

Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC)

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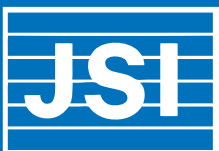
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Program Year 3 Annual Report

Achievements, Lessons Learned and Way Forward

October 1, 2010 – September 30, 2011



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This program is implemented by JSI Research & Training Institute Inc., in collaboration with World Education's Bantwana Initiative, Communication for Development Foundation Uganda, mothers2mothers, and Uganda Cares.

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LIST OF ACRONYMS

AB	Abstinence and Being Faithful	EMR	Electronic Medical Records
ABC	Abstinence, Being Faithful and Condoms	EoP	End of Program
ACP	AIDS Control Programme	FLEP	Family Life Education Program
AIC	AIDS Information Centre	FOC-REV	Friends of Christ Revival Ministries
AIDS	Acquired Immuno-deficiency Syndrome	FSG	Family Support Group
AMREF	African Medical Research Foundation	GBV	Gender Based Violence
ANC	Antenatal Care	GLIA	Great Lakes HIV&AIDS Initiative
ART	Antiretroviral therapy	GoU	Government of Uganda
AZT	Azidothymidine	HBC	Home based care
BCC	Behaviour Change Communication	HC	Health Centre
BCPs	Behaviour Change Communication Programs	HCI	Health Care Improvement project
BMU	Beach Management Unit	HCP	Health Communication Partnership
CB DOTS	Community Based Directly Observed Treatment – Short course	HCWM	Healthcare waste management
CBC	Complete Blood Count	HIV	Human Immuno-deficiency Virus
CBOs	Community Based Organizations	HMIS	Health Management Information Systems
CD4	Cluster of Differentiation 4	HRS	Human Resources for Health
CDFU	Communication for Development Foundation Uganda	HRL	Health Reference Laboratory
CDR	Case Detection Rate	HSD	Heath sub-District
CM	Community Mobilization	HTC	HIV Testing and Counseling
CME	Continuing Medical Education	ICF	Intensive Case Finding
CORPs	Community Owned Resource Persons	IDAAC	Integrated Development Activities and AIDS Concern
CPD	Continuous Professional Development	IEC	Information, Education and Communication
CPHL	Central Public Health Laboratory	IGAs	Income Generating Activities
CSAs	Community Support Agents	IP	Implementing Partners
CSOs	Civil Society Organizations	IMAI	Integrated Management of Adult and Adolescent Illnesses
CSWs	Commercial Sex Workers	IMCI	Integrated Management of Childhood Illnesses
DACs	District HIV&AIDS Committees	IMPAC	Integrated Management of Pregnancy and Childbirth
DATs	District HIV&AIDS Taskforces	IYCF	Infant and Young Child Feeding
DFPP	District Focal Point Persons	JCRC	Joint Clinical Research Centre
DHMT	District Health Management Team	JMS	Joint Medical Store
DHIS	District Health Information System	JSI	JSI Research & Training Institute, Inc.
DHO	District Health Officer	LG	Local Government
DLFP	District Laboratory Focal Person	LMIS	Logistics Management Information System
DOTS	Directly Observed Treatment – Short Course	LQAS	Lot Quality Assurance Sampling
DQI	Data Quality Improvement	m2m	Mothers2Mothers
DTLS	District Tuberculosis and Leprosy Supervisor	MARPs	Most-at-risk populations
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation	MCPs	Multiple Concurrent Partnerships
		MDD	Music Dance and Drama

MEEPP	Monitoring and Evaluation of Emergency Plan Progress
MoH	Ministry of Health
MoU	Memorandum of Understanding
MUAC	Mid upper arm circumference
MUCOBADI	Multi Community Based Development Initiative
NAADS	National Agricultural Advisory Services
NACWOLA	National Community of Women Living with HIV&AIDS in Uganda
NAFOPHANU	National Forum for People Living with HIV&AIDS in Uganda
NMS	Network Support Agents
NSAs	National Medical Stores
NTP	National Tuberculosis and Leprosy Program
NTRL	National Tuberculosis and Leprosy Reference Laboratory
NUMAT	Northern Uganda Malaria, AIDS and Tuberculosis Program
NVP	Nevirapine
OCA	Organizational Capacity Assessment
OIs	Opportunistic Infections
OVC	Orphans and other Vulnerable Children
PACE	Program for Accessible Health, Communication and Education
PCR	Polymerase Chain Reaction
PEP	Post exposure prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PITC	Provider Initiated Testing and Counseling
PLHIV	Persons Living with HIV&AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
PNC	Postnatal Care
PrEP	Pre Exposure Prophylaxis
PTC	Post Test Clubs
PwP	Prevention with Positives
PwD	Persons with Disabilities
PY	Program Year
Q	Quarter
QI	Quality Improvement
QoC	Quality of Care
REF	Referral

SACCOs	Savings and Credit Cooperative Organizations
SDS	Strengthening Decentralization for Sustainability project
SCHW	Sub County Health Worker
SCMS	Supply Chain Management System
SMC	Safe Male Circumcision
SPAI	Service Performance Assessment and Improvement
STAR	Strengthening TB and HIV&AIDS Responses
STAR-E	Strengthening TB and HIV& AIDS Responses in Eastern Uganda
STAR-EC	Strengthening Tuberculosis and HIV&AIDS Responses in East Central Uganda
STIs	Sexually Transmitted Infections
SURE	Securing Uganda's Right to Essential Medicines project
TASO	The AIDS Support Organization
TB CAP	Tuberculosis Control Assistance Program
TB	Tuberculosis
TCR	Tested Counseled and Received HIV results
ToT	Training of Trainers
TSR	Treatment Success Rate
UAC	Uganda AIDS Commission
UBTS	Uganda Blood Transfusion Services
UDHA	Uganda Development and Health Association
UHMG	Uganda Health Marketing Group
UMEMS	Uganda Monitoring and Evaluation Management Services
URHB	Uganda Reproductive Health Bureau
USAID	United States Agency for International Development
VHTs	Village Health Teams
WASH	Water Sanitation and Hygiene
WHO	World Health Organization
YA	Youth Alive
YAWIA	Youth and Women in Action
YEAH	Young Empowered and Healthy
ZTLS	Zonal Tuberculosis and Leprosy Supervisor

LETTER FROM CHIEF OF PARTY



Dear Colleagues,

Once again, it is with great pleasure that we share with you our latest Annual Report. This report highlights in narrative, figurative and pictorial forms, representative achievements of the Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) program during the course of Program Year 3. Over the past twelve months, STAR-EC has been privileged to implement activities in East Central Uganda in partnership with nine district local governments and eleven civil society organizations with presence in the region. The achievements presented in this PY3 Annual Report are the result of this collective effort.

On behalf of JSI Research & Training Institute Inc. (JSI) and STAR-EC, I would like to take this opportunity to thank the American people who, through the United States Agency for International Development (USAID), have generously continued to provide funding for this program despite the current global financial challenges.

STAR-EC would also like to thank the Government of Uganda that, through the Ministry of Health, has continued providing useful guidance through the provision of up-to-date policies and guidelines; the provision of technical assistance; taking lead on numerous trainings; and the provision of support supervision in the region.

To our consortium partners namely the Bantwana Initiative; Communication for Development Foundation Uganda (CDFU); mothers2mothers (m2m); and Uganda Cares, I would like once again to express JSI's continued gratitude to the great staff you seconded to STAR-EC; the technical expertise you have continued to provide; and the innovation that you have brought on board during this implementation year.

STAR-EC activities continue to be guided by the priorities enunciated in the Uganda National HIV&AIDS Strategic Plan 2007/8-2011/12; the Health Sector Strategic and Investment Plan 2010/11-2014/15 and the Health Sector HIV/AIDS Strategic Plan 2010-2015. We also follow the overall principles outlined in the United States Government's Global Health Initiative. All the different stakeholders' participation in STAR-EC activities continues to be highly valued and as we enter into another implementation period, we would like to share with you the results that have been achieved so far; the challenges that we have faced; and the proposed way forward. JSI is indeed grateful for the opportunity to contribute towards improving the access to, coverage of, and utilization of quality and comprehensive HIV&AIDS and TB services in East Central Uganda and we are confident that the intended beneficiaries are reaping results from this collaboration.

Enjoy the reading!

Sincerely,

A handwritten signature in black ink, appearing to read 'Samson Kironde', with a long, sweeping horizontal line extending to the right.

Dr. Samson Kironde
Chief of Party, STAR-EC

EXECUTIVE SUMMARY

The period October 2010 to September 2011 relates to the third year of implementation by the Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) program. This program aims at increasing access to, coverage of, and utilization of quality and comprehensive HIV&AIDS and TB prevention, care and treatment services within district health facilities and communities in nine districts of East Central Uganda.

This report is being submitted in accordance with the provisions of Cooperative Agreement No. 617-A-00-09-00007-00 between USAID and JSI Research & Training Institute, Inc. STAR-EC is implemented by a consortium of five partners that include JSI Research & Training Institute, Inc. (JSI) as the prime partner; World Education's Bantwana Initiative; Communication for Development Foundation Uganda (CDFU); mothers2mothers (m2m); and Uganda Cares as sub-partners.

During Program Year (PY) 3, tremendous efforts were made towards improving the scope, quality, geographical coverage and accessibility of HIV&AIDS and TB services in East Central Uganda using a health systems strengthening approach. Notable achievements for human resources for health included training and providing on-job mentoring to health workers; recruitment of 40 health workers to fill the vacant positions in the new Buyende District; as well as the sponsoring of 10 microscopists to undertake pre-service training in laboratory technology at the Jinja Medical Laboratory Training School.

Health services financing involved providing direct funding to public health units to primarily conduct outreach activities and also to support CSO-led service delivery at family and community levels. Over the PY3 period, a total expenditure of UGX 1,772,785,955 was incurred to support district-led activities, compared to UGX 497,322,650 spent during PY2. In addition, funding to the eleven civil society organizations supported by STAR-EC amounted to UGX 2,608,039,990. Consequent upon this funding, there was overall improvement in CSO geographical coverage, rising by 21% from 52 sub-counties during PY2 to 63 during PY3; and parishes by 25% from 266 during PY2 to 332 in PY3.

There was also an increased focus on strengthening the supply chain management capacity and health infrastructure of district health units and civil society organizations (CSOs). STAR-EC provided laboratory reagents and equipment; HIV test kits; key pharmaceutical items (mainly to support safe male circumcision); assorted prevention of mother-to-child transmission of HIV (PMTCT) supplies; as well as 'maama' and home based care kits.

There was refurbishment of the laboratory at Bugiri General Hospital; the operating theatre at Busesa Health Centre (HC) IV; and the placement of waiting shades at seven selected health centers with high patient volumes. Improvement in logistics management led to an increase in the reporting rate from 93% during PY2 to 97% in PY3 and to a decrease in the stock-out rate of key supplies from 49% during PY2 to 36% in PY3. Support to laboratory services resulted into an increase in the number of facilities with functional laboratories in the region from 66 during PY2 to 80 facilities at the end of PY3. There was also a significant increase in the number of key laboratory tests performed in PY3 compared to PY2.

During PY3, support to health information systems entailed rolling out the electronic medical records (EMR) system to all the 26 accredited sites that are providing antiretroviral therapy (ART). Additionally, data quality audits and quarterly program performance reviews were performed. Other activities included on-job training on data collection tools; training of 92 local government and CSO personnel on conducting and executing the lot quality assurance sampling (LQAS) survey as well as working with the STAR-E program in implementing the service performance assessment and improvement (SPAI) workshop for Iganga, Kaliro, Kamuli and Namutumba Districts. Additionally, STAR-EC conducted an organizational capacity assessment (OCA) for all eleven supported CSO partners. They were also provided with technical support in developing targeted action plans that were done in respect to the OCA findings.

STAR-EC acknowledges the importance of strengthening local leadership, management and governance that is crucial for prioritizing, planning and delivering health services in an effective and coordinated manner. To this end,

STAR-EC trained 45 members of the District HIV&AIDS Committees (DACs) from the nine districts in coordination, support supervision, resource mobilization and management. The committees were further supported to conduct quarterly HIV&AIDS coordination meetings and an annual district HIV&AIDS stakeholders' review meeting. Such governance support to the districts will in future be provided through the Strengthening Decentralization for Sustainability (SDS) program that has now started providing grants to six of the districts in East Central Uganda.

In relation to health services delivery, significant progress was made during PY3 and this is summarized below and in Table 1 at the end of this Executive Summary.

- HIV testing and counseling (HTC) services were delivered through 106 health facilities up from 68 at the end of PY2. HTC outreaches prioritized the hard-to-reach underserved communities and key populations at higher risk. Overall, a total of 330,966 people (201,967 females and 128,999 males) were tested for HIV and received results. Of those tested and received results 17,849 (5.4%) were diagnosed HIV positive. Not surprisingly, the highest HIV prevalence (17.0%) was registered from the islands of Mayuge and Namayingo Districts which have significant numbers of fisher folk – a known most-at risk population (MARF).
- PMTCT (Option A) services were delivered at 85 health facilities and overall, 99,464 pregnant women of previously unknown HIV status were counseled, tested and received results, with a positivity rate of 2.5%. Additionally, 73% of the HIV positive women were enrolled onto a PMTCT prophylactic regimen/HAART as compared to 60% during PY2. To enhance retention of 'mother-baby' pairs and adherence to PMTCT interventions, the mothers2mothers (m2m) model was scaled up to 30 sites (up from 10 in PY2). The PMTCT-EID strengthening program greatly improved the tracking of the 'mother-baby' pairs in the implementing sites.
- Access to clinical care services expanded from 80 to 129 facilities including 33 HCs II that serve fishing communities. These were supported to develop the competence to enroll HIV positive clients into chronic care.
- Nutrition interventions were supported with training, mentoring and coaching of 30 health workers on nutrition integration into HIV clinics and provision of ready-to-use therapeutic foods (RUTF). A total of 147 severely malnourished PLHIV were served.
- Antiretroviral treatment services were supported at 26 facilities (including 4 hospitals, 12 HCs IV and 10 HCs III). Monthly ART outreaches were conducted with a priority focus on underserved and hard-to-reach MARFs notably the fisher folk. A total of 5,083 new clients enrolled on ART compared to 1,776 newly enrolled on ART in PY2. A total of 7,487 clients are currently on antiretroviral treatment.
- Pediatric ART services were scaled up to all the 26 ART sites from the initial 12 during PY2. This translated into 100% coverage of hospitals and HCs IV. A total of 530 newly identified HIV positive children (under 15 years of age) were enrolled onto ART during PY3.
- There was a big improvement in the TB/HIV indicators across all districts. To illustrate this achievement, 96% (n=2,407) of the new patients recorded in the TB register had an HIV test done compared to 84% (n=2,133) in PY2. A total of 432 (57%) TB/HIV co-infected patients started on cotrimoxazole prophylaxis and ART in PY3 compared to 123 (22%) started on the same in PY2. The program has observed that there is a low prevalence of TB/HIV co-infection (34%) in the region compared to the national estimate of 50-60%. As regards TB prevention, the average PY3 case detection rate (CDR) stood at 42.8% compared to PY2 achievement of 38.8%.
- Promotion of HIV prevention through sexual and other behavior risk prevention was done through peer-centric approaches such as use of 'model couples', youth peer educators and NACWOLA's community support agents (CSAs). Overall, 132,586 individuals were reached with HIV prevention messages focusing on abstinence and being mutually faithful.
- Promotion of HIV prevention through other strategies beyond abstinence and being faithful was mainly done through conducting integrated outreaches to key populations at high risk including fisher folk; sex workers and their partners; and long distance truck drivers. All together, a total of 19,473 key populations at higher risk were reached against the PY3 annual target of 10,000. A total of 33,717 individuals in the category of 'emerging populations at higher risk' (including plantation, 'boda boda' motorcyclists, bar, lodge and video hall operators and workers) were reached with behavior change

promotional messages. In addition, a total of 41,881 people were reached with prevention with positives services.

- Safe male circumcision services were also scaled up to 15 health facilities and 90 additional service providers were trained. A total of 14,327 clients received safe male circumcision (SMC) services up from only 803 served in PY2.
- A lot of effort was placed on improving the quality of health service delivery. This entailed training and facilitating all district quality improvement teams to conduct monthly coaching to the facility-based quality improvement teams. In addition, regional quality of care staff members were facilitated to provide quarterly mentorship visits to district coaches and health unit staff. Through these visits, health workers were mentored on standards of care and good clinical practices.

The comprehensive package of services that continued to be delivered under this program was buttressed by mutually reinforcing intra-facility and community-facility referrals and networking. The village health teams (VHTs) have been a portal for community mobilization and referral activities. A total of 3,879 VHT members were trained and supported to carry out their functions. During PY3, 91,275 new clients were referred for a range of services with 68% of the referred clients received services within one month of referral.

It is worth noting that although most of the planned targets were duly achieved or even significantly surpassed (as evidenced in Table 1), implementation during PY3 was not without the usual challenges. Such challenges continue to include human resource constraints at district and CSO levels; stock-outs of essential items; delays in reporting and accounting; and the generally poor infrastructure through which services have to be delivered.

