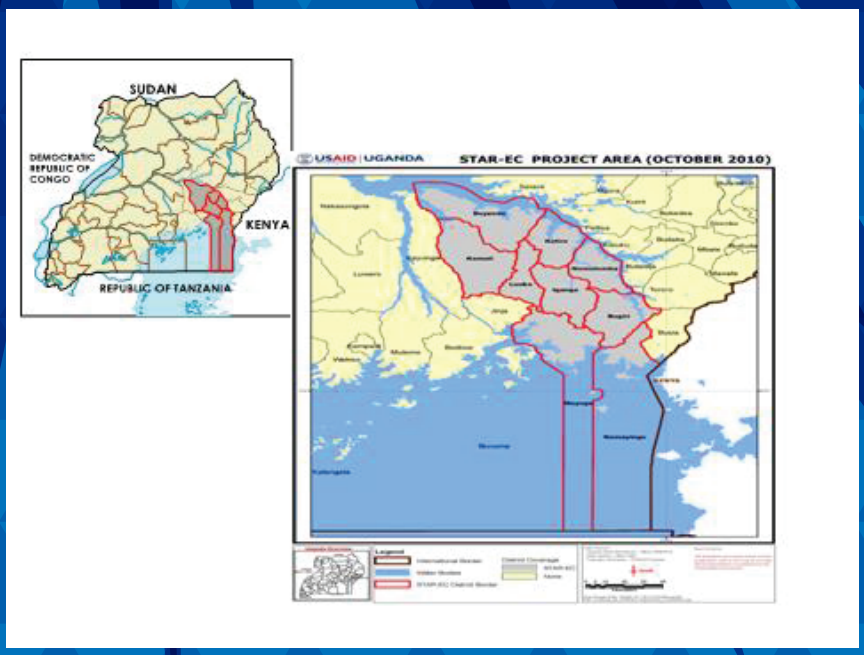
STRENGTHENING TB AND HIV & AIDS RESPONSES IN EAST CENTRAL UGANDA

STAR-EC

END-LINE SURVEY REPORT

Results from Nine Districts in East Central Uganda



Final Report

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List of Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
BCC	Behavior Change Communications
CAO	Chief Administrative Officer
CDO	Community Development Officer
CI	Confidence Interval
CSO	Civil Society Organizations
CTX	Cotrimoxazole
DHO	District Health Office(r)
EC	East Central
FP	Family Planning
HIV	Human Immunodeficiency Virus
HC	Health Center
HF	Health Facility
HTC	HIV Testing and Counseling
HMIS	Health Management Information System
HSD	Health sub-district
IEC	Information, Education and Communication
IYCF	Infant and Young Child Feeding practices
JSI	JSI Research & Training Institute, Inc.
LQAS	Lot Quality Assurance Sampling
LG	Local Government
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MTCT	Mother-to-Child Transmission of HIV
NGO	Non-Governmental Organization
NTLP	National TB and Leprosy Control Program
p value	Probability Value
PLHIV	People Living with HIV&AIDS
PMTCT	Prevention of Mother-to-Child Transmission of HIV
RH	Reproductive Health
SA	Supervision Area
SDS	Strengthening Decentralization for Sustainability program
STAR-EC	Strengthening Tuberculosis and HIV&AIDS Responses in East Central Uganda
STRIDES	STRIDES for Family Health program
TB	Tuberculosis
UAC	Uganda AIDS Commission
UDHS	Uganda Demographic Household Survey
USAID	United States Agency for International Development
USG	United States Government
VHT	Village Health Team
DOTS	Directly Observed Therapy Short Course

Highlights

On an annual basis for the last seven years, and with funding from USAID, the Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR-EC) program has conducted Lot Quality Assurance Sampling (LQAS) surveys to assess program progress. Using results from these surveys, the least performing indicators have been identified and targeted for improvement each year while districts and sub counties have also been prioritized in accordance to identified need. Six districts were assessed during the 2009 baseline survey while a total of nine STAR-EC supported districts have been assessed during the rest of the subsequent years till the end of program. All these surveys have been conducted during the period May - June of each year.

Similar to previous years, a total of 63 Local Government (LG) personnel (8 female and 55 males) from all the aforesaid districts were trained or re-trained in the application of the LQAS survey methodology. Only six participants were new to this year's training. For purposes of comprehending STAR-EC's program life household/community level performance results more easily, the 2015 report will concentrate on the 2009, 2012 and 2015 outcomes that represent findings at baseline, mid-term and end-line time periods (respectively).

Details on the survey methodology and specifics on all of the findings can be found in the main body and appendices of this report including all past annual reports. Table 1 summarizes data trends on key assessed indicators at the three aforementioned program life time periods.

Table 1: STAR-EC Household Program Life LQAS Survey Results 2009 - 2015

Indicator definitions	Performance during program life			Notes (unless mentioned, all notes herein refer to the year 2015 results)
	Baseline 2009	Mid-term, 2012	End-line, 2015	
REPRODUCTIVE HEALTH				
% of pregnant women attending ANC at least 4 times during the last pregnancy	49.1	47.9	52.2	The proportion of women receiving ANC services at least once remains high at 95.9%. However, it was highest during 2011 at 96.8%.
% of deliveries (in the last 2 years) that took place in a health facility	69.1	67.4	82.5^{oo}	p<0.001. Kamuli (95.3%) and Bugiri (64.7%) districts reported the highest and lowest findings respectively.
% of married/cohabiting women 15-49 years using modern family planning methods	26.4	29.2	31.8 ^{ooo}	In addition, 33.7% (15-49) of married/cohabiting women reported currently using any family planning method.
PMTCT				
% of women tested and received their HIV test results during ANC in last 2 years	43.9	70.7	88.1 ^{ooo}	p<0.001. The advent of eMTCT interventions in 2013 generated higher results during subsequent years.
% of adults who know all the 3 MTCT ways (during pregnancy, delivery and breast feeding)	45.2	40.3	52.8 ^{oo}	More women (55.4%) than men (46.6%) knew all three MTCT ways (p<0.001).
HIVTESTING AND COUNSELING (HCT)				
% of adults (15 years and above) who have ever taken an HIV test	47.9	63.7	83.6^{ooo}	Significant differences (p<0.001) when comparing sex of respondents as well as when comparing performance by year since baseline.
% of adults (15 years and above) who have tested and received their HIV test results in last 1 year.	33.2	48.4	61.4^{ooo}	Significant differences (p<0.001) when comparing sex of respondents as well as when comparing performance by year since baseline.
% of adults (15+ years) who know where they can be tested for HIV	82.5	90.4	95.3^{ooo}	85.6% of those who know of a place where to go for an HIV test in case they wanted one, have actually tested for HIV.
BIO-MEDICAL HIV PREVENTION				
% of men (15-54 years) who have ever been circumcised	37.4	45.0	57.5 ^{ooo}	Significant increments (p<0.001). (58.3% of all young men (15-24 years) have ever been circumcised.
Of those who have never been circumcised, % of males who say they would accept to undergo circumcision in case they were offered a chance at a health facility	66.6	75.9	65.7%	Results show a decline from mid-term in 2012 to end-line in 2015. Follow up operations research may be able to explain this down trend.
ANTI RETROVIRAL THERAPY (ART)				
% of adults (15+ years) who believe that HIV patients should take ARV drugs and/or cotrimoxazole	36.1	51.8	67.3 ^{ooo}	68.5% were males and 66.8% females.
% of adults (15+ years) who know a place to get ARV drugs for HIV patients	58.0	76.5	88.7 ^{ooo}	Each year, more proportions of adults are getting to know where to obtain ARVs
BEHAVIORAL PREVENTION				
% of adults (15+ years) who know a place to obtain condoms	82.8	88.8	91.8^{ooo}	p<0.001. Less females (91.3%) than males (93.1%) knew of where to obtain condoms.
% of adults who can mention the 3 major ways of HIV&AIDS prevention (Abstinence, Being faithful and Condom use)	58.7	68.8	70.7 ^{ooo}	Among districts, Kaliro (89.3%) had the highest while Iganga (59.6%) and Luuka (61.9%) had the lowest.
% of adults (15+) able to reject all the major HIV&AIDS misconceptions (witchcraft, mosquito bites and sharing food)	48.3	57.9	66.3 ^{ooo}	Among those that believe in these misconceptions, most believe that HIV can be transmitted through mosquito bites.
CARE AND SUPPORT				
% of households with a person who is very sick or bed ridded for a period of three or more months, or anyone who died after being sick for more than three months	12.7	8.7	7.6 ^{ooo}	p<0.001. Among districts, the highest proportions were reported from Mayuge (15.1%) and Namayingo (10.0%) while the lowest was reported from Kamuli (2.1%)
(Of those affected households) % of households receiving care and support for a sick bedridden person or someone who died after being sick or bedridden for more than 3 months	55.9	65.5	74.2 ^{ooo}	Support received by affected households included: Free Medical 69.4% Free emotional 26.2% Free material 17.1% Social Support 30.3%
TUBERCULOSIS				
% of adults (15+ years) who know that it is possible for a person to have TB and HIV at the same time	81.9	86.9	88.9^{ooo}	No significant differences (p=0.704) between males (88.4%) and females (89.6%).
% of adults (15+ years) who know that TB is a curable disease	55.4	69.1	75.5^{ooo}	Significant differences (p=0.002) between males (79.2%) and females (73.9%).
% of adults (15+ years) who know of any signs and symptoms of TB	84.4	88.1	92.6 ^{ooo}	Findings were high across all districts, however results show low proportions among those who know of two or more important signs.

Source: Household LQAS 2009-2015 surveys

^{ooo}Significant trend in improvements since baseline survey (p<0.05)
^{oo} Significant trend in improvements since mid-term (p<0.05)

1.0 Introduction

1.1 Background

STAR-EC is a USAID PEPFAR funded program which is being implemented in nine districts of East Central Uganda and is scheduled to end on 30th March, 2016. STAR-EC aims at expanding access to and utilization of the comprehensive package of TB and HIV&AIDS services by building upon existing networks, expanding geographical coverage and populations served through strengthening district specific responses and expanding the role of CSOs and communities in planning, implementing and monitoring activities. Routine monitoring and periodic evaluation are crucial aspects of effective and efficient program implementation. The STAR-EC program adopted the LQAS survey, a rapid and cost-effective tool to measure coverage of relevant indicators while identifying gaps in performance at household/community level. This survey is conducted annually and commenced with a baseline assessment in 2009. In addition, it provides a good source of routine health statistics that complement the existing national health management information system (HMIS).

1.2 Major Objectives of STAR-EC

STAR-EC has five major objectives that include:

- 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 health centers (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.
- Intensifying demand generation activities for HIV&AIDS and TB prevention, care and treatment services.
- Strengthen the continuum of care for vulnerable children at community and facility levels. (This objective was developed starting with PY6)

Over the last seven years, the LQAS methodology has been used by STAR-EC to establish progress of different national, district and program level indicators at the community level. In the aftermath of data collection, manually tabulated results were immediately analyzed then shared with all the nine district team members, leaders and decision makers so as to promote evidence based planning and decision making.

With co-support from both STAR-EC and the SDS program, the 2015 survey was conducted during May to June (same year). This survey primarily assessed the availability, accessibility, effectiveness and efficiency of services related to HIV&AIDS and TB indicators. Other non-HIV&AIDS related indicators included reproductive and adolescent reproductive health; water and sanitation indicators. These were assessed with the participation of district local government personnel. Findings from these surveys have been instrumental to STAR-EC as well as the central government, LGs and other development partners in the assessment of program progress including identification of underperforming areas that each respective district should endeavour to address during their subsequent LG annual planning and budgeting process. Further, the continued dissemination of these results will help in building a consensus on the value of LQAS with district and national leaders thus enhancing the feasibility of institutionalizing LQAS as a routine monitoring and evaluation approach for district and nationwide interventions

2.0 Methodology

2.1 Questionnaire Preparation

For consistence and comparability of survey results, minor additions and revisions were made during the preparation of survey questionnaires. Therefore, most of the questions within the tools developed during the baseline and subsequent survey years were maintained and these tools contained standard questions that were based on most of the USAID/PEPFAR new generation indicators, World Health Organization (WHO), the Ugandan Ministry of Health (MoH), Uganda AIDS Commission (UAC) as well as the STAR-EC program level indicators and other intervention areas. Consideration was also given to specific district LG indicators of interest. Special attention was also given to making sure that the considered indicators were useful for comparison with routinely collected service data.

Survey questions were structured according to the standard questions used nationally and internationally to measure the chosen indicators. Soon after, questionnaires were pre-tested and revised accordingly. However, it should be noted that starting with the 2011 survey, questionnaires incorporated some new indicators on maternal and child health that included immunization and malaria management for under 5 year olds and pregnant women. Other indicators and special groups assessed included Orphans and Vulnerable Children (OVC)[1].

As opposed to four sets of questionnaires that were being examined in the first two survey years, namely:(1) biological mothers with children less than two years of age; (2) young people aged 15-24 years; (3) men aged 15 to 54 years; and(4) women aged 15 to 49 years, two more sets or target groups were introduced during the last three survey years. These included: (1) biological mothers with children aged 12-23 months (this meant that the previous category of biological mothers with children 0-24 months was subdivided into two groups – that is 0-11 months and 12-23 months) and (2) OVC. In order to cater for immunization indicators, the split between biological mothers of children under 2 years was instituted during the 2011 survey so as to have assessments based on the 0-11 months and 12-23 months age groups. Therefore in total there were six household based questionnaires for different age categories during this survey. Unlike the previous years, the HIV&AIDS module was added onto interview questions for the 2013 survey biological mothers of children 12 -23 months questionnaire category. However, there were some few additional changes to note as part of the 2014 survey. In order to increase on the sample size for measuring Integrated Young Child Feeding (IYCF) practice indicators meant to aid reporting for the SPRING program in Namutumba and Mayuge districts, the 0-11 months age group was sub-divided into the 0-5 and 6-11 months age categories for the two aforementioned districts.

Most questions were common across different target age groups and this helped to ensure comparability across these groups as well as increase the sample size for the entire survey. Each individual questionnaire contained questions about household characteristics (including the exact location) and questions on socio-demographic characteristics, water and sanitation (except for the youth group), HIV&AIDS and family planning. Other modules, however, were specific to some groups and did not feature in some target group questionnaires. For example, questions on direct ANC services and HIV testing for PMTCT purposes were only included in the questionnaires for mothers with children under two years of age. By arranging some questionnaires in this format (whereby all respondents from the six[2] target groups were asked the same questions), the sample size derived from such shared modules was at most increased to 570 per district instead of 95 (excluding Namutumba and Mayuge districts that had 665 sample size due to the aforementioned IYCF target group categories) thereby increasing the degree of precision in measuring the related indicators. Overall, the random sample size for all the six target groups examined in the 2014 survey was 5,324 individuals. However, the concentration of results for this report will dwell on 4,469 individuals excluding the 855 individuals examined under the OVC group category whose questionnaire was mainly limited to OVC type of questions. Additionally, each age specific category questionnaire had question modules that explored specific interests related to a given age category. For example, PMTCT service utilization questions were only restricted to biological mothers of children under 2 years and in no other age category questionnaire. It should be noted that the 2009 baseline survey carried an overall sample of 2,280 respondents and this was mainly due to the fact that there were only six supported districts to collect this information from at the time.

Prior to the training of district LG and CSO[3] personnel, extensive pre-testing of survey questions took place at the village level. Edits and various adjustments were made to improve these data collection tools before the final printing of questionnaires could commence.

2.2 Training/re-training for the 2015 survey

For both the 2014 and 2015 surveys, training/re-training of two participant groups lasted three days each (the first five surveys years' trainings took a total of five days each). The first group trained from 11-13th May, 2015 at MUM Resort Hotel, Iganga. This group included Iganga, Mayuge, Namutumba, Kaliro and Kamuli district LG personnel. The second group which comprised of Luuka, Bugiri, Namayingo and Buyende district personnel trained from 18-20th May, 2014 at Ntinda Valley Resort Hotel in Iganga District.

The training and re-cap covered the following topics: introduction to surveys and LQAS methodology, field preparation, sampling and

1 Data on OVC was collected with STAR-EC's support, however, analysis and reporting of this data was conducted by the STAR-EC LQAS project.

2 One out of the six questionnaires (OVC tools) did not carry modules on HIV related indicators

3 CSO personnel were only involved in LQAS survey data collection and analysis activities during the first four years of STAR-EC's program life. Thereafter, their participation was limited to dissemination and utilization activities.

selection of households, selection of respondents, pre-testing, interviewing techniques and logistics of data collection. Training was participatory with practical sessions where interviewers demonstrated knowledge on household selection within a mini, mock village. During the session on interviewing techniques, tips were provided to the interviewers on how to contact the household in a village, explain the purpose of the study, gain cooperation, enumerate household members, select the respondent, ask questions in the required manner, put the respondent at ease and accurately record the respondent's answers and any other required information. Role-plays and mock interview training techniques were employed where applicable.

During the training, a day was dedicated to training interviewers on the questionnaires that were eventually used to collect data. A total of six categories of questionnaires were reviewed and these included all those mentioned under section 2.1. During the training workshop, questions were translated into Lusoga (the local language). A pretest of these questionnaires was henceforth conducted and its results reviewed overnight by survey supervisors. The following day it was discussed together with field interviewer teams. Lastly, as a means to establish the knowledge and recall levels of training participants, prior and end training evaluation exercises were conducted as part of the workshop.

2.3 A Brief Background to the LQAS Methodology

The LQAS methodology was developed in the USA in the 1920s and widely used in the manufacturing industry for quality control of the goods produced on a production line. This methodology involves taking a small random sample of a manufactured batch (lot) and testing the sampled items for quality. If the number of defective items in the sample exceeds a pre-determined criteria (decision rule) then the lot is rejected. The decision rule is based on the desired production standards and a statistically determined sample size. This methodology was borrowed by the public health sector. It uses a small sample of 19 respondents that provides an acceptable level of error for making management decisions (samples larger than 19 have practically the same statistical precision as 19 - they do not result in better information, and they cost more[4]). Details of the history and statistics behind the method have been discussed in various literatures[5].

LQAS is a lower cost, less time consuming sampling method that can be adapted to the service sector by using supervision areas (SAs) instead of production lots to identify poorly performing areas that do not reach an established benchmark. It can also provide an accurate measure of coverage or service system quality at a more aggregate level (e.g. program area). In this survey, existing lower level administrative structures (sub-counties) were used as SAs and each district as a program area or lot. A minimum of five supervision areas per district was required to obtain an acceptable 95% confidence level in the LQAS survey. SAs were derived in respect to population size and geographical locations/neighborliness of different sub-counties. Weighting in respect to population size was used while deriving SAs for districts with more than 5 sub-counties. The higher the population of a given sub-county, the more likely it stood a chance of being selected as a standalone SA while at the same time if two or more sub-counties within the same district were geographically neighboring each other and had a lower combined population when compared to one sub-county in the same district, they would then form a given SA. The overall district coverage for the survey indicators was then used as a benchmark against which SA performance was assessed as either below or above the desired performance and poorly performing areas identified as a priority for improved or enhanced interventions.

2015 HOUSEHOLD SURVEY GENERAL INFORMATION

4,465 respondents aged 15-54 years were interviewed from 4,465 households within 855 villages

29.7 % (1,328) were males aged 15-54 years and

70.3% (3,137) were females aged 15-49 years

46.5%(2,078) were young people 15-24 years

An additional 855 respondents were interviewed as part of the OVC questionnaire. This number is excluded from all those mentioned above. For the districts of Namutumba and Mayuge, there was a split of the 0-11 months age group into the 0-5 and 6-11 months target group in order to create a bigger sample size required to analyze information on IYCF indicators.

2.4 Village and Household Sampling

Sampling of villages during the 2015 survey was conducted in relation to the SAs that had already been formulated and defined during the baseline and 2010 survey. In 2009, six districts were assessed and these included; Bugiri, Iganga, Kaliro, Kamuli, Mayuge and Namutumba. However, in 2010, there was a national redistricting exercise that led to the creation of Buyende, Luuka and Namayingo districts that were demarcated out of Kamuli, Iganga and Bugiri districts respectively. As already elucidated in the previous section, SA boundaries were formulated in respect to population size and the geographical location of different sub-counties within each district. Sampling was executed with each district considered as an independent 'Supervision Unit' and divided into 5 SAs.

A two-stage sampling plan, first randomly selected 19 villages per SA by use of proportionate to size sampling. Sampling proportionate to size is a sampling technique for use with surveys or mini-surveys in which the probability of selecting a sampling unit (e.g. village, camp) is proportional to the size of its population. It is most useful when the sampling units vary considerably in size because it ensures that those in larger sites have the same probability of getting into the sample as those in smaller sites and vice versa.

4 Valadez J. et al (2003) Assessing Community health programs, Using LQAS for baseline and monitoring

5 Lemeshow S, Taber S. Lot quality assurance sampling: single and double-sampling plans. World Health Statistics Quarterly 44, 115-132

The second step is to randomly select a household within the village. This step involved using the village local council household listings or register that is periodically updated when in- or out-migration and movement within the village takes place. This is the most up-to-date household list, and in cases where one was not available, the interviewer compiled a list together with the village leader(s) based on a village map. Interview locations for the household survey were therefore selected using the updated household listings obtained from local authorities.

