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

## Program Year IV Annual Report



**Achievements, Challenges &  
Lessons Learned**  
October 2011 - September 2012



Funded by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement No. 617-A-00-09-00007-00



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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

<	Less than
>	Greater than
AB	Abstinence and Being Faithful
ABC	Abstinence, Being Faithful and Condoms
ACP	AIDS Control Program
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ART	Antiretroviral Therapy
BCC	Behavior Change Communication
BCPs	Behavioral Change Communication Programs
CBO	Community Based Organization
CD4	Cluster of Differentiation 4
CDFU	Communication for Development Foundation Uganda
CDR	Case Detection Rate
CM	Community Mobilization
CME	Continuing Medical Education
CORPs	Community Owned Resource Persons
CPHL	Central Public Health Laboratories
CPT	Cotrimoxazole Preventive Therapy
CPD	Continuous Professional Development
CSAs	Community Support Agents
CSO	Civil Society Organization
CSWs	Commercial Sex Workers
DHMT	District Health Management Team
DHO	District Health Officer
DLFP	District Laboratory Focal Person
DOTS	Directly observed therapy short-course
DQI	Data Quality Improvement
EID	Early Infant Diagnosis
eMTCT	Virtual Elimination of Mother-to-Child Transmission of HIV
FLEP	Family Life Education Program
FOC-REV	Friends of Christ Revival Ministries
FSG	Family Support Group
GBV	Gender Based Violence
GoU	Government of Uganda
HBC	Home based care
HC	Health Center
HCP	Health Communication Partnerships
HCWM	Health Care Waste Management
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information Systems
HRH	Human Resources for Health
HSD	Health Sub-District

HTC	HIV Testing and Counseling
ICF	Intensified Case Finding
IEC	Information, Education and Communication
IGAs	Income Generating Activities
INH	Isoniazid
IMAI	Integrated Management of Adult and Adolescent Illnesses
IMPAC	Integrated Management of Pregnancy and Childbirth
IP	Implementation Partners
IYCF	Infant and Young Child Feeding
JCRC	Joint Clinical Research Centre
JMS	Joint Medical Store
JSI	JSI Research & Training Institute, Inc.
LG	Local Government
LMIS	Logistics Management Information System
LQAS	Lot Quality Assurance Sampling
LTFU	Lost to follow up
m2m	mothers2mothers
MARPs	Most-at-risk populations
MCPs	Multiple Concurrent Partnerships
MDR	Multi-Drug Resistant Tuberculosis
MIPA	Meaningful involvement of people living with HIV & AIDS
MoH	Ministry of Health
MoU	Memorandum of Understanding
MSH	Management Sciences for Health
NACWOLA	National Community of Women Living with HIV&AIDS in Uganda
NSAs	Network Support Agents
NTLP	National Tuberculosis and Leprosy Program
NTRL	National TB Reference Laboratory
NUMAT	Northern Uganda Malaria AIDS and Tuberculosis Program
NVP	Nevirapine
OCA	Organization Capacity Assessment
OIs	Opportunistic Infections
OP	Other Prevention
OVC	Orphans and Vulnerable Children
PACE	Program for Accessible Health Communication and Education
PCR	Polymerase Chain Reaction
PE	Peer Educator
PEPFAR	President's Emergency Plan for AIDS Relief
PHDP	Promotion of positive health dignity and prevention
PITC	Provider Initiated Testing and Counseling

## List of Figures Cont.

PLHIV	Persons Living with HIV&AIDS	STAR-EC	Strengthening Tuberculosis and HIV&AIDS Responses in East Central Uganda
PMTCT	Prevention of mother-to-child transmission of HIV	STIs	Sexually Transmitted Infections
PNC	Postnatal Care	SURE	Securing Uganda's Right to Essential Medicines project
PP	Positive Prevention	TASO	The AIDS Support Organization
PrEP	Pre Exposure Prophylaxis	TB CAP	Tuberculosis Control Assistance Program
PY	Program Year	TB	Tuberculosis
Q	Quarter	TCR	Tested Counseled and Received HIV results
QI	Quality Improvement	ToT	Training of Trainers
QoC	Quality of Care	TSR	Treatment Success Rate
SCHW	Sub-county health worker	UAC	Uganda AIDS Commission
SDS	Strengthening Decentralization for Sustainability	UAIS	Uganda AIDS Indicator Survey
	Opportunistic Infections	UBTS	Uganda Blood Transfusion Services
SPAI	Service Performance Assessment and Improvement	UDHA	Uganda Development and Health Association
SPARS	Standardized Performance Assessment and Recognition Strategy	UHMG	Uganda Health Marketing Group
STAR-EC	Strengthening TB and HIV&AIDS Responses in East Central Uganda	UMEMS	Uganda Monitoring and Evaluation Management Services
STIs	Sexually Transmitted Infections	URHB	Uganda Reproductive Health Bureau
SURE	Securing Uganda's Right to Essential Medicines project	USAID	United States Agency for International Development
TASO	The AIDS Support Organization	VHTs	Village Health Teams
TB	Tuberculosis	WASH	Water Sanitation and Hygiene
TSR	Treatment Success Rate	WHO	World Health Organization
UAC	Uganda AIDS Commission	YA	Youth Alive
URHB	Uganda Reproductive Health Bureau	YAWIA	Youth and Women in Action
USAID	United States Agency for International Development	YEAH	Young Empowered and Healthy
UVRI	Uganda Virus Research Institute	ZTLS	Zonal Tuberculosis and Leprosy Supervisor
UVRI/HRL	UVRI HIV Reference Laboratory		
	Program Year		
VHTs	Village Health Teams		
VMMC	Voluntary Medical Male Circumcision		
WHO	World Health Organization		
YAU	Youth Alive Uganda		
SACCOs	Savings and Credit Cooperative Organizations		
SDS	Strengthening Decentralization for Sustainability project		
SCHW	Sub County Health Worker		
SCMS	Supply Chain Management System		
SPAI	Service Performance Assessment and Improvement		
STAR	Strengthening TB and HIV&AIDS Responses		
STAR-E	Strengthening TB and HIV& AIDS Responses in Eastern Uganda		

## Letter from the Chief of Party



**Dear Colleagues,**

Once again, yet another year of program implementation has gone by – how quickly time flies! I am pleased to present to you the fourth annual report of the Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) program. This Program Year 4 Annual Report highlights in narrative, figurative and pictorial forms, representative achievements of the STAR-EC program during the period October 1st 2011 up to September 30th, 2012. Over the past twelve months, STAR-EC has continued to implement activities in nine districts in East Central Uganda in partnership with the respective district local governments and civil society organizations working in the region. The results presented in the 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 President's Emergency Plan for AIDS Relief (PEPFAR) and the United States Agency for International Development (USAID) have generously continued to provide funding for this program. I would also like to thank the Government of Uganda that through the Ministry of Health has provided guidance to STAR-EC through the provision of up to-date and revised policies and guidelines in key technical areas; the provision of technical assistance; taking lead on numerous trainings of district health staff; and the provision of support supervision in the region. To our partners on STAR-EC namely the Bantwana Initiative; Communication for Development Foundation Uganda (CDFU); mothers2mothers (m2m); and Uganda Cares, we would like to once again appreciate the technical expertise and innovation that you continue bringing to the program.

All the different stakeholders' participation in STAR-EC activities continues to be highly valued especially as we enter a particularly challenging implementing period, when HIV prevalence rates in the country are on the rise again as reported in the most recent Uganda AIDS Indicator Survey, 2011.

As we share with you the results contained in this report, we would like to reiterate our commitment to working even harder going forward in order to support national efforts to scale up what works and target our efforts more specifically to identified key populations and drivers of the HIV&AIDS epidemic in East Central Uganda. Despite continued systemic challenges in key areas such human resources for health; frequent commodity stock outs; as well as the poor infrastructure and modern equipment needs, we are confident that these gaps are collectively beginning to be addressed by various stakeholders and this will go a long way towards improving service delivery as we strive to provide more accessible, comprehensive and quality HIV&AIDS and TB services to the population in East Central Uganda.

Sincerely,

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

**Dr. Samson Kironde**  
Chief of Party, STAR-EC

## Executive Summary

The activities contained in this annual report were implemented by the Strengthening TB and HIV&AIDS Responses in East-Central Uganda (STAR-EC) during Program Year Four (PY4). PY4 covers the period October 1<sup>st</sup> 2011 – September 30<sup>th</sup> 2012. This report is being submitted to the United States Agency for International Development (USAID) by the STAR-EC program in accordance with the terms of Cooperative Agreement No. 617-A-00-09-00007-00.

During PY4, STAR-EC carried out a 'Focus for Impact' exercise in which a decision was taken to implement to scale a minimum package of high impact prevention interventions with demonstrated potential to reduce new infections by targeting the key populations. This exercise was informed by findings from key studies which included: The Uganda AIDS Indicator Survey (UAIS 2011); the Uganda Demographic Health Survey (UDHS) 2012; The most-at-risk populations (MARPs) study 2011; and STAR-EC's annual lot quality assurance sampling (LQAS) surveys. The UAIS, 2011 revealed that HIV prevalence in East-Central Uganda in the general population has dropped from 6.5% in 2005 to 5.8% in 2011. Despite this drop in HIV prevalence, both the UAIS and the MARPs study revealed a high prevalence of multiple concurrent sexual partnerships among communities in the East Central region.

Based on the findings of the above mentioned documents, STAR-EC identified and characterized the key populations and took cognizance of the relative importance of various behaviors and settings in driving the HIV&AIDS epidemic as it embarked on expanding access to and utilization of quality tuberculosis and HIV&AIDS services in East Central Uganda. The program registered great achievements as a result of this re-strategizing and scale up effort during PY4.

The number of health facilities delivering HIV counseling and testing (HTC) services rose from 106 static sites and 268 outreaches during PY3 to 123 health facilities ( including 4 hospitals, 12 HCs IV, 59 HC III and 48 HCs II) and 239 outreaches during PY4. A total of 335,662 individuals received HTC and results during PY4. Of all the new positives identified during HTC, 84% (11,263/13,473) were enrolled into care.

The number of health facilities trained and equipped to provide voluntary medical male circumcision (VMMC) and services were scaled up from 15 static sites in 2011 to 19 sites in 2012. A total of 79,813 males were reached with a package of VMMC services. This represents an increment of 557% in the number of males reached with VMMC services over one year (in comparison to achievements during PY3). A total of 24,287 key population and 93,571 general population individuals were reached with risk reduction services that focused on ABC including taking an HIV test in accordance with the risk profiles of such individuals.

In PY4, 96 health facilities delivered a comprehensive care package up from 78 sites in PY3. Currently HCs III and II handle the largest client load of 43% up from 23% two years ago. A total of 11,263 new PLHIV were enrolled into care during PY4 while 24,335 were active in care of whom 7.1% were children.

There was an increment from 83 (in PY3) to 94 health facilities providing PMTCT services by the end of PY4. Overall, a total of 125,882 women were served and received HTC results for PMTCT purposes during ANC, labor and delivery, PNC including those who turned up with known and documented HIV positive results. Additionally, 3.2% of all pregnant women were found HIV positive and a total of 3,660 HIV positive pregnant women received ARVs for PMTCT purposes (up from 3,418 in PY3) while 1,135 HIV-exposed infants received ARV drugs for prophylaxis. The East Central region will start rolling out Option B+ in March 2013, according to Ministry of Health guidance.

During PY4, access to antiretroviral therapy (ART) services was expanded through increasing the number of accredited health facilities from 26 in PY3 to 42 sites including ( including 4 hospitals, 12 HCs IV and 26 HCs III). A total of 5,419 new clients ( including 540 children) were initiated on ART. Of all the 12,278 clients active on ART, 936 (7.6%) were children. The retention of clients on ART increased from 74% in PY3 to 83% during PY4.

The TB treatment success rate has progressively increased over the years from 66.9% of PY2 to 85.4% in PY4. Overall, 70% of TB/HIV co-infected clients were enrolled on ART and CPT compared to 18% and 55% for PY2 and PY3 respectively.

Suffice to note that a number of innovations were interwoven into various interventions to improve service delivery. These innovations include but are not limited to the following:

- Training and on-job support to implement nurse-only visits
- Involvement of sub-county health workers in field preparation of sputum slides and transportation to nearby diagnostic units in order to improve on the cure rates
- Adopting an integrated/‘supermarket’ approach particularly in delivering services to hard-to-reach and high prevalence areas
- Enhanced linkage to and retention in medical care through ‘mentor mothers’, ‘expert clients’ and ‘community support agents’ buttressed by a functional community village health structure
- Using mobile phones to remind clients on their appointments aiming at improving retention and adherence to treatment
- Community based ‘knowledge rooms’ for provision of combination HIV prevention services
- Task shifting by utilizing routine testing and counseling (RTC) volunteers at high volume sites to scale up Provider initiated testing and counseling
- Cascading performance reviews to site level and using service data to identify gaps and develop strategies for improvement

Notwithstanding the many achievements that were registered by the program during PY4, implementation continued to be negatively impacted by recurrent challenges such as the long distances made by health workers from peripheral facilities to sample referral hubs; human resource constraints; and the frequent stock outs of key commodities notably: HIV test kits, CD4 reagents, VMMC consumables and TB drugs. We look forward to working closely with USAID, MoH and other partners to overcome these challenges in Program Year Five.

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

Intervention area	Key Indicators (Numbers)	Achievements (Number of Individuals served)						End of Program Life Target Vs Achievements			
		PY1 (implementation from July 2009 -Sept 2009)	PY2 (Oct 2009 - Sept 2010)	PY3 (Oct 2010 - Sept 2011)	PY4 (Oct 2011 - Sept 2012)	End of PY4 target	% of PY4 targets achieved	End of Program Life Target	Program Cummulative achievements to date (total PY1, PY2, PY3 and PY4)	% of end of Program Life Target achieved	Comments
HIV Testing and Counselling (HTC)	Individuals who received HTC and their results	10,376	178,303	330,966	335,662	130,000	258	600,000	855,307	143	This success is attributed to increased access to services through HCs II and outreaches with special emphasis on integrated service outreaches, training and multi-tasking of health workers as well as the stable supply of HIV test kits in most months.
	Individuals trained in HTC	64	256	356	32	66	48	400	708	177	The program conducted sufficient trainings in its early stages which facilitated meeting and exceeding EOP life targets for this indicator. Thus, training of more HTC health workers in this PY was not a program priority .
	Outlets providing T&C services	35 service outlets (only 2 were static)	76 static and 280 parishes (outreach sites)	106 static and 268 parishes (outreach sites)	123 static and 239 parishes (outreach sites)	120 static sites	103% of static sites	148	123 static sites	83% of static sites targeted	A 16% increment in HTC static facilities. However, there was more prioritization of integrated outreaches among MARPs as opposed to the general population thus the decrease in the number of outreaches when compared to the previous PY.

Intervention area	Key Indicators (Numbers)	Achievements (Number of Individuals served)						End of Program Life Target Vs Achievements			
		PY1 (Implementation from July 2009 -Sept 2009)	PY2 (Oct 2009 - Sept 2010)	PY3 (Oct 2010 - Sept 2011)	PY4 (Oct 2011 - Sept 2012)	End of PY4 target	% of PY4 targets achieved	End of Program Life Target	Program Cummulative achievements to date (total PY1, PY2, PY3 and PY4)	% of end of Program Life Target achieved	Comments
PMTCT	Pregnant women with known HIV status (includes tested and received results) excluding PNC	No Implementation during PY1	65,983	104,689	109,746	113,000	97	482,600	280,418	58	A total of 125,882 ANC, L&D and PNC women were served and received results (103,009 during ANC; 1,351 with known & documented results; 5,386 labor and delivery and 16,136 PNC). Scale up to HCs II has duly increased mothers accessing this service. PMTCT target was revised based on population during PY3. More scale up to HCs II will occur in PY5.
	Pregnant women who received ARVs to reduce the risk of mother to child transmission	No Implementation during PY1	1,759	3,418	3,660	3,300	111	16,400	8,837	54	Out of 3,660 pregnant women; 2,670 were given ARVs for PMTCT during ANC 'only'. The program has since the beginning of PY4 scaled up to HCs II in tandem with the national eMTCT strategy. More scale up during PY5 will duly increase the number of mothers accessing this service as demonstrated in this year
	Persons trained for PMTCT	No Implementation during PY1	177	621	84	70	120	400	882	221	During the scale up of PMTCT in PY5, more HWs from new PMTCT sites will be trained
	Service outlets providing PMTCT	No Implementation during PY1	68	83	94	118	80	118	94	80	Annual target could not be achieved as some health facilities (HCs II) were found not to have enough capacity to provide PMTCT services. Such service outlets will be targeted during PY5 to cater for eMTCT demands.
Sexual and Other Behavioral Risk Prevention (General Population)	Targeted population reached with abstinence and/or being faithful messages (AB only)	39,737	102,860	132,586	70,056	60,000	117	283,000	345,239	122	A total of 93,571 individuals received Risk Reduction counseling which was focused on ABC and taking an HIV test in accordance with the risk profiles of those individuals. Only three CSOs compared to eleven the previous PY provided AB interventions thus the reduction in numbers.

Intervention area	Key Indicators (Numbers)	Achievements (Number of Individuals served)						End of Program Life Target Vs Achievements			
		PY1 (implementation from July 2009 -Sept 2009)	PY2 (Oct 2009 - Sept 2010)	PY3 (Oct 2010 - Sept 2011)	PY4 (Oct 2011 - Sept 2012)	End of PY4 target	% of PY4 targets achieved	End of Program Life Target	Program Cumulative achievements to date (total PY1, PY2, PY3 and PY4)	% of end of Program Life Target achieved	Comments
Sexual and Other Behavioral Risk Prevention (General Population)	Individuals trained to provide AB services	234	564	298	0	110	0	1,265	1,096	87	There were no new CSO personnel to be trained during this year. The pool of peer educators under the pre-qualified CSOs were trained in the previous years
	MARPs reached with individual or small group level HIV prevention based on evidence and meet minimum required standards	12,179 were reached through "other prevention" interventions	12,763	19,473	24,287	26,000	93	88,300	68,702	78	Only three CSOs compared to eleven the previous PY provided MARPs HIV prevention interventions thus the failure to meet targeted numbers.
Clinical/ Preventive Services- Additional TB/HIV	HIV+ patients in HIV care or treatment (pre-ART or ART) who started TB treatment	0	205	533	421	1,000	42	4,900	1,159	24	In East Central Uganda we continue to observe a low% of TB/HIV co-infected patients among TB patients up to 33% compared to the national estimate of 54%
	TB patients who had an HIV test result recorded in the TB register	13	1,802	2,317	1,810	1,100	165	5,500	5,942	108	1,576 was reported to MEEPP and excludes sites that offer 'TB care only'
	Individuals trained to provide HIV/TB related palliative care	64	875	250	0	200	0	700	1,189	170	Rather than train more personnel, efforts were concentrated on consolidating the quality of service being provided by those who had been trained.
Anti-Retroviral Therapy (ART)	HIV + individuals receiving a minimum of one clinical care service (CXT)	283	7,041	16,684	24,335	19,000	128	26,000	24,335	94	Anecdotes indicate a reduction in stigma in the community and so HIV positive clients are openly coming for enrolment into care clinics
	Adults and children with advanced HIV infection newly enrolled on ART	61	1,776	5,083	5,419	6,512	83	19,930	12,339	62	LOP target was revised due to increase in the number of new clients to be enrolled on ART during this year. The new target was given in April, 2012 by USAID.
	Adults and children with advanced HIV infection receiving ART (CURRENT)	372	3,119	7,487	12,278	12,697	97	20,512	12,278	60	Target for current clients was revised due to the change in the target for new clients to be enrolled during this and subsequent years. Note: Going forward, the program is targeting 80% of all new clients to remain active on ART each year

Intervention area	Key Indicators (Numbers)	Achievements (Number of Individuals served)						End of Program Life Target Vs Achievements			
		PY1 (implementation from July 2009 -Sept 2009)	PY2 (Oct 2009 - Sept 2010)	PY3 (Oct 2010 - Sept 2011)	PY4 (Oct 2011 - Sept 2012)	End of PY4 target	% of PY4 targets achieved	End of Program Life Target	Program Cummulative achievements to date (total PY1, PY2, PY3 and PY4)	% of end of Program Life Target achieved	Comments
Safe Male Circumcision (SMC)	Males circumcised	0	803	14,327	79,813	90,000	89	225,000	94,943	42	STAR-EC was able to reach such high numbers than ever before through 19 static and 1,080 circumcision outreaches. However, the program was unable to achieve set targets mainly due to interruptions in the availability of anesthetics as well as disposable male circumcision kits especially during Q1 and Q3 of PY4.
	SMC surgical sites	0	7	15	19	18	106	18	19	106	In a bid to increase access to SMC services, four extra sites were brought on board during PY4
Strategic Information	Local organizations provided with TA for SI activities	4	11	11	3	11	27	11	11	100	During this year, only 3 CSOs were supported as the program awaits approval for additional CSOs from USAID
	Individuals trained in SI (including M&E, surveillance and/or HMIS)	122	379	170	287	85	338	85	379	446	In order to avoid double or more counting, the highest number of trained persons in any of the years was picked to represent the overall program life achievement on this indicator's training numbers. This is because the same individuals receive multiple or the same training every year.
	Local organizations provided with TA for HIV-related institutional capacity building	4	11	11	3	11	27	11	11	100	During this year, only 3 CSOs were supported as the program awaits approval for additional CSOs from USAID

# 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 previous annual reports available on the STAR-EC website ([www.starecuganda.org](http://www.starecuganda.org)) and are not repeated here.

