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

Program Year V
Annual Report
October, 2012 - September, 2013



THE REPUBLIC OF UGANDA

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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

ABC	Abstinence, being faithful and condoms	DOTS	Directly observed short course
AIDS	Acquired Immunodeficiency Syndrome	DQA	Data Quality Assessment
ANC	Antenatal care	DTLS	District tuberculosis and leprosy supervisor
ART	Antiretroviral therapy	EID	Early infant diagnosis
ARVs	Antiretroviral drugs	eMTCT	Elimination of mother-to-child transmission of HIV
ASSIST	Applying Science to Strengthen and Improve Systems	FLEP	Family Life Education Program
BIWIHI	Bukooli Island Women Integrated Health Initiative	FC2	Female Condom
BMU	Beach Management Unit	FOC-REV	Friends of Christ Revival Ministries
CBOs	Community-based organizations	FP	Family planning
CD4	Cluster of differentiation 4	FSG	Family support group
CDD	Community development department	GLS	Green Label Services
CDO	Community development officer	GoU	Government of Uganda
CDFU	Communication for Development Foundation Uganda	HBHTC	Homebased HIV testing and counseling
CDR	Case detection rate	HC	Health center
CHAI	Clinton Health Access Initiative	HIBRID	HIV Based Real-time Integrated Database
CoR	Continuum of Response	HIV	Human immunodeficiency virus
CPT	Cotrimoxazole prophylaxis therapy	HMIS	Health management information systems
CPHL	Central Public Health Laboratory	HTC	HIV testing and counseling
CSAs	Community support agents	IEC	Information, education, and communication
CSO	Civil society organization	JCRC	Joint Clinical Research Centre
DBTAs	District based technical assistance partners	JDHO	Jinja Diocese Health Office
DCDO	District community development officer	JMS	Joint Medical Stores
DHO	District health officer	JSI	JSI Research & Training Institute, Inc.
DHT	District health team	LC	Local council
DHIS2	District Health Information System 2	LQAS	Lot quality assurance sampling
DMC	District management committee	LTFU	Lost to follow up
DOP	District operational plan	MARPs	Most-at-risk populations

MC	Male circumcision
MCPs	Multiple concurrent partnerships
MDR	Multi-drug resistant tuberculosis
MMS	Medicines Management Supervisors
m2m	Mothers2mothers
MoH	Ministry of Health
MTCT	Mother-to-child transmission of HIV
NACS	Nutritional assessment counseling and support
NAADS	National Agricultural Advisory Services
NAFOPHANU	National Forum for People Living with HIV&AIDS Networks in Uganda
NEQAS	National External Quality Assurance
NMS	National Medical Stores
PACE	Program for Accessible Health Communication and Education
PCR	Polymerase chain reaction
PEP	Post-exposure prophylaxis
PEPFAR	President's Emergency Fund for AIDS Relief
PHDP	Positive health, dignity and prevention
PHFS	Partnership for HIV free survival
PITC	Provider-initiated testing and counseling
PLHIV	Person living with HIV
PMTCT	Prevention of mother-to-child transmission of HIV
PNC	Postnatal care
PNFP	Private not-for-profit
PwP	Prevention with Positives
PY	Program year

QI	Quality improvement
RTC	Routine testing and counseling
SCORE	Sustainable comprehensive responses for vulnerable children
SCHW	Sub county health workers
SDS	Strengthening Decentralization for Sustainability program
SIWAAO	Sigulu Women AIDS Awareness Organization
SLMTA	Strengthening laboratories management toward accreditation
SOAR	Strengthening outcomes, achieving results
SPAI	Service performance assessment and improvement
SPARS	Service performance assessment recognition strategy
STAR-E	Strengthening TB and HIV&AIDS Responses in Eastern Uganda
STAR-EC	Strengthening TB and HIV&AIDS Responses in East Central Uganda
STIs	Sexually transmitted infections
SURE	Securing Uganda's Right to Essential Medicines project
TB	Tuberculosis
TSR	Treatment success rate
UDHA	Uganda Development and Health Association
UHMG	Uganda Health Marketing Group
URHB	Uganda Reproductive Health Bureau
USAID	United States Agency for International Development
VEDCO	Volunteer Efforts Development Concerns
VHTs	Village health teams
VMMC	Voluntary Medical Male Circumcision
WAOS	Web-based ARV ordering and reporting system

Letter from Chief of Party



Dear Colleagues,

I am pleased to present to you the fifth annual report of the Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) program. This Program Year (PY) 5 Annual Report was meant to be the final one for STAR-EC but early this year, and as part of the program's cooperative agreement, STAR-EC was awarded an additional one-year extension till March 9, 2015. This annual report highlights in narrative, tabular, figurative and pictorial forms, representative achievements of the STAR-EC program during the period October 1st, 2012 up to September 30th, 2013. Over the past twelve months, JSI Research & Training Institute Inc., the prime partner for STAR-EC, has continued to maintain cordial and productive relationships with all key stakeholders. The results presented in this report arise out of this continued partnership with the nine district local governments and civil society organizations working in the region with continued guidance and support from the Ministry of Health as well as the United States Agency for International Development (USAID).

I would like to take this opportunity to thank the American people who through the President's Emergency Plan for AIDS Relief (PEPFAR) have generously continued to provide funding for this program, not only to STAR-EC but to many other implementing partners in the region with whom we collaborated during PY5. In addition, thanks go out to our program partners namely: the Bantwana Initiative; Communication for Development Foundation Uganda (CDFU); mothers2mothers (m2m); and Uganda Cares, we continue to value the innovation and technical expertise that you bring to the STAR-EC consortium.

As we share with you the results contained in this report, we would like to reiterate our commitment to working harder during our final year of implementation (PY6) in order to achieve our overall programmatic objectives. We are confident that we will have made a difference in delivering more accessible, comprehensive, quality and sustainable HIV & AIDS and TB services to the population of East Central Uganda by the time of program close in March 2015.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dr. 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 consortium of partners led by JSI Research & Training Institute, Inc. that comprise the Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) project. This report covers activities performed during Program Year (PY) 5 during the period from October 1, 2012 – September 30, 2013 and is being submitted to the United States Agency for International Development (USAID) by STAR-EC in accordance with the terms of Cooperative Agreement No. 617-A-00-09-00007-00.

During PY5, STAR-EC worked closely with a number of partners at national, district and community levels in a bid to deliver a comprehensive and integrated package of prevention, care and treatment services. Through collaborative efforts with the Ministry of Health (MoH), nine district local governments, Strengthening Decentralization for Sustainability (SDS) project and other partners, STAR-EC registered significant success towards achieving the PY5 targets and improving the quality of service delivery in East Central Uganda. Capacity building activities were implemented simultaneously with the provision of essential logistics and supplies, improvement of the laboratory network system, support to the supply chain management system and enhancement of the capacity of partners to plan, deliver services, evaluate performance, and learn from the experience garnered from implementation.

Given the significant variation in HIV infection risk among different population subgroups, fishing communities, commercial sex workers and long distance truck drivers were given additional attention in delivering a combination of HIV& AIDS services. As will be detailed in the subsequent sections of this report, there were significant improvements in access to services resulting from the service integration delivery approach that was pursued coupled with the strong referrals and linkages network that was initiated within and between the various TB and HIV&AIDS prevention, care and treatment and 'wrap-around' services.

Cognizant of the serious human resource constraints that have continued to impede the smooth delivery of services countrywide, STAR-EC worked closely with the MoH, PEPFAR, the Uganda Capacity Project, and SDS to recruit 50 additional health workers in East Central Uganda during 2013. This targeted recruitment (the least available cadres were targeted for recruitment) improved on both the numbers and the quality of human resources in 33 health facilities in the nine districts supported by the program.

Utilizing HIV testing and counseling (HTC) as an entry point into all other HIV prevention and care interventions, special focus was placed on targeting key populations. The number of health facilities delivering HTC services rose from 123 static sites and 239 parish level outreaches during PY4 to 132 health facilities (including 4 hospitals, 12 health centres (HCs) IV, 73 HCs III and 43 HCs II) and 385 parish level outreaches during PY5. A total of 817,011 individuals (including those from prevention of mother-to-child transmission of HIV (PMTCT) and voluntary male medical circumcision (VMMC) settings) received HTC and their results during PY5. This was a 124.7% achievement when compared to the PY5 target. Of all the new 20,554 positives identified during this intervention, 93% were provided with Cotrimoxazole prophylaxis while 59% were enrolled into care.

Over the past four years, STAR-EC has scaled up VMMC services to nineteen static health facilities in the region. During PY5, a total of 133,122 males were reached with VMMC services, bringing the total of circumcisions to 228,065 conducted since program inception. According to the annual Lot Quality Assurance Sampling (LQAS) surveys conducted by STAR-EC in the region, the proportion of males aged 15-54 years who have ever been circumcised has increased from 37.4% in 2009 to 51.0% by 2013. This regional VMMC achievement represents 64% of the number of male circumcisions needed if East Central Uganda is to achieve an 80% coverage thereby realizing epidemiological public health impact.

A total of 70,473 most-at-risk populations (MARPs) and 88,214 general population individuals were reached with risk reduction services that focused on abstinence, being faithful, and condom utilization (ABC). In order to increase personalization of risk, and clients were provided with one-on-one counseling and linked to biomedical HIV prevention services on site or to nearby health facilities in pursuit of the 'combination prevention' strategy. As a key result of this effort, a total of 2,621,364 male condoms were distributed from 993 static and 1,815 mobile condom service outlets.

Overall 12,159 new people living with HIV&AIDS (PLHIV) were enrolled into care during PY5 while 34,517 were active in care from a total of 111 static sites. The proportion of children active in care largely remained the same (7.1% in PY4 and 2,508 (7.3%) during PY5. By close of PY5, a total of 14,421 (42%) of clients were served at HCs III in comparison to only 9,597 (39%) served at the same level during PY4.

Implementation of the Option B+ strategy in East Central Uganda commenced in April 2013. By September 2013, provision of Option B+ had been initiated at 98 sites and a total 93 of the 98 sites currently providing Option B+ had been accredited for provision of antiretroviral therapy (ART). Overall, a total of 140,475 women were served during this period and these included 115,804 during antenatal care (ANC); 8,727 during labor and delivery; 14,102 during postnatal care (PNC) and 1,842 who turned up with already known and documented HIV

positive results. Additionally, 3.3% of all the 126,373 pregnant women tested (excluding PNC) were HIV positive (a finding slightly higher than the 3.1% reported during PY4). Of the 14,102 women tested during PNC, 1.7% were found to be HIV positive. Overall, 70% (3,069 HIV positive pregnant and lactating mothers seen at health facilities during PY5) were given ART for life. In the same vein, out of the total of 1,509 HIV exposed babies delivered at the health facilities, 91% accessed prophylactic antiretroviral therapy at birth.

During PY5, access to ART services was expanded through increasing the number of accredited health facilities from 42 in PY4 to 66 sites including (including 4 hospitals, 12 HCs IV, 49 HCs III and 1 HC II. A total of 8,657 new clients (7% children) were initiated on ART. Of the total 20,577 clients active on ART, 1,554 (7.6%) were children. Loss to follow up of clients on ART in PY5 decreased from 16% in Q1 to 11% during Q4.

During PY5, a total of 2,062 cases of all forms of TB were notified resulting in a case detection of 1,397 (34%). The TB treatment success rate has progressively increased over the years from 67% of PY2 to 88% in PY5, and is close to the new national/global target of 90%. The cure and loss to follow up rates stand at 63% and 3.5% respectively and are above the respective national averages of 40% and 12%. Eighty percent of the TB/HIV co-infected patients were enrolled on ART by the end of the PY5 compared to 70% during PY4 and the national average of 49%. Notwithstanding the innovations that the program has undertaken (as described later in this report), the regional case detection rate (CDR) has remained low over the past five years. This raises doubt on the TB burden in the region; a question that will likely be addressed by the upcoming nationwide TB prevalence study.

Notwithstanding the many achievements that were registered during PY5, implementation was negatively impacted by recurrent challenges such as human resource constraints and the frequent stock outs of key commodities notably HIV test kits; CD4 reagents; and cartridges for the point of care Pima machines. Additionally, no circumcisions were done during January 2013 due to the need to ensure that all VMMC sites had fully constituted emergency response kits. We look forward to working closely with USAID, MoH and other partners to overcome most of these challenges during PY6.

Table 1: Summary of achievements since program inception

Intervention area	Key Indicators (Numbers)	Achievements (Number of Individuals served)					% of PY5 targets achieved			Program Cumulative achievements to date (total PY1*-Q2, PY5)	% of end of Program Life Target achieved	PY5 Q3 Comments (unless specified)
		PY1* (implementation from July 2009 -Sept 2009)	PY2 (Oct 2009 - Sept 2010)	PY3 (Oct 2010 - Sept 2011)	PY4 (Oct 2011 - Sept 2012)	PY5, (Oct 2012 - Sept 2013)	PY5 targets	End of Program Life Targets				
HIV Testing and Counselling (HTC)	Individuals who received HTC and their results (including pregnant women &PNC, PMTCT partner testing & VMMC numbers)	10,376	178,303	447,532	461,544	817,011	654,920	125	2,317,295	1,914,766	83	Indicator measures overall HTC services provided at both static and outreach sites including individuals, couples, young people, pregnant women, men who received HTC during PMTCT and those served during post-natal care.
	Individuals who received HTC and their results (excluding pregnant women, PNC & PMTCT partner testing numbers)	10,376	178,303	330,966	335,662	667,687	562,000	119	1,815,875	1,522,994	84	HIV positivity rate was at 2.7%. A total of 49,386 couple units (102,399 individuals) were counseled, tested and received their results together as a couple
	Individuals trained in HTC	64	256	356	32	117	117	100	583	825	142	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 PY5 was not a program priority until a needs assessment deems so. However, on-job support supervision of trained workers will continue till end of program life.
	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)	128 static and 385 parishes (outreach sites)	132 static	107	148	132	89	Due to the implementation of activities by 6 extra (new) CSOs, more parishes have received outreaches when compared to previous program years
PMTCT	Pregnant women with known HIV status (includes tested and received results) including PNC	No Implementation during PY1	65,983	104,689	109,746	140,475	92,920	151	501,420	420,893	84	115,804 women received HTC and results during their first ANC visit, 8,727 L&D and 14,102 PNC with 1.8%, 2.6% and 1.7% diagnosed HIV positive respectively. 1,842 had known and documented HIV+ results. Stock out of test kits limited HTC services when compared to previous quarters
	Pregnant women who received ARVs to reduce the risk of mother to child transmission	No Implementation during PY1	1,759	3,418	3,660	4,341	2,540	171	16,890	13,178	78	Implementation of Option B+ started on 1st April 2011 thus the increment in ART numbers. Out of 4,341 pregnant women, 3,069 were on ART for life
	Persons trained to provide PMTCT services	No Implementation during PY1	177	621	84	453	400	113	870	882	101	For Option B+ implementation to be successful, HWs from new PMTCT sites have been trained while all personnel at old sites have been oriented as well.
	Service outlets providing PMTCT	No Implementation during PY1	68	83	94	118	118	100	118	118	100	However, only 98 of the 118 sites are offering Option B+ services
Sexual and Other Behavioral Risk Prevention (General Population)	Targeted population reached with sexual prevention messages (general pop+MARPs)	51,916	132,011	185,776	117,858	316,003	276,000	114	903,000	803,564	89	Messages included taking an HIV test in accordance with the risk profiles of such individuals. Of these 70,473 were MARPs while 157,316 were emerging MARPs and 88,214 were from the general population
	Individuals trained to provide sexual prevention services	234	564	298	0	162	120	135	1,060	1,258	119	Includes training of district condom focal persons, health educators and VHTs .
	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	70,473	62,400	113	198,900	139,175	70	40,375 of all MARPs were re-visited with additional information on combination prevention during the same program year. More MARPs were reached in Q4 of PY5 compared to earlier quarters due to high level of implementation by new CSOs.

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Intervention area	Key Indicators (Numbers)	Achievements (Number of Individuals served)					% of PY5 targets achieved			Program Cumulative achievements to date (total PY1*-Q2, PY5)	% of end of Program Life Target achieved	PY5 Q3 Comments (unless specified)
		PY1* (implementation from July 2009 - Sept 2009)	PY2 (Oct 2009 - Sept 2010)	PY3 (Oct 2010 - Sept 2011)	PY4 (Oct 2011 - Sept 2012)	PY5 (Oct 2012 - Sept 2013)	PY5 targets	End of Program Life Targets				
Clinical/ Preventive Services- Additional TB/HIV	TB patients who had an HIV test result recorded in the TB register	13	1,802	2,317	1,810	2,024	2,000	101	8,100	7,966	98	Treatment success rate (TSR) for Q3 was 89% compared to 85.4% in Q2
	HIV+ patients in HIV care or treatment (pre-ART or ART) who started TB treatment	0	205	533	421	320	600	53	4,550	1,479	33	In East Central Uganda, STAR-EC continues to observe a low percentage of TB/HIV co-infected patients among TB patients compared to the National figure of 54%
	Individuals trained to provide HIV/TB related palliative care	64	875	250	0	73	44	166	644	1,262	196	43 were trained on multi-drug resistant (MDR)TB while 30 on facility based DOTs to MDR patients
Anti-Retroviral Therapy (ART)	HIV + individuals (active clients) receiving a minimum of one clinical care service (CXT)... Cumulative	283	7,041	16,684	24,335	34,517	43,000	80	74,250	34,517	46	More effort will be instituted during PY6 and PY7 to ensure enrolment of newly identified HIV+ clients into care.
	Adults and children with HIV infection newly enrolled on ART	61	1,776	5,083	5,419	8,657	14,240	61	50,365	20,996	42	End of program life targets were increased in accordance with unmet need estimated basing on eligible population. Scale up strategies will include: utilization of dedicated teams to re-embark on accelerating ART initiation; outreaches, addressing challenges on CD4 testing and transportation of samples as well as strengthening referrals and linkages. Initiation of Option B+ increased ART enrolment
	Adults and children with HIV infection receiving ART (CURRENT).. Cumulative	372	3,119	7,487	12,278	20,577	26,937	76	52,900	22,113	42	Cumulative ART active numbers increased due to the introduction of Option B+ during the quarter
Voluntary Male Medical Circumcision (VMMC)	Males circumcised as part of Voluntary Male Medical Circumcision	0	803	14,327	79,813	133,122	120,000	111	378,350	228,065	60	STAR-EC will continue supporting the training of more HWs to offer VMMC services so that VMMC is integrated into routine service delivery.
	VMMC surgical sites (static)	0	7	15	19	19	19	100	19	19	100	
Health Systems Strengthening and Strategic Information	Local organizations provided with TA for HIV-related institutional capacity building and SI activities	4	13	11	3	9	9	100	11	11	100	During this quarter, six additional CSOs were supported to start program and activity implementation
	Individuals trained in SI (including M&E, surveillance and/or HMIS)	122	379	170	287	93	93	100	383	383	100	63 of those trained were trained/ re-trained in LQAS. All EOP targeted individuals have been trained. The program is consolidating these achievements through on-going mentorship

* PY1 (March-September 2009) involved only 3 months of actual implementation, the rest was program start-up activities

Source: HMIS/STAR-EC program records

1.0 Introduction

1.1 Brief overview of STAR-EC

The Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) program is implemented in nine districts of east central Uganda including Bugiri, Buyende, Iganga, Luuka, Kaliro, Kamuli, Mayuge, Namayingo and Namutumba. Currently, the region is inhabited by an estimated 3.1 million people, approximately 9% of Uganda's current population.

Since inception in 2009, the STAR-EC program has supported TB and HIV&AIDS services delivery in East Central Uganda under the following objectives:

- ▶ 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;
- ▶ Strengthening decentralized HIV&AIDS and TB service delivery systems with emphasis on HCs IV and III and community outreach;
- ▶ Improving quality and efficiency of HIV&AIDS service delivery within health facilities and civil society organizations;
- ▶ Strengthening networks and referral systems to improve access to, coverage of and utilization of HIV&AIDS and TB services; and
- ▶ Intensifying demand creation activities for HIV&AIDS and TB prevention, care and treatment services.

During the past five years, STAR-EC has registered significant progress towards improving the scope, quality, geographical coverage and accessibility of HIV&AIDS and TB services in East Central Uganda using a health systems strengthening approach. Key services such as (HTC, PMTCT and ART hitherto limited to hospitals, HCs IV and a few HCs III have now been taken nearer to people at more HCs III, key HCs II, and within communities as outreaches. VMMC services have since been introduced and are now delivered through 19 health facilities, multiple outreaches and 'circumcision camps.' All public general hospitals in the region have been provided with CD4 count machines and 12 HCs IV and 7 HCs III have received point-of-care CD4 machines from the MoH. Demand for services has been created and both medical and lay service providers have been trained to provide quality services and conduct cross referrals between health facilities and communities. However, there still exist key outstanding challenges as highlighted in the Text Box 1. Given these challenges, in PY5 STAR-EC embarked on a portfolio of key interventions to be delivered to target sub-populations.

TEXT BOX 1: KEY OUTSTANDING CHALLENGES IN EAST CENTRAL UGANDA

- ▶ High HIV prevalence of 5.8% (the estimated number of PLHIV in the region by 2013 are 87,000 of whom only 24,000 (approximately 30%) are currently in care)
- ▶ HIV prevalence not uniform across the nine districts with lakeshore and island districts like Namayingo having a high prevalence of 10.3% compared to 3% for Kaliro
- ▶ High level of multiple concurrent sexual partnerships (MCPs) estimated at 26% among men (UDHS 2011)
- ▶ High prevalence of MARPs in the region (mostly fisher folk, commercial sex workers and truckers)
- ▶ Though prevalence of circumcision in the region is at 45%, LQAS data shows that by 2012, only 32% of adult males were circumcised specifically for HIV/STI prevention purposes. VMMC need in region is currently estimated at 306,000
- ▶ Zonal TB reports for 2011 show TB case finding at only 43%

2.0 Priority intervention areas during PY5

2.1 HIV TESTING AND COUNSELING (HTC)

During program year five, STAR-EC continued with its integrated approach to service delivery and used HTC as an entry point into all other HIV prevention and care interventions. Using the 'know your epidemic, know your response, know your context and cost' paradigm, in collaboration with the MoH, other partners and CSOs in the region, special focus was placed on targeting key populations such as fisher folk, truckers and commercial sex workers at known 'hotspots'. Couples (both married and co-habiting) and 'boda boda' motorcyclists were also targeted. The details of the focus areas

TEXT BOX 2: STRATEGIES USED TO DELIVER HTC DURING PY5

- ▶ Task shifting of HTC from health workers to lay volunteers (RTC volunteers trained to offer PITC)
- ▶ Rolling out PITC to 42 high volume sites (vs. 28 of PY4)
- ▶ HBHTC by expert clients for household members of index HIV clients
- ▶ HBHTC targeting homes and dwelling places of vulnerable children
- ▶ Targeted monthly integrated HTC community outreaches e.g. couple week (during PY3 and PY4 this was offered quarterly), and moonlight and scenario events for truckers and sex workers
- ▶ Integrated Island HTC outreaches for fisher folk
- ▶ Free standing outreaches for 'boda boda' riders and out-of-school youth

and results achieved within HTC service delivery are provided in subsequent sections.