Each of the nine East Central districts in the region was divided into five SAs as follows:

Table 2: District Supervision Areas and LQAS in the East Central Region, 2010 – 2015

No.	Districts	Supervision Areas (sub-counties)
1	Bugiri	Bugiri TC, Iwemba&Nabukalu (BukooliB); Bulesa&Buluguyi (Bukooli C); Bulidha&Budhaya (BukooliA); Buwunga&Kapyanga (Bukooli D) and Muterere&Nankoma (Bukooli E)
2	Buyende	Bugaya, Buyende, Kagulu, Kidera, and Nkondo sub-counties
3	Iganga	Buyanga&Namalemba (Bugweri A); Ibulanku&Makuuutu (Bugweri B); Iganga TC &Nakigo (Kigulu C); Nabitende, Nambale&Nawandala (Kigulu A) and Namungalwe, Bulamagi&Nakalama (Kigulu B)
4	Kaliro	Bumanya, Gadumire, Namwiwa, Nawaikoke and Namugongo sub-counties
5	Kamuli	Balawoli&Namasagali (Bugabula A); Bugulumbya, Nawanyago, Wankole (Buzaaya A); Bulopa, Kitayunjwa, Namwenda (Bugabula C); Kisozi, Mbulamuti (Buzaaya B) and Nabwigulu, Butansi, Kamuli TC (Bugabula B)
6	Luuka	Bukanga/Waibuga, Bukooma, Bulongo/ Nawampiti, Ikumbya and Irongo sub-counties
7	Mayuge	Baitambogwe, Wairasa, Imanyiro (Bunya A); Bukatube, Mayuge TC, Mpungwe (Bunya B); Buwaaya, Bukabooli, Kigandalo (Bunya C); Kityerera, Busakira (Bunya D) and Malongo, Malongo Islands (Bunya E)
8	Namayingo	Banda, Buswale, Buyinja, Mutumba and Sigulu sub-counties
9	Namutumba	Bulange&Ivukula;Kibaale&Nsinze;Mag ada and Namutumba sub-counties

Source: STAR-EC LQAS Household Surveys, 2010 -2015

2.5 Quality Assurance and Control

Quality assurance was taken to be an integral component of the entire survey process and included appropriate preparation and orientation of research assistants to ensure that they were sufficiently trained and familiar with the survey processes and the different questionnaires; provision of adequate support supervision by a team of supervisors[6] at every stage of the survey with an emphasis on quality data collection; and regular and prompt feedback and reporting to each responsible survey line manager or consultant in each district by the data collectors.

At each survey stage, instant field problem solving as well as the production and constant field editing was exercised by the participants themselves in each district. Fully edited questionnaires would then be given to each respective district LQAS focal person and ultimately their supervisors (district survey consultants) were charged with the last line of responsibility in each district during data collection. Further, cleaning of collected data still took place at both data entry and analysis levels.

2.6 Ethical Considerations

2.6.1 Informed Consent

In this survey, every respondent had the right to refuse the interview or to refuse to answer specific survey questions. Interviewers respected this right and verbally administered informed consent before conducting the interview. However, such cases were almost inexistent and very negligible. Most of the intended and randomly selected respondents accepted to be interviewed the very first time they had been approached by an interviewer.

2.6.2 Privacy

It is important for each respondent's interview to be conducted in a manner that is comfortable for them and in which they are able to speak openly and honestly. Therefore, all interviews were conducted in the respondent's home and in a private area. During the interview, no other adult man, woman or older child was present or able to hear the interview. Babies and other younger children in some instances were allowed to be present during the interview. If the respondent indicated that she or he was uncomfortable holding the interview at home, the interview was conducted at another location in respect to the interviewee's preference.

6 The team of supervisors included a total of 10 personnel (one provided the overall technical oversight and support supervision) as well as nine district specific consultants who extended technical assistance to district participants during the execution of this methodology in each district.

L-R, LQAS interviews in Namutumba District

An interview at the showers of Lake Victoria (Sigulu Islands)

An interview of a biological mother of a child 0-11 monthsin Namayingo District

2.7 Data Sources and Analysis

Households were the lowest units from which respondents for this survey were obtained. Data analysis focused on assessing coverage levels for the different program indicators and comparisons between districts. To a large extent, proportions were computed to determine the status of each indicator and statistical tests (z-test, chi-square and fisher's exact) were applied to assess whether the resultant changes were significant at the 5% level. Desegregation by district, respondent's age and sex, and other key variables were done to some extent in order to understand the possible factors behind the variations. Data was entered using the Epi Data software and STATA statistical software was used to compute proportions and significance levels.

3.0 Results

Table 3: Demographic Characteristics of Survey Population, baseline, mid-term and end-line Surveys

Year of Survey		Baseline, 2009		Mid-term, 2012		End-line, 2015	
Characteristic	**Category**	**n= 2,280**	**%**	**n=4,275**	**%**	**n=4,465**	**%**
Sex	Male	881	38.6	1,345	31.5	1,328	29.7
	Female	1,399	61.4	2,930	68.5	3,137	70.3
Age Group (years)	15-24	2,124	47.7	2,017	47.2	2,078	46.5
	25-34	1,373	27.6	1,294	30.3	1,470	32.9
	35-44	683	17.2	671	15.7	641	14.4
	45-54	285	7.5	293	6.9	276	6.2
Education Status (highest level of education attained)	No school education	262	11.5	423	9.9	271	6.1
	Primary 1-4	285	12.5	546	12.8	516	11.5
	Primary 5-7	970	42.5	1,876	43.9	1,930	43.2
	Secondary	686	30.1	1,259	29.5	1,530	34.3
	Tertiary	71	3.1	144	3.4	187	4.2
	missing responses	6	0.3	27	0.6	31	0.7
Marital Status	Single, no partner	448	19.7	691	16.7	759	17.0
	Single, regular partner	79	3.4	206	4.8	254	5.7
	Single, non-regular partner	68	3.0	94	2.2	90	2.0
	Married/Cohabiting	1611	70.7	3,128	73.2	3,105	69.5
	Divorced/Separated	65	2.9	135	3.2	180	4.1
	Others/missing responses	8	0.4	21	0.5	77	1.7
District of Residence	Bugiri	380	16.7	475	11.1	475	10.6
	Buyende*	n/a	n/a	475	11.1	475	10.6
	Iganga	380	16.7	475	11.1	475	10.6
	Kaliro	380	16.7	475	11.1	475	10.6
	Kamuli	380	16.7	475	11.1	475	10.6
	Luuka*	n/a	n/a	475	11.1	475	10.6
	Mayuge	380	16.7	475	11.1	570	12.8
	Namayingo*	n/a	n/a	475	11.1	475	10.6
	Namutumba	380	16.7	475	11.1	570	12.8

*Buyende, Luuka and Namayingo districts only came into existence starting with the 2010 survey thus the absence of 2009 data

Source: STAR-EC LQAS Household surveys, 2009, 2012 and 2015

Results taken from all the seven survey years show that there was equal representation of respondents from each of the target groups and districts involved in this survey except for Namutumba and Mayuge districts whose 0-11 months age group was split into the 0-5 and 6-11 months age groups so as to increase on the sample size required to collect information on Infant and Young Child Feeding practices (IYCF) indicators in the two aforementioned districts. Each of the survey year results show that respondents were predominately female and during the 2015 end-line survey, 70.3% were female respondents. The mean and median ages were 27.3 (ranges 15 – 54 years) and 25 years respectively. Additionally, only 6.1% of the respondents had never received any formal education (and this was a reduction when compared to the 2009 baseline result of 11.5%) while an aggregate of 38.5% had attained secondary or tertiary level education – an increment from 33.2% reported during the 2009 baseline.

HIV&AIDS Related Indicators

Key HIV&AIDS indicators assessed during this and previous survey years included those related to the following interventions: a) Behavioral Prevention; b) HIV Testing and Counseling (HTC); c) Prevention of Mother-to-Child Transmission (PMTCT); d) Anti-Retroviral Therapy (ART); e) Care and Support Services for People Living with HIV&AIDS; and f) HIV/TB Collaborative Services.

3.1 Behavioral and Bio Medical Prevention

3.1.1 High Risk Sexual Behavior and Condom Use

STAR-EC interventions include 'combination HIV prevention' that involves behavioral, biomedical and structural interventions. Behavioral risk prevention activities focus on delay of sexual debut; reduction in the number of sexual partners and promotion of correct and consistent condom use as well as distribution. Structural HIV prevention was promoted through peer support groups and by using the 'men and HIV' program that benefited the champions trained to reach out to boys, men and the entire community challenging and calling upon them to adopt social norms and values that promote respect for girls and women while rejecting violence against women, disallowing risky cultural practices such as risky rites of passage and widow inheritance.

Over the life of the program , there was no significant decrease (p=0.089) in the proportion of individuals (15-54 years) that reported having had sexual intercourse with a non-marital/non-cohabiting or non- regular partner within the last 12 months prior to the survey at baseline (18.6%, n=1,434) when compared to end-line (16.4%, n=3,070). Table 4: provides details by age group and district at program end line in 2015.

Table 4: Sexual intercourse with a non-marital/non-cohabiting or non-regular partner within the last 12 months prior to the 2015 survey

Disaggregation	Sub- group disaggregation	Sample size	Percentages	Probability values
Age group	15-24 years	1,333	19.5	Pearson chi2(2) = 17.2, p<0.001
	25-34	967	13.4	
	35-54	770	14.7	
Sex	Males	1,087	25.7	Pearson chi2(1) = 105.8, p< 0.001
	Females	1,983	11.3	
Districts	Bugiri	340	16.5	Pearson chi2(8) = 55.2, p< 0.001.
	Buyende	324	13.3	
	Iganga	331	13.6	
	Kaliro	312	18.0	
	Kamuli	302	13.3	
	Luuka	340	18.8	
	Mayuge	369	8.4	
	Namayingo	331	27.2	
	Namutumba	421	18.5	
Total		3,070	16.4	

The 2015 study also sought for behaviors on condom utilization among persons who engage in risky sex. A total of 74.9% (n=410) of all adults 15-54 years who reported having had sex with a non-regular partner in the last 12 months prior to the survey, reported having used a condom at last high risk sex (a finding not significantly different (p=0.681) from baseline (73.3%, n=210) or mid-term findings of 72.1% (n=362). While significant differences (p=0.003) between males (75.0%, n=184) and females (60.0%, n=155) had been noticed as part of the 2014 survey results, there were no significant differences (p=0.412) between males (76.4%, n=241) and females (72.8%, n=169) in 2015.

Overall, there were significant findings (p<0.001) when comparing age groups on risky sexual behavior. As illustrated in Table 4, young people 15-24 years indulge more into such sex when compared to other age groups. Among young people, 19.5% (n=1,333) reported having had sex with a non-regular partner (non-marital/non-cohabiting partner) in the last 12 months prior to the survey, while at the same time 77.8%, (n=212) of those who had had such sex reported using a condom with such a partner.

Logistic regression results show that males were 2.8 times more likely than females (p<0.001) to have had multiple sexual relationships. When compared to the 25-34 years age group (reference group), persons in age group 15-24 years were 1.4 times more likely (p=0.011) to have multiple sexual relationships. Additionally, the 2015 results show no significant differences (p=0.137) when the 35-54 years age group was compared to the reference group and this has been the same situation with all past annual survey results since baseline.

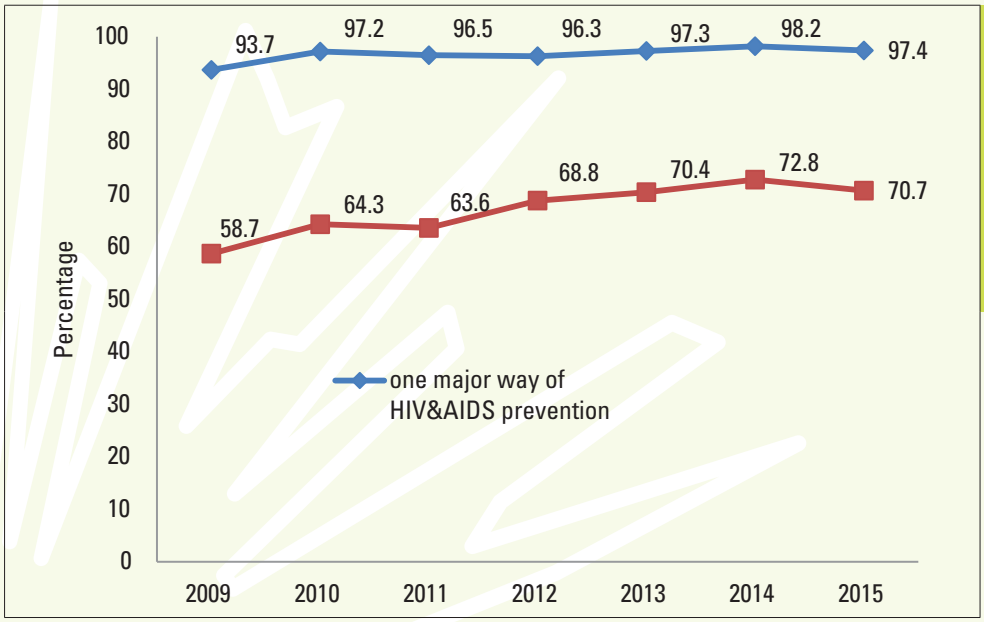
Additionally, out of a sample size of 4,398 adults age 15-54 years, 48.5% reported having perceived themselves to be at low risk of getting HIV infection and 18.3% no risk while 26.1% perceived themselves to be at high risk, 1.9% reported being HIV positive while 5.2% could not make their own assessment on this indicator.

3.1.2 Behavioral Prevention (Abstinence, Being Faithful and Condom use - ABC)

Abstaining from sexual activity, being faithful to one sexual partner, and using condoms during sexual intercourse are three behaviors that can prevent or reduce the likelihood of sexual transmission of the HIV virus. These behaviors constitute the "ABC approach." Key questions related to this aspect of knowledge of HIV transmission were assessed during the survey as well as questions concerning HIV related misconceptions.

When asked about ways to reduce the risk of HIV transmission and knowledge of all three ways (abstaining from sex, consistent condom use and having one faithful, uninfected partner), results showed a significant increment (p<0.001) from 58.7% (n=2,280) reported in the 2009 baseline to 70.7% (n=4,465) of respondents in 2015. At the same time, when analyzing information on at least one major HIV prevention method comprising any of all the three aforementioned prevention ways, there was an increment (p<0.001) from 93.7% (n=2,280) reported during the baseline to 97.4% (n=4,465) in the 2015 end-line survey. An annual trend analysis for both indicators is illustrated in Figures 1-3.

Figure 1: Trend in the Proportion of Respondents that Mentioned One or All Major Ways of HIV&AIDS Prevention (ABC) by Year of Survey

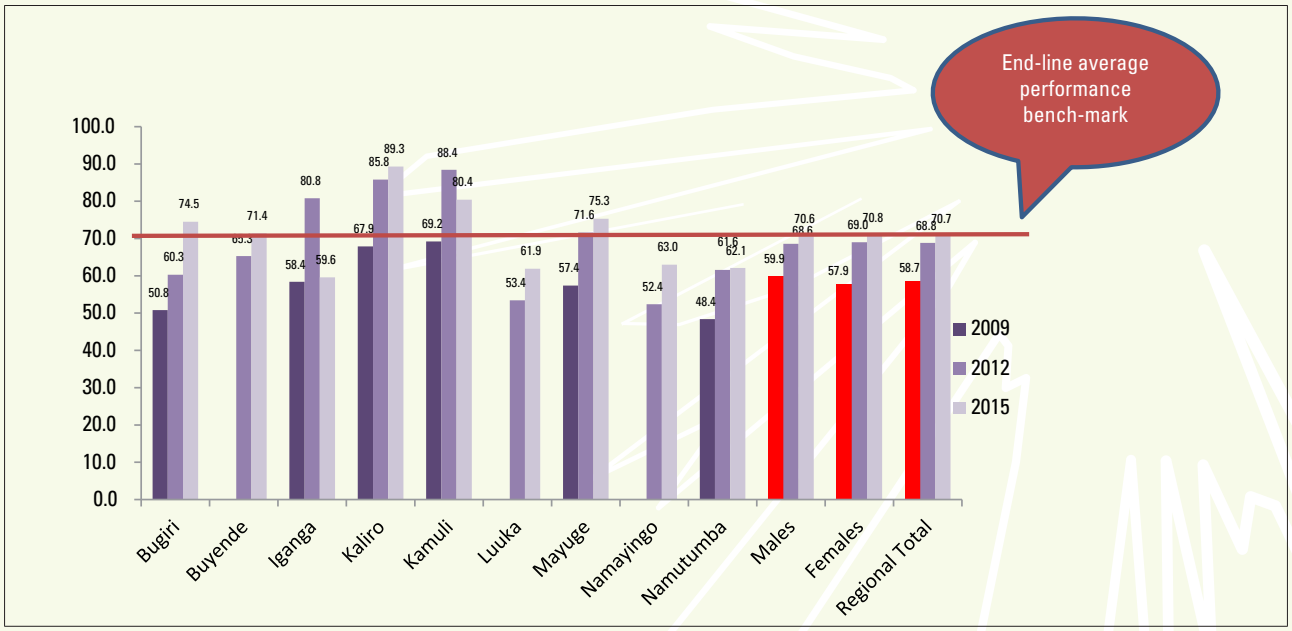


70.8% of all females and 70.6% of all males in 2014 reported being able to identify all three major ways of HIV&AIDS prevention 58.8% of all young people 15-24 years could mention all 3 ways at baseline. This increased to 69.5% (p<0.001) at end-line

Source: STAR-EC LQAS household surveys, 2009-2015

As part of the 2015 results on knowledge of all the 3 major ways of HIV prevention, there were no significant differences (p=0.927) between males and females while at the same time there were significant differences (p<0.001) when comparing districts. Kaliro (89.3%) and Kamuli (80.4%) districts reported the highest findings while the least were found in Iganga (59.6%), Namutumba (62.1%), Luuka (61.9%) and Namayingo (63.0%) districts. Among individuals who mentioned all the three major ways, 93.8% (n=3,111) reported that they knew of a place where they could obtain condoms. This was a significant increment (p<0.001) when compared to the 2009 baseline findings of 85.1% (n=1,338). Figure 2 shows differences related to awareness of the three major prevention ways by district.

Figure 2: Percentage of Adults Who Can Mention All Three Major Ways of HIV&AIDS Prevention by District* and Year

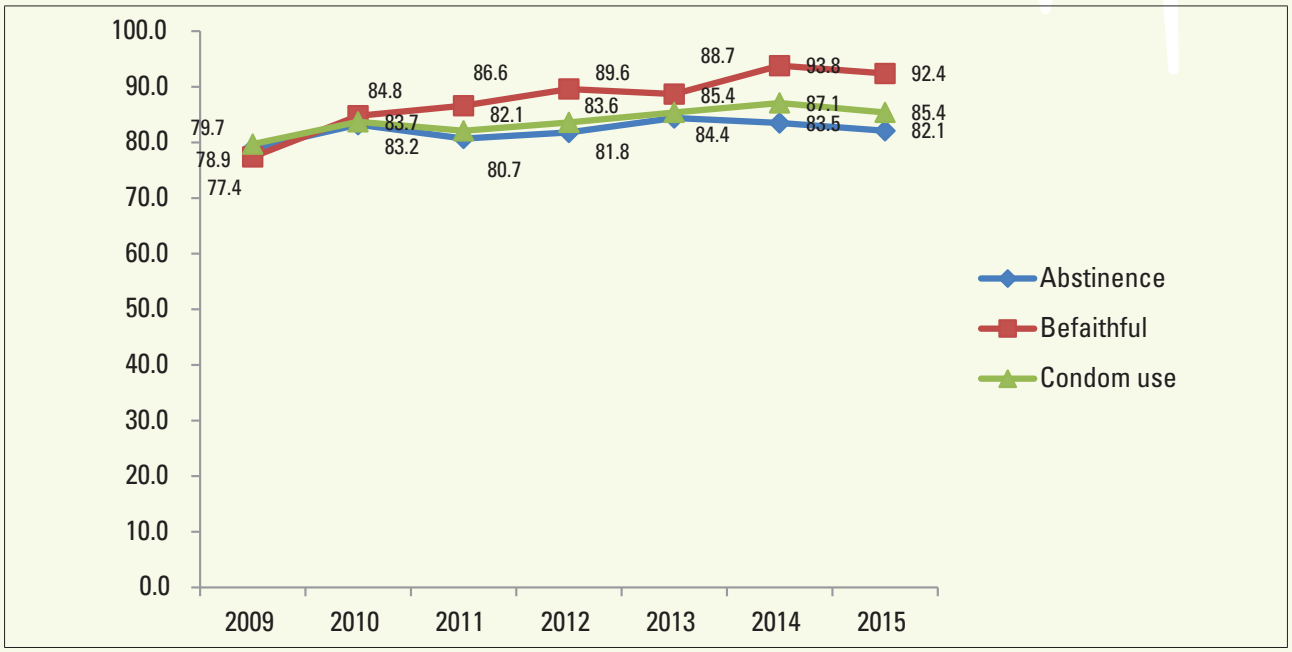


Source: STAR-EC LQAS household surveys, 2009-2015

*Buyende, Luuka and Namayingo districts were not yet in existence by 2009, therefore no results during the same year

Figure 3 shows further evidence of the trends related to respondents' knowledge and awareness of each prevention method. Knowledge by respondents on each of the HIV prevention ways still remains high and for most of the years, abstinence has been the least mentioned by all respondents.

