busia	64.0	68.5	73.9	62.0	54.4	rally,
Butaleja	35.4	26.4	40.3	20.8	26.5	we
Kapchorwa	29.8	86.5	64.9	43.2	59.5	obse
Kibuku	26.7	17.5	17.5	22.8	8.8	rve
Kween	16.6	15.2	9.1	18.2	27.3	that
Mbale	98.2	71.0	80.0	86.2	85.5	5 of
Pallisa	39.5	62.2	56.3	49.6	58.8	the
Sironko	46.4	61.5	62.8	55.1	47.4	12
Average PY 4 CDR = 52%	44.7	53.3	52.8	51.9	50.2	supp

orted districts—namely Bukwo, Bulambuli, Butaleja, Kibuku, and Kween—have had persistently low case detection rates because of challenges in lab staff manpower and equipment, and we shall plug these gaps in PY 5 through training of microscopists, supportive supervision, and placing more microscopes. Mbale district, which is home to the regional referral hospital, has maintained case detection above 80% through most of PY 4.

The observed improvement is due to supportive supervision and mentorship for health workers to increase index of suspicion for TB and use of the intensified case finding approaches/forms; increasing the number of functional diagnostic facilities; increasing community awareness about TB and its relationship with HIV through the CSOs and case managers; and revamping of the CB-DOTS strategy.

Treatment outcomes (treatment success rate): The average treatment success rate rose to 80.6%, short of the national target of 85% in PY 4. Pallisa, Kapchorwa, and Budaka districts performed consistently above the 85% mark.

Whole-site supportive supervision and mentoring: During the reporting period, the STAR-E team of clinical mentors and technical advisors worked together with the district staff (TB and ART supervisors) to provide facility team mentorship and CME training on intensified case finding, TB-HIV co-treatment and TB infection control.

One-day orientation trainings for district/facility staff members: The project also supported these trainings on the Uganda national guidelines for programmatic management of multidrug-resistant tuberculosis. Trainers drawn from the NTLF oriented a total of 290 health workers.

Priorities for PY 5

- Targeted whole-site mentorships and CME training to get more health workers oriented TB/HIV.
- Consolidation of Intensified use of Case Finding in the health facilities and communities.
- Increasing number of diagnostic facilities through training of microscopists.
- Advocating for recruitment of laboratory personnel by the districts.
- Lobbying for additional laboratory equipment from partners such as the Global Fund.
- Supportive supervision and mentorship for the facility staff members, targeting those already trained to operate the diagnostic units and those who are to be trained.

Regional and national support of the TB program

The DTLS, the DLFP, and the HIV focal person were supported to carry out integrated supportive supervision during which they assisted the health facilities staff with recording and reporting, and provided technical support to ensure availability of drugs and other commodities. The external quality assurance (EQA) system was also implemented as stipulated by the NTLF. All 100 supported diagnostic facilities participated and were declared satisfactory on the EQA system.

Eight zonal meetings for DTLS were supported in PY 4 because the STAR-E region encompasses districts spread across two zones, the South-East and Eastern zones. At each of these meetings, the DTLS validated their quarterly reports and reconciled follow-up information on transferred patients with the other district supervisors, sharing laboratory quality assurance results for the diagnostic units best practices in integration of TB/HIV services.

Advocacy, Communication, and Social mobilization (ACSM): Compared to 2011, when only two districts (Mbale and Sironko) commemorated World TB Day, in 2012 the number of districts commemorating the day increased to eight (Budaka, Bukwo, Butaleja, Busia, Kibuku, Mbale, Pallisa, and Sironko). The event served as an opportunity for the districts to raise awareness about TB in their communities. All leaders at the district level were involved in these functions and thereby increased advocacy for TB.



Deputy RDC Mbale officiated at the district function in Mbale.

Looming challenges to be tackled in PY 5

1. ICF forms are under utilized, registers are suspect in the facilities, and there is a lack of triaging as an infection control measure. The project will support mentorship and supportive supervision to address these challenges.
2. There are few diagnostic sites in Kween, Kibuku, and Bulambuli, implying long travel distances. The project will work with the MOH to establish an additional 40 diagnostic units.
3. Low case detection in Bukwo, Kween, and Kibuku require that the technical advisor for TB provide targeted support in collaboration with the respective zonal supervisors.
4. There is low community awareness about availability of diagnostic and treatment services, and the SCHWs will be encouraged to work concertedly with CSOs to raise community awareness.
5. To address high default rates in border districts of Bududa and Busia, the project will attempt to enhance follow-up mechanisms in these districts through the sub-county health workers to increase CB-DOTS coverage to >80%.

Planned activities for PY 5

1. Increase TB microscopy sites to 120
2. Train 40 health workers as microscopists
3. Continued technical support to all 141 health facilities to offer TB/HIV collaborative services and ensure 100% cotrimoxazole and ART initiation for HIV+ TB patients.
4. Improve TB CDR and TSR to 70% and 85%, respectively.

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

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

Background

STAR-E LQAS supports the application of Lot Quality Assurance Sampling methodology across the whole country among districts supported by USAID-DBTA funded projects. STAR-E LQAS supports the application of three LQAS processes: LQAS community surveys, facility assessment (FA) and service performance assessment and improvement (SPAI). The interaction of the three STAR-E LQAS-led processes strengthens the districts' and

facilities’ monitoring systems and data use while building the districts’ capacity to use up-to-date data for planning and monitoring service delivery.

Achievements in PY 4

The following information is structured according to the seven strategic objectives (SOs) enumerated in the work plan.

Strategic Objective 1: Provide management oversight and leadership to support the functioning of the IR2a component.

Planning and monitoring the implementation of IR2a component: Annual and quarterly planning and review meetings were held with participation of home office and LATH. The PY 5 plan and budget was submitted as required and on time. Weekly meetings were held as part of the internal monitoring process. Educational sessions (“clinics”) were organized as part of LPO staff continual improvement. The statutory quarterly reports were prepared and submitted on time. STAR-E LQAS was also reviewed internally by MSH’s Center for Health Services every quarter.

Technical Advisory Group Meetings: The LQAS Technical Advisory Group (LTAG) held all its statutory meetings and one special meeting in PY 4. Guidance was sought on a number of aspects, including preparation of the LQAS reports and products, mining the LQAS database, and comparing of LQAS and UDHS data.

Reviewed issues and recommendations from the information-sharing meeting A special meeting was held to discuss LQAS sustainability and establishment of a central coordination office for LQAS processes, beyond MSH funding period. The LTAG minutes showing action points and designated responsibilities and actions taken are circulated to members.

Strategic Objective 2: Develop LQAS institutionalization and coordination mechanism at the Central Level.

STAR-E LQAS continued to work with various partners, including: Civil Society Fund (CSF), STOP Malaria, SDS, STAR-EC, STAR-SW, STRIDES, SUNRISE and districts through SDS and district Focal Persons. Periodical coordination meetings involving all the participating IPs were held to streamline the support given to the districts for the three processes. There have been no developments on establishment of an institutional home for LQAS. It is hoped that concrete decisions will be made by the end of PY 5.

Meetings were held with officials and program managers of central government ministries—Ministry of Local Government (MoLG), Ministry of Gender, Labour and Social Development (MGLSD), and MOH—to seek guidance on implementation, review tools, and guidelines. STAR-E LQAS participated in the revision of MGLSD orphans and vulnerable children M&E framework, leading to adoption of LQAS as a method to track some of their core indicators.

Strategic Objective 3: Build capacity in LQAS support at national and district levels

This SO involves training National LQAS Facilitators (NLFs) to have more competent people available to support LQAS application and data use at the district level and to develop materials and tools to support LQAS training at the district level. STAR-E LQAS reviewed the training materials, tools, and guidelines resulting from the experiences and lessons from the PY 3 and CSF surveys held in January and February 2012 in consultation with LATH, ministries, and IPs. All the tools are available on the LQAS website (www.starelqas.ug/). They are as follows:

Table 8: Materials produced and reviewed under STAR-E LQAS guidance

<u>Training materials:</u>	<u>Guidelines</u>
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<ul style="list-style-type: none"> • LQAS in Community-Based Surveys in Uganda – A Trainers Guide • LQAS in Community-Based Surveys in Uganda – A Participants Manual • Quality Assurance Guidelines for LQAS Application <p><u>Data collection and management tools</u></p> <ul style="list-style-type: none"> • 2012 LQAS survey generic questionnaires covering seven service areas, with modifications in indicator definitions and additional categories to be surveyed • Hand tabulation tables • Summary tables • Facility assessment 	<ul style="list-style-type: none"> • LQAS survey data collection reliability guideline • Revised SPAI process guideline and facilitator notes • Data transfer guidelines • NLF selection criteria and training guidelines • District sensitization guidelines • Detailed Implementation Plan template, to guide IP preparation for district surveys • SA demarcation and selection guidelines and selection of district teams • LQAS coordination guidelines
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Promote and Support Institutional Training of LQAS

Makerere School of Public Health (MAKSPH) is in the third year since the teaching of LQAS was introduced in the curricula. In PY 4, 119 students who attended the various courses at the school were exposed to LQAS. Students taught LQAS methodology at MAKSPH in academic year 2012–13 included full-time MPH (25), MPH Distance Education (60), MHSR (16), MPH Nutrition (21), CDC/Fellows (34), and Bachelor’s in Environmental Health (59)

STAR-E LQAS hosted a Fellow from the MAKSPH-CDC HIV/AIDS Fellowship Program who completed his two-year attachment at the end of March 2012. The Fellow completed a programmatic project of developing *Standard Operational Procedures (SOPs) for Application of LQAS at the District Level*.

Support Training of National LQAS Facilitators (NLFs)

STAR-E LQAS completed training the third batch of 25 district-nominated NLFs (Table 8). To date, 73 NLFs trained NLFs are now available to support the district surveys. The distribution of the trained NLFs is as follows: Bio Statisticians (9); CDO (4); DEO (1); DHO, including clinical officers (5) Personnel Officer (1) Planning Unit, including Statisticians and Population Officers (5).

28 districts without a NLF include 3 in STAR-E, 3 in CSF; 9 in SUNRISE; 5 in STRIDES; 5 in SMP; 8 in STAR-EC, and 5 in STAR-SW.



LPO staff supervising NLFs during training

Table 9: Summary of NLFs in the Three Phases of Training

Category	GP1	GP2	GP3
<i>Total</i>	25	23	25
Ministries	3	0	
NGO	3	4	
District	15	13	25
Private	4	6	0
Male	5	9	17
Female	20	14	8

Strategic Objective 4: Promote application of LQAS methodology in the local governments

The SO focuses on promoting LQAS application among IPs (STARs, CSF, SMP, SUNRISE, and STRIDES) and districts, with the expected result of increased number of districts repeatedly undertaking LQAS surveys and using the results.

STAR-E LQAS revised the 2012 LQAS survey questionnaires to include revised malaria indicators and one additional target group: mothers of children 24–59 months. This was done in consultation with the program managers in MOH, indicator TWG, SMP, and CSF. Although the questionnaires are in English, key terms and phrases are translated into different local languages where the surveys take place. To date, more than 20 different local languages translations have been made.

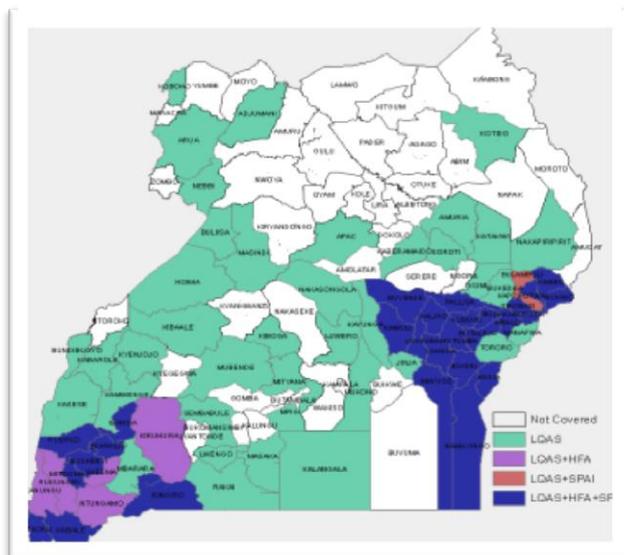
A data collector during an interview in Kiboga District



In PY 4, 73 districts under the seven IPs were supported to undertake surveys covering seven targeted groups: youth (15–24 years), women (15–49 years), men (15–54 years), OVC (5–17 years), mothers of children (0–11 months), mothers of children (12–23 months), and mothers of children (24–59 months). STAR-E covered PHAs (15–55 years) as well. The process started with training IP and district staff, followed by data collection, hand tabulated the data, interpretation of the results, and reports which

were presented to senior district officials. The participants are largely drawn from the DHO, CDO, education, and works departments.

Map 2: Districts Supported for LQAS Community Surveys in 2012



Experiences and lessons from the 2012 surveys

- With LQAS funding through SDS to date at least 35 have undertaken the districts’ three-week community surveys with minimal support.
- Selection of district LQAS focal persons to manage the LQAS activities, to ensure success of the exercises in the district.
- Presence of district-based NLFs, to supervise and support the survey process in their respective districts is also commendable.
- Participants in the repeat LQAS surveys have continued to show improved interview and tabulation, required less supervision, and demonstrated better understanding of the survey requirements.