Table 1: Program Year 3 summary results in relation to overall program outputs

Intervention Area	Key Indicators	Achievements to-date vs. PY3 and End of Program (EoP) targets								
		PY1 (only 3 months)	PY2	PY3	Target for PY3	% of Target achieved	EoP Target	Cumm. achievement	% of EoP target achieved	Comments
HIV Testing and Counseling (HTC)	Individuals who received HTC and their results	10,376	178,303	330,966	130,000	255	600,000	519,645	87	Improved availability of test kits, increase in no. of outreaches contributed to high outputs
	Individuals trained on HTC delivery	64	256	356	200	178	400	676	169	More individuals than initially planned had to be trained due to scale up to HCs II level and increased community outreaches
	Outlets providing T&C services	35 (of which only 2 were static)	76 static and 280 outreach sites	106 static and 268 outreach sites	100 static sites	106 (of static sites)	148	106 static sites	72% (of static sites)	
Prevention of mother-to-child transmission of HIV (PMTCT)	Pregnant women with known HIV status	No implementation	65,983	104,689	118,000	89	482,600	170,672	35	Initial EoP target was increased from 300,000 to 482,000 due to USAID directive
	Pregnant women who received ARVs for PMTCT prophylaxis	No implementation	1,795	3,418	6,900	50	26,230	5,177	20	Routine program data collected over time shows a lower HIV prevalence among the pregnant women (<4%) than the national figure used to derive target (6.5%)
	Persons trained to provide PMTCT	No implementation	177	458	240	191	400	635	159	More PMTCT sites were brought on board hence need for more persons trained

Intervention Area	Key Indicators	Achievements to-date vs. PY3 and End of Program (EoP) targets								
		PY1 (only 3 months)	PY2	PY3	Target for PY3	% of Target achieved	EoP Target	Cumm. achievement	% of EoP target achieved	Comments
Prevention of mother-to-child transmission of HIV (PMTCT)	Service outlets providing PMTCT	No implementation	68	83	68	122	73	83	114	85 facilities received training support while 83 actually provided PMTCT services during PY3
Sexual and Other Behavioural Risk Prevention	Targeted popn. reached with abstinence and/or be faithful messages	39,377	102,860	132,586	60,000	221	283,000	275,183	97	Increase in no. of CSOs and trained volunteers providing services Better planning and allocation of trained resources
	Individuals trained to provide AB messages	234	564	315	430	73	1,265	1,113	88	
	MARPs reached with individual or small group messages	12,179	12,763	19,473	10,000	195	50,000	32,236	64	New indicator on MARPs introduced during PY2 and EoP cumulative doesn't include PY1 Results which were under OP
Clinical and Preventive Services (TB/HIV)	HIV+ patients in HIV care or treatment who started TB treatment	0	205	533	1,000	53	4,900	738	15	Our routine data shows that TB/HIV co-infection in East Central Uganda continues to be lower (34%) than 50-60% reported nationally. Over 93% of HIV+ clients were screened for TB
	TB patients who had an HIV test result recorded in the TB register	13	1,802	2,317	1,100	211	5,500	4,312	75	Increased training of health workers at HCs III and dissemination of Policy Guidelines Mentorship and support supervision
	Individuals trained to provide HIV/TB related palliative care	64	875	250	200	125	700	1,189	170	Trained ToTs who then trained at health sub-district level
Antiretroviral therapy (ART)	HIV+ individuals receiving a minimum of one clinical care service	283	7,041	16,684	14,000	119	26,000	15,5999	60	Increase in no. of outreaches Steady supply of drugs by both MoH and PEPFAR
	Adults and children with advanced HIV infection newly enrolled on ART	61	1,776	5,083	1,750	290	8,200	6,920	84	Scale up to more sites Increased outreaches Regular supply of drugs from both MoH and PEPFAR
	Adults and children with advanced HIV infection receiving ART (current)	372	3,119	7,487	4,773	157	9,323	4,773	51	

Intervention Area	Key Indicators	Achievements to-date vs. PY3 and End of Program (EoP) targets								
		PY1 (only 3 months)	PY2	PY3	Target for PY3	% of Target achieved	EoP Target	Cumm. achievement	% of EoP target achieved	Comments
Safe Male Circumcision (SMC)	Males circumcised	0	803	14,327	4,350	329	15,360	15,130	99	To achieve population level impact, the EoP target for SMC is likely to be dramatically increased
	SMC surgical sites	0	7	15	12	125	15	15	100	More outreaches and 'circumcision camps' will have to be done in order to reach the numbers required for 'population level impact'
Strategic Information (SI)	Local organizations provided with TA for SI activities	4	11	11	11	100	11	11	100	
	Individuals trained on strategic information	122	379	170	85	200	85	671		Redistricting from 6 to 9 districts led to need for more training Some individuals are trained more than once but on different modules
Policy Analysis and Systems Strengthening	Individuals oriented/trained on new/revised HIV&AIDS related Policies and Guidelines	347	124	80				551		This is a 'reporting only' indicator so no targets were set
	Local organizations provided with TA for HIV related institutional capacity building	4	11	11	11	100	11	11	100	

Source: STAR-EC program records

1.0 INTRODUCTION

1.1 Background

JSI Research & Training Institute, Inc., has been implementing HIV&AIDS and TB related activities in East Central Uganda since March 2009. Details about the objectives of the STAR-EC program and a description of the geographical area of coverage have previously been extensively provided elsewhere in the PYs 1 and 2 annual reports available on the STAR-EC website (www.starecuganda.org) and are not repeated here.

The PY3 report focuses on describing achievements made in the context of what is summarized in Table 1 and also highlights lessons learned and challenges during the period October 1, 2010 to September 30, 2012. A way forward under each result area is also provided in order to inform future programming for this five-year program.

2.0 MAJOR RESULT AREAS DURING PY3

2.1 Result 1: Increasing access to, coverage of and utilization of quality comprehensive HIV&AIDS and TB prevention, care and treatment services within district health facilities and their respective communities

2.1.0 HIV Prevention

Promotion of HIV prevention through sexual and other behavioural prevention

Promotion of 'combination' HIV prevention in the general population

In line with the current thinking on HIV prevention, during PY3, STAR-EC implemented 'combination' HIV prevention encompassing behavioral, biomedical and structural interventions. The behavioral risk prevention activities focused on delay of sexual debut; reduction in the number of multiple concurrent sexual partnerships; and promotion of correct and consistent condom use as well as condom distribution. Structural HIV prevention included alteration of social and cultural norms and attitudes through utilization of peer support groups as well as behavior change communication utilizing several campaigns that are described in detail later in this report. Structural prevention initiatives focused on various segments of the population (especially males) with the aim of challenging them and calling upon them to adopt social norms and values that promote respect for girls and women and reject violence against women, risky rites of passage and widow inheritance. Initiation of income generating activities (IGAs) among peer support clubs was also promoted as was knowledge sharing and risk avoidance through various sporting activities.

For biomedical prevention, peer educators promoted information dissemination, education and referrals for services that meet respective needs of different sections of the community. The approaches used to promote sexual and other risk behavioral prevention included peer-to-peer dialogue; small group discussions; peer support group activities; fidelity seminars and behavior change communication programs (BCPs); the 'Knowledge room' based services; and integrated outreaches to hard-to-reach and most-at-risk populations (MARPs) of which the East Central region has plenty. Clients were encouraged to take up services such as HIV testing and counseling (HTC) to know their status as well as that of their partners; and (for the males) to take up safe male circumcision (SMC) which is known to reduce the risk of acquiring HIV infection.

Detailed results from the interventions that were promoted by STAR-EC during PY3 are presented in subsequent sections of this report.

Promotion of mutual fidelity, delay of sexual debut and sexual partner reduction initiatives

STAR-EC supported a total of 101 youth clubs formed within the community. Through these clubs, peer educators reached a total of 66,329 youth (32,664 females, 33,665 males) promoting age-appropriate messages aimed at delaying sexual debut and partner reduction. These messages included goal setting; life skills planning and education promoting life skills; how to cope with peer pressure; strategies for delay of sexual debut; the benefits of knowing one's HIV status; strategies to stay negative; positive living after knowing that one is HIV positive; the benefits of HIV testing prior to initiation of sexual relationships; condom use; and maintaining healthy relationships through sports.



A peer support group in East Central Uganda

Youth were further counseled to understand the dangers of early marriage, cross generational and transactional sex and were challenged to reject risky rites of passage

All the youth clubs were equipped with games and sports items and the peer educators received targeted information, education and communication (IEC) and behavior change communication (BCC) materials that included job aids, cue cards and training manuals facilitate their work.

Additionally, STAR-EC supported the training of 412 'model couples' using the 'Families that prosper' module. The peer educators for the 'model couples' were provided with talking points, training manuals and other IEC/BCC materials to facilitate their work in the community.



Peer educators using disseminated IEC material during community dialogue

The couples were used to promote mutual fidelity messages including celebrating marriage; working together as a couple; sharing spousal expectations; enjoying one another's company; as well as maintaining friendship and joint problem solving as a couple. Beyond providing this information, the 'model couples' promoted HIV prevention messages including condom use targeting couples in discordant relationships and referring couples for HTC and male spouses for SMC.

Religious leaders with peer support skills also supported the implementation of being faithful through holding fidelity sessions, couple counseling and communication.

Cumulatively, the 1,210 'model couples' trained during PY3 reached a total of 66,257 individuals (31,089 females, 35,168 males) with messages aimed at personalization of risk perception and coming up with risk reduction strategies.

The groups have since initiated revolving funds schemes to help them run some income generating activities (IGAs) including piggery, poultry, crop farming and maize milling projects formed to maintain coherence and sustainability of these groups beyond STAR-EC support.



Sam and Sarah – a now happily married 'model couple'

One of the beneficiaries of the 'model couples' training shared the benefit they received from the 'Families that prosper' module and this is what they had to say:

"As a typical rural Musoga husband, I used to believe that a wife is a man's property and you can afford to do anything with her..., I used to spend lots of money and time with my peers drinking and having fun" says Sam.

"I regretted getting married to Sam and I always thought of divorcing every now and then, misery always filled my heart! I only stayed for the sake of my children..." remarked Sarah.

However, with a smile Sarah now confesses *"Our marriage completely changed after going through the Families that prosper training and we are now happily married."*

Lessons learned

- The training of trainers (ToT) for *'model couples'* impacted and provided the skills used to cascade the training to reach more couples at the grassroots level
- Utilizing the peer-led approach mainly through peer-to-peer dialogues has created a platform for youth to discuss private issues affecting them and have appropriate referrals provided

Challenges and way forward

- Many youth are faced with parent-to-child communication challenges and lack a supportive environment to discuss issues related to their sexual life. For example, some youth reported symptoms of sexually transmitted infections but could not share these with their parents due to fear. However through peer-to-peer dialogue they have been helped and appropriate referrals provided
- There is high demand for start-up capital for income generating activities. STAR-EC is supporting the groups to link up with the existing programs such as the National Agricultural Advisory Services (NAADS) and the Savings and Credit Cooperative Organizations (SACCOs)
- Negative perception and resistance to condom use especially if this is fronted by women to their partners. Such requests are usually associated with infidelity. *'Model couples'* continued to support their peers to understand the importance of condom use in HIV prevention

Promoting risk reduction strategies among most at risk populations (MARPs)

The MARPs reached during PY3 included fisher folk; commercial sex workers (CSWs) and their partners; long distance truck drivers; as well as other *'emerging MARPs'* groups including *'boda boda'* motorcyclists, bar and lodge attendants, video hall attendants as well as plantation workers. Targeted HIV interventions for MARPs were promoted through outreaches; peer-to-peer initiatives; established static sites such as the *'Knowledge rooms'* at Naluwerere truck stop and at Lugala landing site; as well as through quarterly joint integrated service delivery week-long visits to hard-to-reach populations on the islands.

The following HIV prevention services were provided to fisher folk:

- Education on correct and consistent condom use, distribution of condoms, HTC, (SMC) and sexually transmitted infection (STI) screening and treatment
- Peer education, counseling and referrals as appropriate
- Training of influential individuals (such as the Beach Management Unit (BMU) leaders who act as *'gatekeepers'* and of other local leaders from the islands and landing sites) as peer educators to support fisher folk. Cumulatively, a total of 300 peer educators were trained to promote HIV prevention among the fisher folk.
- HIV prevention services for CSWs, their partners and the long distance truck drivers were provided along the *'hot spots'* located along the transport corridor (e.g., Naluwerere, Iganga Town and Idudi). The strategy employed included peer-to-peer counseling and utilization of the *'Knowledge room'* at Naluwerere in Bugiri District to provide a wide range of HIV prevention services.

Services provided to truckers and CSWs included:

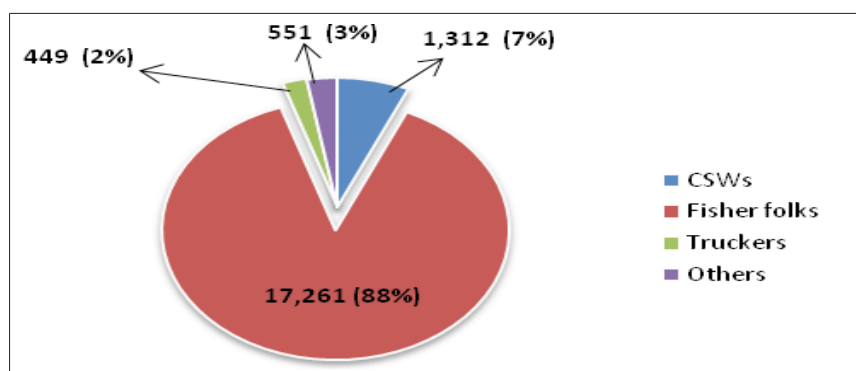
- Peer-to-peer counseling on reduction of serial and multiple concurrent relationships
- *'Moonlight HTC'* and referral for STI treatment
- Skills building for safer sex negotiation
- Condom promotion (including female condoms), education and distribution
- Recreation through education, videos, pool and board games
- Distribution of targeted IEC/BCC materials
- Additional service provided included reinstallation of internet, digital satellite television and use of mobilizers (commonly referred to as the *'go betweens'*) to reach out to truckers in their park yard. These activities were specifically done to make the *'Knowledge room'* services more attractive to truckers



Serving hard-to-reach populations: On the left, STAR-EC engages peer educators in a focus group discussion and on the right, a peer educator demonstrates to a group of women how to use a female condom

Over all, during PY3, STAR-EC supported training of additional 482 peer educators to offer services to MARPs. All together a total of 19,473 MARPs were reached; against a set target of 10,000. Of these, 17,261 were fisher folk, 1,312 were CSWs, 449 were truckers and 451 were others (who included street kids and the uniformed services). These results are summarized in Figure 1.

Figure 1: MARPs reached with HIV prevention interventions during PY3 by type



Source: STAR-EC program records

A total of 424,997 pieces of both male and female condoms were distributed to MARPs through 5,994 outlets in the community.

Targeting ‘emerging MARPs’ with HIV prevention interventions

CSOs also provided HIV prevention interventions to ‘emerging MARPs’ whose composition has already been described earlier in this report. Due to the nature of their occupations, ‘emerging MARPs’ were mainly reached at their work places. STAR-EC supported training of 130 peer educators from among the ‘emerging MARPs’ to reach out to their peers at the work place. The HIV prevention services which were provided included education on mutual fidelity and partner reduction; condom use; dangers of alcohol abuse; and referral for HTC and SMC. A total of 33,717 individuals (10,204 females, 23,513 males) were reached in this category during PY3. Table 2 shows the number of ‘emerging MARPs’ reached by category during PY3.

Table 2: ‘Emerging MARPs’ reached by category during PY3

Category of Individuals	No. reached
‘Boda boda’ motorcyclists	4,467
Plantation workers	1,861
Mobile business people	6,668
Bar and logde attendees	2,755

Category of Individuals	No. reached
Those in local film halls (Bibanda)	2,622
Out of school youth	2,988
Couples reached by model couples	2,222
Others	10,134
Total	33,717

Source: STAR-EC program records

Lessons learned

- Joint integrated service delivery to hard-to-reach populations is a good approach to serving the underserved and migratory MARPs like those on the islands. Through this approach missed opportunities have been minimized and many fisher folk are being reached

Challenges and the way forward

- There is high prevalence of sexually transmitted infections reported among the MARPs. STAR-EC supported training of health workers in diagnosis and management of STIs. More peer educators were trained to provide referrals, condom promotion, education and distribution targeting MARPs
- The number of peer educators trained especially for fisher folk is not yet sufficient to provide a critical level of impact to reach the fisher folk. During PY4, STAR EC will support training of more peer educators to serve this group

Promotion of HIV Prevention through Prevention with Positives (PwP) programs

In collaboration with the Ministry of Health (MoH) and The AIDS Support Organization (TASO), STAR-EC trained health workers and persons living with HIV/AIDS (PLHIV) peer educators in positive prevention counseling. STAR-EC liaised with the Program for Accessible Health Communication and Education (PACE) which donated 148 copies of the positive living profiling tool for health workers.

In addition, the program procured and installed 80 special transparent condom dispensers inside HIV&AIDS clinics at 80 facilities in all the nine districts with emphasis on consistent condom use by PLHIV that are enrolled in care and/or were initiated on ART. Furthermore, 1,000 basic care package starter kits were procured and distributed to priority PLHIV such as pregnant women, children and TB-HIV co-infected clients. STAR-EC also facilitated the national launch of the 'Positive living lifestyle' held in Kamuli District.

During PY3, the package of PwP services that was supported included family planning (mainly condom use for dual protection); diagnosis and treatment of STIs; promotion of condom use and distribution; psychosocial support and treatment adherence counseling; counseling for disclosure; and couple counseling and testing.

STAR-EC supported 13 PLHIV groups including seven discordant couple clubs and six young positive clubs. In addition, 556 community support agents (CSAs) and 98 family support group (FSG) meetings were supported to promote peer-led interventions for PLHIV in the community.

PwP achievements during this period included the following:

- A total 41,881 people (23,844 females, 18,037 males) were reached with PwP services
- A total 294,510 condoms (293,833 male condoms and 677 female condoms) were distributed to PLHIV through 3,299 condom outlets in the community
- The PLHIV groups were supported to develop linkages and networks with the village health teams (VHTs) thereby creating a multi-directional referral system for PLHIV in the community
- An additional 88 PLHIV peer educators were trained on PwP interventions in order to offer services to the other PLHIV in their community

Promoting HIV prevention through discordant couple support clubs

During PY3, STAR-EC supported the implementation of PwP interventions targeting PLHIV in discordant relationships to promote HIV prevention. Through NACWOLA, six community-based discordant couple clubs and one health facility based discordant couple club were supported.

A total of 280 couples from the seven discordant couple clubs were supported to hold monthly peer support meetings which included condom education and distribution; counseling on the importance of routine partner HIV testing; risk reduction counseling; skills building for safer sex negotiation and practice; ART adherence; and information on other health services including family planning, STIs, TB and safe male circumcision. Couples shared issues that affect them in their discordant relationships such as openness and couple communication; stigma and discrimination; partner care and support; desire to have children; and disclosure; benefits of attending peer support meetings; and initiation of income generating activities.

Supporting young positives to live positively



'Expert client' sharing his experiences with young positives

Young people living with HIV do not only face the challenge of coping with HIV but also experience the challenges relating to child growth and development, especially during puberty. During PY3, STAR-EC supported young positives' clubs under NACWOLA and a total of 240 young positives were supported to attend monthly peer support meetings to share issues that affect them such as stigma and discrimination; sharing their fears of living with HIV; disclosure; ART adherence counseling; proper sanitation and hygiene; sex and sexuality; and life skills.

During one of the meetings, one Wilson had this to say: *"I have been highly stigmatized both in the community and in school since it is well known that my parents died of AIDS. I found it very challenging and life was very difficult for me... However, since I joined the young positives club, I realized that I am*

not alone, through these meetings we share issues that affect us, I now feel free..." He was linked to NACWOLA in Kaliro by a CSA.

Lesson Learned

Peer support from groups such as discordant couples, young positives, FSGs and CSAs has provided opportunity for PLHIV to share experiences as well as enhance learning and utilization of the positive living package

Challenge and the way forward

HIV sero-status non-disclosure by some parents and guardians to their children. Some children have not been disclosed to and do not know why they are taking drugs. STAR-EC will continue to support NACWOLA to provide supported disclosure for such parents and guardians.



A 'circumcision camp' being executed in East Central Uganda during PY3

Promotion of Biomedical prevention through Safe Male Circumcision (SMC)

During PY3, STAR-EC supported the roll out of SMC services in the region beginning with learning visits to the two SMC training institutions in the country namely the Rakai Health Sciences Project (RHSP) and Makerere University Walter Reed Project (MUWRP).