Figure 3: Knowledge and Awareness of Each of the HIV Prevention Method by Year



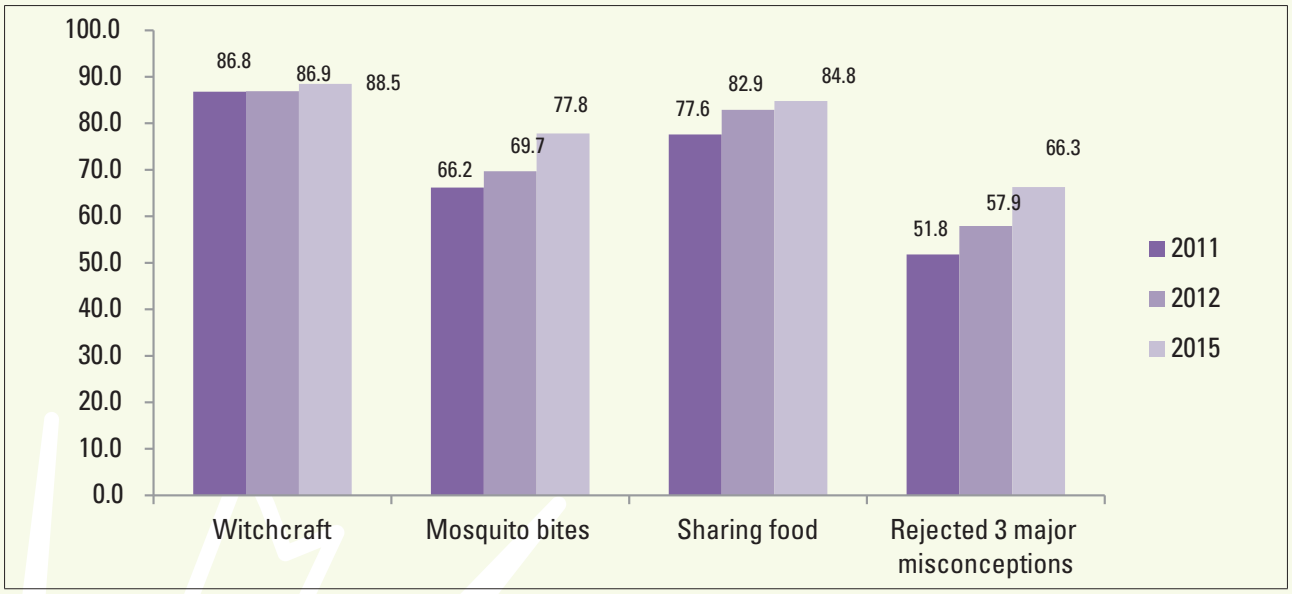
Source: STAR-EC LQAS Household Surveys, 2009-2015

3.1.3 HIV Transmission Misconceptions

A sizeable part of the population still believes in certain misconceptions about the transmission of HIV. Most common among them include transmission through mosquito bites, witchcraft, sharing food, utensils and sharing of toilets with an infected person as well as touching/ contact with an infected person. Among the afore-listed, an analysis was conducted concentrating on the three major misconceptions that include transmission of HIV through mosquito bites, witchcraft and sharing of food with an infected person.

Overall, as illustrated in Figure 4, there has been a significant increment ($p<0.001$) from 48.3% (n= 2,280) reported at baseline in 2009 to 66.3% (n=4,465) in 2015 among individuals who were able to reject the three major aforementioned HIV transmission misconceptions. For the seventh assessment year running, most of the respondents were able to reject transmission through witchcraft while fewer respondents (when compared to those who rejected witchcraft) rejected transmission through mosquito bites –something that still calls for improved, well packaged and tailor made information, education and communication interventions. Though not significant ($p = 0.207$), more males (67.6, n=1,328) than females; (65.7%, n=3,137) were able to reject the three major HIV transmission misconceptions. Among districts, the least performance was reported from Buyende (61.3%), Mayuge (60.5%) and Bugiri (53.1%).

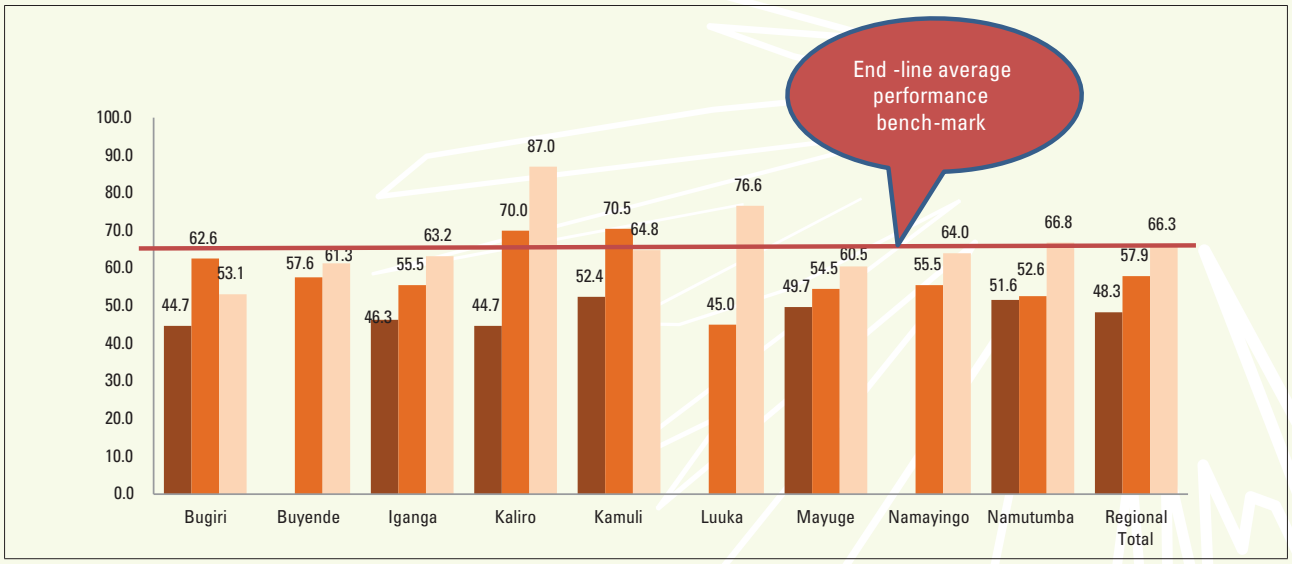
Figure 4: Rejection of HIV Transmission Misconceptions by Year



Source: STAR-EC LQAS household surveys, 2009-2015

Figure 5 illustrates the significant variations ($p<0.001$) in knowledge of HIV transmission misconceptions by district among those who could reject such misconceptions.

Figure 5: Percentage of Adults that Rejected All Three Major HIV Transmission Misconceptions by District*



Source: STAR-EC LQAS Household Surveys, 2009-2015

*Buyende, Luuka and Namayingo districts were not yet in existence by 2009, therefore no results during the same year

Further analysis was conducted on HIV transmission and misconception knowledge. It was found that less than half (43.5%, n=4,465) respondents were able to mention at least two ways of HIV transmission and at the same time reject all major HIV misconceptions. This was significantly higher ($p<0.001$) than 36.1%, n=4,275 reported during the 2012 mid-term assessment.

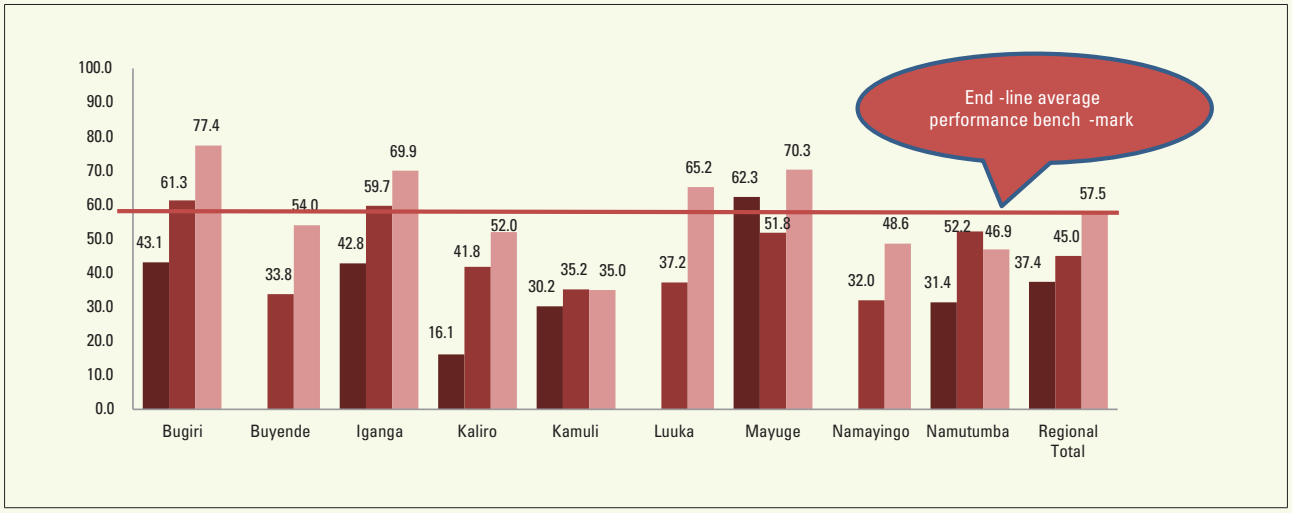
3.1.4 Bio-Medical Prevention

Voluntary Medical Male Circumcision (VMMC) has been prioritized by the MoH and USAID as a key pivot that is also part of the national HIV&AIDS response. By the end of June 2015, STAR-EC had supported health facilities and outreach sites to conduct 378,350 male circumcisions (MCs) in about 6 years. The integrated services delivery model was implemented in STAR-EC's past program year with greater reach and success among hard-to-reach areas and this helped to foster linkages to other HIV&AIDS prevention, care and treatment services. Special community VMMC outreaches have been used to target the general population of men, key populations and 'emerging key populations' (such as the 'bodaboda' motorcyclists, plantation workers, and HIV negative males from discordant support groups). The program offers priority to males aged 35-45 years since this sub-population has the highest HIV prevalence nationally (11-12%)1. Additionally, VMMC is one of the novel HIV prevention methods that have been proven to minimize HIV transmission risks. Clinical trial results conducted in three different countries did show an effectiveness of 60% in South Africa, 53% in Rakai, Uganda and 57% effectiveness in Kisumu, Kenya. In March 2007, WHO/UNAIDS recommended VMMC as an integral part of HIV prevention strategies following clinical trial results that had been obtained in South Africa, Uganda, and Kenya. Globally, 30% of men are circumcised and this practice is primarily done for cultural and religious reasons and occasionally for medical reasons. Over 40 observational studies have shown a protective effect of VMMC against HIV acquisition and countries with high male circumcision prevalence tend to have low HIV prevalence. The MoH in Uganda has also worked out a policy in support of VMMC. During PY2 (Oct 2009 – Sept 2010), STAR-EC initiated VMMC services in seven health facilities within East Central Uganda. In extending VMMC services to different targeted males, the program was supporting 22 static sites and more than 40 community outreaches per week by the end of PY6.

Overall, there has been significant progress ($p<0.001$) in the proportion of males 15-54 years who have ever been circumcised in the EC region from 37.4% (n=872) in 2009 to 57.5% (n=1,316) reported in 2015. This increase can also be partly supported by the fact that STAR-EC had conducted 378,350 male circumcisions by end of June 2015. Figure 6 shows results by year and district while Map 1 shows baseline and end-line survey results in East Central Uganda . The 2015 survey also shows no significant coverage differences ($p=0.299$) among age groups. However, more males in the 15-24 and 25-34 years age groups with results at 58.3% (n=684) and 60.2% (n=226) respectively have ever been circumcised when compared to the 35-54 years age group whose proportions were found at 54.4% (n=406).

1 Ministry of Health (MoH) [Uganda] and ICF International. 2012. Uganda AIDS Indicator Survey 2011: HIV Indicator Factsheet. Calverton, Maryland USAD: Ministry of Health and ICF International

Figure 6: Proportion of Males 15-54 Years Who Have Ever Been Circumcised by District and Year*

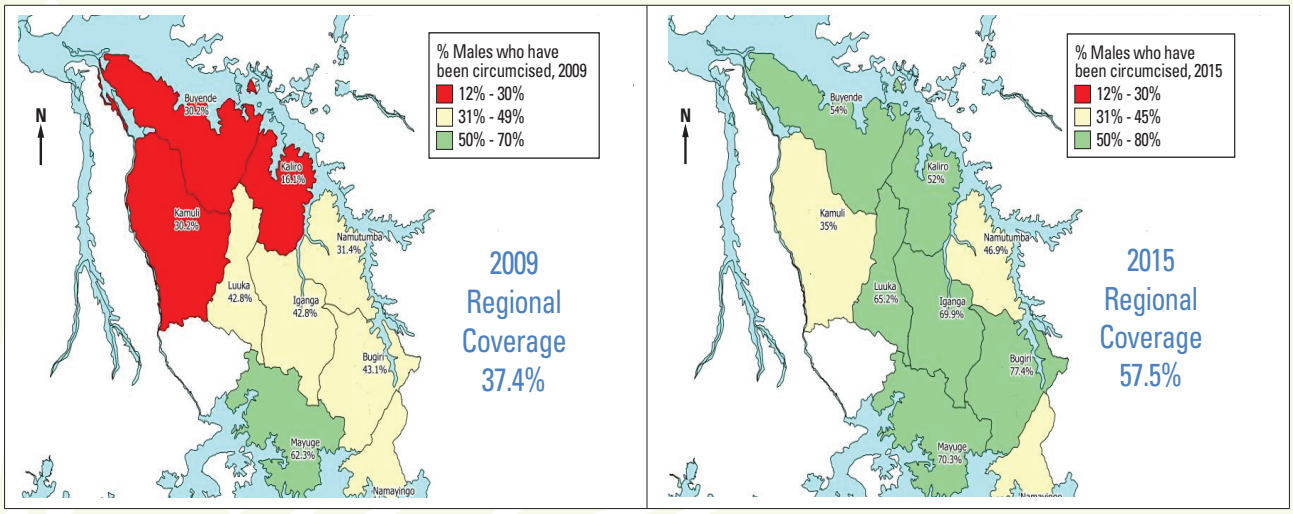


Source: STAR-EC LQAS 2009-2015 Household Surveys

*Buyende, Luuka and Namayingo districts were not yet in existence by 2009, therefore no results during the same year

As illustrated in Figure 6, the highest proportion was registered in Bugiri (77.4%) and Mayuge (70.3%) districts while the lowest was reported from Kaliro (52.0%) and Kamuli (35.0%) districts. As part of prioritization for VMMC interventions, Namayingo, a district with most key populations and high HIV sero positivity in the region, is one such district that has benefited from STAR-EC's VMMC interventions. In 2011, only 25.0% males had ever been circumcised while this had risen to 48.6% by the time the 2015 survey was conducted. Interestingly, past LQAS household survey findings seem to agree with the actual amount of inputs and outcomes on VMMC that STAR-EC was able to achieve in the region. Further information and analysis on this can be found in the STAR-EC 2012 LQAS Survey Report under the VMMC section.

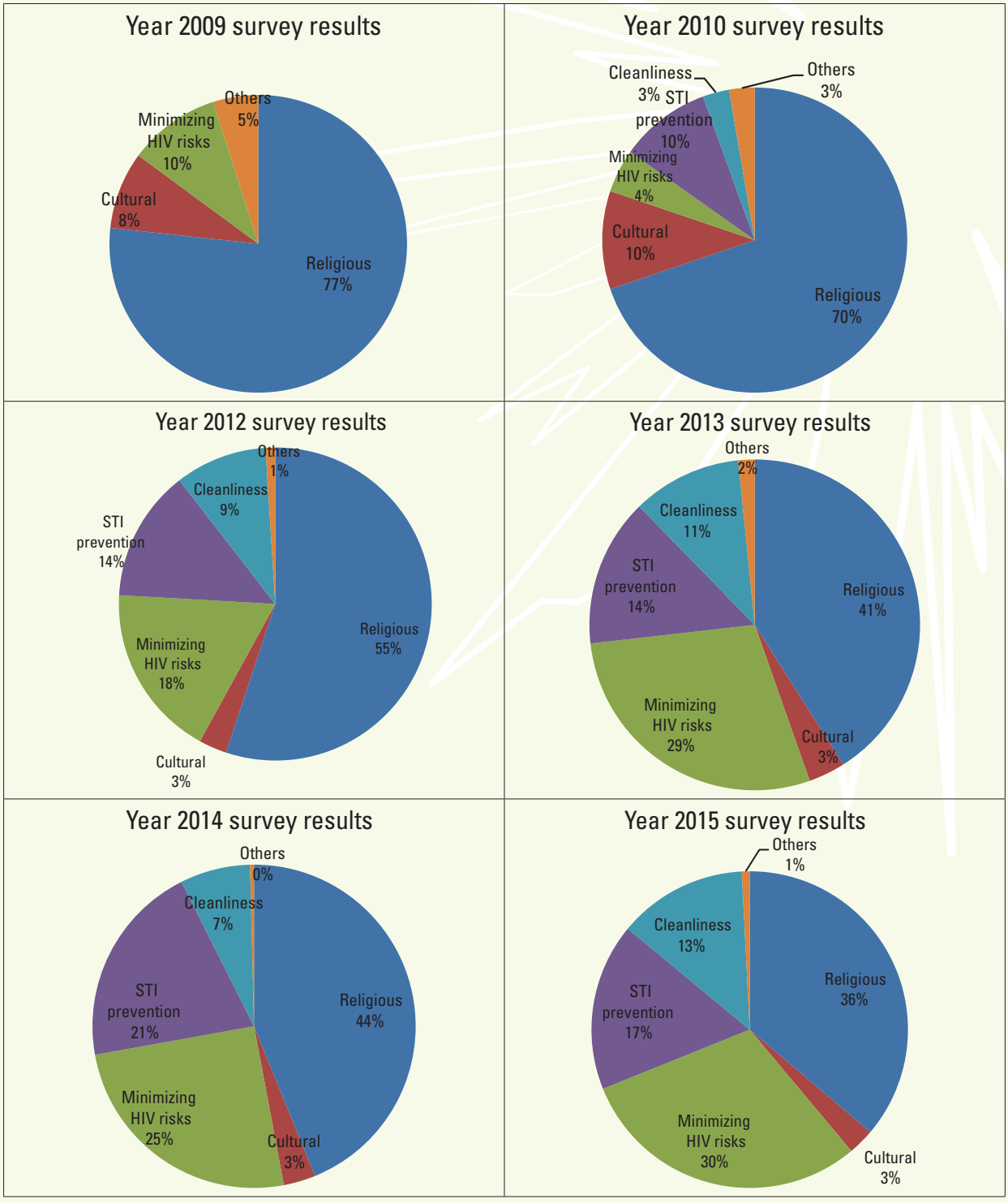
Map 1: Proportion of Males 15-54 years who have ever been circumcised in East Central Uganda



Source: STAR-EC LQAS 2009-2015 Household Surveys

The study further examined male respondent's reasons for circumcision. While results had always shown that the majority of respondents who had ever been circumcised mentioned circumcision for religious and cultural reasons, there has been a decrease in proportions related to this indicator from 85.1% (n=309) in 2009 to 38.9% (n=288) in 2015 ($p<0.001$). This study further shows that more of the men who have ever been circumcised are reporting that they were circumcised for HIV and STI prevention reasons. These proportions have increased each year. Figure 7 illustrates the respondent's reasons for circumcision.

Figure 7: Respondent's Reasons for Circumcision



Source: STAR-EC LQAS 2009-2015 Household Surveys

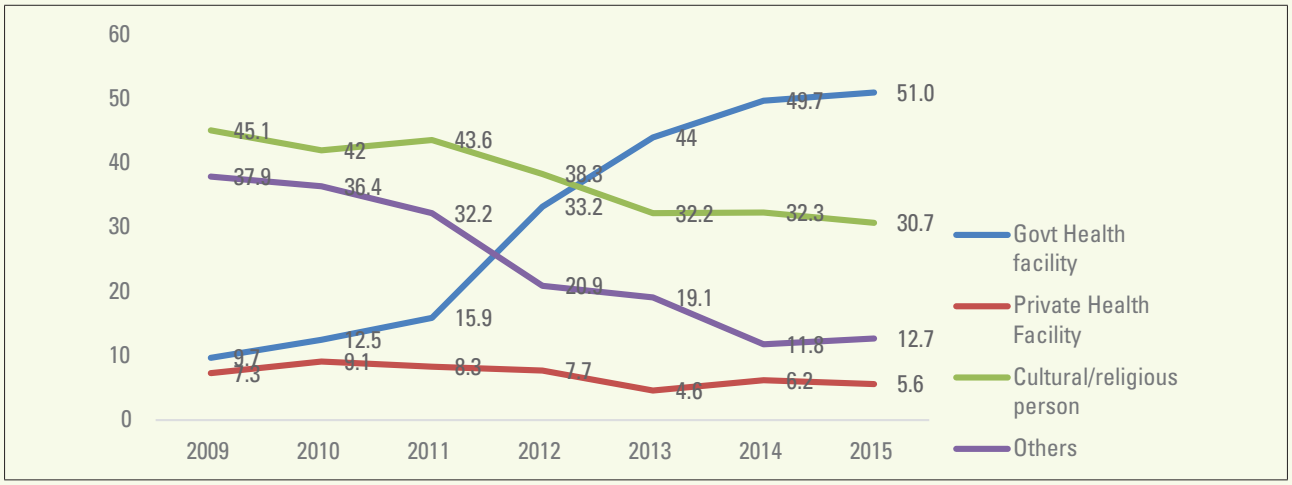
3.1.4.1 Places where circumcisions took place

The survey investigated places where men's circumcision procedures were conducted. These questions applied to all men who had been circumcised irrespective of when their circumcision took place. Both Figures 8 and 9 illustrate findings in the last six years. Figure 8 represents

the proportion of males who reported the location of the place from which they were circumcised and also includes all men irrespective of whether they were circumcised at birth. Figure 9 illustrates circumcisions within the last year prior to the survey.

STAR-EC supported 22 government health facilities including various organized community outreaches in the provision of VMMC services. Only one private health facility (Mercy Health Centre III in Iganga District) was supported by the program. Overall, results continue to show that every year more proportions of men who have ever been circumcised reported having undergone the procedure from a government health facility while on the other hand there is a decline in the proportions of men having gotten circumcised from a private health facility, religious/cultural setting or any other place other than the aforementioned. This applies to both groups of men who have ever been circumcised and those who were circumcised one year prior to the survey.