These experiences are examples of achievements toward institutionalization and sustainability of LQAS process at the district level.

However, there are still some challenges:

- Many SDS-funded districts still have challenges adhering to schedules for their data collection due to late release of funds and requisitions by the focal point persons. The delays created uncertainty among district participants.
- In spite of the intensified sensitization, there is still lack of total commitment by the districts’ leadership to support and supervise the district data collection teams

- The new districts have staffing challenges. They tend to send very low cadre staff. There have been requests of training in the local languages. The capacity of such district persons presents a challenge of completing the data collection in five days. The strategy is to have intensified trainings in these districts.
- Some district teams continue to complain about the size of the questionnaire. It takes 6–7 days to complete the data collection exercise.

In spite of the challenges, the progress is commendable. STAR-E LQAS responds to these challenges during the coordination meetings with IPs and agrees on responsibilities and schedules. STAR-E LQAS has also taken on more involvement in sensitizing and supervision of the districts processes, especially in districts applying LQAS for the first time.

Strategic Objective 5: Mobilize partners in the application and use of LQAS

This SO focuses on mobilizing partners to support LQAS awareness and for use of LQAS data. The expected result is increased commitment and involvement among partners, institutions, and districts in use of LQAS at national and district levels.

Develop and implement a strategy to advocate and mobilize IPs for LQAS application

In PY 4, STAR-E LQAS made tremendous progress and implemented a number of activities, mainly focusing on fostering awareness and promoting use of LQAS data at the district level.

- Completion of the communication and advocacy strategy.
- Continued popularization of the three LQAS processes (LQAS, FA, SPAI) through an Information kit, entitled “Know more about LQAS,” targeting policy makers and other national-level stakeholders. Other promotional materials such as posters and fliers were produced and placed on the LQAS website.
- A document titled “LQAS Institutionalizing in Uganda, May 2009–December 2012” highlighting the achievements and successes of the work of STAR-E LQAS was prepared as part of documentation for an information-sharing meeting (ISM). The document is available on the LQAS website (www.starelqas.ug/).

Other materials produced and shared during the ISM include, press release about LQAS, pull-up banners to communicate LQAS, FA, and SPAI processes, fliers (simplified LQAS), posters to communicate LQAS methodology and district summaries, electronic map displays, and success stories.

All these efforts have led to LQAS increasingly becoming recognized as a major source of data and information to support planning and decision making for resources.

Various stakeholders’ meetings were held to promote LQAS methodology. These include briefing to MoLG permanent secretary and commissioners, CAOs, and town clerks of municipalities on use of the results in April 2012 during their quarterly review meetings, and director general of Ministry of Health as part of publicizing and planning the ISM, in March 2012. Others included Marie Stopes, ministries, and national agencies (MGLSD, UBOS), UCU, UMU, UMI, and districts.

Organize and convene a National LQAS Conference to share monitoring and evaluation methods, experience and results.

STAR-E LQAS organized a national information sharing meeting in March 2012 under the theme “Using LQAS data for identifying service performance gaps and taking action at national and district level.” The main objective of the meeting was to share the results of the LQAS community surveys, facility assessments, and SPAI, and to share experiences, lessons, and good practices gained by the districts in the course of undertaking the surveys and assessments. The presentations from districts, ministries, IPs, and training institutions on the LQAS methodology, processes, and results provided understanding of the LQAS methodology and how the results have been used by

the districts and other partners to improve their services' performance. The meeting brought out pertinent issues needing attention at various levels. The meeting report was compiled and shared with all participants and key stakeholders.

Post-ISM activities as part of responding to the issues and recommendations, so far implemented, include:

1. An advocacy plan has been developed to create targeted demand for LQAS, followed by a meeting with MoLG and MGLSD to discuss LQAS integration.
2. Two success stories were developed from the ISM entitled "Demystifying LQAS to promote ownership and sustainability" and "Integrate LQAS in existing systems, ISM participants recommend." These have been shared with USAID, partners, and within a MSH forum.

Dissemination of LQAS results

The following dissemination efforts were carried out:

1. Launched a quarterly newsletter; to date two issues have been produced
2. Seven success stories highlighting remarkable progress made by districts in the uptake of the methodology
3. District dissemination of the preliminary survey results from the 2012 surveys, held immediately after the survey exercises, provide preliminary results of the surveys and gaps noted from the results
4. One poster presentation at the 19th International HIV & AIDS conference in Washington, D.C. in July 2012 and three posters presented at the National Pediatric AIDS Conference held in September 2012.
5. Launch of the STAR-E LQAS website (<http://www.starelqas.ug>), in March 2012.

Strategic Objective 6: Establish and manage an information system for LQAS

This strategic objective focuses on establishing an LQAS information system. Key activities include development of mechanisms for assembling and managing the LQAS database and production of results from the database. The LQAS database is now established to track the core set of LQAS indicators in the areas of HIV, AIDS, TB, FP, education, child survival, malaria, OVC, and education for time trends and geographical patterns. The database has already received 67 district data sets from the 2012 surveys and also contains data sets of previous applications, and it is also used to prepare district-specific survey reports that are sent to IPs to help districts prepare the narrative.

STAR-E LQAS reported to USAID the DO3 indicators tracked by LQAS community surveys in September 2012. The following table and figure show that STAR-E LQAS surveys contribute useful and up-to-date information on services.

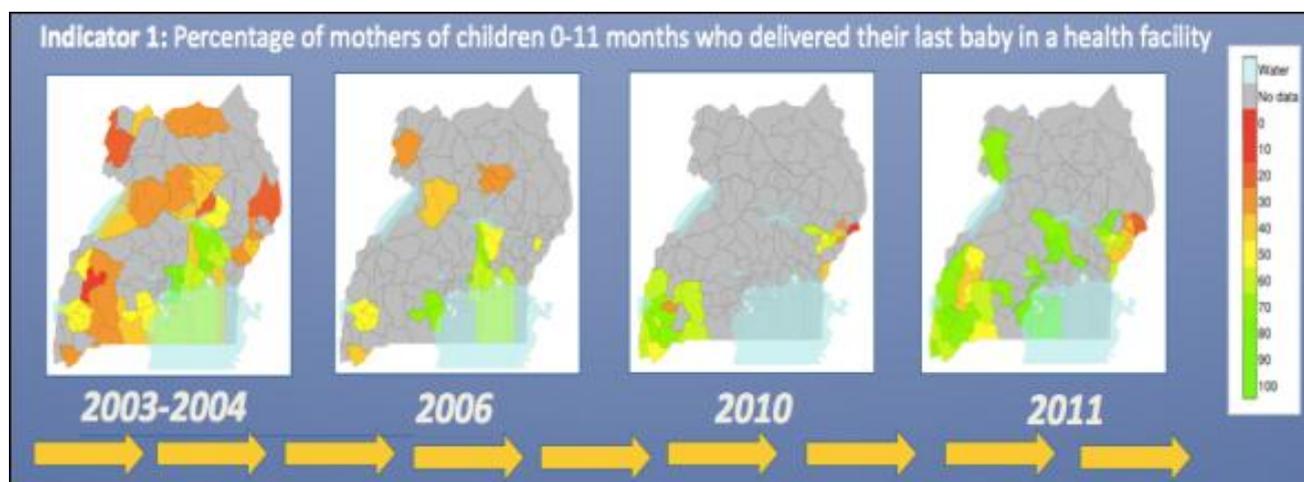
Table 10: Sample of HCT Results and Programmatic Comments from Mbarara District (Individuals who were counseled and tested for HIV in the past 12 months and know their HIV results)

Supervision Area	Youth (15–24 Years)	Men (15–54 Years)	Women (15–49 Years)
Mbarara A	7	8	13
Mbarara B	11	6*	10
Mbarara C	7	9	10
Mbarara D	6*	11	10
Mbarara E	8	9	14
Mbarara F	5*	7	12
Target Group Specific coverage (95% CI)	38.6 (29.6–48.2)	43.9 (34.6–53.5)	60.5 (50.9–69.6)
District Average coverage (95% CI)	47.7 (42.3–53.1)		

Supervision Area	Youth (15–24 Years)	Men (15–54 Years)	Women (15–49 Years)
	Decision rule = 7		
Number of SAs below decision rule		0	0
National Target %	70% Decision rule = 11		
Results show that district average coverage for individuals who were counseled and tested for HIV in the past 12 months and know their HIV results was less than 50%. The Mbarara D and Mbarara F among the youth and Mbarara B among the men performed below the district average coverage.			

Results in Map 3, from Mbarara District show that district average coverage for individuals who were counseled and tested for HIV in the past 12 months and know their HIV results was less than 50%. The Mbarara D and Mbarara F among the youth and Mbarara B among the men performed below the district average coverage.

Map 3: Sample of Results from the Epidemiological Studies



Support to district data entry

STAR-E LQAS conducted an assessment of district capacity to manage and analyze LQAS data and preparation of LQAS surveys and HFA reports. A report was compiled and guided development of a training curriculum for training district teams. The experience has affirmed the need for data entry, management and analysis to be done at the district rather than IP level to provide opportunities for capacity-building at the district level.

SO7-Promote FAs and Innovative use of Results

This SO covers the application of FAs and innovative use of results. The desired result of this SO is to have increased number of districts undertaking FAs and using the results to plan service improvement. It aims at more IPs supporting districts undertaking FAs and use of results through the SPAI process, Continued Development and Standardization of Tools and Guidelines for FAs and Data Use. FA assessment was conducted in 11 STAR-E and 13 STAR-SW districts.

Table 11: Summary of People Trained for FA

STAR-E	STAR-SW
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District	# of people trained	District	# of people trained
Bududa	6	Bushenyi	8
Busia	9	Mitooma	8
Butaleja	6	Kisoro	14
Mbale	9	Ibando	8
Budaka	10	Isingiro	14
Kapchorwa	6	Rubirizi	5
Pallisa	11	Kabale	20
Sironko	9	Buhweju	5
Bukwo	3	Kiruhura	10
Kween	3	Rukungiri	15
Kibuku	11	Ntungamo	11
		Sheema	8
		Kanungu	9
	83		135

***Bulambuli district did not undertake the HFA in 2011 because of the landslide catastrophe. The district requested to concentrate on relief interventions.*

Lack of funds by IPs deterred more districts carrying out facility assessments and the main challenge.

Support IPs in Application of SPAI in Districts

In PY 4, SPAI was applied in 8 STAR-E districts in December 2011 (Budaka, Bududa, Busia, Butaleja, Kapchorwa, Mbale, Pallisa, and Sironko) and 4 districts in May 2012 (Bulambuli, Kween, Bukwo, and Kibuku). It was also applied in 8 STAR-SW districts (Buhweju, Bushenyi, Ibando, Isingiro, Kabale, Kisoro, Mitooma, and Rubberize) in March 2012. This brings the total of districts with SPAI application to 26, 2 more than the PY 4 target of 24. District teams of 7–10 people drawn from DHO and other key departments were involved in a five-day process to develop SPAI plans that are implemented over a period of 6–12 months.

Additionally, 15 IP and 10 NLFs have been exposed to SPAI process for at least one round.

Table 12: Districts That Have Carried Out the SPAI Process

STAR-E		STAR-SW		STAR-EC	
District	# of people trained	District	# of people trained	District	# of people trained
Bududa	6	Bushenyi	8	Namutumba	6
Busia	6	Mitooma	8	Mayuge	10
Butaleja	8	Kisoro	8	Bugiri	10
Mbale	6	Ibando	7	Kaliro	6
Budaka	8	Isingiro	8	Kamuli	6
Kapchorwa	8	Rubirizi	8	Iganga	6
Pallisa	8	Kabale	8	NLFs	4
Sironko	8	Buhweju	9		
Bukwo	7	NLFs	3		
Kween	7				
Bulambuli	9				
Kibuku	7				
NLFs	2				
	90		67		48

***STAR-EC Districts were trained in 2011, but continued implementing their improvement plans in 2012.*

Generally, the following results were noted in the implementation of SPAI plans:

- More health workers received in-service training, in a bid to provide better services.
- Staff seconded and transferred to lower health facilities and those identified in need specialized services (e.g., Buhweju, Bushenyi, Mayuge).