The PY4 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, 2011 to September 30, 2012. A way forward under each result area is also provided in order to inform future programming for STAR-EC.

## 2.0 Major result areas and progress during Program Year Four (PY4)

### 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 within the nine supported districts

#### 2.1.1 Increasing access to and uptake of HIV testing and counseling (HTC) services during PY4

During Program Year Four (PY4), there was a rapid scale-up of HIV testing and counselling (HTC) mainly aimed at increasing early identification of HIV infection so as to be able to provide effective HIV prevention and also to offer care and antiretroviral treatment (ART) services to individuals living with HIV. Review of the STAR-EC lot quality assurance sampling (LQAS) report of 2012 shows that the proportion of adults who have ever taken an HIV test in the nine districts has increased significantly from 47.9% at baseline in 2009 to 63.7% in 2012 with a higher proportion of women than men accessing this service. Similarly, the proportion of adults testing within one year prior to the survey increased from 35.8% in 2009 to 51.1% in 2012. At the same time, the proportion of individuals with knowledge of where to obtain HTC services grew (from 82.5% in 2009 to 90.4% in 2012).

#### Key HTC approaches adopted during PY4

- Provider initiated testing and counselling (PITC) at all care points in health facilities
- Task shifting through the use of HTC volunteers at high volume sites
- Integrated community outreaches also referred to as the supermarket approach
- Monthly couple HTC campaigns

123 health facilities provided HTC services (4 hospitals, 12 HCs IV, 59 HCs III and 48 HCs II) contributing to a 16% increment in HTC static facilities

This improved performance is related to the innovative HTC approaches that STAR-EC has supported both at facility and community levels over the past four years, particularly during PY4. Using the '*know your epidemic, know your response, know your context and know your cost approach*', delivery of HTC services rose from 106 health facilities and 268 outreaches in PY3 to 123 health facilities and 239 outreaches primarily targeting couples, males eligible for VMMC, pregnant women and most-at-risk populations (MARPs) in all nine districts. There was more prioritization of integrated outreaches among MARPs as opposed to the general population thus

the decrease in the number of outreaches when compared to the previous PY. At health facility level, HTC was offered at service points such as outpatient departments (OPD), antenatal clinics (ANC), young child clinics, post natal clinics, paediatric wards and voluntary medical male circumcision sites. In addition, STAR-EC facilitated HTC volunteers to support the overstretched health workers to offer PITC services primarily at OPD, ANC and paediatric wards at high volume facilities such as hospitals.

At community level, especially among parishes of high HIV prevalence, HTC services were provided through the use of integrated/‘supermarket’ approaches designed to target couples, pregnant women in the community and established as well as emerging MARPs such as the ‘Boda Boda’ riders. Other than HTC, linkages are ensured through offering a package of services at outreach sites including VMMC, family planning, PMTCT, care and treatment including ART, TB treatment, risk reduction and referral services. Special effort was placed on reaching

out to couples through routine couple HTC and ‘couple week’ campaigns. Truckers and commercial sex workers were mainly accessed through integrated scenario events while the fisher folk were reached through integrated free standing outreaches at landing sites. In addition to all other approaches mentioned, STAR-EC supported integrated island outreaches targeting fisher folk, commercial sex workers and other island residents in Mayuge and Namayingo Districts.

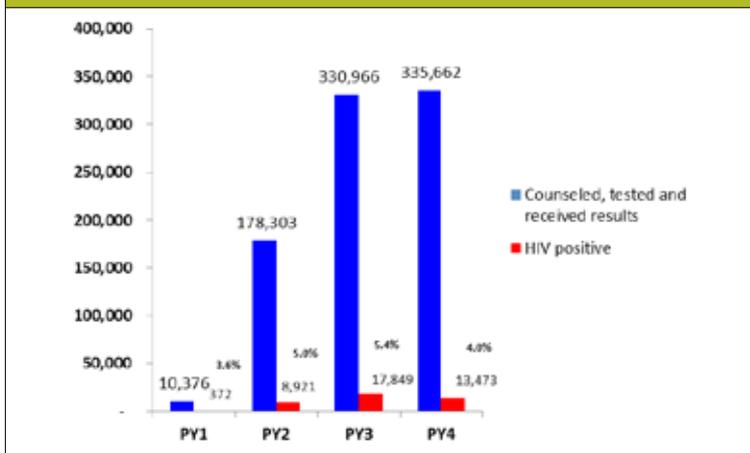
As a result of all these efforts, a total of 336,307 people were counselled and tested while 335,662 people (132,643 male and 203,019 female) received their results during PY4 – far exceeding the STAR-EC annual target of 130,000 people.

The trend of clients accessing HTC services through all of the project years thus far are illustrated in Figure 1. It is worth noting that the output stagnated between PY3 and PY4 because of the frequent stock outs of test kits during PY4. However, due to the roll out of provider initiated HTC services to all care points at supported health facilities, clients accessing facility based HTC services continued to increase between PY3 and PY4 as illustrated in Figure 2. On the other hand outreach based

HTC services reached fewer people in PY4 when compared to PY3. This is mainly attributed to the reduction of collaborating CSOs in the community from twelve by the end of PY3 to the current three. Thus, 60% of all people tested for HIV during PY4 accessed the service at facility level. Overall 9,596 individuals (a positivity of 4.6%) were diagnosed HIV positive through the facility based HTC services as compared to 3,877 (positivity of 3.0%) identified using community outreaches. Of all the new positives identified, 84% (11,263/13,473) were enrolled into care.

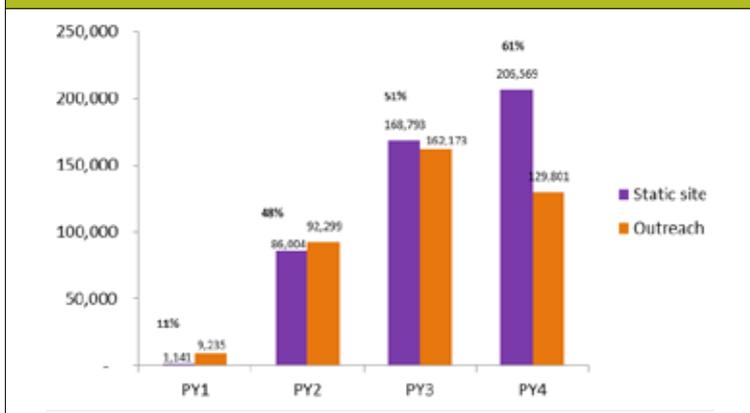
Despite some of the logistical challenges highlighted earlier, a review of couple counselling and testing trends during the same period shows an increase in the number of couples accessing couple HTC

**Figure 1: HTC outcomes, PY1-PY4**



Source: STAR-EC program records

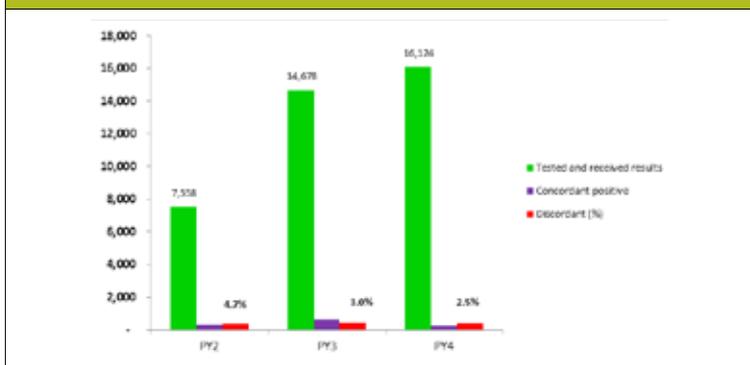
**Figure 2: HTC trends by static site and outreach, PY1-PY4**



Source: STAR-EC program records

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**Figure 3: Couple HIV counseling and testing trends, PY2-PY4**



Source: STAR-EC program records

1 ‘Boda Boda’ riders are motor-cycle taxi riders who widely conduct their business across rural and urban settings within Uganda

in PY4 when compared to PY3 and PY2 (see Figure 3). This increase, albeit modest, is attributable to the increase in the frequency of the integrated couple HTC implementation in the community from quarterly to monthly. While couples accessing the service were on the increase in PY4, the proportion of discordant and concordant couples was lower in PY4 (2.5% and 1.6% respectively when compared to PY3's rate of 3% and 1.6% respectively). The East Central Uganda regional HIV prevalence given by the Uganda AIDS Indicator

Survey 2011 was 5.8%. On the contrary, as sourced from STAR-EC's PY4 records, the average positivity for all nine districts during PY4 was 4.0% (13,473/336,307) in the general population. Additionally, just like in previous program years, Namayingo and Mayuge Districts posted the highest positivity rates in the region. This was primarily due to the existence of island communities in these districts that on average posted positivity rates of 12.5% (344/2,756) and 9.7% (196/2,030) respectively during the year. Figure 4 illustrates HIV prevalence in the nine districts during PY4.

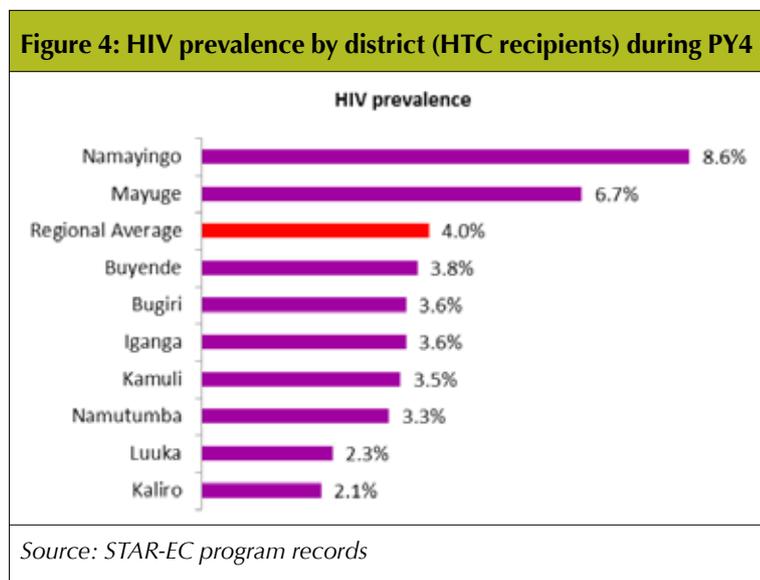


Table 2 illustrates the number and proportion of MARPs reached as well as their HIV positivity rates in five districts of the East Central region where specific MARPs groups are highly existent and were prioritized for HTC MARPs interventions. In all districts, MARPs included truckers, commercial sex workers and 'boda boda' cyclists .

**Table 2: MARPs who received HTC services in priority districts**

District	MARPs tested for HIV			MARPs tested HIV positive (%)		
	Female	Males	Total	Females	Males	Total
Bugiri	2,061	1,687	3,749	143 (6.9)	72 (4.3)	215 (5.7)
Buyende	2,392	2,418	4,810	122 (5.1)	100 (4.1)	222 (4.6)
Iganga	115	168	283	10 (8.7)	11 (6.5)	21 (7.4)
Mayuge	4,711	4,237	8,948	295 (6.3)	303 (7.2)	598 (6.7)
Namayingo	3,830	3,987	7,826	463 (12.1)	422 (10.6)	885 (11.3)

Source: STAR-EC program records

HIV positive people diagnosed during PY4 at both static facilities and community outreaches were linked into care. Where care services were not available at given sites, identified positive clients were referred and additional effort was undertaken to link them to PLHIV expert clients both at facility and community level to ensure that they successfully reach and are served at their referral destinations.

## Challenges

- The distribution of HIV test kits by the national logistics system still suffers from stock outs
- While STAR-EC reached and surpassed the HTC target for PY5, the population based need is still high. LQAS results show that 36.3% of people in all nine districts between 15–54 years of age have never accessed HTC services in their lifetime
- The MARPs population in the region is quite mobile and this limits their access to a full package of integrated services including follow up
- High staff turnover especially among HTC volunteers at high volume sites

## Way forward

- During PY5 STAR-EC will continue scaling up the coverage of integrated HTC services to lower level facilities (HCs II) and the community primarily targeting key populations in the nine districts
- STAR-EC will adopt innovative approaches targeting populations of people who have not tested before in the nine districts especially Buyende, which posted the lowest density for HTC testing in the recent LQAS 2012 report
- The program will encourage multi-tasking in order to address problems of high staff turn over
- Linking males in discordant relationships to VMMC especially when they are found HIV negative

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

Emphasis was placed on building capacity of health workers in delivering PMTCT services and strengthening the community arm to improve facility-community linkages so as to maximize every opportunity of increasing access to, utilization and retention of clients into PMTCT care services. Health workers as well as 'mentor mothers' (expert clients supported by the mothers2mothers program) were offered trainings and on-the-job mentorships

*125,882 were served as part of PMTCT and received results (overall total)*

103,009	During ANC
1,351	Reported with known and documented results
5,386	Labour and delivery
16,136	Post-natal care

on management of clients, logistics management, recording and reporting and follow up of PMTCT clients. In addition, village health teams (VHTs) were oriented in expanding the facility based services to villages and client homes to ensure increased access to services by the community.

In total, 104 health facilities, 33 of which are island and lake shore based facilities, were supported to implement PMTCT services using 'Option A'<sup>2</sup> as the region awaits the MoH phased roll out of option B+<sup>3</sup> in March 2013. Facilities supported included all hospitals, HCs IV, HCs III and up to 20% (43/200) of HCs II. MoH

recommends reaching out to at least 60% of all HCs II, however, this may be difficult to achieve during PY5 as priority will be placed on achieving full roll out of Option B+ in all supported facilities. At all these sites, STAR-EC, in collaboration with MoH and district mentors, supported quarterly PMTCT-EID mentorships for health workers, which helped them solidify their skills in the management of PMTCT-EID clients. In addition, a total of 84 health workers (HWs) including 22 HWs from 18 landing site facilities; 8 HWs from the 8 island facilities and 54 HWs from 27 mainland facilities underwent training on integrated management of adult illnesses (IMAI)/integrated management of pregnancy and childbirth (IMPAC) as part of the phased scale up to areas with MARPs.

PMTCT services delivered during the quarter included, HTC during ANC, labor and delivery as well as post natal, ARV prophylaxis, ART eligibility assessment and linkage into chronic care and ART services. Family planning service delivery, primarily among HIV positive women, which had been a challenge in most of the facilities was also addressed during PY4. Health workers in 44 health facilities were mentored and supported to offer provider initiated family planning as an integral part of TB and HIV & AIDS services. Furthermore, 78 of the 104 facilities were supported to offer monthly psychosocial support to pregnant and lactating mothers through family support group (FSG) meetings using the national PMTCT FSG guidelines. Family support groups serve as a retention/

<sup>2</sup>Option A: Use of antepartum AZT (from 14 weeks of pregnancy), sdNVP + AZT/3TC at delivery and AZT/3TC for 7 days postpartum

<sup>3</sup>Option B+: HAART for all HIV positive pregnant women irrespective of CD4 count

adherence, behavior change and linkage/referral tool for the 'mother-baby' pairs who would otherwise get lost in the community. These group meetings also present an opportunity to the mothers and their partners to receive a package of PMTCT services. Table 2 serves to illustrate this using the Mentor Mothers perspective during PY4.

<p><b>Key interventions that increased island population access to PMTCT services:</b></p> <ul style="list-style-type: none"> <li>Provision of delivery equipment (beds, sterilizers, ambu-bags and delivery sets)</li> <li>Training of health workers in IMAI/IMPAC and continuous on-the-job mentorship</li> <li>Integrating PMTCT and family planning in monthly and quarterly integrated outreaches to islands and landing sites</li> <li>Task shifting using the mentor mother model</li> </ul> <p><b>Key achievements:</b></p> <ul style="list-style-type: none"> <li>Increased coverage of PMTCT services to lakeshore and island communities</li> <li>Improved enrollment and retention of mother baby pairs in PMTCT</li> </ul>		
<p><i>A mother receives a contraceptive implant (Jadelle) during an integrated outreach at a landing site where PMTCT, family planning and other services were offered</i></p>		

**Table 3: 'Mentor Mothers' Family support group outputs for clients seeking FP, disclosure, HTC for male spouses and TB screening services**

Service	FSG clients in need of a service	FSG clients who received services	Proportion that received services
Family planning	197	179	91%
Assisted disclosure	201	155	77%
Male spouses accessing HTC	35	33	94%
TB Suspects (mothers referred for TB assessment)	327	305	93%

In addition to taking care of the psychosocial needs of adults through FSGs, STAR-EC supported psychosocial support services for 50 children in two high volume facilities of Iganga Hospital and Kigandalo Health Centre IV. The project piloted the 'Ariel Children's Club' model developed by the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF). A monthly clinic dedicated to children has provided a platform for better assessing children and for caregivers to discuss issues concerning their psychological needs. As a result, children have improved access



*Young children relax at a merry go round at Iganga Hospital as an older group attends a DVD group discussion session with a child counselor*

as well as improved adherence to treatment. In addition, issues of disclosure are well addressed during this clinic.

Peer learning among care givers has impacted how children are looked after, especially at home. "Before I brought this child to this group I knew that my child cannot look healthy because he has HIV but when I saw other children looking much better, I felt I was not doing much for my child and

there and then I asked other mothers who excitedly shared with me about feeding and now he looks better," testified one care giver in Kigandalo sub-county.

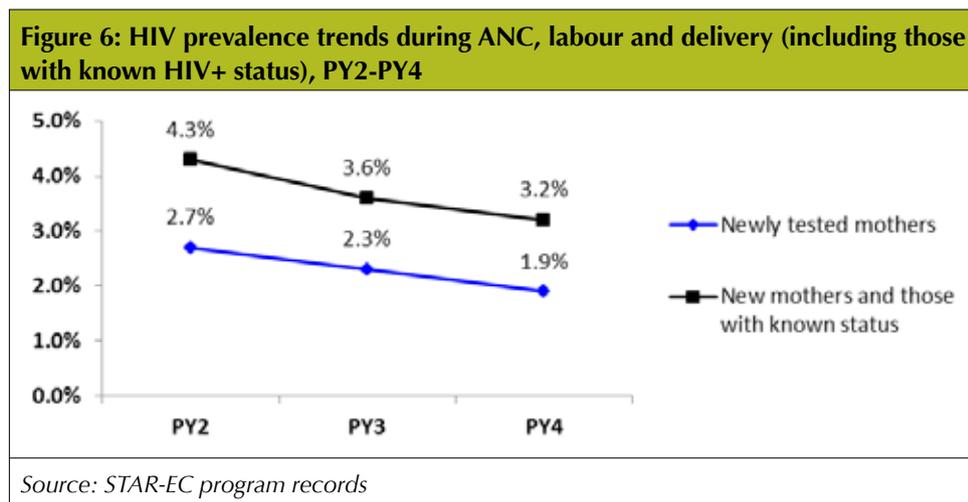
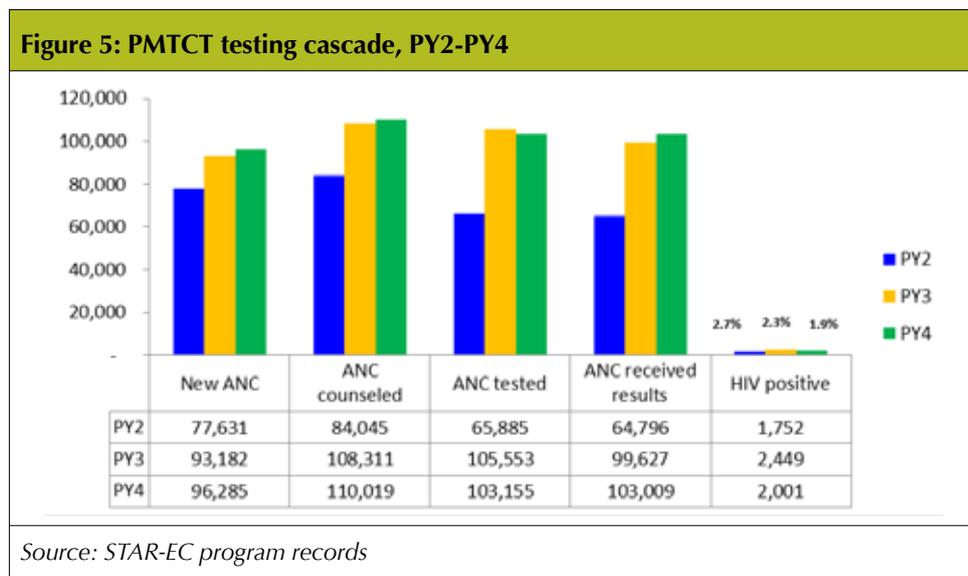
STAR-EC, in collaboration with the MoH, continued to support the PMTCT-EID strengthening process at all 104 facilities in the nine districts. The hallmark of this strengthening lies in the creation of tracking points in the

community and at all care points at the facility designed to identify and refer all 'mother-baby' pairs eligible for PMTCT and early infant diagnosis to a central EID care point at the facility (usually at ART or ANC). This innovative approach has helped the program identify, enroll and retain more 'mother-baby' pairs onto PMTCT and EID. As a result the program has also succeeded in identifying exposed babies not delivered at facilities in the community during outreaches and immunization clinics.