Figure 8: Places Where Men Were Circumcised From, by Year (among men who have ever been circumcised)



Source: STAR-EC LQAS 2009-2015 Household Surveys

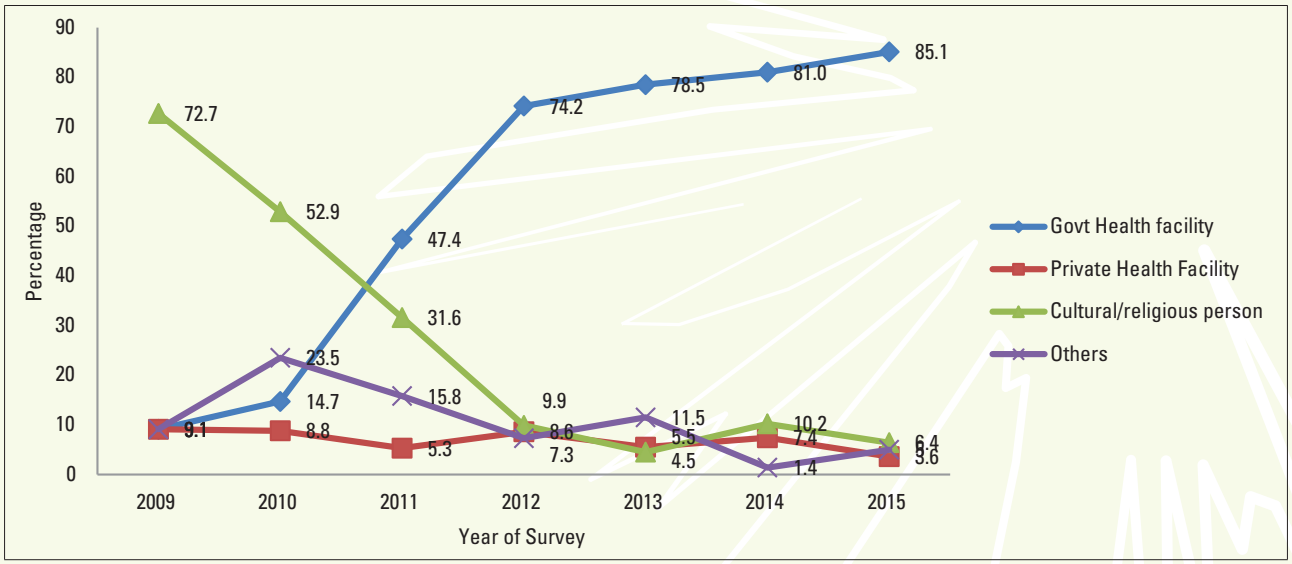
End-line survey results (see Figure 8) show that among men who have ever been circumcised, about half (51.0%, n=710) of them were circumcised from a government health facility. This was a significant increment (p<0.001) when compared to 9.7% (n=288) at baseline. Additionally, 5.6% (n=710) were circumcised from a private health facility while at the same time there has been a significant drop (p<0.001) from 45.1% (n=288) at baseline to 30.7% (n=710) at end-line among males having their circumcisions from a cultural/religious person or setting.

3.1.4.2 Circumcision within one year prior to the survey

Figure 9 illustrates a similar but more significant trend (p< 0.001) in the proportion of males getting circumcised within one year prior to the survey and the place where their circumcision took place. There was a high significant increase (p<0.001) in the proportion of males from 9.1% (reported during the 2009 baseline2) to 85.1% (n=141) among those circumcised from a government health facility while on the contrary there were high significant declines (p<0.001) reported against other circumcision sites. Results continue to show that fewer proportions of males are getting circumcised from private health facilities.

2 The 2009 baseline survey sample size was too small. Therefore baseline results can only be used as a proxy.

Figure 9: Proportion of Men and Places Where They Were Circumcised Within the Last Year Prior to the Survey (by Year)

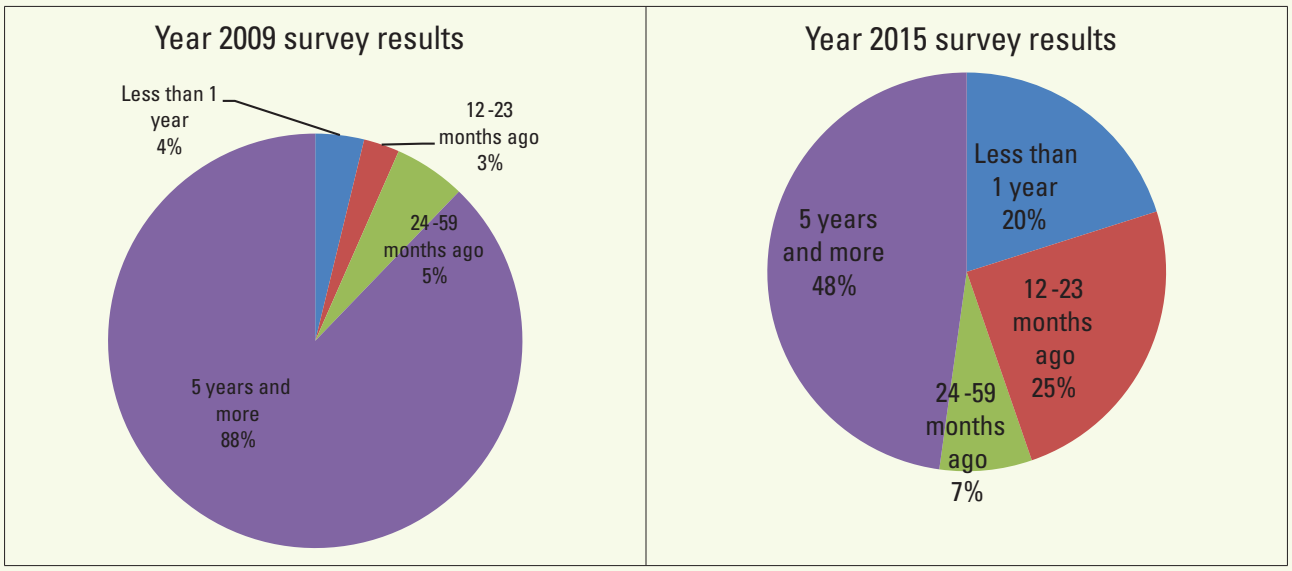


Source: STAR-EC LQAS 2009-2015 Household Surveys

3.1.4.3 Time period when circumcisions took place

All men who reported that they had ever been circumcised were asked when their circumcisions took place. Similar to previous survey findings, almost half of the men (47.8%, n=735) reported having gotten circumcised more than 5 years prior to the survey. It should be noted that most of the men who were circumcised during the time period beyond five years are those that had their circumcisions before any VMMC interventions. However, over the years, it has been noted that the proportion of men getting circumcised one year prior to the survey is on a significant increase (p< 0.001). This increased from 3.8% (n= 320) at baseline in 2009 to 26.8% (n=578) in 2012 and 30.5% (n=734) in 2014. However, in 2015 this decreased to 20.1% (n=735) due to more prioritization of other HIV and public health services other than voluntary male circumcision. Figure 10 illustrates some of these findings.

Figure 10: Time Period When Men were Circumcised as Reported in 2009 and 2015

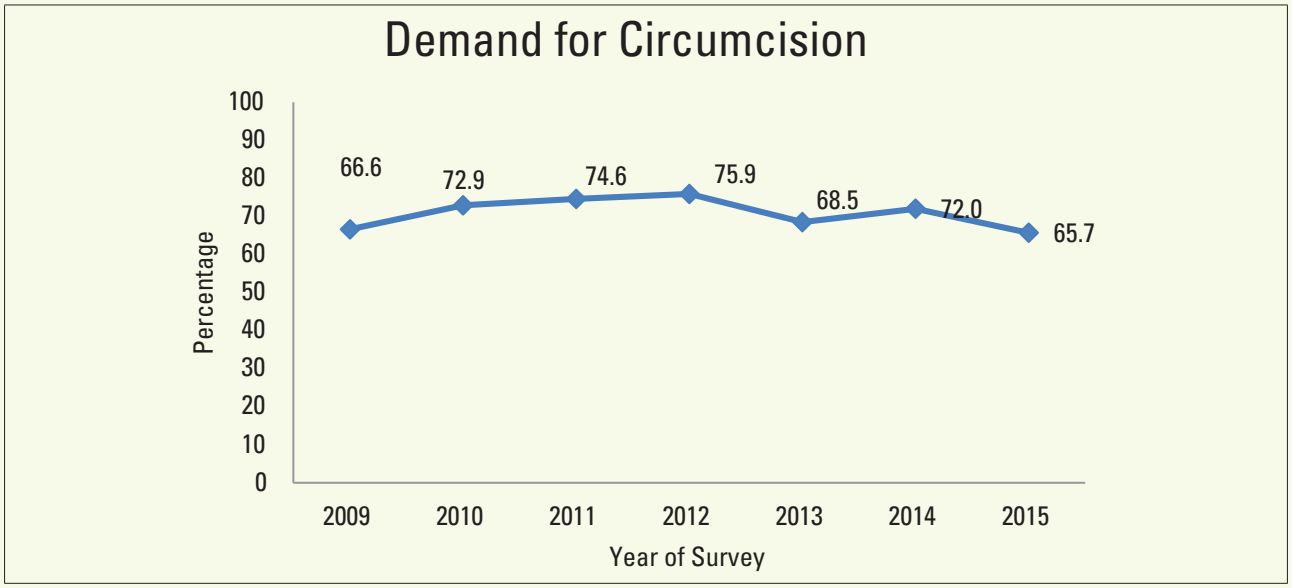


Source: STAR-EC LQAS 2009 and 2015 Household Surveys

The desire and demand for circumcision services significantly increased (p = 0.045) over the first six program years from 66.6% (n=551)

reported at baseline in 2009 to 72.1% (n=601) in 2014. However, it should be noted that it was highest at mid-term in 2012 (75.9% (n=744) while in 2015, this proportion dropped to 65.7% (n=563) – a finding lower than what was reported during baseline. Among districts, the highest demand for circumcision services was reported in Kaliro (80.8%) and Namutumba (86.8%) while the lowest was reported from Namayingo (36.7%), Iganga (55.0%) and Mayuge (59.6%).

Figure 11: Trend in Demand for Circumcision Services Over The Last 5 years

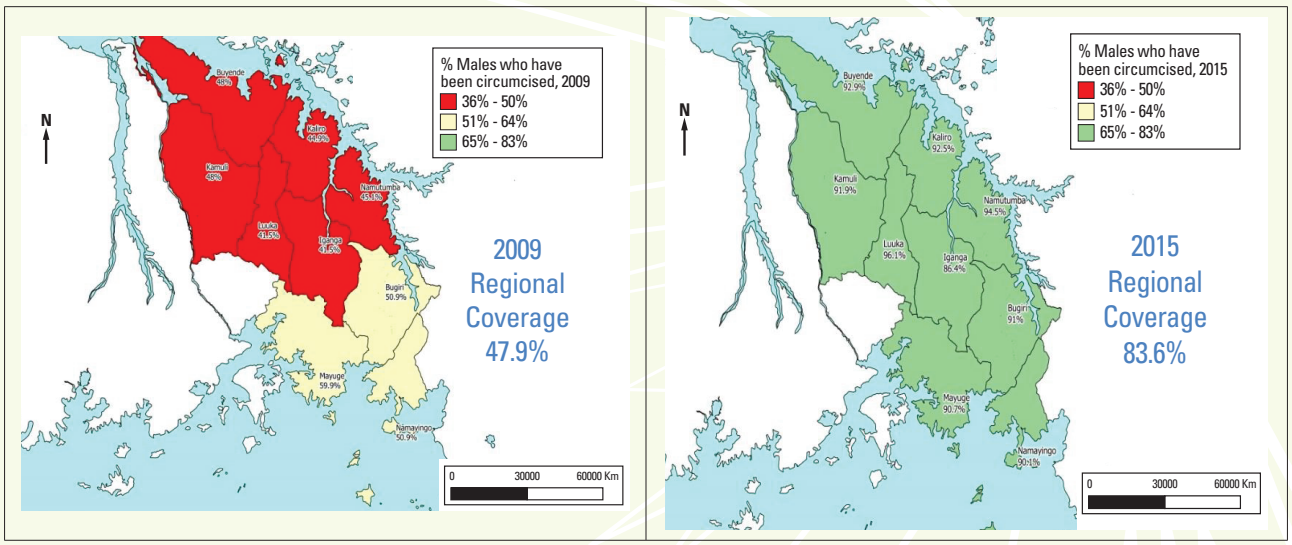


Among those who have never been circumcised and reported that they would not undergo circumcision even if they were offered a free chance at a health facility, the 2015 results (n=141) show 25.5% reporting that circumcision is against their religion or faith (a decrease when compared to 36.7% reported during baseline); 65.3% that it is too painful (an increment when compared to 42.9% reported during baseline); 1.4% mentioned having no funds to facilitate this undertaking and/or believe it still has some hidden costs (2.0% was reported during baseline); 7.8% mentioned the existence of poor quality services (2.0% was reported during baseline).

3.2 HIV Testing and Counseling (HTC)

Since program inception, STAR-EC has facilitated the scale up of HTC service delivery through 132 health facilities and over 385 parish level outreaches in the region. Health facilities have been supported to deliver HTC using both static and outreach based approaches (i.e. stand alone and couple HIV counseling and testing outreaches) prioritizing the hard-to-reach, underserved communities and key populations like MARPs. HIV testing and counseling is the entry point for other HIV services such as treatment, care and support. Interventions encourage one who is negative to stay negative by adhering to abstinence, being faithful or proper and consistent condom use. Among other things, one who is HIV positive is encouraged to live a positive life and seek proper medication. This makes HTC the nexus for referral to umbrella/ clinical care and support services including screening or testing for TB. Therefore, HTC also formed an important part of this study.

Map 2: Percentage of Adults Age 15–49 Who Have Ever Been Tested for HIV in the East Central region



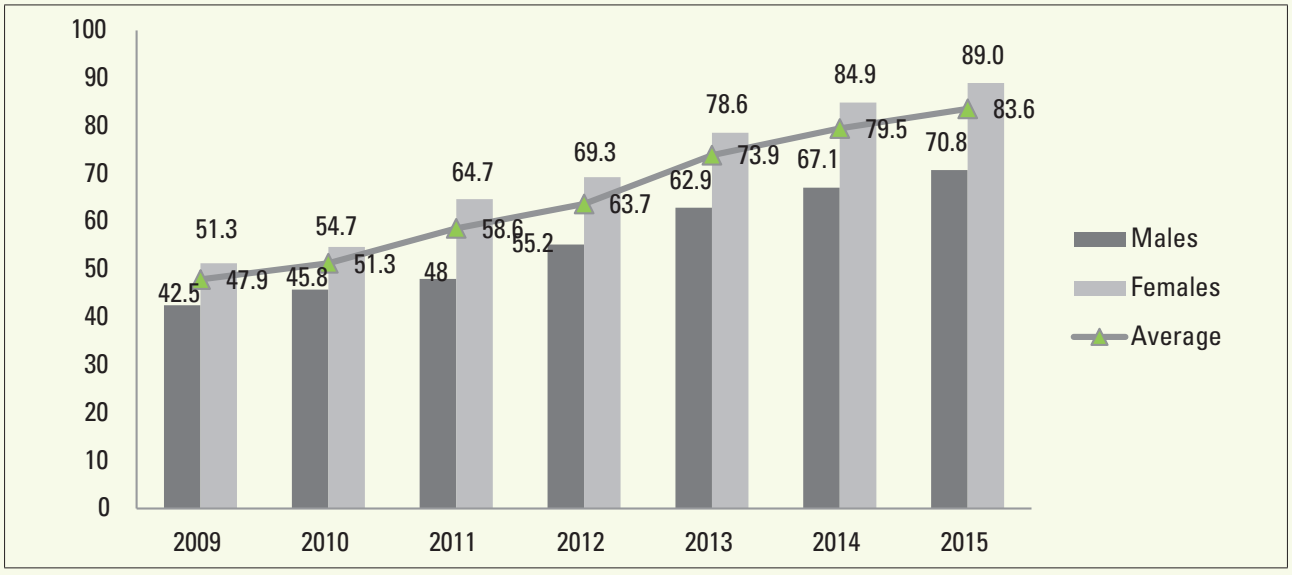
Source: STAR-EC LQAS Household Surveys, 2009 and 2015

The analysis of HIV&AIDS related questions was limited to respondents of reproductive age (15-49 years for women and 15-54 years for men). Therefore, the total sample size for these specific questions was 4,465 (1,328 males and 3,137 females). The analysis also looked at 2,078 young people (15-24 years old) as a sub-population of interest, whose performance against the various survey indicators was also assessed. Detailed results on HTC among young people can be found within this section while those on gender and district can be found under Appendix 1.

3.2.1 Ever tested for HIV

When compared to baseline (47.9%, n=2,266), midterm (63.7%, n=3,420) and end-line (83.6%, n=4,435) years, there were significant ($p<0.001$) improvements on the proportion of individuals who reported ever being tested for HIV in their entire life. A further analysis on the 2015 end-line results shows significant differences ($p<0.001$) among districts as well as when drawing comparisons between males (70.8%, n=1,315) and females (89.0%, n=3,120). All districts reported results higher than the 80% mark with Luuka having the highest proportion of persons who have ever tested for HIV at 89.2% while Namayingo (76.7%) and Bugiri (79.9%) reported the lowest coverage on this same indicator. Map 2 shows further details at baseline and end-line.

Figure 12: Percentage of Adults Age 15–49 Who Have Ever Been Tested for HIV (by Year)

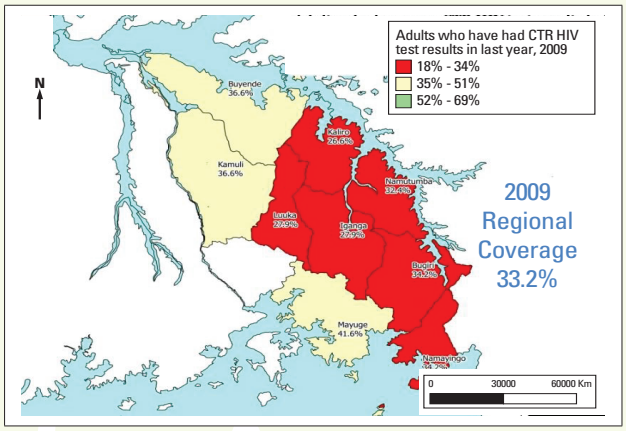


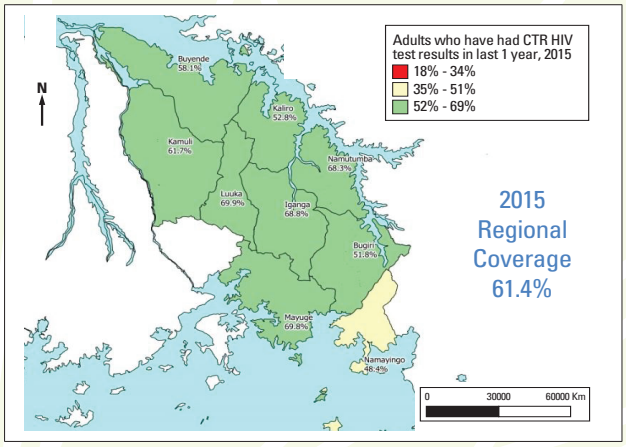
Source: STAR-EC LQAS Household Surveys, 2009-2015

3.2.2 HIV Testing Within One Year Prior to the Survey

The current HTC interventions drive is to have HIV negative individuals testing at least once every year. Testing once for HIV among those that turn out to be negative may not be sufficient as one's status may change over time. Additionally, it is advisable that one tests at subsequent time periods especially if they know that they have been practicing risky sexual behavior or in cases where they doubted their partner(s)' faithfulness. Routine HTC is therefore very imperative. This survey therefore involved a series of questions on HIV testing among respondents within the last year prior to the survey.

Map 3: Proportion of Adults (15-54 years) that Tested for HIV and Received Their Results in Last One Year Prior to the Survey in East Central Uganda in 2009 and 2015





Source: STAR-EC LQAS Household Surveys, 2009 and 2015

Respondents were asked whether they had taken an HIV test and received their results in the last year prior to the survey. There was a steady and significant increase ($p<0.001$) in all districts in the proportion of adults (15 years and above) from 33.2% (n=2,280) during baseline to 48.4% (n=3,420) in 2012 and 61.4% (n=4,465) reported in 2014. Despite all the efforts by the STAR-EC program to prioritize Namayingo District for HTC and other services, performance is still the lowest at 48.4% (n=475) followed by Bugiri (51.8%, n=475) while the highest was noted from Luuka at 69.8% (n=475).

Due to increased access of HTC in the region, analysis shows that of those individuals who have tested for HIV within the last one year prior to the survey, 63.9% (n=2,253) had tested for HIV more than once in the same year. At the same time, of those individuals who have ever tested for HIV, close to eight in every ten (79.8%) last tested within 12 months prior to the survey. Table 5 below shows findings among persons who have ever tested and the last time they ever tested for HIV.

Table 5: Proportion of persons in 2015 that have ever taken an HIV test and the last time they took an HIV test

Sex	Proportions (%)					Total number of respondents
	Within the last 12 months	Between 12 to 24 months	Between 2 and 5 years	Between 5 and 10 years	10+ years	
Males	72.1	18.6	4.2	2.3	2.8	926
Females	82.4	14.0	2.6	0.5	0.6	2,674
Total	79.0	15.1	3.0	0.9	1.1	3,600

A proportion of 54.8% was reported as the finding during the 2009 baseline among adults age 15-54 years who knew of a place where to take an HIV test and had at the same time ever taken an HIV test. This increased to about two thirds (68.5%, n=3,052) and eight in every ten (85.6%, n=2,953) in 2012 and 2015 respectively. .

3.2.3 Disclosure of HIV Results Among Partners

When offering HIV testing and counseling services, emphasis is also placed on the importance of HIV status disclosure among HIV-infected clients, particularly to their sexual partners. Disclosure is an important public health goal for a number of different reasons. First, disclosure may motivate sexual partners to seek testing, change behavior and ultimately decrease transmission of HIV. In addition, disclosure has a number of potential benefits for the individual including increased opportunities for social support, improved access to necessary medical care including antiretroviral treatment, increased opportunities to discuss and implement HIV risk reduction with partners, and increased opportunities to plan for the future (WHO 2004 report). As part of this survey, partner disclosure was investigated for respondents who had tested within one year prior to the survey.