- District staff and political leaders conduct sensitizations on PMTCT, HCT, and SMC. More radio talk shows on HIV/AIDS and malaria issues. As a result of the talk shows, there is increased coverage in HCT and PMTCT services.
- Intensified and integrated supportive supervision in district health service delivery.
- The SPAI exercise inspired districts to deliver prioritised services with their limited resources.
- Districts find PI plans as key resources in the development of the district annual plans and budgets and long-term development plans.
- The SPAI process led to a CD4 count machine to be delivered to Mitooma district by STAR-SW to boost the services in the area.
- Increased use of LQAS data and PI plans in the development of district annual plans.
- More targeted HC IIIs accredited to offer ART services

Challenges

1. Harmonizing SDS-led district funding with IP schedule. There was late release of funds for LQAS activities earlier agreed upon for all the 3 LQAS processes.
2. Long-term sustainability of financial resources needed for the three processes by districts until districts reflect M&E in their annual budgets to attract government funding

Opportunities

1. Despite the above challenges, there are opportunities:
2. MoLG endorsement of LQAS is an opportunity for districts to reflect M&E in their budgets
3. Training institutions offering LQAS in their curricula

Summary of PY 5 activities

- Review and align the component's PMP to PY 5 activities and targets
- Convene quarterly review and planning meetings for preparation of periodic reports
- Prepare and submit LQAS indicator results and 2013 consolidated LQAS report to USAID
- Establish an LQAS central coordination structure and convene meetings
- Hold quarterly LTAG meetings
- Support IPs in application of LQAS in districts: SUNRISE (12 districts), STOP Malaria (6), STAR-E (12), STAR-SW (13), STRIDES (11), STAR-EC (9)
- Support IPs' and districts' dissemination of LQAS results at the district level
- Maintain and manage a central LQAS database
- Support IPs complete 2012 and 2013 district-specific community survey reports, application of FAs in 34 districts: STAR-E (12), STAR-EC (9), STAR-SW (13), plus FA for OVC services in 3 districts, and undertake SPAI-lite in 6 districts and support application of SPAI in 34 districts: STAR-E (12), STAR-EC (9) and STAR-SW (13)
- Undertake operations research:
- Analyze and compare LQAS survey results with UDHS results using 2011 data

PROMOTING USE OF LQAS DATA FOR PERFORMANCE IMPROVEMENT

Background

For many years, the only official source of data at district level for planning and decision making was the Uganda Demographic and Health Surveys (UDHS) conducted every 5 years and national population surveys that come out every year. These surveys only provide aggregated data at national and regional level, which limits districts in using this data in their specific planning, thereby creating a data gap. This lack of timely data on key social service indicators has been a major cause of planning and budgeting challenges as well as inadequate support from partners at local government level.

Evidently, there was need for an inexpensive approach that would provide timely community level data to support district annual planning and decision making. As a result, the Lot Quality Assurance Sampling (LQAS) Methodology that uses small sample sizes to identify poor and well performing supervision areas was seen as an appropriate complimentary source of data for local governments.

District surveys and assessments

LQAS

STAR-E-LQAS a component of the USAID-funded STAR-E project managed by Management Sciences for Health (MSH), promotes the LQAS methodology as a simplified way to provide important timely information for evidence-based planning. To date, 73 districts in Uganda have conducted LQAS community services with support from STAR-E LQAS and other USAID DBTAs. These surveys are increasingly becoming a major source of timely information to support decision making and resource allocation at district level.

"We don't have any other source of data for our planning. LQAS gives us data every year on community level indicators which makes our decision making more evidence-based" The Namutumba District Planner said.

The Chairman Kiboga district local government also noted that the survey was a new development in the district. *"This survey is the first of its kind in this district and we are now more informed about the situation in our communities."*

The process takes 3 weeks providing community level data in a short time. Its power is in providing small area data that is needed for lower level planning.

A number of district managers and planners have expressed their appreciation of data resulting from LQAS surveys, noting that they can now use real-time data to inform their planning process. The District Health Officer Mbale, Dr. John Waniaye had this to say:

"LQAS is an informative tool for many indicators in the sector, providing data on performance of health services in our district which makes targeting of resources easier". Data use

Service performance assessment and improvement (SPAI)

With the appropriate awareness created and acceptance of the methodology attained, STAR-E LQAS embarked on promoting use of survey results, by building the capacity of districts through the Service Performance Assessment and Improvement (SPAI) tool. SPAI is a step-by-step process that engages district managers to analyze and prioritise service gaps using LQAS and other data to plan for appropriate improvement interventions. Districts identify causes to areas that were 'red flagged' during the survey and develop appropriate short-term and long term interventions.

In Mbale district the results of the 2011 LQAS community survey revealed that the district was performing poorly in the areas of Malaria and HIV/AIDS. It was specifically noted that poor record keeping and data management at health centres, low coverage of HCT services and poor diagnosis of Malaria cases were major problems. Through the SPAI process, the Mbale district team with support from the IP was able to develop a performance improvement plan to train health workers in data and records management and Village Health Teams in proper diagnosis of Malaria cases. The district also re-allocated funds within the health budget to increase HCT coverage.

"The SPAI process helped us to re-focus our priorities and monitor progress". The DHO Mbale said.

Another district that is using LQAS data to improve performance in the health sector is Bududa. The 2011 LQAS community survey results revealed that TB and HIV/AIDS were still major problems in the community. TB knowledge on signs and symptoms, mode of transmission and how it could be prevented was very low. Through the SPAI process, Bududa district team developed a performance improvement plan to be implemented using available resources. There is now increased proactive identification of TB patients through routine testing at the HIV clinics, TB registers and case finding forms have also been distributed to all health centres and are being used. In addition, VHTs have been trained in identifying TB suspects and referring them to health centres for further management. Namutumba district through the SPAI process was able to strengthen client follow up through training of VHTs, 15 peer educators and 12 mother-to-mother expert clients under support from STAR-EC. To increase sensitization on HIV/AIDS the district is using a total of 220,242 PHAs.

The SPAI tool has also enabled districts to make good use of data to improve performance using available resources. Overall districts have been able to integrate their SPAI plans into their district work plans for smooth implementation and follow up.



A district staff during SPAI planning

2.1 Strengthening Human Resources for Health

During PY 4, the STAR-E project continued to support the 12 districts in targeted aspects of building capacity of the health workforce with emphasis being placed on site mentorships as opposed to didactic workshop style training. Table 12 captures the training activities supported during PY 4.

Table 13: Training/Activities Completed during PY 4

Training Activity	Number of Participants	Comments
Revised HMIS TOT	24	Part of the national effort to roll out the new HMIS tools.
Training of HWs and STAR-E clinical mentors in cervical cancer screening	34	Done at Mbale RRH. Aimed at integrating screening with existing services.
Training of nursing assistants as microscopists	21	Competencies in doing HIV, DBS, TB, and malaria tests. Gap filling measure at HUs.
Training of health workers in TB/HIV co-management	35	Involved medical officers, clinical officers, nurses, and midwives.
Training of SMC teams (three cadres per team)	23 teams	The trainings were conducted in Kayunga and Mukono in collaboration with MUWRP
Knowledge exchange program (focused on HMIS tools and patient flow and triage)	6 teams	Involved HWs visiting facilities outside of their own districts
Training of MARPS (CSW) in communication skills and HIV/AIDS prevention	55 MARPS	These were predominantly from the Busia district
District Health Information System (DHIS2)	30	The participants were HMIS focal persons and biostatisticians. This is in support of making the DHIS2 operational.

Planned activities for next quarter:

- Prepare required logistics and schedules for the training of health workers in 141 health facilities in eMTCT (Option B+ roll-out) with actual training commencing in Q2 of PY 5.
- Support the training of the dedicated VMMC teams that are essential for the continued scale-up of VMMC services to meet public health impact targets.
- Organize and conduct post-training mentorship site visits in support of the eMTCT program.
- Support the districts to recruit required health professionals (by facilitating adverts, selection processes, and induction of new staff) in the three new districts.

2.2 Improvement of Infrastructure, Laboratories, and Equipment for Health Units, and Implementing Continuous Improvement Plans

STAR-E continues to support improvement of laboratory structure by working with health units in-charges and district health officers to avail space for laboratory services. Out of the 11 health facilities targeted for facility remodeling/renovation, 3 were handled during the course of PY 4 (Busolwe Hospital laboratory, Masafu Hospital laboratory, and Kapchorwa Hospital ART laboratory), while 8 have been deferred to PY 5 in line with the adjusted pipeline budget.

The MOH supplied 11 ART sites with CD4 PIMA machines and STAR-E facilitated the onsite training of teams in the use of the machines.

Increase access and uptake of quality laboratory services: Currently laboratory functionality in HC III stands at 80%, up from 25%. Of the 141 supported facilities, at least 100 are diagnostic TB units. At the hospital and HCIV facility level, all the supported laboratories are fully functional.

Laboratory commodities management: The laboratory logistics management system has also been strengthened throughout PY 4, however in the course of Q4 there have been occasional stock-outs, particularly of HIV test kits where the project has supported DHOs and district lab focal persons to redistribute stock from areas of low utilization to those with high consumption. The project has played a key role in tracking timely order from the districts to NMS, and on occasion supported the transmitting of emergency orders as well. The test kits procured by the project were supplied to our non-public sector sub-grantees (ATGWU and AIC) for conducting targeted HTC outreaches.

Standard operating procedures: SOPs were distributed to all health facilities with laboratory services. Onsite training of laboratory personnel on their use was conducted by DLFPs in all health facilities.

Provision of data collection and reporting tools: All the necessary data collection tools (stock cards, daily consumption logs, and monthly summary logs) were distributed to all health facilities with functional labs. These tools have facilitated monitoring of stock levels and utilization of laboratory reagents/HIV test kits. Laboratory staff and other health workers involved in PICT received onsite orientation on these tools.

Supportive supervision: Continuous supportive supervision was carried out in the district general hospitals by the DLFP supported by CPHL and STAR-E to carry out mentoring in the lower-level laboratories, HC IVs, and HC IIIs. Continuous follow-up visits for performance improvement have also been supported through DLFPs.

Laboratory accreditation: The process toward laboratory accreditation is ongoing. Mentoring was conducted by MOH officials together with STAR-E. The laboratory services have improved in the quality of results disseminated, turnaround time for releasing results (especially TB results, which used to take up to two days, but are now delivered to patients on the same day), organization of the laboratory layout, and the cleanliness of the laboratory. As of the end of PY 4, Kapchorwa Hospital laboratory had gone through the three phases of the SLMTA process and was awaiting the final assessment.

Supporting specimen referrals: STAR-E has continued to support the referral of laboratory specimens from all the HCT sites to the JCRC reference laboratory in Mbale (allocated vehicles). This is in addition to the sites that received CD4 PIMA machines and those districts that are supported by the SDS project for referral of samples. The average turnaround time now for a dried blood spot (DBS) sample result is one week.

Table 14: Laboratory Commodities Procured and Supplied by STAR-E

Description	Qty stock	Unit of measure	Qty to AIC	Qty issued to health facilities	Balance in stock
HIV chase buffer for determine kit	320	l	200	0	120
HIV determine 100 tests	320	l	200	0	120
HIV statpak dipstick 30 tests	170	l	106	0	64
HIV Unigold test kits 20 tests	250	l	156	0	94
Vacutainer Tube with EDTA 4ml	32,000	l		14,200	17,800
Vacutainer needles G21	320	100		14,200	178
Vacutainer needle holder	16,000	l		9,750	6,250

Planned activities for next year:

- Support the quantification and timely ordering of laboratory commodities in preparation for the Option B+ rollout implementation.

- Conduct the procurement of service providers for the actual renovation of the remaining eight health facilities.
- Continue to support the district laboratory focal persons to play their rightful roles in commodity quantification, ordering, and monitoring—with a view to ensuring practical sustainability.
 - Continued support of external quality assurance monitoring coupled with supportive supervision and on-the-job training together with the DLFPs.

2.3 Strengthening of Overall Commodity Management in the Districts

Commodity management is a set of activities and procedures that ensure health commodities are available, accessible, and of high quality. The goal in any ART program is to provide uninterrupted drug supply to treatment centers and to patients, in a timely manner, while minimizing drug expiry. To achieve this, an efficient drug supply management system is required at the centers. Such a system would ensure accurate quantification of drug needs and constant communication between the central supply and the facilities to prevent stock-outs and ensure redistribution of about-to-expire drugs.

The flow of HIV/AIDS/TB commodities from National Medical Stores (NMS) and Joint Medical Stores (JMS) to the districts and ultimately to lower health facilities is not always an efficient and effective process. In PY 4, STAR-E project continued to support 141 health facilities (8 hospitals, 12 HC IVs. and 120 HC IIIs) in the 12 districts to ensure consistent supply of HIV/TB commodities.

The planned activities for PY 4 were as follows:

1. Support district-based trainings of health workers and stores managers in logistics management and commodities tracking system (provide logistics management information tools) for HIV/AIDS/TB and other health commodities.
2. Conduct a training and orientation for medicines management supervisors (MMS) in three of the seven non-SURE districts. These carry out mentoring coaching and collect data on health commodities management and ensure timely ordering of drugs by health facilities.
3. Carry out regular data collection for quantification, procurement, and allocation of ARVs buffer needs for all public, private not-for-profit, and private for-profit health facilities.
4. District focal persons on commodities management are to be supported to include logistics management as part of their supportive supervision to each facility. They will also support the system in determining the stock situation in health facilities and prompt preparation of orders/reports to NMS.
5. Support logistics coordination meetings at district level.
6. Support and conduct regular technical supportive supervision to health facilities in logistics management and Web-based ordering initiative for essential health commodities. This will include on-the-job training to mitigate frequent transfers of trained staff.
7. Continue to support districts in timely preparation of the Comprehensive HIV Care & ART Quarterly Report to ACP/MOH.
8. Continued liaison with MOH, NMS, SCMS, JMS, and districts to ensure constant availability of HIV/TB/AIDS commodities in all sites of HIV and AIDS care.