2.1.1 Increasing access to HTC services

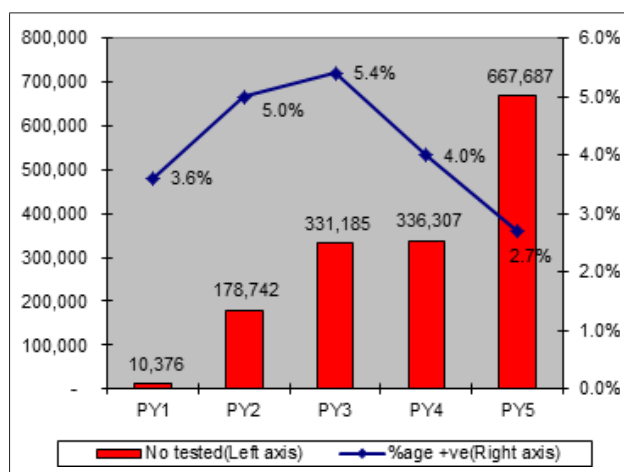
Various strategies as presented in Text Box 2 were used to target the different sub populations with HTC services and all of these contributed to a total of 817,011 clients accessing HTC, a 124.7% achievement over the PY5 annual target. Table 2 further provides the access by population group while Figure 1 illustrates trends of HTC and HIV prevalence by program year. Further analysis of HIV positivity trends by district also shows that all supported districts registered a decline in HIV positivity. While the Uganda AIDS indicator Survey 2011 reported a decline in HIV prevalence in the East Central region from 6.5% to 5.8% in the general population, routine HMIS data on this indicator shows a further decrease from 5.4% in PY3 to 2.7% in PY5.

Table 2: HTC outputs by population group vs. PY5 target

Category	Annual target	PY5 achievement	% achievement
General population	250,000	430,384	172.2
Couples	192,000	102,399	53.3
VMMC males only	120,000	123,967	103.3
Female involvement (VMMC)	n/a	10,937	n/a
Male involvement (PMTCT)	n/a	8,849	n/a
Pregnant women including PNC and known & documented results	92,920	140,475	151.2
Total	654,920	817,011	124.7

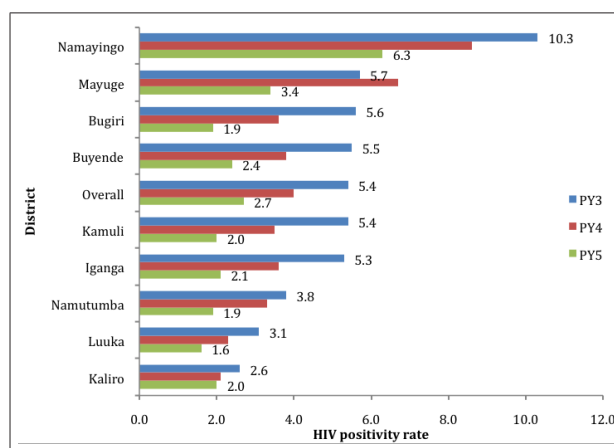
Source: HMIS/STAR-EC program records

Figure 1: HIV testing and positivity, PY1 - PY5 (excluding PMTCT services numbers)



Source: HMIS/STAR-EC program records

Figure 2: Trends on HIV positivity, by district and program year

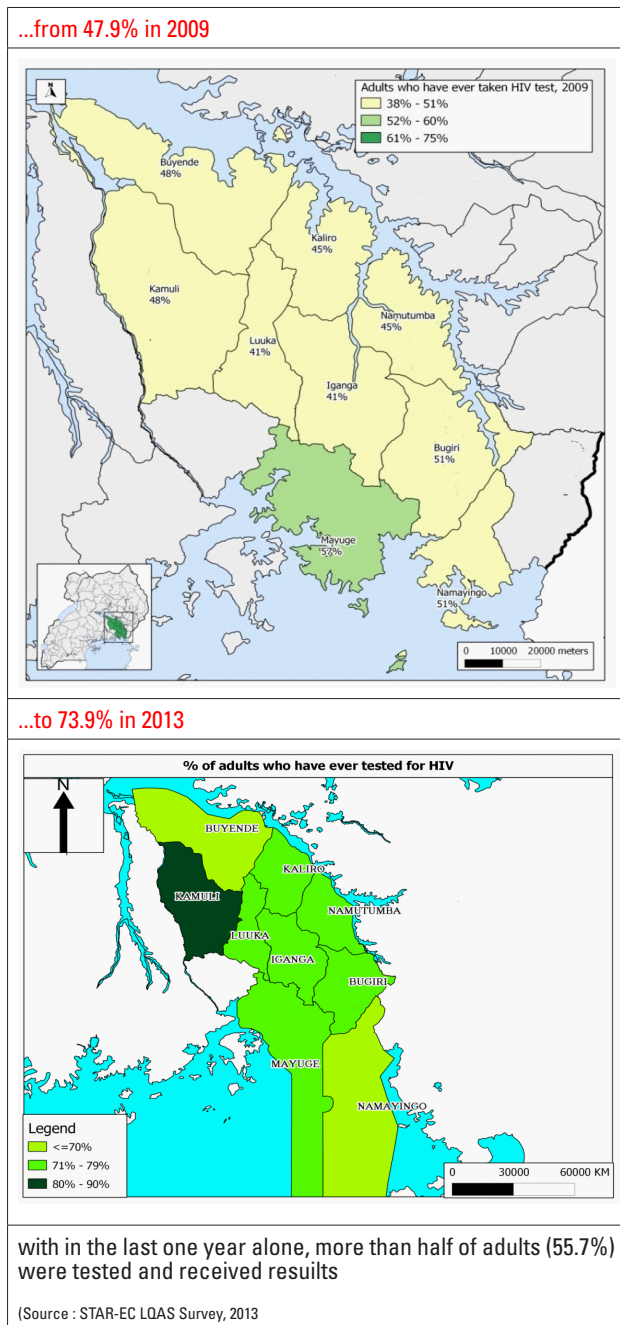


Source: HMIS/STAR-EC program records

2.1.2 Increasing geographical coverage of HTC services

Program efforts have not only been focusing on reaching more people but also at scaling up HTC services to lower level facilities. To date, 132 health facilities (including 4 hospitals, 12 HCs IV, 73 HCs III and 43 HCs II in the region) offer HTC services but also support outreach HTC services and home based HIV testing and counseling (HBHTC). Among the HCs II 33 island and lake shore health facilities were included. All of this is a fourfold increase when compared to PY2 where HTC services were offered through 35 health facilities (4 hospitals, 12 HCs IV and 19 HCs III, all on the mainland). Several outreaches were conducted in 385 parishes during the entire program year. The focus of this scale up has primarily been lower level facilities in high prevalence areas on the mainland including islands and lake shores). Map 1 illustrates LQAS survey results on HTC service coverage in 2013 compared to the 2009 baseline.

Map 1: The road we have traveled - HTC ever tested



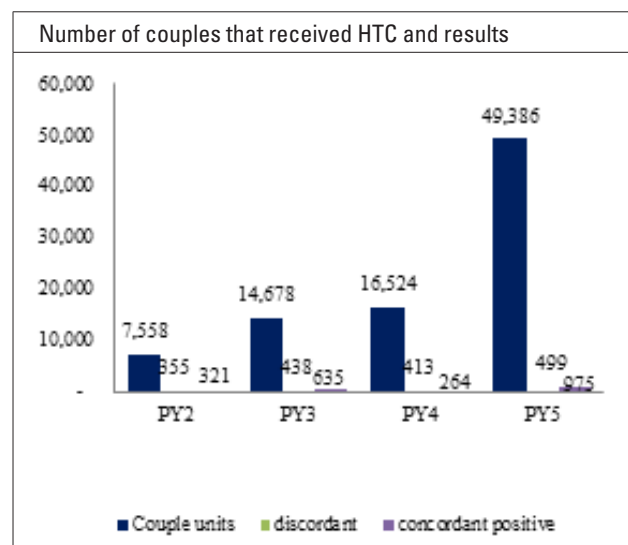
2.1.3 Increased utilization of HTC services

‘Monthly integrated couple week HTC outreaches have dramatically increased both the access and utilization of HTC services in the East Central region’.

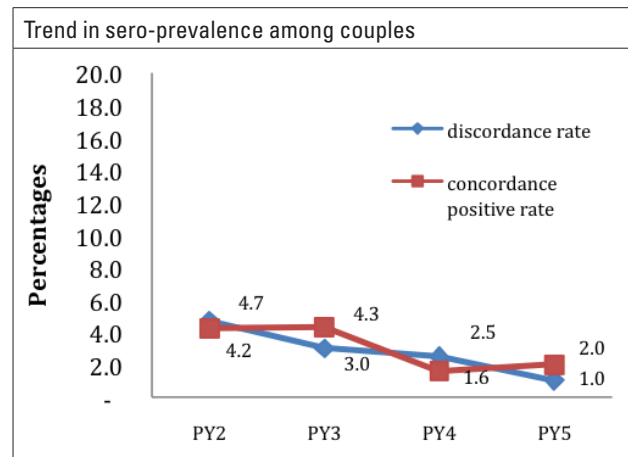
During PY5, intensive efforts were continued to increase utilization of HTC services and to link all identified positive clients into care. HTC was fully integrated in all service delivery interventions and events and served as an entry point to all other HIV prevention care and treatment interventions. It was part of larger social

media campaigns, sports gala, commemorative events, and other occasions where crowds had been mobilized. The program also devised other innovative strategies like the weekly integrated couple HTC outreach which proved very effective in reaching out to not only couples but to the general population. A total of 102,399 individuals (49,386 couples) were reached with HTC and received their results as couples. It is worth noting that the number of couple units accessing HTC registered a threefold increase (298.9%) in PY5 compared to PY4 (see Figure 3). Overall, out of all the new 20,554 positives identified during HTC, VMMC, PMTCT, 93% were provided with Cotrimoxazole while 59% were enrolled into care.

Figure 3: Couple counseling and testing outcomes



Source: HMIS/STAR-EC program records



Source: HMIS/STAR-EC program records

Lessons learned:

- Task shifting through the use of routine counseling and testing (RCT) volunteers and ‘expert clients’ has helped increase the access and utilization of HTC services both at facility and the community while releasing the understaffed health worker to deliver other services
- While integrated couple week has gone a long way in increasing the numbers of couples accessing the service

there is still need to increase access to couple HTC both at facility and community levels

Challenges:

- ▶ Intermittent stock outs of HIV test kits during the year interrupted HTC services and as such some of the community outreach interventions such as the 'integrated couple week HTC' did not meet the set annual target
- ▶ Despite increased coverage and utilization of the targeted HTC interventions to known 'hotspots' and other high prevalence areas, it has become difficult to meet the set target for HIV positive clients identified and enrolled into care. Target setting for PY6 in this regard has taken into consideration the continued drop in positivity seen from PY3 to date

Way forward:

During PY6 the program will intensify efforts to reach key populations like couples, fisher folks, commercial sex workers, 'boda boda' motorcyclists and truckers while scaling down its efforts to the general population in a bid to maximize on the HIV positive yield.

2.2 ELIMINATION OF MOTHER TO CHILD TRANSMISSION OF HIV

Beginning in April 2013, STAR-EC program efforts focused on transitioning PMTCT interventions from Option A to Option B+ (ART for life for all pregnant women identified as being HIV irrespective of CD4 cell count). The components of this roll out in the region are illustrated in Figure 4. Currently 98 of the 118 Option A sites offer Option B+ (including 4 Hospitals, 12 HCs IV, 69 HCs III, and 13 island and lake shore HCs II), they have had their health workers trained (453 in total trained by both MoH and district trainers) and have received mentorships and monthly coaching in delivery of Option B+. The following section highlights the outcomes of the roll out of Option B+ as well as other interventions geared towards eMTCT and are reported by the four World Health Organization elimination of mother-to-child transmission (eMTCT) prongs.

Figure 4: Option B+ roll-out during PY5 activities

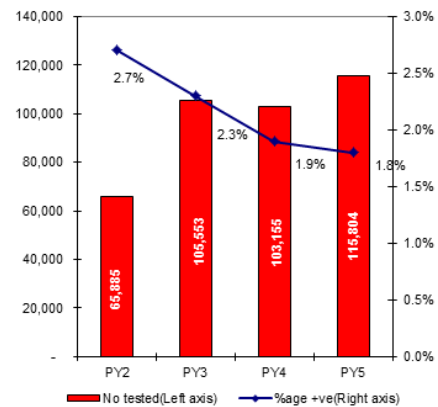
Option B-Plus training for Health Workers	<ul style="list-style-type: none"> • 35 Option B+ district Trainers of trainers trained • 85 facilities in the region trained using the 6-day Option B+ curriculum (ART/PMTCT and PMTCT only sites) • 13 facilities trained using the 13-day Option B+ training curriculum (for newly recruited Health workers and HCs II)
Mentorship Visits	<ul style="list-style-type: none"> • All 98 trained sites taken through mentorship at 2 weeks and 1.5 months after training using MOH and District mentors
Provision of data tools and job aids	<ul style="list-style-type: none"> • STAR-EC supported the reproduction and distribution of all Option B+ registers, job aids and reporting tools to the 98 trained sites
Provision of medical equipment	<ul style="list-style-type: none"> • During PY6 the program plans to procure and distribute EID equipment like Weighing scale, height board, head circumference tapes to all OPTION B+ sites
Follow-up for lost mother/infants	<ul style="list-style-type: none"> • This has been on going in all PMTCT sites during PY5, it is further strengthened in the 45 Option B+ sites offering m2m model.

2.2.1 Prong I: Primary prevention of new infections in women of child bearing age

Using a combination prevention approach with HTC services as the entry point into the wider behavioural, biomedical and structural prevention, STAR-EC supported HTC services provision to pregnant women attending ANC at 110 health facilities (4 hospitals, 12 HCs IV, 67 HCs III and 27 HCs II) in the region. At static and outreach services, 'expert clients' and 'mentor mothers' worked closely with health workers to ensure that mothers were offered health education and pre-test counselling and were supported to take the test. They participated in condom education and distribution, and supporting mothers and couples live positively and adhere to treatment. In addition, STAR-EC facilitated village health teams (VHTs) to map, refer and follow up pregnant women in order to ensure that they access ANC services including HTC.

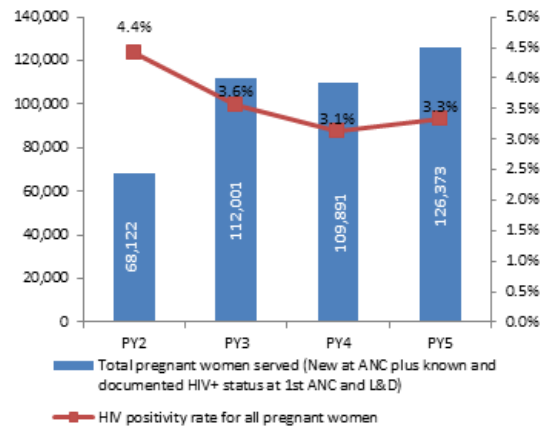
Figure 5: HTC and Prevalence among pregnant women

HTC and prevalence among all pregnant women (including ANC, L&D and known and documented status)



Source: HMIS/STAR-EC program records

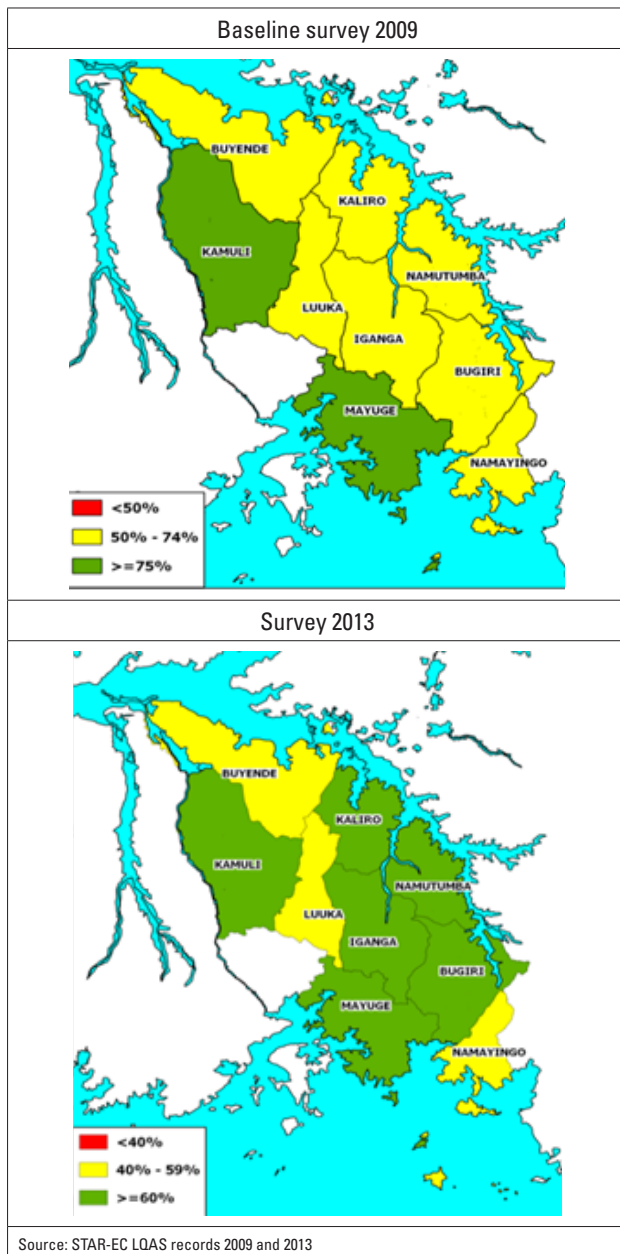
HTC and prevalence among new testers during ANC



Source: HMIS/STAR-EC program records

Overall, a total of 140,475 got HTC results for PMTCT purposes during and these included 115,804 during ANC; 8,727 during labor and delivery; 14,102 during PNC and 1,842 who turned up with already known and documented HIV positive results. Additionally, 3.3% of all the 126,373 pregnant women tested (excluding PNC) were HIV positive¹ (a finding slightly higher than the 3.2% reported during the previous program year). Of the 14,102 women tested during PNC, 1.7% were positive. Despite the increase in number of pregnant women accessing HTC during ANC from PY2 to PY5, HIV positivity among new testers at ANC has consistently been reducing each year (as shown in Figure 5).

Map 2: The LQAS household survey results on HTC among pregnant women (%women counselled tested and received results in past 2 years) Baseline - 2009 compared to 2013



2.2.2 Prong II: Prevention of unintended pregnancies among women living with HIV

During the program year, STAR-EC supported the cascade of provider initiated family planning to all Option B+ sites in the region. Additionally the service was actively integrated into all the community HTC outreaches in the region. The program also worked together with Marie Stopes Uganda and the Uganda Health Marketing Group (UHMG) to offer specialised family planning (FP) services during the integrated island outreaches. As a result, a total of 37,622 first visit clients (of the year) received FP services, of whom 6,972 were HIV+ women. Though the uptake of FP services in the region and country is still low, household survey results showed an increment from 29.2% reported in 2012 to 35.5% in 2013 among all married/cohabiting women using modern FP methods.