### Enhancing access to PMTCT-EID services using the Mentor Mothers model

STAR-EC supported the implementation of the mentor mothers peer model at 30 high volume health facilities with an aim of enhancing access to PMTCT and psychosocial support services for the HIV positive pregnant and lactating mothers. During the reporting period, 60 'mentor mothers' were offered refresher sessions in psychosocial support and community follow up, linkages to care and treatment to minimize loss of PMTCT clients among other topics. Use of these 'mentor mothers' served as a useful advantage in addressing some of the pressing challenges like loss of PMTCT clients that were identified during routine program data analysis. The 'mentor mothers' embarked

on a monthly 'active client follow up' for PMTCT clients with an aim to ensure they have access to uninterrupted PMTCT services and to maximize chances of having negative babies. This initiative was implemented in collaboration with VHTs, 'expert clients' and health workers who utilized phone calls and physical home visits for PMTCT clients missing key appointments.

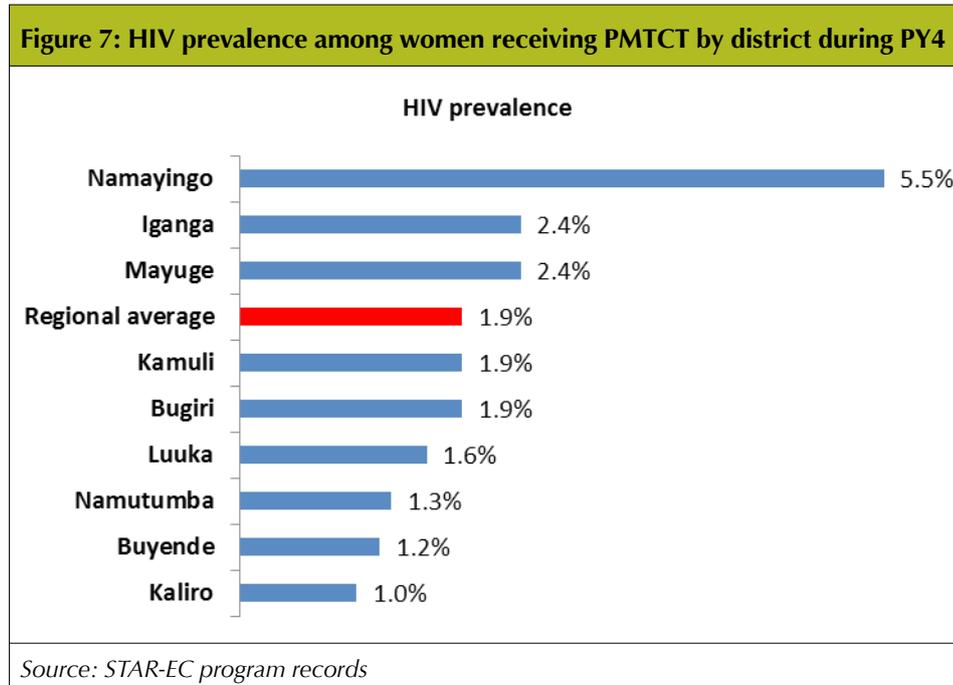


provided a stepping stone for engaging village health teams (VHTs) into community PMTCT activities and this enhanced antenatal and postnatal referrals and follow ups from the community to the facility.

Overall, a comparison between PY2 when PMTCT service interventions started and PY4 shows that new mothers attending ANC and those who were counseled tested and received results have increased. In the same regard, while male involvement is still below the national target of 50% (using the proxy of partner testing at ANC as a proportion of the new ANC mothers), results showed improvements in PY4 where 12% male spouses tested (11,535/96,285) when compared to PY3 where only 8% (7,232/93,182) tested.

Further review of the testing cascade shows that HIV prevalence of newly tested ANC mothers has decreased from 2.7% (1,752/65,885) in PY2 to 1.9% (2,001/103,155) in PY4. This trend is still evident even when we review the positivity of the total HIV positive pregnant mothers (newly tested and those attending ANC with known HIV positive status) over the three year period (Figure 6). This observation is in tandem with the 2011 UAIS findings that showed a reduction in HIV prevalence to 5.8% in the East central region from 6.5%<sup>4</sup> reported in 2006. During PY4 Namayingo District posted the highest positivity (among ANC women) while Kaliro posted the lowest (see Figure 7). This scenario is similar to that in PY3 and is the reason why STAR-EC refocused interventions and committed substantial resources to target the key populations in Namayingo District through the interventions enumerated

in the first text box under the PMTCT section.



Overall during the past four years, STAR-EC established, sustained and rolled out PMTCT interventions to all levels of health services delivery including facility and community structures. Several approaches have been utilized by STAR-EC, the key one of these being the use of dedicated expert clients 'mentor mothers' who have continuously worked with the existing health work force to improve a number of

PMTCT indicators in the facilities where they are stationed. Detailed analysis of data shows that these sites have persistently performed better than 'non-mentor mother' supported sites (Figure 7) and yet this additional manpower also releases the overstretched health workers to attend to other key services (task-shifting, task-sharing). During PY5, the program will learn from and scale up the successes of 'mentor mother' sites to other sites in order to comprehensively address PMTCT challenges in all the supported facilities.

Generally the PMTCT performance in PY4 has improved as compared to PY3. Notably, provision of ARVs for prophylaxis for the mother during ANC, enrollment of eligible positive mothers onto HAART (from 73% in PY3 to 80% in PY4), and provision of ARVs for prophylaxis for the HIV exposed new born have greatly improved (from 90% in PY3 to 95% in PY4) this is clearly illustrated in Figure 8. As a result, STAR-EC was able to meet the national targets for the provision of ARVs for prophylaxis both for the mother (target – 80%) and the HIV exposed newborn (target – 90%). A total of 33,046 deliveries were registered at health facilities as compared to 31,747 in PY3. However enrollment of positive mothers onto HAART during PY4 ( 20%) was still below the national target of 30 – 40% of all HIV positive pregnant mothers and this could be attributed to the decline in CD4 testing services that was experienced during PY4 when support for transportation of samples was getting transitioned from STAR-EC to SDS. Similarly the positivity of the HIV exposed babies though lower in PY4 (9.8%) compared to PY3(11.9%) is still above the national target of less than 5% (see Figure 8).

A review of this positivity rate showed that of the 113 HIV positive babies who accessed early infant diagnosis services from the 30 'mentor mother' supported sites, 57% were delivered by mothers who missed PMTCT while 16% were babies of mothers who attended PMTCT late in pregnancy. Only 27% of these babies were born to mothers who fully attended the PMTCT services. Thus the program through its strengthened PMTCT-EID services needs to use innovative community approaches to reach and retain these pregnant women not accessing PMTCT at all or who do so late in pregnancy in order to meet the virtual elimination of mother-to-child transmission (eMTCT) target of less than 5% in PY5.

<sup>4</sup>Uganda HIV&AIDS Behavioural Sero Survey, 2005/6

## Lessons Learned

- The *'mentor mother'* approach is an important model for improving enrollment and retention regarding PMTCT services provision
- Family support groups and regular follow-up with the community are key interventions in ensuring that HIV positive mothers adhere to PMTCT services

## Challenges

- Health service delivery in the island communities is severely hampered by the lack of qualified staff in these places. The few available nursing aides will have to be trained and supported to offer a comprehensive package
- The program has noted the continued late reporting of HIV+ mothers during labor and postpartum when little can be done to prevent MTCT. This is one of the reasons that can explain existence of high numbers of HIV positive babies than would have been if the situation was reversed

## Way forward

- STAR-EC in collaboration with the MoH is preparing to embrace PMTCT services provision using Option B+ guidelines in March 2012. In the meantime all sites are being supported to strengthen the existing Option A services in preparation for the transition to new guidelines
- STAR-EC will continue collaborating with the STRIDES for Family Health project and all nine local governments in a bid to further improve reproductive health and goal oriented ANC indicators
- During PY5, STAR-EC will strive to improve access of eligible women to CD4 services at all facilities especially those that will still be offering PMTCT services using Option A. This will largely be achieved through improving timely release and disbursement of CD4 transportation while working closely with the SDS Project
- Emphasis will be placed on community PMTCT interventions designed to reduce the proportion of mothers who turn up for ANC or PMTCT services late during pregnancy, labor, postpartum or those that never turn up at all

Figure 8: Improved access & linkages to PMTCT services

3. Program outcomes for PY4 compared to PY3

Category Percent	PY3 (2010/2011)		PY4 (2011/2012)	
	Mentor Mothers (30 sites)	Non-Mentor Mothers (55 sites)	Mentor Mothers (28 sites)	Non-Mentor Mothers (78 sites)
<b>Overall</b> (85 sites)				
<b>CD4 Assessment</b>	38% (988/2574)	22% (276/1261)	29% (525/1826)	13% (198/1525)
<b>Total given ARVs for PMTCT Prophylaxis during ANC</b>	78% (2004/2574)	63% (790/1261)	84% (1540/1826)	74% (1130/1525)
<b>HAART Enrollment during ANC</b>	21% (418/2004)	9.6% (76/790)	28% (425/1540)	10% (116/1130)
<b>HIV Positive deliveries</b>	4.4% (1033/23705)	2.7% (221/8042)	3.9% (889/22818)	2.9% (301/10228)
<b>Baby ARVs</b>	91% (939/1033)	86% (189/221)	96% (855/889)	93% (280/301)
<b>Positivity of Exposed infants</b>	11.9% (224/1877)	12% (60/501)	9.3% (164/1756)	10.7% (88/822)
<b>Positive babies linked to ART</b>	86% (193/224)	72% (43/60)	109% (179/164)	97% (85/88)
<b>Overall</b> (106 sites)				
				22% (723/3351)
				80% (2670/3352)
				20% (541/2670)
				3.6% (1190/33046)
				95% (1135/1190)
				9.8% (252/2578)
				105% (264/252)

1. Improving access to PMTCT Services

**Demand Creation/Community PMTCT**

- Utilizing VHTs and mentor mothers (IEC)
- Radio programs

**Identification & Intra-facility Linkages**

- m2m site: Health education and triage by m2m and health worker
- Active intra facility linkage of clients to all care points by mentor mothers
- Inter facility/ facility -community Referral by mentor mothers HWs in non m2m

**SYSTEM STRENGTHENING**

- Continuous Mentorship
- Logistics Management
- Support supervision and monitoring

2. PMTCT client retention

**Monthly Family Support Groups**

- Using mentor mothers and health workers in m2m sites
- Two – three group/month at m2m sites
- Health workers only at non m2m sites
- One meeting per month, non m2m site

**Community Active Client Follow Up**

- M2m site: Monthly follow up by mentor mothers/health worker using phone calls and home visits & referrals
- Non m2m site: quarterly physical follow up by health workers only

## Key Care & Support achievements of PY4

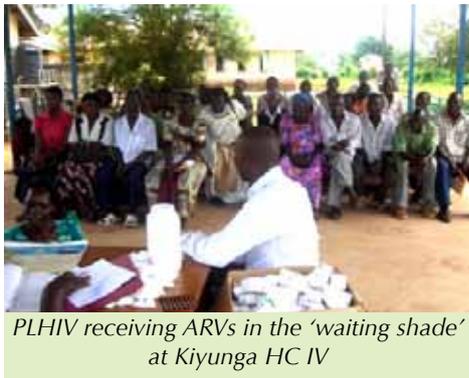
- 62 Health Workers, 22 expert clients trained on comprehensive HIV care & treatment
- 11,263 new PLHIV enrolled into care i.e. 84% of 13,473 new HIV +ves identified at HTC outlets (excluding PMCT)
- 1,169 (56%) of 2,100 new HIV+ve pregnant women (2,001 from ANC and 99 from Labor and delivery) were linked to care clinics; also 1,350 known HIV+ve women received ANC services
- 252 HIV-infected infants (PCR positive) were linked from EID to Care; 116 infants <1yr initiated ART this year
- From two 'know-your-child's-HIV-status' campaigns, 107 HIV +ve children were identified and enrolled into Care (1.6% of 6,777 children tested)
- 1,719 children are active in care, thus children (7.1% of care clients Vs national target of 15%)
- 786 PLHIV, 57 of whom had terminal cancers, received palliative care services
- 306 malnourished PLHIV got ready to use therapeutic food (RUTF) at 10 sites
- 24,335 PLHIV active in care received Cotrimoxazole; Retention rate =54% (n=44,986 ever enrolled) –attrition 46%
- Established nine home-based care team

## 2.1.3 Care and support

During PY4, the STAR-EC program consolidated the delivery of a comprehensive care package<sup>5</sup> at 96 facilities (up from 78 health facilities in PY3) and as such realized great strides in improving utilization of services and linkages (see adjacent text box and Appendix 2). Key activities of the year focused on strengthening the health system through:

- On job training and clinical mentorship for various categories of health workers
- Task-shifting to volunteer PLHIV a.k.a. 'Expert Clients'
- Support for use of the Patient Monitoring tools system for HIV care/ ART data capture and reporting to MoH
- Support for clinical chart reviews to identify and mobilize eligible clients for accelerated initiation of ART

In addition, spacious patient waiting shades were erected at seven high volume



PLHIV receiving ARVs in the 'waiting shade' at Kiyunga HC IV

facilities to host the rather congested HIV care clinics, as per national guidance on TB infection control.

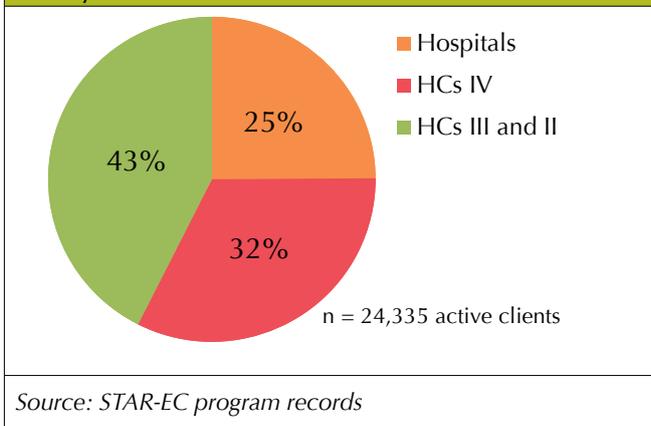
Decentralization of care to lower level facilities namely HCs III and II was a key strategy that increased access to care and treatment services across the region. Using the 'decentralized care model', capacity of lower level health cadres, especially the nurses, has been built through trainings, mentorships and support supervision and these are managing most of the HIV care at lower level facilities (where there is scarcity of more qualified human resource). As shown in Figure 9, HCs III and II now handle the largest client load of 43%

up from 23% two years ago, hence many PLHIV clients spend much less on travel costs and are more likely to be retained in chronic care at sites nearer to their homes.

During PY4, STAR-EC significantly leveraged resources for HIV care and support services through collaboration with other USAID-funded projects, namely:

- Health Care Improvement project [supported quality of care improvement e.g. the palliative care collaborative]
- HOSPICE Africa [supported palliative care (pain control)]
- Health Communication Partnership

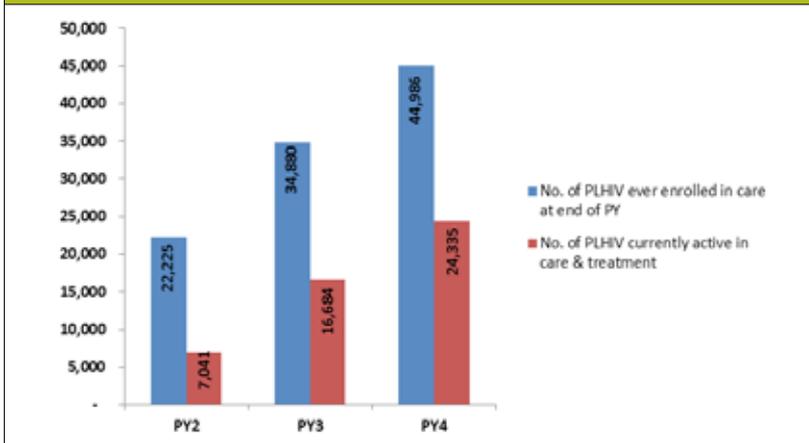
**Figure 9: Distribution of care clients by level of health facility**



Source: STAR-EC program records

<sup>5</sup> The comprehensive Care package includes: enrollment in chronic care clinic; Cotrimoxazole prophylactic therapy; treatment of opportunistic infections; treatment of sexually transmitted infections; Fluconazole prophylaxis; palliative care -pain control; basic care package kit to prevent diarrhea & malaria; laboratory tests (Hb, CD4); psychosocial support counseling; nutrition assessment and ready-to-use therapeutic food (RUTF); home-based care and follow-up support; EID care & pediatric HIV care; assessing eligibility for antiretroviral therapy (ART); ART adherence preparation counseling; and linkage /referral to ART clinic

**Figure 10: Trends in patient retention in care PY2-PY4**



Source: STAR-EC program records

(HCP) [supported Positive Living campaign, IEC/BCC materials, job aides]

- STRIDES for Family Health [supported long term family planning for PLHIV; nutrition assessment and support]
- TASO and IRCU programs [rationalization of Care/ART support at 6 overlapping facilities]
- AIDSTAR-One [healthcare waste management equipments]
- Food and Nutrition Technical Assistance (FANTA III) [nutrition assessment, counseling and support]

Retention of clients remained a key challenge despite its emphasis during

PY4, and is mainly attributed to intermittent supply of cotrimoxazole at facilities. Efforts to address this challenge included implementation of a patient appointment system in partnership with the Clinton Health Access Initiative at seven pilot sites, initiation of psychosocial support groups at some health facilities and support for mentorships of health workers in counseling as well as proper recording of client data. Despite the above steps taken, client retention is still poor and deserves special focus during PY5.

### Challenges

- Retention in care is still low at 54% with over 20,000 inactive PLHIV (see Figure 10). The majority of these clients missed appointments, implying inadequate follow up support mechanisms
- Implementation of psychosocial support group (PSG) services is still limited to a few facilities, and is complicated by a lack of dedicated counselors in the health staffing structure
- About 35 care facilities did not report data due to various systemic gaps including inadequate support supervision

### Way forward

- During PY5, STAR-EC will support the scale up of the 'appointment system' and 'pro-active follow-up' for clients who miss appointments or those lost to follow-up, through the use of phone calls and home visits by 'expert clients' and home-based care teams
- PSG meetings will also be scaled up to 131 care clinics and expert clients will be supported to enhance their counseling skills in order to effectively modulate these meetings
- The 35 non-reporting sites will be mentored on the 'patient monitoring tools' system in Q1 of PY5



PEP posters pinned up at local council offices, police posts and schools

### Post Exposure Prophylaxis(PEP)

Services for post-exposure prophylaxis were provided at 42 ART facilities. During PY4, STAR-EC printed and distributed the MoH format of PEP registers and documentation forms to these facilities. At district level, meetings were conducted to sensitize health workers, policemen, and local council officials on availability of PEP services. Also STAR-EC procured wall charts from Raising Voices |Centre for Domestic Violence Prevention (see adjacent picture). Consequent upon this support, the following results were achieved:

- A total of 81 persons (22 males and 59 females) received the 28-day course of ARVs

- Of the 81 persons, 44% were cases of rape/sexual assault (compared to PY3 findings of 18 persons and 22% rape/sexual assault cases)
- All 81 PEP clients had follow-up HIV tests at the recommended intervals and at completion of PEP and only one health worker turned HIV positive and was started on lifelong ART.

### Lesson Learned

Designating one health worker as the PEP focal person has increased access to and utilization of PEP services.

### Challenge

Some PEP clients failed to return for repeat HIV tests at three and six months post-exposure.

### Way forward

During PY5, STAR-EC will proactively support tracing of PEP clients at home, workplace, or school while observing confidentiality.