The program utilized a variety of collaborative opportunities to build capacity for delivery of SMC services in the region including placement of staff; training of service providers; joint technical support supervision; as well as sharing research papers and other materials on SMC. Other activities included working with district and health facilities to select teams of service providers who would then be trained and



Fishermen being taken through pre-SMC education at a circumcision camp

conducting of a comprehensive needs assessment on the readiness of health facilities to roll out SMC activities. The findings of the needs assessment informed the facility-specific interventions during the roll out of the service. In partnership with the training institutions, MoH and other implementing partners, STAR-EC has scaled up SMC services to cover 15 health facilities distributed across the nine districts.

During PY3, 90 service providers from East Central Uganda were trained to deliver SMC services. STAR-EC procured some basic equipment and supplies for a few select sites which lacked them in order to roll out SMC. The program received 36,000 SMC leaflets, 96 SMC flip charts and over 320 health workers booklets from the Health

Communication Partnership (HCP) as part of demand creation, sensitization and mobilization.

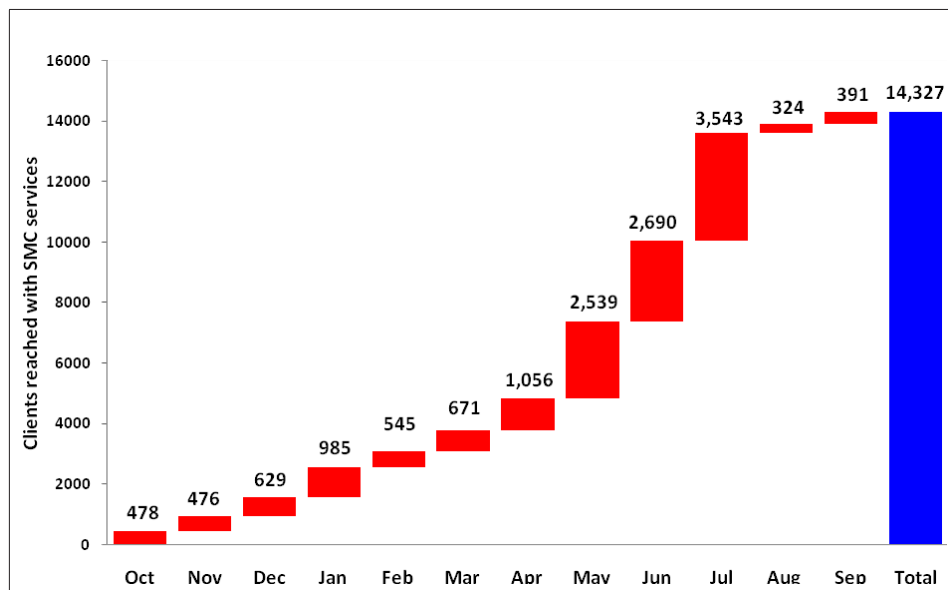
STAR-EC employed different strategies including static sites, outreaches and 'circumcision camps' in order to scale up service delivery. Static clinic days were instituted at the 15 health facilities on a weekly basis. STAR-EC supported over 130 outreaches as well as three 'circumcision camps' during PY3 – the latter targeting mainly the islands of Sigulu and Sagitu. Prior to starting outreaches, STAR-EC received technical support from the PEPFAR Technical Working Group on Medical Male Circumcision in April, 2011 following which the program had a turning point with more strategies to achieve the required pace and scale.



Moses, a fisher man from Golofa, enters the circumcision tent; receives the service; walks out of the tent; receives post SMC instructions and medication; and finally demonstrates to clients waiting to get the service how to take care of the wound

During PY3, a total of 14,327 clients were served with SMC services up from 803 served in PY2. Almost half 47% of clients served in PY3 were reached through outreaches and 'circumcision camps' mainly conducted during the period May-July, 2011. During February to March, 2011 as well as August to September, 2011, there was a slowdown of the service due to stock out of anesthetic drugs as well as sutures critical for SMC service delivery. This is clearly demonstrated in Figure 2 that shows clients reached during PY3.

Figure 2: Number of clients reached with SMC services during PY3



Source: STAR-EC program records

About 76% of SMC beneficiaries during PY3 were adolescents and adult men, 20% were aged between 5-14 years and about, 4% were children under 5 years. During this period, the adverse event rate was 0.8 % most of which consisted of moderate pain, and infections which were managed to a complete resolution.

STAR-EC participated in the development of SMC communication strategies for the traditionally non-circumcising areas together with HCP and the Makerere University School of Public Health. The program supported joint



A couple presenting their SMC experience

support supervision by MoH and MUWRP in which technical support on the STAR-EC roll out plan to front line health facilities and service providers was provided. STAR-EC also supported the launch of the Safe Male Circumcision Policy and Communication Strategy in the East Central region. In attendance were district leaders, MoH representatives, CSO representatives, health workers and religious leaders. During the event, satisfied clients testified and participants were given chance to ask questions. 100 copies of the SMC policy and 100 copies of the SMC communication strategy were disseminated during this launch.

STAR-EC supported districts and health facilities to conduct community education, sensitization and mobilization in secondary schools and nearby communities. VHT members also complemented these efforts

as some of them were role models by taking up SMC services ahead of the rest in their communities. The sites followed up all clients who had received SMC services to provide post circumcision instructions, assess any adverse events, reinforce abstinence messages during the healing period, and educate spouses and other family members on providing support to the circumcised persons.

Lessons Learned

- STAR-EC and the CSO partners learned that effective demand for SMC services was enhanced by early investment in community mobilization and education. This involved political, religious and cultural leaders as well as communities prior to the actual roll out of SMC activities. This increased acceptability for the service
- Initiation of SMC outreaches and circumcision camps yielded more results to complement static SMC services where health workers had other competing priorities
- SMC contributed to HTC outputs since all persons due for SMC are offered an HIV test. This has boosted the number of men receiving HTC services and linkages to other services at the facilities

Challenges and the way forward

- Lack of trained human resource to conduct SMC activities. STAR-EC worked with MUWRP and RHSP to train more teams of service providers to expand access to SMC services
- Low level of community awareness of SMC as an HIV prevention strategy. STAR-EC will invest in community mobilization and education targeting political, cultural and religious leaders, schools, women's groups, SACCOs, and other community structures
- Limited number of surgical sets at the SMC sites compared to the high demand for SMC coupled with the stock outs of anaesthetic drugs. During PY4, STAR-EC, will work closely with USAID to ensure a regular supply of disposable SMC kits and anaesthetic drugs

SUCCESS STORY

Tales from the islands about circumcision services in East Central Uganda



Ssenyonga Joseph

Ssenyonga Joseph, a 27 year old mechanic reports that he spends most of his time at Lolwe Island where he repairs boat engines. "...I keep going to the mainland every month just to check on my family..." he laughs and adds "...my wife..." Joseph reports that the first time he saw the big boat six months ago, he was told that the health workers had come to treat any kind of disease as well as to circumcise people. He adds that he had picked interest in circumcision from his wife, a Moslem, who was pushing him to be circumcised but which he had not done because he feared to be converted to Islam. "But since this time the circumcision was being conducted by medical workers, I went to the tents and the counselor told me that it is a medical method to help reduce the risk of acquiring HIV and improve personal hygiene too. That was a good reason for me and I went for circumcision that very day..." Joseph says. When he told his wife that he had been circumcised, he says that she could not believe! He mimics her voice, saying "...Who has finally managed to convince you to circumcise?" "...I then explained to her the whole process, since the counselor had told me to stay off sex for at least six weeks. I explained to her that I would not see her that month because I was still healing so I went to see her after two months and you don't want to know what happened!" He laughs. "This has really strengthened my relationship, I enjoy being with my wife and she also enjoys being with me. I feel clean and I know I have some protection against HIV."



Roger Masambala

Roger Masambala is a 27 year old fisher man living on Golofa landing site, Lolwe Island, Sigulu Sub-County, Namayingo District. When asked about the service he received that day, he reports, "... I was circumcised in March, 2011 when you people came to Golofa ..." Six months later, Rogers was found preparing his fishing nets during the third integrated service delivery outreach. "Musawo! Musawo! Webale nny'okutujanjaba!", literally meaning "Doctor! Doctor! Thank you very much for treating us!" He smiles... expressions of great satisfaction. When requested to answer a few questions, he obliges, 'Musawo waffe, sisobola kugana kwogera nnawe" meaning, "I cannot refuse to talk to you, our Doctor". Regarding which service he received then, he quickly said, "I was circumcised..." He adds that before being circumcised, he would at times have some itching around his private parts and would also get swellings and wounds on the foreskin. "... some days I could not spend five minutes without scratching even when in a public place ...", he said. "That day, after talking with a counselor about the benefits of circumcision, which were not limited to HIV prevention but also included prevention of some STIs, I made the decision to receive it" he added. A very happy Rogers reports, "... I now no longer scratch. I am smart and clean. I used to fear whenever I am going to meet my wife but all that is history now ... Honestly if I were a minister or if I was in Government I would make it a law for everyone to circumcise."

Increasing access to and uptake of HIV testing and Counseling (HTC)

During PY3, HTC service delivery was scaled up to 106 health facilities (up from 68 at the end of PY2) in an effort to support both static and outreach based approaches (i.e., stand alone and couple HIV counseling and testing outreaches), which prioritize the hard-to-reach underserved communities and key populations like MARPs.



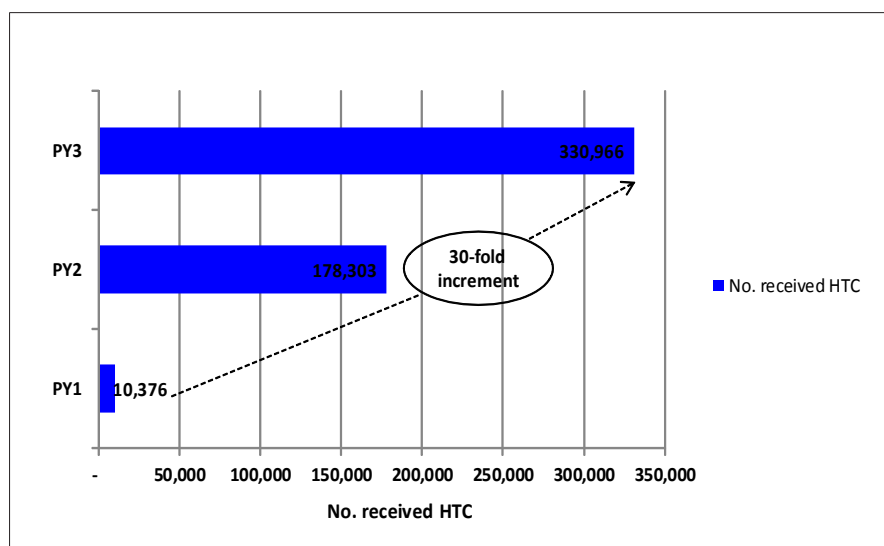
Community members testing for HIV in Buyende District during World AIDS Day 2010

STAR-EC conducted monthly outreaches targeting MARPs on the islands of Dolwe and Sigulu main in Namayingo District; and Jaguzi and Sagitu in Mayuge District. A total of 12,843 people (5,545 females, 7,298 males) received HTC services on these islands and of these 17.0% were found to be HIV positive but with differences among women (20.0%, n = 5,545 and men 14.8%, n = 7,298). Through these outreaches, a total of 193 couples (393 individuals¹) accessed HTC, 18 of whom were discordant and 11 of whom were found concordant HIV positive. All HIV positive persons were duly linked to care through the integrated service delivery outreaches.

Overall, in all nine districts, a total of 330,966 people (201,967 females, 128,999 males) were tested for HIV and received results from both public health units and CSOs in PY3 compared to 178,303 during PY2. Furthermore, during PY3, 99.9% (n = 331,185) of all the people who were counseled and tested

received their test results compared to 99.7% in PY2. All in all, total of 17,849 (11,016 females, 6,833 male) were diagnosed HIV positive resulting in an overall HIV prevalence rate of 5.4% for PY3. Some of these data is summarized graphically in Figures 3 and 4.

Figure 3: Individuals counseled, tested and received HIV results (PY1 – PY3)

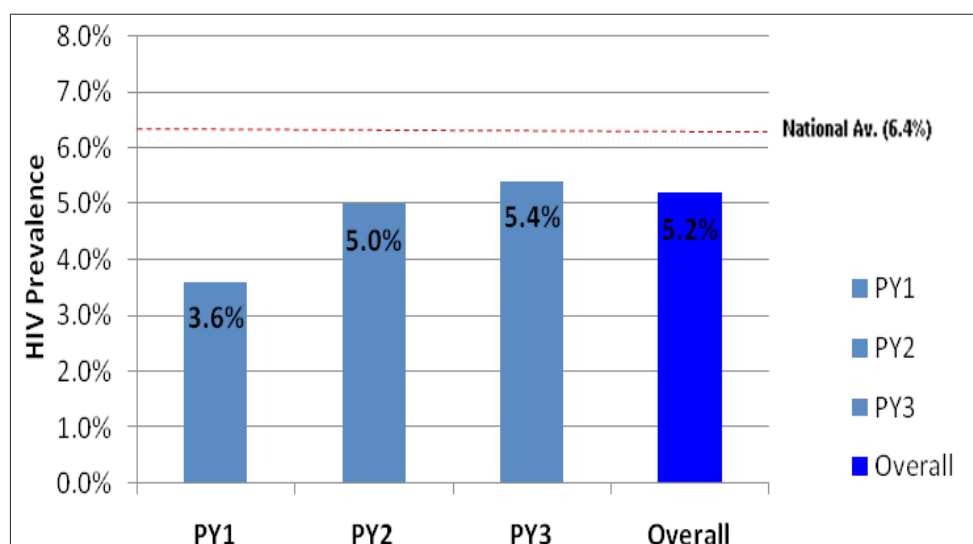


Source: STAR-EC program records

The significant increment shown in Figure 3 is attributable to the provider initiated counseling and testing (PICT) approach (HTC points throughout the care system); increased emphasis on HTC outreaches coupled with community mobilization (using village health teams and where possible public address systems); and improved supplies management by health facilities as a result of regular logistics support supervision and mentorships by the Ministry of Health (MoH), the relevant district health officials, and STAR-EC.

¹ Some couple units involve more women than men in respect to polygamous relationships

Figure 4: HIV prevalence among individuals receiving HTC in East Central Uganda (PY1 – PY3)



Source: STAR-EC program records

The progressive rise in HIV seropositivity seen in Figure 4 may be attributed to an increased targeting of MARPs (who have a higher HIV prevalence than the general population) during PY3. This is in direct line with the ‘*Know Your Epidemic-Know Your Response*’ paradigm that STAR-EC emphasizing on during this implementation period.

In PY3, outreaches accounted for 49% of all HTC service delivery and static sites for the remaining 51%. A total of 14,678 couples accessed HTC services primarily through the quarterly ‘*Couple HIV counseling and testing*’ outreaches undertaken by both health facilities and CSOs within the community. Of these, 438 couples were found to be discordant and 635 concordant HIV positive. All discordant couples were referred to our partners the Infectious Disease Institute Jinja Pre Exposure Prophylaxis (PrEP) study site in Jinja and to TASO for further care and support. Concordant couples were referred to appropriate centres for ART evaluation and care.

Among the nine districts supported by STAR-EC, Namayingo (which has the Sigulu Island archipelago) had the highest HIV prevalence rate (10.3%) while the Kaliro District had the lowest prevalence at 2.6%.

Lessons Learned

- While routine HTC service provide can be used to target couples, the innovative ‘*Couple HIV counseling and testing week*’ outreach approach has proven to be a more effective strategy
- Successful increase in HTC access is subject to the number of facilities offering the service; the emphasis that is placed on outreaches to key populations; and diligent logistics management involving district, MoH and National Medical Stores (NMS) stakeholders
- Integrated service delivery outreaches to island MARPs communities have enhanced yield and linkage of HIV positive clients to comprehensive HIV and TB care services.
- The outreach mode of delivery appears to be a more effective way of reaching men with HTC services.

Challenges

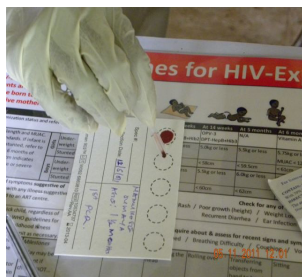
- Due to increased demand for HTC services in East Central Uganda, health facilities are outstripping the available supplies they normally access through NMS. This has necessitated STAR-EC to procure buffer stocks of HIV test kits in order to cater for CSOs while at the same time plugging the existing short falls at health facilities

Way forward

- STAR-EC in collaboration with the MoH and districts will continue offering ongoing support to ensure that facilities embrace better logistics management in order to minimize stock outs

- During PY4, the ‘*Couple HIV counseling and testing week*’ initiative will be undertaken on a monthly basis (from the current quarterly) in order to reach more couples. The ‘*Know your child’s status*’ initiative will be maintained to enhance identification of HIV positive children and link them to appropriate care and treatment
- Integrated TB and HIV&AIDS outreach services to the islands will be continued on a monthly basis as they result in identification, care and support for those in most need of the services that STAR-EC supports in East Central Uganda

Prevention of mother-to-child transmission of HIV (PMTCT)



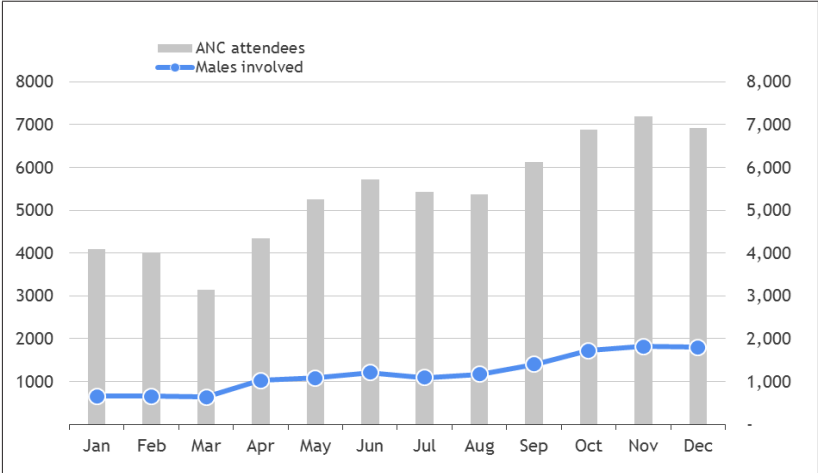
Techniques used by health workers to collect dry blood spot samples from a six week and a 6 month old HIV exposed baby during the integrated outreach at Sigulu islands

During PY3, STAR-EC supported PMTCT service provision according to the new national guidelines (Option A) in 85 of the 276 health facilities in the East Central region. Support included training of 33 health workers (21 male, 12 female) from 17 lower level sites (HCs III and II) across the region using the Integrated Management of Adult Illnesses (IMAI)/Integrated Management of Pregnancy and Childbirth (IMPAC) coupled with the PMTCT-EID strengthening training methodology. In addition, STAR-EC facilitated PMTCT-EID mentorships at 44 lower level facilities (36 HC III and 8 HC II) to enhance the application of the knowledge acquired. Overall, a total of 458 health workers were trained in PY3 to offer quality PMTCT services.