Prong III: Prevention of MTCT among HIV positive pregnant women

Figure 6: Proportion of HIV Positive pregnant women and exposed babies on ARV prophylaxis (PY2 - PY5 Vs National Option B+ bench mark)

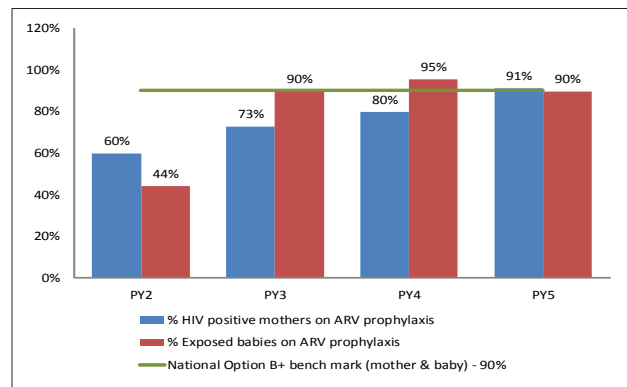
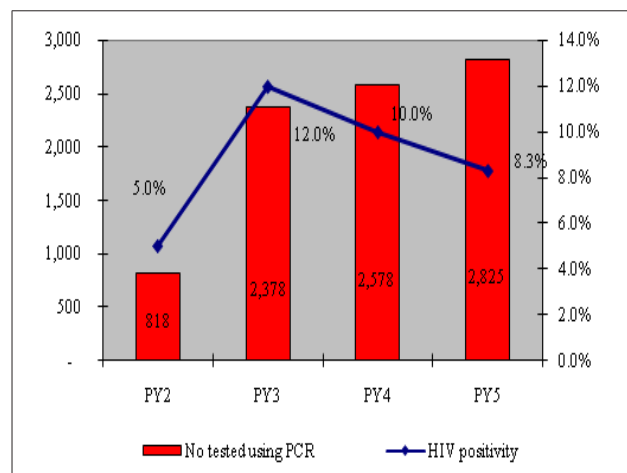
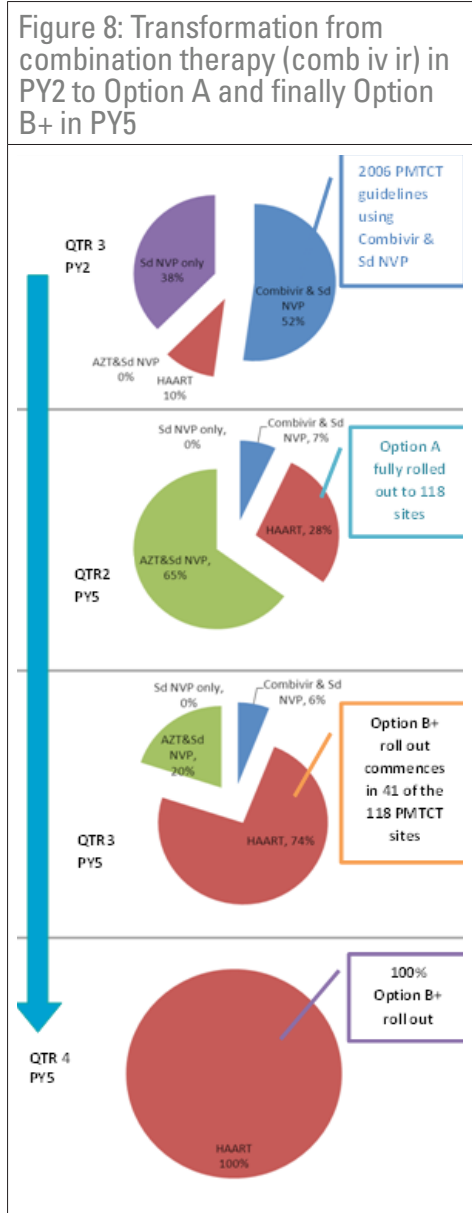


Figure 7: PCR-DNA testing among HIV exposed babies, PY2-PY5



¹ Includes those who turned up with HIV positive known and documented results

As a result of the successful roll out of Option B+ in the region complemented by MoH efforts to accredit more health facilities for provision of ART (now 93 of the 98 Option B+ sites are accredited), more HIV positive pregnant women and lactating mothers have accessed ART, more exposed babies have accessed ARV prophylaxis, and more have received polymerase chain reaction (PCR) tests. This has translated into a progressive decline in HIV positivity among exposed babies over the years. Figure 6 illustrates the proportion of HIV positive pregnant women and HIV exposed babies accessing ARVs for prophylaxis PY2 to PY5 while Figure 7 shows the progressive decline in HIV positivity among HIV exposed children. It's worth noting that the program has succeeded in surpassing the national Option B+ bench mark of 90%. The noted improvements in access to ART noted in PY3 and PY4 were as a result of strengthening the intra-; inter-facility; and facility-community PMTCT and early infant diagnosis (EID) linkages using the EID focal point persons at facilities to coordinate all these referral, linkage and follow up services. The roll out of Option B+ and ART accreditation in the region, have also helped to drastically increase the proportion of HIV positive pregnant mothers accessing ART for life; program data shows that all the HIV positive pregnant and lactating mothers that visited facilities during PY5 were given ART. In the same vein, the use of single dose Nevirapine and other regimens initially used for PMTCT prophylaxis has also steadily declined and eventually been phased out. Figure 8: illustrates this transformation from the period when the 2006 PMTCT policy guidelines (combination therapy using Combivir and single dose Nevirapine in third trimester) were still in effect during Q3 of PY2 through the transition to Option A (Q2 of PY5) and now Option B+ (Q3 of PY5)



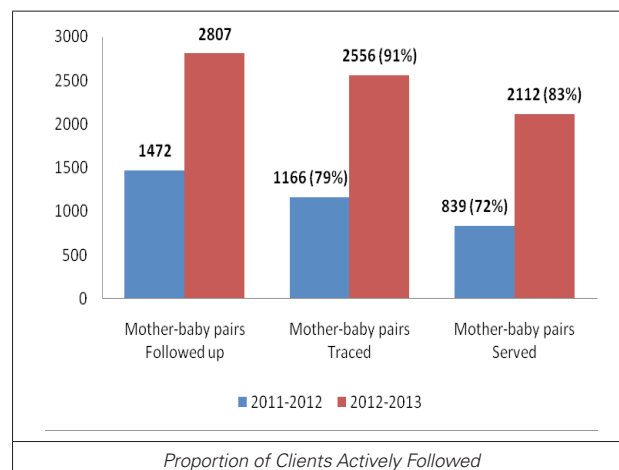
2.2.4 Prong IV: Provision of care, treatment and support to women living with HIV and their families

During PY5 the program continued to support referral, linkage and follow up mechanisms designed to minimise loss to follow up while maximising adherence and retention into Option B+ for the 'mother-baby' pair. In order to achieve this, the program expanded its 'm2m model' from 28 to 45 PMTCT sites, facilitated PMTCT family support meetings in all the 118 sites and ensured that defaulting 'mother-baby' pairs were actively followed up) in all PMTCT sites. In addition all care sites were supported to actively identify mothers and link them to PMTCT services. High level facilities were also supported to conduct outreaches to HCs II to identify and support HIV positive mothers as well as build the capacity of lower level facilities.

2.2.4.1 Enhancing 'mother-baby' pair access to and retention in Option B+ using the 'm2m model'

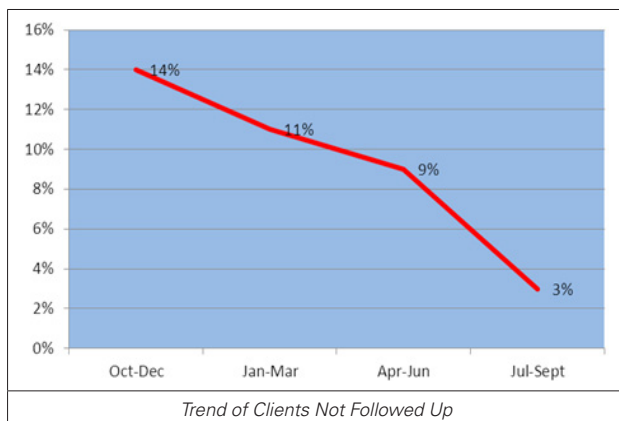
In a quest to effectively roll out option B+, the 'mentor mothers' model was scaled to 45 health facilities, including additional 17 high volume, high HIV prevalence and underserved sites of Namayingo, Buyende, Mayuge, Bugiri and Luuka districts. Due to the acute health workforce shortage, ten 'mentor mothers' were graduated into RCT volunteers and all the 91 'mentor mothers' were trained on the Option B+ 'continuum of care'.

Figure 9a: Proportion of Clients Actively Followed



Source: HMIS/STAR-EC program records

Figure 9b: Trend of Clients Not Followed Up



Source: HMIS/STAR-EC program records

Working with health workers, 'expert clients' and VHTs, 'mentor mothers' were able to link and retain more clients for HIV care (Figure 9a). The interventions by 'mentor mothers' ranged from linkages to active client follow-up, psychosocial support, peer education, and managing PMTCT/EID strategic information. In order to ensure quality, 'mentor mothers' received supportive supervision, while site coordinators attended monthly site coordinators' review meetings and the quarterly 'Let's SOAR (Strengthening outcomes, achieving results)' performance reviews meetings. The family support group (FSG) initiative also enabled more mothers to be linked to CD4 tests and life-long ART (99%); improved disclosure (93%); more babies tested and given prophylaxis (84% and 90%, respectively); and more clients retained in care (93%).

Key lessons learned

- PMTCT-EID related HMIS data collection has improved with on-going capacity building and task shifting to 'mentor mothers'
- The joint quarterly 'Lets' SOAR reviews involving health workers enhance collaboration and provide direction towards improving the PMTCT 'continuum of response'
- FSG activities strengthen linkages and contribute to client retention
- Quarterly mentorships by the combined MoH-District teams together with the monthly coaching visits by the district teams were key in ensuring timely and quality option B+ roll out in the region
- FSGs together with active client follow up in the community are a key tool in improving retention/adherence to option B+ in the region through the minimization of loss to follow up



A mentor mother escorting a lactating mother to care point during an integrated outreach on Dolwe Island

Challenges:

- While Option B+ has been associated with increased uptake of ART services, the challenge faced by the program is to ensure retention and adherence of the mother to the service for life
- While linkage between PMTCT and ART has improved beyond the 90% mark, a few 'mother-baby' pairs are still falling through the cracks yet the national benchmark is set at 100% linkage
- While STAR-EC has supported demand creation and logistics management for PMTCT services in the region, the program is still facing inadequate supply of HIV test kits among other key requirements

Way forward:

- Consolidation of Option B+ roll out through supporting the MoH to further accredit more high volume HCs II in the region for ART service delivery
- Increase strategies for retention in and adherence of mothers to Option B+ at both facility and community
- Increase focus on the Partnership for HIV Free Survival (PHFS) initiative through further integration of nutrition assessment and counselling support service (NACS) at all Option B+ sites

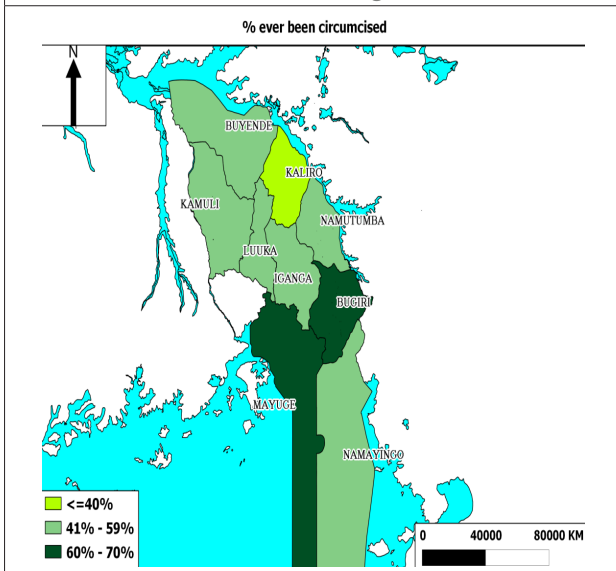
2.3 Voluntary medical male circumcision (VMMC)

Voluntary male medical circumcision has been and remains a pivot intervention area in STAR-EC programming and the progressive improvement in coverage and access shown below is as a result of the huge and ambitious VMMC scale up efforts undertaken in the region.



Fisher folk at Dolwe landing site, Sigulu Islands receiving VMMC services in a tent

Map 3: Males 15-54 years ever circumcised, (LQAS 2013 in East Central Uganda)



Source: STAR-EC 2013 LQAS Survey

The 2013 LQAS household survey results (Map 3) showed that the proportion of males aged 15-54 years who have ever been circumcised in the East Central Uganda increased from 37.4% at baseline in 2009 to 51.0% by 2013. Among the districts, Bugiri (69.3%) reported the highest proportion while Kaliro (33.8%) had the lowest (LQAS 2013).

Over the past four years, STAR-EC has scaled up VMMC services to nineteen static health facilities in East Central Uganda. Much of this scale up was realized during PY5 when sixteen of the nineteen sites were supported to additionally scale-up VMMC through circumcision outreaches and camps in order to meet the very high VMMC target of 120,000 circumcisions for PY5 and to counter the dwindling demand at the static sites. It was increasingly noted that these outreaches and camps reached more males than the static services thus more effort was laid on increasing their frequency while still maintaining the static services. Every opportunity was taken to integrate VMMC into service delivery outreaches, commemorative events, local community events as well as market

days. There was enhanced integration of VMMC into monthly couple HTC campaigns in which weeklong VMMC services are provided and this initiative led to 22% (29,386) men in marital and/or cohabiting relationships receiving VMMC services.

The program also prioritized high HIV prevalence areas such as landing sites, islands and truck stops along the highway as well as districts such as Buyende, Kamuli and Namayingo which have low male circumcision prevalence for circumcision outreaches and camps. Sites were also supported to take VMMC services to MARPs which accounted for 29% of the total number of men served in PY5. To counter the challenge of massive staff transfer that occurred in the region and had the potential to jeopardize achievement of results, STAR-EC supported training of 18 newly recruited staff to ensure continuity of VMMC especially at the static sites. The program also received 143,935 pre-packed VMMC disposable kits from USAID's central procurement mechanism which enabled the realization of the set target.

2.3.1 Scaling up VMMC while ensuring quality service

During this reporting period, STAR-EC supported sites to improve and enhance adherence to MoH/PEPFAR quality assurance (QA) and quality improvement (QI) standards. The program in collaboration with the Applying Science to Strengthen and Improve Systems (ASSIST) project conducted initial site assessments towards institutionalization of QA/QI in VMMC services at all sites. All supported sites were provided with a fully constituted emergency kit that included laryngoscopes, pulse oximeters, glucometers, thermometers, ambubags, oxygen cylinders, oxygen tubing as well the requisite drugs (such as Atropine and Adrenaline) that are necessary for emergency preparedness and response. This was followed by provision of QI documentation journals, as well as other reporting and recording tools. Further to this, in collaboration with Mulago School of Anesthesia and Jinja Regional Referral Hospital, STAR-EC supported hands-on training on emergency preparedness and response for all service providers involved in VMMC roll out. These service providers practiced and role-played emergency response techniques including the use of emergency response equipment as well as provision of cardiopulmonary resuscitation.

All supported sites received two rounds of coaching and mentorship visits as well as two follow up QI site assessments during which progress across seven QI indicators (see Dashboard in Annex 1) was measured and improvements proposed. The ASSIST project provided QA/QI mentorship to STAR-EC by taking on Bugiri Hospital, Nsinze HC IV and Buyinja HC IV as model sites from which STAR-EC is learning from and scaling up to the remaining 16 sites (see Dashboard in Table 3). All VMMC sites have been supported to develop and execute continuous quality improvement action plans.

To improve reporting as well as reduce severity and mismanagement of adverse events while at home, all clients reached with VMMC services were provided with both oral and written post-circumcision instructions and advised to call back for

assistance from the health facility team in case of a problem.

Table 3: Dashboard for ASSIST supported sites of September 2013

	Health Unit District IP Supporting Site	Management systems	Supplies, equipment & environment	Registration group education and IEC	Individual counseling & HIV testing	Male circumcision surgical procedure	Monitoring & evaluation	Infection prevention	Comments
1	Nsinze HCIV, STAR-EC, Namutumba	80	83	67	83	93	71	100	To get screens to ensure client's privacy, update stock cards, continue filling in the SMC register and completing it, to get HTC guidelines and SMC communication strategy, to get missing STI drugs and continue encouraging clients to come with their partners for SMC. To use lower level facilities to conduct day 7 follow up.
2	Buyinja HCIV, STAR-EC, Namayingo	90	83	83	89	90	79	91	To get client gowns, get wall hangings for client's clothes, To continue updating the SMC register fully, To continue tracking performance indicators especially day 7 and partner involvement
3	Bugiri Hospital, STAR-EC, Bugiri	90	83	100	94	90	79	92	To get and start using MOH SMC tools, to get utility gloves, to take client's vital signs after SMC, To continue following up on indicators.

Source: HMIS/STAR-EC program records

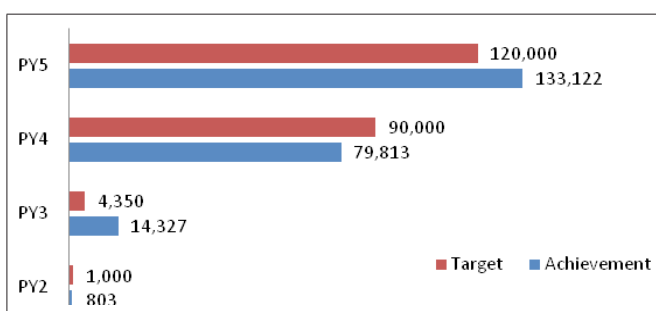
2.3.2 Scaling up VMMC while ensuring safe and appropriate waste management

STAR-EC established a strong collaboration with Green Label Services (GLS) Limited, AIDSTAR One and SDS which aided the smooth collection and disposal of all VMMC generated medical waste. Service providers from VMMC sites were trained on the principles of health care waste management by GLS. VMMC sites were provided buffer stock of waste bins, bin liners, safety boxes to facilitate management of increased amounts of waste generated due to the rapid VMMC service delivery scale up.

2.3.3 Orientation of Village Health Teams (VHTs) in VMMC

Village health teams especially those from districts with low male circumcision (MC) prevalence such as Buyende, Namayingo and Namutumba received orientation in VMMC with a view to improve their skills in mobilizing their communities. The selection of the VHTs for the training was further informed by low MC sub-counties in these prioritized districts. Following the orientation, there was a significant turn up of males for VMMC

Figure 10: Clients who received VMMC services, (PY2 - PY5)



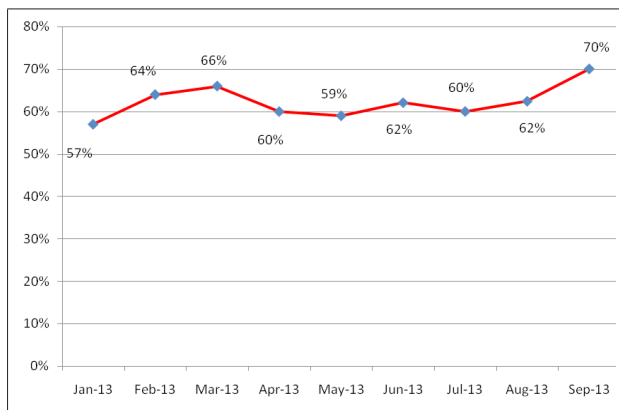
Source: HMIS/STAR-EC program records

Results

During this program year, 133,122 clients were reached with VMMC services, making a total of 228,065 male circumcisions conducted since program inception. This regional VMMC achievement represents 64% of the number of MCs needed for East Central Uganda to achieve 80% coverage thereby realizing an epidemiological public health benefit. Ninety percent (90%) of the clients reached during PY5 were reached through circumcision outreaches and camps; underscoring the importance of these two strategies towards achieving the results. A total of 123,967 males circumcised had initially received HTC services as part of the minimum package offered and of these 421 (0.3%) were diagnosed HIV positive and

enrolled into care. Additionally, some of the circumcised men were jointly tested with their partners while some other females also received HTC from a VMMC setting. In total 10,937 of such females were tested, received their results and only 63 (0.6%) tested positive. Cost benefit analysis using the Decision Makers Tool points towards averting 12,004 new HIV infections by circumcising 228,065 male circumcisions thereby contributing \$12,044,157.9 to the national HIV prevention effort since STAR-EC embarked on rolling out the VMMC services.

Figure 11: Trend of follow up of MC clients over the last nine months



Source: HMIS/STAR-EC program records

Amidst efforts to reach more men with VMMC, STAR-EC intensified support to sites on follow up of clients on Day 2 and Day 7 as well as the documentation thereafter. This has been tracked for the last nine months (Figure 11) and has shown significant improvement with an average of 62% clients returning for follow up. Many of the clients who do not return have been reported to visit private clinics convenient and/or nearest to them to remove bandage on Day 2 and subsequent follow up and care visits. The reason behind this is the mobile nature of the clients.

Lessons learned

- The program has been able to supersede this program year's VMMC target of 120,000 MCs by prioritizing outreaches while integrating VMMC into couple HTC, commemorative events, and integrated island outreaches
- The USAID's centralized mechanism for male circumcision kits and other supplies has greatly facilitated achievement of results

Challenges and Way Forward

- The management of metallic waste from the disposable MC kits has been a serious challenge at the supported sites due to the fact that Green Label Services has not been collecting waste regularly. STAR-EC will work with SDS to request for a more long standing contract for GLS. STAR-EC will also continue to work with AIDSTAR One to explore ways of moving waste from non-SDS districts to those under SDS support for collection by GLS.
- During PY5, the Government of Uganda (GoU) initiated a

process of recruitment of new staff across the country. This process also led to promotions and transfers across the region and affected already trained VMMC teams. STAR-EC will support training of newly recruited health workers to offer VMMC services so that VMMC is continuously integrated into routine service delivery.

2.4 Combination prevention

'Combination prevention is premised on the idea that there is an optimal mix of interventions that will provide the greatest impact.'

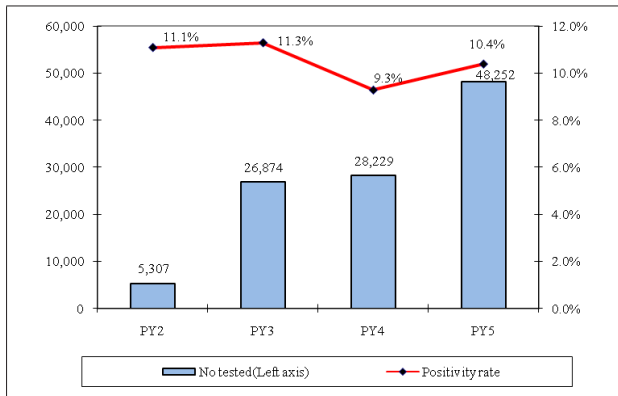
TEXT BOX 3: COMBINATION PREVENTION AT A GLANCE (ACHIEVEMENTS)

- **88,214** general population individuals reached with combination prevention
- **70,473** MARPs reached with combination prevention and **505,753** condoms distributed to them
- **157,316** emerging MARPs reached with combination prevention
- **24,954** couples reached
- **56,941** out of school youth reached
- **2,621,364** pieces of condoms distributed (2,515,169 male and 106,195 female condoms)
- **22,557** PLHIV reached with PHDP

STAR-EC has over the past five years tailored HIV prevention approaches to the different populations especially those that are presumed to be the drivers of the HIV epidemic in the region. While biomedical interventions have been fully discussed in the other sections of the report, this section will dwell on behavioral and structural interventions and how effective linkages were made with the biomedical services. The key populations that received the greatest focus included: commercial sex workers; truckers; and fisher folk. The 'emerging MARP's that were of main focus include the 'boda boda' motorcyclists while in the general population a key focus was placed on married couples and out-of-school youth. These were reached through one-on-one sessions and in groups using peers and health workers who provided education and counseling with the view of increasing personalized risk perception and linking clients for biomedical services onsite or through referral to nearby health facilities. The 'four tent' model (used during integrated outreaches), the 'knowledge room' based services and the 'get off the sexual network game' were key approaches used to promote structured information and counseling. These focused on: building skills in safer sex negotiation and condom use; dangers of transactional and casual sex; need for alternative sources of income especially for commercial sex workers and gender based violence. Special efforts were made by implementing partners (including the districts and the CSOs) to reach out to 'hotspots' as well as other hard-to-reach and underserved communities including island and landing sites. Utilizing HTC as an entry point

to deliver services to these 'hotspots', STAR-EC data show that the HIV positivity among key populations in the region has over the years steadily declined (Figure 12).