## 2.1.4 Treatment – Antiretroviral Therapy

During PY4, efforts to support ART care in the nine districts were aimed at increasing enrollment of clients improving retention of clients and contributing to HIV prevention efforts by expanding coverage among MARPs. These were mainly achieved through scaling up ART services by supporting accreditation of more health facilities from 26 in PY3 to 42 in PY4 ( including 40 public and 2 private not for profit facilities), building the capacity of clinical teams to offer comprehensive HIV care services and rolling out ART outreach services. Of the 42 facilities supported, 4 were hospitals, 12 were HCs IV and 26 were HCs III. Special focus was placed on targeting special groups including HIV+ children, HIV+ pregnant women, HIV/TB co-infected clients and MARPs. Key interventions included:

- Monthly ART outreaches to areas of high prevalence that included the islands of Mayuge and Namayingo Districts and targeted MARPs
- Integration of ART care and treatment services in community outreaches especially at landing sites and trading centers
- Satellite ART outreaches to lower health facilities specifically HCs III and IIs
- Mentorships for health workers on WHO staging, utilization of CD4 services and early initiation of ART

**Figure 11: Clients newly enrolled on ART, annual performance against targets**

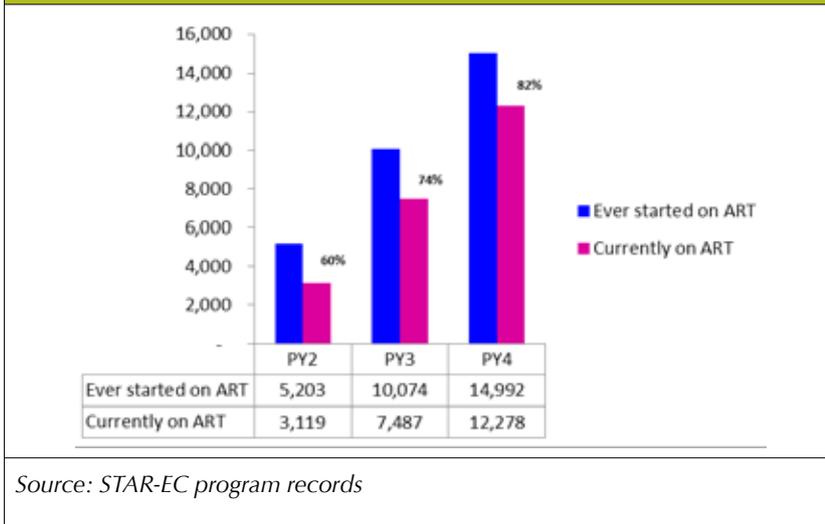


Source: STAR-EC program records

In addition, due to the revision in the program annual ART target (from 1,750 to 6,512) that was made during the reporting period (PY4), STAR-EC employed a catch up strategy of ‘accelerated initiation of ART’ which utilized dedicated teams from Uganda Cares and districts to actively search for, counsel and initiate all medically eligible clients on ART. As a result of the above strategies, a total of 5,419 new clients were initiated on ART which represents, a 7% increment from PY3 performance and 83% achievement of the revised annual target (Figure 11). Similarly the proportion of children newly enrolled on ART increased primarily because of the quarterly ‘*know your child status*’ campaigns and the mentorships on

pediatric management that the program supported throughout the year. On the contrary, the proportion and number of pregnant women newly enrolled on ART declined due to a decline in access to CD4 in some sites as the transportation of CD4 specimens was destabilized by a change in the funding mechanisms. However linkages between ANC and ART clinics also need to be strengthened in order to initiate as many eligible pregnant women

Figure 12: ART client retention, PY2-PY4



Source: STAR-EC program records

as possible on ART. Further analysis of data shows that the retention of clients on ART increased from 74% in PY3, to 83% by September 2012. Of all the 12,278 clients active on ART, 936 (7.6%) are children and 11,342 (92.4%) are adults. In addition, 99.5% of clients are on 1st line ARV regimen while 0.5% are on 2nd line.

During the reporting period, STAR-EC employed a multipronged strategy to address the high rates of client loss that were prevailing during the previous years and this strategy entailed: partnering with

the Clinton Health Access Initiative to pilot utilization of a clinic appointment book system; use of master patient index cards; improving the patient record filing system and use of mobile phone text message reminders for clinic appointments. In addition, the program supported expert clients to visit clients who are lost and those who miss appointments and improved the records system at various health facilities through supply of patient cards and filing cabinets.

Analysis of the data shows that the proportion of clients lost to follow up (LTFU) reduced from 19.3% at the beginning of PY4 to 18% by the end of quarter 4, PY4 (see Table 4). As compared to other mainland health facilities; Sigulu Islands have had an increasing trend of LTFU this program year: 3.0% during Q1; 11.8% during Q2; 14.3% in Q3 and 14.7% in Q4. This can be attributed to the highly mobile Island populations and the more frequent integrated visits where more clients have been initiated on ART.

Table 4: ART cohort analysis of patient outcomes for PY4

Cohort analysis indicators	Oct- Dec 2011 (Quarter 1)		Jan-Mar 2012 (Quarter 2)		April – Jun 2012 (Quarter 3)		July –Sept 2012 (Quarter 4)	
	No.	%	No.	%	No.	%	No.	%
ART clients started on ART 12 months ago	906	-	1,185	-	1,324	-	1,718	-
ART clients still active on ART after 12 months	662	73.1	821	69.3	862	65.1	1,042	61
ART clients dead within 12 months	41	4.5	50	4.2	37	2.8	52	3.0
ART clients transferred out to other health facilities within 12 months	28	3.1	93	7.8	144	10.9	312	18
ART clients lost to follow up within 12 months	175	19.3	221	18.7	281	20.9	312	18

In order to promote HIV prevention among clients on ART, strategies were put in place to ensure that patients on ART do not engage in risky behavior. Interventions such as; interpersonal communication and personal testimonies on behavioral change by peers; promotion of positive health dignity and prevention (PHDP) in the communities and at facilities; risk reduction counseling at the facility and during outreaches and promotion of fidelity programs that are aired on local radio stations were all utilized.

### Lesson Learned

The accelerated initiation of ART approach with the use of dedicated teams helped to increase enrolment of clients on ART. This approach that involves same day enrolment of medically eligible clients and ongoing adherence counseling of clients is highly recommended if the program is to achieve set ART targets.

## Challenges

- The irregular transportation of CD4 samples from health facilities that lack PIMA machines to the regional hubs negatively impacts the rate of enrollment of clients on ART
- The LTFU rates are still high (currently at 18%). More efforts need to be put in place to reduce this further

## Way forward

- During PY5, STAR-EC will continue supporting the accelerated initiation drive through the use of dedicated teams in order to enroll as many clients on ART as possible
- The proportion of children on ART is still below the national target of 15%; special focus will be placed on identification of HIV exposed infants and children through Young Child Clinics, outreach sites and all service delivery points at the health facilities
- In order to reduce the LTFU rates further, STAR-EC will scale up the multi-pronged strategy highlighted above to all 42 ART sites and engage expert clients in active client follow up
- Efforts will also be put in expanding ART to PLHIV in discordant relationships.

## Success Story

### Extending ART services to hard-to-reach fishing communities of East Central Uganda

The high population of MARPs especially the fisher folk is one of the drivers of the HIV epidemic in the East Central region. This population has been found to engage in multiple sexual partnerships and other risk behaviors which propagate the epidemic. This warrants early intervention in terms of extending HIV care services including ART treatment to them in order to interrupt the transmission cycle and reduce the prevalence which currently oscillates between 15-20% in this hard to reach population.

The STAR-EC program re-strategized and focused resources to sources of new infections by increasing access and expanding coverage of HIV services among fisher folk in Sigulu and Sagitu Islands of Namayingo and Mayuge Districts respectively. On a monthly basis, STAR-EC facilitates a team of district clinicians to camp at these island facilities offering ART services. Their efforts are then supplemented by quarterly integrated visits by a team of STAR-EC staff and district clinicians who spend week-long camps delivering a combined package of HIV prevention care and treatment services.

To reinforce the above VHTs on the islands have been trained to support clients on ART and the scanty health workers have been mentored to continue providing services in the absence of the visiting



*Such visits are characterized by high demand for services. Fisher folk at Sigulu islands wait to receive care during an integrated outreach. Right: A mother receives counseling for her baby who is HIV positive*

teams. During PY4; a total of 2,556 fisher folks were reached with HTC services during integrated outreaches. Of these 328 (12.8%) tested HIV positive; 193 were newly enrolled into care and 184 clients were found medically eligible and started on ART.

## Lessons learned

Active engagement of indigenous people in HIV&AIDS service delivery leads to more effective and cost saving means of ART delivery to the communities

### Challenges

- The mobile nature of these populations greatly affects the retention of clients in care and on ART as many become lost to follow up
- The very scarce human resource at the islands and overall in the affected districts also affects the continuity of care

### Way forward

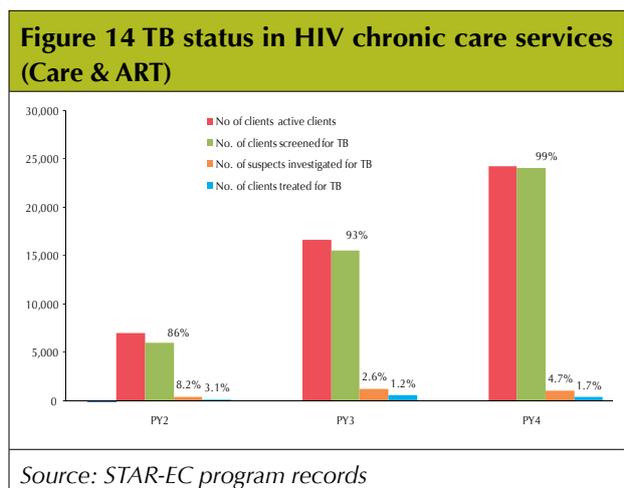
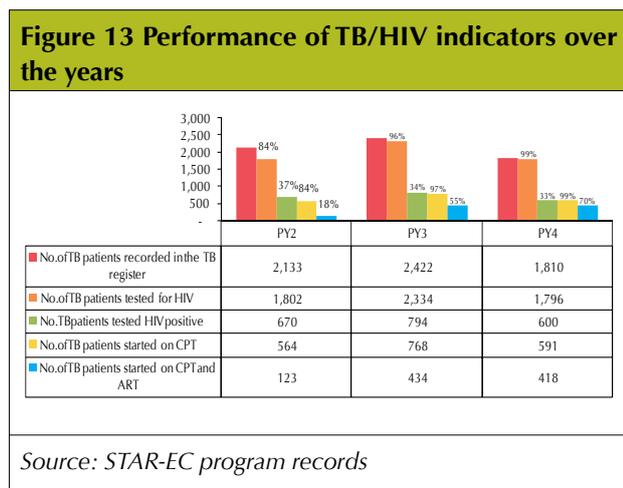
- Increase ART outreaches to the Islands and landing sites so that more fisher folk are able to access comprehensive care and treatment services regularly
- Accreditation of Island health facilities so that they can serve clients on a weekly basis as opposed to a monthly or quarterly basis
- Involvement of 'expert clients' to trace clients that are lost to follow up

## 2.1.5 Clinical/Additional TB/HIV

### Clinical/ Additional TB/HIV

During PY4, the program focused on strengthening the community and facility based TB control initiatives that were aimed at improving TB/HIV collaboration and integration, the case detection rate (CDR), and TB treatment outcomes.

TB/HIV collaboration at facilities has progressively improved over the past four program years as indicated in the charts below. Overall 70% of TB/HIV co-infected clients were enrolled on ART and CPT compared to 18% and 55% for PY2 and PY3 respectively. The national achievement stands at 32% for ART. In addition, 99% of all patients in HIV chronic care were screened for TB compared to 86% and 93% during PY2 and PY3 respectively. The regional HIV prevalence among the notified TB cases is consistently low at 33% and far below the estimated national prevalence of 54%



## TB Control Activities

Efforts to increase TB CDR focused on contact tracing, intensified TB case finding at health care facilities and referral of all TB suspects from the community to facilities for diagnosis and early initiation of treatment. In order to effect this, both facility and community support was solicited. 1,000 VHTs, 470 drug shop attendants and 300 traditional healers were oriented on intensified TB case finding and referrals, health workers were supported to

## Key strategies that have been used to improve TB/HIV indicators

- Integration of HTC services in TB clinics
- Support supervision and Mentorship for health workers on TB/HIV co-management
- Involving VHTs and Sub-county health workers (SCHWs) to identify and refer TB suspects including follow up TB clients
- Dissemination of diagnosis algorithms and new policies on early initiation of ART for TB clients irrespective of CD4
- Increasing the number of ART outreaches
- Improving linkages and internal referrals between TB and HIV service points enabling TB/HIV patients to quickly access ART
- Improving recording and reporting
- Improving community awareness and involvement
- Provision of patient-friendly health communication materials to patients in their communities
- TB screening at ANC by mentor mothers

conduct sputum outreaches in hard-to-reach sub-counties and Islands and TB campaign outreaches were organized across the nine supported districts. Involvement of the drug shop attendants, private clinics and traditional healers is one strategy aimed at increased involvement of the private sector in TB control. Through these efforts, there was an increase



VHT members of Lolwe Island during an orientation on TB- ICF and referrals

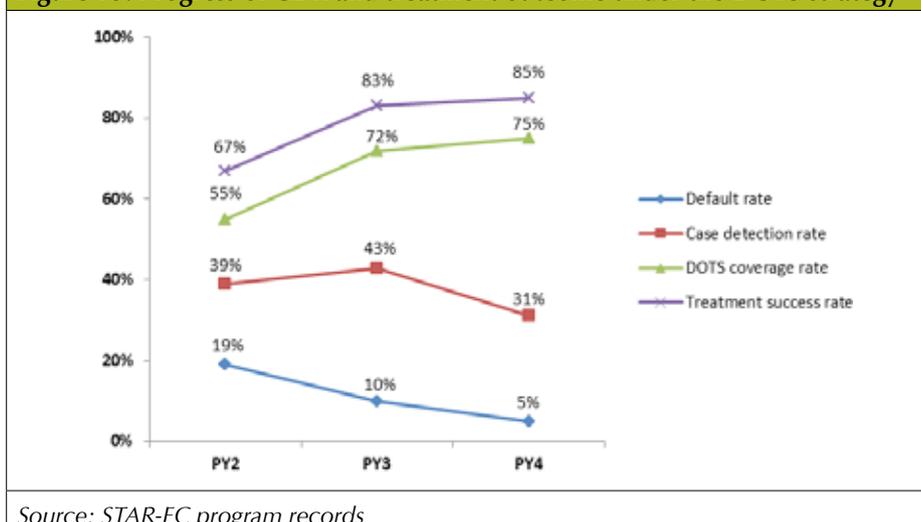
in the number of TB suspects identified and sputum smears performed in the laboratories, although few TB cases were identified. The CDR initially increased from 32% at the

beginning of the program to 43% by the end of PY3 but a progressive decline was noted during PY4 despite the above mentioned interventions. The regional CDR currently stands at 31% which is far below the national target of 70%. Though the decline in the number of cases detected may be a positive achievement for the TB interventions implemented, the actual burden of TB in the East Central region needs further evaluation.

## Treatment outcome under the DOTS strategy

In an effort to consolidate TB DOTS, STAR-EC in collaboration with SDS supported sub county health workers' (SCHWs) performance review meetings, contact tracing, and delivery of TB medicines to clients in the respective communities. In addition HSD TB focal persons were supported to conduct quarterly support supervision and mentorship to the SCHW. In addition during Q4 of PY4, a total of 100 SCHWs were oriented on field preparation of sputum slides and transportation of these slides to nearby diagnostic units in order to improve on the cure rates. Results show that the overall TSR has progressively increased from 66.9% of PY2 to 85.4% and is above both the national achievement of 75% and the national target of 85%. The cure rate improved from 47% for Q1 of the PY4 to 53% during Q4.

Figure 15: Progress of CDR and treatment outcome under the DOTS strategy



\*PY1 involved only 3 months of implementation and most of this included TB start-up activities, therefore the absence of data

## Addressing TB infection control at health facilities

STAR-EC continued to provide technical support to facilities to implement the first line TB infection control measures ( both administrative and environmental). The TB infection control assessment conducted during PY2 indicated limited knowledge and inadequate implementation of TB infection control practices at facilities. The same report showed that six health care providers had suffered from TB in the previous year. As a result of strengthened TB infection control practices such as triaging and separation of TB suspects, emphasizing cough etiquette, opening windows and doors at facilities and proper disposal of sputum samples, only one health care provider has been reported to have suffered from TB in the previous three years.



*Left: A SCHW with a mother who was abandoned by husband after her 8 and 2 year old (in the photo) children were identified with TB in Idudi sub-county. After successful treatment for the children, she is now happily reunited with the husband. Right: A STAR-EC staff mentors health workers on how to examine a TB suspect baby*

## Improving childhood TB diagnosis and management

Through mentorship and support supervision, STAR-EC progressively built capacity of health care providers from 85 diagnostic and treatment facilities on management of childhood TB. As a result of this support, 172(7.2%) of the 2,404 total TB cases identified during PY3 were children and similarly 130 (7.2%) of the 1,810 total TB cases identified during PY4 were children; and all these have been appropriately managed.

## Multi-Drug Resistant (MDR) TB

STAR-EC conducted mentorships for health workers on MDR TB and also supported referral of samples for MDR TB suspects to the National tuberculosis reference Laboratory (NTRL) in the nine districts. A total of 19 patients were identified with MDR TB and are awaiting treatment.

### Lessons learned

- Mentorship and quality support supervision by district supervisors improves the quality of work and subsequently the district TB indicators
- Strengthening community structures plays a critical and sustainable role in TB control

### Challenges

- The migratory nature of populations of Buyende, Mayuge and Namayingo Districts as well as the nature of urban settings affect the treatment outcome of patients
- The scarce human resources for health (in the laboratory) still limits TB achievements and this has mostly affected Namayingo and Luuka Districts
- Stock outs of HIV test kits and cotrimoxazole tablets affects testing of TB patients and enrollment of TB/HIV co infected patients on CPT hence failure to achieve the 100% target

### Way Forward

- STAR-EC will support the involvement of VHT community structures to further support implementation of TB DOTS
- The program will continue to support facilities on logistics management and early requisition for supplies

## 2.1.6. Promotion of HIV Prevention through Sexual and Behavioral Risk Reduction

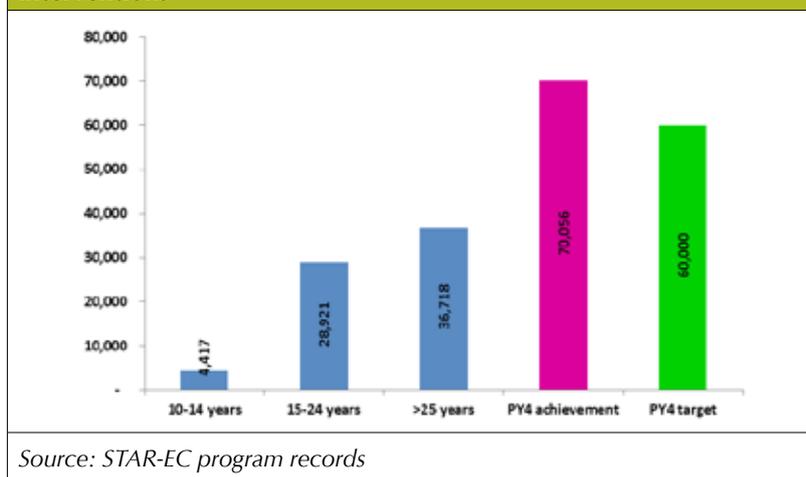
The program supported sexual and other behavioral risk prevention interventions both in the general population as well as among key populations. Through the nine supported districts and the three pre-qualified CSOs, 'combination prevention' promoting biomedical, structural and behavioral prevention interventions was delivered. Peer educators and VHTs were equipped with information, education and communication (IEC) materials as talking points which facilitated their one on one sessions and small group counseling sessions in the community. Figure 16 shows the target populations, the strategies used to reach them with various services and the key outputs.

**Figure 16: Target populations and strategies used to reach them**

Targeted population groups	General strategies used to deliver the interventions	Key outcomes:
<p><b>General population:</b> Out-of-school youth, married and/or cohabiting couples</p> <p><b>Key populations:</b> Fisher folk, sex workers, truckers and uniformed personnel</p> <p><b>Other emerging key populations:</b> "Boda boda" motorcyclists, business men, plantation workers, bar and lodges and 'Bibandas' attendees</p> <p><b>HIV prevention services offered:</b> Risk assessment and counseling, life skills building, condom promotion, HTC, VMMC, PMTCT, care and treatment and linkages</p>	<ul style="list-style-type: none"> <li>▪ Four tent model utilized for risk reduction counseling</li> <li>▪ Scenario events combined with HIV service provision to hot spots</li> <li>▪ Mini integrated outreaches to bars &amp; lodges, video halls and 'Boda boda' stage</li> <li>▪ Interpersonal communication by peers</li> <li>▪ Fidelity programs integrating HIV service provision</li> <li>▪ Use of knowledge rooms to deliver HIV services to the community</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased level of knowledge on HIV prevention from 58.7% to 68.8% over four years.</li> <li>▪ Increase in access to HTC by couples from 7,558 to 16,124 (2009 and 2012) respectively.</li> <li>▪ Over 88.8% of adults know where to access condoms</li> <li>▪ Increase in demand for female condom among sex workers</li> </ul> <p><i>Source: STAR-EC LQAS, 2012 and Program Routine Records</i></p>

Despite the above interventions and achievements, multiple concurrent partnerships remain a key challenge in the East Central region and stands at 30.5% among men and 6.7% among women (UAIS 2011)<sup>6</sup>. In addition the level of knowledge on HIV prevention is still low at 68.8% (LQAS, 2012). STAR-EC will therefore during PY5 continue to utilize the various community structures to provide risk reduction counseling in the community and to increase the level of awareness to about 80%.