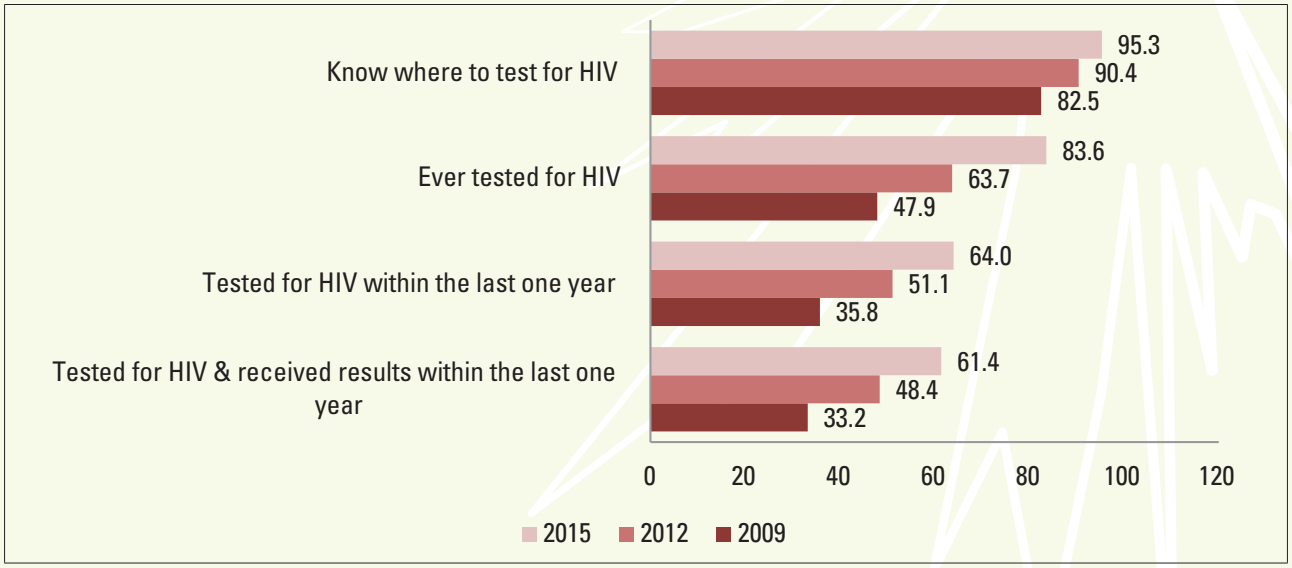
Overall, of the respondents who tested and received their results within the last one year prior to the survey and had a partner at the time of test, 92.4% (n=1,936) compared to a mid-term finding of (89.8%, n=1,200) in 2012 reported that they had disclosed results to their partners. End-line results show that there were no significant differences ($p=0.570$) on gender (91.7%, n=422 males compared to 92.5%, n=1,514 females reported that they would be able to disclose to their partners).

3.2.4 Knowledge of a Testing Site

Results show a gradual and steady increase for most districts on the proportion of adults that knew where to test for HIV. There were significant differentials in coverage noted by district for all survey years ($p < 0.001$). Unlike comparisons on the small increments that were realized over the first three program years, there was a 5.4% point increment between 2011 and 2012 from 85.0% to 90.4% respectively.

Overall, there was an increase from (82.5%, n=2,277) reported during the 2009 baseline to 90.4% during mid-term and 95.3% (n=4,406) in 2015 among individuals who knew where they could take an HIV test. Additionally, for the first time, this survey year's results had significant differences between females and males (p=0.013) unlike the first six survey year results.).

Figure 13: Progress on Key HTC Indicators over Baseline (2009), Mid-term (2012) and End-line (2015)



3.3 Young People (15-24 years) and HIV&AIDS

3.3.1 Young People Social Demographics

Table 6: Surveyed Population Socio Demographic Characteristics: Sex, Highest Level of Education Attained and Marital Status

Year		2009		2012		2015	
Characteristic	Category	n= 1,087	%	n=2,017	%	n= 2,078	%
Sex	Male	395	36.3	676	33.5	694	33.4
	Female	692	63.7	1,341	66.5	1,384	66.6
Highest level of education attained	No school education	47	4.3	67	3.3	50	2.4
	Primary 1-4	63	5.8	150	7.4	134	6.5
	Primary 5-7	498	45.8	987	48.9	887	42.7
	Secondary	444	40.9	748	37.1	923	44.4
	Tertiary	31	2.8	56	2.8	75	3.6
	Missing/unknown	4	0.4	9	0.5	9	0.4

Year		2009		2012		2015	
Characteristic	Category	n= 1,087	%	n=2,017	%	n= 2,078	%
Marital Status	Single, no partner	405	37.3	629	31.2	691	33.3
	Single, regular partner	67	6.2	166	8.2	215	10.3
	Single, non-regular partner	60	5.5	78	3.9	68	3.3
	Married/cohabiting	529	48.7	949	47.1	1,055	50.8
	Divorced	4	0.4	13	0.6	11	0.5
	Separated	21	1.9	24	1.2	32	1.5
	Widowed	*	*	*	*	2	0.1
	Missing/unknown	1	0.0	9	0.5	4	0.2

*not assessed during survey year

Source: STAR-EC LQAS Household Surveys, 2009 - 2015

3.3.2 Young People (15-24 Years) and HTC

There were significant increments ($p<0.001$) when the 2015 end-line results (93.8%, n=2,048) were compared to the 2009 baseline result of 81.4% (n=1,087) among young people age 15-24 years who reported that they had knowledge of a place where one could go for an HIV test. Mid-term results were reported at 88.8% (n=1,664).

Each year results continue to show significant increments ($p<0.001$), among young people who have ever taken an HIV test. This has increased from 41.8% (n=1,087) reported in 2009 to 77.2% (n=2,055) in 2015. Similar to the findings during previous surveys, there was evidence of significant ($p<0.001$) gender and age differentials on HIV testing among young people. There continues to be a huge gap between male and female young people on the uptake of HIV tests as more females (84.3%, n=1,372) than males (63.0%, n=683) of the same age group continue to access HTC services (even among those testing within the last one year). There were also significant differences across districts ($p<0.001$). Mayuge District (84.0%) reported the highest findings while the least were reported from Kaliro District (71.2%).

In addition, survey findings also suggest significant increments ($p<0.001$) of 59.0% (n=2,078) in 2015 when compared to 43.0% (n=1,684) of young people age 15-24 years in 2012 that reported they had taken an HIV test and received their results in the last year prior to the survey. The 2009 baseline results were much lower at 30.9% (n=1,087). Among districts, there were significant differences ($p<0.001$) in the coverage of young people who tested for HIV and received their results within one year prior to the survey. The highest proportions were noted in Mayuge (68.5%) and Namutumba (65.3%) while the lowest were in Namayingo (45.6%) and Bugiri (50.6%).

3.3.3 Young People and Sexual Behavior

The study found no significant difference ($p >0.005$) between baseline (12.5%, n=1,087) and end-line (11.9%, n=1,792) results on the proportion of young people age 15-24 years who had sex below the age 15 years. As illustrated in Figure 14, first sexual debut peaks at 16 years for both female and male respondents of ages 15-19 years while at the same time more proportions of females (27.9%) than males (25.0%) of the same age group were reported to have had sex at the aforementioned age. Figure 15 illustrates findings for the 20-24 years age group.

Figure 14: Age at which 15-19 year olds first had sex (2015 survey results)

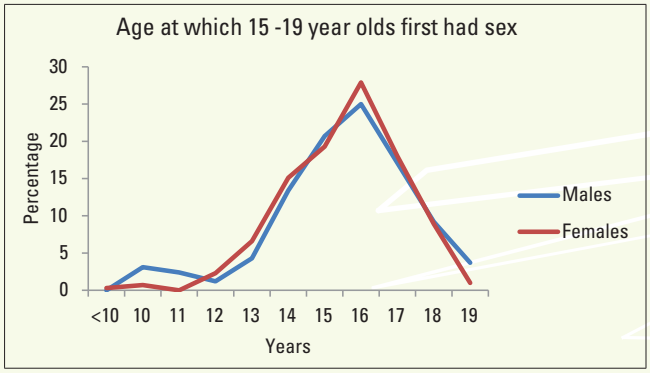
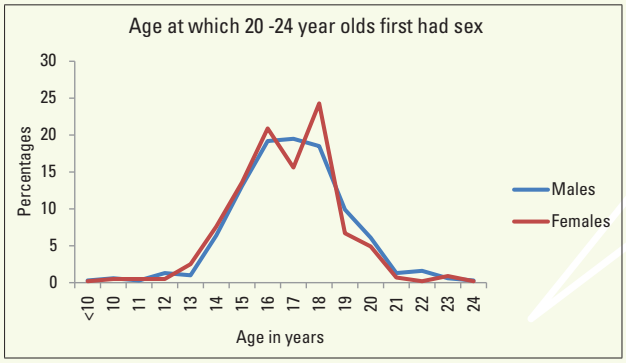


Figure 15: Age at which 20-24 year olds first had sex (2015 survey results)



3.4 Reproductive Health Among Adults 15-54 Years

The World Health Organization defines reproductive health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, reproductive health, or sexual health/hygiene, addresses the reproductive processes, functions and system at all stages of life. Areas assessed under reproductive health during this survey comprised mainly of aspects that were related to family planning utilization and goal oriented antenatal care. Family planning results showed that the proportion of women (ages 15-49) years using any method during the baseline was 25.3% (n=2,217) but dropped and stagnated at 23.6%, (n=3,327) during both the 2010 and 2011 follow-up surveys. However, over the last 4 years, the 2012 and 2015 surveys show a rise to 27.6% (n=2,930) and 29.5% (n=3,137) respectively (p<0.001).Results also showed an increase rom 26.2% (n=2,373) in 2011 to 31.8% (n=2,369) in 2015 among currently married/cohabiting women 15-49 years (excluding pregnant women) who were using modern family planning methods.

52.2%%attended ANC at least 4 times –a finding not very different from 49.1% in 2009

28.6% of pregnant women tested and received their HIV results together with their partners during ANC -a higher finding than 17.3% in 2012

82.5% pregnant women gave birth from a health facility in the 2 years prior to the survey-an increment from 69.1% in 2009

31.8% of all married/cohabiting women interviewed reported using modern family planning methods -an increment from 26.2% in 2011

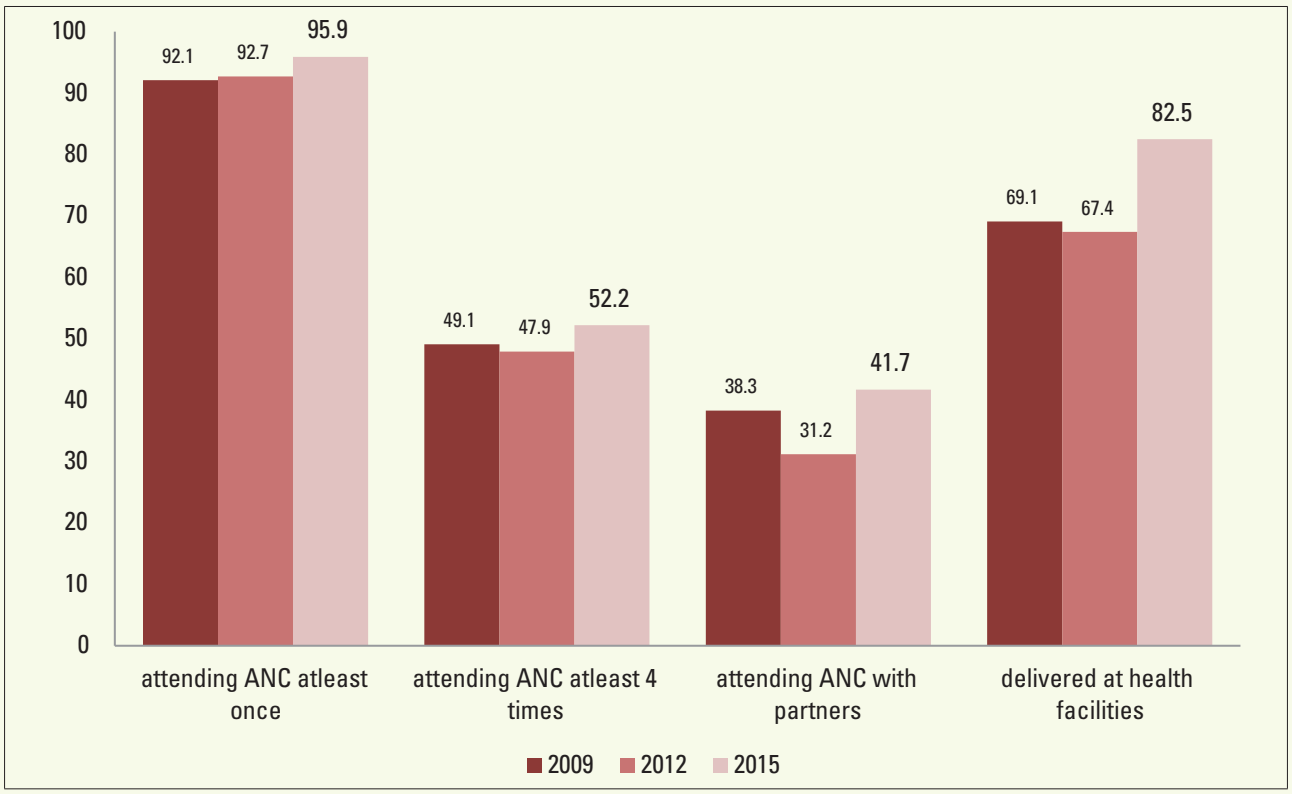
Women who had given birth to children two years prior to the survey were asked questions related to goal oriented ANC. Other questions entailed their last pregnancy related experiences, practices and behaviors.

Comparisons were made between indicators on ANC attendance at least once and four or more times. The proportion of pregnant women attending ANC at least once increased from baseline (92.1%, n=570) to end-line (95.9%, n=1,900) while the recommended four or more times has been reported on the increase from 49.1%, (n=570) in 2009 to 47.9%(n=1,710) in 2012 and now at 52.2% (n=1,900). The proportion of biological mothers of children 0-23 months who reported having attended ANC with their partners and tested as well as received their results together as a couple for HIV was at 28.6% (n=1,900) in 2015 and this was significantly (p<0.001) higher than mid-term results of 17.3% (n=1,710). For the fourth survey year running, the highest findings of results were found in Kaliro (52.6%). while the lowest were reported in Mayuge (16.8%), Namutumba (20.7%) and Namayingo (21.6%).

Significant increments (p<0.001) were registered from 69.1% (n=570) reported during baseline to 82.5% (n=1,900) at end-line in 2015 among the proportion of biological mothers of children 0-23 months who reported having had their last birth at a health facility. However, though not significant (p>0.050), there had been a drop in results to 67.4% (n=1,710) at mid-term in 2012. Among districts, 2015 results show that Kamuli (95.3%), Iganga (90.0%) and Kaliro (86.8%) reported the highest results while Bugiri (64.7%) and Namutumba (78.6%) had the lowest results. These district variations and results have been consistent for most of the years of program life. Interestingly, except Bugiri District, all the districts that have hospitals reported high proportions. There was also remarkable improvement on this indicator from 40.0% reported in 2009 from Namayingo District to 81.6% reported in 2015.

While it is possible for women to deliver from a health facility setting, it is also possible for some women to deliver from such settings in the absence of a skilled or qualified service provider. Overall, 81.2% (n=1,900) in 2015 compared to 67.2% (n=1,710) in 2012 of biological mothers of children 0-23 months reported having their deliveries at the health facility assisted by qualified staff (i.e. a doctor, nurse or midwife).

Figure 16: Reproductive Health Indicator Results (%) by Year of Survey



Source: STAR-EC LQAS Household Surveys, 2009-2015

- 91.5% of adults (15-54) years identified at least one way of MTCT – a lower finding than 95.5% at baseline in 2009
- 52.8%adults were able to identify all the 3 MTCT ways – an increment from 45.2% at baseline

% of respondents 15-54 years who knew that HIV can be transmitted to a baby through;

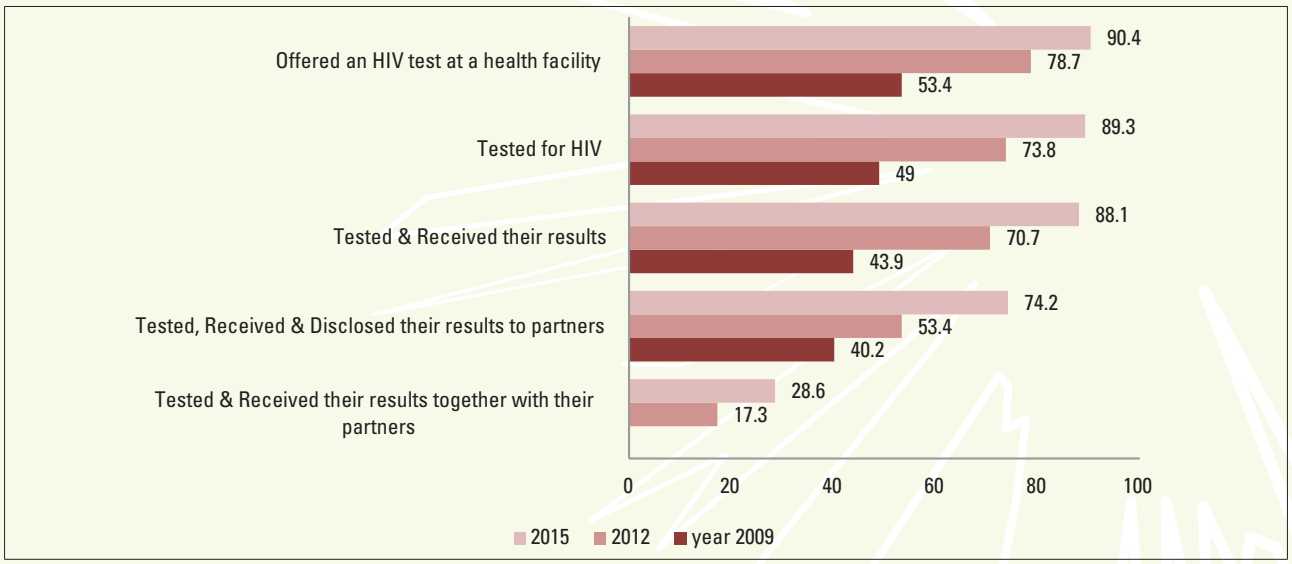
	Males	Females
Pregnancy	56.1 %	65.2%
Delivery	83.7	89.2%
Breast feeding	71.1%	76.8%

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

PMTCT is an important undertaking supported by the MoH and other development partners in the fight against pregnant women infecting their unborn babies with HIV during pregnancy, delivery and after birth while breast feeding. Without treatment, many babies born to HIV positive women can become infected with HIV through the three aforesaid transmission ways. Uganda was among the first countries in sub-Saharan Africa to initiate a pilot clinical PMTCT program in the year 2000. Back then, PMTCT services were given as a routine service to consenting HIV-positive women at delivery. Educating women that PMTCT is of benefit to them and their babies is another approach that has been adopted. This is a diversion to the earlier approach where PMTCT services were a part of the birth delivery package, given as a routine offer for those who tested HIV positive during prenatal clinic visits. Currently, MoH is advocating for virtual elimination of mother to child transmission of HIV where implementing partners have to target all pregnant HIV positive women.

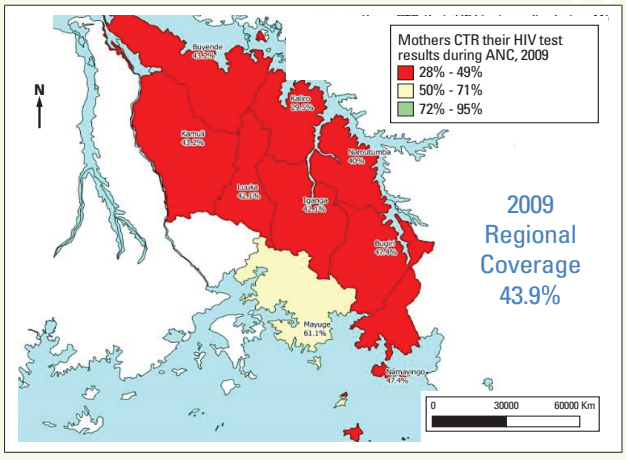
Information related to PMTCT practices was sought from biological mothers of children 0-11 months and those with children 12-23 months who had given birth to children two years prior to each annual survey. Additionally, knowledge of PMTCT was assessed from both males and females in the reproductive age groups 15-54 years and 15-49 years respectively. Figure 17 illustrates the upward trend in the key PMTCT indicators across the years.

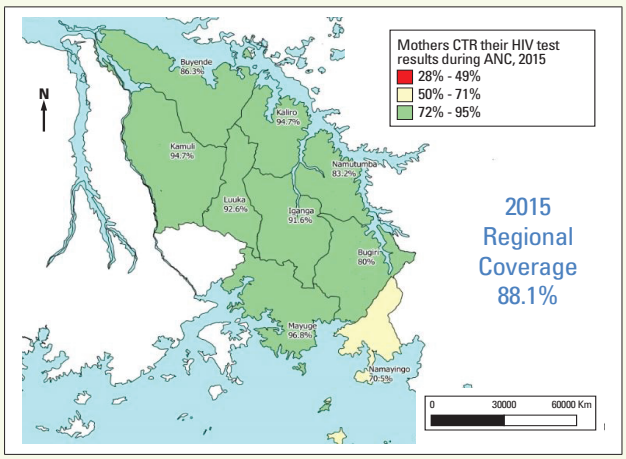
Figure 17: PMTCT Indicator Results (%) during ANC, by year of survey



Source: STAR-EC LQAS Household Surveys, 2009-2015

Map 4: % of biological mothers of children (0-24 years) who reported having taken an HIV test during their last pregnancy for PMTCT purposes





Overall, PMTCT indicator results continue to show increments each subsequent year starting with the 2009 baseline. This is clearly illustrated in the Figure 17. Results showed significant ($p<0.001$) differences between districts and among males (86.8%, n=1,328) and females (93.5%, n=3,137) who were able to identify one MTCT way. The same district and gender differences ($p<0.001$) were reported among 52.8% (n=4,465) of all individuals who were able to identify all three MTCT ways.

3.6 Knowledge and Perceptions on Anti-Retroviral Therapy (ART)/ Cotrimoxazole (CXT)

Like all past household surveys, this year's survey was only able to investigate some information on ART among the general population (adults 15 – 54 years) and did not include investigations among Persons Living with HIV&AIDS (PLHIV) thus no information on their practices could be obtained. The survey therefore set to find out respondents' knowledge, perceptions and thoughts on ART. While there was a decreasing trend in the proportion of adults who believed that HIV patients should take ARV/cotrimoxazole drugs from the baseline year in 2009 to 2011, there is now an increasing trend reported in the last four survey years ($p<0.001$). Overall, proportions increased from 36.1% (n=2,280) at baseline to 51.8% (n=3,420) in 2012 and 67.3% (n=4,465) in 2015. Table 7 highlights some of these findings.