Figure 12: MARPs provided with HTC and HIV positivity positive rates



Source: HMIS/STAR-EC program records

2.4.1 Promoting combination HIV prevention among MARPs

Efforts to reduce risk among sex workers: The strategies that have worked:

- ▶ Using their own peers-locally known as mentor buddies
- ▶ Providing an integrated package of services through integrated outreaches
- ▶ Use of the 'knowledge room'
- ▶ 'Moonlight' HTC
- ▶ Special STI corners
- ▶ Integrated scenario events

TEXT BOX 4: ACHIEVEMENTS IN REGARDS TO SERVICES DELIVERED TO SEX WORKERS

- ▶ Overall 4,870 sex workers were reached with combination prevention services:
- ▶ 2,283 were old clients
- ▶ 43,100 female condoms were distributed to CSWs
- ▶ 46,340 Fisher folk & CSWs received HTC & results (10.8% were positive)

2.4.2 Promoting combination HIV prevention among long distance truck drivers

The program used innovative ways to reach out to truckers, considering their busy schedules including:

- ▶ 'Brokers' who work as mobilizers at Naluwerere, Idudi, Busowa and Bulange reached truckers at their park yards and/or in bars and lodges with condom education and distribution
- ▶ 'Moonlight' HTC services
- ▶ All day and night STI clinics
- ▶ A combination of services provided at the knowledge rooms

TEXT BOX 5: TRUCKERS REACHED AND PACKAGE OF SERVICES DELIVERED TO THEM

- ▶ 2,634 reached with combination prevention messages.
- ▶ 1,290 were old clients
- ▶ 2,634 received condoms
- ▶ 1,912 truckers & CSWs received HTC and results (2.7% were positive)

2.4.3 Promoting combination HIV prevention among the fishing communities

Through integrated outreaches by STAR-EC, the district and CSO teams to the islands and landing sites, 62,387 fisher folk have been reached with condom promotion and distribution, risk reduction counseling and onsite biomedical services including HTC, VMMC, FP, eMTCT, STI management, TB screening and treatment, ART and laboratory services. Among these 36,560 fisher folk were reached more than once. Community structures such as VHTs, 'expert clients' and peer educators have been utilized to provide continuous risk reduction counseling and follow up as well as condom promotion and distribution. These efforts have been complemented by use of innovative community mobilization and education approaches including puppetry skits and street performances. These enabled us to have targeted messages for this key population.

The bimonthly special integrated outreaches to Sigulu and Masolya islands have also shown that there has been steady increase in the demand for services among fisher folk. ... *'The community is now well informed about the services that you bring to the island and as their leader we encourage them to go for services...'* a member of beach management unit (BMU) in Sigulu reported.



A crowd keenly observes and listens to messages from puppets during skit performances at the outreach in Bwondha landing site in Mayuge

2.4.4 Reaching out to other sub populations at high risk of HIV infection

Table 4: number of individuals reached with appropriate ABC interventions during PY5

Other population at risk	Numbers reached
'Boda boda' motorcyclists	10,837
Business men	18,204
Plantation workers	2,006
Bar and lodges attendants	6,118
Video/'Bibandas' attendees	8,011
Other youth in the community	56,941
Couples reached	51,810
Over all total	157,316

Source: HMIS/STAR-EC program records

'Boda boda' motorcyclists, businessmen, plantation workers, bar, lodges and 'bibanda' attendees as well as couples and out-of-school youth were also focus groups during PY5; special efforts were made to reach them at their places of work and/or recreation. Working with peers and VHTs from among the different listed populations behavior change messages have been coupled with active linkage to biomedical services. Irene, one of the VHTs attached to recreational facilities in Iganga Town Council reported 'I supervise and ensure regular condom supplies to six recreational places (bars, lodges and video halls) where STAR-EC installed condom dispensers, the managers are friendly and cooperative. *'To help me in my peer education, I use pre-recorded CDs for example the one on condoms..., afterwards I attend to questions and then make referrals for other services that are offered at Iganga Hospital and later follow up...'*

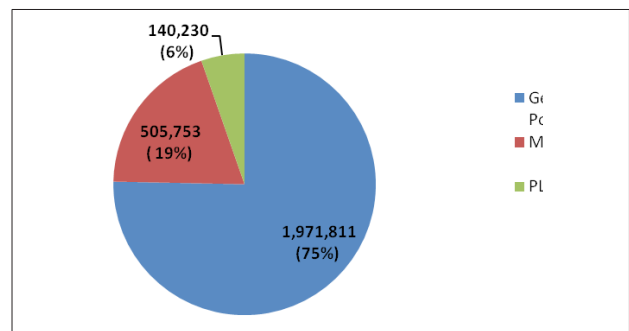
2.4.5 Social promotion of condoms targeting hot spots and recreational facilities

During PY5, the program increased availability, accessibility, and knowledge; as well as de-stigmatizing condom use among key populations and in the general population. The key approaches used were: 'condom karaoke', installation of condom dispensers at recreational places, community condom activations during integrated outreaches, peer-to-peer and interpersonal condom education and distribution. Special efforts were made to promote female condoms (FC2) by training 130 health workers on FC2 promotion and equipping them with FC2 flip charts and pre-recorded CDs to aid education and demonstration of FC2.



A peer educator conducting female condom education in Wakawaka landing site

Figure 13: Condoms distributed in PY5 by sub population type



Source: HMIS/STAR-EC program records

Lessons learned

- Organizing focused interventions in form of 'one stop supermarket' during integrated outreaches brings in better and complete results through onsite active referrals and linkage to different services
- Combining social promotional strategies with interpersonal peer-led approach to condom promotion is more effective in promoting condom education and creating demand for condoms

Challenges

- Inability to negotiate for safe sex practices especially among younger sex workers
- Limited time for engaging with services by sub populations like truckers, fisher folk, 'boda boda' motorcyclists, bar and lodges attendees remain a key hindrance for them to access services

Way forward

- STAR-EC will strengthen the ‘mentor buddies’ approach of utilizing experienced commercial sex workers so as to continue counseling their younger and inexperienced sex workers on safe sex and the need for identifying alternative sources of income. Additionally, special STIs corners will be run in selected hot spots where sex workers and their partners will be reached
- STAR-EC will strengthen the leadership of the different sub populations like the BMU, and ‘Boda boda’ associations to continue mobilizing and counseling their constituencies on the importance of positive behavior change

2.4.6 Promoting combination HIV prevention in the general population

In PY5, a combination of communication approaches including: public radio live talk shows; announcements; spots/jingles; a toll free hot line; and print materials were used to reach the general population with TB and HIV/AIDS prevention, care and treatment messages. Working with four public radios, social experiential teams, and dedicated online counselors, STAR-EC has continued to raise awareness as well as comprehensive knowledge on various issues related to HIV&AIDS and TB among the general population all aimed at increasing risk perception and facilitating behavior change.

Table 5a: Total number of callers per district from July - September, 2013

Districts	Primary Issues Counselors Discussed with Clients During Calls							Regional Total		
	HIV/AIDS & TB	Family Planning	Drug Abuse	GBV	Maternal Health	Malaria	Others	Males	Females	Total
Bugiri	90	224	3	3	34	2	25	284	97	381
Iganga	92	144	1	6	19	5	44	230	81	311
Kaliro	55	174	3	3	51	2	24	229	83	312
Kamuli	110	355	4	5	40	5	16	369	166	535
Namutumba	30	28	0	2	7	1	1	52	17	69
Mayuge	102	240	4	6	49	14	18	333	100	433
Buyende	36	53	3	2	10	2	26	114	18	132
Namayingo	25	32	0	5	4	2	8	68	8	76
Luuka	30	47	1	3	9	0	13	82	21	103
Total Number	570	1,297	19	35	223	33	175	1,761	591	2,352

Source: CDFU call centre

The promotion of the STAR-EC region toll free line began in Q3, PY5 (April – June). Recording of calls specifically commenced during Q4 (July- September) and the total number of calls by the end of PY5 was 2,352 (74.9% of the callers were males while 25.1% were females). Table 5a includes more details.

Table 5b: Households that reported receiving BCC messages, by year of survey

Indicator (all indicators measured a period covering the last three months prior to the survey)	2009	2010	2011	2012	2013	Comments
% of households that received at least one message about HIV&AIDS prevention	63.1	60.0	65.1	75.5		Most of the BCC indicators show an increment in coverage especially over the last two survey years when compared to the first three years of this assessment. Three more district based radio stations were brought on board to target areas which had not been reached (making a total of four). In addition, there was increased involvement of edutainment during community integrated outreaches.
% of households that received at least one message about HIV&AIDS care and treatment	55.9	53.2	60.4	70.6	88.5	
% of households that received at least one message about TB	39.9	41.7	51.7	68.1	86.1	
% of households that received at least one message about ART treatment	40.6	40.3	48.1	62.2	85.2	
% of households that received at least one message on other HIV prevention (OP) methods	58.9	56.5	50.1	65.3	85.3	
% of households that received at least one message on AB in the last 12 months	58.6	45.0	59.5	69.7	86.7	

Source: HMIS/STAR-EC program records



DHE Jinja and her health worker educate the general public in one of the talk shows held at NBS

"I used think that people with HIV are a problem and I did not know that I also have a role to play as a member. In fact, I used to blame them asking where they got it. When I listened to the discussion on community responsibility for people living with HIV I understood that we need a collective effort to defeat HIV," testimony from a religious leader from Buyende.

Results of LQAS 2013 show that over the years more households have been reached with behavior change messages as portrayed in the trends in Table 5. Similarly the findings further indicate that 91.7% knew where to obtain condoms; 70.4% could mention all the three major ways of HIV prevention; and 60.4% rejected myths about HIV transmission. This is a significant improvement from previous LQAS findings.

Through the various communication media, various issues were discussed including but not limited to: multiple concurrent partnerships(MCPs); risk of HIV infection; couple HTC; communication between couples; roles of community leaders; adherence; goal oriented ANC; discordance among couples; eMTCT; VMMC; and breast feeding advocacy.

2.4.7 Efforts to reach couples in married and / or cohabiting relationships with combination HIV prevention interventions



A counselor giving out HIV test results during community couple peer program in Namayingo district

Couples were targeted and reached through community based couples peer support groups, religious prayers events, 'scenario

events' (integrated HIV services outreaches targeting specific community) and monthly integrated 'couple week'. Model couples provided testimonies, skits and drama to relay information on maintaining positive couple relationship that helps to promote mutual fidelity.

Success Story

I was rescued from a devastating marital relationship of domestic and gender based violence.....Says Sande

Sande aged 41years and his wife Agnes (38years) married for 15 years with 5 children shared their marital journey during one of the integrated outreaches to couples in the community peer support group... 'My husband used to drink alcohol; he would beat me and could not support the family in anything... I struggled to provide for my children's' basic needs.... Hope came after we were visited by a model couple from FLEP who talked to us and linked us to the community couple group from where we learnt many skills to improve our marriage relationship... we continued attending the meetings. In one of the meetings, a health worker came and provided HTC, my results were negative, the counselor supported us to share our test results and good enough my husband was also negative... This was the beginning to a new path of live...Sande concluded... I was missing a lot of happiness; I thank FLEP and STAR-EC for rescuing me...

2.4.8 Reaching out of school youth with age appropriate HIV prevention interventions



Using sports to reach youth with risk reduction counseling at one of the landing sites in Mayuge District

Working with community based youth clubs, sports and other recreational facilities such as 'bibandas'; youth aged 10-24 years were provided with age appropriate ABC interventions. The focus of these interventions is to create awareness about HIV transmission and increase risk perception. Health workers and peers provide facts on HIV transmission and prevention, the importance of delaying sexual debuts, help the youth to build life skills and to cope with peer pressure. They also offer condom promotion, education and distribution to sexually active youth and link them to HTC, reproductive health and VMMC services.

Lessons learned

- ▶ Through sharing their experiences, 'model couples' supporting have helped to promote mutual fidelity, couple communication and openness which are key in tackling issues of MCPs

Integrating couple HTC during community couple based programs enhances disclosure of sero-status among couples as well as facilitating identification of pregnant women and lactating mothers for linkage to ANC and PMTCT programs

Challenges

- ▶ Rampant unemployment among young people especially in hard-to reach communities forces them to engage in risky behaviors and dangerous practices such substance abuse and casual sex that can in turn increase their risk of contracting HIV infection

Way forward

- ▶ STAR-EC will continue to support youth to engage in more productive activities such as games and sports as well as linking organized groups to micro-finance support initiatives

2.5 Care and Support

2.5.1 Integrating Positive Health Dignity and Prevention (PHDP) interventions in HIV care

TEXT BOX 6: KEY ACHIEVEMENTS DURING PY5

- ▶ 119,557 condoms were distributed to PLHIV (8,279 were female condoms)
- ▶ 22,557 clients received basic care services
- ▶ 6,972 clients (that received Family Planning methods)
- ▶ 4,386 clients received Basic Care Kits
- ▶ 1,481 PLHIV started on RUTF
- ▶ 64 clients received palliative care services

STAR-EC recognizes that provision of a complete PHDP package is an effective strategy for reducing risky sexual behavior among PLHIV and thus the rate of new infections. In PY5 the program supported training and orientation of 78 health workers, and 30 communities and 270 facility-based 'expert clients' in PHDP interventions and national indicators. These 'expert clients' and lay counselors were supported to relay information to clients in care regarding PHDP and utilize the PHDP tracking tool which was adopted following the MoH mid-term review of PHDP activities. Other groups reached included discordant couples and youths (young positives). Young positives were reached through monthly psychosocial support meetings during which they were offered an appropriate package of prevention with positives (PwP) services (see Text Box 7) and were taken through different skills building

sessions and HIV prevention messages. Such sessions were also used to support parents and guardians in disclosing to their children. Older adolescents also had special sessions on sexual and reproductive health including safe sex options, family planning and condom education. Discordant couples were supported to meet monthly and share experiences on how to live and cope with discordance; experienced discordant couples shared their testimonies and encouraged others to live positively and support one another. Overall, a total of 17,475 (11,519 females and 5,956 males) PLHIV at HIV care facilities were reached with a minimum package of PHDP services an increase from 3,940 achieved during PY4.

TEXT BOX 7 MINIMUM PACKAGE OF PHDP SERVICES FOR PLHIV

- ▶ Adherence counseling
- ▶ Disclosure counseling
- ▶ Condom education and distribution
- ▶ CD4 monitoring
- ▶ PMTCT and eMTCT
- ▶ STIs screening and treatment
- ▶ HTC for discordant partners
- ▶ Reproductive health and family planning
- ▶ Economic and income generating support initiatives
- ▶ Nutrition and balanced diet
- ▶ Balancing work and rest

2.5.2 Post Exposure Prophylaxis (PEP)

To-date STAR-EC has supported the provision of PEP services to 197 clients, 47% (92) of whom were served in the last 12 months. Of the 92 clients, 32% (n=29) received PEP following occupational exposure, 43% (n=40) rape/sexual assault, and 25% (n=23) other non-occupational exposure causes. To facilitate this, STAR-EC supported the training and mentorship of health workers in four hospitals on provision of PEP services, sensitized local authorities i.e. police officers and local council (LC) leaders on availability of PEP services and disseminated PEP IEC materials procured from the Center for Domestic Violence Prevention at various principal points like police stations, and LC I offices.

2.5.3 Nutrition Assessment Counseling and Support

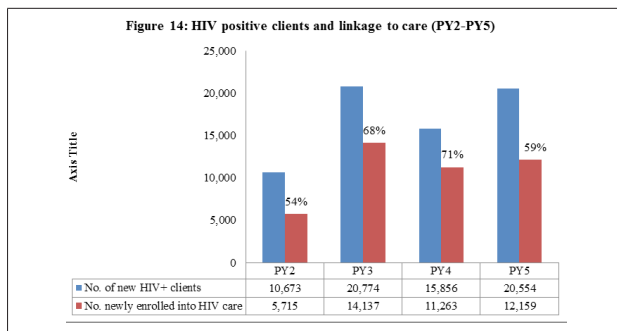
In line with the Uganda Nutrition Action Plan 2011-2016, STAR-EC in collaboration with MoH and FANTA III is involved in a nutrition capacity building and strengthening program whose Phase One involved training of nutritionists from 4 hospitals and 6 HCs on NACS and distribution of therapeutic feeds through alliance with RECO Industries Ltd. The nutritionists were subsequently supported to mentor and supervise lower level facilities in assessing and

counseling clients on nutrition. Following assessment, a total of 1,481 PLHIV were found to be severely malnourished and subsequently started on ready to use therapeutic food (RUTF) in PY5. This collaboration will continue to support sale up of nutritional interventions to more health facilities in the region.

2.5.4 Care and Support

In line with the 'decentralized care model', HIV comprehensive care was provided at 111 facilities, up from 96 facilities in PY4. Emphasis was placed on increasing access by scaling up care services to lower level facilities while ensuring quality and as a result a total of 14,421 (42%) of clients were served at HCs III in comparison to 9,597 (39%) served at the same level during PY4.

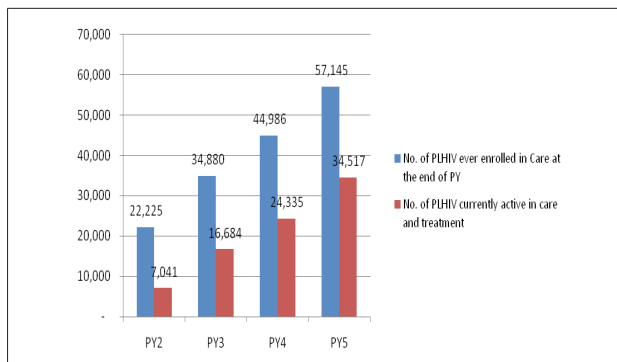
Figure 14: HIV positive clients and linkage to care (PY2-PY5)



Source: HMIS/STAR-EC program records

As mentioned under previous sections, 20,554 clients were newly identified HIV positive and 93% received Cotrimoxazole while 59% (12,159) of these were enrolled into care and of these, 841 were children below 15 years. Strategies to increase enrollment into care included the utilization of 'dedicated clinical teams' that were supported by STAR-EC sub partner, Uganda Cares, which continuously focused at ensuring linkage of HIV positive people from

Figure 15: Retention among HIV care clients, PY2-PY5



Source: HMIS/STAR-EC program records

"Dedicated clinical teams also continuously focused at ensuring linkage of HIV positive clients from HTC testing points into care"

HTC testing points into care, (ii) use of 'expert clients' to escort newly diagnosed HIV positive clients to ART clinics, (ii) and use of 'linkage facilitators' at facility level and community support agents (CSAs) at community level to strengthen facility and community linkage between the HTC points and the chronic care points. In addition, STAR-EC oriented the nine district quality improvement teams on the concept of 'continuum of response' (CoR) and these in turn mentored 84 facility QI teams on monthly longitudinal tracking of CoR indicators (these mainly focus on linking clients from one service point to another). This effort was augmented by technical assistance from the ASSIST project in 8 high volume sites to further improve the CoR.

Table 6: Clients active in care by level of facility

PY	HC II	HC III	HC IV	Hospital	Total
PY 4	722	9,597	7,977	6,039	24,335
PY5	2,664	14,421	10,124	7,308	34,517

Source: HMIS/STAR-EC program records

2.5.5 Pediatric care and support

Deliberate effort was made to take care of special groups like children under 5 and as such, STAR-EC expanded the innovation of critical early child care and treatment activities to five high volume facilities. This innovation encouraged both the clinicians and counselors to create and dedicate time monthly to provide both medical and non medical support to children and their caregivers. These monthly interactive meetings have improved the number of children active in care by 46% from 1,719 in PY4 to 2,508 in PY5 and have also provided a platform to address issues of anxiety in children, coping with their positive situations, proper adherence, nutrition, and roles and responsibilities of caregivers towards children living with HIV. Over 223 children are benefiting from these special clinics. More strategies employed to increase pediatric enrollment into care and to improve the quality of services offered to them are enumerated in Text Box 8.

TEXT BOX 8: STRATEGIES TO INCREASE PEDIATRIC ENROLLMENT AND CARE

- ▶ 'Know your Child' Status campaigns
- ▶ Facilitation of 'Ariel Children's clubs' in 6 facilities
- ▶ Use of pediatric counselors to follow up, counsel and ensure that all lost HIV exposed infants return into care
- ▶ Use of pediatric community awareness campaigns
- ▶ Mentorship of clinical teams to increase their pediatric management skills

STAR-EC also supported the establishment of adolescent-specific clinics and ‘youth corners’ in five high volume sites (the same facilities with Ariel clubs) with an aim to create a forum for addressing adolescent-specific issues and facilitate a smooth transition from childhood to adulthood. Health workers have been oriented in adolescent friendly services and receive monthly technical support to improve their skills in delivery of quality services.



Some of the children benefiting from a special pediatric clinic at Kigandalo HC IV

To mitigate the challenge of loss of clients in care, STAR-EC supported the use of patient appointment system in all the supported facilities, supported health workers to correctly fill the patient monitoring tools, and supported expert clients to track those lost to follow up and facilitate psychosocial support groups in 118 facilities to especially address the challenges commonly faced by the new clients. Following this undertaking, retention of clients progressively improved from 32% in PY2 to 60% by the end of PY5. Further effort was put into strengthening the supply chain system through supporting facility based logistics focal persons in timely submission of web based orders as well as supporting medicines management supervisors to improve logistics management at facility level. These helped to reduce interruption of service delivery and thus helped maintain clients in care.