**Figure 17: Individuals reached with age-appropriate HIV risk reduction interventions**



### Reaching the youth with age appropriate Abstinence, Being faithful and Condom use (ABC) interventions

Young people aged 10-24 years were reached with various age appropriate HIV prevention interventions. For the youth who are not sexually active, the sessions focused on building their self-worth, dignity and respect, life skills, facts about HIV transmission and prevention as well as encouraging

<sup>6</sup>The LQAS 2012 findings show a similar proportion of results

### Engaging local leaders in youth trainings to promote Men & HIV:

Kabooli the Local Chairman of Bumanya in Kaliro said ' it was a new beginning for me, after the training, I have utilized community meetings to talk about Men, HIV & gender... But for sure our community is opening up about gender expectations, inequalities and violence. Youth and adults, men and women are questioning deep-rooted beliefs about what it means to be a man and what it means to be a woman. Kabooli concluded.

them to engage in more productive activities. Sessions for sexually active youth, focused on building skills on safer sex practices, education on correct and consistent condom use, partner reduction and mutual fidelity. Youth friendly approaches including individual and small group sessions by trained peer educators, and use of drama, sports gala and games were used to reach the various age groups. Health workers and VHTs also targeted such youth events to deliver integrated HIV services to the youth.

### Promotion of mutual fidelity among couples

During PY4, STAR-EC supported trained model couples, religious leaders, opinion leaders and VHTs to conduct home to home, community dialogue sessions, fidelity seminars and community integrated outreaches to promote a range of services (highlighted in

figure 16 above). Effective linkages were utilized for biomedical services. Overall, 70,056 individuals ( including 37,569 males and 32,487 females) were reached with HIV prevention interventions (AB only) including youth and couples (See Figure 17).

## Success Story

### Mr. and Mrs. Musuwa narrate their experience as a model couple and a VHT from Bulidha Sub County, Bugiri District

Musuwa and his wife Jessica have been married for 10 years, and have 4 children. In 2011, this couple was identified and trained by STAR-EC in families that prosper model. They form one of the model couples under Uganda Reproductive Health Bureau (URHB) working in Bulidha Sub County. Before the training, the couple had problems. Jessica confessed, “..My husband used to beat me, he used not to provide any financial support to meet the family needs, and each of us used to make individual decisions...” Musuwa added, “The training benefited us a lot, I am now a trained VHT and therefore lead by example; together with my wife we have decided to live a healthy life, and we have benefited from various health services: we are practicing family planning now, and in March 2012, I went for VMMC”. With a smile, while holding their couple HTC certificate, both Musuwa and wife pledged to remain faithful to each other and they hope to continue planning together for their children.



Jovial Musuwa and his wife display their couple HTC certificate received after sharing their results

#### Lessons learned

- Integration of HTC services in couple fidelity seminars and couple group meetings boosts the uptake of couple HTC. Couples will fully and freely test together
- Model couples who are VHT members have a wider spectrum of health issues to promote and it's easier to mentor them to support other couples in the roll out of combination HIV prevention

#### Challenges

- Limited and unfriendly youth reproductive health services provided at health facilities
- Poor health seeking behaviors among some couples, notably low family planning uptake

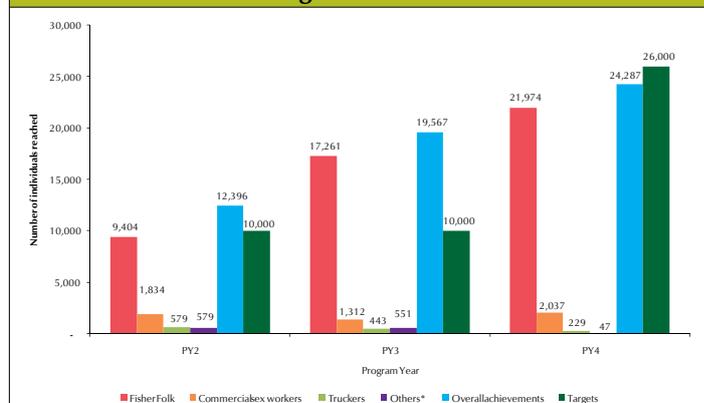
#### Way forward

- During PY5, STAR-EC will support health facilities to set up youth corners to provide RH services for young people
- The program will also continue to provide on-going counseling to enable them adopt positive health seeking behaviors

## Reaching key populations with risk reduction services

The MARPs study that was conducted by STAR-EC in December 2011 estimated a total of 82,339 individuals in the nine STAR-EC supported districts in the East Central region. Among these populations, low comprehensive HIV knowledge, multiple concurrent partnerships and high risky sex were reported across all the categories of key populations.

**Figure 18: Key populations reached by type with risk reduction services during PY2 to PY4**



Source: STAR-EC program records

To address these, STAR-EC engaged 'Focus for Impact' interventions during PY4 that targeted mapped hot spots along the northern transport corridor like Idudi and Nalwerere; landing sites and as well as the Islands of Sigulu and Masolya to reach the various key populations with HIV prevention interventions. The strategies highlighted above were utilized to provide interpersonal communication and risk reduction counseling. Special attempt was made to reach the 'hidden' populations at their work stations like bars, lodges, hotels, restaurants, video halls and 'Boda boda' stages at which onsite HIV prevention services were provided.

**Figure 19: 'Emerging' MARPs reached by category during PY4**



Source: STAR-EC program records

## HIV prevention services delivered to key populations:

- Get off the sexual network campaign in partnership with UHMG
- Risk reduction counseling by peers and mentor buddies to promote reduction in multiple sexual partnerships
- 'Moonlight HTC' and active linkage for STI treatment, FP, VMMC, ART, PMTCT, care and support
- Skills building for safer sex negotiation, condom promotion, education and distribution, recreation through education, videos, pool and board games as well as digital television satellite, distribution of targeted IEC/BCC materials

## 'Condomization' for HIV prevention among key populations



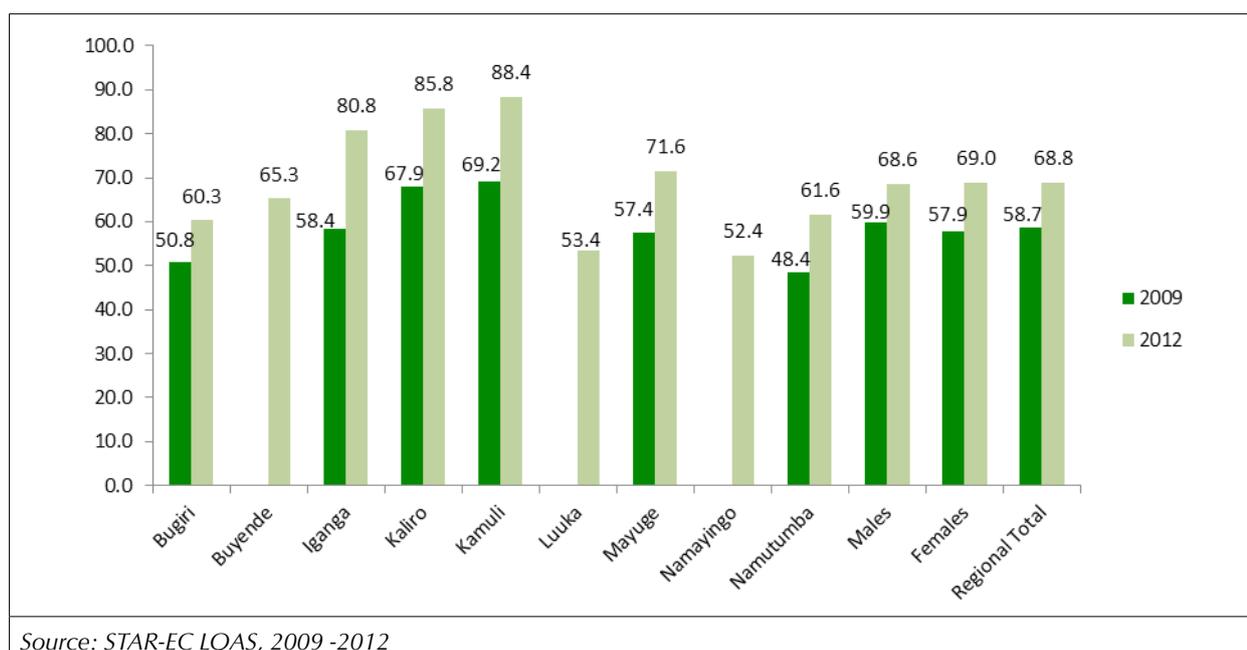
Taking HIV services to MARPs' work places in Iganga; A peer educator in a session at 'bodaboda' stage while sex workers in their work place at Idudi dialogue with health workers

'Yes! I need the money but I cannot have sex without protection, the female condom has made it better for me..., No condom, No sex!' a sex worker at Idudi truck stop testified.

During PY4, the program supported targeted condom promotion in hotspots. Condoms were distributed at static and mobile outlets. To increase the coverage and outlets of condoms in the community, 600 VHTs were oriented in condom promotion and overall a total of 1,682,571 condoms (1,606,240 Male condoms; 76,331 female condoms) were distributed through 1,629 outlets in PY4.

**Utilizing the ‘Know Your Epidemic, Know Your Response’ to promote HIV prevention:** Results of three annual STAR-EC LQAS surveys revealed inadequate HIV prevention knowledge among adults in Namayingo District (See Figure 20 below); which is predominately inhabited by fisher folk. In the ‘Focus for Impact’ interventions, prevention efforts were deliberately tailored to fishing communities of Namayingo, Mayuge, Buyende and Bugiri Districts. Through the various strategies highlighted above, a total of 21,974 fisher folk were reached with HIV prevention services in PY4 (see Figure 18 above).

**Figure 20: Percentage of adults (15-54 years) who can mention all three major ways of HIV prevention (ABC) at LQAS baseline in 2009 and in 2012**



Source: STAR-EC LQAS, 2009 -2012

### Lessons learned

- Evening events are more effective in reaching key populations especially truckers and sex workers, as this is their work time when they can easily be accessed
- Integrating social marketing, fun and entertainment during integrated community outreaches helps to draw crowds that are reached in the ‘four tent’ model with risk reduction counseling

### Challenges

- Truckers and ‘boda boda’ cyclists have limited time to enable them access a range of services. Service provision is often interrupted when ‘boda boda’ cyclists receive customers
- Appreciation of the ‘get off the sexual network’ campaign is still limited especially among the island population which claims to have a small population of women and believes in sharing these women
- The number of CSOs offering risk reduction and HIV prevention interventions reduced in PY4 when compared to previous program years

### Way forward

- STAR-EC will continue targeting work places for MARPs groups so as to reach them with various services
- STAR-EC will also continue to improve interventions through the provision of integrated services as opposed to the past where messages were simply disseminated

## Target psychosocial support groups supported during PY4

Discordant couples, young positive and PwDs living with HIV

### Package of PHDP services

- Condom promotion and education on correct and consistent use
- Safer sex negotiation skills
- Risk reduction counseling
- Family planning, VMMC, PMTCT, ART and adherence counseling
- Counseling on disclosure
- Positive spousal communication
- Routine HTC for the negative partner
- Importance of good nutrition and balanced diet
- Water, hygiene and sanitation
- Importance of psychosocial support system
- Economic empowerment and income generating activities
- Dangers of drugs abuse and alcohol consumption



*'Disability is not inability' Namutumba District PwDs sports club lives positively and fights stigma through sports*

## Promotion of positive health dignity and prevention (PHDP) in the community

PHDP was provided through supporting expert clients and health workers to provide a minimum package of HIV prevention services (highlighted in the text box). The strategies used included, supporting monthly psychosocial group meetings, risk reduction counseling by health workers, home to home and community dialogue sessions to promote sharing and building skills for safer sex options. Overall a total of 3,940 PLHIV were reached with a minimum package of HIV prevention services. A total of 13,107 condoms (11,326 male condom; and, 1,781 female condoms) were distributed through 83 condom outlets.

### Supporting PLHIV with disabilities to cope with stigma

Persons with disabilities (PwDs) who are living with HIV&AIDS experience stigma both from the disability and their HIV status. In PY4, STAR-EC targeted the households of PwDs and supported delivery of a package of HIV prevention services. A total of 3,575 PwDs ( 2,047 females; 1,528 males) together with their household members were reached. Through this support PwDs have learned to fight stigma and live positively as demonstrated in the testimony that follows.

### Challenges

- The needs of PwDs go beyond psychosocial support; some of them lack basic needs
- The desire to have more children among some discordant couples is still high

### Way forward

- STAR-EC will support and encourage PWD structures at district levels to lobby for Community Development Department (CDD) grants that can be used in the start-up of income generating activities
- STAR-EC will work with other stakeholders to scale-up family planning, reproductive health education and counseling both at facility and community level using VHTs

## Success Story

### Looking ahead, Ndaula a 22 year-old HIV positive youth shares his aspirations

*"At the age of 12 years, my mother told me I was HIV positive. From a family of seven children I was the only one who tested positive, I wondered what wrong I had done! As a result of HIV Ndaula suffered from 'Ekispi' that affected his sight. My father had died.....life was very difficult", Ndaula recalls. Through NACWOLA Ndaula was counseled, linked to the young positives club... "Here I felt sense of belonging, we meet and share experiences, and I have learnt a lot from our counselors who have supported me to live positively". Ndaula recalls in 2009 he was one of the presenters during His Excellency, the President of Uganda's visit to Bugiri District. Through his moving testimony he was one of those identified for a scholarship. 'I have completed my Bachelors degree and I look forward to getting a good job; Being positive with disability does not mean that it is the end; I encourage fellow young positives to have hope and dream big...' counsels Ndaula.*

#### Lessons learned

- The psychosocial support meetings provide opportunity for discordant couples and young positives to share and learn from their colleagues including allaying myths and fears associated with living with HIV&AIDS
- Without a clearer PLHIV structure on the ground to implement and co-ordinate PHDP interventions, it is difficult to provide peer support services to young positives and discordant couples in the community

#### Challenges and way forward

- The desire to have more children among some discordant couples is still high; STAR-EC will work with other stakeholders to scale-up family planning and reproductive health education and counseling both at facility and community level using VHTs
- The needs of PWDs go beyond psychosocial support; some of them lack basic needs. STAR-EC will support and encourage the PWDs structures at district levels to lobby for Community development department (CDD) grants for PWDs

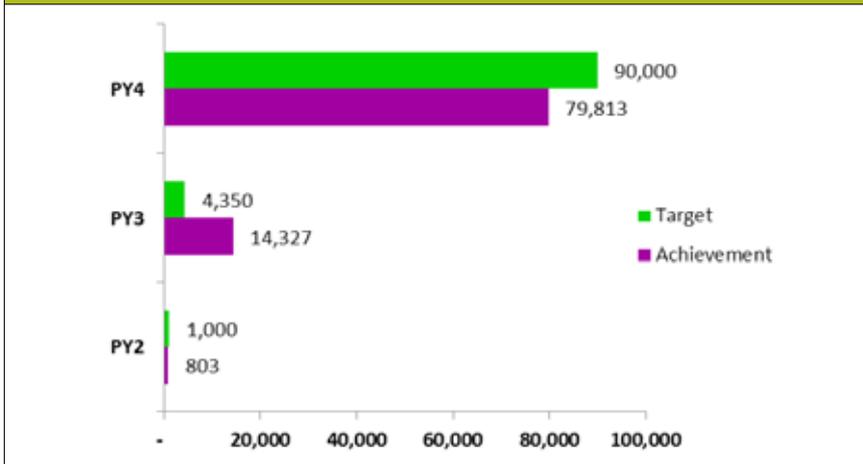
#### VMMC Summary Results for PY4

- 19 health facilities supported to deliver VMMC services each conducting at least one static clinic per week yielding 14,265 circumcisions
- 16 health facilities supported to conduct 1,080 circumcison outreaches yielding 51,718 circumcisions
- 50 three-day mini-camps organized yielding 11,500 circumcisions
- Four integrated service delivery camps to Island in Lake Victoria yielding 2,330 circumcisions

#### Promotion of biomedical prevention through voluntary medical male circumcision (VMMC)

During PY4, STAR-EC increased the number of supported VMMC sites in the region from fifteen to nineteen. The program employed a multi-pronged strategy in the delivery of VMMC services including; static clinics, outreaches as well as circumcison camps. Out of the 19 sites, 16 facilities were supported to conduct outreaches

**Figure 21: Clients who received VMMC services in East Central Uganda PY2-PY4**



Source: STAR-EC program records

who had ever been circumcised, and regionally there was a 9.2% increase (from 35.8% in 2011 to 45.0% in 2012) in the proportion of men ever circumcised. The survey also specifically reported a significant increase in the proportion of males circumcised at a government health facility or its outreach within the last 12 months prior to the survey (from 47.4% in 2011 to 74.2% in 2012).

### Lessons Learned

- Provision of VMMC disposable kits by USAID greatly increased the efficiency of the limited number of VMMC teams in the region and therefore enhanced the achievement of results
- VMMC serves as an effective way of reaching men with other services including HTC and linkage to care
- The MOVE mentorships initiated in February 2012 and the mini camps enabled the program to reach more clients

### Challenges

- The erratic supply of anesthetics interrupted service delivery and affected achievement of results
- There has been high volume of waste generated from the disposable kits at both static and outreach sites
- Limited human resource at public health facilities for which there are several competing priorities has continued to undermine the rate of VMMC scale-up

### Way forward

- STAR-EC hopes that the bulk purchase of anesthetics and other consumables by USAID through JMS will address shortages
- The program will continue to work with AIDSTAR-One and SDS to dispose-off waste in accordance to national and international recommended standards
- In PY5 STAR-EC will roll out the use of dedicated VMMC teams to reduce the pressure on public health workers
- Prioritization of males for VMMC services will continue to include MARPs. Special attention will also include circumcision of males in HIV discordant couple relationships especially if they are HIV negative

## 2.2 Result Area 2: Strengthening decentralized HIV&AIDS and TB service delivery systems with emphasis on Health Centers III and IV as well as community outreaches

### 2.2.1 Support to strategic information collection and dissemination

#### 2.2.1.1. District led performance reviews:

STAR-EC conducted the PY3 annual and PY4 quarterly performance reviews at district specific level. Issues discussed included annual progress of CSOs and local governments (LGs) against planned targets and set standard operating procedures and guidelines. With technical back-stopping from STAR-EC during these meetings, LG technical heads took lead in the discussion of results and subsequently made action plans aimed at fixing

identified gaps and improving performance in PY5. Like in previous years, LGs have been able to integrate their performance review findings in their work plans.

#### 2.2.1.2. Lot Quality Assurance Sampling (LQAS) Survey and other program assessments:

STAR-EC in partnership with the SDS project trained/re-trained 63 LG and 3 CSO folks from nine STAR-EC supported districts in conducting the LQAS survey methodology. Six of the nine districts were SDS and STAR-EC co-supported. This partnership was another essential step towards institutionalization of LQAS in all supported districts. It is also interesting to note that most of the key LQAS indicator results were found comparable to other related studies such as the Uganda AIDS Indicator Survey (2011) and the Uganda Demographic Health Survey (2011). LQAS survey results have contributed to the HIV&AIDS and TB programming. The 2012 results will be disseminated to USAID, UAC, districts, CSOs and other partners through the STAR-EC website and hard copies. Like has been the situation in the past, annual health facility assessment and LQAS household data was used to inform STAR-EC's PY5 work planning, interventions and targets. Consequently, this data was used in planning by all stakeholders including CSOs and LGs during the development of their annual work plans and District Management Improvement Plans (DMIPs), respectively. During the first quarter of PY5, STAR-EC will disseminate both PY4 program routine data and the 2012 LQAS results in all the nine STAR-EC supported districts at both higher and lower administrative and planning local government levels. Additionally, as part of the sustainability plan, STAR-EC will continue to work with the STAR-E LQAS program and other partners in the institutionalization of LQAS. More leadership roles will be directly played by LG personnel as part of the promotion towards their sustainability plan. Training of district staff on the methodology will be extended to include new district cadres with emphasis on district biostatisticians and other new district folks to build a critical mass of skilled personnel that will partly foster sustainability and further institutionalization of this activity at district level.

#### 2.2.1.3. Data Quality Assessments (DQAs):

STAR-EC conducted two major DQAs and several other routine DQA and Improvement activities during PY4. Routine DQAs and Improvements have been used during the year and such activities were conducted together with the provision of on spot support and technical assistance extended to several prioritized health facilities. As a result, most of the data obtained from districts is now of quality. One major DQA was conducted by MEEPP and covered six health facilities (at Hospital and HC IV level) focusing on training and ART data. Another major DQA activity implementation covered 15 sampled HFs (including 3 hospitals, 5 HCIVs and 7 HCs III) as well as 3 CSOs (Family Life Education Program [FLEP], Youth Alive [YA] and the Uganda Reproductive Health Bureau [URHB]) with focus on PMTCT, VMMC, ART, HTC and MARPs. A standardized tool of the national PMTCT program developed by MEASURE Evaluation for PEPFAR and the Global Fund Implementing Partners was used. Findings and recommendations will form the basis for training and mentorships on data management during PY5.