Table 7: Percentage of Adults (15+ years) Who Believe That HIV Patients Should Take ARV/Cotrimoxazole Drugs

Districts	Year of Survey						
	2009	2010	2011	2012	2013	2014	2015
Bugiri	45.5	38.4	30.0	52.1	61.7	64.8	47.0
Buyende*	-	17.6	13.4	36.6	42.5	62.7	62.3
Iganga	32.6	50.8	42.4	61.8	66.1	57.9	70.1
Kaliro	33.7	37.9	41.8	56.1	68.6	91.4	83.0
Kamuli	41.6	30.5	36.3	61.1	75.6	79.8	76.0
Luuka*	-	41.1	29.2	54.7	64.8	80.4	89.9
Mayuge	31.3	41.6	37.4	51.6	58.7	59.0	53.5
Namayingo*	-	33.7	30.8	62.9	60.8	79.2	90.5
Namutumba	31.8	27.6	22.6	29.7	34.3	38.8	41.1
Regional Total	36.1	35.5	31.6	51.8	59.3	67.4	67.3
p value	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

*Buyende, Luuka and Namayingo districts were not yet in existence by 2009, therefore no results during the same year

Source: STAR-EC LQAS Household Surveys, 2009- 2015

Table 8: Percentage Who Know of a Place to Obtain ARV /CXT Drugs (Government and Private Health Facilities)

Districts	Year of Survey						
	2009	2010	2011	2012	2013	2014	2015
Bugiri	66.8	64.1	60.6	79.8	89.6	92.6	80.5
Buyende	-	43.8	51.4	78.6	88.5	94.2	90.5
Iganga	56.0	71.9	85.1	83.8	91.7	90.5	83.3
Kaliro	55.2	59.0	80.7	85.0	96.2	99.6	96.6
Kamuli	51.9	49.9	67.1	76.8	86.0	93.9	84.7
Luuka	-	59.7	66.4	67.6	88.4	91.8	91.0
Mayuge	57.1	73.1	75.8	78.7	90.5	92.9	92.7
Namayingo	-	42.7	42.0	59.2	79.6	85.5	87.3
Namutumba	61.5	64.9	66.7	78.1	91.2	92.0	90.3
Regional Total	58.0	58.8	66.3	76.5	89.1	92.6	88.7
p value	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Buyende, Luuka and Namayingo districts were not yet in existence by 2009 therefore, no results during the same year

Source: STAR-EC LQAS household surveys, 2009- 2015

Overall, results showed that more individuals are getting aware of where to access ARVs every year except for the final assessment year where there was a slight drop in findings. Additionally, awareness is highest in Kaliro (96.6%) and lowest in Iganga District (83.3%). Significant differences (p=0.044) were reported among males (87.2%, n=1,249) and females (89.3%, n=2,966).

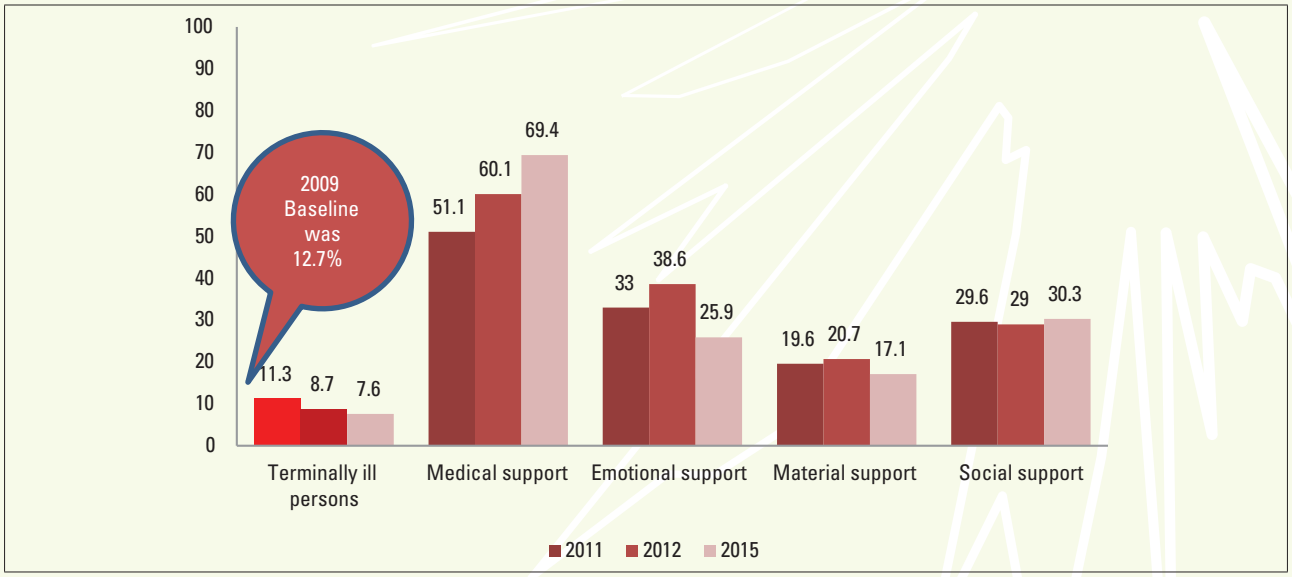
3.7 Care and Support

The survey asked questions on both community and clinical care with respect to the various HIV&AIDS and/or related indicators. Due to stigma related issues, it is not as possible to get an actual measure of the number/proportions of PLHIV at the household level or the actual measure of PLHIVs in need of care and treatment support. Most people are always hesitant to mention and opt never to reveal whether they are HIV positive. Again, people are always reluctant to mention if someone in their household is HIV positive. However, survey findings revealed a decrease in the number of respondents that reported they would want to keep it a secret if a family member were found HIV positive from 65.6% (n=2,276) at baseline in 2009 to 50.3% during mid-term and 35.1% (n=4,162) in 2015.

In order to minimize respondent bias, all past surveys opted to adopt a proxy question that would help to measure the existence of PLHIVs

and their need for care services. Thus, respondents were asked whether they had a sick and bedridden person (including the respondent) or someone who had died after being sick or bedridden for more than three months in their household. There were significant changes in the trend and proportion of households reporting having existence of such persons over the last seven years. Results at baseline in 2009 were reported at 12.7% (n=1,139) and at 8.7% during mid-term while in 2015, they were at 7.6% (n=1,694) as illustrated in Figure 18 (p<0.001). Among districts, the highest of such findings were in Mayuge (15.1%), Namayingo (10.0%), Luuka (9.0%) while the lowest results were found in Kamuli (2.1%). Figure 18 further illustrates the proportion of households with terminally ill persons and the type of support they received for the terminally ill or bedridden person.

Figure 18: Care and Support Indicator Results



*during 2009, support indicators were not assessed

Source: STAR-EC LQAS household surveys, 2011 –2015

At baseline in 2009, more than half (55.9%, n=145) compared to 65.5% (n=148) and 74.2% (n=128) reported in 2012 and 2014 respectively of the affected households reported receiving home care and support for the terminally ill person(s). These findings represent significant increments over the last six years (p=0.001). The survey also established that almost all respondents' households (90.1%, n=121) with terminally ill persons reported their willingness to care for a PLHIV in their own This was a fall in indicator findings and was significant (p<0.001) when compared to mid-term (94.3%, n=141) and baseline (99.3%, n=145) results.

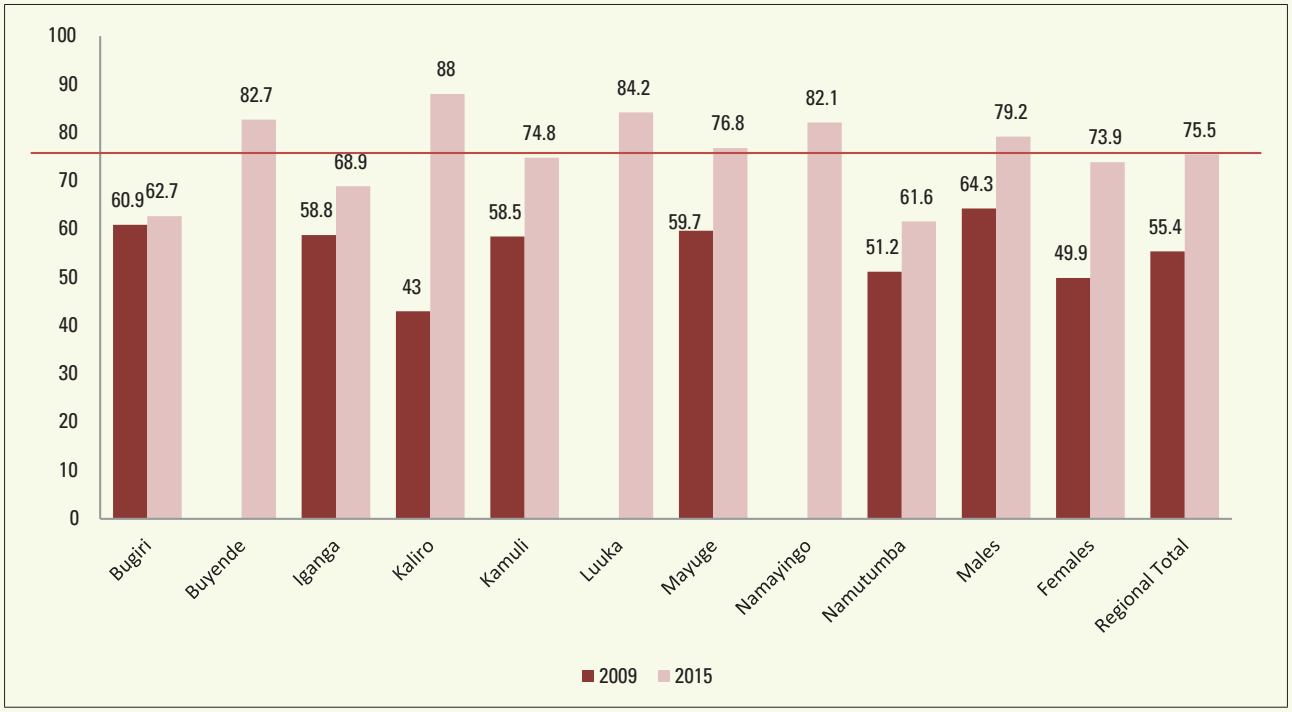
Overall, as illustrated in Figure 18, there has been significant increments (p<0.001) in medical support provided to terminally ill persons while there was no significant growth in emotional (p= 0.320), material (p=0.725) or social support (p= 0.996).

3.8 Knowledge and Perception on Tuberculosis (TB)

The STAR-EC program routine TB/HIV indicators have improved across all districts. Most notable however, is the low prevalence of TB/HIV co-infection at 31% in the region when compared to the national estimate of 49% TB/HIV co-infection (National TB and Leprosy Program, FY 2012/2013). This improvement and others are the result of improved linkages and internal referrals between the TB and HIV care services as well as improved knowledge on TB transmission, prevention and dissemination of the new policy among the health care providers.

As part of the household survey, knowledge and awareness on TB within the various East Central region communities were investigated. In 2015, approximately nine in every ten (92.6%, n=4,437) compared to 88.1% (n=3,397) in 2012 and 84.4% (n=2,254) at baseline in 2009 knew of at least one sign and symptom of TB (p<0.001). At the same time, 2014 results showed that, 88.9% (n=4,436) knew that it is possible for one to have both HIV and TB at the same time while 75.6% (n=4,349) adults aged 15-54 years knew that TB is a curable disease. Additionally, there were significant findings (p<0.001) as more males (79.2%, n=1,300) than females (73.9%, n=3,049) knew that TB is a curable disease and 89.2% (n=4,465) respondents mentioned they would take TB suspects to a health unit for testing, care and treatment. Figure 19 shows the trend in the proportion of adults who knew that TB is a curable disease by district.

Figure 19: Percentage of Adults 15-54 Years Who Knew of TB is a Curable Disease by District



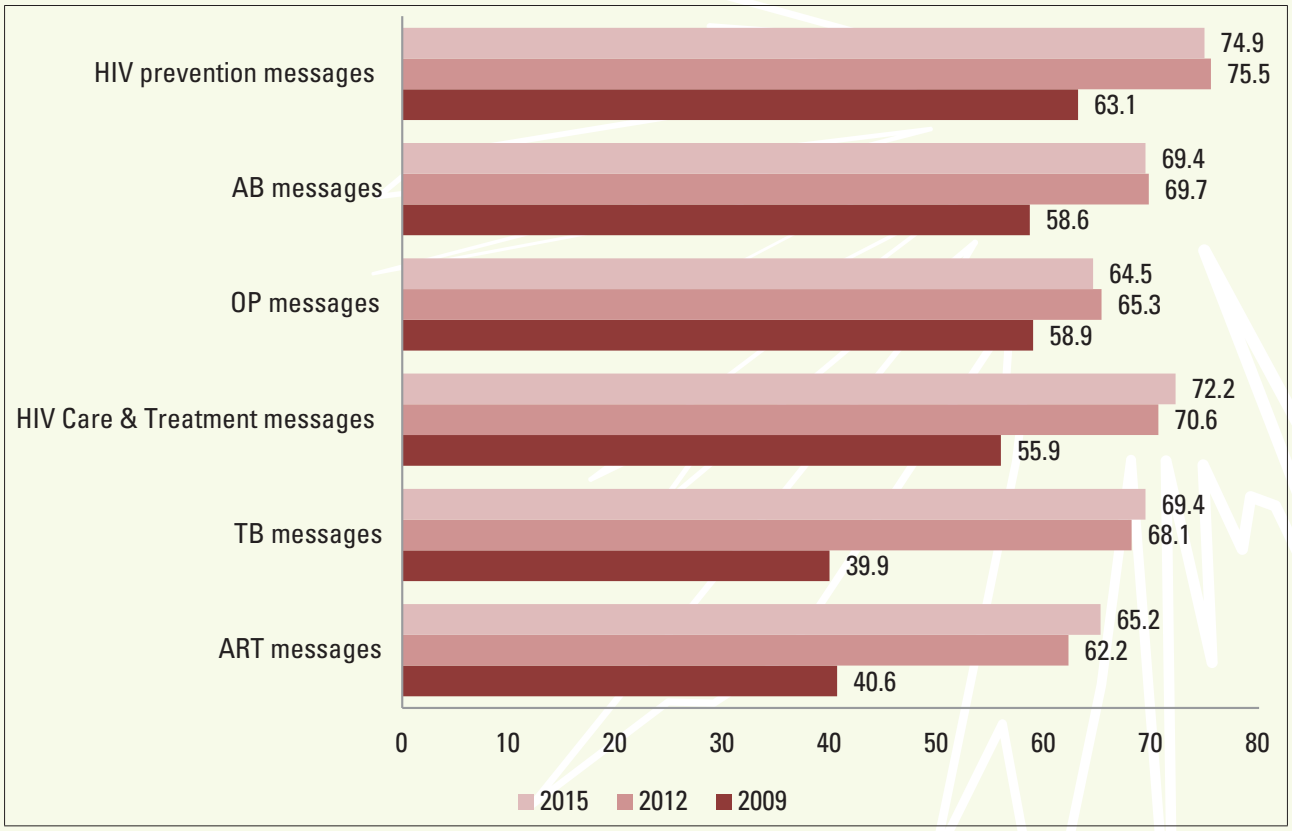
Source: STAR-EC LQAS Household Surveys, 2009 and 2015

Buyende, Luuka and Namayingo districts were not yet in existence by 2009, therefore no results during the same year

BCC and IEC are also an important component in the success of both HIV and TB interventions hence respondents were asked whether they had heard or received any of these messages within three months prior to the survey. Figure 20 shows the trend in the proportion of respondents receiving health messages by type of message.

Overall, there was an increment in the proportion of adults that received BCC messages from, baseline in 2009 to the 2013 survey. However, there was a decline in results reported in the end-line year 2015 (see Figure 20). Variations across districts for most indicators were also found significant ($p<0.001$). More BCC indicator results can be found under Figure 20 and Appendix 1 of this document.

Figure 20: Percentage Distribution of Respondents Receiving Health Messages in the Last 3 months Prior to Survey



Source: STAR-EC LQAS Household Surveys, 2009- 2015

4.0 Challenges and Lessons Learned

4.1 Challenges

This section presents some of the main challenges that have continued to recur during each survey year. Some of them have been addressed every time they occur while others continue to exist beyond the control of various stakeholders involved in the implementation of this survey every year.

Data collection on Sigulu and Jaguzi islands was very challenging. Data collectors had to spend many days and nights on the island since their number was reduced from nine (or more) to seven in the last three survey years. While in search of randomly sampled interview locations, rains and lake storms made it almost impossible to move from one island to another– something that forced some data collectors to discontinue with the process only to make call backs later.

Whenever possible, interviewers were instructed to observe items like bed nets and toilet facilities. However, information that includes ante-natal attendance, HIV testing during pregnancy and malaria intermittent presumptive treatment were not systematically verified against the ANC card, except in cases where a respondent's responses contradicted. Similarly, details of the treatment given to children with a history of fever were not confirmed with respective medical forms, thus possibly contributing to erroneous categorization of the medicines prescribed. Recall failure among some respondents could not be ruled out.

Interpreting the findings of surveys always poses the challenge of attribution of the results. Due to the cross-sectional design of all past surveys, it is only possible to draw conclusions about associations between various factors and the resultant measures of each indicator. Any attribution of causality is not possible. In a dynamic environment like the health sector in Uganda, it is also difficult to attribute an estimated association between a certain intervention and the related findings. More specifically, while the constellation of efforts and activities of the STAR-EC program may well have had an impact on the direction and change in many of the indicators measured between the baseline and end-line, STAR-EC cannot fully claim responsibility for the changes observed. However, it should be noted that during STAR-EC's program life in the East Central Uganda region, there was no other partner with significant contributions on HIV&AIDS interventions covering the scale of activities implemented by STAR-EC.

In some supervision areas, it was discovered that some of the sampled villages had their names changed and this would cost interviewers a lot of time and money in trying to trace for such villages. However, these would later be traced with the help of the local guides and the objectives of the survey were therefore not compromised.

Most of the training participants complained of the length of time it took to find a randomly selected village as well as the time taken to randomly select the first household. The poor state of some roads in the region characterized with huge pot holes also slowed transportation and in some areas data collectors had to walk for miles on foot as there was no easy navigation of roads. Additionally, there are few or no roads on these islands thus making it hard to access sampled villages on these islands. Further, there are hardly any vehicles on the islands thus interviewers had to walk for long hours on foot to reach sampled villages and households.

In some districts, most or all the district officials who were selected by their respective different District Health Offices were very quick at conceptualizing the methodology, committed to the exercise and showed high levels of engagement and involvement. However to a limited extent, some district officials were either not very committed to the LQAS exercise or simply not competent to conduct this exercise. These were noted and their respective DHOs advised accordingly. In other cases, trainers would pay more attention to trainees who had been identified as not performing to the desired standards. Some of these individuals were later on seen to improve. Lastly, some districts complained of the length of time their district officials were involved in LQAS at the expense of other on –going activities and work at their duty stations.

Starting with the last three annual surveys, the SDS program extended support to six of the nine STAR-EC supported districts and is commended for having improved releasing funds to each district LG on time (especially in the last two survey years). However, there was still a delay when it came to timely disbursement of funds to the LG data collectors by the LG accounting authorities themselves. Some district data collectors would finalize the data collection exercise without receiving any allowance or transport refund. This was not only a de-motivator but also could have compromised the quality of data collected since participants had to dig deep into their own pockets to facilitate themselves as they waited for these funds.

Inflation has hit Uganda over the past years and this has caused most budget line items to shoot up. On the contrary, there hasn't been enough funding to increase on the budget for LQAS activities even when some line items such as fuel have clearly and sharply risen. Some of the data collectors therefore had to improvise or use their own money to top up on fueling bikes to the far and hard to reach sampled villages while others ended up sharing one bike – something that increased on the length of time for data collection. Although transport refund for the data collection was increased from shs. 15,000/= to shs. 20,000/= during the last two program years, data collectors still found it a challenge to traverse the sampled villages with such a small amount.

4.2 Lessons Learned

Partnerships between USAID IPs on such undertakings are not only good at promoting improved partnerships and coordination of activities but also with reducing activity costs that mainly arise out of the advantages of the economies of scale. Additionally, partnerships have helped in avoiding the duplication of the same activities within the same district and such ventures help in reducing on the fatigue that the district officials would face with undertaking the same activity by different partners thus reducing on their workload.

Increased involvement of LQAS district specific focal persons in the management of this survey activity is one way of ensuring and promoting sustainability. District involvement in the planning and execution of LQAS activities helps to promote ownership of the activity by each district. Partnerships between districts and STAR-EC have also been enhanced by all districts providing their staff in the utilization of the entire methodology thus providing some answers to making LQAS activities sustainable.

Triangulation of HMIS and program routine data (where applicable) with LQAS findings is one way of supporting the process of evidence based planning and decision making.

Involvement of both junior and senior district local government officers in this exercise has additional advantages when compared to the sole utilization of senior officers. The senior officers help to give stewardship to junior officers. Additionally, they get to interface with district specific gaps first hand as they are collecting this data. This was very evident especially during the collection of data from health facilities. Owing to their experiences during the survey, senior district officials thereafter get empowered to become better planners and managers based on evidence obtained from collected data. On the other hand, junior officers are more likely to be involved in the actual execution of this entire methodology. Again, they are more readily available given the fact that they have fewer district roles to play when compared to senior district officials who are at times called upon mid-way through the survey exercise to attend to some other district activities.

Additionally, both junior and senior level district officials can only be successfully involved in the implementation of LQAS activities to some extent. It is hard to entirely utilize them in the execution of the entire LQAS activity. They are involved for 21 straight days starting with the preliminary phase, training, data collection, manual tabulation and reporting. Since they have other demanding and prescribed work to do with the district, it would therefore be harder to involve them in the subsequent processes that involve electronic data entry, statistical analysis and report writing.