Achievements

Conducted a training and orientation for medicines management supervisors (MMS) in seven non-SURE districts

I. Training

A total of 16 health workers from seven non-SURE districts (Busia, Bududa, Budaka, Kibuku, Sironko, Bulambuli, and Kween) were trained as medicines management supervisors (MMS). The training lasted for two weeks and was supported by the SURE program. The MMS are expected to support districts in health commodities management at health sub-district and district levels. In addition, they are the key persons in implementation of the Supervision Performance Assessment and Reward/Recognition Strategy (SPARS) in all health facilities within their respective districts. The MMS who were jointly identified by the district management and STAR-E are from health sub-districts and district levels who are acting as focal persons for all health commodities. With support from STAR-E and districts, MMS coordinates all activities on supply chain management, which includes ensuring that orders for health commodities are quantified, promptly submitted to NMS/JMS, liaising with suppliers, and supervising and monitoring use of these commodities at health facility level.

2. Orientation of MMS and SPARS implementation

After the training, the MMS (6) of two districts (Busia and Sironko) were oriented for two days on skills improvement in preparation for SPARS implementation. The orientation of the MMS was conducted by the STAR-E logistics advisor and regional pharmacists based at Mbale and Soroti regional referral hospitals. The two districts are in the first phase (STAR-E plan) of SPARS implementation, which occurred in PY 4 Q4. The next implementation phase is expected in PY 5, depending on availability of funds.

SPARS implementation was conducted by selecting a few health facilities in every district that are being monitored regularly by the MMS, supervised, and assessed until improvement is seen using standard indicators. Once the MMS are satisfied that a facility has achieved the basic performance level, implementation of SPARS begins at additional health facilities, until all the health facilities in the district are covered.

Data collection for quantification, procurement, and allocation of ARVs buffer needs for all public, PNFPs, and PFP health facilities.

STAR-E supported and allocated buffer ARV drugs and cotrimoxazole to the 30 accredited ART sites and 1 non-accredited ART site. This site is being prepared for ART accreditation, and allocation was based on stock levels at the health facility at the time. The non-accredited site was given ARVs because it has trained health workers, HMIS tools, and minimum laboratory services and offers ART services with the support of STAR-E clinical mentors. Subsequently, in PY 5 it will be accredited and serve as a fully functional ART site.

Appendix 5 shows the details of ARVs and cotrimoxazole as buffer stocks allocated to both accredited and non-accredited sites

Support logistics coordination meetings at district level

Meetings bring together the district management and focal persons in medicines management to discuss and identify gaps that affect the effective and efficient management of health commodities in the district. The interventions jointly developed with the districts will be implemented by the districts with technical assistance through mentoring and coaching by STAR-E technical advisors.

During PY 4, STAR-E management has been participating in District Health Management quarterly meetings where issues on strengthening commodities management are discussed. On special occasions, the logistics advisor conducts meetings with key personnel in commodities management, e.g., implementation of SPARS. Two separate meetings were held in Busia and Sironko districts and involved the district health officer, district medicines management supervisors, and district biostatistician.

Support and conduct regular technical supportive supervision to health facilities in logistics management and Web-based ordering initiative for essential health commodities.

Supportive supervision: During PY 4, STAR-E has been giving technical supportive supervision to 21 selected sites that were either weak in commodities management, being prepared for accreditation, newly accredited, or

implementing SPARS. The STAR-E logistics advisor, together with district medicines focal persons, continued to provide technical support through mentoring and coaching to health workers at the health facilities. The activity focused on forecasting, quantification and order preparation including keeping proper records and handling of commodities received at the health facilities. During this period, 93% of the ART sites were able to submit their orders to NMS.

Web-based ordering: The MOH recognized a need to introduce electronic ordering for health commodities to National Medical Stores (NMS) and other suppliers. The aim is to improve the order rate and timeliness of orders to NMS by health facilities. At the moment, ARVs will be the first commodity for facilities to order electronically. Therefore, Ministry of Health, with support from SURE, is rolling out the system through implementing partners, including STAR-E.

During PY 4, the logistics advisor and the IT officer of STAR-E were trained as TOTs to roll out the system by training the ART site key personnel on how to order ARVs using the Web-based system. STAR-E is to roll out the Web-based system in PY 5 to all ART sites.

Continue to support districts in timely preparation of quarterly report to ACP/MOH.

During PY 4, the 30 ART sites/facilities were supported in preparing the report and submitting to ACP/MOH on time.

Continued liaison with MOH, NMS, SCMS, JMS and districts

During PY 4, STAR-E worked with MOH and NMS to quantify and distribute cotrimoxazole tablets (adults & children), HIV test kits, fluconazole, adult anti-tuberculosis drugs to health facilities, as shown in Table 14.

Table 15: HIV/TB/AIDS Commodities Distributed from NMS/CPHL/MOH to HCs, PY 4

No	Item	Unit	Qty	Number of Health Facilities
1	Cotrimoxazole 960 mg tab	100	20264	27 ART sites
	Cotrimoxazole 960 mg tab	1000	128	128 ART sites
2	Cotrimoxazole 120 mg tab	100	936	27 ART sites
	Zidovudine 300 mg	60	5724	128 PMTCT sites
3	RHZE (150/75/400/400) tab	24	157	68 TB sites
4	EH (400/75) tab	24	267	68 TB sites
5	RHE (150/75/400) tab	24	68	66 TB sites
6	Determine	100	414	9 ART sites
7	Fluconazole 200 mg tab	28	27	1 ART site
8	BDS Kits	100	58	57 H/F's
9	Male condoms	144	500	12 districts

To avoid expiry of drugs in health facilities due to over-stocking and low consumption, some items were redistributed to facilities with high consumption rates.

Collaboration with other Implementing Partners and Ministry of Health

There are other key implementing partners in the management of health commodities. During PY 4, STAR-E collaborated with SURE, CHAI/UNITAID, and ACP/MOH to enhance planning and ensure availability of essential medicines at health facilities. The following meetings were held to synergize the collaborative efforts.

I. CHAI/UNITAID/MOH meeting on stock tracking, forecasting, and quantification

Three meetings were held by CHAI/UNITAID/MOH with IP logistics officers. The meetings focused on performance of ART sites in making order to NMS/JMS, support of CHAI ending December 2012,

forecasting and quantification, and scaling-up of pediatric enrollment. Following these meetings, STAR-E has been able to stock ARVs at JMS and provide buffer stocks to district health facilities and to identify facilities that do not order/report according to NMS schedule and take remedial actions through joint meetings with district managers.

II. Meeting of regional pharmacists, IP logistics advisors with SURE and Ministry of Health

SURE and MOH organized a two-day meeting for all IPs and development partners who handle health commodities. The aim was to share experiences of various stakeholders and how partners are implementing the Supervision Performance Assessment Strategy (SPAS) in districts of operation. The meeting resolved to modify the SPAS strategy during the role-out in all non-SURE districts.

III. Meeting of IPs and MOH for the mid-term review of national laboratory services.

The goal of the meeting was to understand the ways IPs are implementing laboratory services in the country and compare with the national guidelines. The logistics advisor represented the STAR-E project in the meeting and made a presentation on the objectives of the project, performance, and most especially the laboratory services. Star-E was among the IPs following and adhering to the national policy and guidelines for laboratory services.

IV. Training of logistics advisor of IPs in medicines management as regional supervisors in non-SURE districts

The SURE project and MOH organized a two-week training for all logistics advisors of implementing partners. The training aimed at equipping the logistics officers with the knowledge and skills necessary to effectively supervise district and health sub-district medicines supervisors. This applies to all non-SURE districts where other partners are operating and includes all health essential commodities. The training was in line with PY 4 activities in health commodities management.

V. Rolling out the pharmaceutical software (Rx Solution) in hospitals

The meeting aimed at improving health commodities management in the country by soliciting ideas from IPs and regional stakeholders in supply chain management; agreeing on implementation of the developed plan by SURE and MOH; and forming a task force to ensure coordination of the rollout process. This intervention was as a result of the current status of Essential Medicines and Health Supplies Management Information System in Uganda today.

Challenges

1. Despite intensive training in logistics management, health workers are still not placing orders for PMTCT services promptly to National Medical Stores, as anticipated. The major contributing factor is leadership at all levels in the districts.
2. Implementation of SPARS requires a lot of resources (money, time) and commitment by the medicines management supervisors for it to yield desired results. Some MMS are motivated by incentives, especially money, before any activity is performed, despite receiving salaries from the government. Both district managers and STAR-E have tried, through meetings, to ensure that these key personnel understand that it is part of their routine job responsibilities.
3. Sometimes NMS does not adhere to its delivery schedule, and therefore delivers supplies when most facilities are soon to run out, which prompts STAR-E to allocate its stock at JMS as a supply BUT not as a buffer stock.
4. Persons trained in logistics management in districts are frequently transferred, leaving a gap in the former health facility. This has prompted STAR-E to intensify onsite technical supportive supervision, which has been costly in terms of time and funds.
5. Most facility managers have consistently failed to establish a monthly stock record of HIV/AIDS commodities for planning purposes.

2.4 Strengthening the District HMIS, M&E, and Operations Research

Through its mandate to strengthen use of strategic information in the districts, STAR-E supported the following activities during PY 4.

- In collaboration with the MOH, STAR-E supported the training and application of the District Health Information System (DHIS II).
- Through the STAR-E HMIS strengthening component, we printed and distributed the revised tools for the 12 districts. The project also supported a training for the district HMIS and biostatistician in the revised HMIS tools, as well as supportive supervision and mentorships for improved documentation, records management, and collection of routine data, based on the new tools. The details and specifics of items procured are provided in Appendix 5.
- Continuous updating of STAR-E database and generation of QI reports for USAID and UMEMS.
- STAR-E also conducted technical supportive supervision specifically targeting strengthening of documentation and reporting for PMTCT and ART/chronic care services. Key lessons were documented and shared that has culminated in a Data Quality Audit (DQA) planned for PY 5.
- During PY 4, in collaboration with the DHOs' offices, STAR-E supported two data review meetings across all 12 districts. The meetings attracted health facility in-charges, who had been asked by the DHOs to come with their quarterly reports for onward submission to MOH. The reports were reviewed, lessons shared, challenges documented, and action plans drawn.

Monitoring and Evaluation

- Compilation and dissemination of district-specific reports from all quarterly reports.
- Managing the entire strategic planning and implementation process for the three LQAS packages of community survey, health facility assessment, and SPAI. Implementation begins in Q4 and later spills over to Q1 of PY 5. Between July 9 and August 3, 2012, STAR-E project supported 12 districts to conduct LQAS Surveys. The LQAS survey process involved training 239 district staff drawn mainly from the health and community development departments, data collection, and data tabulation. All the stages of this survey took place at the respective districts. Development of LQAS district-specific reports is in progress.
- LQAS Data Management Training: Following the LQAS survey, three people from each of the 12 districts, totaling 36, were trained for a period of five days in LQAS data entry, analysis, and report writing. The participants of this training involved district HMIS focal persons, biostatisticians, and District Health Management team members. The trained district personnel are expected to draft LQAS reports based on the results of 2012 LQAS surveys conducted in their districts.

Operations Research

BCC IP Survey

Ministry of Health, in collaboration with STAR-E, USAID, and Johns Hopkins Health Communications Partnership (JHU-CCP), planned to conduct a survey in 28 districts to evaluate health communication interventions implemented by USAID partners. The objective of the survey was to collect information that would help in examining the effectiveness of behavior change communication (BCC) interventions implemented by USAID partners over the past two years, while at the same time provide baseline information for those partners who have not started implementing similar activities. For STAR-E, the four districts of Bukwo, Sironko, Mbale, and Busia were included in the sample.

Preparations for the BCC IP survey started in December 2010 after a call from USAID for USAID implementing partners' to participate and assess the impact of behavior change communication messages countrywide. At the

national level, STAR-E participated by availing a technical person throughout concept development, design and implementation. STAR-E participated in the survey in the districts of Bukwo, Sironko, Busia and Mbale

Communication

During PY 4, STAR-E project staff participated in writing abstracts for the International AIDS Conference (IAS 2012), and the abstracts listed in Table 16 were successful and presented.

Table 16: Abstracts Submitted and Presented at IAS 2012

1.	A Workshop-based Approach to Scaling Up Couple HIV Counseling and Testing (CHCT) among Discordant Couples: Scenarios from Rural Uganda. J.F. Acio	Poster presentation
2.	Focusing Maternal Child Health investments for sustainability through building the capacity of District Health Teams to meet eMTCT targets. D. Kintu	Poster presentation
3.	Overcoming the huddles of Quality Improvement (QI) in resource limited settings: Health Systems gains from implementation of the Fully Functional Service Delivery Point (FFSDP) Model. M. Arinaitwe	Poster presentation
4	Proactive identification of <i>Esther Sempira</i> HIV exposed infants to reduce missed opportunities for a DNA PCR test at the Young Child Clinic (YCC) of three health facilities in rural eastern Uganda. E. Namusoke	Poster presentation
5.	A simplified tool for communicating and dissemination LQAS survey data of small area performance. E. Sempira	Poster presentation
6.	Tracking loss to follow-up of clients on care using expert clients in Pallisa district, Eastern Uganda. J. Emamu	Poster Presentation

The project prepared an abstract entitled “How a health systems intervention contributes to reduce loss to follow-up amongst HIV exposed infants: A case study of a rural health center in Uganda” describing improved use of a facility-based appointment book for the Second Global Symposium on Health Systems Research in Beijing, China. It was accepted as an oral presentation at a panel session.