#### 2.2.1.4. Routine support supervision through on-site mentorships and training:

STAR-EC continued to provide on-site support supervision to both care and ART sites covering at least 130 health facilities. During the year, more emphasis was placed on newly accredited ART sites (both on the mainland and islands) to ensure smooth transmission of data for clients transferring from the already existent ART accredited sites to the newly accredited ones. A total of 450 health workers have been mentored in data management (169 revised HMIS tools, 270 in ART patient monitoring tools and 11 in DHIS2 across the nine districts. As part of health systems strengthening, STAR-EC in partnership with STRIDES for Family Health conducted a three day training for district staff in district health management information systems for all the nine STAR-EC supported districts. The training attracted clinical officers, medical officers, midwives, nurses, nursing assistants and medical records assistants, district HIV&AIDS focal persons, health management information (HMIS) officers and laboratory technicians among others. A total of 169 people from 128 health facilities attended the training. The participants were oriented on the revived HMIS tools which included, PMTCT, ART, Care, HTC and TB among others. The trainings were led by district level facilitators who had initially been trained as trainers by the MoH staff and STAR-EC prior to the training. According to the pre-and post-training assessment exercise, participants

gained better knowledge in understanding and interpreting the district HMIS indicators. This will go a long way in improving data collection and utilization at lower levels. In addition, STAR-EC in collaboration with MoH and USAID/MEEPP trained eleven district folks in DHSI2 (medical records assistants and HMIS focal persons) from five STAR-EC supported districts (Buyende, Iganga, Luuka, Namutumba and Namayingo). As a result of this training, they have been able to submit web-based reports to the Ministry of Health. In PY5, STAR-EC plans to provide internet connectivity to support DHIS II roll out and functionality. Additionally, as already indicated in the previous sections, 66 district workers were trained in LQAS methodology.

#### 2.2.1.5. Enhancing clients' records management:

Over this period, STAR-EC in partnership with the CHAI rolled out the pilot intervention at seven selected sites to improve patient records management and clients appointment scheduling, reduce clients waiting time and as well as reduce clients lost to follow-up. During the roll-out, health workers, records assistants, 'expert clients' and the 'mentor mothers' were trained in the use of the master patient index (MPI) cards and file retrieval. In addition, the above facilities were provided with one metal filing rack each. After four months of the rollout, a follow on visit was made which revealed a number of benefits as a result of this intervention. These include easy retrieval of clients' files whereby time reduced from 20 to 3 minutes there by reducing clients waiting time and timely reminders of clients' next appointments in advance.



Records management before and after CHAI intervention

#### 2.2.1.6. Key partnerships and strategic information meetings attended:

STAR-EC partnered with MEEPP, the SDS program, MoH Resource Centre, STRIDES for Family Health and CHAI to train, mentor and equip LG health facilities and CSOs something that greatly impacted on the quality of data, reporting and decision-making. Others included the STAR-E LQAS program. STAR-EC also attended at least 25 strategic information related meetings organized by different stakeholders (15 at national level and 10 at district level). Meetings provided avenues for planning, experience sharing and dissemination of strategic information which nourished the implementation of strategic information planned activities.

#### 2.2.1.7. Special studies and operational research activities:

STAR-EC carried out a quantitative and qualitative special study on the 'key populations' entitled 'Population Estimation, HIV Knowledge, Attitudes, Practices Study and Hotspots Mapping Among Most-at Risk Populations in the East Central Region of Uganda'. The study which involved 1,218 respondents aimed at obtaining baseline data on the estimates of 'key populations', size and types, knowledge, attitudes and practices of such key populations. The findings have been used to identify health service gaps and thus 're-focus for impact' particularly for key populations in the remaining life of the project. In addition STAR-EC conducted operational research as well as documentation of program outcomes and best practices. This assessment was done among discordant couple support groups to find out the benefits obtained from subscribing membership to such a support group. Findings

indicate that being in a discordant group greatly enhances positive living and reduces domestic gender-based violence. During the activity, strategies to further reinforce PHDP were discussed.

#### 2.2.1.8. Information sharing at international level:

During the year, STAR-EC developed, shared and presented 29 papers at national (5) and international levels (24). Twelve papers were presented at the XIX International AIDS Conference (AIDS 2012) in Washington, D.C., 22-27 July 2012; twelve others were presented at the 16<sup>th</sup> International Conference on AIDS & STIs in Africa (ICASA 2011) in Addis Ababa, Ethiopia, 4-8 December (see Appendix 4 for details of papers presented). These papers demonstrate STAR-EC success stories, best practices and innovations accruing from the implementation of HIV&AIDS and TB programs in the East Central Uganda.

### 2.2.2 Improving Human Resources for Health (HRH)

During the reporting period, STAR-EC continued to collaborate with the different stakeholders in improving the numbers and quality of the existing HRH in the region. Recognizing the need to develop effective clinical teams that can provide quality comprehensive TB and HIV&AIDS services, the program mostly utilized clinical mentorship and support supervision approaches to build the capacity of available HRH without causing interruptions in service delivery. Targeted mentorships and trainings have seen the program support scale up of services to lower facilities and reduce workload on health workforce through promoting task shifting and role sharing approaches of service delivery.

A total of 562 service providers received at least one in-service training, two students were supported to enroll for pre service training in nursing and 8 students completed their Diploma course in biomedical laboratory technology and they are already contributing to service delivery at HCs III previously run by laboratory assistants. Appendix 1 shows the number of health workers that received in- service training per technical area during PY4.

In response to the critical lack of health workers in the region, STAR-EC in collaboration with the Namayingo District health office secured posting of eight health workers (including five nurses, two midwives and one clinical officer) to the district under the health systems strengthening project.

In the same vein, STAR-EC supported a team of consultants to identify factors affecting health workers' performance and to provide mentorship to health workers on performance improvement; results of the mentorship were shared with the district leaders and these will guide the program in providing tailored support to the health system.

#### Challenges

- The region is still plagued with very low staffing levels which affect formation of clinical teams and provision of comprehensive services. Districts like Namayingo have staffing levels as low as 20% of the required staff.
- High staff attrition in several health facilities also depletes the established clinical teams hence the frequent need to train the new members

#### Way forward

STAR-EC will continue collaborating with MoH, the Uganda Capacity project, the SDS project and the Strengthening and Improving National Training Systems (SAINTS) project through Baylor Uganda to support the districts to train and recruit more staff to bridge the severe HRH gap in the region during PY5

### 2.2.3. Injection safety and Waste Disposal Interventions

During the reporting period STAR-EC in collaboration with AIDSTAR-One disposed of approximately 3,000 kilograms of metallic medical waste generated from disposable voluntary medical male circumcision kits from 18 health facilities. This waste was collected and transported to a central place for incineration. During this exercise the health workers received technical assistance from AIDSTAR-One on how to effectively handle this medical waste in an environmentally friendly and safe manner. During PY5, this collaboration will continue and with support from SDS. The districts of Kamuli, Iganga and Bugiri will be supported to continue collecting and

transporting waste to a centralized incinerator while the rest of the districts will be supported directly by STAR-EC to manage their waste.

During PY4, STAR-EC also provided assorted health care waste handling equipment and material to 33 new PMTCT HCSS II along the landing sites and islands and these included: 33 wheel barrows; 33 heavy duty aprons; 10 pressure sterilizers; 33 pairs of gumboots; and 33 pairs of heavy duty gloves. In addition, 99 color coded bins, 132 packets of biohazard bags, 132 five-litre injection safety boxes; 66 labor suite aprons; and 99 boxes of examination gloves were provided.

STAR-EC participated in the 7th Annual National Stakeholders' Conference on Health Care Waste Management (HCWM) and the information shared has been crucial in guiding the district local governments to budget for HCWM activities. This was not the case before.

## 2.2.4 Supporting laboratory services, health infrastructure and equipment needs

Effective laboratory services are essential and play significant roles in TB, HIV&AIDS prevention, diagnosis, treatment and monitoring. During PY4, STAR-EC in collaboration with the Central Public Health Laboratories (CPHL); National TB Reference Laboratory (NTRL); Uganda Virus Research Institute/HIV Reference Laboratory (UVRI/HRL); SDS program; and district structures provided considerable laboratory support geared towards contributing to the national response to TB and HIV&AIDS control.

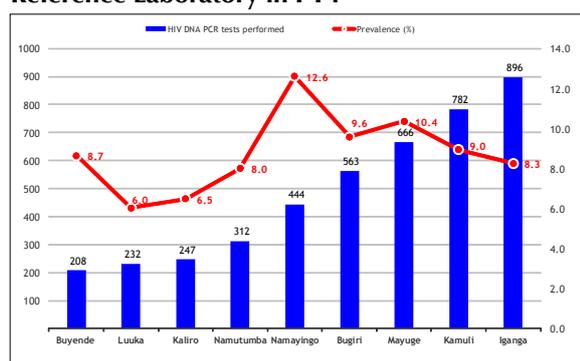
Analysis of data from supported health facility laboratories since PY2 to PY4 (Table 5) showed a steady increase in number of most of the diagnostics tests performed implying an increase in community access to and utilization of laboratory diagnostic services in the region. HIV, Malaria and TB still top the list of the burden of disease in the region. However, prevalence rates for other clinical conditions like intestinal parasitic infestation 24.7% (n=10,321) were high. In addition, the prevalence of proteinuria and glucosuria was high at 18.9% (n= 19,786) and 6.4% (n=19,681) respectively indicating possible high levels of renal impairment either due to pathological causes or ART toxicities if among PLHV on ARVs. More clinical evaluation is therefore required to ascertain this but it also calls for more vigilance among clinicians to routinely monitor ART clients for possible toxicities.

### Key laboratory interventions implemented in PY4

- Supported blood specimen referral for CD4 & HIV DNA PCR testing for ART monitoring & EID respectively at all supported Health Facilities including sputum referral for MDR TB testing
- Facilitated Strengthening Laboratory Management Towards Accreditation (SLMTA) activities at three general hospitals to prepare sites for accreditation by MoH/CPHL in PY5. Also supported data collection, collation and validation at all supported sites
- Strengthened knowledge and skills of laboratory service providers through integrated technical laboratory mentorships, in-service and pre-service training
- Reached MARPs in island communities with laboratory diagnostic services for HIV&TB screening including CD4 testing for ART monitoring
- Supported National External Quality Assessment Schemes (NEQAS) for TB, HIV and Malaria testing implementation at all STAR-EC supported health facilities
- Rolled out (installation and training of users) of PIMA Point-of-care CD4 machines that were provided by MoH at 19 ART accredited HCs
- Provided equipment, preventive maintenance service, supplementary diagnostics and supplies. Additional equipment procured will be distributed in Q1, PY5

More HIV antibodies tests (n=446,550) were performed by the supported laboratories than any other tests indicating increased community access to HTC which is a critical entry point to other HIV prevention services

**Figure 22: HIV DNA PCR tests (n=4,350) per STAR-EC supported District reported by MoH/CPHL, EID Reference Laboratory in PY4**



### Early infant diagnosis of HIV laboratory results

Data from the MoH EID testing laboratory showed that 4,350 HIV DNA PCR tests were performed on the DBS referred from STAR-EC supported health facilities in PY4. Average regional prevalence was 8.8% (n=4,350) higher than national target of <5.0%. Iganga District had the highest number of DBS analyzed (n=896) while Buyende had the least (n=208). Namayingo District had the highest HIV prevalence among exposed infants at 12.6% (n=444) while Luuka had the least prevalence of 6.0% (n=232) as shown in Figure 22.

Source: Ministry of Health Central Public Health Laboratories, EID testing Laboratory records

**Table 5: Trends in laboratory performance for selected tests for PY2, PY3 & PY4**

Type of Laboratory test	Number of tests reported centre per year		
	PY2	PY3	PY4
HIV antibodies screening	128,180	349,518	446,550
Blood slides examination for Malaria diagnosis	252,041	288,924	367,271
TB (Sputum ZN microscopy)	12,373	25,435	27,342
HIV DNA PCR for EID	732	3,654	3,626
CD4 testing for ART initiation & monitoring	6,937	21,790	21,351

### Key laboratory outputs of PY4

- 21,351 CD4 tests that contributed to 5,419 PLHIV enrolled on ART and ART monitoring
- 3,626 HIV DNA PCR tests for EID reported of which 252 infants born to HIV positive mothers were diagnosed HIV positive
- 609 CD4 tests provided to the Fisher folks during the 3 integrated clinical outreaches to Islands in Namayingo and Mayuge Districts
- 19 patients with MDR-TB were confirmed through sputum referral to NTRL (refer to TB section for details)
- A total of 27,342 TB sputum ZN microscopy tests were performed of which 1,251 TB cases were diagnosed from expected 4,119 cases
- Supported laboratories registered a high performance of 97% in TB NEQAS
- 8 Laboratory staff sponsored by the program completed their Certificate and Diploma courses in Medical laboratory Technology at Jinja Laboratory Training School
- 24 and 15 laboratory staff received in service training for TB sputum microscopy and laboratory refresher training in good laboratory practices respectively while 91 were trained in laboratory logistics
- 19 HC were supported to install and train in the use of PIMA point of care CD4 machines provided by the MoH and this has helped to increase access to CD4 in the region

### Lesson learned

Fortifying existing structures coupled with continuous advocacy for laboratory stakeholder support in health systems strengthening is key in improving community access to laboratory diagnostic and monitoring services

### Challenges

- Health facilities experienced prolonged shortage of HIV test kits, CD4 diagnostics and related supplies due to periodic national stock outs

- Under utilization of other laboratory equipment, clinical chemistry analyzers and hematology analyzers at the region hubs has been noted and this is due to inadequate senior clinicians to utilize such equipment
- Health facilities continue to face inadequate laboratory service providers to cope with the high demand for diagnostic services for other clinical ailments besides HIV and TB

### Way forward

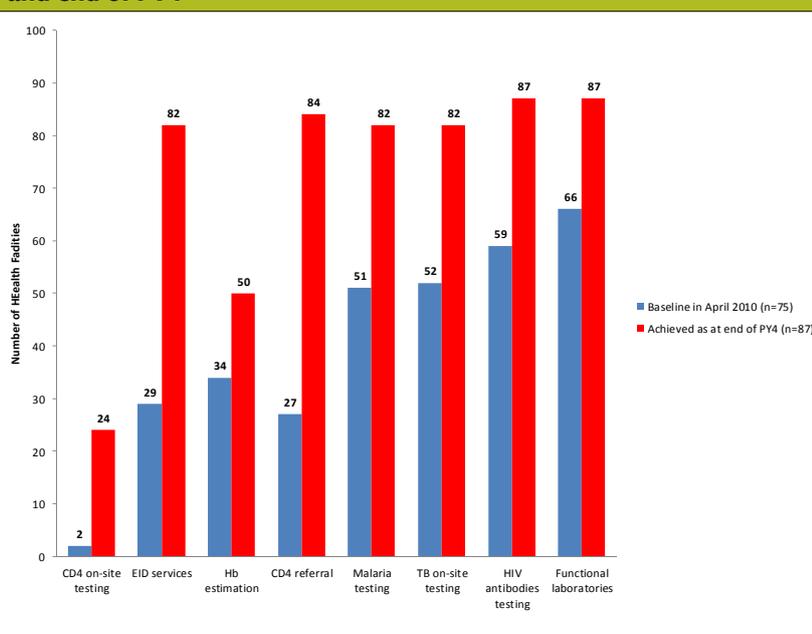
- STAR-EC will continue to support districts in eradicating or reducing stock-out of reagents through improved working relations with the National Medical Stores
- Continued advocacy for district authorities to recruit more staff to cope with the high demand for diagnostic services for other clinical ailments besides HIV and TB coupled with creation of more hubs to decentralize testing at HSD level such that services are taken closer to the community

## Success Story

### Community access and utilization of laboratory services increased

A Laboratory Needs Assessment conducted in PY2, 2010 by STAR-EC in collaboration with MoH indicated that there was limited community access to essential diagnostic laboratory services in the region due to few functional laboratories and lack of basic equipment like microscopes at many HCs. Interventions implemented by the program that included provision of laboratory equipment (microscopes, CD4 machines, haematology analysers, colorimeters), training of laboratory services providers, strengthening external quality assurance implementation, over the years indicate that by end of PY4, access to and availability of various essential laboratory services increased at all supported facilities.

**Figure 23: Access to laboratory services (%) at baseline (April 2010) and end of PY4**



Source: STAR-EC program records

### 2.2.5 Improving supply chain management

During PY4, STAR-EC continued to build capacity that had been created at the district and HSD level during PY 3 with a view of improving supply chain systems. District health management team members namely: District PMTCT, laboratory and ART Focal Persons as well as District TB and Leprosy Supervisors were supported to coordinate submission of commodity orders by health facilities to NMS and JMS on a bi-monthly basis. In collaboration with Securing Ugandans' Rights to Essential medicines(SURE) project, 13 medicines management supervisors (MMS) were trained and facilitated to carry out a baseline assessment of the standardized supervision, performance assessment

and recognition strategy (SPARS) in 52 HCs. Other strategies supported to improve availability of commodities included:

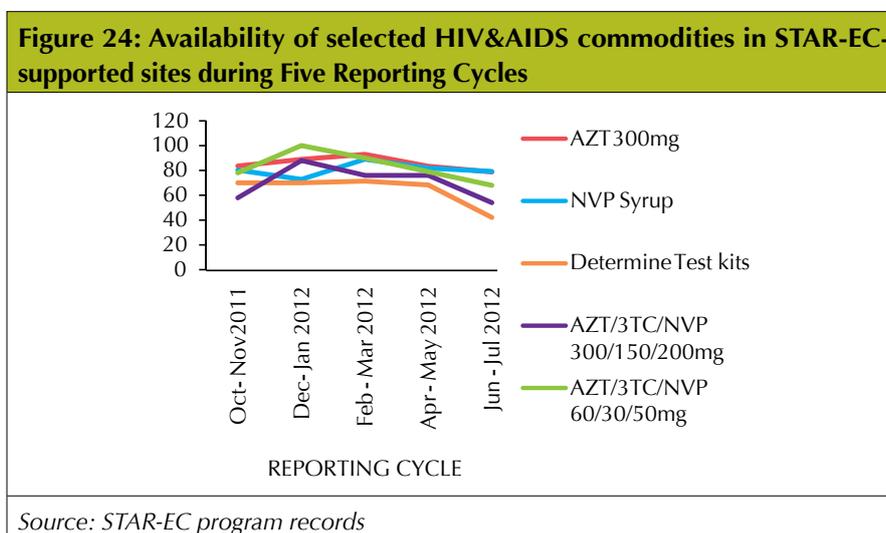
Improving product selection and quantification	<ul style="list-style-type: none"> <li>In collaboration with district hospital pharmacists from Iganga and Bugiri, STAR-EC supported dissemination of 2010 ART guidelines to 42 health centers and provided technical assistance on quantification</li> </ul>
Supporting the distribution function	<ul style="list-style-type: none"> <li>Distributed PMTCT commodities including ARVs, test kits and related accessories from NMS to 9 newly trained HCs II. Subsequently, facilitated HCs IV and hospitals to distribute HCT, PMTCT, HIV care and prevention commodities to 34 new HCs II</li> <li>Distributed HIV test kits and TB drugs from NMS to 42 HCs in eight districts as part of an emergency order following a national stock out</li> </ul>
Improving quality through capacity building and records management	<ul style="list-style-type: none"> <li>Provided Logistics Management Information tools to 140 HCs</li> <li>Trained 157 health workers in logistics management of ARVs, laboratory and Therapeutic Foods</li> </ul>

The program also provided wooden shelvings to 22 health centers as well as wooden pallets to 18 newly accredited sites in the region with the aim of improving storage practices. The picture below shows the impact of providing shelving on storage management.

### Improved Storage Management at Lolwe HC II following Provision of Wooden Shelving



However, much as availability<sup>7</sup> for some commodities improved at the beginning of PY 4 as shown in Figure 23 below, a gradual decline started in Q2 possibly due to reduced availability at national level as displayed by the MoH stock status reports. This in turn led to a drop in reporting rate from an average of 92% in PY 3 to 84%<sup>8</sup> by the end of PY 4 attributed to lack of morale arising from a low order re-fill rate.



<sup>7</sup>Availability as defined by MoH's minimum months of stock: 2 months of stock for ARVs and 3 months of stock for test kits

<sup>8</sup>Source: STAR-EC Program records

## Lesson learned

Availability of supplies and commodities at service delivery points requires various strategies including involvement of district health leadership in improving reporting and ordering for commodities, as well as supporting commodity distribution and re-distribution functions

## Challenges

- Recurrent stock outs of critical HIV&AIDS and TB commodities have impeded service delivery such as HTC, HIV chronic care and blood sample referral for CD4 testing
- Routine staff transfers reduce skilled labor at health facility level that is critical in providing relevant services consequently reducing the quality of services

## Way Forward

STAR-EC will continue to facilitate the medicines management supervisors (MMS) as key focal persons on supply chain management to build capacity among health workers through comprehensive supervision across intervention areas, rolling out the web-based ordering system as well as supporting the re-distribution function that has proven critical in ensuring consistent availability of commodities at health facility level.