Lessons Learned

Dedicated clinical teams are a great resource in improving client enrollment into care, linkages between various service points and generally reducing attrition rates

Challenges

- The recruitment of new health workers (with limited skills in HIV care) and re deployment of old clinical teams compromised client care
- NACS services are still very limited especially regarding availability of RUTF

Way Forward

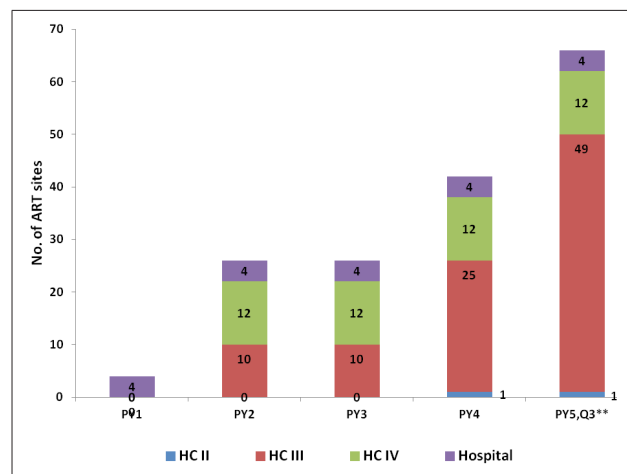
- STAR-EC will support training and mentorship of newly recruited health workers in comprehensive HIV care
- District nutritionists will be supported to scale up NACS to all PMTCT and new ART accredited sites
- STAR-EC will continue to support innovative strategies to improve pediatric enrolment including support for pediatric counselors to trace HIV positive exposed infants

2.6 Anti-retroviral therapy (ART)

2.6.1 Scaling up ART service provision

Over the past five years, STAR-EC has supported the scale up of ART services from hospitals to lower level facilities including those within hard-to-reach areas like the islands, raising the coverage of ART service provision to 66% of health facilities targeted by STAR- EC in the region. Subsequently, the proportion of HIV positive clients in care receiving ART increased from 44% in PY2 to 60% in PY5. To achieve this, STAR-EC supported MoH to accredit additional facilities to provide ART, supported training and regular mentorships of health workers to build their capacity in provision of comprehensive HIV care, and supported the availability of various logistics necessary for provision ART. A total of 59 health workers were trained in comprehensive HIV care, use of patient monitoring tools and reporting to MoH. ‘Expert clients’ (20) from some of the newly accredited sites were also trained in HIV care and these helped to handle a number of tasks including but not limited to: adherence counseling, records management, client triage and follow up of lost clients.

Figure 16: ART accredited health facilities in East Central Uganda



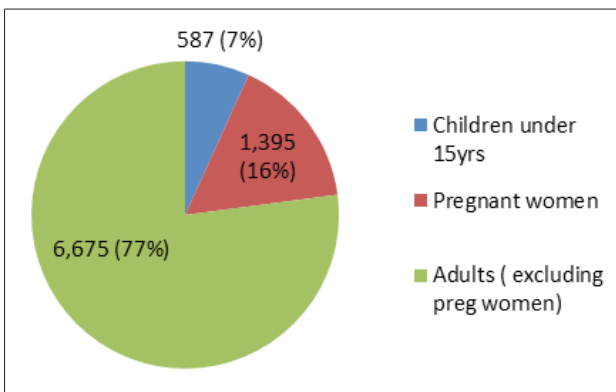
Source: HMIS/STAR-EC program records

“The presence of dedicated clinical teams was a great contribution to the number of clients newly initiated on ART from 5,419 clients in PY4 to 8,657 clients in PY5 (Figure 17).

PY5 was marked by accelerated initiation of HIV eligible clients on ART with special focus on HIV positive children, pregnant

women, HIV/TB co-infected clients and MARPs. STAR-EC took all possible steps to support the active identification and screening of all medically eligible clients. The program scaled up its catch up strategy of using dedicated clinical teams (12 locum staff) who worked at 12 high volume sites for six months enrolling on ART as many clients as possible. ‘Expert clients’ also continuously screened client charts, tagged those that were due for ART and linked the clients to the clinical team for treatment. ‘Linkage facilitators’ including ‘mentor mothers’ also actively referred 12,159 newly identified HIV positive clients for enrollment into care and subsequent initiation on ART. Among those newly enrolled on ART were 7% children (Figure 17).

Figure 17: Categories of clients newly initiated on ART during PY5



Source: HMIS/STAR-EC program records

In addition, pediatric counselors were supported to trace 120 HIV positive children from the community, counsel them, initiate them on treatment and support them on adherence. As a result 83 children were found medically eligible and initiated on treatment.

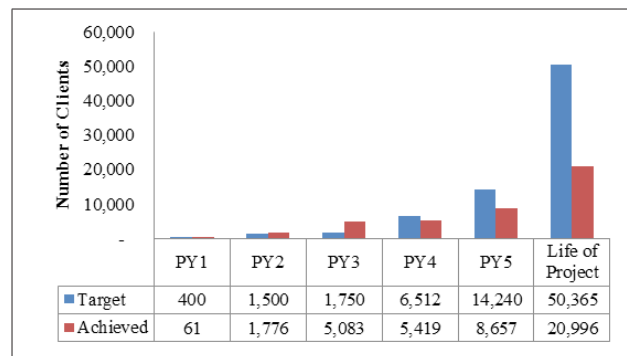


Health worker taking MUAC of a child during an integrated outreach

Specifically for the MARPs, STAR-EC facilitated placement of resident clinical teams (14 temporary health workers: 7 medical clinical officers and 7 midwives) at seven HCIs at the islands of Namayingo district and supported district teams to conduct monthly ART outreaches to hard-to-reach communities (island

and lakeshores) in a bid to increase access to ART for MARPs. These two strategies specifically helped to identify and enroll 1,910 MARPs into care of whom 49% (929) clients were found medically eligible and initiated on ART. Satellite outreaches were also conducted by health workers from nearby accredited sites to 45 lower level facilities on the mainland all in an effort to reduce missed opportunities and to help in transitioning PMTCT clients to lifelong ART.

Figure 18: Newly enrolled clients on ART, PY1 – PY5



Source: HMIS/STAR-EC program records

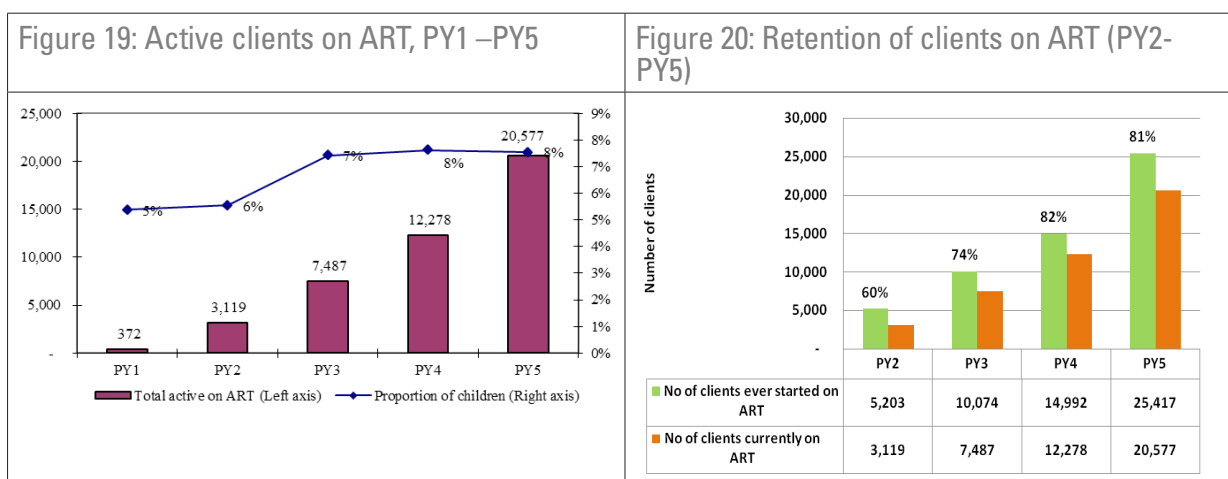
These efforts were complimented by messages aired during interactive radio talk shows covering importance of ART, adherence, eMTCT as well as specific campaigns on pediatric HIV care and breastfeeding.

Although results have more than doubled (just in one year), the unmet need for ART is still very high, there is therefore need for renewed effort and mitigating setbacks like stock outs of ARVs, CD4 reagents and HIV test kits.

Improving the quality of care of ART service delivery

Amidst all the above interventions, efforts were made to improve and maintain the quality of care, as well as address the key challenges of adherence and retention of clients on treatment. In this regard, 32 health workers (especially those from newly accredited sites) were trained in data management and subsequently provided with regular mentorships and support supervisions to ensure they collect and submit quality data. Clinical teams were supported to conduct clinical chart reviews during which they identified clinical management gaps, identified and color tagged all clients eligible for ART, for CD4 and for follow up and duly follow them up. District quality improvement teams were supported to regularly mentor facility teams in improving linkage of clients between different service points and transitioning all eligible clients from basic care to ART. In collaboration with Baylor Uganda, Jinja Regional Referral Hospital and MoH, facilities were mentored on how to provide quality pediatric care, how to track pediatric ART indicators and how to assess themselves in delivery of pediatric HIV&AIDS care and treatment services. This support

aided facilities to identify performance gaps and continuously work on improving pediatric services. As a result, the proportion of children active on ART steadily increased from 5% in PY1 to 8% by the end of September 2013 (performance by years is illustrated in Figure 19). Although there has been an improvement in enrolment of children when compared to the program baseline, the proportion of children on ART is still below the national target of 15% and has stagnated at just over 7% over the last two program years. Going forward, special focus will be placed on identification of both young and older children during PY6, by increasing community awareness of pediatric HIV&AIDS diagnosis and treatment services, using VHT and PLHIV networks to reach out to households with exposed children and children living with HIV, carrying out family HCT campaigns using the HIV positive mothers as index clients and rolling out adolescent friendly HIV clinical, psychosocial and outreach services.



Source: HMIS/STAR-EC program records

2.6.2 Approaches that were used to promote adherence and enhance retention

Retention of clients on ART increased from 60% in PY2 to 81% by the end of PY5 (Figure 20) and further analysis showed that that the proportion of clients lost to follow up (LTFU) reduced from 16% in Q1 to 11% by the end of quarter 4, PY5 (Table 7). To achieve this, STAR-EC continued to facilitate ‘expert clients’ to conduct short but intensive preparatory counseling of clients to be initiated on treatment; conduct adherence support group meetings to a maximum of 25 clients per health facility once every two months targeting those with psychosocial issues or those newly initiated on ART and educating their peers on positive prevention, side effects of ARVs and adherence to treatment. Community follow-up of lost clients either through phone contact or home visits by expert clients also helped to improve retention in care and on treatment.

Table 7: ART Cohort analysis of patient outcomes for the four quarters of PY5

Cohort analysis indicators	Oct-Dec 2012 (Q1)		Jan- March 2013 (Q2)		Apr–Jun 2013 (Q3)		July –Sept 2013 (Q4)	
	No.	%	No.	%	No.	%	No.	%
ART clients started on ART 12 months ago (net current cohort)	1,072		1,200		1,412		2,332	
ART clients still active on ART after 12 months	812	76	899	74	1,135	80	1,855	80
ART clients dead within 12 months	26	2	44	4	41	3	44	2
Clients who stopped treatment	1	0.1	11	1	2	0.1	8	0.1
ART clients who missed appointment within 12 months	66	6	115	10	56	4	171	7
ART clients LTFU within 12 months	167	16	131	11	178	13	254	11

Source: HMIS / STAR-EC program records

The records system was improved by providing patient initiation cards, spring file folders, patient appointment books and metallic filing racks to all ART sites. Sylvia an expert client from Luuka district had this to say: *'the metallic filing racks have helped to reduce on the waiting time of patients during clinic days because files are retrieved faster and there has been minimized misplacement of patient records. Also the appointment book system has made it easy to identify and follow up clients that miss appointments on a given day.'*

Way forward

- Accelerated initiation of medically eligible PLHIV on treatment using dedicated ART teams will remain a core activity under PY6 in order to achieve the gap and remaining target of clients before end of program life.
- Continue utilizing QI approaches to scale up pediatric ART services: Facilitate pediatric QI mentors to support QI teams at each facility utilize their existing data and align their performance with the required standard
- Build capacity of health workers from newly accredited sites through trainings on pediatric ART, and comprehensive HIV&AIDS, regular mentorships and coaching. Equip new ART sites with various logistics (HIV care/ART cards, registers) to enable them offer comprehensive HIV care and treatment services during PY6.

Lesson learned

Clinical mentorships, chart reviews and color tagging of files have been key approaches in scaling up ART services and improving the quality of care.

Challenges

Coverage of pediatric ART services is still limited; only 59 out of 93 ART sites offer pediatric services. The newly recruited health workers still lack skills to manage HIV clients.

2.7 Clinical / Additional TB/HIV

During PY5, the program focused on strengthening the community and facility based TB control initiatives in order to increase adult, pediatric, and MDR (multidrug resistant) TB case detection, ART enrollment for TB/HIV co-infected patients, and the treatment outcomes of all forms of tuberculosis. In addition, during the last quarter, STAR-EC participated in and supported the external national review of the TB program and the recommendations highlighted in the report will be utilized to inform our own programming during this year. The following section gives the details of how each of the above objectives was achieved.

2.7.1 Increasing TB case notification/detection (CDR) at facility and community level

Efforts to increase CDR focused on intensified TB case finding at facilities and congregate settings (prisons, schools, police, and army barracks), contact tracing by sub-county health workers (SCHWs), and referral of presumptive TB cases from the communities by VHT members, drug shop attendants, and traditional healers/herbalists. Additionally the program supported TB campaign outreaches in districts targeting high prevalence sub-counties. These campaigns involved innovative strategies of working with 'foot soldiers' (VHTs, local council leaders, and other opinion leaders), moving from door-to-door in identified high prevalence parishes to collect sputum samples. In addition, STAR-EC supported radio programs regarding positive health behaviors and prevention, care, and treatment of TB to further enhance demand for services and promote behavior change. During PY5, a total of 2,062 cases of all forms of TB were notified resulting in a case detection of 1,397 TB cases (34%). The regional CDR has remained low over the past five years (as illustrated in Figure 21) despite all the innovative strategies explained above. This has raised a question about the TB burden in the region and we hope that the forthcoming nationwide TB prevalence study will answer this question and help inform future programming.

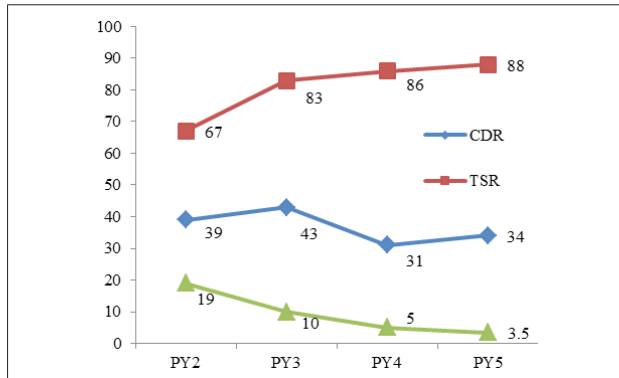
'Identification of TB patients requires very proactive and dynamic approaches like door-to-door screening, and TB community campaigns since TB clients usually present late for diagnosis and treatment.'



The DTLS and a Nurse in Kamuli hospital addressing traditional healers on ICF and treatment adherence

2.7.2 Improving TB treatment outcomes

Figure 21: Trends in national TB indicators (PY1-PY5)



Source: HMIS/STAR-EC program records

The quality of TB case management has been improving progressively during the last five program years. The overall treatment success rate (TSR) in the region stands at 88% which is above the STAR-EC program set target of 87% and is steadily hitting the new national/global set target of 90%. The cure and lost to follow up rates (63% and 3.5 %, respectively) are also consistently above the national averages of 40% and 12%, respectively. This achievement is attributed to the strategies outlined in Text Box 9.

TEXT BOX 9: TREATMENT SUPPORT STRATEGIES

- ▶ Register triangulation during the district specific review meetings
- ▶ Regular support supervision by HSD TB FPs to SCHWs in the communities and peripheral facilities
- ▶ Involvement of VHT members, traditional healers/herbalists, and drug shop attendants in supporting treatment adherence
- ▶ Collaboration with SDS in supporting delivery of TB medicines by SCHWs in their respective communities
- ▶ Regular collection of sputum/slide preparation and transportation by SCHWs to diagnostic facilities

‘Preparation and transportation of slides to diagnostic facilities by SCHWs plays a critical role in improving the treatment outcome and cure rates’

2.7.3 Improving TB/HIV collaborative activities

STAR-EC continues to register progressive improvements in the TB/HIV indicators. A combination of strategies as outlined in text box 10 was employed and consequent to this, 80% of the TB/HIV

co-infected patients were enrolled on ART by the end of the PY5 compared to the national average of 49%. Screening HIV clients for TB in chronic care settings as well as testing TB clients for HIV have all progressively improved and remained above the national performance as reflected in Figure 22 and Table 8. However just like CDR, STAR-EC program data shows that the number of TB/HIV co-infected clients in the region is consistently below 40% compared to the national estimate of 53%.

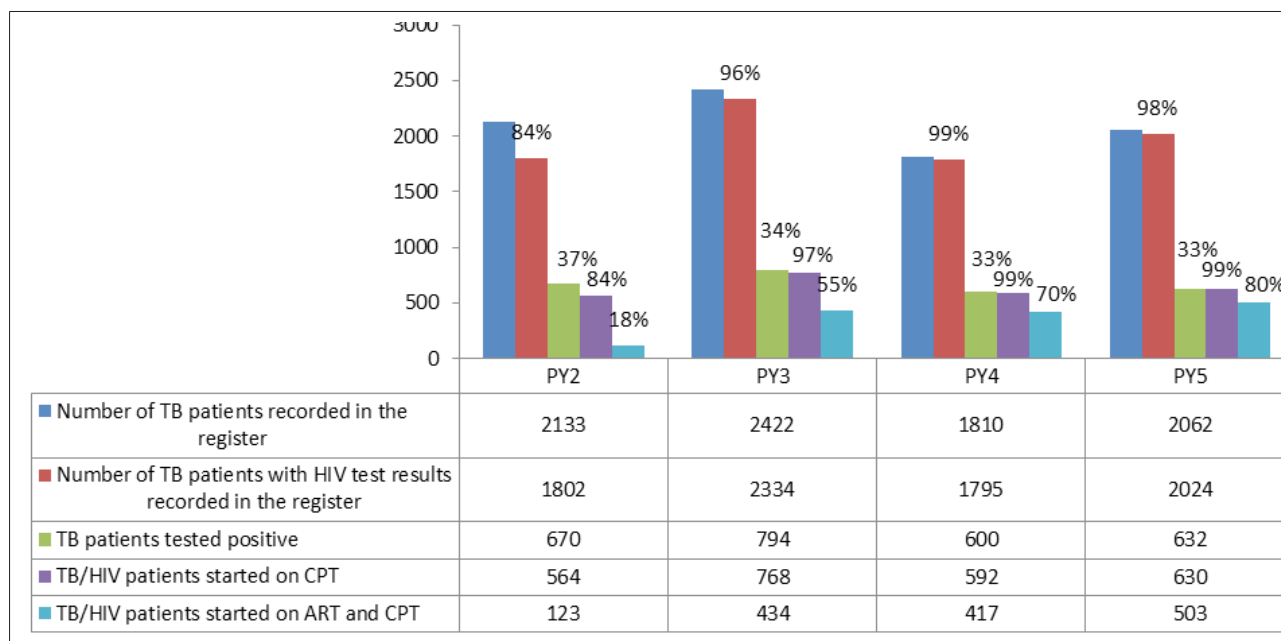


TB nurses in Iganga Hospital display evidence of TB/HIV data utilization during the recently concluded external National TB program

TEXT BOX 10: STRATEGIES FOR TB/HIV INTERGRATION

- ▶ Improved TB/HIV data utilization and regular QI team meetings at high volume sites
- ▶ Improved knowledge and dissemination of the new policy among the health care providers of initiating ART as early as possible irrespective of CD4 cell count
- ▶ Strengthened community VHT and sub-county health worker (SCHWs) structures that have enabled community and facility linkages
- ▶ Regular support supervision and mentorship to the health care providers
- ▶ Increased number of ART accredited sites
- ▶ Improved linkages and internal referrals between TB and HIV points

Figure 22: TB indicator outcomes on selected indicators PY2 – PY5



Source: HMIS/STAR-EC program records

Table 8: Progress of TB screening in HIV chronic care settings

District	Clients seen	No.(%) of clients screened for TB	No.of suspects investigated for TB	No of clients treated for TB
PY2	7,020	6,017 (86)	495	187
PY3	16,684	15,568 (93.3)	1,300	610
PY4	21,897	21,477 (98.1)	1,138	421
PY5	34,517	34,182 (99)	1,026	320

Source: HMIS/STAR-EC program records

2.7.4 Promotion of TB infection control

STAR-EC conducted an assessment of TB infection control implementation at facilities during the first quarter of PY5 to aid provision of targeted intervention for the facilities. Based on the gaps identified, the program provided support towards implementation of first line (administrative and environmental) infection control measures which included procurement of a tent for Iganga Hospital HIV/TB clinic, mentoring health workers on TB infection control measures, formation of infection control teams and managers at health facilities, and provision of IEC materials that promote TB infection control.

2.7.5 Addressing the emergence of multi-drug resistant (MDR)TB

Throughout PY5, STAR-EC supported referral of samples for MDR presumptive cases for diagnostic sensitivity testing (DST) to the National TB Reference Laboratory (NTRL). The program also supported the assessment and accreditation of Iganga Hospital as a regional treatment center for multi-drug resistant (MDR) TB and trained 43 health workers in the region on MDR case management and infection control. In addition, 30 health workers from nine follow up sites were trained and prepared to provide facility-based DOTS to MDR patients. A total of six patients were initiated on MDR treatment towards the end of PY5.



Iganga Hospital MDR TB Nurse demonstrating how to administer MDR TB drugs to H/Ws from Namayingo follow up facility.



MDR nurse administers treatment to an MDR client

Challenges and way forward

- The quality of TB screening and diagnosis by sputum microscopy in HIV patients continues to pose a challenge to health care providers. As supplies for GeneXpert technology become readily available, STAR-EC will support delivery of sputum samples for GeneXpert technology examination to Jinja Regional Referral Hospital and Buyinja HCIV
- Lack of admission facilities at the Iganga Hospital MDR treatment center denies provision of comprehensive care to very sick MDR patients in the region. STAR-EC will ensure quicker initiation of treatment to MDR patients as soon as they are diagnosed. STAR-EC will also strengthen facility directly observed treatment short course (DOTS) at follow up facilities to reduce the need for admission.
- Diagnosis and management of TB in children remains a challenge due to limited knowledge and skill among health care providers as well as scarce X ray services. STAR-EC will continue to provide technical support and ensure wide dissemination of TB treatment guidelines and algorithms

Success Story

'CONTINUUM OF RESPONSE' IN PRACTICE

The Sigulu Islands Experience in Namayingo District

Close to 50% of Namayingo District is covered by water; a set of eleven habitable islands make up Sigulu Islands with an estimated population of 42,000 people. The general health condition of the community is characterised



Above is Maringa Island in Sigulu, below fisher folk queuing for HTC during an integrated outreach

by poor access to health care, the available public health facilities are understaffed and virtually with no private health service providers and the poor transport for inter-islands and mainland connections make it very difficult for the populations to access quality health care. Regarding the HIV situation among the fisher folk, the STAR-EC MARPs study report, 2012 indicates that fishing communities are characterized with risky behaviors like sharing of women, multiple sexual partnerships and non-use of condoms. The influencing factors to high risk sex include: availability of extra daily disposable cash, high consumption of alcohol, redundancy during the day, a high concentration of social outlets operating all the time, negative attitudes and low risk perception. In response to know your epidemic, STAR-EC had a maiden service delivery outreach in 2011 and discovered the high HIV prevalence that ranged between 17-30%. In a bid to strengthen the 'continuum of response' STAR-EC promoted

an integrated model of service delivery to reduce loss of HIV positives and linkage to care.