Enhancing the role of peer support using the ‘mothers2mothers model’

STAR-EC implemented the ‘*mothers2mothers (m2m) model*’² in 20 health facilities, bringing the total number of sites implementing this model to 30, by the recruitment, training, and facilitation of 44 additional ‘*mentor mothers*’. The ‘*mentor mothers*’ received monthly mentorship support with emphasis on the need for active screening, care and referral/follow-up for the HIV exposed infants and their mothers intra-facility, inter-facility and in the community. In addition, 40 ‘*mentor mothers*’ underwent in-service training using an updated training curriculum based on both the new World Health Organization PMTCT and infant and young child feeding (IYCF) guidelines and a training needs assessment. In total, 2,252 HIV positive antenatal and 1,667 postnatal mothers were enrolled at these 30 health facilities for longitudinal follow up by the ‘*mentor mothers*’. More work remains to be done to enhance male involvement in PMTCT interventions, as the m2m peer support model does not appear to have had a significant impact on the participation of male partners in antenatal activities as evidenced in data given in Figure 5 for a 12-month period when this was tracked.

Figure 5: Male involvement in antenatal care over a 12-month period



Source: STAR-EC program records

Referral of CD4 and DBS samples for PMTCT

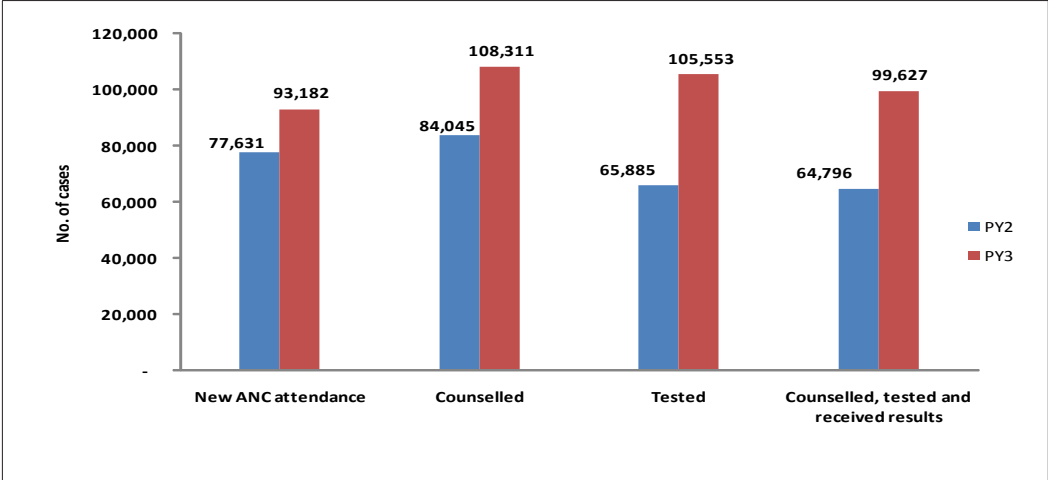
STAR-EC facilitated access to CD4 testing for the HIV positive pregnant women, as well as dried blood spot (DBS) for polymerase chain reaction (PCR) testing through a referral mechanism to three hospital laboratories, ultimately improving geographical and financial accessibility to these services.

In a bid to enhance retention of ‘mother-baby’ pairs and adherence to PMTCT interventions, the program facilitated a phased implementation of family support group (FSG) meetings at 68 facilities. FSG meetings were conducted at 30 facilities every month and at these model sites, the total FSG meeting encounters included 2,320 antenatal, 8,267 postnatal mothers as well as 2,548 couples.

During PY3, a total of 108,311 pregnant women were counseled during antenatal care, labor and delivery and 97.5% of these were tested for HIV. Of these 104,689 (96.7%) were counseled, tested and received results resulting in an overall HIV prevalence rate of 2.5% (this includes those who attended antenatal care with an already known HIV status).

Furthermore, 11,877 women were tested during postnatal care and 2.7% of these were found HIV positive. Figure 6 illustrates the comparison between PYs 2 and 3 regarding uptake of PMTCT services.

Figure 6: Pregnant women that received counseling, testing and results during ANC for PMTCT purposes during PYs 2 and 3



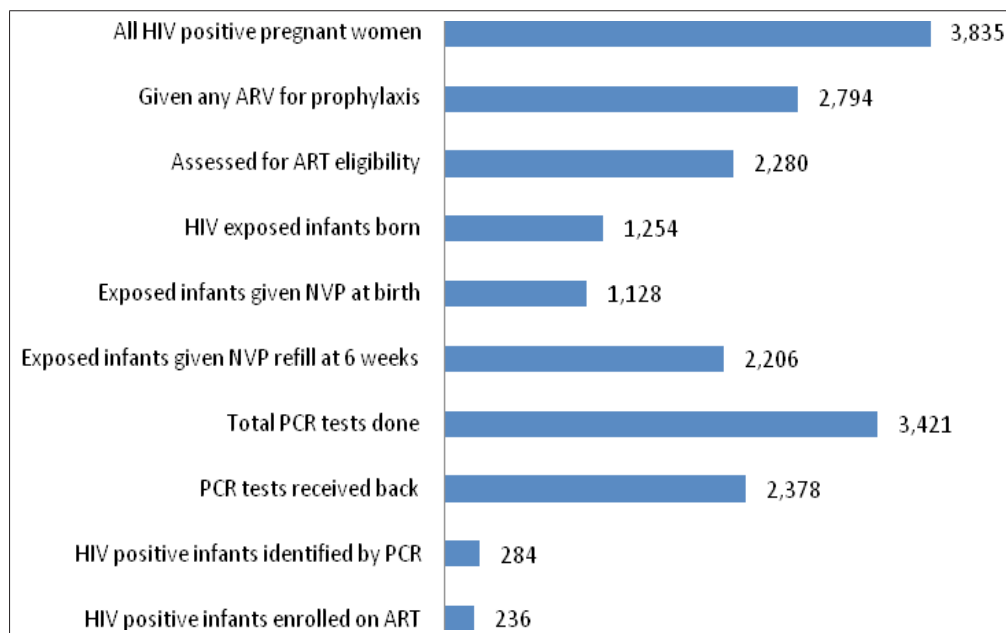
Source: STAR-EC program records

During PY3, 73% (n= 3,835) of all the identified HIV positive women were prescribed a PMTCT prophylactic regimen or highly active antiretroviral therapy as compared to 60% (n=2,932) during PY2. A total of 3,421 DBS samples were referred to Joint Clinical Research Centre (JCRC) and Central Public Health Laboratory (CPHL) for PCR testing. By the end of PY3, only 69.5% (n= 3,421) of the sample results had been returned from the laboratories and of these 11.9% were HIV positive.

During PY2 a total of 816 PCR tests were referred to JCRC of which 5% were HIV positive. The thirty-fold increase in the number of PCR tests over this period can be attributed to the improved tracking of the ‘mother-baby’ pair following the adoption of the Ministry of Health PMTCT-EID strengthening programme as well as due to the use of cell phones and home-visit follow ups by the ‘mentor mothers’.

As a result, an increase in the uptake of HIV testing, 60% (n=3,835) of the HIV positive pregnant women were assessed for ART eligibility (using CD4 and WHO classification) during PY3 as compared to only 16% during PY2. In this reporting period, 73% of HIV positive pregnant women and 90% of exposed infants received ARV prophylaxis as compared to 60% and 44% respectively during PY2. Figure 7 illustrates the PMTCT cascade for PY3.

Figure 7: PMTCT cascade among during PY3



Source: STAR-EC program records

STAR-EC made two presentations at the 5th National Pediatric HIV&AIDS conference in Kampala, Uganda. One of the presentations was on the ‘m2m model’ sharing experiences of utilizing lay volunteers (‘mentor mothers’) in augmenting the work of professional health workers in PMTCT service delivery. The other presentation conveyed the role of district based technical assistance programs (such as STAR-EC) in improving PMTCT outcomes. STAR-EC as participated in the review of the national implementation guidelines for family support groups.

Lessons learned

- Implementation of quality PMTCT is highly dependent on continued and regular mentorship of health workers and also on the availability of regular supplies
- The PMTCT-EID strengthening program has greatly improved the tracking and follow-up of ‘mother-baby’ pairs.
- Family support groups serve as important follow up points for HIV positive mothers and their infants. However there may be need to provide a wider range of support groups to cater for clients graduating from PMTCT. Such groups include pediatric support groups, ART support group, etc.

Challenges

- Low male involvement in PMTCT continues to affect the number of partners interacted with and may be a contributory factor to a high number of deliveries at home
- Follow up of the HIV exposed babies whose mothers did not honour their EID appointments has been expensive since many mothers do not have telephones as the EID strengthening program had anticipated
- Referral for antiretroviral therapy by non-ART providing sites remains a major challenge because accredited ART centers (26) are much fewer than the PMTCT sites (85) and coverage of ART outreaches to lower units (though improving) is still limited

Way forward

- During PY4, STAR-EC plans to facilitate the scale up of PMTCT and EID services to a total of 241 facilities up from the current 85 in the region in tandem with the MoH and UNAIDS guidance seeking virtual elimination of mother-to-child transmission of HIV. Island and lake shore lower level HCs II will be prioritized during this scale up
- Referral linkages at both facility and community levels will be further strengthened by involving more lay providers and the use of phone follow up in combination with physical home visits
- There is need to leverage activities aimed at improving male involvement to enhance uptake of integrated contraception and HIV services. STAR-EC will explore best practices on this from other implementing partners within and outside of the country

2.1.1 Care and Support

Umbrella Care

STAR-EC actively participated in the PEPFAR's care and treatment rationalization process that entailed identifying implementing partner overlaps at facility level; conducting joint field visits to compile and share logistical data; and holding stakeholder discussions. By doing so STAR-EC was able to transition two facilities in East Central Uganda to TASO.

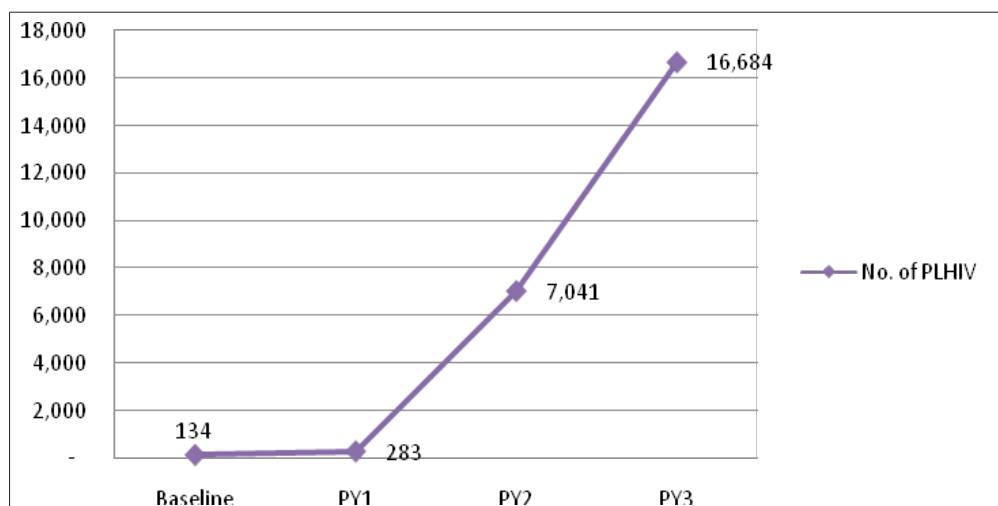
By end of September, 1,380 PLHIV transitioned from TASO outreaches to MoH static facilities for registration and enrollment into pre-ART care. The program made additional modifications to support and increased client case loads by utilizing such mechanisms as running more than one clinic day per week; assigning the transferred patients to the newly established clinic days; and strengthening patient triage to decongest the traditional clinic days. Simultaneously, STAR-EC built capacity of healthcare providers through additional training and mentorships. STAR-EC also facilitated improvements in the physical infrastructure by remodeling seven high volume facilities to provide patient waiting shades and procuring furniture for 80 chronic care facilities.

Clinical care

During PY3, the coverage of access to clinical care services increased from 80 to 129 facilities. Providers are now empowered to deliver a care package including management of sexually transmitted infections and pain and symptom control in addition to the traditional cotrimoxazole prophylaxis and routine clinical assessments for opportunistic infections.

This expansion was a result of not only a training and on-job mentoring of 57 health workers in collaboration with Mulago National Referral Hospital and Hospice, but also the procurement of buffer cotrimoxazole medication as well as the timely and accurate quantification of the other required supplies from NMS. Consequently, enrollment into care and service utilization by PLHIV has risen steeply over time, an achievement largely attributable to USAID support through STAR-EC. Figure 8 illustrates uptake of care by PLHIV since program inception.

Figure 8: Number of PLHIV in care by Program Year



Source: STAR-EC program records

Lessons learned

- Clinical mentorships are essential in improving the quality of care for clients
- Most of the clients who are lost to follow up are lost during the first three months of initiation into care

Challenges

- Incomplete documentation and irregular updating of the MoH patient monitoring tools for HIV care is a particular challenge at facility level
- High attrition of clients coupled with ineffective system to track those that miss appointments remains a challenge

Way forward

- During PY4 and beyond, district clinical mentors will be facilitated to provide regular mentorship on HIV care documentation
- STAR-EC plans to pilot an innovative and active client tracking and follow up model in collaboration with MoH and the Clinton Health Access Initiative. The intervention entails use of a patient register; an appointment book; short text messaging (SMS) reminders to clients; and telephone call and physical follow-up

Additional support and care

During PY3, STAR-EC introduced three new components of support services including home based care; nutritional support for PLHIV; as well as psychosocial counseling. Details about these new services are provided below:

Home Based Care

The National Community of Women Living with HIV/AIDS in Uganda (NACWOLA) identified 60 facility based PLHIV volunteers to provide home based care services (HBC) to bed-ridden PLHIV. Subsequently, NACWOLA grouped these volunteers into HBC teams whose responsibility was to provide nursing care, psychosocial support, follow-up of lost clients, and the 'positive living' concept package of services. A total of 30,461 PLHIV were visited and supported at home by the trained peer supporters. Of those seen, 938 received home based care kits.

Nutritional Support

STAR-EC collaborated with the Food and Nutrition Interventions for Uganda (NuLife) project to expand coverage of nutritional support services from three to ten facilities (including 4 Hospitals and 6 HCs IV) by training, mentoring and coaching 30 health workers on nutrition integration into HIV clinics; procurement of medical equipment including weight scales and mid-upper arm circumference (MUAC) measuring tapes; procurement of out-patient therapeutic care registers; and procurement of ready-to-use therapeutic foods (RUTF). Seven of these facilities recorded improvements in anthropometric and clinical outcomes of 147 severely malnourished PLHIV to whom they distributed RUTF. By including STAR-EC sites on the Reco Industries³ distribution list, USAID has enabled the program to treat more malnourished clients at no additional cost.

Psychosocial Counseling Support

Uganda Cares trained and mentored 59 expert PLHIV clients on adherence counseling and support who work on a voluntary basis in the HIV care and ART clinics and provide counseling to enrolled clients. In the interest of the meaningful and greater involvement of PLHIV, community support agents (CSA) from NACWOLA formed and coordinated 26 facility-level adherence support groups that meet monthly to provide peer-to-peer support in the form of sharing testimonies or tips on coping with AIDS-related stress.

Challenges

- There are inadequate counseling skills among the health workers coupled with low staffing levels and a high patient load
- The provision of psychosocial counseling support is yet to be standardized across facilities

Way forward

- A counselor supervisor will be identified and facilitated to support district teams that will provide counseling technical assistance to all chronic care facilities
- Provision of psychosocial counseling support activities to be guided by the national adherence framework document whose adaptation process was co-funded by STAR-EC among other partners

2.1.2 Treatment – antiretroviral services

Antiretroviral therapy service delivery

During PY3, antiretroviral therapy services were supported at 26 sites (including 4 hospitals, 12 HCs IV and 10 HCs III) that are spread out across the nine STAR-EC supported districts. Currently all hospitals and HCs IV in the region offer ART services. A total of 19 health units (at HCs III level), the majority of which are currently serving as outreach sites, have been assessed for accreditation to provide ART services in their own right by MoH. If this is successful, the number of accredited sites in the region will increase to 45. However, as part of the rationalization process, two of the already accredited sites (Mayuge and Banda HCs III) are to be transferred to TASO to avoid duplication of support. In return, STAR-EC will take full support of Bumanya HC IV (372 current clients), Namungalwe HCIII (348 current clients) and Bugiri Hospital (660 current clients) – facilities where TASO has also been providing support to a total of 1,380 ART clients.

In order to increase the number of clinical teams available to offer ART services and also cater for the 19 new sites that were assessed during the quarter, STAR-EC facilitated MoH and Uganda Cares to train 103 health workers (including 26 clinicians, 32 nurses/midwives, 28 nursing assistants and 17 expert patients) on comprehensive HIV&AIDS care and treatment including ART. STAR-EC, Uganda Cares and MoH also made mentorship visits to the clinical care teams. With technical support from Uganda Cares, expert patients now assist in implementing the ART adherence framework in the region.

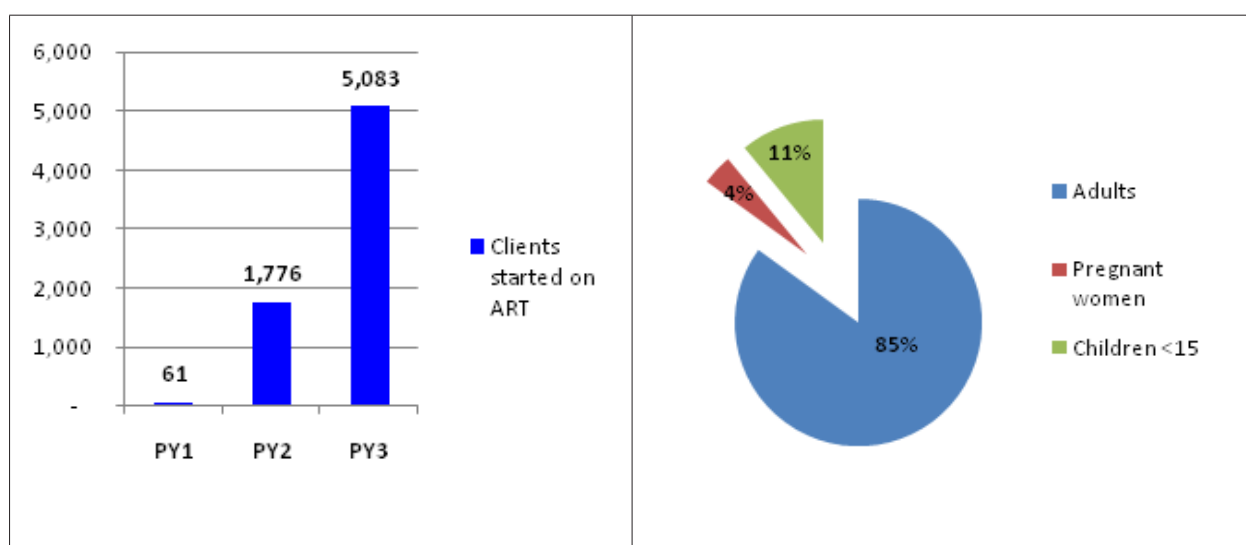
By the end of PY3, the number of new clients enrolled on ART was 5,083, indicating an upward trend since PY1 (please see Figure 9). Of the newly enrolled in PY3, 85% were above 15yrs, 4% pregnant and 11% were

³ Reco Industries Ltd., is a local supplier of Ready to Use Therapeutic Foods that USAID has contracted to supply to implementing partners

under 15. Further, analysis of patients initiated on ART in the East Central region showed a retention rate of 74%. Additionally, STAR-EC supported the scale up of pediatric HIV&AIDS care and treatment services from 4 to 26 facilities (the accredited sites). This scale-up included the training 120 health workers; dissemination of pediatric AIDS guidelines and job aids including those for the early infant diagnosis (EID) program; and on-job mentorships. These activities were implemented in partnership and collaboration with key stakeholders including Baylor-Uganda for technical support supervisions; MoH and the Regional Centre for Quality of Health Care for trainings; Jinja Regional Referral Hospital for on-job mentorships; and the Health Communication Partnership (HCP) for job aids and community mobilization campaigns. More work remains to ensure that all the estimated HIV positive children in the region (n=13,668) are enrolled in care.