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

### 2.3.1 Health Care Improvement

Program Year IV was characterized by efforts to improve the quality of service delivery across all intervention areas. Key strategies employed to achieve this included mentorships for clinical teams, joint and integrated support supervision visits, support for monthly continuous professional development sessions as well as support for facility and district based quality improvement teams. During the reporting period, the 84 health facility quality improvement (QI) teams received continuous mentorship on the quality improvement principles including organizing clinic activities, implementing action plans, and improving data collection, analysis and utilization at facility level. Additionally three CSO QI teams and VHT coordinators from all the districts received mentorship on documentation, reporting and principles of community eMTCT. These quality improvement efforts have resulted in the general increase in the number of clients served and improvement of patient care indicators as elaborated under the different thematic areas that are presented in earlier sections of this report.

In an effort aimed at promoting the participation of Ministry of Health in program activities, STAR-EC supported



*Mentor and health workers look at facility ART register during joint support supervision by MoH, STAR-EC and CDC at Kiyunga HC IV*



*Analyzed data displayed at Iganga - Health facilities are now using data for monitoring and planning service delivery*

the conduct of integrated support supervision at 39 health centers; 4 PLHIV groups; 4 CSOs; and 3 VHT groups in East Central Uganda. Reports showed that all the facilities visited implemented services according to national guidelines. All the sites demonstrated ability to effectively collect data, analyze it and utilize it in planning as evidenced by their data summaries displayed on walls in various clinics; and there were clear linkages between the community, CSOs and health facilities.

### 2.3.2 Addressing the quality of health care through improvement projects

During the reporting period, STAR-EC adopted an approach of engaging facility teams in competitively

#### **Irundu HC III; New ART accredited Health Facility displays improved performance through its QI team**

- Properly filled registers
- Patient flow chart displayed at all clinic departments
- Well displayed information and trends analysis in form of Charts and graphs
- Very organized and clean health facility
- Clear evidence of team work
- QI team meetings held regularly
- Monthly summaries in the registers
- Integrating FP in HIV care with a properly filled register
- Able to do testing and counseling among all pregnant women during Labor, ANC and PNC
- Linking all HIV positive mothers to ART clinic

improving areas of weakness as identified through routine analysis of program data. A total of five projects were launched during the year which included implementation of the '5S' (sort, set, shine, standardise and sustain) principle of quality improvement; improving the uptake of family planning, improving HMIS reporting, active identification of eligible clients and tracing lost to follow up clients. Consequently, the cases of lost to follow up on ART in a twelve month cohort reduced from 19.3% at the end of PY3 to 18% during PY4, the number of newly enrolled on ART has also increased by 7%. The implementation of the '5S' principles and co-opting of other staff out of the HIV clinic has helped in expanding QI initiatives beyond TB and HIV&AIDS.

Additionally, STAR-EC supported 44 health facilities (through the use of quality improvement teams) from Kamuli, Iganga, Mayuge, Buyende and Bugiri Districts to pilot the implementation

of 'provider initiated family planning' aimed at improving the uptake of FP services. The teams employed several strategies including: utilization of expert clients to sensitize clients on the availability of family planning services; reinforced counseling on family planning; referral of all those in need to a designated worker and active documentation of all clients offered the services. As a result of these efforts, a total of 24,619 clients received various FP methods out of whom 14,168 were new and 10,451 were revisits. The majority of the clients 9,629 (39%) preferred injectable contraceptives. During PY5, the remaining, 40 facilities will be supported to take on this initiative to increase the uptake of family planning. The program will continue working in close partnership with STRIDES for Family Health and Marie Stopes to improve accessibility and utilisation of family planning hence improved performance of prong II of PMTCT.

### 2.3.3 Facilitating change through sharing best practices

Over the reporting period, STAR-EC supported nine districts to hold district based collaborative learning sessions. This presented an opportunity for the QI teams to share achievements, learn from performing facilities, address cross cutting and facility specific challenges, receive feedback from district quality teams as well as get the district leadership more involved in issues affecting service delivery. Through these sessions, there is evidence of improved health workers ability to collect, analyse, plot and display facility data that guides patient care and planning.

## Lessons learned

- Joint clinical mentorships between STAR-EC MoH and district staff enable the transfer of skills to district based mentors as they work with senior staff
- Districts based learning sessions increase district participation in quality improvement and encourage ownership of quality improvement activities by the district leadership

## Challenges

- Heavy work load and inadequate staffing levels make it difficult for the site teams to effectively concentrate on quality improvement activities and their identified projects
- The staff changes and transfers that occurred in a number of facilities affected the composition of quality improvement teams and implementation of QI activities.

## Way forward

- Joint clinical mentorships and district based collaborative learning sessions will continue during PY5 to support the teams sustain the best practices achieved so far and further build the capacity of districts to eventually take over QI activities

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

### 2.4.1 Scale up of TB and HIV&AIDS service through the Village Health Teams (VHTs)



In an effort aimed at increasing uptake of TB and HIV&AIDS service in East Central Uganda, STAR-EC planned to support MoH to scale up the VHT structure by forming more 600 VHTs; 15 VHTs were taken through a trainers of trainees (TOT) course and later supported to train 625 VHTs from Namayingo, Luuka, Kaliro and Mayuge Districts. This shows 104% achievement in this area. VHTs have gained skills in community PMTCT, TB intensified case finding, mobilization for VMMC, HTC, condom promotion, referrals and networking as well as general knowledge in community mobilization and sensitization.

*“In fact I thank STAR-EC! After the training at Ntinda Valley Hotel – Iganga District, I have reached about 300 people in their households with counseling and I have given out referrals in a period of six months. I also know how to handle clients very well when they come to the facility”.*

During PY5, STAR-EC facilitated VHTs with supplies such as referral books, VHT registers and reporting tools. In addition logistics such as umbrellas, and T-shirts were supplied to facilitate their community work. Further still, 100 model VHTs in the nine districts were facilitated with rain coats, gum boots, and bags. Beyond the basic training VHTs received, STAR-EC utilized

**Table 6: Coverage of VHTs in the East Central region**

District	Total Villages	Villages covered with VHTs	% contribution of STAR-EC	% un met need for the district
Kamuli	756	336	28	56
Bugiri	384	205	54	47
Buyende	340	36	100	89
Kaliro	94	222	54	24
Mayuge	530	201	45	62
Namutumba	349	178	71	49
Luuka		140	100	
Iganga	389	115	75	70
Namayingo	250	101	84	60

the Radio Distance Learning Program to enhance knowledge of 980 VHTs in the districts of Mayuge and Bugiri. The pre-recorded program aired in the two radio stations addressed the knowledge gaps in the areas of family planning, HIV prevention, alcohol abuse, gender based violence (GBV), HTC and ART. This has enabled VHTs to; provide comprehensive messaging in various fields, promote good health in the community and liaise with



VHTs during an orientation on HMIS in Iganga district

health facilities through referral and data collection. As narrated by a VHT member, *“the radio program has helped us get recognition for our work. They even look for us to provide clarifications on health matters in their households”*

STAR-EC also supports districts to conduct quarterly VHT review meetings in which they provide feedback on their performance, share experiences and communicate any emerging issues from the communities. Progressively, VHTs have sensitized communities on VMMC, TB, HTC, ANC, PMTCT, family planning and actively participated in condom promotion during home visits, community

dialogues and integrated service delivery outreaches. Consequently eligible people from the community have been identified and effectively linked for various services as shown in Table 6.

During PY4, STAR-EC also supported MoH to conduct community HMIS orientation and support supervision to VHT structures in East Central Uganda. And as a result of this, three districts including (Namutumba, Bugiri and Iganga) have submitted their data through HIMS to MoH.

## 2.4.2 Strengthening the coordination structures of people living with HIV (PLHIV)



PLHIV in Gadumire- Kaliro demonstrating their benefits from Linkage to NAADs

In the previous year (PY3), STAR-EC in collaboration with NAFOPHANU rejuvenated all the sub county level PLHIV networks in the region and built their capacity in lobbying, advocacy and referrals and networking. During PY4, STAR-EC continued to provide quarterly support to these networks to; establish PLHIV groups, conduct support supervision and stake holders review meetings, integrate WASH into home based care, provide psychosocial support to fellow PLHIV and conduct referrals. Through STAR-EC’s support, a total of 27 against 80 (PY4 target) PLHIV psychosocial groups were formed in the nine districts (three per district) with a deficit of 34%. This was due to the fact that NACWOLA pulled out its support to the groups and it remained a challenge to continue bringing them together. However, the existing 27 groups mobilized themselves to improve their livelihoods through small projects such as art and crafts, poultry keeping, plantations and animal keeping. They have also accessed support from the NAADs program in their respective districts in form of poultry, piggery, goats, bee keeping, improved seeds for planting, and developed a saving culture through the savings and credit scheme. Buluguyi PLHIV group for example, has saved about 2.5 million shillings, Bulesa 300,000 shillings, and Nakalama 2.5 million shillings from which members benefit through obtaining low interest loans.



Consequently 19,638 (11,782 females and 7,856 males) PLHIV and their household members were reached with wrap around services against the annual target of 300. This was attributed to the strengthened collaboration with other partners like Plan Uganda, AIDS Education Group for Youth, Child Fund, TASO, government programs

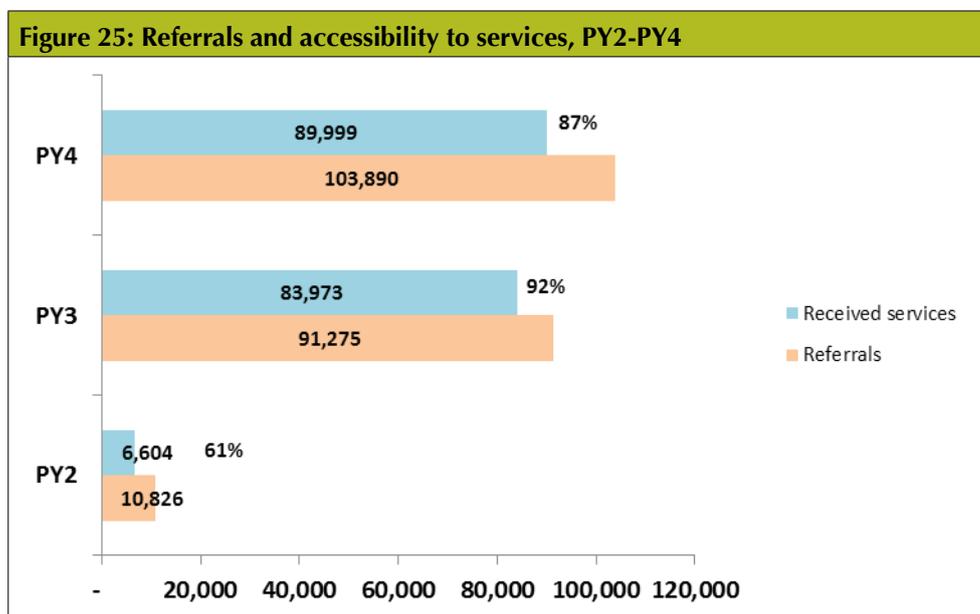
like NAADs and other local CBOs.

To further foster meaningful involvement of PLHIV (MIPA), STAR-EC supported NAFOPHANU to guide the development of HIV Strategic plans for district PLHIV networks. Districts working closely with lower level PLHIV networks and making use of the relevant reports like the AIDS Indicator Survey 2011, LQAS annual household survey data 2009-2012 and the National HIV strategic plan, have developed draft strategic plans and await the PLHIV district general assembly for further discussions and approval.

### 2.4.3 Fostering effective linkage of health centers to community structures to increase uptake of TB and HIV&AIDS services

Review of STAR-EC program data (PY1 to PY4), shows that the proportion of people who have accessed services through referrals in the nine districts has increased significantly from 10, 826 in PY1 to 103,890 in 2012 with a higher proportion of people accessing HCT, PMTCT, Family planning, ANC, TB, SMC, psychosocial support, STI, Home based care and wrap around services.

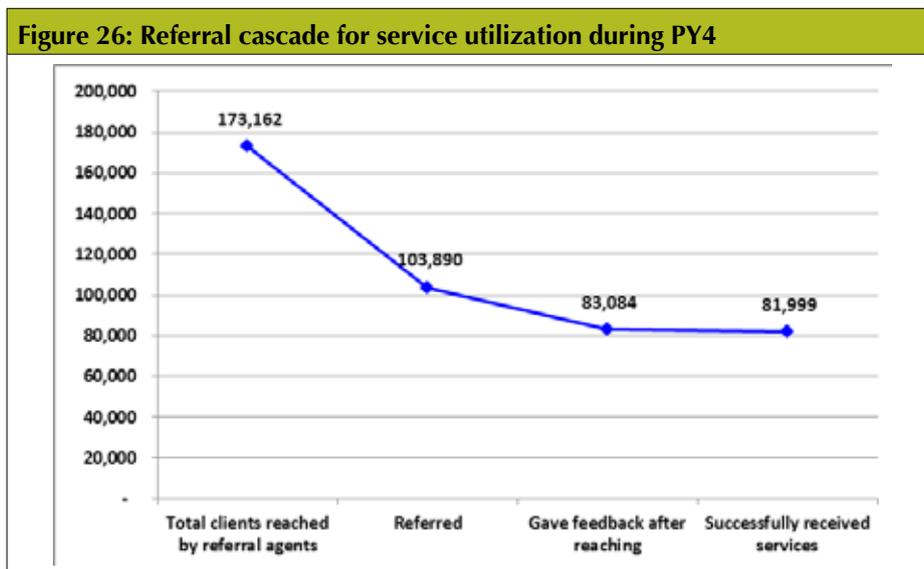
This was attributed to the support provided by STAR-EC to districts to strengthen the relationships between health facilities and community structures. As it is in the community, STAR-EC supported health centers to identify referral focal persons to coordinate all intra, inter and community – facility referrals. Focal persons from 4 hospitals, 12 HCslV, 45 HCslII and 14 HCslI, have been supported to conduct quarterly joint networking meetings involving health workers, 'mentor mothers', VHTs, community support agents (CSAs), CSOs and other partners. In addition, joint networking meetings at 16 health sub district level have been supported and in all these meetings issues related to improving linkages; follow up of clients, honoring referrals from the community, responding to clients concerns, intra and inter facility referrals, attitudes of health workers among others are addressed. Currently the region has 75 (103%) health facilities with functional referral system between community and clinical services against the 73 facilities targeted for PY4. As a result of this joint effort, 103,890 referrals were made by the community structures and of these 89,999 accessed services. The graph below shows referrals trend from PY1 to PY4.



Source: STAR-EC program Data

The figure above shows a great improvement in the accessibility of TB and HIV&AIDS services from PY1 to-date. This is attributed to the fact that community systems have been strengthened and there is a significant networking level of the community and the health facilities. However, the referral still had limitations. With the termination of NACWOLA there was a challenge of not having a community based referral coordination body which could track all the referrals from point of referral to completion. This led to delays in accessing services and limited follow up by the referring agents.

During PY4 community referral facilitators while conducting door- to door mobilizations they reached 173,162 community members with TB and HIV&AIDS related messages. During such visits they identify clients eligible for referrals and referral forms provided to access services from desired service provision points. The referral cascade below shows the trend of service utilization.



Source: STAR-EC program Data



DAC meeting for Strategic Planning in Iganga District

#### 2.4.4 Strengthening the capacity of districts to develop HIV strategic plans

STAR-EC and the Uganda AIDS Commission supported Bugiri, Iganga, Mayuge, Kamuli, Kaliro and Namutumba Districts to develop integrated HIV strategic plans as per the National HIV Strategic Planning guidelines. This support offered the districts an opportunity to define key priorities and activities for HIV &AIDS responses as well as indicators and targets that the districts should focus on during the next four years. The exercise was highly participatory; a technical working group with representatives from all departments was nominated which worked tirelessly to produce draft HIV strategic plans which have been discussed by the District

HIV/AIDS Committees and are currently awaiting approval by the respective district councils.

#### 2.4.5 CSO Mentorship and Coaching

During PY4, STAR-EC continued offering technical support to the three prequalified CSOs namely; Family Life Education Program (FLEP), Uganda Reproductive Health Bureau (URHB) and Youth Alive Uganda (YAU). Quarterly support supervision visits were organized for each CSO where a multi-disciplinary team from STAR-EC provided feedback to the CSOs on their performance and discussed ways of addressing gaps. Other support offered included orientation of new staff in the various technical implementation aspects, review of human resource and financial policies and review of FLEP's organizational policies and development of sustainable systems. Through this support, it was observed that URHB and Youth Alive regional offices experience delays in dissemination of policies from their head offices in Kampala and this affects their implementation. STAR-EC has made efforts to address the gaps identified during the OCA for the prequalified CSOs. URHB was supported to review their human resource manual and as a result an audit was conducted which resulted in the recruitment of new staff. FLEP was also supported to identify other partners to mobilize resource for implementation and organizational development, As a result TASO with support from the civil society fund (CSF) supported FLEP to review the Board of Trustees manual while STAR-EC supported them to review the financial and human resource manual.

## Lesson Learned

Continuous engagement of CSOs in identifying their gaps enhances their capacity in developing action plans that promote ownership of interventions thus improving service delivery

Under the care & support section, the lesson learned is:

- Decentralizing care to lower level facilities increases enrollment into care, although it is rather costly regarding capacity building support.

## Way forward

- STAR-EC will guide the VHTs and PLHIV networks on how to utilize and leverage other Government resources like those provided by NAADS and community driven development grants (CDD) for referral.
- MOH will be engaged to support districts and the VHT leadership in generating, analyzing, interpreting and utilizing data for decision making

## Challenges

- Limited referral points for wrap around services in the region have hampered the efforts of PLHIV and VHTs referring clients for non-clinical services
- The capacity of districts to analyze data generated by VHTs in their communities for decision making is still limited
- Fostering the relationship between health workers, CSAs and VHTs is still a challenge, thus the prevailing big numbers of clients lost to follow up

**Table 7: PY4 targets Vs achievements**

Indicator	Targets	Achievements
No. of functional VHTs	600	901
No. of Functional PLHIV groups	80	86
No. of Health facilities with functional referral system	73	82
No. of PLHIV households using wrap around	300	19,638
No. of CSOs supported for institutional capacity building	13	3

## Success Story

It was a routine home visit day for Harris, a VHT who found Ruth, 70 years old from Bulaga Village



*Ruth with her family enjoying their harvests as she narrates her story and appreciating VHT work*

Namutumba District confined in the house with a cough, a lot of night sweats and severe chest pain that had lasted for over three weeks as she explained. After a lengthy explanation, a visiting VHT referred Ruth for sputum examination at the nearby health unit. On examination the sputum was positive and Ruth was immediately started on TB treatment. Being elderly she had challenges with monthly appointments so the VHT had to deliver medicines to her home the consecutive months. After eight months of treatment aided by the VHT, follow up screening was done in September 2012 and she is now cured. "... I appreciate the VHT who visited me and directed me where to heal from. He has made me live up to now, he has been bringing medicines every month, I have not used any money for

transport. I am now cured, strong and can take care of my family. I was worried of my grand children if I died then. I thank the program which brought VHTs in Namutumba".

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

During program year four, STAR-EC expanded the scope and scale of behavior change communication to ensure continual refinement of target group and behavior change messages through diverse and contextually appropriate range of interventions. To this effect, the program targeted audiences with relevant messages through: the interactive one-hour radio program; IEC materials and job aids; and interpersonal communication through peer educators, VHTs and health workers. The program also collaborated with the MoH and other partners such as HCP and UHMG to implement communication interventions. These interventions addressed issues highlighted in the LQAS (2010) that included low condom utilization among the Most- at-risk populations, low comprehensive knowledge about HIV&AIDS among others.