During PY5, STAR-EC in collaboration with Namayingo District and other implementing partners the CSOs, other local structures like VHTs, Beach Management Unit (BMU) and peer educator (all working as linkage facilitators) participated in quarterly integrated service delivery outreach model in which the following services were provided:

- HTC as an entry point,
- Safe male circumcision
- PMTCT/EID
- Screening for STIs and treatment
- Family Planning
- HIV support care and ART
- Condom promotion
- Moonlight HTC and condom karaoke (special drive for condom promotion),
- BCC and risk reduction counseling using the four tent model
- Community dialogues to promote structural prevention
- Management of other medical conditions like malaria

'CONTINUUM OF RESPONSE' IN PRACTICE:

An example of results from outreaches conducted in Sigulu Islands during PY5

Type of linkage	Indicator description	Achievement
HIV + from HTC and CTX	# newly identified HIV-positive individuals	712
	# newly identified HIV-positive individual provided with CTX	587
	Proportion of new HTC clients provided with a minimum of care service (CXT)	82%
HTC to care	# newly identified HIV-positive individual	712
	# identified PLHIV newly enrolled in care	587
	Proportion of new HTC clients linked and enrolled into care	82%
HTC only to care (excluding women from PMTCT)	# newly identified HIV-positive individuals	667
	# identified PLHIV newly enrolled in care	542
	Proportion of new HTC clients linked	81%
PMTCT -HTC to care (including all pregnant women and PNC but excluding known & documented)	# new HIV-positive pregnant & PNC women	45
	# HIV+ pregnant & PNC women enrolled in care	45
	Proportion of PMTCT clients linked	100%
PMTCT to care (excluding PNC and known & documented)	# new HIV-positive pregnant women	41
	# HIV+ pregnant women enrolled in care	41
	Proportion of pregnant women linked	100%
TB to care	# newly identified TB-HIV positive	19
	# TB-HIV cases enrolled in HIV care	19
	Proportion of new TB clients linked	100%
Care to ART	# PLHIV in care eligible for ART	158
	# eligible clients newly started ART	158
	Proportion of eligible clients initiated on ART	100%

Source: HMIS/STAR-EC program records

To address the high attrition rate for the islands which is as high as 13% primarily due to the mobile nature of these communities, STAREC plans to improve retention by:

- Training and positioning two 'expert clients' per island facility to engage in adherence counseling, manage the client appointment books, generate lists of clients who don't keep appointments on a monthly basis and work with VHTs to trace these clients
- Establishing PLHIV forums in the islands which will conduct home visits to lost clients (list generated by 'expert clients') and provide psychosocial support
- Adoption and scale up of the 'four tent' model during the integrated outreaches in the islands to improve linkages
- Supporting 'linkage facilitators' to link every positive client into care
- Facilitating adherence support group meetings once every two months which will be conducted by the trained 'expert clients'; PLHIV will be encouraged to share testimonies on adherence and disclosure
- Ensure there is an uninterrupted supply of ARV and drugs for opportunistic infections

2.8 Laboratory services delivery, equipment and infrastructural improvement

TEXT BOX 11: PY5 LABORATORY OUTPUTS IN SUPPORT OF PMTCT, ART, HCT & TB INTERVENTION AREAS:

PMTCT/eMTCT: Early Diagnosis of HIV by referral of dry blood spots (DBS) for HIV DNA PCR testing at CPHL

- 4,666 HIV DNA PCR tests performed
- 344 infants diagnosed HIV positive

ART, Care & Treatment: Improved referral of blood samples for CD4, viral load testing for quality ART monitoring and screening of OIs among PLHIV in collaboration with SDS and JCRC:

- 29,526 CD4 tests reported
- 336 viral load tests
- 07 HIV resistance tests
- 87 Serum Crag tests for *Cryptococcus neoformans*
- 51 *Toxoplasma gondi* tests

HCT: HIV testing (on-site & through outreaches)

- 642,660 HIV antibody tests reported

TB: Diagnosis of TB by sputum microscopy & Sputum specimen referral for MDR-TB testing at NTRL

- 28,495 TB sputum ZN microscopy tests performed
- 1,397 new TB cases diagnosed
- 4 new MDR-TB cases diagnosed
- 6 Thyroid Function Tests (TFTs) MDR-TB infected patients performed for baseline assessment prior to initiation of MDR-TB treatment

Availability and provision (onsite or by referral) of quality clinical laboratory services to the community is an integral component of any health care system, not only for TB, and HIV&AIDS care and treatment but for other clinical conditions as well.

In collaboration with various stakeholders, STAR-EC has over the past five years scaled up laboratory support to various health centres (HCs) with in the East Central region from 66 in PY2 to 87 in PY5, all with capacity to provide a package of preventive, diagnostic and monitoring tests.

The contribution of laboratory support to TB, HCT, ART, PMTCT/eMTCT interventions over the years (PY2-PY5) are summarized in Table 9. Overall, more laboratory tests were performed in PY5 compared to earlier program years indicating improved access to diagnostic services by the community:

- HIV antibody tests have increased six-fold in PY5 (n=642,660) compared to PY2 (n=128,180)
- From PY2 to date PY5, 812 infants born to HIV positive mothers were diagnosed HIV positive by DNA PCR testing protocol in collaboration with the Central Public Health Laboratories (CPHL) and Joint Clinical Research Centre (JCRC)
- On average, 1,457 (n=5,831) TB cases were diagnosed annually in the last 4 years (PY2-PY5)
- More CD4 tests were performed in PY5 than any other PYs 2,3 & 4

Table 9: Laboratory diagnostic outputs towards HIVpivots and TB management (PY2-PY5)

TB, HIV&AIDS intervention areas	Laboratory support	Outputs				
		PY2	PY3	PY4	PY5	Total
HCT	HIV antibodies tests performed	128,180	349,518	446,518	642,660	1,566,876
PMTCT/eMTCT	Number of DNA PCR tests performed	732	3,654	3,626	4,666	12,678
	Number of exposed infants diagnosed HIV positive	44	252	284	344	1,197
ART, Care & Treatment	CD4 tests performed	6,937	21,790	21,351	29,526	79,604

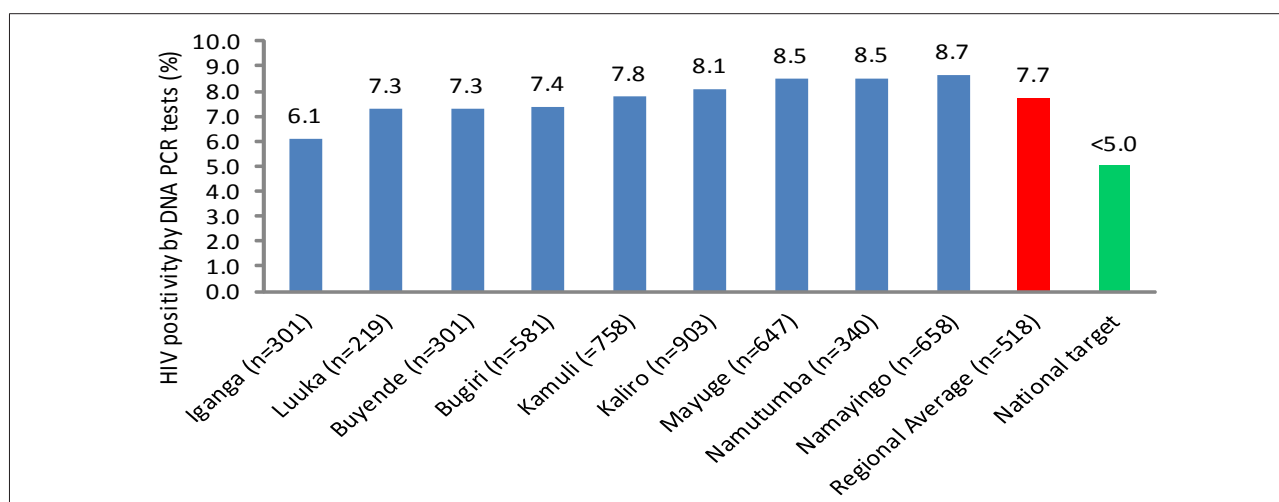
TB, HIV&AIDS intervention areas	Laboratory support	Outputs				
		PY2	PY3	PY4	PY5	Total
TB	Sputum TB ZN microscopy tests	12,373	25,435	27,342	28,495	93,645
	TB patients diagnosed	1,477	1,615	1,342	1,397	5,831

Source: HMIS/STAR-EC program records

2.8.1 Dry Blood Spots (DBS) referral to CPHL Early Infant Diagnosis of HIV by DNA PCR testing in PY5

In total, 4,666 DBS were analyzed for HIV by DNA PCR in PY5 from which 344 exposed infants were diagnosed HIV positive. Kaliro District sent the highest number of DBS (n=903). However, the average HIV prevalence was 7.7%, while 4 Districts (Kaliro, Mayuge, Namutumba and Namayingo) had a prevalence of over 8% way above the national target of <5.0% (Fig 23)

Figure 23: HIV prevalence among DNA PCR tests for exposed infants per District in PY5



Source: HMIS/STAR-EC program records

2.8.2 Support towards health system strengthening

In effort to augment health systems strengthening, the program provided minor infrastructural improvement, support towards laboratory equipment, HMIS, staff skills improvement and implementation of strengthening laboratory management towards accreditation (SLMTA), Table 2. In collaboration with the national reference laboratories, supported implementation of national external quality assurance (NEQAS) for TB, HIV and malaria testing (Table 10).

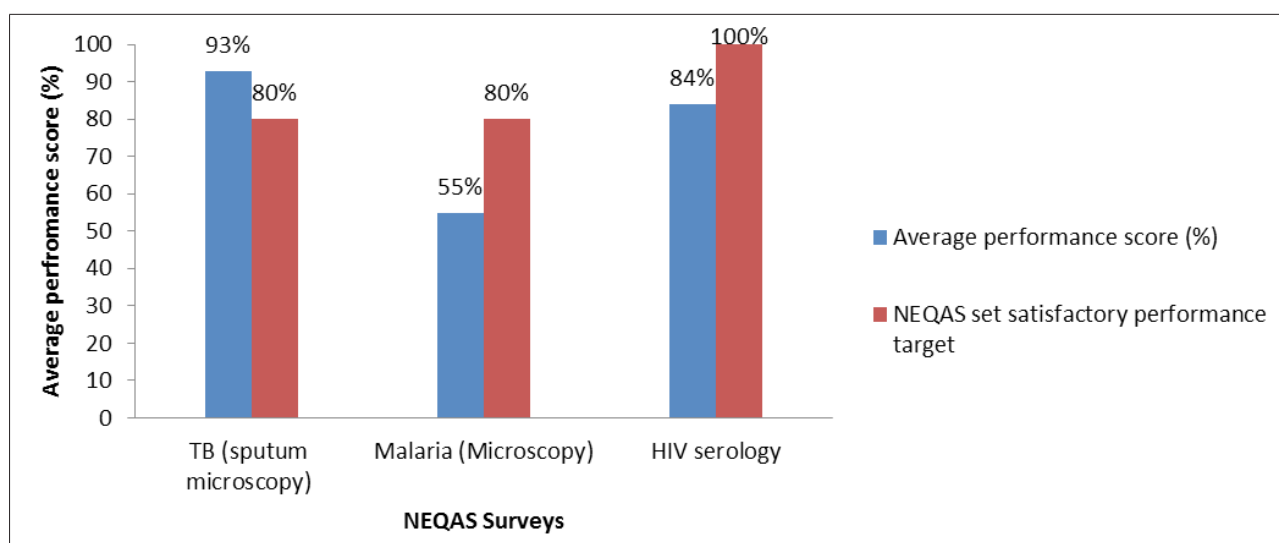
Table 10: Additional laboratory support towards health system strengthening

Intervention areas & Laboratory activities implemented	PY5 Outputs
Infrastructure, Laboratory hubs, Equipment and HMIS support	Fluorescent microscopes installed (in collaboration with NTRL) at 2 HCs to improve TB diagnosis Colorimeters provided to 3 HCs Light Microscopes provided to 3 HCs Serviced and repaired 3 CD4 machines, 2 Chemistry & 3 haematology analyzers at 3 General Hospitals, 3 Colorimeters and 3 Microscopes Completed creation of reception and phlebotomy areas at 3 new laboratory hubs

Intervention areas & Laboratory activities implemented	PY5 Outputs
	Commenced installation of solar power panels at 18 ART sites to enhance onsite diagnostic capacities Laboratory data from 87 HCs for all indicators as per HIMS collected coupled with adoption of DHIS2 reporting system
Strengthening Laboratory Management Towards Accreditation (SLMTA), Staff skills improvement, LQMS implementation	69 laboratory staff recruited through MoH/ PEPFAR partnership 46 laboratory staff offered re-fresher training in TB diagnostics (n=24) and colorimeter applications (n=22) 2 additional HC laboratories (Kidera and Bumanya HCs IV) enrolled into SLMTA program. The other initial 3 laboratories (Bugiri, Iganga and Kamuli) continued to be supported throughout the PY and expected to attain star 3 by end of 2013 Mentorships for laboratory staff continued
National External Quality Assurance (NEQAS)	Proficiency panel testing conducted with average performances of: TB = 93%, HIV = 84% and Malaria = 55% (Fig. 24)

Source: HIMS/STAR-EC program records

Figure 24: PY5 Performance of supported HC Laboratories in National External Quality Assessment Schemes (NEQAS) for TB, HIV and Malaria



Source: HIMS/STAR-EC program records

Key challenges and way forward

- Recurrent stock out of essential diagnostics remains a key bottle neck to laboratory services delivery leading to frequent interruptions in diagnostic services. STAR-EC will continue coordinating with NMS and District based structures to offset the shortages
- Infrastructural needs and equipment gaps (especially for CD4 testing) continue to limit community access to onsite laboratory testing services, they often rely on specimen referral which delays decision making by clinicians. STAR-EC is working with SCMS project to provide more equipment (CD4 machines, haematology and clinical chemistry analyzers) at 3 additional hubs in the region

2.9 Improving Supply Chain Management

STAR-EC continued to register steady progress in supporting the nine districts to manage HIV related and other logistics. The support

included training and mentoring health workers in the ordering, storing, monitoring and reporting on the use of various logistics, and improving storage conditions of commodities. During PY5, the program supported 138 health facilities (4 hospitals, 12 HCs IV, 73 HCs III and 49 HCs II including those at the islands) to access the various logistics necessary for delivery of comprehensive HIV and TB prevention care and treatment services. To further strengthen the system and consolidate successes, more health workers were trained in logistics management and proper quantification while the focal personnel were supported to coordinate submission of commodity reports and orders by health facilities to the National Medical Store (NMS) and Joint Medical Store (JMS) on a bi-monthly basis.

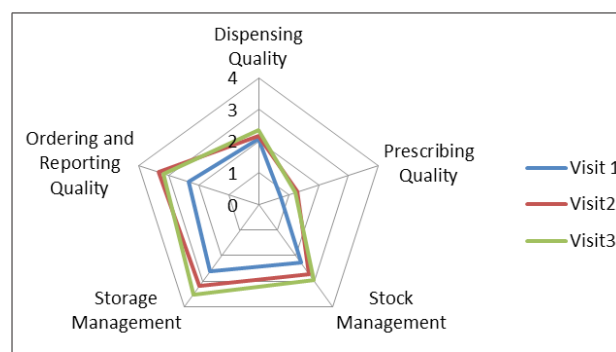
In addition STAR-EC supported the roll out of the web-based ARV ordering and reporting system (WAOS). This is the official ordering and reporting system for all ART and PMTCT orders from facilities and was introduced by MoH in 2012 in a bid to mitigate the frequent stock out of supplies that often resulted from delays/failure in submitting paper based orders.

Health workers and biostatisticians in all the nine districts were trained in the use of this system and subsequently supported to transition from the old system. Although the transition was initially challenged by a number of hiccups like unreliable internet connectivity, orders for the respective cycles were submitted and supplies available at the national ware houses were delivered to facilities as requested. This system has greatly improved communication between health facilities, the MoH Resource Center, and the national warehouses and is a promising strategy for improving availability of supplies at facilities. However because of the aforementioned challenges with the new system, the ordering and reporting rates are still not up to the desired standard and moving forward in PY6, the district focal persons and biostatisticians will be supported to ensure that all facility orders and reports are submitted ahead of the deadline. STAR-EC during PY5 also supported the distribution of starter drugs for Option B+ to all trained sites as well as other logistics like data collection tools and consumables necessary for the smooth implementation of option B+.

To further improve the quality of logistics management at facilities, STAR-EC worked with district supervisors referred to as medicines management supervisors (MMS) in the six non-SURE districts of Buyende, Iganga Luuka, Kamuli, Kaliro, and Namayingo to roll out the supervision performance assessment recognition strategy (SPARS). SPARS is a national strategy of improving logistics management in health facilities which mainly looks at five indicators including: dispensing quality; prescribing quality; stock management; storage management; as well as ordering and reporting quality. These are assessed and scored out of five. STAR-EC supported the MMS on a quarterly basis to mentor facilities and score their performance against the various indicators. The spider graph is a representation of the general performance of all the six districts in the five indicators which were assessed on three previous quarterly visits. The three districts supported by the

Securing Uganda's Right to Essential Medicines (SURE) project (which include Namutumba, Bugiri, and Mayuge) also showed similar improvements on the five indicators.

Figure 25: Performance of health facilities on medicines management



Source: HMIS/STAR-EC program records

Prescribing quality was rated so poorly primarily because the prescribers lacked the current national guidelines as these had not yet been received from MoH. However STAR-EC will support the MoH to distribute these guidelines as well as the standard operating procedures (SOPs) which health workers will use in prescribing and will hopefully help to improve this indicator in PY6. The improvements in stock and storage management were as a result of installation of medicine cabinets and pallets in health facilities. A total of 96 cabinets and 145 pallets were provided to 85 health facilities.

In addition STAR-EC introduced a bulk text message service through which health facility in-charges are promptly informed of any ongoing delivery of supplies so they quickly prepare to receive them, identify any mismatch in orders and deliveries and quickly communicate to NMS. This strategy has led to improved response from NMS concerning missing items. STAR-EC also procured some buffer stock of test kits and CD4 reagents during PY5 to offset the stock outs that were experienced and to enable continuity of services.

Lesson learned

The use of WAOS and bulk text messaging has improved communication and enhanced availability of supplies at the facilities.

Challenges

- The frequent stock outs of CD4 reagents and HIV test kits at national level was a major kick back to service delivery
- Technical interruptions in the Web based ordering system delayed submission of orders

Way forward

- Support biostatisticians to improve the timeliness and accuracy of web based orders

- Support the distribution of the new clinical guidelines to help improve the prescribing quality
- Support MMS to utilize the redistribution guidelines and ensure continued availability of supplies at facilities.

2.10 Improving Human Resources for Health (HRH)

During PY5, the program put a thrust of its efforts on improving the capacity of clinical teams to provide quality and comprehensive TB and HIV&AIDS services through targeted trainings, clinical mentorship and support supervision approaches. Cognizant of the fact that the staffing levels in the health sector have persistently remained low with the proportion of approved positions filled ranging from as low as 48% in 2009 to 55% in 2012 at district level, STAR-EC continued to work with the MoH, PEPFAR, the Uganda Capacity project and SDS in order to improve on the number and quality of human resources for health in the region. In collaboration with the SDS and PEPFAR 50 health workers of key cadres including 25 enrolled nurses, 17 midwives and 8 clinical officers were posted to 31 HCs II (mainly those serving hard-to-reach communities), one hospital and one HC III.

Additionally, responding to the critical lack of health workers coupled with high HIV prevalence in island communities, STAR-EC supported the posting of 14 temporary health workers (including 7 clinical medical officers and 7 midwives) to seven hard-to-reach HCs II located in the Sigulu Islands of Namayingo District to provide continuous TB and HIV&AIDS care treatment and prevention services. The office of the District Health Officer worked the District Service Commission to recruit these health workers and committed to absorbing these health workers into the system once this support ceases. .

Furthermore, pursuant to the need to boost the efforts of existing staff in identifying and enrolling medically eligible clients into ART and ensure a continuum of response, STAR-EC through its partner, Uganda Cares placed and supported 12 locum staff at six high volume sites. This intervention has resulted in improved ART enrolment at those sites as indicated under the ART section.

A total of 1,258 service providers received at least one in-service training. Table 11 shows the number of health workers trained per technical area.

Table 11: Number of health workers trained per technical area

Technical area	Sex		Grand Total
	Female	Male	
ART	87	48	135
CARE	75	73	148
HTC	68	49	117
Lab	6	18	24
Logistics and Supply Management	58	58	116
PMTCT	339	114	453
Prevention	73	89	162
Strategic Information	30	29	59
TB	17	27	44
Grand Total	753	505	1,258

Source: HMIS/STAR-EC program records

STAR-EC support to internship during PY5.

During this program year, a total of local five interns were brought on board. The interns provided support to the following directorates: Strategic information (1), technical (3) and Program Operations (1). An additional two interns were from the United States of America. The internship program was for a period of six months and for all these months, interns received a monthly stipend with three months paid up using overhead funds. Out of the five interns, three have been retained by STAR-EC as temporary (1) and full time staff (2). The rest were also able to find employment opportunities with other organizations.