The 'bodaboda' (motorcycle taxi) hire mechanism is very effective in helping data collectors reach randomly sampled villages at a relatively cheaper cost. Additionally, if the participating District

Local Governments could provide their motorcycles for the data collectors and they are fueled by STAR-EC during the data collection exercise, then this would help to cut costs further and in a way help in the promotion of a spirit of partnership and cost share. However, most districts report having their motorcycles occupied in other district on-going activities.

Supporting district LQAS focal persons was found to be very helpful. These personnel are continuously being groomed into the future leaders of this exercise in every district. These focal persons not only helped during the survey exercise but in the mobilization of the district authorities to discuss results and come up with action plans during LQAS dissemination.

The continuity and success of the LQAS exercise can only be ensured once districts and their respective department staff are made to understand and utilize the results that are generated by the survey in their annual planning. LQAS activities will be sustainable once fully embedded within district owned planning and budgeting processes.

Building rapport especially with the local authorities is very important and builds confidence in the local community sharing their ideas freely.

Training of district and CSO staff in the LQAS methodology has empowered them in the deeper conceptualization of community programs, how they operate, what affects them and insights on how to alleviate undesirable issues.

5.0 Conclusions and Recommendations

Overall, the performance of most indicators since the 2009 baseline survey showed significant improvements across most of the districts.

Despite most of the efforts made by the STAR-EC program in reaching out to hard to reach areas such as the islands of Namayingo and Mayuge Districts, the 2015 results continue to show that such areas and districts continue to lag behind when compared to performance from other districts (even though the performance of the two aforementioned districts is on the increase). As a whole, Namayingo District was noticed with least performances across a number of indicators highlighted under the findings section of this report. Therefore, there is need to further increase on the level of support provided to this district. In addition, other than some of the known factors (hard-to-reach and hard-to-serve sub-counties e.g. islands, mobile and key populations etc), there is need to identify other challenges in Namayingo District so as to inform future programming.

Much as the results show significant increases (from baseline to end-line) in the proportion of persons who have ever tested for HIV as well as those who have tested for HIV in the last one year, the proportion of individuals involved in marital, cohabiting and regular relationships testing for HIV is still low. Likewise, while there is a gap between males and females receiving HTC services (more females are receiving services when compared to men), the gap is even bigger between male and female young people. Therefore, there is need to increase focus on gender while making services more accessible to young people and the general population. Similarly, increased focus on identifying concordant positives and discordant couples for linkage to appropriate care, treatment and prevention services will be imperative while executing couple counseling and testing interventions. As mentioned in recommendations of other past LQAS reports, there is need for programs to exploit the opportunity of males who escort their pregnant wives to health facilities for ANC by providing them with HTC services. Home to home would be another useful strategy once increased to scale. Prioritization of areas or sub-counties deemed to have key populations is another important approach that should continue to be upheld. This would increase HTC uptake amongst the neediest areas that have the highest prevalence and will result into increased extension of care and treatment services for the infected persons. Results also suggest that there is a group of persons who have never tested for HIV and there is increased need to break into this group more rapidly than is currently the case.

Although there was a reduction in the likelihood of males having multiple sexual partners in 2015 when compared to the 2009 baseline results, the proportion of males indulging in multiple sex is still significantly higher than that of females. Additionally, though condom utilization during risky sexual behavior is at a proportion of more than two thirds, there has not been a significant increment reported on utilization since baseline. Follow up programming should therefore focus on improving this aspect.

Overall, there were significant increments in medical support provided to terminally ill persons while there was no significant growth in emotional, material, or social support.

Increased partnership and collaboration with district local government and the private sector is highly recommended. Large numbers of private health facilities assessed during past health facility assessments were found to serve a sizeable number of clients that cannot be ignored. There is also a need to increase the level of partnerships with some of the implementing partners in the region that are charged with direct increase in the quality and quantity of RH and Goal ANC service provision. STAR-EC and STRIDES should therefore increase on the level of this partnership as the success of PMTCT/eMTCT outcomes largely depends on both USAID IPs working closely with local governments (especially on goal oriented ANC). Further strengthening of SDS collaboration is imperative and may not only help in promoting a sustainable environment with district funding mechanisms towards various public health interventions but LQAS survey activities as well.

It should also be noted that while ANC attendance has not significantly changed since baseline, there has been significant increments in health facility deliveries and PMTCT uptake. However, STAR-EC and partners need to scale up ANC attendance so as both HIV positive and negative pregnant women can be identified and provided with respective recommended services.

Results continue to show that more adults in the region have acquired more TB knowledge. This applies to TB indicators on adults who know that it is possible for a person to have TB and HIV at the same time; adults who knew that TB is a curable disease and those who knew some signs and symptoms of TB. However, a big proportion of adults could not mention the most imperative signs and symptoms of TB. This is therefore an area that needs improvement especially with the way TB messages are packaged as part of IEC interventions. Further, in relation to knowledge on HIV prevention, there is need for further improvements in Luuka and Namayingo districts since they are the least performing districts.

There is a need to refocus, increase on prevention interventions and to increase on their integration into other interventions and services. Upholding and scaling up the "Know your Epidemic, Know Your Response" ideology and putting it into practice are also very imperative. An increase on diversification of venues from the usual institutional settings like schools and health facilities where information on HIV transmission and prevention is routinely provided is highly recommended.

It is recommended that the STAR-EC program investigates further why there was a decline in VMMC demand when compared to baseline results. This will help to inform programming and targeted solutions. As expressed under the recommendations of previous surveys, there is a need for further VMMC scale up through emphasis on increased integration of services (VMMC, HTC and

other behavioral prevention services). Males who escort their pregnant women during ANC can also be extended this service or referred to such service points. Districts that include Namayingo, Namutumba, Kamuli and Buyende reported the lowest coverage and therefore need to be targeted for improvement. As opposed to providing VMMC services in health facilities alone, more outreaches should be created and services should be extended to all men irrespective of sero-status otherwise stigma will be created when some men are turned away (from this service) on discovery of a positive sero status. Targeting of secondary schools and higher institutions of learning within districts is also very important since such settings are already a mobilized community. In addition, school holidays are an opportunity for reaching out to more students who may opt for VMMC services during such time periods.

Improvements have been noticed on the level of timeliness for disbursement of LQAS funds to districts by the SDS Project. However, there is need for further improvement by the district LGs themselves while disbursing the same funds to LQAS district personnel otherwise there is a risk of compromising quality standards when data collectors are faced with such challenges. As the STAR-EC program nears its end, both SDS and STAR-EC need to engage more with each other so as to address the sustainability question. The same level of engagement should include other stake holders that include LGs and CSOs.

STAR-EC has already built the capacity of over 100 local government (LG) and 15 CSO personnel in the execution of LQAS surveys in the region over the last six program years. With this kind of built capacity, the program should continue to support LQAS activities with more leadership roles directly played by LG personnel (particularly the district planning and HMIS departments). Data from LQAS has been useful in the development of the district management improvement plan (DMIP) and district operation plan and as such this practice should be extended to strengthening of the overall annual LG planning and budgeting process through support from the CAO's office. In order to respond to LQAS funding issues beyond STAR-EC's program life, the program should continue to encourage different district departments to conduct their own "miniature" LQAS surveys as part of their own district routine activities. DMIPs should also include plans to conduct these miniature LQAS. Namutumba is one example of a district where such small scale LQAS activities have been conducted.

Appendices

Appendix 1: Summary of Key Household Survey Indicator Results 2009 - 2015

	Appendix 1: STAR-EC Annual Household LQAS Survey Results- 2009-2015																																			
			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
	REPRODUCTIVE HEALTH																												biological mothers of children 0-11 months* (all disaggregation in blue text for indicators R1 - P7)			biological mothers of children 12-23 months* (all disaggregation in blue text for indicators R1 - P7)					
R1	% of pregnant women attending ANC at least once during the last pregnancy	Total	92.6	92.1	96.3	91.6	96.3	98.4	95.8	97.4	98.4	92.6	96.3	96.3	87.4	97.9	98.4	94.7	86.3	93.7	92.6	91.1	96.5	77.9	79.5	86.8	91.6	97.4	97.2		92.2	96.0		93.2	95.8	92.1	92.7	95.9
R2	% of pregnant women attending ANC at least 4 times during the last pregnancy	Total	50.5	46.3	46.8	43.2	47.9	50.5	51.6	49.5	58.4	41.1	41.6	53.7	42.1	45.3	58.4	45.3	55.8	37.4	60.0	43.7	54.0	45.3	53.2	44.7	49.5	53.7	60.7		47.0	52.0		48.8	52.5	49.1	47.9	52.2
R3	% of pregnant women attending ANC that were accompanied by their partners	Total	31.6	32.1	34.2	34.7	32.1	53.2	28.4	29.0	31.1	43.2	42.1	64.7	40.0	37.4	33.7	41.1	36.4	49.5	36.8	22.6	39.3	26.3	20.0	26.8	49.5	29.0	43.5		34.2	41.2		28.2	42.3	38.3	31.2	41.7
R3b	%of pregnant women whose patners were tested for HIV during ANC as a couple	Total		21.6	35.8		21.1	47.4		28.4	34.7		30.0	59.0		32.6	39.0		19.5	56.8		17.4	32.6		17.9	33.7		21.4	31.6		24.1	38.9		22.5	42.0		23.3	40.3
R4	% of pregnant women whose partners were tested for HIV during ANC as a couple and received their results	Total		17.9	24.2		14.7	36.8		21.6	26.8		24.2	52.6		25.8	26.8		14.2	41.1		9.0	16.8		14.7	21.6		13.7	20.7		17.5	26.3		17.1	31.5		17.3	28.6
R4b	%of deliveries that were assisted by a doctor/nurse/midwife or nursing aid	Total			68.4			82.6			86.3			85.3			87.9			85.3			79.7			79.5			78.3			79.2			83.6			81.2
R5	% of deliveries (in the last 2 years) that took place in a health facility	Total	47.4	64.2	64.7	65.3	63.2	80.0	77.9	82.6	90.0	68.4	70.0	86.8	76.8	89.5	95.3	71.6	63.2	85.3	67.4	63.2	82.1	40.0	41.6	81.6	76.8	69.0	78.6		64.9	82.0		69.8	83.0	69.1	67.4	82.5
R6	% of women (15-49) currently using family planning methods (CPR)	Total	26.3	29.9	34.2	15.8	21.8	18.8	26.9	26.5	35.4	23.8	27.4	42.6	24.5	34.3	27.8	26.5	22.2	33.7	23.6	26.2	24.2	26.6	38.7	31.4	26.5	21.2	20.9							25.3	27.2	29.5
R7	% of currently married/cohabiting women(15-49 years) using any FP method	Total		32.7	35.6		23.3	22.5		30.6	38.8		33.1	50.7		35.3	34.2		23.8	39.4		28.5	27.2		46.1	42.3		21.1	20.1								30.3	33.7
R8	% of married/cohabitting women 15-49 years using modern family methods	Total		28.7	35.3		22.1	21.7		29.8	33.3		31.3	47.6		35.3	33.8		23.0	39.0		27.7	24.7		45.7	39.6		20.7	20.1								29.2	31.8
	PMTCT																																				
P1	% of biological mothers who were offered an HIV test during ANC in last 2 years	Total	60.2	78.0	85.1	35.8	66.1	88.4	51.1	87.2	92.6	45.7	84.1	95.3	47.4	89.4	95.3	61.7	18.6	95.2	64.2	18.1	98.9	59.6	77.5	76.1	51.6	63.0	85.0		79.7	90.0		77.6	90.9	53.4	78.7	90.4
P2	% of biological mothers tested for HIV during ANC in last 2 years	Total	52.6	67.4	83.2	32.6	62.1	87.4	46.3	81.6	92.1	41.1	80.5	95.3	44.2	86.8	95.8	55.8	73.2	93.2	61.1	77.9	97.2	50.5	73.7	75.3	48.4	61.1	83.5		75.6	89.3		72.1	89.4	49.0	73.8	89.3

Appendix 1: STAR-EC Annual Household LQAS Survey Results- 2009-2015

			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
P3	% of biological mothers tested and received their HIV test results during ANC in last 2 years	Total	47.4	64.2	80.0	31.6	56.8	86.3	42.1	79.0	91.6	29.5	79.5	94.7	43.2	85.8	94.7	48.4	69.5	92.6	61.1	73.2	96.8	45.3	71.1	70.5	40.0	57.4	83.2		72.2	88.0		69.2	88.1	43.9	70.7	88.1
P4a	(Of those biological mothers who were offered an HIV test during ANC in last 2 years) % who tested and received their results	Total	90.0	93.9	96.2	96.7	91.5	98.8	93.0	96.8	99.4	73.7	98.1	99.5	97.6	98.8	98.9	86.8	93.6	99.4	100.0	92.7	99.6	89.6	96.4	93.0	82.6	92.4	99.6		94.9	98.5		95.3	98.6	90.3	95.1	98.5
P4c	(Of those biological mothers who attended ANC at least 4 times during the last pregnancy) % who tested and received their HIV results in the last 2 years	Total	90.0	96.7	97.3	100.0	86.4	97.6	91.7	97.5	99.0	73.7	96.8	99.0	96.0	98.8	99.1	88.5	88.9	100.0	100.0	91.0	99.3	92.9	89.1	90.0	84.6	91.8	98.6		93.8	97.5		92.5	99.0	90.6	93.2	98.2
P5	% of biological mothers (0-11 months) who were counselled about PMTCT	Total		77.3	85.3		70.2	87.9		84.5	86.2		73.2	94.7		87.1	87.4		68.2	91.3		81.3	91.1		73.8	87.5		56.9	77.1		77.0	86.5		72.4	88.1		74.7	87.3
P6	% of biological mothers who were counselled about HIV prevention (things to do)	Total	59.0	72.5	82.9	45.3	67.2	79.6	70.5	83.2	87.8	55.8	72.3	93.1	64.2	87.7	88.8	63.2	65.2	89.6	71.6	81.4	89.3	54.7	74.9	75.6	51.6	58.7	76.7		76.9	83.4		70.5	86.4	62.1	73.7	84.8
P7	% of pregnant biological mothers who were counselled about HIV testing	Total	89.4	78.4	90.4	96.3	69.3	79.2	95.1	83.2	88.7	73.5	74.3	94.2	97.0	91.4	90.3	86.0	70.6	91.3	100.0	83.6	94.2	90.2	75.1	75.2	86.1	60.9	78.5		78.7	86.5		73.8	87.5	90.8	76.3	87.0
P8	Proportion of women who know a mother can transmit HIV to her infant during:	Pregnancy	66.1	67.7	58.4	70.4	73.5	65.5	51.9	59.7	73.7	68.1	80.7	86.5	62.2	76.3	62.7	67.0	59.6	76.6	52.7	54.7	47.7	59.8	58.9	54.2	66.4	60.2	65.2							61.3	65.9	65.2
		Delivery	87.5	83.8	85.0	80.8	82.6	85.9	89.3	88.5	90.5	84.3	86.3	93.2	90.8	93.1	89.5	91.4	70.5	92.5	87.9	88.7	93.6	83.9	79.7	81.7	93.4	80.1	89.6							88.8	83.8	89.2
		Breastfeeding	78.0	73.3	75.5	63.4	77.3	65.0	70.0	85.9	79.5	74.0	78.5	87.9	72.4	87.1	87.9	80.3	64.4	87.9	76.5	80.4	76.3	68.5	73.8	54.6	77.9	68.6	76.1							74.8	76.7	76.8
P9	Proportion of men who know a mother can transmit HIV to her infant during:	Pregnancy	69.4	61.9	42.5	70.8	77.7	65.5	63.0	53.4	63.2	62.1	71.7	75.7	53.0	68.7	50.3	66.9	51.4	64.5	52.9	52.5	35.7	63.6	44.8	56.6	55.8	55.4	54.6							59.3	59.7	56.1
		Delivery	89.6	82.7	80.3	81.9	86.4	88.5	85.5	88.6	87.3	84.1	82.1	88.4	92.6	91.8	79.0	87.7	77.6	92.4	85.0	81.8	80.9	83.1	73.9	71.3	90.9	73.0	86.8							88.0	81.9	83.7
		Breastfeeding	67.6	75.6	75.5	62.5	75.5	69.2	71.5	78.4	64.2	67.6	63.0	80.1	68.0	77.6	76.3	80.3	63.5	83.7	77.1	69.9	63.1	65.7	63.4	55.9	69.5	56.6	73.2							70.2	69.1	71.1
P10	% of adults who know at least one MTCT way	Total	95.8	89.0	86.7	92.6	91.8	93.5	95..26	94.0	93.7	92.4	88.4	93.1	96.1	96.1	90.1	93.7	81.6	96.0	95.3	91.3	91.2	94.0	85.5	85.3	98.2	85.8	93.3	96.1	87.3	86.8	95.1	90.6	93.5	95.5	89.3	91.5
P11	% of adults who know all MTCT ways	Total	49.5	51.6	47.8	47.9	62.4	48.8	40.0	48.4	58.7	49.2	88.4	77.9	43.2	65.3	54.3	50.5	41.3	61.3	41.3	42.9	40.0	42.9	34.7	34.3	47.9	43.4	54.0	41.4	45.8	46.6	47.5	53.3	55.4	45.2	50.3	52.8
**	% of individuals who know two key actions that reduce HIV transmission from an infected mother to her child			36.2			19.2			45.3			38.7			53.7			46.8			37.9			41.6			19.7								37.7	
	WATER AND SANITATION																																				

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			DISTRICT RESULTS																									REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
W1	% of house holds main source of drinking water	Piped into dwelling	0.4	3.2	0.6	0.0	0.4	0.0	0.7	0.0	0.0	0.0	0.2	0.2	1.4	0.4	0.6	0.3	0.4	1.5	0.0	0.9	0.2	0.3	0.0	0.2	0.0	0.0	0.7							0.4	0.6	0.5
		Piped into yard/ plot	1.1	1.9	0.2	0.3	0.0	0.0	1.1	7.6	1.7	1.4	0.4	0.8	0.4	0.0	0.0	0.0	0.6	0.2	0.0	1.9	0.4	0.0	0.4	0.6	0.0	1.1	0.0							0.6	1.6	0.4
		public tap	0.7	4.7	2.5	6.4	0.8	1.3	2.8	5.9	6.6	0.7	2.1	0.4	0.0	1.9	0.2	0.8	2.8	0.9	4.3	2.4	7.6	1.1	1.3	1.3	0.0	1.1	0.0							1.4	2.6	2.4
		Bore hole	50.0	63.7	71.0	83.1	92.6	93.9	78.5	78.9	80.1	95.1	93.7	97.7	87.3	92.4	94.3	84.4	87.2	93.0	71.8	61.8	65.9	29.5	48.9	65.8	82.0	83.8	92.3							77.5	78.2	80.6
		Protect-ed well/ spring	10.5	12.5	12.0	0.0	0.0	0.0	11.3	3.4	4.7	0.4	0.6	0.6	1.4	2.8	3.2	5.8	7.0	3.0	6.9	14.3	10.6	2.9	6.8	1.1	6.7	5.5	1.8							6.1	5.8	4.2
		unpro-tected well/ spring	11.2	11.2	10.3	3.2	2.1	1.7	5.3	4.2	4.0	1.1	1.3	0.2	3.2	1.1	0.0	6.9	0.9	1.1	13.7	13.7	8.8	13.8	12.9	8.3	11.3	8.6	4.6							7.6	6.2	4.4
		Rain water	0.0	0.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	0.4	0.0	0.0	0.0							0.1	0.1	0.2
		Tanker-truck		0.0	0.2		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.6	0.0		0.0	0.0								0.1	0.0
		Cart with tank/ drum	0.oo	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.2	0.0		0.0							0.1	0.1	0.0
		Surfance Water (River,Stream,Dam,Lake,Canal,Irrigation Channel)	26.1	1.9	2.1	7.1	4.0	3.2	0.4	0.0	2.3	1.4	1.5	0.0	5.3	1.5	1.5	1.9	1.1	0.2	3.3	4.7	6.7	51.9	28.0	22.2	0.0	0.0	0.7							6.1	4.7	4.3
		bottled water	26.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	1.4	0.2		5.3	0.0		0.0	0.0	0.2	3.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.0							6.0	0.1	0.0
		others	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	o.oo	0.0	0.0							0.1	0.0	0.1
	HIV&AIDS																													Males			Females					
H1	% of adults who have ever taken an HIV test	Total	50.9	66.3	79.9	37.6	52.9	85.8	41.5	62.6	85.2	44.9	63.2	80.0	48.0	75.3	81.8	38.3	61.3	89.2	56.9	58.4	88.3	50.1	65.8	76.7	45.1	67.6	84.5	42.5	55.2	70.8	51.3	69.3	89.0	47.9	63.7	83.6
		Female	55.7	67.8	85.9	42.0	56.3	91.7	45.9	68.6	91.1	46.0	67.8	85.4	51.3	81.9	91.4	40.2	68.6	92.0	64.0	69.1	95.6	50.9	69.7	79.3	44.0	73.8	87.3							51.2	69.3	89.0
		Male	43.1	63.9	66.4	30.6	47.7	72.8	34.3	53.6	70.6	43.1	55.8	68.5	43.0	64.9	62.7	35.2	50.3	82.0	44.6	41.5	69.4	49.0	59.7	70.8	46.7	59.1	76.1							42.5	55.2	70.8
H2	% of adults who have tested for HIV in last 1 year	Total	36.8	51.6	56.0	21.1	43.2	60.0	29.7	49.5	70.3	30.5	50.3	55.4	37.9	66.1	65.9	25.5	46.6	70.7	44.0	44.7	74.7	44.2	52.6	51.2	36.1	55.0	68.6	30.1	40.8	49.9	39.5	57.7	69.9	35.8	51.1	64.0
		Female	40.4	53.0	63.4	24.3	47.2	64.0	36.5	57.6	77.9	31.1	56.2	62.6	41.3	75.0	76.7	26.2	55.5	72.7	51.3	55.8	81.9	46.0	58.0	52.8	35.8	61.1	73.2							39.5	57.7	69.9
		Male	31.0	49.3	39.5	15.9	36.9	51.3	19.1	37.1	51.5	29.7	40.8	39.6	32.7	52.0	44.3	24.5	33.1	65.7	31.4	27.2	56.5	41.3	44.3	47.7	36.4	46.5	54.9							30.1	40.8	49.9