Operations Research planned for PY 5

1. Delivery preferences for mothers in the region disaggregated by sero status.)
2. Barriers to male involvement in ANC /PMTCT in Eastern region (Denis Kintu)
3. A KAP study on Family planning among HIV-positive clients of reproductive age (Denis Kintu)
4. Factors driving pregnancies among HIV-positive women that come with known HIV status
5. Outcomes of client follow up by case managers, cost benefit analysis (mother- baby pairs)
6. To consider -s later, PMTCT management information systems in the district adherence among Option B+ mothers
7. Experimenting mother to mother approach to improve ANC attendance of HIV-positive pregnant women
8. Reducing patients waiting time in the health facilities using effective triaging
9. Using a modified appointment book to monitor Adherence and loss to follow-up studies in selected facilities
10. Qualitative study on factors affecting institutional deliveries
11. STAR-E documentary alongside an internal end of term evaluation
12. Presumptive diagnosis and treatment of HIV exposed infants to minimize delays of DNA/PCR.
13. Criteria prepared and disseminated to five hospitals
14. Data collection to be done through ART cards and EI clinical charts.
15. Prevalence of anemia in HIV-infected children on AZT. Are we doing the correct monitoring, both prior and intra treatment.
16. Assessment of the factors affecting completion of HIV Exposed Infants testing algorithm at 18 months.

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

3.1 Improving Quality of Care

STAR-E has continued to work with health facilities and districts and the Ministry of Health with the main aim of improving the quality of HIV/TB service delivered by the health-care workers in communities, facilities and the district. The STAR-E project planned to achieve this through implementation of the Fully Functional Service Delivery Point (FFSDP) model, which has 10 core standards aimed to make sure that each facility is efficient and competent in service delivery and this is integrated within the MOH policy framework.

In PY 4, STAR-E had set out to support the implementation of the FFSDP model in the health facilities by training of health workers in principles of QI and to implement technical approaches to quality and performance improvement, coaching/mentoring visits in facilities, MOH facilitated mentoring, learning sessions, recognizing of the best performing health workers, Operation Research Survey and coordination with the Ministry of Health and other agencies. STAR-E did implement all the planned activities apart from learning sessions

Training of health workers in principles of QI and Implementing technical approaches to quality and performance improvement

The MOH initiated the HIV Quality of Care program to facilitate the development of sustainable quality improvement activities through building capacity and capability for quality management at all levels of health care delivery systems in the country. The initiative balances quality improvement and performance measurement while building a solid foundation of programmatic infrastructure. To strengthen the quality improvement in the eastern region of the country STAR-E sponsored the training of 16 facilities in 10 districts which was facilitated by Ministry of Health MOH/ACP and Quality assurance departments and a total of 36 health workers were trained.

Quality Improvement Mentoring with Ministry of Health at the Health Facilities

STAR-E, with MOH QI regional mentors and district QI personnel, conducted a mentoring exercise in a total of 16 health facilities, 12 of which are ART sites and 4 of which are non-ART sites. The aim of the mentorship exercise was to equip QI teams with practical quality improvement skills and techniques used in improving the quality of care provided to clients and quality management in health facilities. The exercise also aimed to assist the site teams in implementing the work plans they developed after training and guide them in baseline data collection on the mandatory MOH indicators being monitored in the improvement collaborative by all STAR-E-supported sites. These indicators are:

- The coaching content covered
- Evaluation of QI team functionality establishing team support
- Factors influencing QI sustainability
- Implementation of work plans
- Understanding the indicators and their sources
- Collection of baseline data

Continued Coaching by the Quality Assurance Advisor and Clinical Mentors

Through identification of problems within processes that hinder achievement of good health outcomes, implementing changes and monitoring progress, the STAR-E team of technical advisors, clinical mentors and the district health teams have continued coaching the facilities.



This has involved working within Ministry of Health set standards and managing processes of HIV/AIDS and TB service delivery using national guidelines to achieve good health outcomes. This has happened in the 35 health facilities with trained QI teams. All the 35 active QI teams in the 12 districts are implementing a data management collaborative whose main aim is to strengthen practices of documentation, HWs after a QI mentoring session in Kameke HC III, Pallisa district

analysis, utilization and sharing of data generated at facility level.

By monitoring key indicators on a monthly basis, a systematic approach for conveying the importance of excellence to individuals and teams has been established. The teams hold meetings to review their performance and monitor at least three indicators of performance which include the following:

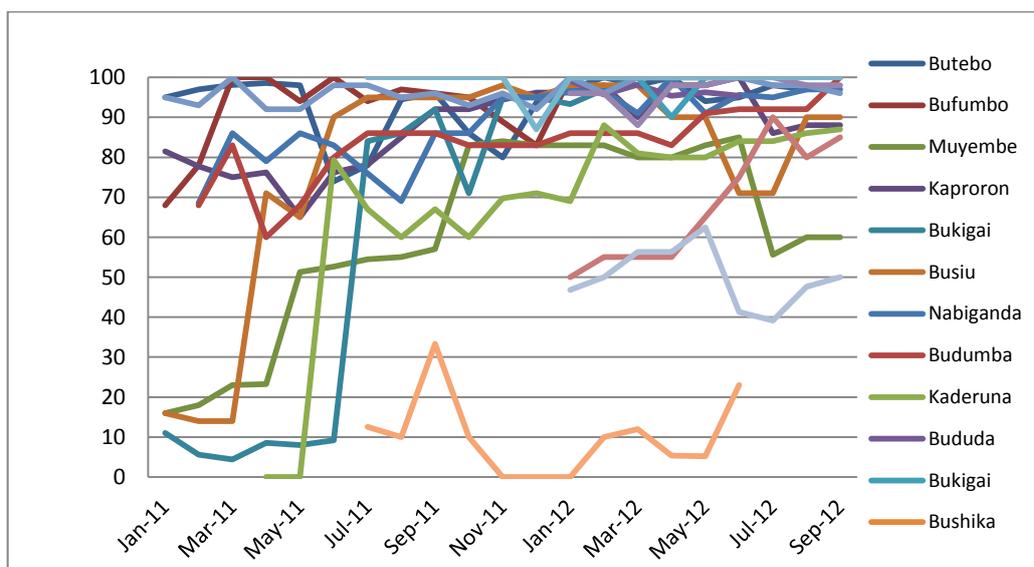
- Percentage of HIV-positive patients seen in the clinic who are in general care and/or receiving ART who are assessed for active TB at every clinic visit
- Percentage of patients newly receiving ART who have met the ART eligibility criteria prior to starting their regimen
- Percentage of children born to HIV-positive mothers in PMTCT who were tested for HIV
- Percentage of HIV-positive patients enrolled in the clinic and receiving general care who have been assessed for ART eligibility at every visit
- Percentage of patients on ART are adherent to ARV medicines
- Percentage of HIV-positive patients of reproductive age seen in the clinic who are counseled on family planning methods
- Percentage of HIV-positive patients seen in the clinic (general care or receiving ART) who are prescribed daily cotrimoxazole

Programmatic performance

- I. MOH guidelines recommend that all patients on ART take at least 95% of the prescribed doses as measured by one objective measure (monthly refills or pill counts) and one subjective measure, such as self-reporting, drug compliance calendars, or reports from adherence supporters.

Historically, this is an indicator that is poorly monitored at facilities because health workers do a verbal assessment but never document the patients' adherence on the HIV cards. There is a general improvement trend in the documentation of this indicator and the general changes across sites have been to encourage pill count and self-reporting.

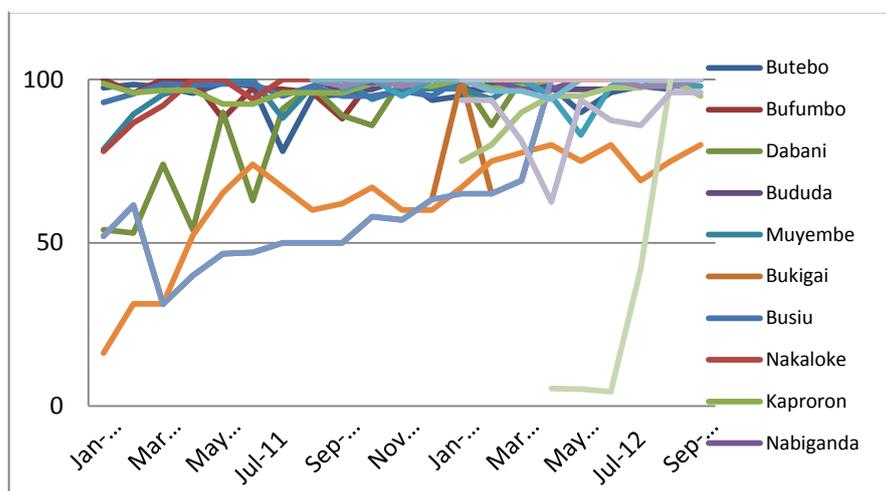
Figure 9: Facility Percentage Adherence Assessment



The outliers include the newly accredited facilities of Kameke and Buhehe Health centers but the expectation is that there will be improvement as has been witnessed in other “older” facilities with continued mentorships.

- MOH recommends that HIV-positive patients, whether on ART or in chronic care, should be assessed for TB every time they are seen by a health care provider using the following clinical symptoms: coughing for more than two weeks, blood in sputum, weight loss, night sweats. This is an indicator that is generally performed well in almost all facilities, as shown in Figure 10.

Figure 10: Facility Percentage TB Assessment



more than two weeks, blood in sputum, weight loss, night sweats. This is an indicator that is generally performed well in almost all facilities, as shown in Figure 10.

All patients on ART should have met the ART eligibility criteria prior to starting ART through assessment of WHO clinical staging (3 or 4), absolute CD4 (<350), and in children age, absolute or percentage

CD4 and WHO clinical staging.

This indicator has always done well as most patients who start on ART will either meet the WHO criteria and now with an increase in the CD4 machines in our health facilities including some Health Centre threes, the expectation is toward 100%.

Highlight of a model quality Improvement site team: Nakaloke HC3

In addition to the mandatory indicators, the QI team in Nakaloke decided that they would monitor other indicators. This was geared toward a general improvement in their health care delivery and these extra indicators include:

- Percentage of patients on ART who have shown clinical improvement during the last six months
- Percentage of children born to HIV-positive mothers who are tested for HIV
- Percentage of patients in care who keep their given appointments

The monitoring of extra indicators by the QI team is time consuming, but it addresses areas that need improvement, as decided by the team. Retention in care is one of the biggest challenges in the STAR-E project area and in most chronic care facilities in the country. The lessons learned in Nakaloke will go a long way in addressing the same issues in other chronic care facilities.

Tested changes implemented by the QI team

- Involvement of community people and a case manager in tracing of patients
- Integrated services, especially TB care in HIV clinic to reduce the patients' visits for those who might have TB/HIV co-infection
- Reducing clinic waiting times by triaging and pre-package of cotrimoxazole a day to the ART clinic day
- Functionalizing the appointment book and a list generated after each clinic day for all patients who would have missed their scheduled visit and this handed to the case manager for immediate tracing of the defaulters
- Continuous counseling on appointment keeping and emphasis on the importance of disclosure

Facility performances on 5S

In order to set the best stage for health personnel to make maximal use of their skills and knowledge, the MOH recommends the 5S method as the foundation for all QI initiatives in the country, and currently it's being implemented by all hospitals in our project area. 5s stands for a sequential process that involves Sorting, Setting, Shining, Standardizing, and Sustaining the internal environment as managed by service providers themselves. This has improved the infrastructure and workplace organization and safety in these facilities.



Organized pharmacy after initiation of 5S in Masafu Hospital

Coordination with the Ministry of Health and other agencies

The Ministry of Health, in a bid to ascertain the quality of services provided by facilities implementing quality improvement activities across the country, carried out a facility-based assessment, conducted based on the harmonized set of indicators in adult ART, HCT, pediatric care, and TB in 16 randomly selected facilities in the STAR-E operational area. The survey reviewed the quality of care provided during the period from July 2011 to December 2012. STAR-E facilitated this exercise through its coordination; two health facility workers carried out the cross-sectional survey. The quality improvement advisor is an active member of the national QI coordination

committee and was actively involved in the drafting and finalization of the national QI framework, which was launched by the MOH in February 2012

Activities planned for next quarter

1. This being the final full year of the project, the emphasis is on ownership by the district and the facilities in most of the QI activities for enhanced sustainability.
2. Train health facility health workers in 5S through a facility-based two-day training. This will go through the process of dissemination of 5S concepts, training of whole site in 5S concepts, conducting a situation analysis, identifying the priority areas, and conducting Sort/Set/Shine activities at the areas targeted to be a 5S showcase.
3. VMMC service supportive supervision in addition to measuring the effectiveness of individual quality improvement efforts. This will involve development of indicators at the facility level to measure the overall effectiveness of improvement in the quality of male circumcision services.
4. Continued coaching by the quality assurance advisor and clinical mentors.
5. Participate in MOH QAD/ACP/technical working groups and review meetings.