Challenges

- The region is still plagued with very low staffing levels which affect the formation of clinical teams and provision of comprehensive services
- High staff attrition coupled with frequent transfers of health workers disrupts the established clinical teams hence the frequent need to train the new members

Way forward

STAR-EC will continue collaborating with key stakeholders to support the districts to train and recruit more staff to bridge the human resources gap

3.0 Strengthening Decentralized HIV&AIDS and TB service delivery systems with Emphasis on Health Centers as well as community systems

3.1.1 Utilizing local leadership to promote health-service delivery

STAR-EC has continuously worked with the districts to increase their involvement in HIV programming and in her last years of implementation; the program is making every effort to promote ownership and sustainability of the various HIV/TB prevention and care interventions that it has supported over the years. The program gave priority to districts with high HIV prevalence (including Mayuge, Bugiri, Namayingo and Buyende) and these were supported to discuss annual LQAS results and pass resolutions to address the gaps identified. To accomplish this task, technical working groups (TWG) comprised of: the District HIV focal person; the District Planner; the DHO; the Clerk to the District Council; the Secretary for Health; and a representative of people living with HIV (PLHIV) were constituted in each district to study the LQAS results and other sources of data on HIV and to draft a presentation for the District Council with recommendations on how to address the gaps in implementation of HIV&TB activities.

In Namayingo District for example, resolutions were passed on how to scale up VMMC, reproductive health services, and condom promotion strategies, especially in the islands while in Bugiri District, resolutions were passed on scaling up HTC, VMMC, reproductive health services, and on taking strong action regarding health workers who are absent from their duty station on a regular basis. The resolutions were handed over to the Chief Administrative Officer for implementation. In the next program year, STAR-EC follow up with these resolutions, and provide mentorship and support to ensure that these they are implemented.

3.1.2 Strengthening the role of civil society and Community-Based Organizations (CBOs) in effectively reaching communities

Continuous mentorship and coaching for CSOs yielded increased referrals and linkages. The six organizations that were brought on board during the year, together with the three pre-qualified CSOs, were instrumental in promoting a 'continuum of response' for PLHIV during PY5. This was achieved through the integrated service delivery approach that was adopted by the program, the peer support programs, couples' HTC, utilizing religious institutions, and community commemoration events such as youth sports galas. As a result, the 9 CSOs reached 30,949 individuals with referrals and linkage services, 27,235 (88%) of whom received the services they were referred for. CSOs also promoted retention PLHIV into care by working with the health facility teams to map and trace clients who had not turned up for clinic appointments.

3.1.3 Supporting the Community Development Officers (CDOs) to update health and other wrap around service provider inventory

STAR-EC during the course of 2011 supported the development of a referrals directory for health and other wrap around services with an aim to improve referrals and networking. This Directory was reviewed and updated during PY5 by the CDOs working together with CSOs. The exercise was successful, and the CDOs and CSO representatives were oriented on how to use the mapping tool and thereafter supported to visit organizations in their respective sub counties and validate the data collected with LC1 chairpersons. In total 289 organizations were mapped with Kamuli and Mayuge districts having the highest number of organizations at 49 each. The majority of these organizations (63%) are community based organizations (CBOs) with limited capacity to provide services to PLHIV.

TEXT BOX 12: STRATEGIES USED TO LINK PLHIV AND OVCTO WRAP AROUND SERVICES

- ▶ Utilization of Triplicate referral forms and Registers
- ▶ Identification and support to two linkages facilitators per site
- ▶ Orientation of referral focal persons on Intra-facility linkages
- ▶ Quarterly Mentorships by district referral coordinators
- ▶ One day joint referral meeting at facility and Utilization of Triplicate referral forms and Registers
- ▶ Identification and support to two linkages facilitators per site
- ▶ Orientation of referral focal persons on Intra-facility linkages
- ▶ Quarterly Mentorships by district referral coordinators
- ▶ One day joint referral meeting at facility level

Figure 26: Inventory on organizations per district



Source: HMIS/STAR-EC program records

3.2 Strengthening networks and referrals systems to improve access to, coverage of and utilization of HIV&TB services.

3.2.1 Community systems strengthening

Building on the PY4 successes, while consolidating and replicating best practices in PY5, STAR-EC continued to strengthen networks and referral systems by addressing key coordination points that promote linkages to increase access to and uptake of HIV&TB services in the region. Seventy three health facilities were supported to establish and strengthen linkages with community structures such as VHTs, PLHIV, local councils, and CSOs. A robust demand creation strategy was implemented which resulted in increased demand for linkages to priority interventions namely: VMMC, eMTCT, ART, and condom promotion, as well as services for orphans and other vulnerable children (OVC). The supported community structures listed above, were oriented, on the basic knowledge and skills needed to carry out priority interventions and to effectively play the roles of ‘linkage facilitators’ by ensuring that they reach those in need, including OVC at the community and facility levels. As a result 113,736 clients were successfully referred and 87% (98,855) received services.

In addition, STAR-EC supported PLHIV and OVC linkages to other wrap around services via collaboration with other stakeholders such as the sustainable comprehensive responses for vulnerable children (SCORE) in Bugiri Mayuge and Namayingo districts. As a result of this collaboration, sub county networks were established for Muterere, Bulidha and Budhaya in Bugiri District, and Buswale, Mutumba and Buhemba in Namayingo district, and these were linked to the SCORE program. Two PLHIV groups of 40 members each in Mutumba sub county were trained in village saving and loans and members have started forming associations and making contributions for their savings. In addition, one group in Burundira Parish, in Mutumba sub county, Namayingo District, was provided with tomato seeds and started growing tomatoes to improve nutrition. Plans to link all other identified critically vulnerable PLHIV households to these services are underway.

3.2.2 PLHIV involvement in improving referrals and linkages and improving their own health and living conditions

STAR-EC has been strengthening the capacity of people living with HIV to plan, implement, and monitor activities related to PLHIV. STAR-EC during the course of the year supported the National Forum of People living with HIV&AIDS (NAFOPHANU) to provide mentorship and coaching to 84 sub county PLHIV networks and 36 PLHIV psychosocial support groups in the nine districts. The support offered included hands on training and mentorship in records management, income generating activities, fighting stigma and discrimination, referrals and linkages, OVC programming, and adherence counseling.



A PLHIV PSS drama group in Malongo Mayuge district during the mentorship

In total, 850 PLHIV psychosocial support group members participated in these mentorship meetings. PLHIV registers were also updated and lists of clients who fail to show up for their follow up appointments from health facilities were used to compare with the registers and necessary follow up was done. This has enabled 34,517 PLHIV to be retained and receive care and treatment, and 12,159 PLHIV were newly enrolled

Furthermore, in some districts, psychosocial support groups have been able to generate income and improve their food security. For example, in Bugiri District, Bulesa Advocacy Group acquired local poultry, 3 goats and 1 Boer goat under the National Agricultural Advisory Services (NAADS) program, the Buvawala women’s support group was supported by Heifer International to acquire goats, and the same group has also been supported by Volunteer Efforts for Development Concerns (VEDCO) Uganda with seeds. Some groups in Nawaningi, Iganga District, have started making crafts and baking to generate income, and in Kamuli District, Mbulamuti, Mayuge, and Lugala psychosocial support groups have started village savings and loan associations to boost their savings.

Table 12 shows the details of various PLHIV groups that have received support.

Table 12: List of PLHIV psychosocial support groups that have received support

District	Group Name	PLHIV Members	Source of support
Kaliro	Kaliro T/C PLHIV Network	28	Internal Contributions from members
Luuka	Bakaseka Majja PLHIV Group	90	Internal Contributions from members
Bugiri	Balyegomba Psychosocial Group	22	Internal Contributions from members
Namayingo	Banda AIDS support Group	25	Internal Contributions from members
Iganga	Tusuubira PLHIV Group	56	Internal Contributions from members
Mayuge	Bukabooli S/C Network	80	Internal Contributions from members
Buyende	Gema kunwino PLHIV Group	23	Local Government
	Bugaya PLHIV&OVC Group	81	Internal Contributions from members
Kamuli	Kamuli YP Group	85	Plan International, PACE
	Kamuli Expert Client Psychosocial Group	30	Internal Contributions from members
	Mbulamuti PSS	40	Internal contributions
Namutumba	Balibatusoka Positive Group	60	Local Government

Source: HMIS/STAR-EC program records



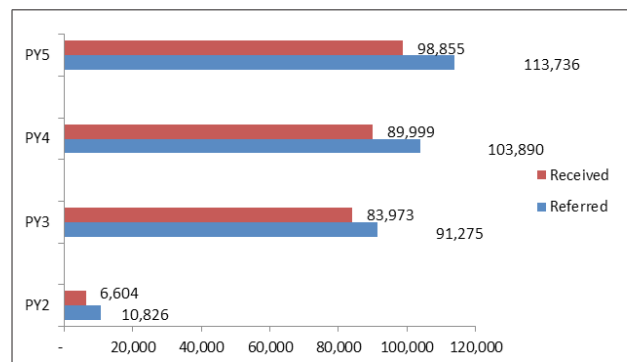
3.2.3 PLHIV involvement in referrals and linkages

PLHIV linkage facilitators have been instrumental in mobilizing communities for HIV&TB services, and there has been an increase in the number of clients accessing health services, as Figure 27 portrays. This is demonstrated by a continuous increase in referrals made by the community structures to health facilities' intra-facility service, and access improvement as demonstrated in the HTC-care linkages, ANC-eMTCT linkages, increased ART initiation, and OVC linkages to wrap-around services.

Across the period, STAR-EC has registered a stable increase in linkage of clients from the community to access health services. Figure 26 shows referrals accumulating from 10,826 to 113,736 within a five-year period. This is attributed to the intensified demand creation interventions, integrated service delivery outreaches and the bridge between the community and facility through the engagement of 'linkage facilitators'

3.2.4 Supporting Village Health Teams (VHTS) to participate in and increase access to services

Figure 27: Total Referrals Vs Services received for PY5



Source: HMIS/STAR-EC program records



PLHIV psychosocial support groups in Mbulamuti Kamuli and Banda in Namayingo districts during their monthly meetings for saving and credit and PSS

During PY5, STAR-EC increased the coverage of VHTs in the region from 3,435 to 5,000 (69% increase). These VHTs were supported to effectively increase and improve the activities they were carrying out like condom promotion, community PMTCT, mobilization for TB screening, as well as conducting linkages and referrals for access to various services; but they also participated in client follow-up by providing information on client's locations, and at times accompanying the facility team to the client's households for effective tracing. This has encouraged and improved health-seeking behavior, as VHTs encourage clients to continue with care. This is exhibited in the number of clients supported through referrals to access services. During PY5 the VHTs referred a total of 43,741 and 39,059 females and males respectively out of which 88% (72,853) received services. To enable realization of these results the VHTs were provided with referral forms and registers as well as various information education and communication (IEC) materials.

3.2.5 Orientation of Village Health Teams in HMIS reporting

To enable VHTs to improve reporting using the health management information system (HMIS) tools, STAR-EC worked with the MoH resource center technical staff to conduct mentorship and coaching sessions at the sub-county and district level. The focus was on the Biostatisticians, HMIS Focal Persons, VHT coordinators, 'mentor mothers,' 'expert clients', and health workers. A total of 1,494 VHTs from the nine districts benefited from the orientation and mentorships. As a result of this orientation, VHTs have significantly improved data submission including referrals, linkages, and active client follow up records. In addition, the HMIS focal persons have also started capturing VHT data into the DHIS2 database and submitting referrals data to STAR-EC monthly.

3.2.6 Community component of elimination of mother-to-child transmission of HIV

STAR-EC implemented a community eMTCT strategy to improve early ANC attendance, completion of the 4th ANC visit, safe delivery at health centers, follow-up visits for PNC, improving male involvement, and early enrolment into the eMTCT program for HIV positive pregnant mothers. Working with 44 ART/PMTCT sites supported by STAR-EC, 420 VHTs (10 per site), conducted a comprehensive mapping of all pregnant women within the catchment area of the facility to identify pregnant mothers who had never attended any ANC or those who had missed their follow up ANC visits. Mothers who had not delivered at health facilities were also identified. Counseling was offered to all of the mapped women and their male counterparts. Table 13 below shows the number of pregnant women identified per district.

Table 13: Number of Pregnant Women Mapped in 42 sub counties for East Central Region

District	No. Pregnant women	1st ANC	2nd ANC	3rd ANC	4th ANC	Never Attended	No. Pregnant Referred
Bugiri	3,297	801	752	627	540	590	1,596
Buyende	6,949	1,985	1,610	1,251	922	1,501	2,243
Iganga	3,061	843	657	572	369	673	876
Kaliro	3,339	1,063	668	463	376	784	1,167
Kamuli	4,721	1,464	1,157	985	718	838	2,103
Luuka	2,993	1,017	783	567	359	788	1,132
Mayuge	2,747	994	735	485	333	252	1,678
Namayingo	2,181	682	442	351	251	538	982
Grand Total	29,288	8,849	6,804	5,301	3,868	5,964	11,777

Source: HMIS/STAR-EC program records

Buyende District presented with the highest number of pregnant women with Namayingo District having the least. As it is elsewhere, pregnant mothers usually attend first ANC visit but a few complete to the 4th ANC visit. The data also showed a big number of pregnant mothers who had never attended any of the ANC visits. All identified clients were referred to the nearest health centers and subsequent follow ups shall be conducted to ascertain the delivery data for pregnant women

3.2.7 Strengthening OVC 'continuum of response' and care

This intervention was introduced during the last quarter of PY5 and the activities reported here were introductory in nature. Detailed interventions will be rolled out in PY6. To strengthen the OVC 'continuum of response' at community and facility levels, STAR-EC during the course of PY5 developed strategies to ensure that HIV exposed and infected children and their families that receive facility based medical care, are linked to community OVC services through a systematic referrals and linkages system. The services offered to them

include home based care services, and support for nutrition, education, income generating activities, and child protection and legal support services. To facilitate this, STAR-EC conducted district entry meetings targeting district community development officers (DCDOs), CDOs, CSOs, ART focal persons and orphanage managers. The purpose of these meetings was to develop a mechanism for supporting pediatric ART-OVC linkages, to ensure appropriate assessment of OVC for referral to other service providers, and to train 'linkage facilitators', 'expert clients' and referral focal persons, in the use of OVC vulnerability index tool.

3.2.8 Increase OVC linkages to HTC services

In addition to provider initiated HIV testing and counseling (PITC), HBHTC, 'know your child's HIV status' campaigns among high HIV prevalence districts, and other outreaches targeting children, STAR-EC also extended services to OVC in 7 dwelling places out of the 60 mapped in the region. Prior meetings were held with the home managers and DCDOs as a prerequisite for HTC activities. Home managers mobilized OVC and their caretakers; and as a result 1,762 people were tested, of whom 873 were less than 15 years. Twenty individuals tested HIV positive, 3 of whom were children below 15 years of age. Effective linkages for care and follow up were made for all those found to be HIV positives. Reports showed that they were successfully enrolled and are receiving care. Plans are underway to reach the remaining 53 homes during PY6 and establish other networks to reach more OVC.

3.2.9 Improving the quality of community interventions

During PY5, STAR-EC collaborated with ASSIST on a strategy to integrate QI into community health activities to improve health facility linkages, adherence, and client retention. Two health facilities (Kamuli and Bugiri Hospitals) were identified to participate in a community collaboration pilot and five villages served by these hospitals were selected for the intervention. The villages were selected based on high HIV client load, existing community-health facility linkages, commitment of the facilities, and availability of community resource persons including VHTs, CBOs and CSAs. Training and mentorships were conducted for the QI teams at the facility and these have started working closely with the community to improve retention of clients. Comprehensive results will be presented in the first quarter report for PY6.

Challenges

- Limited capacity of other wrap around service providers continue to hamper efforts to PLHIV to other wrap around services
- Local revenue has been pointed out as a limitation for the districts to allocate more resources to HIV interventions
- VHT tools are expensive to print and replenish making it difficult to capture data
- Reporting data on OVC is a challenge since most HMIS tools do not segregate age category 15-18 years

Way forward

- Efforts have been put in place to engage local government to integrate PLHIV services into ongoing efforts for poverty alleviation such as NAADS and CDD.
- STAR-EC will lobby local governments to include VHTs in their development plans to support their operations.
- VHTs will be supported to develop alternative sources of income to sustain their work

STAR-EC will continue engaging local leadership to increase their knowledge of HIV and AIDS response to promote ownership and sustainability VHT

3.3 Support to strategic information collection and utilization

3.3.1. District led performance reviews and use of data for evidence based decision making

During this program year, STAR-EC conducted both the staff in-house and district local government performance review meetings (for all the nine districts) where PY4 data from HMIS and LQAS results were disseminated in comparison to past program year performance since baseline. In addition, quarterly performance reviews for PY5 were conducted. With technical assistance from STAR-EC's strategic information and technical teams, district staff were able to review their performance in relation to sub county, district, regional and national targets by technical area. Challenges, experiences, lessons learned and the way forward were mapped by participants and as such quarterly district owned action plans were developed. These included new strategies aimed at realizing their PY5 targets including strategies on improving the quality and scale-up of services.

Similar to what has always been the norm each year, STAR-EC continued to utilize strategic information from key studies to inform program interventions and activities. These studies include: the AIDS Indicator Survey (2011); Uganda Demographic and Health Survey (2011); STAR-EC LQAS surveys (2012 and 2013); and the STAR-EC MARPs Study (March 2012) on key populations (fisher folk, sex workers, 'boda boda' motorcyclists and truckers). Most of this information was also used together with routine HMIS information while developing the program's PY6 work plan. Year 4 Annual Report | October, 2011 - September, 2012

3.3.2. Lot Quality Assurance Sampling (LQAS) Survey

STAR-EC in partnership with SDS conducted the 2013 LQAS survey in the nine STAR-EC supported districts. This is an annual activity aimed at tracking program outcomes and enhancing evidence-based programming. The survey was conducted after training/re-orienting 63 district personnel in the LQAS methodology and

is intended to build a critical mass of skilled people to foster sustainability of this activity at district level. Rapid preliminary survey results on key indicators were shared among all district participants in the aftermath of conducting a two day data tabulation workshop. The STAR-EC 2013 LQAS report is now available and offers full details on household level outcome indicator program progress to date.

3.3.3. Data Quality Assessments (DQAs)

In addition to what had been done during previous program years, STAR-EC conducted its own routine data quality assessment and improvement exercises while working closely with district specific HMIS focal persons. These were mainly conducted prior to and in the aftermath of every reporting quarter. Health facility workers also participated in this exercise and were supported on performing their own DQAs and data quality improvements prior to any reporting to various stakeholders.

Furthermore, MEEPP conducted a data quality assessment for VMMC at Bugiri Hospital and Nankoma HC IV. The findings showed that STAR-EC contributes almost 21% of total VMMC outputs and that these sites not only have impressive numbers of persons circumcised but also have extremely low deviance in terms of data quality compared to other sites that were assessed elsewhere. The recommendations from the exercise are being implemented to improve the quality of VMMC data

Together with the MoH AIDS Control program, STAR-EC conducted a data quality assessment on PMTCT in seven health facilities from Luuka District. The DQA showed that health facilities were still using old versions of HMIS tools, health workers were still misinterpreting PMTCT codes and most health facilities were not reporting to MoH through District Health Information System (DHIS) 2. All of these challenges were subsequently addressed by the program during mentorship and support supervision.

3.3.4. Routine support supervision through on-site mentorships and training

STAR-EC trained health workers from Bugiri, Iganga, Kamuli, Kaliro and Namutumba districts in the use of Open Medical Records Systems (MRS). A total of 60 health workers from 13 health facilities benefited from this training. The cadres trained from each health facility included: facility in-charges; medical records assistants; nursing officers; biostatisticians; data entry clerks; as well as HMIS and ART focal persons. The program also supported the orientation of health workers by the Ministry of Health PMTCT team in the revised Option B+ and HIV Care/ART HMIS tools; orientation on the latest revised Option B+ and HIV care/ART data primary capture and reporting tools including SMS weekly reporting; as well as the latest MoH guidelines on drugs and management of HIV+ pregnant and lactating mothers and their HIV exposed babies.

In a bid to improve on VHT data collection skills during community service, 186 sub county and parish VHT coordinators from 30 sub

counties in all the nine districts were oriented on data collection, recording and reporting. This helped to improve on the quality of data reported by VHTs. Following this orientation, STAR-EC facilitated sub county VHT coordinators to collect and report monthly data. As a result, VHTs can now collect referrals data and report it in a timely and quality manner. However, one of the challenges includes insufficient VHT capacity to use electronic data management systems – something that the program intends to address in PY6, starting with VHTs that have interest as well as those educated enough to be able to utilize this option.

3.3.5. Support to HMIS and enhancement of clients' records management

As part of efforts to strengthen HMIS at health facility and district levels, STAR-EC printed and distributed the revised HMIS tools to health facilities. The tools are helping in ensuring that health facilities capture and report data in line with new and existing MoH policies that include change in regimen and other national reporting requirements. STAR-EC will continue supporting with the printing and distribution of tools whenever need by districts is ascertained. Additionally, as mentioned under the section above, training of health workers on HMIS was conducted during PY5.

In addition, the program supported records management through procurement and supply of file folders and HIV care cards for health facilities that are offering ART and HIV care services. Overall, over 6,000 HIV initiation cards, 6,000 HIV continuation cards, and 5,000 file folders were distributed. In PY6, the program will aim at procurement of 50 filing cabinets for new health facilities that will be providing Option B+ and ART services.

STAR-EC together with a team from the Clinton Health Access Initiative (CHAI) provided HIV Care clients cards, suspension and spring files, and metallic filing racks as well as onsite training and mentorship of health workers on filing, use of master patient index cards, appointment book strategy and general patient's records management. This was scaled up from seven health facilities that had been piloted in the last quarter of PY4 to 64 other sites making a total of 71 health facilities. The onsite orientation and mentorship will be ongoing to ensure that the acquired knowledge, skills and good practices of records management are fully embraced by health workers at intended health facilities. A total of 75 metallic filing racks, 3,000 files (1,000 suspension and 2,000 spring files) were procured and distributed among all the afore-stated 71 health facilities.

3.3.6. Key partnerships and strategic information meetings attended

STAR-EC participated in a number of meetings related to strategic information strengthening. These included: the Option B+ data quality assessment workshop organized by MoH/MEEPP/CDC/USAID and district performance/validation workshops organized by SDS.

STAR-EC contributed towards the progress on LQAS institutionalization while working with the STAR-E LQAS Project as well as HMIS strengthening with the MoH Resource Centre. STAR-EC was also involved in a training organized by MEEPP to orient implementing partners in the upgraded Partner's Reporting System (PRS) and DHIS2. At this training, the HIBRID system was introduced and subsequently, training on the use of the system was done. In addition, STAR-EC attended an mTrac national stakeholders meeting that was called by the MoH Resource Center to keep stakeholders abreast of all the progress and challenges that mTrac is registering. mTrac is a mobile tracking system that the MoH plans to roll-out to all districts in the country.