The Ministry of Health led a three-months long 'Know your Child's Status' campaign from July to September, 2011 to build on various initiatives and as a consequence, 530 newly identified HIV positive children were enrolled onto ART during PY3.

Figure 9: ART uptake for new clients (PY1-PY3) and the % breakdown of new clients during PY3



Source: STAR-EC program records

Lessons Learned

- Continued mentorships are essential in enhancing clinical team support
- Radio messages are useful when targeting ART enrollment in children

Challenges

- Staff attrition is a challenge in most of the ART accredited sites. This greatly affects the whole spectrum of care from clinical services to follow up of clients in the community
- Clinicians in most health units have a low index of suspicion and confidence for initiation of children on ART hence the observed slow pace of enrollment of children on ART
- Limited coverage of pediatric AIDS care services at lower rural facilities only 20% of lower level sites (n=129) offer pediatric services

Way Forward

- Emphasis will be placed on improving client enrollment, monitoring, strengthening linkages and retention to improve patient outcomes through the established sites as opposed to scale up to more ART sites. The use of expert clients to support linkages will be crucial
- A 'Know Your Child's Status' weeklong campaign will be initiated in all ART sites on a quarterly basis
- All ART clinics will be supported to adopt the 'family centered' approach during designated days

- 30 health workers will be trained on pediatric ART to increase their skills so that pediatric ART enrollment can be prioritized
- STAR-EC plans to support an on-job mentorship on implementing the '10-point management plan for HIV in children⁴' at all 129 clinical care facilities including the accredited ART sites

2.1.3 Clinical services: Additional TB/HIV services

Capacity building for TB service delivery

TB/HIV indicators have improved across all districts. Most notable however, is the low prevalence of TB/HIV co-infection (our data shows 34% co-infection compared to the national estimate of 50-60%). This noted improvement may be a result of improved linkages and internal referrals between the TB and HIV care services and improved knowledge and dissemination of the new policy among the health care providers.

During PY3, in an effort to expand the private-public mix for TB care services, STAR-EC facilitated the following initiatives: training and follow up support for 150 health care workers from private facilities within the region on TB/HIV co-management and TB infection control; refresher training courses for laboratory staff on TB microscopy to ensure accuracy of test results; training to improve the coordination of TB activities at district and health sub district (HSD) levels; and the introduction of the district TB and leprosy supervisors (DTLS) and the TB HSD focal persons course at Buluba Hospital.

STAR-EC in collaboration with MoH and district officials also conducted quarterly joint TB/HIV support supervision visits and mentorship to health care providers in public and private facilities. Financial and technical support was also provided for three quarterly South East TB zonal meetings meant to review performance and propose action steps in TB service delivery.

All the above activities focused on TB and TB/HIV activities, TB infection control, TB DOTS and recording and reporting with healthcare delivery settings. Some of the main findings of the supervision exercise included: improvement in TB/HIV collaborative activities at facility level; low TB cases detected despite the numerous sputum smears examined; improved CB DOTS implementation by lay providers across all districts; inadequate TB patients follow up at two, five and eight months; and significant improvement in documentation in the relevant registers across all the nine supported districts.

The program also supported procurement of the National TB and Leprosy manuals as well as Multidrug Resistant (MDR) and TB Infection Control Guidelines which were supplied to all facilities that provide TB services. Tables 3 and 4 below summarize comparisons of achievements between PYs 2 and 3 implementation.

Table 3: Comparison of achievements on select TB indicators (PY3 and PY2)

Indicator	PY3 (Quarterly and Overall)					PY2 (Overall)
	Q1	Q2	Q3	Q4	Overall	
New patients recorded in TB register	526	667	625	589	2,407	2,133
New patients recorded in TB register who had an HIV test done	487 (93%)	638 (96%)	616 (99%)	576 (98%)	2,317 (96%)	1,802 (84%)
New TB patients tested HIV positive	171 (35%)	220 (34%)	205 (33%)	192 (33%)	788 (34%)	670 (37%)
TB/HIV co-infected patients started on CTX	156 (91%)	212 (96%)	202 (99%)	191 (99%)	761 (97%)	564 (84%)

⁴ The '10-point management plan for HIV in children' entails: 1. Early diagnosis of HIV; 2. Cotrimoxazole prophylaxis for prevention of opportunistic infections and diarrheal diseases; 3. Growth and development monitoring; 4. Immunization, nutritional education, supplementation, and support, including multivitamins and iron; 5. Routine quarterly de-worming with mebendazole; 6. Aggressive management of acute illnesses; 7. Psychosocial support and palliative care; 8. Adolescent care and support; 9. Family-focused care including prevention of mother-to-child transmission; and 10. ART when indicated.

Indicator	PY3 (Quarterly and Overall)					PY2 (Overall)
	Q1	Q2	Q3	Q4	Overall	
TB/HIV co-infected patients started on CTX and ART	56 (36%)	116 (55%)	134 (66%)	126 (66%)	432 (57%)	123 (22%)

Source: STAR-EC program records

Table 4: TB status in HIV chronic care services (Care & ART) for PY3 and PY2

Indicator	PY3 (Quarterly and Overall)					PY2 (Overall)
	Q1	Q2	Q3	Q4	Overall	
Current clients seen	9,427	10,396	15,599	16,684	52,106	7,020
No.(%) of clients screened for TB	8,975 (95%)	9,832 (94.6%)	14,852 (95.2%)	15,568 (93%)	49,227 (94.5)	6,017 (86%)
No. of suspects investigated for TB	385 (4.3%)	465 (4.7%)	153 (1%)	297 (1.9%)	1,300 (2.6%)	495 (8.2%)
No. of clients treated for TB	139 (1.5%)	129 (1.3%)	138 (0.9%)	204 (1.3%)	610 (1.2%)	187 (3.1%)

Source: STAR-EC program records



STAR-EC staff giving a sputum mug to a TB suspect during a Sigulu Island outreach

TB Control Activities

Case detection rate (CDR)

During PY3, the program focused on increasing the CDR from 39% at the end of PY2 to 70% (the national target). Planned activities were integrated into the 'Couple HIV counseling and testing week' as well as the 'TB week.' Key activities included orientation of PLHIV and VHT members on intensified case finding and referrals; slide preparation and transportation by HC IIs to diagnostic facilities in Kaliro, Namutumba, Mayuge and Bugiri Districts; and enhanced utilization of ICF tools at facilities involving lay providers.

STAR-EC also supported sputum outreaches in sub counties with limited services in Buyende, Namayingo and Mayuge Districts and also for the prison inmates and schools in Iganga District. For the prisons, none of the inmates were identified with TB whereas five children were identified with TB.

Despite numerous smears performed fewer than expected TB cases were identified. For example in Luuka District alone, 816 smears were done during the final quarter of PY3 but only 6 were positive for TB. The average PY3

CDR stood at 42.8% compared to a PY2 achievement of 38.8% and a 2009 baseline of 31.7 %. It should be noted that this is still far below the national target of 70% and while more effort needs to be put in to identify more TB cases, it also raises questions about the actual TB burden in this region against which the CDR is assessed.

TB DOTS

As part of TB treatment support activities, STAR-EC in collaboration with the districts is involving cured TB patients in providing peer adherence support to current patients.



Kato George a former TB patient observes Okello (70 yrs of age) swallow TB and ART medicines

Mr. Okello, a current TB patient narrates in a local language that *“Bantwala mwilwarilo nga tiwulira, aye Kato George ni Kaziba bandabirire, kati nsoboola okutyama.”* Translated into English, this means that *“I was taken to hospital while unconscious, but because of the support by Mr. Kato (a DOTS supporter) and Mr. Kaziba (the sub country health worker), am now able to seat unsupported”*

Table 5 summarizes achievements per district for CDR, TSR and TB DOTS by comparing PYs 2 and 3.



Table 5: Progress of CDR, TSR and TB DOTS coverage by district in East Central Uganda

District	Case Detection Rate (%)		Treatment Success Rate (%)		TB DOTS coverage (%)	
	PY2	PY3	PY2	PY3	PY2	PY3
Iganga	52.0	66.4	61.4	85.5	46.3	64.1
Luuka*	-	15.7	-	-	-	82.5
Kamuli	28.3	33.6	52.3	83.3	34.3	73.8
Buyende*	-	27.2	-	-	-	87.4
Kaliro	29.0	28.2	80.9	82.9	82.7	74.2
Namutumba	36.6	54.2	73.1	81.9	38.7	68.9
Bugiri	44.0	45.9	52.9	79.5	63.8	54.2
Namayingo*	-	45.5	-	-	-	64.1
Mayuge	42.8	43.3	80.9	84.4	63.5	76.4
Overall	38.8	42.8	66.9	83.3	54.9	71.7

*Luuka, Buyende and Namayingo are new districts that did not have disaggregated data for some of the reporting period

Source: District Quarterly Reports

Advocacy, Communication and Social Mobilization (ACSM) for TB services

	
<i>A health worker giving a sputum mug to a TB suspect</i>	<i>Drama performance during the commemoration of World TB day in Namutumba District</i>

STAR-EC supported the districts to commemorate World Tuberculosis Day under the national slogan *“On the Move against TB – Innovate to Accelerate Action.”* During the commemoration, health workers provided TB screening and HTC to clients. Those who tested positive for TB were started treatment as well and those who tested positive for HIV were initiated into care and treatment. Other ACSM activities included radio talk shows, drama and sensitization meetings at community levels.

Lessons learned

- Mentorship and quality support supervision by district supervisors after the initial training improved the quality of work and subsequently the TB indicators
- Strengthening performance review meetings between the TB and HIV care providers improves uptake of ART among TB/HIV co-infected patients
- ‘Cough focal persons’ (who include lay providers, CSAs and support staff) that have been identified to

conduct intensified TB case finding at facility level have greatly improved routine TB screening and utilization of ICF tools

Challenges and way forward

- There is limited access to ART services for TB patients diagnosed at HC III level and from the islands. During PY4, STAR-EC plans to scale up ART services to HC IIIs and facilitate clinical teams to conduct outreaches in areas with limited services such as the islands
- There are limited linkages and internal referrals between the TB and HIV care services at some facilities. However, there have been significant efforts to improve these linkages through performance review meetings at facility level as well as through mentorship and support supervision

2.2 Result 2: Strengthening Decentralized HIV&AIDS and TB service delivery systems with emphasis on HCs III and IV as well as community outreaches

2.2.0 Improving leadership and governance at district at lower government levels

In order to ensure effective service delivery and sustainability of HIV&AIDS coordination mechanisms at the district level, STAR-EC in collaboration with the Uganda AIDS Commission (UAC), trained 45 members of the district HIV&AIDS committees (DACs) from the nine districts in coordination, support supervision, resource mobilization and management. UAC also inducted the three newly created districts of Buyende, Luuka and Namayingo.

Additionally, the program supported the districts to conduct quarterly HIV&AIDS coordination meetings and an annual district HIV&AIDS stake holders' review meeting which facilitated the planning and implementation of TB and HIV&AIDS activities in the region as well as planning for PY4.

STAR-EC supported bi-annual performance review meetings for district focal point persons and CSO staff involved in the implementation of STAR-EC interventions which addressed issues related to successes, constraints and challenges to program implementation. It should however be noted that now that the Strengthening Decentralization for Sustainability (SDS) program is now fully on board, it will be expected to fully take over this role at least for six of the nine districts in East Central Uganda.

2.2.1 Strengthening Health Management Information Systems at district level



STAR-EC Chief of Party hands over computers to district health officers to facilitate the rollout of the EMRS

In order to better ensure patients' confidentiality and improvement of data storage, STAR-EC supported MoH by procuring and distributing different HMIS registers and filing cabinets to 77 health facilities and also supported the roll out of the planned MoH AIDS Control Programme Electronic Medical Records (EMR) system at all the 26 supported ART sites

At the beginning of quarter 2, STAR-EC supported the training of eight District HMIS focal persons in the utilization of the new revised HMIS forms and continued providing health facilities with on-going support supervision on how to utilize these new forms.. In July 2011, STAR-EC conducted a data quality assessment (DQA) exercise on purposively selected health facilities that included high volume and low volume sites as well as facilities producing high quality and poor quality data. The program used the DQA findings to design and execute targeted responses to issues related to data quality and reporting.

Lot Quality Assurance Sampling (LQAS) and other trainings

During PY3, STAR-EC trained district HMIS focal persons, staff from each district's planning unit as well as the district health and community development offices (92 in total from nine districts) in LQAS and subsequently conducted the entire LQAS survey and process. Other key activities included partnerships with the STAR-E LQAS program in conducting the service performance assessment and improvement (SPAI) workshop for supported districts (trained 24 officials from Iganga, Namutumba, Kaliro and Kamuli Districts). The workshop's main objective was to support district teams in using data generated from routine HMIS, facility and LQAS surveys to identify health service gaps.

District performance reviews

During PY3, STAR-EC also conducted in-house quarterly program performance reviews (at institutional level) for all staff responsible for providing technical assistance to local government (LG) structures and CSOs. At the district level STAR-EC organized 36 quarterly performance reviews that were attended by a total of 850 LG and CSO personnel.

During performance reviews: participants discussed district work plans and performance; lessons learned; reviewed previous action plans and developed of new ones; and developed recommendations aimed at improving the quality of serviced delivery. Participants in these reviews included district technical heads; administrative and political leaders; health facility personnel; as well as CSO representatives. By supporting district, health sub-district and sub-county level performance reviews as well as LQAS disseminations, STAR-EC contributed to building human resource capacity for effective data utilization at all levels.

2.2.2 Key meetings and workshops held with other partners

During PY3, STAR-EC attended several strategic information workshops and meetings at district and national levels, which included:

- The JSI Bilateral Project Global M&E Meeting (September 19-23, 2011), Accra, Ghana aimed at developing skills among field staff from JSI projects worldwide in various M&E-related areas relevant to their fieldwork.
- The TMG-UMEMS meeting for selected implementing partners (August 26, 2011) aimed at discussing how the Uganda Monitoring and Evaluation Management Services (UMEMS) could support implementing partners (IPs) over the remaining life of the UMEMS project to effectively respond to the monitoring and evaluation requirements of their programs
- "Managing for Results" (MFR) organized by UMEMS (May 2-6, 2011) aimed enhancing capacity of IP staff in monitoring and evaluation of programs and organizational learning
- The stakeholders meeting on the development of the PMTCT data quality assessment tool (June 8, 2011).
- The LQAS coordination meeting (June 2, 2011) aimed at discussing with IPs implementation guidelines for future LQAS surveys
- Training of Trainers (ToT) workshop on the new Open Medical Records System (MRS) application (May 10, 2011)
- Customized open Medical Records Systems (MRS) Application meeting aimed at reviewing the draft customized open MRS application
- Several SDS meetings aimed at identify key areas for this project to support at district level and to harmonize IP work plans
- The MEEPP implementers' meeting (March 31, 2011) organized by the Monitoring and Evaluation of the Emergency Plan Progress (MEEPP) project which aimed at sharing emerging issues from the new generation PEPFAR indicators. Proceedings from the meeting contributed towards improvements in quality of data, reporting and data utilization

2.2.3 Organizational capacity assessment of supported CSOs

During PY3, STAR-EC conducted an organizational capacity assessment (OCA) for several of the supported civil society organizations in order to identify capacity gaps and develop plans to address them. The OCA focused on the strengths and weaknesses of CSOs related to human resource management; assets control and management; monitoring & evaluation; information management systems; and financial control aspects.

CSOs were requested to design their own organization development action plans in relation to the OCA findings. CSO participants included Executive Directors, Program Coordinators, Program Officers, Finance staff and in some cases members of the Boards of Trustees. Based on the OCA findings and recommendations several CSOs (including AIC, FOC-REV, IDAAC, UDHA, YAWIA, Youth Alive Uganda, URHB, FLEP and MUCOBADI)⁵ have developed or improved their strategic plans

2.2.4 Information sharing and dissemination of best practices

During PY3, STAR-EC strengthened its resource center to increase accessibility and sharing of relevant information with its partners. A link (<http://41.221.86.162:83>), which is accessible through the STAR-EC website (www.starecuganda.org) was created in order to enable off-site partners access electronic materials from the resource center.

Additionally, program had a total of 20 abstracts accepted for presentation at both national and international conferences as follows: 12 at the 16th International Conference on AIDS and STIs in Africa (ICASA)2011 due to take place in Addis Ababa, Ethiopia from December 4-8, 2011; 5 at the 5th National Pediatric Conference that took place in September, 2011, Kampala, Uganda; at the JSI Global Bilateral M&E Projects Meeting, September 2011, Accra, Ghana; and one at the HIV Capacity Building Partners Summit; March, 2011, Nairobi, Kenya. Appendix 3 provides details about these presentations.

2.2.5 Improving Human resources for health

Training human resources for health (HRH)

STAR-EC continues to support the increased availability and effectiveness of human resources for health in East Central Uganda through various mechanisms that include training; mentorship; support supervision; exchange visits to highly performing health centres ; and the promotion of task shifting role sharing, and multitasking at different levels of health service delivery.

During PY3, STAR-EC collaborated with the MoH and other partners to conduct training activities aimed at improving knowledge, attitudes and skills of health workers in delivering quality comprehensive TB/HIV care and prevention services in the region. The number of persons who were trained during PY3 are summarized in Table 1 of this report and have also been presented under each sub-technical area section.

In response to the critical shortage of laboratory personnel in the region, the program collaborated with the district local governments and enrolled 10 microscopists at Jinja Medical Laboratory Training School for a pre-service training on laboratory technology.