### Creating demand for services through the interactive One-hour Radio program

Throughout PY4 , STAR-EC continued to support the one-hour interactive radio program on NBS Kodh’eyo 89.4 FM that aimed at improving demand for TB and HIV&AIDS prevention, care and treatment services by reinforcing messages delivered through other channels. Local leaders, Health professionals, VHT members, and beneficiaries of health services were among the guest speakers. A total of 52 interactive radio talk shows were aired during this period covering such topics as enumerated below:

- Role of VHTs and Health workers in referrals for TB and HIV&AIDS services
- Prevention of HIV&AIDS/ABC+ prevention strategy
- TB prevention, care and treatment
- Role of Local Leaders in TB and HIV&AIDS prevention, care and treatment
- Voluntary medical male circumcision
- Couple HIV counseling and testing
- PMTCT /EID
- Adherence to ART
- HIV&AIDS related stigma and discrimination

During these sessions, speakers addressed a number of concerns including myths and misconceptions. The myths were demystified by facts presented by guest speakers as illustrated in the illustration below:

Some Common myths (from radio Callers)	Vs	Facts (from Guest Speakers)
<ul style="list-style-type: none"> <li>▪ ARVs cure HIV</li> <li>▪ Voluntary Medical Male Circumcision (VMMC) negatively affects sexual performance of a man</li> <li>▪ The foreskin removed is sold to make other products like lip shine for ladies</li> <li>▪ When you test for HIV after taking pain killers like panadol the virus is not detectable in the blood</li> <li>▪ You can get TB by sharing utensils with an infected person</li> </ul>		<ul style="list-style-type: none"> <li>▪ ARVs do not cure HIV but suppress the viral load</li> <li>▪ VMMC does not negatively affect the sexual performance of a man because the only part of the reproductive organ touched is the fore skin but other parts are not tampered with</li> <li>▪ The fore skin is burned on the site of service provision e.g. at outreaches or incinerators for static sites</li> <li>▪ Pain killers do not kill HIV antibodies that are tested for. Whether an HIV person has taken pain killers or not these antibodies will be detected</li> <li>▪ TB is an airborne disease so using utensils with infected persons does not spread the disease but all TB clients should be started on treatment so as to reduce chances of spreading the disease to others through air</li> </ul>

STAR-EC also supported airing of four radio spots produced by the MoH and UHMG twice a day on two regional radio stations (Victoria FM and NBS 89.4 FM) for a period of 6 months. The MoH spots encourage couples to test together and mothers to attend antenatal clinics to avoid transmission of HIV from the mother to the child. The UHMG spots encourage community members to get off the sexual network in order to live a good life. The radio spots also direct community members to service delivery centers.

## Intensifying demand for services through Information Education and Communication (IEC) materials and Job aides

In addition to radio messages, STAR-EC disseminated IEC materials during this reporting period to reinforce messages disseminated through interpersonal communication. The materials disseminated during the year included: Paediatric ART guidelines and dosing charts received from the MoH; brochures on facts about voluntary medical male circumcision in Luganda and English, VMMC grain sack flipcharts, VMMC signposts which were placed at VMMC service centers, the VMMC policy document and the VMMC communication strategy.



A health worker gives out couple HTC leaflets to couples during an outreach in Namayingo District

Others included: couple HTC leaflets and posters; Peer Educator talking points; as well as TB prevention and care brochures.

Job aids were disseminated to health workers during the mentorship visits to ensure they understood their usefulness and interpretation while educational materials were distributed to clients as they waited for services at different stations or during their interaction with the health workers.

A health worker from Ivukula said, *“Having these ART guidelines displayed on the wall reminds me on how to deal with clients and the dosing chart guides me on who gets what to avoid mistakes. The Ministry of Health should have guidelines for all health services printed so that we*

*display them on the walls.”*

As a result of the various behavior change communication interventions implemented since the inception of the STAR-EC program, there has been a notable improvement in a number of BCC indicators across the nine supported districts as revealed by the LQAS results illustrated below:

**Table 8: Key Behavioral Change Communications indicator results, LQAS 2009 – 2012**

INDICATOR	2009	2010	2011	2012
% of individuals that received at least one message about HIV&AIDS prevention in the last 3 months	63.1	60.0	65.1	75.5
% of individuals that received at least one message about HIV&AIDS care and treatment in the last 3 months	55.9	53.2	60.4	70.6
% of individuals that received at least one message about TB in the last 3 months	39.9	41.7	51.7	68.1
% of individuals that received at least one message about ART treatment in the last 3 months	40.6	40.3	48.1	62.2
% of individuals that received at least one message on other HIV prevention (OP) methods in the last 3 months	58.9	56.5	50.1	65.3
% of individuals that received at least one message on AB in the last 12 months	58.6	45.0	59.5	69.7

Most of the BCC indicators show an increment in coverage especially over the last two years when compared to the first two years of this assessment.

Source: LQAS 2009 -2012 Household survey reports



*Clients receiving TB screening in Namutumba and HTC services in Bugiri Districts during AIDS commemoration*

### Utilizing World AIDS Day and World TB Day to provide integrated services to big numbers of people

During the reporting period, STAR-EC in collaboration with SDS supported all the nine districts to commemorate the World TB and World AIDS days, respectively. This opportunity was utilized to support integrated service delivery outreaches to the target population. District leaders including LCV chairpersons, Chief Administrative Officers and Resident District Commissioners presided over the functions. Spiced with drama and testimonies from PLHIV, a package of HTC services, VMMC, TB and reproductive health services were offered. Also used it as an opportunity to serve civil servants who are usually hard -to-reach through community outreaches

### Working with other partners to provide integrated services



*Community members waiting for health services at Magada HCIII during the integrated outreach*

In a bid to respond to the malnutrition crisis that hit Namutumba District in 2011 where children were dying of malnutrition while the community suspected witchcraft, UHMG organized an integrated services outreach at Magada HC III. Different partners including the MoH, Banking sector, pharmaceutical industry, and the media houses joined hands to provide a wide range of services to the affected population. Services offered included: health education; nutritional guidance; immunization; and the treatment of minor illness in children; and the entire community. In addition, STAR-EC supported provision of HTC services and TB screening during this outreach and 103 community members tested for HIV. Six people tested HIV positive and were enrolled into chronic care at Magada HCIII. A total of 36 community members had their sputum screened for TB and none was positive.

STAR-EC also partnered with a regional radio station Nile Broadcasting Services (NBS) in their corporate social responsibility drive code named "NBS – Luwombo" in nine districts to deliver integrated HIV care services to the target population. Services provided included: HTC, VMMC, family planning, TB screening and treatment, STI screening and treatment and immunization. In this collaboration 1,333 people received HTC services out of whom 33 were HIV positive and were linked into care. In addition, 742 males received VMMC services.

## Increasing individual risk perception through Games and entertainment



*Peer Educators utilizing Get off the sexual network game stimulate public discussion.  
Photo 2 a peer educators engages fisher folks in MCP discussion*

The collaboration with UHMG through trainings and development of appropriate IEC materials reinforced our interventions for MARPS in the region. Working with trained peer educators within the social networks of the targeted audience (Bodabodas, CSW and fisher folk), STAR-EC managed to educate MARPs on: MCP, correct and consistent condom use, and faithfulness through edutainment participatory approach and also utilizing MARPs-specific IEC materials to ensure adoption of healthy practices. The 'get off the sexual network' game, a concept adopted from UHMG campaign influenced people to take up immediate HIV tests and seek other medical services hence a step towards behavior change. Working with peer educators to conduct one-on-one message during integrated service outreaches in the MARPs location enhanced appropriateness of communication for impact.

### Lesson Learned

Working with other partners in health services delivery provides an opportunity to leverage each other's strengths in order to provide an integrated package of services to the community.

### Challenges

- Given that most of the key populations like the fisher folk and commercial sex workers are mobile, there is need to have continuous communication interventions in order to appropriately reach the changing population
- Some communication print materials displayed in areas that are presumed to be very accessible to clients suffer from misuse when they are pulled off when still relevant
- Health workers still need a lot of support to utilise every opportunity with a client and deliver appropriate health education

### Way forward

- A focused approach to link all BCC activities with key program areas for prevention, care and support will be encouraged. More communication intervention especially among the key populations should be prioritized
- Continued mentorship to health workers so that they utilize all opportunities to give information about services provided at the health facility including effective referrals for services that are provided elsewhere

## 4.0 Conclusion

During PY4, STAR-EC registered enormous achievements that aided increasing the scale and scope of HIV prevention, care and treatment services. Central to all the interventions that were implemented during PY4, was a consistent focus on MARPs and vulnerable groups, something that took precedence in order to directly address existing epidemiological evidence regarding HIV prevalence in East Central Uganda. In particular, efforts were put on enhancing behavior change communication aimed at increasing individual risk perception coupled with delivery of a combination of HIV prevention services. Although the demand for care and treatment services remains high, this report has detailed progressive efforts that have led to a significant increase in the proportion of eligible PLHIV that are currently enrolled into care and treatment. Similarly, a number of milestones have been covered regarding health and community systems strengthening; which is a prerequisite for delivering a continuum of HIV&AIDS services. Involvement of communities and PLHIV networks in delivering services has been a cornerstone in ensuring that interventions supported under this program are relevant and context specific.

In PY5, critical emphasis will be placed on rapidly scaling up priority interventions and strengthening linkage to services so as to ensure a *'continuum of response'*. The program will continue to work with CSOs and communities with a view of increasing social transformation and community AIDS competence necessary for stemming the tide of new infections. Opportunities for enhancing collaborating, learning and adapting (CLA) will be increased through performance review meetings, exchange visits, quality improvement team initiatives aimed at coming up with new innovations to address the diverse challenges at community and health facility levels.

The magnitude of results detailed in this report could not have been achieved without the partnerships of STAR-EC consortium members, Ministry of Health, district staff, health facility staff and linkage facilitators, CSOs and a number of other Implementing Partners. As STAR-EC focuses on rapidly scaling up interventions during PY5, the need for stepping up this collaboration in order to overcome the constraints highlighted in this report cannot be over emphasized. We wish to acknowledge and thank all STAR-EC program partners for their individual contribution towards the results described in this report.

## Appendix 1: Health Workers trained during PY4 by technical area

TECHNICAL AREA	F	M	Grand Total
Art pediatric	46	16	62
HTC	24	8	32
Lab services	8	31	39
PMTCT	57	27	84
Strategic information	110	177	287
Supplies chain management	51	106	157
Sex prevention MARPs	0	10	10
Clinical care additional pediatric	26	5	31
<b>Grand total</b>	<b>322</b>	<b>380</b>	<b>702</b>

## Appendix 2: Analysis of outputs for HIV clinical care services

**Table 11: New clients and current PLHIV clients enrolled in chronic AIDS care during PY4**

Particulars	Oct-Dec 2011		Jan-Mar 2012		Apr-Jun 2012		Jul-Sept 2012		PY4 TOTAL	
	N	%	N	%	N	%	N	%	N	%
New clients enrolled into chronic HIV&AIDS care	2,490		2,972		2,696		3,105		11,263	
Adults 15 years + (% of new enrolled)	2,271	91%	2,637	89%	2,473	92%	2,884	93%	10,265	91%
Males	745	30%	836	28%	860	32%	1,035	36%	3,476	34%
Females	1,526	61%	1,801	61%	1,613	60%	1,849	64%	6,789	66%
Pregnant women (% of females)	267	17%	335	19%	266	17%	301	16%	1,169	17%
Children < 15 years (% of new enrolled)	219	9%	335	11%	223	8%	221	7%	998	9%
0 – 4 yrs.	146	6%	231	8%	130	5%	145	5%	652	6%
5 – 14 yrs	73	3%	104	3%	93	3%	76	2%	346	3%
Clients eligible for ART but not yet started (waiting list*)	122		182		119		162		162*	
Transfer in on chronic AIDS care during this quarter	373		699		520		467		2,059	
Cumulative ever enrolled in care	36,308		35,973		39,421		44,986		44,986	
Current (active) in Care + ART (retention rate) (% of ever enrolled)	17,518	48%	19,534	54%	21,897	56%	24,249	54%	24,249	54%
Transferred Out of facility during the quarter (% of ever enrolled)	124	0.3%	465	1.3%	357	0.9%	182	0.4%	1,128	2.5%

Particulars	Oct-Dec 2011		Jan-Mar 2012		Apr-Jun 2012		Jul-Sept 2012		PY4 TOTAL	
	N	%	N	%	N	%	N	%	N	%
Died during quarter (% of ever enrolled)	42	0.1%	72	0.2%	50	0.1%	44	0.1%	208	0.5%
Lost-to-follow-up during the quarter (% of ever enrolled)	1,803	5%	1,747	5%	1,914	5%	1,198	3%	??	43%
Number of facilities reporting	82		91		93		96		96	

### Appendix 3: Coverage per CSO

Name of Civil Society Organization	Intervention areas	Districts	Sub counties covered
Family Life Education Programme (FLEP)	HTC, ABC, OP, CM	Kamuli, Buyende, Iganga, Luuka, Mayuge	Kamuli : 2/13 Buyende: 3/6 Iganga: 8/14 Luuka; 1/8 Mayuge: 3/13
Uganda Reproductive Health Bureau (URHB)	HTC, TB/HIV, ABC, OP	Bugiri, Namayingo	Bugiri: 6/11 Namayingo; 1/6
Youth Alive Uganda	CM, ABC, OP, HTC	Kamuli, Namutumba, Kaliro, Iganga, Luuka, Buyende	Kamuli : 7/13 Kaliro: 2/6 Iganga : 8/14 Buyende: 4/6 Luuka; 4/8 Namutumba : 4/7

Source: STAR-EC program records

\*2/13 means 2 sub counties out of a total of 13 sub-counties in the district. *Acronyms:* HTC: HIV Testing and Counseling; ABC: Abstinence and Be Faithful and Condom use; OP: Other Prevention; CM: Community Mobilization

### Appendix 4: List of presented papers during PY4

#### International level

#### XIX International AIDS Conference (AIDS 2012) in Washington, D.C., 22-27 July 2012

##### Oral poster presentation

**V.S. Mulema**, D. Tumuhairwe, L.Mumbe, T.Odong, A.Mugume. Overcoming challenges in supply chain management amidst rapid scale up of anti-retroviral services.

##### Poster presentations

**D. Businge**, A. Mugume, S. Kironde, M.O. Smith, T. Odong. Utilizing annual LQAS survey results in strengthening decentralized level planning and decision making: An experience on triangulating HMIS and LQAS data from a newly formed district in East Central Uganda.

**S. Kabogoza**, T. Ojulong, F. Kazibwe, D. Businge, A. Mugume, S. Kironde. Innovative methods to promote couples HIV counseling and testing: A case study of utilizing certificates of recognition in East Central Uganda.

**V. Gwokyalya**, T. Odong, K. Mutesasira D. Okello, R. Mwesigwa M. Najjemba, G. Kayita, A. Mugume, S. Kironde. Utilizing the quality improvement team approach in East Central Uganda to improve and scale up HIV and TB

interventions within a resource limited setting.

**V.S. Mulema**, F.Kazibwe, E.Tibenderana, R.Kimuli, S.Kironde. What does it take to transition from one PMTCT prophylactic regimen to another? Lessons from East Central Uganda.

**S. Auma**, J. Onyando, D.Businge, B. Mugisha, F. Kazibwe, A. Chirowodza. Strengthening eMTCT interventions in East Central Uganda through analyzing client outcomes: Local capacity building and continuous quality improvement involving mentor mothers.

**M. Ndifuna**, S. Kironde, E. Tibenderana, V.S. Mulema, K. Mutesasira. Moving from tens to thousands: How using multiple approaches in East Central Uganda is rapidly scaling up voluntary male medical circumcision in traditionally non-circumcising areas.

**F. Kazibwe**, R. Kimuli, K. Mutesasira, D. Businge, S. Kironde. Lessons from East Central Uganda for improvement of PMTCT and Early Infant Diagnosis (EID) service provision through strengthening of referral processes for mother-baby pairs.

**S. Mashate**, S. Kironde, A. Mugume, K. Mutesasira, Guma, P. Awongo, C. Munafu. Improving the diagnostic capacity of peripheral laboratories in resource limited settings through PEPFAR: Experiences from East Central Uganda.

**E.Babu**, H. Ndagire, T. Odong, D. Tumuhairwe, S. Kironde. Fostering meaningful involvement of people living with HIV and AIDS (PLWHA) in health care service delivery: A case study of utilizing volunteer 'expert clients' at health facility level in East Central Uganda.

**K.Mutesasira**, F. Kazibwe, D.Tumuhairwe, A. Kyakulaga, H.Naigaga. Proactive assessment of people living with HIV (PLHIV) within the care setting enhances identification of clients with unmet contraceptive needs and their linkage to the service; A case study from East Central Uganda.

**H. Ndagire**, E.Babu, T.Odong, R.Mwesigwa, S.Kironde, E.Tibenderana, R.Kimuli, M.Kaleeba, R.Levy. Strengthening networks and referral systems to improve access to and utilization of HIV/TB and wrap-around services: Experiences from East Central Uganda.

## **16th International Conference on AIDS & STIs in Africa (ICASA 2011) in Addis Ababa, Ethiopia, 4-8 December, 2012**

### **Oral presentations**

**F. Kazibwe**, L. Kisaakye, M. Najjemba, J. Onyando, B. Mugisha, S. Auma, R. Kimuli, K.Mutesasira, V. Mulema, A. Mugume, D. Businge, S. Kironde . 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.

**T. Odong**, E.Babu, E. Nakabugo, S. Kironde, R. Kimuli, H. Ndagire, M.Ndifuna, D. Businge, R. Mwesigwa. Utilizing an innovative M&E System to improve community based referral mechanisms for HIV&AIDS and TB services: Lessons from East Central Uganda.

**S. Mashate**, A. Batwaula, A. Mugume, S. Kironde, K. Mutesasira, R. Kimuli, G. Gaspard, P. Awongo, L. Bulage. Strengthening Laboratory TB diagnostic capacity of peripheral laboratories in East Central Uganda - A key contributing factor to increasing TB Case Detection Rate.

### **Poster presentations**

**M. Ndifuna**, M. Bwamiki, F. Kazibwe, V. Sserumaga, R. Mutumba, E. Tibenderana, S. Kabogoza, A. Mugume, S. Kironde. Scaling-up Integrated HIV&AIDS Services to Most-at-Risk Populations: The case of Sigulu Islands of Lake Victoria, Uganda.

**A. Batwaula**, J. Mukasa, K. Mutesasira, F. Kazibwe, E. Tibenderana, R. Mwesigwa, A. Mugume, V. Gwokyalya, S. Kironde. Involvement of lay providers to improve TB service delivery: A case study from Iganga district.

**V.Gwokyalya**, T. Odong, K.Mutesasira, D. Okello, R. Mwesigwa, M. Najjemba, G. Kayita, A. Mugume, S.

Kironde. Using Quality of Care (QoC) teams to improve the quality of HIV/AIDS and TB services in the East Central Uganda

**S. Kabogoza**, T. Ojulong, F. Kazibwe, T. Odong, A. Mugume, S. Kironde. Increasing the uptake of HIV Testing and Counseling Services among Couples.

**M. Ndifuna**, S. Obura, C. Kaluba, S. Kironde, M. Mugume, E. Tibenderana, F. Kazibwe. Taking Safe Male Circumcision services to a fishing village in East Central Uganda.

**S. Mashate**, D. Tumuhairwe, A. Mugume, S. Kironde, K. Mutesasira, E. Tibenderana, B. Kakwanzi, K. Kintu, K. Kirunda, J. Mawali, J. Dhikusooka, P. Ojambo. Increasing access to CD4+ testing services using a specimen referral network for rural settings: A Model from East Central Uganda.

**H. Ndagire**, E. Babu T. Odong, R. Mwesigwa, E. Nakabugo, A. Mugume, S. Kironde, R. Kimuli, D. Businge, M. Kaleeba. Referrals and Networking increases access and utilization of HIV&AIDS and TB services: Experiences from East Central Uganda.

### **Abstracts for publication on the conference website and abstract CD-ROM**

**K. Mutesasira**, D. Tumuhairwe, A. Mugume, S. Kironde, F. Kazibwe, V. Sserumaga, S. Mashate, R. Kimuli, P. Elyanu, N. Nabirye. Accelerating access to Pediatric antiretroviral therapy services in East Central Uganda.

**J. Onyando**, J. Businge, F. Kazibwe, S. Kironde, M. Kaleeba, J. Cheptoris. Overcoming barriers to PMTCT services Access: Experiences from Family Support Groups in East Central Uganda.

## **National level**

### **6th National Pediatric HIV&AIDS Conference (NPAC) at Hotel Africana- Kampala, Uganda September 12-14, 2012**

#### **Oral presentations**

**V. Mukyala**, Z. Kasiira, H. Egulwa, V. Gwokyalya, D. Tumuhairwe. Improving the uptake of HIV services among adolescents in a rural public health facility – The experience of Buyinja HC IV.

**A.K. Atube**, N. A. Juma; D. Tumuhairwe, F. Kazibwe. Utilizing family support groups to increase uptake of pediatric AIDS services: Experience from Bugiri Hospital, Bugiri district.

#### **Poster presentations**

**P. Nangobi**, P. Muwereza, A. Kaggwa, J. Apio, M. Kyalo, Z. Namugoya, J. Katusabe, C. Aramo, G. Kakaire, M. Kaziba, C. Wandawa, G. Mwangale, D. Tumuhairwe, S. Mashate. Is point of care CD4 machine critical in pediatric ART services? Experience of Busesa HC IV

### **Implementation Science for Uganda Society for Health Scientists Annual Conference, Kampala Uganda June 22, 2012**

#### **Oral presentations**

**S. Kironde**. Confronting HIV&AIDS in the 21<sup>st</sup> Century: Moving from research to established practice

### **National Quality Improvement Conference Kampala, Uganda 27-29, February 2012.**

**V. Gwokyalya**. Use of District Quality Improvement teams in building capacity of lower health facilities in quality improvement.





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