3.2 Strengthening Clinical Mentoring Systems

During Q3, STAR-E project continued to support all the 141 health units up to HC III level that provide comprehensive HIV and TB services. The project provided a total of 151 mentorship support visits to 417 health workers in the 12 districts and devoted time to strengthening systems at the facilities to increase enrollment, promote retention in chronic care, and minimize loss to follow-up. Together with districts, STAR-E identified four candidate health units to be accredited as ART sites by the Ministry of Health at the end of PY 4.

During the same period, the project facilitated implementation of priority activities. These include ART clinics, provider-initiated testing and counseling activities, continuous professional development (CPD/CME) sessions, client/patient follow-up, and monthly PHA meetings down to the level of HC III. One hundred sixty-eight CPD/CME sessions took place in health facilities and provided an opportunity for staff to share knowledge recently acquired in trainings. Support for PICT increased access to HCT services and has helped to identify HIV clients for enrolment into care and treatment. Facilitation for client/patient follow up is bridging the gap in preventing loss to follow-up and bringing back patients into chronic care, most especially HIV-positive pregnant women and children and HIV-exposed infants.

SPAI process training

As part of strengthening the district's capacity to utilize data, the STAR-E project trained officials from four districts—Bukwo, Kween, Bulambuli, and Kibuku—in service performance assessment and improvement. The training was aimed at building the capacity of the district staff to bring together all information, process it in such a manner as to develop prioritized action plans that are doable and meaningful, and address underlying key health performance gaps. It involved working with identified key district staff over a five-day period in a systematic manner, at the end of which an improvement plan was developed.

Planned activities for Q4

- Continued integrated mentorship teams with a target of institutionalizing the clinical mentoring down to the HC III level through the district-owned mentors, with support from the four project mentors.
- Provide technical input and structure to the district quarterly performance review meetings funded through Grant A by SDS.
- Support facilities in holding their monthly CME meetings by agreeing on schedules with them and providing subject content for their use in preparation for the meetings.

IR 4: Strengthening Networks, Linkages, and Referral Systems

4.1 Participate in networks at the national and international level

During the PY 4, the project participated in some key national and international events, as indicated below:

- **The International AIDS Society (IAS) Conference 2012, held in Washington, D.C., USA:** The project had six abstracts accepted for poster presentation [July 2012]. One staff member was sponsored by MSH to present our work during the conference.
- **A review meeting by all USG IPs under the auspices of the PEPFAR coordinating office:** This was used as an opportunity by PEPFAR to refocus HIV/AIDS initiatives following the release of the 2011 Uganda National AIDS Indicator Survey in June 2012. This meeting was followed by all IPs having to recalculate district-based HIV denominators and targets for the period 2013–2015—following baseline work done by various PEPFAR TWGs [July 2012].
- **A review meeting to introduce the National EMCTCT implementation plan (Option B+ roll-out):** The project has since conducted an assessment of 109 non-ART sites (HC IIIs) in preparation for this national initiative [August 2012].
- **The 6th Annual National Pediatric HIV/AIDS Conference:** The project had two abstracts accepted for this conference. We also sponsored 2 DHOs and two Clinical officers from HC IIIs to attend this informative annual event [September 2012].
- **The Geneva Health Forum on Non-Communicable Diseases:** The theme was “A Critical Shift to Chronic Conditions: Learning from the Front Liners.” The project’s gender and PHA advisor was a panelist in a session titled “Redesigning Healthcare Systems: Beyond Silos,” and she made a presentation on integration of NCDs into HIV continuum of care, with a focus on STAR-E’s experience with cervical cancer screening. The gender and PHA advisor also participated in the ICASA conference in Ethiopia, where she made an oral presentation on STAR-E’s work and experience with integration of cervical cancer screening into positive prevention for PLHIV.
- **Positive living coordination meeting** with other implementing partners and the Ministry of Health to discuss the way forward for PwP communication-related activities, which were previously spearheaded by Johns Hopkins Health Communications Partnership.
- **National Female Condom Coordination Committee meetings:** STAR-E participated in these meetings between Ministry of Health, UNFPA, and implementing partners, and one staff member was co-opted on the National Female Condom Coordination Committee to develop talking points and training materials for health care providers and peer educators.
- **Supportive supervision and mentorship of the cervical cancer trainees** for quality assurance and ensuring that CaCx screening procedures and practices are in sync with WHO and MOH standard operating procedures.



The Gender & PHA Advisor presenting in a plenary session at the Geneva Health Forum

SUCCESS STORY: LEVERAGING OTHER IPS' RESOURCES TO IMPROVE THE LIVES OF PLHA

Management of opportunistic infections can often be difficult and expensive, particularly in resource-limited settings, however, the use of the HIV basic care package commodities has been found to be very helpful in reducing mortality and morbidity levels among persons living with HIV and AIDS. The **HIV Basic Care Kit** contains a long-lasting insecticide-treated mosquito net (adult size), a safe water vessel, a dispenser containing 80 water purifying tablets, 60 condoms, a filter cloth, and a positive living guide. This kit is given to PLHA to help prevent them from contracting opportunistic infections such as malaria and diarrheal diseases. Prevention of opportunistic infections improves quality of life and reduces treatment costs.

In **Busia District**, one of the partners, Program for Accelerated Health Communication and Education (PACE), signed a memorandum of understanding with the district to distribute HIV Basic Care Kits to people living with HIV. Due to limitation in resources, PACE is able to deliver the Basic Care Kits to only Masafu Hospital, the biggest ART site in the district, in the hope that all PLHA would be able to access it from there. Unfortunately, PLHA enrolled for care in other ART sites in the district, for example in Dabani Hospital and Buhehe and Busia health centers, cannot make it to Masafu Hospital, and even if they could, they wouldn't be able to access the Basic Care Kits because they are not registered there. To avoid giving a kit to people who have already received one, the PLHA are asked to sign an acknowledgement of receipt of their kits and their files are stamped indicating that they have received a kit. This means that a PLHA enrolled for care at other ART sites in Busia district might not have a chance of accessing the Basic Care Kits because it is not permissible for them to carry their files to Masafu—even if the transport costs involved weren't prohibitive.

STAR-E, in partnership with PACE and Masafu Hospital, designed an **outreach model** to enable the HIV Basic Care Kits to be delivered to the PLHA at other ART sites in the district. PACE trained the HIV Basic Care Kits' Peer Educators to sensitize PLHAs on the importance of using the kits and, in addition, delivered the kits to Masafu Hospital stores. The hospital releases HIV Basic Care Kits on a weekly basis from their stores for distribution to patients registered at Masafu ART clinic as well as to others for taking to additional ART sites during the outreach. STAR-E provides the **transport facilitation** required to deliver the Peer Educators and the kits from Masafu Hospital stores to the other ART clinic sites.

To date, since the beginning of this networking in July 2012, **166** HIV Basic Care Kits have been given out to PLHAs at Busia HC IV. All persons living with HIV are entitled to the HIV Basic Care Kit, however, because of limited resources the very vulnerable PLHA have been prioritized to include the pregnant and lactating mothers, the children, and clients on ART. During one of the home visits, Yasin, a PLHA, commented *"Before I got my mosquito net, I used to suffer from frequent attacks of malaria, but nowadays this has reduced and I am improving rapidly."* As a matter of fact, this is a true statement because the frequency of Yasin's visits to the ART clinic over the last quarter has markedly reduced.



Yasin Baliraine of Bumirambako village Buwembe Parish, Buyanga Sub County who attends Busia HC IV now able to access the HIV basic care kit, thanks to the linkages between PACE and STAR-E.

Participating in networks at the regional and district level

The STAR-E project has strongly participated in and contributed to regional implementing partner coordinating mechanisms at the district level. Throughout PY 4, progress has been made toward adoption of one single district operational plan (DOP) for all USG IPs providing support to a district. The formal adoption of DOPs has so far happened for Mbale and Kapchorwa, with Sironko in progress. These districts now have an agreed-upon set of indicators for quarterly performance evaluation by the District Management Committee (which is composed of the political and technical leadership as well as IP representatives).

The original nine districts have continued to benefit from Grant A funding by the SDS project and have all qualified for continued support following the validation of last quarter's results. This funding mechanism supports HTC outreaches at selected facilities, referral of CD4 and DBS samples, tracking of CB-DOTS by SCHWs, integrated supportive supervision by the DHT, and coordination meetings such as the DHMT and the DAC. Our focus toward the end of PY 4 was to exert greater influence during DHMT meetings and supportive supervision activities by insisting on a predetermined agenda for the DHMT meetings (focused on evaluating performance during the quarter) as well as tracking previously agreed-upon action points. Similarly, we have insisted on timely arrangement of supportive supervision visits and the use of standardized MOH tools for documenting each facility visit. We have been able to reach an understanding with SDS and the districts that these two activities, which account for two of the nine performance-based indicators in Grant A), will be considered null and void if the STAR-E project is not part of their implementation.

4.2 Participating in Networks at the Community Level

Family Support Groups

To mitigate the social and psychological effects that are likely to have a powerful, often devastating impact on the life and the coping mechanisms of the HIV-positive women and their families, STAR-E project facilitated and participated in the formation of Family Support Groups (FSGs) at one health facility in each of the 12 districts. These FSGs were made in collaboration with the district health office and the community development officers targeting high-volume sites. These health facilities are Pallisa Hospital, Busolwe Hospital, Kapchorwa Hospital, Kibuku HC IV, Bukwo HC IV, Muyembe HC IV, Busia HC IV, Kapraron HC IV, Budadiri HC IV, Budaka HC IV, Bukigai HC III, and Nakaloke HC III.

SUCCESS STORY: FSGs Increase Access to HIV/TB Services at Nakaloke HC III

The Family Support Group (FSG) was launched at Nakaloke HC III, Mbale District, on 8 August 2012. FSGs are peer to peer groups intended to address issues such as follow-up of HIV patients who are lost and who miss appointment dates, support for drug adherence, disclosure of sero-status, and information on hygiene in the home and general positive living principles.

By the time of the launch, the FSG had **28** members. However, current figures indicate membership has risen to **134** people, some of whom are couples.

The members agreed to hold monthly meetings on the first Friday of the month. Issues to discuss include livelihood of the clients, hygiene, and how to support each other. Members also agreed to make a **monthly contribution** of 1000 shillings to support their activities and purchase items like sampans, plates, cups, and firewood, among others, to be used for preparation of porridge during the monthly meetings. This has demonstrated a high level of commitment and ownership of the FSG by the members.

The FSGs have increased the working relationship between health workers and expert clients. The expert clients support health workers in offering health education during ART clinic days at the facility. They also move from village to village to do follow-up of lost clients and those who miss an appointment. As a result, **19 HIV clients** have returned to ART clinic within a period of one month.

The sensitizations conducted in the community have increased the number of people accessing HCT services at both Nakaloke HC III and HCT outreaches. The number of **pregnant mothers** attending ANC has more than **doubled** as a result of the messages given by the expert clients.

PHA meetings

The project continued facilitating and participating in monthly PHA meetings at all the ART and chronic care sites. A total of 144 treatment support meetings were held across all the 12 districts. The meetings occur on a monthly basis at the high volume ART sites, while at the lower-level non-ART sites they occur on a quarterly basis. The PHA groups meet to discuss referral of community members for various HIV/TB-related services—especially TB screening, HIV counseling and testing, PMTCT, and adherence counseling—and to share information with the health workers about any issues arising from services rendered at the clinic. During these meetings, review of previous quarter's performance is done, challenges and experiences shared, and strategies for the next quarter are set.

In addition to the above, STAR-E project has continued supporting and utilizing case managers at all health facilities providing HIV/ART services. The case managers reinforce the efforts of the health workers in service delivery and have reduced the workload at the understaffed health centers. In general terms, they promote positive living among clients in both the community and facility. At the health facility, they help in retrieving clients' files on clinic days, help with triage, distribute condoms, follow up clients who are lost to follow-up, and conduct adherence counseling.

SUCCESS STORY: HIV-POSITIVE MOTHER WINS OVER A FELLOW HIV-POSITIVE MOTHER

Last year Nambozo tested HIV negative while her spouse tested HIV positive (**discordant couple**). In the course of this year, Nambozo became pregnant and went to the ANC clinic at Pallisa Hospital. Unfortunately, she was found to be HIV positive on retesting. She was put on ARV prophylaxis for PMTCT (AZT and nevirapine).

She was receiving her drugs in the ANC clinic and was not referred to the ART clinic. In June of this year Nambozo **delivered at home**. At six weeks, Nambozo brought her child to the Young Child Clinic (YCC) at Pallisa Hospital. The YCC is integrated with an early infant diagnosis (EID) care point. It was at this visit that a DBS sample was taken from the baby for DNA-PCR testing. She also had a blood sample for her CD4 level drawn. She was given cotrimoxazole plus NVP syrup for the infant and allowed back home and given an appointment to return for the results.

The DNA-PCR results came back in September. However, Nambozo never turned up to learn of her results as advised. During a **Family Support Group** meeting held in Pallisa Hospital, it emerged that Nambozo Beatrice, a 38-year-old client had gone missing in the ART clinic for a while. However, one member disclosed that Nambozo was sighted in Kisenyi, a suburb of Pallisa town council. A fellow HIV-positive mother who was on the PMTCT program volunteered to follow up Nambozo and, indeed, she found her in Kisenyi.