Additionally, as part of health systems strengthening, STAR-EC worked with the Uganda Capacity Project to support the recruitment of 40 health workers to fill the critical but vacant positions in Buyende District. STAR-EC will continue working with the relevant stakeholders in the region using the available evidence from the HRH survey conducted by MoH in 2009 in collaboration with the Uganda Capacity Project to identify the most urgent human resources for health needs and dialogue with the relevant districts and the Ministry of Health to identify funds to bridge the identified HRH gaps.

⁵The full names of the CSOs are provided in the list of acronyms at the beginning of this report

SUCCESS STORY

Training as a precursor to improved service delivery: The story of Sister Nandabire Eseza of the antenatal clinic at Iganga Hospital

"Before this training in early 2011, all the requisite HIV testing was done at the antenatal clinic but samples for CD4 and dried blood spots for HIV PCR were drawn from the laboratory and this used to increase on the waiting time for pregnant mothers. There wasn't any designated care point for HIV positive pregnant mothers and their babies and no referral system in place," says Eseza.



Eseza guiding a mother on how to administer Nevirapine Syrup at Iganga Hospital

Eseza is a 29 year old enrolled nurse at Iganga Hospital. She has worked at the hospital for three years. During this period she has seen HIV pregnant mothers wait for long in order to have their blood taken for CD4 testing taken and their children having blood samples taken for PCR.

She adds, *".....after the training we established an EID Care point; all pregnant HIV positive mothers are escorted from ANC to the ART clinic. Use of the triplicate referral form helps in tracking the referred clients. Mothers who deliver from the*

maternity ward are also referred to this care point from where we subsequently do cotrimoxazole refills for babies, provide nevirapine syrup and ongoing

clinical and laboratory assessment. With this system in place," she continues, "all mothers who receive their HIV positive results are linked to the EID care point and to the ART clinic." Her face beaming with confidence, she further asserts, "I can say the intra facility referral system of pregnant HIV positive mothers and their babies has improved our service delivery. This arrangement captures the would-be lost clients and the mothers do not have to wait for long. I can certainly say that our PMTCT indicators have greatly improved ever since we underwent this training."

2.2.6 Strengthening laboratory services delivery

STAR-EC recognizes the pivotal role that laboratory services play towards ensuring quality service delivery. To this end, STAR-EC scaled up the number of health facilities with functional laboratories in the region from 66 facilities during PY2 to 80 by the end of PY3. Key activities aimed at laboratory strengthening that were carried out during PY3 are summarized in Table 6.

Table 6: Key activities carried out during PY3 in order to improve laboratory functionality

Activity	Details
Essential Laboratory Equipment	Automated Haematology and Clinical Chemistry analyzers to 2 General Hospitals; binocular microscopes to 8 HCs; refrigerators to 5 HCs; Colorimeters to 20 HCs; Automatic (20ul, 10-100ul & 100-1000ul) pipettes to 20 HC laboratories; Vortex mixers to 3 General Hospitals; electrical and manual centrifuges to 8 and 20 HCs respectively.
Supplementary Diagnostic Supplies	TB diagnostic reagents to 80 HCs; HIV test kits to 25 HCs; assorted laboratory supplies (immersion oil, microscope slides) to all TB diagnostic units; CD4 diagnostics kits, complete blood count and clinical chemistry reagents related supplies to 3 General Hospitals
Specimen referral for CD4 and EID	Delivery of the samples from the peripheral health units to the testing laboratories for CD4 enumeration (82 HCs) and HIV DNA PCR (71 HCs)

Activity	Details
Pre-service training	10 Laboratory staff supported for Medical Laboratory Technology Course so as to close the laboratory human resource gap
Refresher trainings in Good Laboratory practices	60 Laboratory staff received in-service training in GLPs; 45 Laboratory staff received training on TB sputum microscopy; 55 health facility laboratories received a set of 3 Laboratory Reference Text Books/Manuals; 80 HC laboratories each received 5 copies of MoH/NTRL Laboratory Registers
Sponsorship for Effective Mentoring and Coaching Skills for Enhanced Performance	20 laboratory in/charges from all general hospitals and all health sub district (HSD) sponsored for coaching and mentorship course
Provision of Mentorship and Support Supervision	Laboratory staff at 80 HCs received mentorship and technical support supervision; laboratory data collection and validation enhanced at all the supported HCs; 38 HCs received MoH Laboratory Safety Manuals; 80 HCs received carbonated laboratory request books
TB Proficiency Panel testing scheme	In the 1st survey, 292 TB proficient panels smears were reviewed by 72 supported laboratories while, 335 smears were reviewed during the 2nd survey. Average performance was 92.3
TB Sputum Smear Blinded Rechecking Scheme	NTRL found 96% accuracy of reporting for TB microscopy
Malaria Proficiency Scheme	All supported laboratories that perform malaria testing received and reviewed malaria proficiency panels
HIV Proficiency Panel	All supported laboratories facilitated to participate in the HIV serology proficiency testing
Advocacy	Technical working sessions and meeting convened by MoH and other IPs, including Laboratory Accreditation preparation meetings; East African Public Health Networking (EAPHL) meeting; WHO/AFRO/SLMTA Orientation workshop and trainings; country wide baseline assessment of 21 General Hospital Laboratory selected for enrollment into SLMTA program; development of quality laboratory manual; National Logistics Quantification workshop; presented a paper in the 28th Annual Scientific Conference for the Uganda Medical Laboratory Technology Association (UMLTA)
Collaborations	Central Public Health Laboratories (CPHL); National TB Reference Laboratory (NTRL); Uganda Virus Research Institute/HIV Reference Laboratory (UVRI/HRL); Uganda Blood Transfusion Services (UBTS)
Other Implementing Partners	Joint Clinical Research Centre (JCRC); African Medical and Research Foundation (AMREF); African Epidemiology Network (AFENET); Northern Uganda Malaria and TB Program and The AIDS Support Organization among others

Source: STAR-EC program records

Performance of STAR-EC supported laboratories during PY3

Table 7 summarizes the performance of STAR-EC supported laboratories during PYs 2 and 3 utilized the numbers of key tests performed during each reporting period at the percentage increment in capacity.

Table 7: Number of select laboratory tests performed during PYs 2 and 3

Type of Laboratory Test	Number of tests		% increment
	PY2	PY3	
HIV antibody	128,180	349,518	173
HIV DNA PCR for EID	732	3,654	399
TB sputum microscopy	12,373	25,435	106
Syphilis antibody test	17,440	42,232	142
CD4 cell count	6,937	21,790	214
HB estimation	8,657	29,278	238
White Blood cell count	927	2,873	210
Liver function tests	128	443	246
Renal function tests	37	348	841
Blood slide for malaria	252,041	288,924	15

Source: STAR-EC program records

The above increments are partly attributable to some of the interventions listed in Table 6 above that included the provision of requisite equipment, buffer stocks of reagents and technical assistance through training, mentorships,

job aids and quality assurance. It is notable that even the number of tests performed for diseases not directly related to HIV&AIDS and TB also increased in number during the reported period – an excellent example of how strengthening health systems can have benefits beyond what STAR-EC is directly supporting.



A laboratory unit on a boat. Patients' blood analysis for CD 4 cell count on a Portable CD4 machine in progress.

Taking laboratory services to fisher folk on the islands of Lake Victoria

The HIV prevalence in East Central region is highest among the migratory fisher folk and commercial sex workers residing in the Islands of Sigulu and Sagitu in Namayingo and Mayuge districts respectively and it ranges between 10-30% for an estimated population of 40,000. The islands are hard-to-reach taking between 6-9 hours by boat and lack the requisite infrastructure and providers to deliver basic health services screening and management of HIV-related illnesses, TB and sexually transmitted infections.

With funding from USAID, STAR-EC initiated innovative approaches to increase access to TB and HIV&AIDS

services for this community. One such innovation is conducting quarterly integrated clinical outreach to provide onsite HIV & TB screening, PMTCT, SMC, CD4 cell count, ART and ABC services, coupled treatment of STIs all as one package. During the initial outreaches in March and May 2011, in order to improve access to CD4 count tests, the health facilities transported blood samples by a boat to a District Hospital laboratory on the mainland. However, the turnaround time was quite long in addition to the costs of boat hire to and fro. Additionally, due to the migratory nature of the fisher folk, the majority of them would not be available when the results were obtained and hence were lost to follow up.

In order to address the issues mentioned above, STAR-C set up a mobile laboratory unit with capacity to conduct CD4 analysis on the boat. This resulted in an ability to deliver same day results to clients before they could leave for fishing. Overall, a total, 876 CD4 cells count tests were performed during the reporting period in these hard-to-reach areas, of which 31% were below 350cells/μl hence eligible for ART.

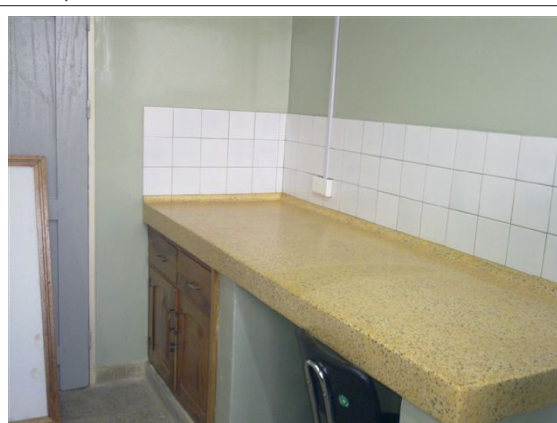
2.2.7 Physical health infrastructure improvement

During PY3, STAR-EC completed the refurbishment of a laboratory room at Bugiri General Hospital to accommodate the CD4 machine, Haematology and Clinical Chemistry Analyzers and installed power inverters to avert power cuts. Air conditioners were also installed at three General Hospital laboratories. STAR-EC also renovated the operating theatre at Busesa HC IV in Iganga District in order to improve working conditions. Seven patient waiting shades at health facilities were also constructed in order to improve patient waiting conditions.

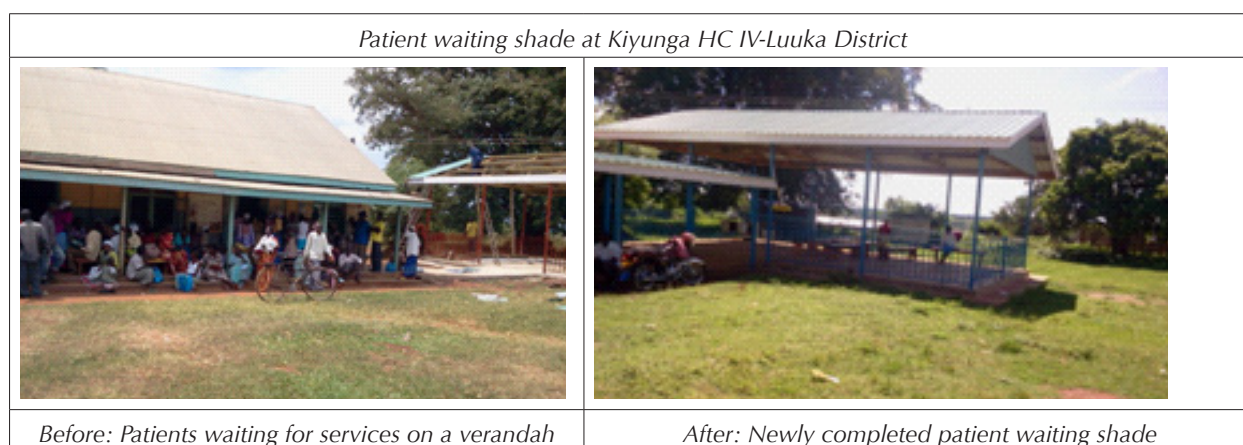
Bugiri CD4 laboratory room work-tops before and after rehabilitation



Before rehabilitation



After rehabilitation






Challenges and the way forward


The demand for laboratory services for the different intervention areas of the program outweighs the capacity of the available staff and the consumable supplies normally provided through NMS. The program will continue to provide technical support for efficient modes of operation and for management of logistics including accurate reporting and timely requisitions from NMS.

2.2.8 Ensuring equitable access to medical products

Figure 10 illustrates activities that STAR-EC undertook during PY3 to ensure regular and equitable access to medical products.

Figure 10: Ensuring equitable access to Medical Products

Intervention	Key activities performed in PY3
 <p>Capacity Building for Supply Chain Management</p>	<ul style="list-style-type: none"> ▪ Trained 57 Store Managers from 54 sites on good stores management ▪ Trained 50 health workers from 24 sites in clinical use and logistics management of fluconazole ▪ Mentored 48 health facilities in close collaboration with the MoH Pharmacy Division ▪ In partnership with MoH, disseminated new PMTCT guidelines (Option A) to Store Managers, Records Assistants and PMTCT Coordinators in 8 districts
 <p>Improving Storage Conditions</p>	<ul style="list-style-type: none"> ▪ Distributed 70 medicine cabinets to 45 ART and PMTCT sites ▪ Distributed 141 pallets to 24 facilities to maintain quality of drug supplies ▪ Supported the collection and destruction of 5,420 kg of expired drugs and other supplies from 7 health units in collaboration with NMS
 <p>Improving Logistics Management Information Systems</p>	<ul style="list-style-type: none"> ▪ Held harmonization meetings with District Health Officials (including health facility in-charges and stores personnel), NMS and SURE to disseminate the new MoH standardized supervision and performance assessment strategy, product availability and accessibility at NMS and district performance ▪ Supported sites to submit timely and accurate orders for essential drugs and other supplies⁶ ▪ Supported the creation of a database with consumption and stock-on-hand data derived from the order forms to inform redistribution of excess stock ▪ Provided LMIS tools including ARV, PMTCT Option A and Laboratory order forms; Issue and Requisition books; Stock cards; NMS order and delivery schedule; as well as fluconazole registers and order books

Intervention	Key activities performed in PY3
 <p data-bbox="268 383 587 416">Provision of Buffer Supplies</p>	<ul style="list-style-type: none"> <li data-bbox="735 219 1390 275">▪ Provided 5,934,000 pieces of male condoms to 10 CSOs; 4 hospitals; 4 HCs IV; and 14 lower level HCs (II and III) <li data-bbox="735 275 1366 331">▪ Provided 1,113,000 female condoms to 1 HC III in Sigulu Islands and 9 CSOs <li data-bbox="735 331 1326 387">▪ Provided 114,400 Determine HIV tests to 11 CSOs; 4 hospitals; 7 HCs IV; 43 HCs III; and 29 HCs II <li data-bbox="735 387 1414 477">▪ Provided cotrimoxazole 960mg (1,149 tins of 1000's and 31,869 packs of 30 tablets each) to 4 hospitals; 35 HCs III; 29 HCs II and 4 CSOs <li data-bbox="735 477 1414 533">▪ Provided cotrimoxazole 120mg (232 tins of 1,000 tablets) to 2 hospitals; 42 HCs III; and 29 HCs II <li data-bbox="735 533 1390 589">▪ Provided 1,000 basic care kits to one hospital; 8 HCs IV; 34 HCs III; and 3 HCs II

Source: STAR-EC program records

The activities mentioned above have led to an increase in the reporting rate from 93% during PY2 to 97% in PY3. In connection with the stock outs, Sister Harriet Egulwa, Senior nursing officer and district PMTCT coordinator of Kamuli has this to say: *“These days we have some motivation to work and mothers are encouraged to come because drugs are available at most health facilities.”*

Lessons learned

- Involvement of district focal persons ensures high reporting rates
- Development of a database with information generated from the order reports informs redistribution and helps to stop gap stock outs

Challenges

- Recurrent stock out of commodities such as HIV test kits, nevirapine syrup and CD4 reagents
- Only ART accredited sites can receive medicines for prophylaxis of opportunistic infections
- Quality of reporting is still below the expected level

Way Forward

- STAR-EC plans to implement the standardized supervision and performance assessment strategy with the support of MoH through the Jinja Regional Referral Hospital pharmacist and the selected medicines management supervisors
- The program will emphasize quality of reporting by working with the medicines management supervisors and NMS. Together with the Clinton Health Access Initiative a tool capable of assessing the quality of orders will be designed. This information will then be relayed to health workers before the subsequent ordering cycle

2.3 Result 3: Improving quality and efficiency of HIV&AIDS and TB service delivery within health facilities and CSOs

2.3.0 Healthcare quality improvement

Ensuring quality service delivery is a critical pillar of the technical assistance that STAR-EC provides in the region. During the reporting period, the program focused on expanding the knowledge and skills of health workers and mandating them to monitor the quality of service delivery offered at the facility level. In order to do so, STAR-EC established facility based and district based quality improvement teams to implement and monitor quality improvement activities.

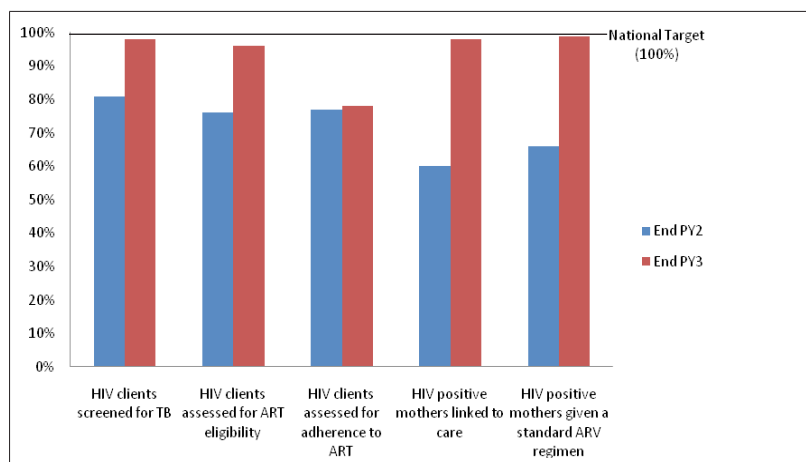


Facility based quality improvement (QI) teams

During PY3, STAR-EC in partnership with MoH and the Health Care Improvement (HCI) project trained and supported a total of 71 health facility teams composed of different cadres of staff and patient representatives to collectively spearhead continuous improvements in service delivery.

Of the 71 trained teams, 56% (40 teams compared to 11 during PY2) actively monitored a minimum of five national quality improvement indicators in the areas of PMTCT, TB, and ART (both adult and pediatric). Improvements from this effort are illustrated in Figure 11.

Figure 11: Quality improvement achievements using HIV clients as an example



Source: STAR-EC program records

Institutionalizing quality improvement through the use of district based quality improvement teams

All nine supported districts had a district quality improvement team trained and supported on a monthly basis to provide coaching to the facility teams. A total of 72 district health team members were trained during PY3 making a total of 108 district quality improvement members for the nine districts. Through their monthly coaching visits, they have helped to build the skills of the individual health workers and teams in identifying performance gaps, interpreting and analyzing data and sharing this data with the rest of the facility members. The visits have also served as avenues for identifying resource and administrative gaps that can easily be attended to by district supervisors.

Improving the skills of frontline providers through supervisions and mentorships

During the year, 84 health facilities received support supervisions and mentorships from the district and health sub district clinical teams. These facilitators of these visits emphasized standards of care; mentored health workers

⁶Late submission of reports has been partly blamed for the unavailability of essential medicines and health supplies at facilities

on clinical skills; replenished missing guiding documents; and supplied the facilities with stationery to conduct continuous professional development (CPD) and case management sessions during which they updated their clinical knowledge and skills and collectively addressed emerging challenges in the clinics.