3.3.7. Health Facility Assessment

STAR-EC with support from the STAR –E LQAS project conducted a comprehensive health facility assessment in all high level health facilities from HCs III to hospital level in all the nine STAR-EC supported districts. The final report will be disseminated in Q1 of PY6 to help in planning for health service improvement.

3.3.8. Information sharing at national and international level

STAR-EC presented papers at both national and international levels. Two papers were accepted for oral presentation at the HIV Capacity Building Partners Summit in Johannesburg, South Africa, March 19-21, 2013. Other papers included:

- Using a multi-pronged approach to improving organizational capacity. Experiences from East central Uganda
- From data to action: Using Service Performance Assessment and Improvement (SPAI) process to promote utilization of HIV & AIDS data generated through Lot Quality Assurance Sampling survey. Experiences from East Central Uganda
- Improving TB Case Detection at a remote facility in Namayingo. (Presented at the 2nd National Quality Improvement Conference, 17-19 June 2013, in Kampala, Uganda)
- Improving the uptake of Reproductive Health Services among men in a rural Public Health Facility. The experience of Kidera HC IV. (Presented at the 2nd National Quality Improvement Conference, 17-19 June 2013, in Kampala, Uganda)
- Rearrangement of the facility setting increases access to TB/HIV integrated services: Lessons from Iganga Hospital in East Central Uganda. (Presented at the 19th Conference of the Union, Africa Region 20-22, June, in Kigali, Rwanda)
- Community participation in TB control activities increases access to diagnostic and treatment services: Lessons from East Central Uganda. (Presented at the 19th Conference of the Union, Africa Region 20-22, June, in Kigali, Rwanda)
- Effective strategies to Improve Uptake of Essential

Services and Retention along the PMTCT Cascade. (Presented at the VII International AIDS Society Conference, 30 June-3 July 2013, in Kuala Lumpur, Malaysia)

These papers enabled STAR-EC to share success, best practices, and innovations accruing from the implementation of HIV&AIDS and TB programs in East-Central Uganda. At the same time, the program was able to learn lessons from other implementing partners who attended the afore-listed workshops.

Constraints

- Currently not all our supported PMTCT sites are submitting their Option B+ weekly reports as it is required by MoH/ACP though they were all trained and have been registered in the system
- The use of DHIS2 in some districts is hampered by irregular power supplies, and lack of internet connectivity and trained staff
- Transition of reporting from the old MEEPP reporting system to the DHIS2 HIV Based Real-time Integrated Database (HIBRID) slowed reporting due to different data disaggregation requirements in the two systems
- There is repetition of PMTCT indicators on the HMIS 105 report and Option B+ addendum report which has created confusion for the health workers compiling these reports
- Due to the slow accreditation of ART sites by MoH, linkage of mothers started on ART during Option B+ service provision to care (ART) was affected

Way Forward

- The MoH/ACP is in the process of revising HMIS 105 and Option B+ addendum reports in order to create one report. STAR-EC will be involved in this process
- STAR-EC is working closely with district HMIS focal persons to ensure that reports entered into DHIS2 are consistent with what is entered into the MEEPP database and what is reported to other stakeholders
- The program will continue conducting data quality assessments in order to ensure completeness, timeliness and consistency of data from health facilities
- STAR- EC will carry out re orientation of health workers on the revised HMIS tools and also ensure that an adequate quantity of the tools is available for use at health facilities. This undertaking will among other activities involve improvements on the harmonization of eMTCT and ART data

3.4 Collaboration with Strengthening Decentralization for Sustainability (SDS) Program

The key prongs of the USAID District Operational Plans (DOP) namely: improved planning; coordination; communication; and elimination of duplication of activities by USAID funded implementing partners within the supported districts, formed the major highlights of PY5. USAID supported partners in a concerted

effort supported the districts to improve performance through ensuring proper planning, coordinated implementation of activities and participated in joint technical support supervision exercises. STAR-EC and other District based technical assistance partners (DBTA) staff also participated in performance validation exercises; district management committee meetings as well as key service delivery activities in the health and community based services departments. On the overall, districts performance in terms of timely and quality implementation of activities, reporting and accountability significantly improved during PY5.

STAR-EC worked closely with the respective district health offices to ensure that the activities funded through the SDS 'Category A' granting mechanism were well implemented, accurate and timely program and financial reports produced, reviewed and shared with SDS for accountability purposes. STAR-EC staff particularly ensured that they participated in the key must attend activities of the integrated health support supervision exercises and expanded district health management committee (DHMC) meetings. STAR-EC staff supported the district teams to identify areas of weakness, challenges and constraints and helped the districts to developed action plans to be followed up to ensure improved program performance. As a result of these efforts, STAR-EC supported districts reported improved performance during validation exercises and hence qualified for at least 75% funds disbursement for the fourth quarter of PY5.

STAR-EC and other USAID funded implementing partners continued to attend the district management committee (DMC) meetings which serve as a peer review, reporting and accountability mechanism by both the districts and the USAID funded programs. Such meetings have helped the different stake holders to review overall performance of the districts in view of the USAID funded activities, identify constraints and challenges to implementation and collectively develop strategies for improved performance. The DMC forum also helped to improve the image of the implementing partners through dissemination of key policy guidelines to the district staff. The districts now view USAID funded

To equip the new CSOs, two orientation workshops were held. These workshops involved orienting the CSO staff to the different intervention area strategies that STAR-EC was adapting to enable them to implement accordingly. After a detailed process which included reviewing their management and programmatic skills and strengths in relation to their locations, the CSOs were inducted on how they would contribute to the key pivot areas of VMMC, PMTCT/eMTCT Option B+, ART, Condom promotion and HTC. Their role in making referrals and follow up of all referrals by themselves, health facilities and collaboration with other service providers was emphasized. They were also inducted in using the program financial and data reporting tools and the importance of timeliness and completeness in reporting.

The key challenge faced by CSOs over the year was the general stock out of HIV testing kits from health facilities that usually supply them. This affected both the prequalified and new CSOs, especially since they use HTC as an entry point to service delivery. Additionally, the new CSOs were affected by a program slow down resulting from a delay in receipt of funds that came almost immediately after signing their grant agreements in April 2013. As a result, they only started operations in June 2013, effectively providing services for only three months. Nevertheless, they were able to achieve some results as shown in Table 14.

partners as one face and voice that speak the same language regarding the program and financial policies and procedures, planning, implementation and coordination of activities. Through performance based financing, districts have taken ownership of USAID funded activities and further inculcated the discipline of accurate and timely program reporting and financial accountability and enhanced program sustainability.

USAID/PEPFAR support for human resource for health coordinated by SDS and the Uganda Capacity Program, has enabled the STAR-EC supported districts to recruit an additional 50 health workers comprised of clinical officers, enrolled midwives and enrolled nurses for high volume HCIs while recruitment for private not-for-profit (PNFP) facilities and laboratory hubs was ongoing by the time of compiling this annual report.

3.5 Grants to Civil Society Organizations

During PY5, six community based organizations (CBOs) came on board to scale up services provided by the three pre-qualified CSOs namely FLEP, URHB and Youth Alive; bringing the total number of grantees to nine. The new CSOs mandate was to extend services to Sigulu islands and landing sites in Namayingo District; and to other landing sites in Buyende District. They would also cover the 'hotspots' along the northern transport corridor.

The new CBOs included the Bukooli Islands Women Integrated Health Initiative (BIWIHI); Friends of Christ Revival Ministries (FOCREV); Jinja Diocese Health Office (JDHO); National Forum of People Living with HIV&AIDS Networks in Uganda (NAFOPHANU); Uganda Development Health Association (UDHA); and the Sigulu Women AIDS Awareness Organization (SIWAAO).

All CSOs were focused on reaching individuals and HIV high prevalence communities not well served through outreaches by health facilities, make referrals and support follow up of all referrals made to ensure clients get services to achieve a CoR for key pivot intervention areas.

Table 14: Summary of CSOs performance for PY5

Name of Grantee	Total Amount disbursed PY5 (UGX)	Results achieved for key CSOs intervention areas				
		HTC	MARPS reached	Other prevention (ABC)	Condoms distributed	Referrals made
FLEP	169,870,918	14,039	20,528	30,733	294,839	123
URHB	172,089,900	17,071	32,611	9,608	111,292	5,3530
YA	172,000,000	19,252	1,096	68,889	26,125	5,711
New 6 CBOs	329,297,468	39,664	24,681	26,952	555,302	33,346
Total for CSOs	843,258,286	90,026	78,916	136,182	987,558	92,710
Total for program		816,839	110,8517	248,553	2,021,274	N/A
% contribution		11%	71%	55%	49%	N/A

Source: HMIS/STAR-EC program records

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3.5.1 Sub Awards

STAR-EC's four sub recipients namely Bantwana, CDFU, m2m and Uganda Cares continued to support implementation of STAR-EC activities in the field to ensure that a CoR is achieved and key program pivot areas are supported. In addition to the general and routine activities, the sub partners carried out key specific activities that contributed tremendously to the program.

Bantwana took a lead role in supporting the PLHIV networks to embark on the task of mapping and registering all PLHIV members in their respective communities; initiating collaboration with SUNRISE to acquire a data base of OVC homes so as to increase community pediatric linkage; and also in engaging CSOs in capacity building activities. Furthermore, they supported mentorships to VHT Coordinators and HMIS focal persons on community HMIS reporting.

Mothers2mothers (m2m) scaled up to 17 new sites to raise the number of sites with 'mentor mother' presence from 28 to 45. They also trained 91 mentor mothers in Option B+ and activated the m2m model in four sites in the Sigulu islands.

CDFU was engaged in combination prevention interventions using puppetry in mobilization for condom promotion as well as interactive radio programs encouraging parents and guardians to take children for care and treatment. Other activities were geared towards promoting health seeking behaviors. Community education activities targeted condom promotions at community service delivery outreaches and also in the night video halls; orientation of CSOs on proper use of IEC materials; conducting radio talk shows and ART campaigns; running of the hotline toll free line for provision of information, counseling and referrals; branding of buildings with prevention messages in some 'hotspots' like the landing sites and islands.

Uganda Cares engaged locum staff in supporting the rapid enrollment of eligible PLHIV onto ART and further sent their head office teams to health facilities to support the enrollment exercise. STAR-EC continued to provide funding to meet personnel costs for the 12 seconded staff and proportionate time input by corporate headquarter staff from the four sub recipients that support program implementation.

3.5.2 Support to District-led activities

STAR-EC continued to support implementation of district-led activities through centrally funded activities, provision of supplies and technical support to health workers to implement HIV&AIDS and TB activities that were directly funded by SDS. STAR-EC continued to provide financial support to health facilities in the three districts of Buyende, Luuka and Namayingo that are not funded by SDS.

3.5.3. Monitoring and Supervision

STAR-EC technical and grants management team continued to monitor and supervise the sub-awards and grantees in the field. Further, the grants team conducted quarterly field visits to support and follow up on the financial reviews that were conducted. The pre-qualified CSOs. BIWIHI, one of the new CSOS located in Lolwe island was also supported during the integrated outreach to Sigulu islands. All CSOs were further oriented in USAID rules and regulations and technical and financial reporting. CSOs were also trained data capture and reporting. Emphasis was also placed on compliance to finance guidelines and grant agreement terms and conditions.

4.0 CONCLUSION

During PY5, STAR-EC witnessed rapid implementation of improved strategies that resulted in tremendous results in relation to the set targets for the program year as well as the end of program life targets. This was possible due to the various innovations that were undertaken in order to increase access to services through supporting integrated service delivery at static sites and community outreaches and promoting community-health facility linkages. Additionally, owing to increased decentralization of HIV&AIDS services from higher to lower level health facilities and communities, PY5 registered increased access to services. Basing on the epidemiological data of the East Central Uganda region, efforts were undertaken to respond to district, sub district and sub population variation in the HIV transmission risk factors with disproportionate attention being placed on interventions for fishing communities, truckers and sex workers. A combination prevention strategy was the cornerstone of this effort coupled with active linkages to services through linkage facilitators at facility and community levels. PY5 also witnessed the roll out of Option B+ for HIV positive pregnant and lactating mothers with its attendant capacity building and logistical upfront requirements. STAR-EC managed to quickly respond to the roll out needs and great results were registered, as has been mentioned in this report.

Going forward, the main focus will be on supporting combination prevention among key populations, creating effective linkages between prevention, care and treatment services in order to ensure a 'continuum of response', generating and utilizing empirical evidence to engender prioritization of interventions that will generate population level impact, and building capacity at district and community levels to foster ownership and competence for sustained delivery of quality TB and HIV&AIDS services.

Suffice to note that the magnitude of the aforementioned achievements would not have been registered without the close partnership and collaboration from several national and international stakeholders. STAR-EC wishes to acknowledge their contribution and looks forward to their continued support during the remaining program life.

Appendix 1: A QA/QI Dashboard for VMMC indicators for 16 STAR-EC supported sites

	Health Unit District IP Supporting Site	Management systems	Supplies, equipment & environment	Registration group education and IEC	Individual counseling & HIV testing	Male circumcision surgical procedure	Monitoring & evaluation	Infection prevention	Comments
1	Busesa HC IV	90	67	80	100	93	78	100	Site improved across all indicators
2	Kamuli Hospital	90	67	83	88	100	92	90	M&E declined and infection prevention improved greatly. However, during next mentorship individual counseling which was not scored will be observed
3	Iganga Hospital	80	67	67			71	78	Site to be supported to improve management systems which declined abruptly and unexplainably. Also during next mentorship standards which were not scored have to be observed
4	Bugono HC IV	80	67	67	89	90	87	79	Improved all indicators. However, during next mentorship standards which were not scored have to be observed
5	Namwendwa HC IV	80	83				64	84	All indicators improved. During next mentorship standards which were not scored have to be observed
6	Nankoma HC IV	70	83	50			50	69	Improved all indicators However, during next mentorship standards which were not scored will be observed
7	Namungalwe HC III	80	33	67	83	86	79	84	Site has to be supported to improve in the area of supplies, equipment & environment
8	Kigandalo HC IV	80	67	50	61	81	78	84	All indicators improved however, indicators with yellow will be supported to make improvement
9	Kityerera HC IV	80	50	67	83		85	84	All indicators improved however, indicators with yellow will be supported to make improvement
10	Kiyunga HC IV	80	33				78	67	Supplies, equipment & environment declined although there was general improvement. Indicators with yellow will be supported to make improvement
11	Bulesa HC III	80	50	67	88	93	78	83	Indicators with yellow will be supported to make improvement
12	Bumanya HC IV	70	67	67			57	72	Improvement across all yellow indicators will be prioritized
13	Kidera HC IV	90	50	67	89	93	78	91	All indicators improved. However, Indicators with yellow will be supported to make improvement
14	Nankandulo HC IV	88	33	67	80	93	78	89	Supplies, equipment & environment declined although there was general improvement.
15	Mercy HC III	80	80	67	100	97	86	86	Improved all indicators greatly. Registration group education and IEC will be supported to make improvement
16	Mayuge HC III	90	50	67	89	83	79	84	Improved all indicators. However, Indicators with yellow will be supported to make improvement

Source: HMIS/STAR-EC program records

Appendix 2: Linkage to care

Type of linkage	Indicator description	Bugiri	Buyende	Iganga	Kaliro	Kamuli	Luuka	Mayuge	Namayingo	Namutumba	Regional	COMMENTS
HIV + from HTC and CTX	# newly identified HIV-positive individual	2,177	1,506	2,636	1,121	2,903	828	3,204	5,235	944	20,554	The positives include the new positives at ANC, L&D, PNC and General HTC including VMMC but excludes known & documented status since most of them are already in care
	# newly identified HIV-positive individual provided with CXT	2,011	1,333	2,414	1,043	2,765	771	2,964	4,815	911	19,027	
	Proportion of new HIV+ provided with a minimum of care service (CXT)	92%	89%	92%	93%	95%	93%	93%	92%	97%	93%	
HTC to care	# newly identified HIV-positive individual	2,177	1,506	2,636	1,121	2,903	828	3,204	5,235	944	20,554	All HIV positives except those with a known and documented status/ TB
	# identified PLHIV newly enrolled in care	1,357	851	1,764	1,035	1,779	642	1,816	2,223	692	12,159	All clients enrolled in pre-ART in PY5
	Proportion of new HIV+ clients linked	62%	57%	67%	92%	61%	78%	57%	42%	73%	59%	
HTC only to care (excluding women from PMTCT)	# newly identified HIV-positive individual	1,823	1,325	2,100	976	2,320	697	2,920	4,823	797	17,781	These excludes positives from ANC,PNC and L&D
	# identified PLHIV newly enrolled in care	1,163	739	1,229	886	1,350	494	1,455	1,983	508	9,807	These exclude new care clients from ANC, PNC and L&D
	Proportion of new HIV+ clients linked	64%	56%	59%	91%	58%	71%	50%	41%	64%	55%	
PMTCT to care (including all pregnant women and PNC but excluding known & documented)	# new HIV-positive pregnant & PNC women	354	181	536	145	583	131	284	412	147	2,773	These include new positives from ANC+ PNC+ L&D
	# HIV+ pregnant & PNC women enrolled in care	194	112	535	149	429	148	361	240	184	2,352	These are ANC, PNC and L&D. To note, I used option B+ clients as proxy for PNC and L&D care clients since they don't have codes in pre-ART register
	Proportion of PMTCT clients linked	55%	62%	100%	103%	74%	113%	127%	58%	125%	85%	% > 100% could be due to enrolment of revisit (old) HIV+ mothers into care due to option B+. There was high enrolment of PNC in Q3-Q4 compared to the new positives

Type of linkage	Indicator description	Bugiri	Buyende	Iganga	Kalro	Kamuli	Luuka	Mayuge	Namayingo	Namutumba	Regional	COMMENTS
PMTCT to care (excluding PNC and known & documented)	# new HIV-positive pregnant women	331	156	431	101	475	107	259	336	117	2,313	These include new positives at ANC but exclude PNC, L&D and Known & Documented HIV positives
	# HIV+ pregnant women enrolled in care	165	99	365	102	257	100	256	145	112	1,601	These are ANC clients newly enrolled in Care
	Proportion of pregnant women linked	50%	63%	85%	101%	54%	93%	99%	43%	96%	69%	% > 100% could be due to enrolment of revisit (old) HIV+ mothers into care due to option B+
TB to care	# newly identified TB-HIV positive	115	21	208	24	44	23	76	89	32	632	
	# TB-HIV cases enrolled in HIV care	104	18	197	24	44	22	62	87	32	590	
	Proportion of new TB clients linked	90%	86%	95%	100%	100%	96%	82%	98%	100%	93%	
Care to ART	# PLHIV in care eligible for ART	1,101	593	1,523	631	1,354	437	1,160	1,518	728	9,045	
	# eligible clients newly started ART	1,034	580	1,393	615	1,295	412	1,139	1,498	691	8,657	
	Proportion of eligible clients initiated on ART	94%	98%	91%	97%	96%	94%	98%	99%	95%	96%	

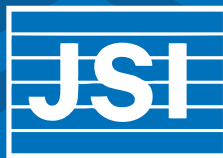
Source: HMIS/STAR-EC program records

Appendix 3: PY5 progress on care and treatment indicators

No.	Indicators	Annual results	Comments
1	Total Pre-ART Care new + current Adults	19,710	
2	Total Pre-ART Care new + current Children	679	
3	Total Pre-ART	20,389	
4	Total ART new + current Adults	19,505	
5	Total ART new + current Children	4,076	
6	Total ART	23,581	
7	Total Care	43,969	
8	TB Screening - 90%	39,572	
9	TB Treatment - 3%	1,319	
10	ART New Naive	9,506	
11	PMTCT Option B+	4,161	
12	No. of sites	59	
13	Total newly enrolled in care - FY12	7,651	
14	Total number in care - FY12	24,335	
15	Total number in care this QTR	34,517	
16	Number of children below 15 yrs current in HIV care in the QTR	2,508	
17	Number newly enrolled into care this QTR	12,159	
18	Number of children <15yrs newly enrolled into HIV care this QTR	841	
19	%age of HIV positive individuals linked into care from HTC	59%	
20	%age of HIV positive infants linked into care from EID	61%	
21	Number on Cotrimoxazole Prophylaxis	34,113	
22	Total number of patients screened for TB	34,182	
23	Total number of TB suspects	1,026	
24	Total number found with active TB	317	
25	Number received Basic Care Kits in the QTR	10,092	
26	%age counselled for Family planning needs	-	Indicator not captured in the MoH reporting form 106a for HIV care and treatment
27	Number of HIV-positive clinically malnourished clients who received therapeutic or supplementary food	885	
28	% newly enrolled into care this qrt	35%	
29	% of Children in care	7%	
30	%age on Cotrimoxazole Prophylaxis	100%	
31	%age of patients screened for TB	100%	
32	%age of TB suspects	3%	

No.	Indicators	Annual results	Comments
33	%age of patient found with active TB	31%	
34	% achievement for care target	79%	
35	% achievement of Children enrolled in care - Newly	124%	
36	(Lost) / Transfers into care	(1,977)	
37	Total newly enrolled onto treatment - FY12	5,419	
38	Total number on treatment - FY12	12,278	
39	Total number current on ART in this QTR	20,577	
40	Number of children <15 yrs current on ART this QTR	1,554	
41	Number newly enrolled on ART in this QTR	8,657	
42	Number of children <15yrs newly enrolled on ART this QTR	587	
43	Number of HIV+ infants (EID) initiated on ART	165	
44	Number of HIV positive individuals started on Option B+	2,217	
45	%age of TB/HIV co-infected started on ART	80%	
46	Number of clients reporting Alcoholism or Substance Abuse	-	Indicator not captured in the MoH reporting form 106a for HIV care and treatment
47	% of clients on ART	60%	
48	% of Children on Treatment	8%	
49	% of Children in care that are on ART	62%	
50	% of client new on ART in the qtr	42%	
51	(Lost) / Transfers into ART	(358)	
52	% of patient on Treatment	60%	
53	% achievement for ART naïve target	91%	
54	% achievement of Children newly enrolled on ART	14%	
55	% achievement for B+ target	53%	
56	Median CD4 for ART naïves this qtr	285	

Source: HMIS/STAR-EC program records



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