Nambozo disclosed that she kept on changing her location for **fear of stigma**, and that she earns her living by selling the local brew to take care of her four children whom her first husband left her with. She said when her customers learn of her HIV status they tend to fear and disappear from her business—the reason she kept changing location and could not go to the ART clinic.

With the **help of a fellow PMTC mother**, Nambozo was brought back to the clinic after counseling. She was given her results and escorted to the ART clinic for HAART initiation. Nambozo has now joined a Fam



Nambozo (with her baby) receiving her ARVs at the clinic.

WINNING AGAINST STIGMA: THE CASE OF TONY AT DABANI HOSPITAL

Tony (not his real name) is an 18-year-old S. 4 school drop-out. He took an HIV test during an HCT outreach conducted by health workers of Dabani Hospital at Dabani boy's primary school in 2011. His results turned out to be HIV positive. Although he was counseled and the health workers gave him a referral to come to the ART clinic and get enrolled into chronic care, he did not immediately respond to this offer due to fear of stigma. The counselor who attended to him during the HCT outreach and other health workers made several attempts, in vain, to follow him up in his village, including at his home, but he and his people often **denied** having a person by the name of Tony at that home. After a while of battling with stigma, and several follow up sessions by health workers of Dabani hospital, Tony got in touch. He had realized that his health was deteriorating rapidly and that if he didn't seek care, he could soon die. At last he made up his mind to go to the ART clinic at Dabani hospital.

When he appeared at the clinic, he was recognized by the counselor as he tried to register using a different name from the one he used at the time of the HIV counseling and testing outreach. He was again counseled, and after several encounters he **overcame his fears** and willingly registered.

Tony has been supported by health workers to overcome stigma to the extent that these days he regularly attends the PHA treatment support meetings at Dabani hospital. The health workers at the hospital have built Tony's **confidence**, and he is one of the PHAs at the health center actively **involved in following up** clients lost to follow-up. To date, two clients—Suzan, who had defaulted since 3 January 2012, and Aida Okumu, a seven-year-old girl who had missed clinic visits three times—have come back to the clinic after having been followed up and convinced by Tony. At the hospital, on clinic days, Tony is among the other expert clients who, on a rotational basis, attend to PHAS as they come to the ART clinic for refills of their septrin or ARVs or to get initiated into the ART clinic. Tony's challenge now is how to forge ahead with life; he has lost his father and lives with a mother who is mentally disturbed. Health workers at Dabani hospital ART clinic are thinking of ways of supporting him to maintain the new status he has achieved.



Tony during one of his counseling sessions



Tony is now more confident and relaxed.

The gender advisor participated in consultative meetings aimed at the formation of Family Support Groups (FSGs) in an attempt to increase uptake of PMTCT services in the districts and community. This was in Kween and Sironko districts. Other activities involved in were clinic-based mentorship of health workers and case managers, and

monitoring the take off and progress of cervical cancer screening in Pallisa Hospital, Butebo HC IV, Budaka HC IV, Busia HC IV, and Masafu Hospital.

Other community-level network meetings included:

- Mentorship visits to ART sites to support PwP activities
- Coordinating follow-up mentorship visits in the 16 health centers offering cervical cancer screening for quality assurance
- Supporting cost-share activities by mobilizing volunteers and holding meetings with them to orient them on the concept of cost share, as well as to assist them to book their volunteer time
- Coordinating the development of a newsletter on C-NCDs and the shooting of a video capturing MSH C-NCD intervention in Uganda for showcasing at IAS
- Supporting the case managers to sign their renewed contracts, and data collection.
- Providing technical support to PBF sub-grantees to fine-tune their proposals in response to the comments from the funders in order to meet the new targets for the project set by USAID.

In a bid to enhance referral of community members for specialized services, we distributed 750 referral books and 180 referral registers across the 12 districts as shown in Table 17. As a result, approximately 10,000 people were referred to different service points for different services such as HCT, SMC, PMTCT, TB screening and cervical cancer screening.

Table 17: Referral Forms Distributed to CBVs in PY 4

S. No	District	# of referral registers distributed	# of referral forms distributed
1	Pallisa	15	80
2	Mbale	15	60
3	Busia	15	80
4	Butaleja	15	80
5	Budaka	15	80
6	Bududa	15	80
7	Bukwo	15	50
8	Sironko	15	80
9	Kapchorwa	15	70
10	Kween	15	30
11	Bulambuli	15	30
12	Kibuku	15	30
Total		180	750

Challenges and lessons learned

- Stock-out of essential drugs such as septrin and dapsone continued to persist in some health centers, such as Kibuku HC IV and Masafu Hospital.
- Sometimes health centers experience stock-out of the male condoms, which is the most common form of protection.
- The uptake of cervical cancer screening has been slow because of lack of awareness in the community and the lack of essential supplies and equipment. Now that there is a national HPV vaccination, there is need to ride on that program to create awareness through multimedia channels.
- When we vary the medium through which information is passed on to the clients and the general public, information fatigue will not set in, especially as we promote information on positive living and prevention.

IR 5: Increasing Demand for HIV/AIDS and TB services

Mobilizing communities for uptake of voluntary medical male circumcision

During PY4, the major focus for demand creation for VMMC was on the traditionally circumcising districts of Eastern Uganda, timed to coincide with the official launch of the *Imbalu* season (traditional circumcision among the Bamasaba) in August 2012. Engagement with the traditional leadership and the community was informed by (1) research findings from a study conducted by the HCP project among the Bamasaba of Uganda about the effects of both VMMC and traditional male circumcision (TMC) and (2) a three-step strategy document developed in partnership with the HCP project whose intended end point would be a media release by the *Omukuka* (the Bamasaba traditional leader), thereby creating space for those Bamasaba who would prefer VMMC for their children or themselves to do so without being ostracized by the rest of the community.



The mammoth crowd that turned up on Aug 3 2012 (official launch of the Imbalu Year).



Dr Thomson Ngabirano (STAR-E) sharing research findings with the traditional leaders council

STAR-E facilitated a meeting with the traditional leaders, at which research findings making the case for a re-think concerning the adverse events associated with TMC and giving voice to the emerging alternative preferences within the Bamasaba themselves were presented. The traditional leaders' council received the findings and openly discussed them, and although they stopped short of agreeing to a media release supporting VMMC as culturally acceptable, they welcomed the project to provide both HTC and VMMC services alongside the venues where TMC would be conducted. Indeed the number of males accessing VMMC at STAR-E-supported sites in the Bamasaba community (Mbale, Bududa, Sironko, and Bulambuli) rose from 708 in Q3 to 2,520 during Q4 (more than a threefold increase). In the days leading up to the traditional launch ceremony at Mutoto grounds, the project supported the provision of HTC services to 605 people, with 214 HIV-negative males accepting referral for VMMC, and 58 people found to be HIV positive referred for care and treatment services.

Planned activities for next quarter:

- A communication strategy supporting the Option B+ roll out to be agreed with MOH and then implemented.
- Scale up use of radio spots, jingles and talk shows that raise the profile of available EMTCT, VMMC HTC and Care/treatment service points (where and when).
- Partner with Uganda Health Marketing Group to craft a behavioral change campaign that is appropriate to the context of the supported districts.
- Produce more posters, brochures, flipcharts, and fact sheets to be made available at both health facilities and selected community venues.

FINANCE, ADMINISTRATION, AND GRANTS, IN US DOLLARS

This report covers Finance, Administration and Grants for project year 4.

Project Funding Overview:

The project funding as at the end of the quarter is summarized in Table 18:

Table 18: Project Funding for Year Ended September 30, 2012

Total project budget, including LQAS	\$33,701,157
USAID plug in	\$30,000,000
Cost share – with plug	\$9,555,173
Total Project Budget	\$73,256,330
Cost share – without plug	\$5,055,174
Obligated funds	\$19,855,851

Project Management and Contract:

1. **Funding:** Obligated funds were still \$19,855,851 by the end of the year, whereas the total expenses including accruals was \$18,015,883, which is 91% spent of the obligated funds, leaving a balance of \$1,839,968, equivalent to 9% of obligated funds remaining.
2. **Round I PBF:** During the year 9 Round I PBGs were successfully closed out after they had been awarded UGX 828,700,800 the previous year. The total amount awarded 42% short of the earlier anticipated UGX 1.43 billion due to shortfalls in the achievement of the agreed-upon targets. Compliance checks on the local subs IRCU, JCRC, ATGWU, and AIC revealed the need for improvement in different areas for each partner, as indicated in the individual reports.
3. **Round II PBF:** Budgets were reduced by 50% to realign them with available funding, while maintaining focus on PMTCT, pediatric HIV, ART programs, and SMC. Technical teams were formed to support the grantees, and the RFA was aligned for the grantees' targets and geographical coverage to fit within the reduced budget.
4. **Cost share:** More than doubled from \$1,222,883 (41% of the expected cost share equivalent per current obligation) to \$3,188,377 (97% of the expected cost share equivalent per current obligation) during the year, which is attributed to LATH and the STAR-E community volunteers' monetized time contributions in the percentages of 23% and 77%, respectively.

I. Administration:

5.1 Procurement & Logistical Support

Logistical support given to a number of programs, including the measles and polio immunization exercises and the LQAS Surveys, involved a number of preparations, including hotel bookings; printing of tools and survey questionnaires; purchase of stationery, meals, and accommodations; procurement of meeting venues; and other logistical support provided by the administration department.

The most major procurement was for the printing and distribution of Health Management Information System (HMIS) tools; HMIS tools worth 119,231,266/= were printed and distributed to the various health facilities supported by STAR-E.



The team also managed to support activities such as cervical cancer screening mentorships, distribution of data collection tools and data collection for Q3 of PY 4, follow-up on PMTCT missing reports, formation of Family Support Groups, district sensitization on LQAS activities, picking HIV testing kits and TB drugs and other health supplies from NMS and JMS, CD4 PIMA training, HIV sample referral, and taking staff to Kampala for meetings, among other activities.

However, it is worth noting the challenges involved, including the usual hard-to-reach areas. This quarter being a particularly rainy season in the region, the roads almost became impassable as shown in the photograph.

The bad roads resulted in an increased rate of vehicle wear and tear coupled with higher fuel consumption patterns in some areas, which impacted the overall vehicle maintenance costs this quarter.

5.2 Security

There were no major security incidents apart from one case of theft where a STAR-E workshop participant's car was broken into and various valuable items were stolen. This was blamed on the laxity of the guards. Subsequently, a meeting was called and held between STAR-E and the manager of KK Security, after which a change of guards was effected immediately. Since then security alertness has been heightened.

5.3 Personnel Information

Staff Turnover: The total number of project staff by the end of the year was 65, compared to 77 at the start of the year. Of the 65 remaining, 32 are program staff and 33 are support team members.

Personnel Performance Review and Development (PPRD): The PPRD process was successfully completed with the majority of the staff being rated at SM (satisfactorily meeting most requirements) and a few exceeding expectations. At the end of the process each member of staff had their targets for next year reviewed and salary reviews were carried out on the basis of their performance plus a blanket base cost of living adjustment.

Team Building Activities: During the year, team building activities and programs were arranged for staff members. These included an annual staff Christmas party in December 2011, supervisors' training, monthly general staff meetings and a participatory internal review workshop. Staff members are now looking forward to an interactive retreat.

Thank you awards and other forms of internal recognition, including receipt of memorabilia to mark the 40th anniversary of MSH's existence further improved staff morale.

A number of abstracts were submitted by staff to international conferences. Some of these were competitively selected for poster presentation and one of the project staff members won an internal sponsorship to present his and all the other posters that were accepted at the International AIDS Symposium in Washington, D.C., in July 2012.

6. Communication & Information Technology

During the year the IT system, including the databases, email and Internet facilities, has remained available without any major breakdowns because of regular preventive maintenance and ensuring there is an up-to-date virus protection.

We also supported the district health information system training and the shooting of a video that was used at the International Aids Conference about Akinyi Mildred, a woman saved from cancer by a STAR-E intervention.