Promoting competition and peer-to-peer learning through exchange visits and collaborative learning sessions

During PY3, the program supported 16 exchange visits between health facilities aiming at promoting competition, creativity and spread of best practices. This intervention has helped to rejuvenate teams by improving their infection control practices in clinics as well as clinic orderliness and patient flow (a case in point is Namutumba District whose facilities were initially dormant but are now very proactive). What followed was the formation of eight collaborative learning sessions each comprising of an average of eight facility teams and two district quality teams. In these sessions, teams shared improvement changes, addressed challenges, identified priority improvement projects and collectively set performance targets.

Addressing quality in the community

At the community level, nine CSOs were trained in quality improvement and supported bi-annually to review the quality of care offered in the community and to re-align their performance to national priorities.

Lessons learned

- Extending quality improvement beyond HIV provides an opportunity for participation of a large team of health workers which increases chances for complete integration and sustainability
- Collaborative learning sessions and exchange visits serve as motivation for health workers to pursue improvement projects especially if it is between facilities of the same level of health care. These avenues can therefore be utilized more by grooming more facilities per district to serve as models

Challenges

- Appreciation of quality improvement is still low both at the facility and district levels and QI activities are still viewed as an extra work load. This coupled with absence of a standard national reporting framework creates complacency among both district and facility teams
- Staff constraints, including transfers and absenteeism, continue to constrain the implementation of quality improvement initiatives

Way forward

- STAR-EC will support the managers at the facility and district levels (through training and support supervision) to further appreciate quality improvement, integrate it into district and facility plans and monitor its implementation
- Special attention will be paid to collaborative learning in order to further inculcate the culture of competition between facilities that can lead to greater improvements in health care

2.3.1 Healthcare waste management and Injection Safety

During PY3, STAR-EC continued facilitating health care waste management (HCWM) and injection safety activities with technical support from AIDSTAR-One through providing supplies, training and on-job support supervision. In collaboration with AIDSTAR-One a total of 113 (46 females, 67 males) health workers from the extended district health teams from Namutumba and Namayingo were trained on the principles of HCWM. These will continue receiving support to conduct regular supervision and mentorship visits to lower health facilities.

Using findings from the PY2, HCWM assessment that was conducted with technical support from AIDSTAR-One, STAR-C provided requisite items to 81 health facilities to ensure proper waste management and final disposal. These included 87 wheelbarrows, 184 pairs of protective eye goggles, 172 industrial overalls, 172 pairs of gumboots, 129 aprons, 172 pairs of heavy duty gloves, 128 sets of color coded bins, 307 metallic foot operated bins, 266 packs of biohazard bags and 218 packs of injection safety boxes.

Additionally, to enhance personal protective measures in infection control, STAR-EC supplied 3,332 boxes of examination gloves to selected health centers and CSOs; and 2,010 boxes of surgical gloves to 15 health centers providing voluntary safe male circumcision services. Furthermore, 5 MARK IV incinerators were purchased and installed at one hospital and 4 HCs IV. In an effort aimed at reducing on the dangers caused by accidental exposure to potentially infectious materials, STAR-EC supported interventions to increase awareness of and accessibility to HIV post exposure prophylaxis (PEP) services.

Challenges

- The amount of gloves supplied to the health facilities through the national credit line is far less than the actual need at all HC levels hence frequent stock outs
- Absence of placenta and medical waste pits in some health centers makes final disposal of the generated waste difficult

Way forward

- The health workers have been supported to come up with proper quantification of the required gloves and use this evidence to lobby for increased allocation of funds to this item
- Supporting continuous development sessions on HCWM and injection safety and support the HCWM committees to promote good practices

2.3.2 Post exposure prophylaxis (PEP)

The health workers, district politicians and the local police forces have been sensitized on the availability of post-exposure prophylaxis (PEP) services for both non-occupational exposure (like sexual assault) and occupational exposure. To-date, about 13 health workers and 5 rape victims have accessed PEP antiretroviral drugs and potentially 18 new infections have been averted.

During PY4, STAR-EC will focus on reaching the household members particularly the girl child, and reaching the village local council chairpersons with PEP educational materials advocating for the need to get *'first-aid PEP'* before legal proceedings commence. The STRIDES for Family Health project has availed us with an opportunity to integrate PEP services with the emergency contraceptive services in the private sector.

2.4 Result 4: Strengthening networks and referral systems to improve access to, coverage of, and utilization of HIV and TB services

2.4.0 Strengthening networks and referrals at community level

During PY3, the 11 STAR-EC supported CSOs registered significant improvements in conducting referrals and promoting networks with other stakeholders within the region. This improvement is largely attributable to the continuous technical support supervision provided by the STAR-EC and the provision of referral materials (including 1,800 referral forms, 500 referral registers and 500 copies of the service provider's Directory) to improve tracking, and refresher training and orientation of the CSO staff in the basics of conducting referrals and establishing networks.

Over a period of 12 months, CSOs referred 91,275 new clients (60% female) for a range of services that included: 41,100 for HIV counseling and testing (45%); 13,392 for PMTCT (15%), 11,102 for ART (12 %); 10,634 for adherence counseling (12%); 4,800 for TB screening, (5 %); 4,050 for safe male circumcision (4%); and 6,197 (7%) for other related services.

68% of the referred clients received services within a month of referral and these referrals were mainly done by community support agents from NACWOLA (68%), followed by YAWIA with 24% and VHTs with 10% respectively. The difference between the number of clients referred and those that receive the services may be attributable to the fact that client tracking is conducted on a monthly basis. Those that reach out for services beyond one month after the referral were not initially tracked.

2.4.1 Strengthening Referrals and linkages at Health Centers

STAR-EC supported health facilities have registered improvement in conducting effective referrals and promoting networks among themselves within the nine districts. Quarterly stakeholders' referral meetings that are attended by CSAs, local leaders, 'mentor mothers', PLHIV and other partners involved in the implementation of HIV&AIDS activities are key to these improvements. A total of 72 HCs participated during PY3 and the net effects are the strengthening of the community-facility referral network; improved feedback loop; and increased access to services by the various referred clients

Additionally, STAR-EC supported three districts to identify four high volume model HCs to strengthen the referrals and networking system. These facilities include are Kamuli and Bugiri General Hospitals; as well as Busesa and Namwendwa HCs IV. Monthly support has been provided through meetings and technical support. As a result, all referrals at these HCs are tracked both internally and externally and a strong relationship between volunteers and health workers has been built. Storage of clients' records has greatly improved and weekly tracing of those lost to follow up has registered good results. These facilities will be utilized as learning sites to cascade the good practices to the rest of the facilities in the region.

2.4.2 Support to Village Health Teams (VHTs)

In order to strengthen community involvement in health service delivery, STAR-EC supported the Ministry of Health to conduct a five-day comprehensive training of 46 trainers of trainers for VHTs from 16 sub-counties in nine districts of East Central region. Following this training, STAR-EC supported the community sensitization, selection, formation and training of VHTs throughout the region. By the end of PY3, a total of 3,879 individuals had been trained to be part of village health teams and from these, 776 teams have been formed. Those trained were supplied with job aids including registers, participant's manuals and other supplies. STAR-EC community referral data shows that VHTs contributed to an increase of people accessing services by 18% during PY3.

STAR-EC also supported the conduct of VHT stakeholders meetings in all the nine districts. The purpose of these meetings was to take stock of the progress of VHT activities; harmonize approaches to operations; streamline facilitation by the various implementing partners; and to chart a way forward on VHT support for sustainability.



Demonstration on how to use a 'tippy tap'

2.4.3 Strengthening the capacity of people living with HIV coordination structures

STAR-EC facilitated The National Forum of People Living with HIV&AIDS in Uganda (NAFOPHANU) to conduct orientation and formation of 66 sub-county PLHIV committees. Members were oriented on their roles, responsibilities and the coordination mechanisms at all levels and as a result they have conducted community mobilization, awareness creation, lobbying, advocacy, referrals and networking. The districts were further supported to conduct quarterly support supervision visits to lower level

structures, conduct quarterly regional and district based meetings. Other support included training of 176 PLHIV in psychosocial support, 60 PLHIV leaders from nine districts trained in lobbying and advocacy, coordination, support supervision, resource mobilization and strategic planning skills intended to build their capacity to develop an HIV&AIDS advocacy strategy and identify effective collaborative advocacy activities in their districts.

As part of the collaboration with MoH, STAR-EC supported the training of 45 CSAs on integration of water hygiene and sanitation (WASH) into home based care so as to reduce the risk of transmission of diarrheal diseases and other water borne diseases. Following the WASH campaign many households have now acquired 'tippy taps'.

2.4.4 Involvement of people with disabilities (PwDs) affected by HIV&AIDS

STAR-EC conducted a rapid assessment of the situation of people with disabilities (PwDs) in the nine districts to establish the progress made to date with regard to access of TB and HIV&AIDS services. Results revealed that despite the progress made over the years in the fight against HIV&AIDS, little attention has been focused on PwDs affected by HIV. Following this, STAR-EC conducted a training aimed at orienting some PwDs on TB and HIV&AIDS and referrals and networking in order equip them with the capacity to mobilize fellow PwDs for related services. As a result of this intervention, there has been some improvement in the number of PwDs accessing care.

Lesson learned

Involvement of PLHIV, community structures and effective linkages promote high utilization of TB and HIV&AIDS services

Challenges

- There is noted non-adherence to referrals due to long distances to referral service points
- Low male involvement also remains as barrier
- Low coverage of wraparound services in the region is a key challenge

Way forward

Continued community sensitization using the established structures and improved tracking of completed referrals

2.5 Result 5: Increasing demand for comprehensive HIV&AIDS and TB prevention, care and treatment services

Building on PY2 achievements, STAR-EC utilized multi-pronged approaches to reach targeted audiences with relevant messages through: IEC materials and job aids; an interactive one-hour radio program; interpersonal and small group communication and innovative approaches that included painting fishing boats with appropriate health messages and reaching more couples with services through the week long couple HTC campaign.

2.5.0 Intensifying demand through IEC materials and job aids

During PY3, STAR-EC disseminated IEC materials to peer educators, *'model couples'*, VHTs and job aids to health workers as follows;

- 22,000 PMTCT English leaflets received from MoH
- 1,000 copies of laminated peer educator talking points and 1,000 copies of cue cards on gender based violence prevention disseminated to peer educators and VHTs
- 26,000 copies of couple HTC Luganda leaflets and 100 Couple HTC signposts put at health facilities
- 5,000 Couple HTC certificates reproduced from MoH
- 87 copies of the Atlas of Common Clinical Presentations of Pediatric HIV Infections received from MoH
- 5,000 TB posters on TB infection control adapted from TB Control Assistance Program
- 2,000 TB infection control stickers
- 5,500 calendars with health messages disseminated to community volunteers, CSO and district offices

2.5.1 Creating demand for services through the interactive one-hour radio program

The one-hour interactive radio program on NBS Kodh'eyo 89.4 FM started during PY2 and has continued to reinforce messages on various aspects of TB and HIV&AIDS prevention, care and treatment delivered through

other channels. Health professionals, VHT members, beneficiaries of health services like SMC, PLHIV and recovered TB clients were some of the guest speakers during PY3. Fifty two radio programs were aired during the year. Some of the topics covered included:

- Role of VHTs, peer educators, sub-county health workers, local and religious leaders, PLHIV and TB recovered clients in TB and HIV&AIDS prevention care and treatment
- Prevention with positives
- Couple HTC
- Safe male circumcision
- Early infant diagnosis
- Family planning

Listeners were given an opportunity to call in and ask questions for clarification. Ivan Musobywa from Nankoma Youth Association in Bugiri District says he convinced his wife to go with him for HTC as a couple at Nankoma HC IV after listening to a radio program on NBS. He says, *“During the radio program the guest speakers explained the advantages of testing as a couple and I felt touched because I had never discussed this with my wife. After the program, I talked to my wife and we agreed to go to Nankoma HC IV to “know our HIV status as a couple.”*

STAR-EC also contracted two regional radio stations (Victoria FM and NBS 89.4 FM) to air two radio spots each per day from Monday to Friday with bonus spots running over the weekend. One spot encourages couples to test together and directs couples to HCs with a couple HTC sign post. The other spot encourages mothers to attend antenatal clinics to avoid transmission of HIV from the mother to the child. The spots have been aired for 5 months (May- September 2011) and will continue up to end of October 2011.



Peer Educators conducting a TB discussion in Lolwe-Sigulu Island

2.5.2 Intensifying demand for services through interpersonal communication (IPC)

During the year, community dialogue sessions to discuss TB and HIV&AIDS issues led by 11 CSOs continued in the STAR-EC supported districts. These community dialogue sessions are conducted by trained peer educators and VHTs who educate people on TB and HIV&AIDS. Community members are also referred to service delivery centers within their communities for appropriate health services.

Twenty five participants were trained as trainers on ___+++ including alcohol use and abuse. Young Empowered and Healthy (YEAH) trainers facilitated the 4 day workshop.

After training trainers on ‘Men and HIV’ during the January-March 2011 Quarter, the trainers cascaded the trainings to lower levels.

FLEP trained 34 participants in Malongo, Kityerera and Kigandalo sub-counties in Mayuge District while URHB trained 36 participants from Bulesa, Bulidha and Muterere sub-counties in Bugiri District. The trained participants engaged community members in discussing factors that put men at risk of getting HIV like excessive use of alcohol, gender norms that put men in superior positions and cultural practices like women inheritance. YEAH trainers supported CSOs during the lower level trainings.

STAR-EC supported CSOs including Youth Alive Uganda, UDHA, FLEP, AIC, UWYDI and the districts to utilize drama in mobilizing communities for TB and HIV&AIDS services. The drama groups trained in forum theatre started engaging the audience during the community drama performances. Under this approach, the drama groups pause between different drama scenes and ask the audience what they would do when faced with scenarios presented in the different scenes. This provides an opportunity to check whether the audience is following and whether the performances deliver the messages intended by the script writers. URHB engages CSWs at Naluwerere in drama performances during ‘moonlight HTC’. This is used as an avenue to deliver behaviour change and health messages to the CSWs in an entertaining way using their peers. *“I learned from the drama*

performance that once a person has an STI it is easy for him or her to acquire HIV” – said a CSW at a ‘moonlight HTC’ outreach in Naluwerere.

2.5.3 Utilizing innovative approaches to reach targeted audiences

In a bid to reach the fishing communities with TB and HIV&AIDS messages, STAR-EC painted 100 boats at Lugala and Wakawaka landing sites in Namayingo and Bugiri districts respectively. The messages were translated into local languages (including Lusomya, Luganda and Lusoga) in order for the local communities to understand. These messages encourage the fisher folk to test for HIV; seek for early and complete treatment STIs; regular and proper condom use; testing for TB for those who cough for two or more weeks; and the dangers of multiple sexual partners etc. The boats act as moving billboards as they cross from one island to another.



Boats painted with HIV Messages at Lugala Landing Site

2.5.4 Participation in national HIV&AIDS activities



Community members testing for HIV in Buyende district during World AIDS Day

STAR-EC supported nine districts in the East Central region to commemorate World AIDS Day 2010 under the national theme “Universal Access and Human Rights” and the slogan “I have a duty to protect every child from HIV...do you?” Health workers were facilitated to provide HTC and TB screening. All clients tested HIV positive were given cotrimoxazole. STAR-EC procured and distributed 270 T-shirts, 270 caps, 18 banners and a newspaper supplement highlighting STAR-EC’s activities in East Central Uganda was published in the New Vision newspaper. STAR-EC participated in MoH activities including the Pediatric ART campaign where communication materials were designed; campaign monitoring tools to health workers disseminated; coordination of radio programs and identification of guest speakers done.

Lessons learned

- Provision of materials such as T-shirts, caps and umbrellas to volunteers is an effective form of motivation. It also enables their identification as an important community health resource team
- Communities are mobilized better using multi-pronged mobilization strategies
- The popular video halls (commonly known as ‘bibanda’) within the communities such as the islands and the landing sites are a cheap and effective avenue for delivering health information and mobilizing communities

Challenges

- The different languages and variation of dialects pauses a challenge in effective utilization of adopted print IEC materials
- Under utilization of job aids in form of booklets by the health workers due to poor reading culture

Way Forward

- Key languages will be considered when planning activities in communities with various languages
- Simple job aids that can be placed on walls to ease use by the health workers should be considered instead of booklets that are often kept in drawers

3.0 GRANTS AND SUPPORT TO DISTRICT-LED ACTIVITIES

3.1 Grants to civil society and community based organizations

During PY3, STAR-EC gave out thirteen grants of which four were to the pre-qualified CSOs (including FLEP, NACWOLA, URHB and Youth Alive) and nine to local community based organizations (CBOs) that were competitively selected during the program year.

Whereas FLEP, URHB and Youth Alive continued to work within their previous areas of operation, there was scale up in provision of more comprehensive services. Both FLEP and URHB extended services to the hard-to-reach islands of Jaguzi and Sigulu in Mayuge and Namayingo Districts respectively, participating in the district health team's monthly integrated service provision. NACWOLA and Youth Alive both started integrating HTC services (which they were not providing before) into their other activities.

While none of the nine districts has all sub counties with all parishes receiving the full range of interventions from the CSOs, there was improvement in coverage during PY3 with the overall CSO geographical coverage increasing by 21% from 52 sub counties during PY2 to 63 sub counties during PY3; and coverage of parishes by 25% from 266 in PY2 to 332 in PY3 as is summarized in Table 8. This brings total sub-county coverage to 83% from 46% in PY1.

Table 8: CSO summary coverage from PY1 to PY3

Total CSO Coverage	PY1	PY2	PY3
No. of Districts covered	6	9	9
No. of sub-counties covered (out of 76)*	35	52	63
No. of Parishes covered (out of 438) **	n/a	266	332

Source: STAR-EC program records

* NACWOLA offers services in all sub counties; their coverage is excluded from the above

** Parishes covered by services were not captured during PY1 which was only three months of actual implementation

Tables 9 and 10 further provide more detail about CSO areas of intervention and coverage by district and sub county in East Central Uganda. It should be noted that though some of the pre-qualified grantees and the community based organizations work in the same districts, STAR-EC ensured that there was no overlap and duplication of service delivery by carefully working out with other stakeholders to map out areas of operation for each organization.