In conclusion, a Finance, Administration and Grants directorate managed to maintain its support function unreservedly for the project's core activities in spite of working under some of the most challenging times since start of the project. Nonetheless, as we look forward to the way forward, the lessons learnt and synergies available will be used more effectively in attaining maximum efficiency and economy in the remaining life of the Strengthening TB and HIV & AIDS Response in Eastern Uganda (STAR-E) Project

APPENDICES

Appendix I: PY 4 Overall HCT Summary by District

District	Males CTR			Females CTR			Males tested HIV positive			Females tested HIV positive			Point prevalence per age group, by sex						Total Prev	Total CHT
	<5 yrs	<17 yrs	>18 yrs	<5 yrs	<17 yrs	>18 yrs	<5 yrs	<17 yrs	>18 yrs	<5 yrs	<17 yrs	>18 yrs	<5M	<17M	>18M	<5F	<17F	>18F		
Budaka	1289	2645	9391	1646	3408	14386	20	22	236	24	21	464	1.6%	0.8%	2.5%	1.5%	0.6%	3.2%	2.4%	203
Bududa	1236	2935	7721	1544	4333	15281	12	29	169	44	55	267	1.0%	1.0%	2.2%	2.8%	1.3%	1.7%	1.7%	121
Bukwa	410	1168	3122	409	1265	5525	5	4	64	5	8	163	1.2%	0.3%	2.0%	1.2%	0.6%	3.0%	2.1%	10
Bulambuli	216	505	4793	316	847	7890	7	9	157	4	38	311	3.2%	1.8%	3.3%	1.3%	4.5%	3.9%	3.6%	70
Busia	1075	2271	10067	1049	2731	16027	25	33	653	39	48	1107	2.3%	1.5%	6.5%	3.7%	1.8%	6.9%	5.7%	139
Butaleja	2314	7086	12103	1990	4296	18888	42	17	266	17	25	473	1.8%	0.2%	2.2%	0.9%	0.6%	2.5%	1.8%	282
Kapchorwa	289	1312	5405	371	2250	10562	6	20	160	8	43	406	2.1%	1.5%	3.0%	2.2%	1.9%	3.8%	3.2%	102
Kibuku	223	584	4514	222	2922	9723	9	6	111	5	8	239	4.0%	1.0%	2.5%	2.3%	0.3%	2.5%	2.1%	6
Kween	66	1122	5509	67	1327	7276	1	2	35	0	4	98	1.5%	0.2%	0.6%	0.0%	0.3%	1.3%	0.9%	7
Mbale	511	1902	9304	647	2752	19251	20	19	273	11	20	752	3.9%	1.0%	2.9%	1.7%	0.7%	3.9%	3.2%	208
Pallisa	517	2584	15421	523	4116	25758	11	11	269	9	12	477	2.1%	0.4%	1.7%	1.7%	0.3%	1.9%	1.6%	516
Sironko	589	2365	8213	613	3386	15868	36	31	297	35	28	685	6.1%	1.3%	3.6%	5.7%	0.8%	4.3%	3.6%	82
Total	8735	26479	95563	9397	33633	166435	194	203	2690	201	310	5442	2.2%	0.8%	2.8%	2.1%	0.9%	3.3%	2.7%	1746

Appendix 2: PMTC Cascade, PY 4

District	Budaka	Bududa	Bukwo	Bulambuli	Busia	Butaleja	Kapchorwa	Kibuku	Kween	Mbale	Pallisa	Sironko	Total
ANC New Clients	9,910	5,665	2,025	2,368	10,547	11,410	4,265	7,706	2,980	10,444	14,407	13,108	94,835
Pregnant CTR	8,902	5,751	2,187	2,657	10,040	11,750	4,375	6,345	3,005	9,467	13,947	13,500	91,926
Pregnant Tested Positive	192	102	38	79	504	192	117	110	26	397	165	379	2,301
Tested Positive	207	129	42	86	516	198	139	117	27	347	172	389	2,369
Positive at Entry	77	45	8	8	160	156	61	35	8	121	168	161	1,008
Total Positive	284	174	50	94	676	354	200	152	35	468	340	550	3,377
Eligibility CD4	56	56	4	21	105	86	276	19	5	97	57	85	867
Eligibility WHO Clinical Staging	65	73	19	31	288	71	72	126	9	378	60	235	1,427
SD NVP	0	0	0	0	0	0	0	0	0	0	0	0	0
Given NVP AZT	119	91	20	64	427	167	113	81	19	252	156	328	1,837
Given SD NVP Combivir	117	46	15	9	190	155	58	51	8	142	125	127	1,043
HAART over 350	54	29	9	12	108	23	30	33	5	61	53	22	439
HAART 350 and Below	54	23	0	4	102	37	50	20	1	64	97	71	523
HAART	26	24	9	8	34	18	18	16	4	20	35	62	274
Total ARVs	262	161	44	81	651	340	189	148	31	414	316	517	3,154
Pos. vs ARVs	22	13	6	13	25	14	11	4	4	54	24	33	223
CTR vs positives	0	0	0	0	1	0	0	0	0	1	0	1	5
Assessed for ARVs	121	117	23	52	380	152	124	125	13	320	94	320	1,841
v Assessed	3	4	2	3	6	6	5	6	2	9	7	7	61
Partners CTR	1,357	123	19	151	409	1,451	191	1,242	113	276	2,157	304	7,793
Partners Tested Positive	25	11	3	2	31	16	5	27	3	12	47	33	215
Exclusive Breast Feeding Within 1 Hour	73	66	5	15	241	159	61	97	5	54	97	167	1,040
Exposed Infants Given NVP	77	66	6	10	262	80	46	58	5	58	96	173	937
Tested in Labor Delivery Positive	15	27	4	7	12	6	22	7	1	4	7	10	122
Health Workers Trained	7	3		3	3	3	3	1	3	4	3	2	35

Appendix 3: Achievements in Sexual Prevention across All Districts

District	# of individuals given sexual prevention messages centering on partner reduction, consistent condom use, and mutual faithfulness.			# of individuals given sexual prevention messages centering on mutual faithfulness or abstinence			MARPs			Condom outlets	Condoms Distributed
	M	F	Total	M	F	Total	M	F	Total		
Budaka	19,458	21,998	41,456	13,067	14,285	27,352	0	0	0	67	43,101
Bududa	8,167	9,067	17,234	5,974	6,498	12,472	330	265	695	34	21,336
Bukwo	9,487	11,421	20,908	5,116	5,505	10,621	330	1,144	1,474	27	26,000
Bulambuli	4,608	5,387	9,995	2,051	2,613	4,664	0	0	0	21	11,837
Busia	22,753	34,679	57,432	8,847	11,371	20,218	5,791	6,412	12,203	115	165,828
Butaleja	6,344	6,980	13,324	2,775	3,265	6,040	0	0	0	96	115,611
Kapchorwa	3,512	4,111	7,623	2,718	3,251	5,969	0	0	0	25	16,209
Kibuku	10,753	11,551	22,304	8,862	9,289	18,151	0	0	0	28	23,190
Kween	745	748	1,493	662	667	1,329	0	0	0	11	12,912
Mbale	1,476	1,723	3,199	706	592	1,298	3,173	3,346	6,519	23	47,498
Pallisa	32,243	32,222	64,465	24,945	25,721	50,666	7,423	6,000	13,423	175	155,781
Sironko	13,969	19,428	33,397	7,583	9,568	17,151	568	1,537	2,105	63	57,140
Total	133,515	159,315	292,830	83,306	92,625	175,931	17,615	19,102	36,715	685	696,443

Appendix 4: HMIS Tools Procured and Distributed to All Health Facilities, PY 4

	Tool	HMIS Form #	Category	# Pgs	Size	Total Qty.
1	District/HSD Manual	—	Book	280	A4	31
2	District/HSD Database	—	Book	145	A4	31
3	District/HSD Monthly Report	HMIS 123	Filmed Bklet (252pgs)	6	A4	31
4	District/HSD Monthly Inpatient Report	HMIS 124	Filmed Bklet (168pgs)	4	A4	31
5	District/HSD Weekly Epidemiological Surveillance Report	HMIS 033B	Filmed Bklet (168pgs)	2	A4	31
6	District/HSD Quarterly Report	HMIS 127	Filmed Bklet (48pgs)	4	A4	31
7	District/HSD Quarterly Assessment Report	HMIS 129	Filmed Bklet (60pgs)	5	A4	31
8	District/HSD Annual Report	HMIS 128	Loose Form	21	A4	31
9	District/HSD Output Performance and Workplan Format	HMIS 021	Loose Form	2	A4	31
10	DISTRICT/HSD Stock Card	HMIS 015	Booklet (200 pgs)	1	A4	31
11	District/HSD Record of Issuing	HMIS 207	Booklet (200 pgs)	1	A4	31
12	District/HSD Requisition and Issue Voucher	HMIS 017	Booklet (200 pgs)	1	A4	31
13	Indicator Booklets	—	Booklet	50	A5	286
14	Health Unit Manual	—	Book	411	A4	255
15	Health Unit Database	—	Book	160	A4	255
16	Health Unit Stock Card	HMIS 015	Booklet (200 pgs)	1	A4	255
17	Requisition and Issue Voucher	HMIS 017	Booklet (200 pgs)	1	A4	255
18	Integrated Antenatal Register	HMIS 071	Book (200 pgs)	1	A3	705
19	Integrated Maternity Register	HMIS 072	Book (200 pgs)	1	A3	771
20	Integrated Postnatal Register	HMIS 078	Book (200 pgs)	1	A3	255
21	Child Register	HMIS 073	Book (200 pgs)	1	A3	765
22	Integrated Family Planning Register	HMIS 074	Book (200 pgs)	1	A3	277

Continued on next page

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	Tool	HMIS Form #	Category	# Pgs	Size	Total Qty.
23	HIV Counseling & Testing (HCT) Register	HMIS 055b	Book (200 pgs)	1	A3	612
24	Pre-ART Register	HMIS 080	Book (200 pgs)	1	A3	57
25	ART Register	HMIS 081	Book (200 pgs)	1	A3	57
26	HIV-Exposed Infant Register	HMIS 082	Book (200 pgs)	1	A3	309
27	Health Center IV Daily Activity Log	HMIS 055a2	Book (200 pgs)	1	A3	13
28	General Hospital Daily Activity Log	HMIS 055a3	Book (200 pgs)	1	A3	11
29	TB Laboratory Register	HMIS 089	Book (200 pgs)	1	A4	139
30	Daily Activity Laboratory Register	HMIS 090	Book (200 pgs)	1	A3	2204
31	Other Serological Tests and Viral Load	HMIS 092	Book (200 pgs)	1	A3	391
32	Microbiology and Serology Hospital	HMIS 093	Book (200 pgs)	1	A3	139
33	Daily Activity Register for Heam	HMIS 094a	Book (200 pgs)	1	A3	139
34	Daily Activity Register for FACS	HMIS 095	Book (200 pgs)	1	A4	139
35	Health Unit TB Register	HMIS 096	Book (200 pgs)	1	A3	139
36	Prescription and Dispensing Log	HMIS 016	Book (200 pgs)	1	A3	255
37	Health Unit Notifiable Disease	HMIS 033a	Book (200 pgs)	1	A4	255
38	Health Unit Weekly Epidemiology	HMIS 033b	Filmed Bklet (168pgs)	2	A4	255
39	Health Unit Outpatient Monthly Report	HMIS 105	Filmed Bklet (252pgs)	6	A4	255
40	Health Unit Inpatient Monthly Report	HMIS 108	Filmed Bklet (168pgs)	4	A4	139
41	Bi-monthly Report and Order form	HMIS 084	Filmed Bklet (200pgs)	1	A4	24
42	Health Unit Quarterly Report	HMIS 106a	Filmed Bklet (48pgs)	4	A4	255
43	Health Unit Quarterly Assessment	HMIS 106b	Filmed Bklet (60pgs)	5	A4	255
44	Health Unit Annual Report	HMIS 107	Loose Form	21	A4	255

Appendix 5: Commodities Supply and Distribution to Districts from JMS/STAR-E

Item description	Source	Unit of measure	Unit pack	Total quantity	# of facilities supplied	Comments
AZT-3TC-NV; 300/150/200 mg	JMS/STAR-E	Tab	60	16,316	31	30 ART sites & 1 not yet accredited
AZT 3TC; 300/150 mg	JMS/STAR-E	Tab	60	2,569	31	30 ART sites, 1 not yet accredited
Efavirenz; 600mg	JMS/STAR-E	Tab	30	1,697	31	30 ART sites, 1 not yet accredited
Alluvia	JMS/STAR-E	Tab	120	235	11	10 ART sites, 1 not yet accredited
Tenofovir- Lamuvudine; 300/300 mg	JMS/STAR-E	Tab	120	5,080	27	26 ART sites, 1 not yet accredited
Nevirapine; 200 mg	JMS/STAR-E	Tab	60	4,696	30	30 ART sites, 1 not accredited
AZT/3TC/NVP; 30/60/50 mg	JMS/STAR-E	Tab	60	1,983	28	27 ART sites, 1 not accredited
AZT/3TC; 30/60 Mg	JMS/STAR-E	Tab	60	187	20	19 are accredited ART sites, 1 not yet accredited
3TC/D4t/NVP; 30/6/50 mg	JMS/STAR-E	Tab	60	1,389	28	27 are accredited ART sites, 1 not yet
ABC/3TC; 60/30 mg	JMS/STAR-E	Tab	60	131	20	All accredited ART sites
Nevirapine syrup 10MG/ml given during PMTCT roll-out	JMS/STAR-E	MI	240 ml	173	16	15 ART sites, 1 not yet accredited
3TC/D4T; 30/6mg	JMS/STAR-E	Tab	30	407	26	25 accredited ART sites, 1 not accredited
Efavirenz; 200mg	JMS/STAR-E	Tab	90	617	20	19 are accredited ART sites, 1 not yet
Atazanavir; 300mg	JMS/STAR-E	Tab	30	205	12	12 ART sites
Retinovir; 100 mg	JMS/STAR-E	Tab	60	215	16	16 ART sites
Cotrimoxazole syrup; 240mg/5ml	JMS/STAR-E	MI	60ml	2,830	29	28 accredited ART sites, 1 not accredited
NVP 50 mg	JMS/STAR-E	Tab	60	131	20	All accredited sites
Cotrimoxazole; 120 mg	JMS/STAR-E	Tab	100	1,907	31	30 accredited, 1 site not accredited
Cotrimoxazole; 480 mg	JMS/STAR-E	Tab	100	2,260	31	30 accredited, 1 site not yet accredited