Table 9: Pre-qualified grantees coverage of the districts by technical intervention area

Name of Civil Society Organization	Intervention areas	Districts	Sub counties covered
Family Life Education Programme (FLEP)	HTC, ABC, OP, CM	Kamuli, Iganga Mayuge	Kamuli : 3/14 Iganga: 3/20 Mayuge: 3/12
National Community of Women Living with HIV/AIDS (NACWOLA)	PP, REF, CM, HTC	Bugiri, Iganga, Kaliro, Kamuli, Mayuge, Namutumba	All sub counties
Uganda Reproductive Health Bureau (URHB)	HTC, TB/HIV, ABC, OP	Bugiri, Kaliro, Namutumba	Bugiri: 9/12 Kaliro: 3/6 Namutumba : 3/6
Youth Alive Uganda	CM, ABC, CP, HTC	Kamuli, Namutumba, Kaliro, Iganga, Luuka, Buyende	Kamuli : 14/14 Kaliro: 5/6 Iganga : 3/20 Buyende: 4/6 Namutumba : 4/6

Source: STAR-EC program records

Table 10: CBO grantee coverage of the districts by technical intervention area

Name of Community Based Organization	Intervention areas	District	Sub counties covered
AIDS Information Centre	HTC, ABC, TB	Mayuge	3/12
Integrated Development Activities and AIDS Concern (IDAAC)	ABC, HTC, SMC, TB	Namutumba	2/6
Friends of Christ Revival Ministries (FOC-REV)	HTC, ABC, OP, TB, SMC	Bugiri Namayingo	2/12 1/7
Multi-Community Based Development Initiative (MUCOBADI)	HTC, ABC, OP, TB, SMC	Namayingo	2/7
Uganda Development and Health Association (UDHA)	HTC, ABC, OP, TB, SMC	Mayuge	2/12
Uganda Development and Health Association (UDHA)	HTC, ABC, OP, TB, SMC	Iganga	2/20
Uganda Women and Youth Development Initiative (UWYDI)	HTC, ABC, TB, SMC	Iganga	2/20
Uganda Women and Youth Development Initiative (UWYDI)	HTC, ABC, TB, SMC	Kamuli	2/14
Youth and Women in Action (YAWIA)	HTC, ABC, OP, SMC	Kaliro	2/6

Source: STAR-EC program records

3.2 Support to district-led activities

There was increased support to district health structures during PY3 including centrally managed training activities, provision of various supplies and direct funding support for district-led activities.

STAR-EC provided support for health workers in implementing HIV&AIDS and TB interventions, including HIV and TB outreaches that were held concurrently in all nine districts, during World AIDS Day and World TB Day as well as the 'Couples HIV counseling and testing week'. In addition to supporting numerous activities, STAR-EC's finance and technical staff provided continuous support to district staff, specifically the selected district focal point persons, to facilitate the timely and accurate submission of activity reports.

In PY3, total expenditure of UGX 1,772,785,955 was incurred to support district-led activities, compared to UGX 497,322,650 in PY2. By the end of PY3, the funding support comprised an average of 73% of the total available PY3 budget funds of UGX 2,436,275,478, for the nine districts. Implementation of program activities by the districts increased, demonstrating improved coordination within district service delivery structures. Table 11 shows support for district-led activities.

Table 11: STAR-EC support to district-led health activities

District	PY2		PY3	
	Budget (UGX)	Disbursements (UGX)	Budget (UGX)	Disbursements (UGX)
Bugiri	70,017,500	63,672,450	346,439,571	254,677,000
Buyende*	0	0	224,754,600	104,471,500
Iganga	139,191,500	105,630,700	302,562,000	221,074,000
Kaliro	83,735,500	72,895,000	276,969,060	198,144,255
Kamuli	96,070,150	54,492,500	288,585,857	226,792,700
Luuka*	0	0	229,199,006	153,054,000
Mayuge	157,160,000	108,022,500	270,230,634	214,406,000
Namayingo*	0	0	217,763,750	195,685,000
Namutumba	132,904,000	92,609,500	279,771,000	204,481,500
Total	679,078,650	497,322,650	2,436,275,478	1,772,785,955

Source: STAR-EC program records

*Buyende, Luuka and Namayingo districts did not receive any funding during PYs 1 and 2 since they are new districts that were created on July 1, 2010. Buyende district was slower in putting in place effective liaison structures than the other two, which resulted in lower level of support received in the first months of the PY3.

It is anticipated that support from STAR-EC for district-led activities during PY4 will continue to consolidate achievements made to date but will reduce now since SDS has come on board and will undoubtedly fund some of the activities that STAR-EC has been funding. STAR-EC support will be focused to those activities at facility level that are essential to achieve technical outputs that fit into the STAR-EC mandate but cannot be funded through the SDS program. Such activities include various outreaches that health facilities carry out to lower level health centres and the community.

4.0 CONCLUSION

During PY3, STAR-EC made great strides towards increasing the scale, accessibility and quality of services delivered to mitigate TB and HIV&AIDS in East Central Uganda. Our collaboration with stakeholders at various levels both within the districts and nationally reached a level of maturity that enabled most of the planned targets for this implementation period to be achieved.

We learned how to leverage various partnerships both within the district local government structures and civil society organizations to achieve desired results and also attempted to focus our interventions to key drivers of the HIV epidemic in East Central Uganda. Our implementation environment is unique and East Central Uganda exhibits pockets of high HIV prevalence that drive the epidemic in this region. The Busoga region STAR-EC operates from is surrounded by a significant number of water bodies meaning that fishing is a major commercial activity which results in a large number of fisher folk. Again, the region is a major transportation corridor from the Kenyan coast – a characteristic that has fueled a vibrant transactional sex industry. These two factors have led to high HIV prevalence among fisher folk and commercial sex workers and their clients, an issue that STAR-EC took into account during programming for PY3 and will continue to mitigate in future interventions.

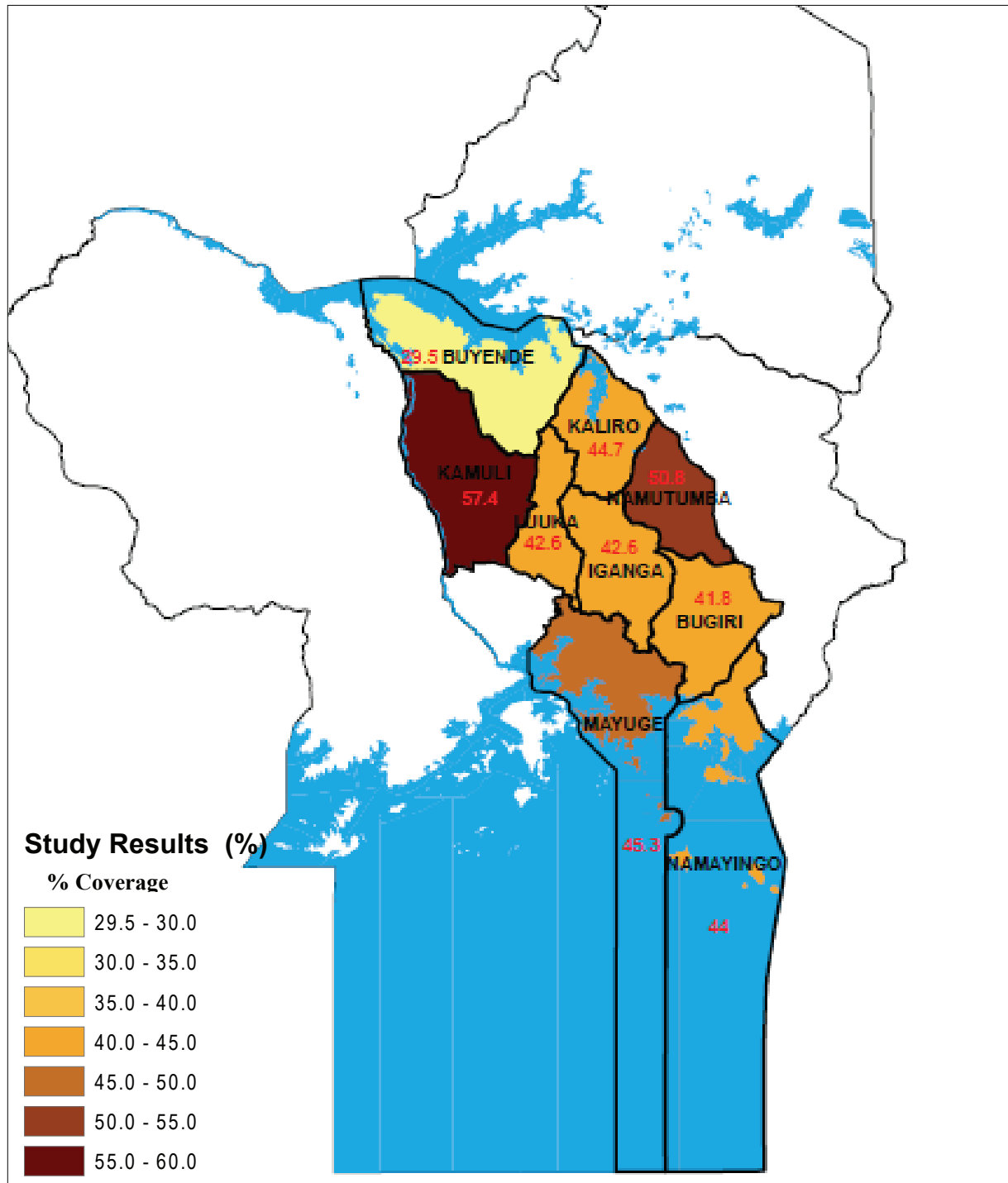
PY3 implementation was not without its challenges, stock outs of key commodities for HIV testing as well as for the provision of safe male circumcision services were a challenge; the health facilities in the region continue to face significant staff shortages; infrastructure and equipment needs to be improved; and the technical capacity of civil society organizations working in the region needs further strengthening.

Notwithstanding, STAR-EC plans to continue working with her partners within the region and at the national level to mitigate some of these challenges so as to further the deliverance of better quality and more accessible HIV&AIDS and TB services to the people in East Central Uganda.

APPENDICES

Appendix 1a: STAR-EC LQAS 2011 Results – HIV Testing and Counseling

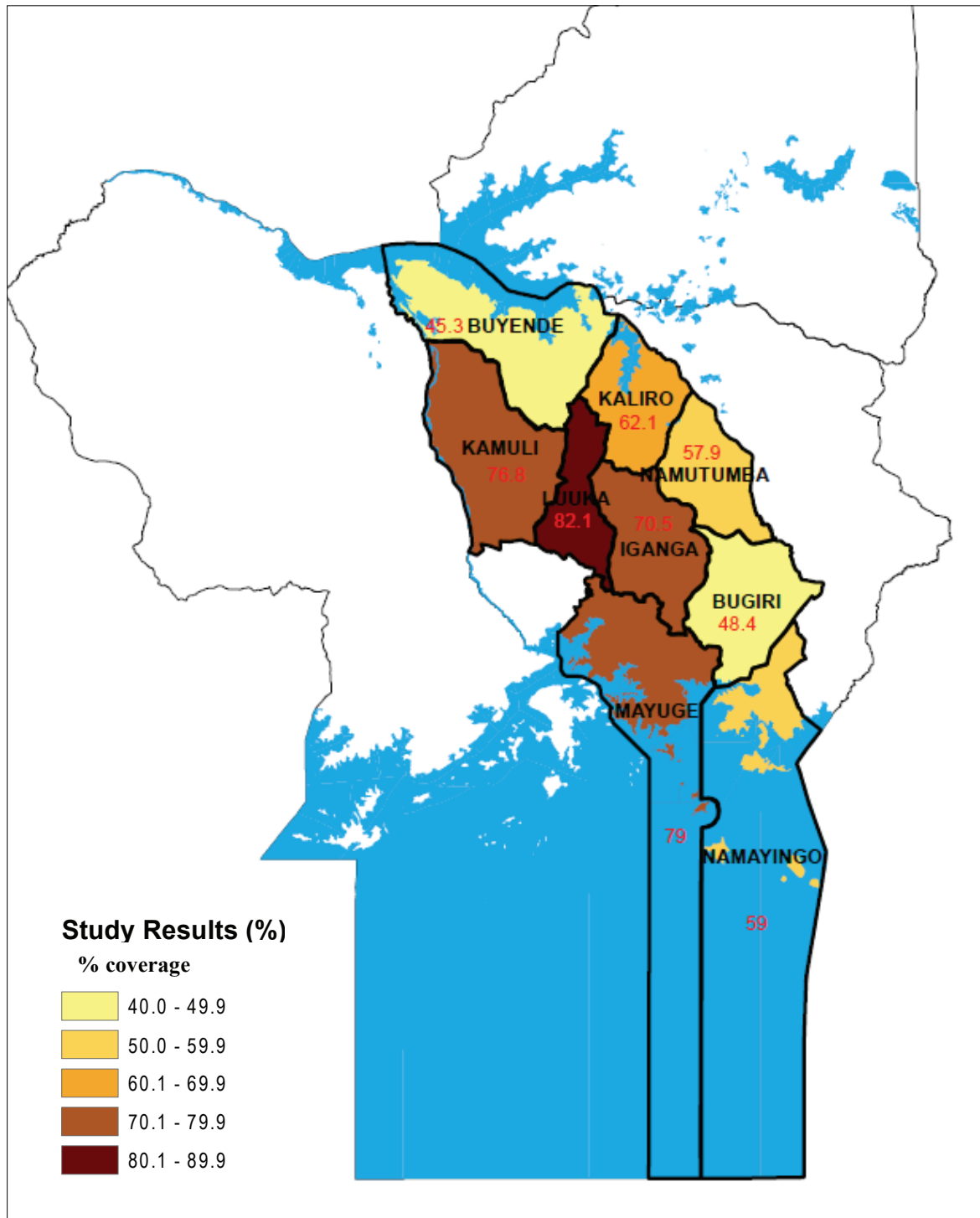
Percentage of adults who were counseled, tested and received their results during 12 months prior to the survey
(Overall regional coverage = 44.3%)



Source: STAR-EC LQAS results

Appendix 1b: STAR-EC LQAS 2011 Results – PMTCT

Percentage of biological mothers of children (0-11 months) who tested and received their HIV results during their last pregnancy (Overall regional coverage =64.6%)



Source: STAR-EC LQAS results

Appendix 2: List of abstracts prepared during PY3

Accepted for the 16th International Conference on AIDS and STIs in Africa (ICASA) 4-8 December 2011, Addis Ababa, Ethiopia.

Oral Presentations

1. **Kazibwe F**, Kisaakye L, Najjemba M, Onyando J, Mugisha B, Auma S, Kimuli R, Mutesasira K, Mulema V, Mugume A, Businge D, Kironde S. Use of improved tracking of exposed infants during early infant diagnosis (EID) to reinforce PMTCT outcomes in a low resource setting. Lessons from East-central Uganda.
2. **Odong T**, Babu E, Nakabugo E, Kironde S, Kimuli R, Ndagire N, Ndifuna M, Businge D, Mwesigwa R. Utilizing an innovative M&E System to improve community based referral mechanisms for HIV&AIDS and TB services: Lessons from East Central Uganda.
3. **Mashate S**, Batwaula B, Mugume M, Kironde S, Mutesasira M, Kimuli R, Gaspard G, Awongo P, Bulage L. Strengthening Laboratory TB diagnostic capacity of peripheral laboratories in East Central Uganda - A key contributing factor to increasing TB Case Detection Rate.

Poster presentations

4. **Ndifuna M**, Bwamiki M, Kazibwe F, Sserumaga V, Mutumba R, Tibendera E, Kabogoza S, Mugume A, Kironde S. Scaling-up Integrated HIV&AIDS Services to Most-at-Risk Populations: The case of Sigulu Islands of Lake Victoria, Uganda.
5. **Batwaula A**, Mukasa J, Mutesasira K, Kazibwe F, Tibenderana E, Mwesigwa R, Mugume A, Gwokyalya V, Kironde S. Involvement of lay providers to improve TB service delivery: A case study from Iganga district.
6. **Gwokyalya V**, Odong T, Mutesasira K, Okello D, Mwesigwa R, Najjemba M, Kayita G, Mugume A, Kironde S. Using Quality of Care (QoC) teams to improve the quality of HIV/AIDS and TB services in the East Central Uganda
7. **Kabogoza S**, Ojulong T, Kazibwe F, Odong T, Mugume A, Kironde S. Increasing the uptake of HIV Testing and Counseling Services among Couples .
8. **Ndifuna M**, Obura S, Kaluba C, Kironde S, Mugume A, Tibenderana E, Kazibwe F. Taking Safe Male Circumcision services to a fishing village in East Central Uganda.
9. **Mashate S**, Tumuhairwe D, Mugume A, Kironde S, Mutesasira K, Tibenderana E, Kakwanzi B, Kintu K, Kirunda K, Mawali J, Dhikusooka J, Ojambo P. Increasing access to CD4+ testing services using a specimen referral network for rural settings: A Model from East Central Uganda.
10. **Harriet Ndagire**, Babu E, T.Odong, R.Mwesigwa, E.Nakabugo, A.Mugume, S.Kironde, R.Kimuli, Businge D, Kaleeba M. Referrals and Networking increases access and utilization of HIV&AIDS and TB services: Experiences from East Central Uganda .

For publication on the conference website and abstract CD-ROM)

11. **Mutesasira K**, Tumuhairwe D, Mugume A, Kironde s, Kazibwe F, Sserumaga V, Mashate S, Kimuli R, Elyanu P, N.Nabirye. Accelerating access to Pediatric antiretroviral therapy services in East Central Uganda.
12. **Onyando J**, Businge B, Kazibwe F, Kironde S, Kaleeba M, Cheptoris J. Overcoming barriers to PMTCT services Access: Experiences from Family Support Groups in East Central Uganda.

5th National Pediatric HIV&AIDS Conference; 28-30 September, 2011, Hotel Africana, Kampala, Uganda.

Oral Presentations

13. **Tumuhairwe D**, Kimuli R, Mulema V.S, Elyanu P, Tagoola A.V, Nambuya H, Namasopo, S “What does it take to minimize the unmet need scaling up Pediatric ART services in Busoga region.
14. **Kazibwe F**, Mutesasira K, Kimuli,R, Odong T, Mugume A, Kironde S, Kisaakye L. District based technical assistance partners (DBTA); are they improving access to PMTCT by ‘mother-baby’ pairs? A case of a partner in East Central Uganda.

15. **Onyando J**, Ajok F, Kironde S, Kaleeba M, Mugisha B, Auma S, Skowronska E, Egulwa H. Utilizing peer volunteers to improve uptake of PMTCT services: A case study of 'mentor mothers' in East Central Uganda .

Poster presentations

16. **Tumuhairwe D**, Nabirye N, Kazibwe F, Elyanu P. Where are the HIV positive children? A case study of Iganga Hospital.

17. **Onyando J**, Businge J, Kazibwe F, Cheptoris J, Skowronska E. The road to virtual elimination of Mother to Child Transmission of HIV: the role of Psychosocial Support Services in East Central Uganda.

JSI Global Bilateral M&E Projects Meeting; 19-23, September 2011 Accra, Ghana.

18. **Kimuli R**, Businge D. Breaking barriers of data management in local government health facilities: Experiences from East Central Uganda.

19. **Businge D**, Kimuli R. Using LQAS to support localized evidence-based planning and decision-making .

HIV Capacity Building Partners Summit; 16-18, March 2011 Nairobi, Kenya

20. **Babu E**, Odong T. Using the Organizational Capacity assessment results to address individual organizations capacity gaps through mentorship.



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