	Appendix 1: STAR-EC Annual Household LQAS Survey Results- 2009-2015																																			
			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
H3a1	(Of those adults who have ever taken an HIV test) % who had an HIV test in last 1 year	Total	72.5	96.6	74.4	57.6	92.7	76.0	72.9	94.0	84.3	68.6	94.1	72.7	79.6	97.3	82.4	68.3	89.9	79.1	77.7	92.9	68.1	89.4	94.3	71.5	81.6	91.7	84.5	71.8	91.5	72.1	77.1	94.9	82.4	75.3	93.8	79.8
H3b																																						
H4a	% of adults who have tested and received their HIV test results in last 1 year	Total	34.2	49.7	51.8	19.2	40.0	58.1	27.9	47.6	68.8	26.6	48.4	52.8	36.6	62.9	61.7	24.2	43.2	69.9	41.6	42.4	69.8	38.7	50.0	48.4	32.4	51.6	68.3	27.5	39.1	48.8	36.8	54.5	66.8	33.2	48.4	61.4
		Female	38.3	50.9	57.6	22.1	42.9	62.5	33.9	55.5	76.1	26.4	54.5	58.9	40.4	71.1	70.0	25.3	51.1	71.6	49.2	52.4	75.8	40.1	55.4	50.3	32.3	56.6	73.2					54.5		36.8	54.5	66.8
		Male	27.6	47.9	38.8	14.5	35.6	48.7	18.4	35.8	50.7	26.9	38.8	39.6	30.7	50.0	44.9	22.4	31.1	65.7	28.6	26.5	54.7	36.4	41.6	44.3	32.5	44.7	53.5		39.1					27.5	39.1	48.8
H4b	% of adults who have tested and received their HIV test results in last 1 year (excluding biological mothers of children 0-11 months)			45.6	40.4		36.1	52.6		40.0	57.9		41.1	41.4		54.7	53.3		38.3	66.3		34.4	58.6		47.4	44.9		49.5	56.8		39.1	48.8		47.3	56.4		43.0	52.5
H5	(OF THOSE WHO HAD PARTNERS AT THE TIME OF TEST) % of adults (15 and above) who have tested, received their results and disclosed results to their partners within the last one year prior to the survey			88.0	90.5		91.9	96.0		88.4	90.8		89.1	94.5		90.6	91.5		88.8	94.7		81.3	96.3		92.7	82.1		95.7	90.5		91.4	91.1		89.1	92.7		89.8	92.4
H7a	% of adults who know where they can be tested for HIV	Total	78.9	91.3	92.8	79.4	91.0	96.0	82.6	94.7	95.1	81.3	98.7	97.2	84.5	94.5	93.8	76.4	84.2	96.6	87.9	89.4	96.6	78.8	78.1	93.3	80.0	91.3	95.5	84.9	90.9	94.1	81.0	90.0	95.8	82.5	90.4	95.3
H7b	(Of those who know where they can be tested for HIV) % that has actually ever tested	Total	58.7	71.5	84.6	41.3	57.0	87.2	48.7	65.3	86.8	50.8	63.9	80.1	55.0	77.4	85.8	47.7	69.1	89.9	61.5	63.3	88.8	59.0	78.6	79.6	53.5	72.2	86.4	47.8	58.9	73.1	59.3	74.8	90.8	54.8	68.5	85.6
H8	% of adults who believe that HIV patients should take ARV drugs	Total	45.5	52.1	47.0	17.6	36.6	62.3	32.6	61.8	70.1	33.7	56.1	83.0	41.6	61.1	76.0	41.1	54.7	89.9	31.3	51.6	53.5	33.7	62.9	90.5	31.8	29.7	41.1	39.1	52.8	68.5	34.2	51.2	66.8	36.1	51.8	67.3
H9	% of adults who know a place to get ARV drugs for HIV patients	Total	66.8	79.8	80.5	43.8	78.6	90.5	56.0	83.8	83.3	55.2	85.0	96.6	51.9	76.8	84.7	59.7	67.6	91.0	57.1	78.7	92.7	42.7	59.2	87.3	61.5	78.1	90.3	64.2	78.2	87.2	54.2	75.4	89.3	58.0	76.5	88.7
H10	(Of those adults who know a place to get ARV drugs for HIV patients) % that mentioned health unit or private clinic	Total	90.7	98.0	94.2	94.4	98.0	97.6	90.0	98.7	98.2	96.2	96.5	98.9	96.4	94.7	90.9	93.2	97.5	95.8	88.7	95.1	93.1	93.6	96.3	95.9	92.1	93.7	98.7							92.2	96.5	96.0
H11	% of adults who know a place to obtain condoms	Total	79.7	88.0	91.0	88.7	86.0	92.9	84.2	88.5	86.4	78.2	92.8	92.5	86.3	95.0	91.9	89.9	90.7	96.1	84.5	93.1	90.7	74.2	78.9	90.1	84.4	85.8	94.5	90.3	94.4	93.1	78.2	85.2	91.3	92.2	96.5	91.8
H12	(Of those adults who know a place to obtain condoms) % that mentioned;	a. Health unit or private clinic	83.5	90.3	96.0	88.8	89.0	95.2	84.3	89.8	90.5	89.2	91.9	96.5	84.8	98.0	93.5	89.9	93.5	93.8	84.4	79.5	91.5	74.2	92.2	96.9	86.3	92.5	97.2							85.4	90.7	94.6
		b. Shop	47.9	34.6	24.1	39.0	45.4	31.4	46.7	45.2	32.6	48.2	61.1	25.4	48.2	19.3	35.1	50.7	37.9	47.1	53.6	56.7	18.9	48.6	26.4	27.2	37.2	39.5	19.3							46.9	40.9	28.7
		c. Village health worker	15.5	13.6	20.6	8.8	3.7	8.8	7.5	14.5	7.5	10.1	11.8	8.6	9.8	8.7	15.2	4.9	10.9	18.5	5.3	11.4	9.8	8.2	13.2	20.8	3.8	8.8	10.4							8.6	10.7	13.3
H13	% of adults who can mention at least one major way of HIV&AIDS prevention	Total	91.8	90.0	98.5	97.4	99.0	99.2	96.6	99.5	93.5	96.6	99.2	99.4	96.6	100.0	98.5	97.6	95.3	96.0	90.3	98.2	98.8	97.1	88.2	95.0	90.5	97.6	97.7	94.8		98.0	93.1		97.2	93.7	96.3	97.4

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			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
H14	% of adults who can mention the 3 major ways of HIV&AIDS prevention	Total	50.8	60.3	74.5	62.6	65.3	71.4	58.4	80.8	59.6	67.9	85.8	89.3	69.2	88.4	80.4	63.4	53.4	61.9	57.4	71.6	75.3	51.3	52.4	63.0	48.4	61.6	62.1	59.9	68.6	70.6	57.9	69.0	70.8	58.7	68.8	70.7
		Female	46.0	61.4	77.1	57.5	68.0	71.4	60.1	79.0	60.5	67.2	86.7	89.0	68.7	90.1	70.1	60.8	52.8	60.4	58.3	70.4	75.3	49.0	51.5	63.2	46.9	60.2	62.4							57.9	69.0	70.8
		Male	58.6	58.3	68.7	71.0	61.1	71.3	55.8	83.4	57.4	69.0	84.4	89.9	70.0	85.8	81.0	67.8	54.3	65.7	55.7	73.5	75.2	55.2	53.7	62.4	50.7	63.5	61.1							59.9	68.6	70.6
H15	(Of those adults who can mention at least 3 or more major ways of HIV&AIDS prevention) % who know where to access condoms	Total	83.4	95.2	95.4	86.1	89.1	93.7	86.9	90.1	91.6	79.1	94.1	94.3	86.7	95.5	92.4	92.9	94.5	98.6	88.5	93.8	90.6	89.2	88.4	93.9	86.4	86.9	95.1	91.7	96.8	94.8	80.7	89.2	93.4	85.1	92.2	93.8
H16	(Of those adults who can mention at least 3 or more major ways of HIV&AIDS prevention) % who tested and received results in the last 1 year	Total	95.4	97.6	97.0	91.5	91.9	98.5	93.1	97.4	97.6	86.9	97.7	99.2	97.0	96.9	99.2	95.6	98.2	97.5	91.9	98.5	99.0	88.8	99.2	98.7	82.5	94.3	99.2	91.5	98.5	98.5	91.5	96.2	98.5	91.5	97.0	98.5
H17	% of adults who can mentioning major ways of HIV&AIDS prevention	a. Abstinance	73.1	72.0	89.4	84.1	81.1	82.0	79.7	89.7	75.0	85.8	91.1	94.9	82.0	94.2	93.7	82.0	73.5	71.9	78.7	81.2	83.8	74.1	66.2	70.1	73.9	87.1	78.7	79.5	82.0	83.2	78.5	81.7	81.7	78.9	81.8	82.1
		b. Being faithful	75.3	83.9	88.8	84.1	94.0	94.1	81.8	92.6	89.6	81.6	96.8	98.3	85.5	97.1	92.4	86.1	81.5	89.6	69.0	92.9	95.8	81.1	78.4	90.9	71.2	89.0	91.8	79.2	89.7	90.9	76.2	89.5	93.1	77.4	89.6	92.4
		c. Condom use	72.8	76.3	89.3	83.9	81.2	87.9	78.7	93.7	71.9	84.4	93.7	93.1	88.1	95.5	93.1	86.2	72.7	82.8	80.9	88.4	89.2	77.3	75.1	77.0	73.4	75.3	83.7	80.6	83.8	85.8	79.2	83.5	85.2	79.7	83.6	85.4
H18	% of adults (15+) able to reject three of the major HIV&AIDS misconceptions (witchcraft, mosquito bites and sharing food)	Total	44.7	62.6	53.1	35.8	57.6	61.3	46.3	55.5	63.2	44.7	70.0	87.0	52.4	70.5	64.8	37.4	45.0	76.6	49.7	54.5	60.5	36.8	55.5	64.0	51.6	50.0	66.8	52.6	61.8	67.6	45.5	55.4	65.7	48.3	57.9	66.3
H19	% of adults (15+) able to reject each of the major HIV&AIDS misconceptions	a. Witchcraft	83.6	87.5	89.4	85.4	92.8	87.9	92.0	88.6	88.5	93.3	87.3	97.3	89.4	95.5	87.7	79.2	76.4	92.8	91.8	81.2	80.6	81.1	77.5	80.6	88.9	95.2	92.1	91.6	88.6	88.3	88.7	85.9	88.5	89.8	86.9	88.5
		b. Mosquito bites	58.6	73.7	62.6	48.5	68.8	76.7	58.2	63.8	79.6	56.4	80.9	90.5	66.7	77.0	75.3	62.1	63.1	87.0	58.3	68.2	75.5	56.2	72.3	76.3	64.3	59.0	77.1	65.0	72.4	79.8	57.6	67.9	76.9	60.4	69.7	77.8
		c. Sharing food	76.9	79.6	78.4	74.9	80.7	80.6	79.9	86.4	82.6	70.1	89.0	93.3	80.6	84.4	86.5	67.7	81.6	89.4	79.8	80.4	88.3	73.4	80.7	75.3	84.4	83.0	87.6	81.5	85.5	84.9	76.8	81.1	84.8	78.6	82.9	84.8
3.1	% of individuals who both correctly identify at least two ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission			39.5			36.1			32.6			53.4			50.3			25.0			33.9			26.1			27.6									36.1	
H21	% of adults who feel able to disclose HIV test results if ever went for test	a. Total	69.4	78.2	80.4	67.4	85.7	92.1	75.7	82.3	84.5	72.8	86.4	88.0	65.1	92.6	78.1	75.3	79.0	90.0	75.5	77.7	94.3	65.9	63.1	70.1	69.7	86.0	92.4	70.0	80.2	83.4	72.2	82.1	86.9	71.4	81.3	85.9
		b. To partners	68.4	68.4	77.5	68.1	73.2	81.9	70.6	71.2	71.4	73.6	64.2	72.3	64.2	68.1	66.6	79.0	73.4	68.1	68.6	75.2	83.1	73.7	82.4	82.9	72.1	78.4	82.6	66.5	67.7	69.6	71.7	75.3	79.5	69.7	72.3	76.6
		c. Family member	39.2	39.2	27.3	46.9	30.3	30.2	38.1	31.8	30.1	42.8	50.9	55.3	41.5	36.2	32.9	32.4	34.6	54.9	37.6	32.2	15.5	36.8	32.6	33.8	43.8	27.0	20.7	47.1	45.2	43.9	36.4	28.6	28.0	40.4	35.1	32.6
		d. Friends	8.0	8.3	4.0	8.3	4.9	4.9	10.5	2.7	2.3	4.4	6.0	5.1	6.5	6.6	1.1	4.3	6.6	1.9	6.6	5.6	2.3	7.7	3.5	1.8	10.6	5.6	4.2	11.7	7.5	5.5	5.4	4.4	2.2	7.8	5.6	3.1
	Of those who were tested for HIV and received their result in the last 12 months, % who disclosed to their spouse/partner	Total																																			

Appendix 1: STAR-EC Annual Household LQAS Survey Results- 2009-2015

			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
H23	Of those adults who have tested and received their HIV test results in last 1 year) % who say would be willing to disclose their results to:	a. Any one	78.5			71.2			83.0			78.2			84.2			81.5			81.0			81.0			74.8			79.3			80.4			80.1		
		b. Family member	37.7	36.0	20.3	34.3	29.6	30.4	26.4	24.9	23.2	25.7	46.2	49.0	29.5	33.1	28.7	44.6	34.8	50.3	28.5	28.0	14.8	39.5	29.0	23.9	33.3	23.5	20.6	38.4	42.4	41.1	26.6	26.7	24.5	30.4	31.7	28.4
		c. Partner	57.7	62.4	72.4	54.8	71.1	77.9	69.8	70.2	67.9	67.3	69.0	81.3	62.6	69.5	61.1	66.3	64.0	68.4	64.6	70.8	83.4	64.0	72.6	73.5	64.2	74.0	82.0	61.6	65.4	67.9	65.2	71.2	76.7	64.1	69.3	74.6
H24	% of adults willing to take care of a family member with HIV virus	Total	95.5	90.6	91.4	94.3	93.7	94.0	98.1	94.8	92.1	97.9	96.0	94.8	99.5	93.7	95.0	95.9	82.2	96.1	98.1	94.4	95.0	89.2	80.3	88.5	98.6	94.8	94.8			92.8			93.9	98.0	91.3	93.6
H25	% of adults who know what to do if family member were HIV positive	a. Take them to health facility	90.8	93.4	91.8	89.5	96.1	90.5	93.4	95.3	92.2	93.4	94.7	92.8	91.6	94.0	92.2	90.5	91.1	88.6	96.3	94.5	97.2	88.2	86.1	91.2	93.7	93.4	96.0	95.1	93.1	93.3	92.0	93.2	92.4	93.2	93.2	92.7
		b. Traditional healer/ herbalist	1.6	0.8	1.9	2.4	1.1	3.4	0.5	1.8	1.7	1.1	1.1	21.1	7.9	1.8	3.8	0.8	2.6	8.0	0.3	1.3	1.8	2.4	10.0	11.0	1.1	1.6	0.7	2.2	2.4	5.6	2.0	2.5	5.8	2.1	2.5	5.7
		c. Faith healing	2.1	2.9	4.0	2.4	1.3	4.2	1.3	1.8	2.1	1.3	1.3	5.5	1.8	1.3	1.9	4.0	6.8	5.5	1.3	1.8	0.9	6.3	9.7	8.0	0.8	3.4	1.4	1.7	3.4	2.9	1.3	3.4	3.9	1.5	3.4	3.6
		d. Give family care/ support	38.7	9.5	25.1	33.4	20.0	30.3	41.8	36.6	11.0	45.8	38.7	20.0	39.5	49.2	37.3	39.0	18.7	29.7	24.7	34.0	7.0	20.3	21.3	27.0	32.4	36.6	19.8	36.6	29.8	23.6	37.5	29.1	22.2	37.2	29.4	22.6
H26	% who would not keep it secret if they found out that a family member were HIV positive	Total	36.8	57.8	47.0	41.3	56.8	49.0	29.3	42.0	20.1	32.1	50.1	36.8	42.4	55.5	29.8	34.9	42.4	44.6	30.8	40.3	27.4	42.1	63.5	27.3	32.4	44.5	35.2	62.5	51.5	37.3	69.3	50.3	34.1	65.6	50.3	35.1
H27	% of individuals who perceive themselves to be at risk of acquiring HIV/AIDS	High risk		31.7	19.1		35.2	35.6		33.2	25.2		17.0	14.4		37.4	21.8		31.9	20.9		35.4	36.9		25.2	30.4		27.8	27.8		28.5	21.2		32.1	28.1		30.6	26.1
		Low risk		45.5	49.5		38.7	40.6		45.8	44.4		50.1	44.8		43.3	55.0		52.9	55.9		37.4	54.0		49.1	41.5		47.8	49.8		47.9	49.6		43.9	48.1		45.5	45.5
		No risk		19.9	22.5		21.5	17.6		16.9	26.0		29.0	36.0		17.9	16.3		10.6	15.1		24.2	5.7		9.3	11.9		16.8	16.7		21.0	24.1		17.1	15.9		18.6	18.3
		PLHIV		1.4	2.6		1.4	0.4		1.1	1.3		1.1	1.1		0.8	1.1		1.2	3.0		1.9	0.4		9.0	7.2		1.5	0.4		1.6	2.0		2.4	1.8		2.1	1.9
		Don't know		1.4	5.1		3.3	3.2		3.0	2.4		2.7	2.1		0.5	3.6		3.5	3.6		1.1	2.9		7.5	7.0		6.1	4.8		1.0	1.8		4.5	4.7		3.2	3.9
3.1	Percentsge of individuals who both correctly indentify ways of preventing the sexuals transsion of HIV and reject major misconceptions about HIV transimition				35.6			41.5			37.5			68.8			51.4			41.3			43.3			36.8			36.7			44.7			43.0		28.8	43.5
3.3	Percentage of individuals who had sexual intercourse with a non marital or non cohabiting sexual partner in the last 12 months	Total	22.4	16.7	16.5	12.0	13.2	13.3	22.5	23.2	13.6	14.6	14.0	18.0	22.4	14.8	13.3	14.0	12.6	18.8	13.1	15.4	8.4	21.5	21.5	27.2	16.6	13.6	18.5	25.4	24.7	25.7	11.3	10.9	11.3	18.6	16.1	16.4
3.4	Percentage of adults who had sexual intercourse with a non marital or non cohabiting sexual partner in last 12 months and used a condom at last higher risk sex		51.0	75.6	66.7	54.6	77.5	53.9	79.6	75.9	69.7	63.6	72.0	73.3	86.7	92.5	85.3	65.4	61.5	83.9	75.0	62.5	50.0	80.5	71.2	88.6	75.0	55.0	77.9	73.4	75.0	76.4	68.6	66.9	72.8	71.7	72.1	74.9

Appendix 1: STAR-EC Annual Household LQAS Survey Results- 2009-2015

			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
3.4b	Percentage of young people 15-24 who had sexual intercourse with a non marital or non cohabiting sexual partner in last 12 months and used a condom at last higher risk sex	Total	50.0	81.0	66.7	63.6	79.0	57.1	94.1	70.6	75.0	53.9	69.2	85.0	81.8	89.5	89.5	60.0	80.0	81.0	90.0	65.2	61.5	72.7	65.4	89.2	62.5	55.0	81.6	71.2	73.5	78.9	70.7	69.4	76.4	71.0	71.9	77.8
3.6	Percentage of Youth 15-24 years who have had sexual intercourse before the age of 15	Total	16.4	15.8	16.7	8.3	5.8	8.3	14.9	19.2	10.9	14.4	14.6	10.4	9.7	4.4	7.5	7.3	17.0	7.9	11.4	18.8	13.0	12.9	16.6	20.3	9.0	15.1	12.5	9.9	13.2	10.4	14.0	15.1	12.9	12.5	14.3	11.9
3.5**	Percentage of Youth 15-24 years who perceive low or no risk of getting HIV&AIDS infection	Total		25.3			39.0			37.9			51.6			38.9			44.2			21.1			20.0			34.7								34.7	
**	Percentage of Youth 15-24 years who had high risk sex in the last 12 months and used a condom																														73.5			77.6			74.7	
	CARE AND SUPPORT																																					
C1	% of households with a person who is very sick or bed ridded for a period of three or more months, or anyone who died after being sick for more than three months	Total	15.8	11.8	5.4	16.3	4.8	6.5	8.5	11.6	6.3	11.1	4.2	7.0	13.7	9.5	2.1	12.1	8.2	9.0	15.3	10.0	15.1	12.6	12.7	10.0	12.1	5.8	6.8		9.7	8.2		7.8	7.0	12.7	8.7	7.6
C2	(Of those affected households) % of households receiving care and support for a sick bedridden person or someone who died after being sick or bedridden for more than 3 months (Home-based care)	Total	56.7	63.6	90.0	25.8	33.3	41.7	75.0	81.8	75.0	81.0	75.0	92.3	53.9	55.6	75.0	60.9	73.3	88.2	34.5	68.4	60.7	79.2	62.5	84.2	47.8	63.6	69.2		65.9	75.4		65.2	72.9	55.9	65.5	74.2
C2b	(Of those affected households) % of households receiving care and support for a sick bedridden person or someone who died after being sick or bedridden for more than 3 months (Home-based care). Type of support received	a. medical		54.6	50.0		25.0	36.4		77.3	75.0		71.4	84.6		38.9	75.0		64.3	88.2		68.4	57.7		66.7	79.0		70.0	75.0								60.1	69.4
		b. emotional		21.1	50.0		12.5	0.0		76.2	36.4		57.1	23.1		27.8	50.0		18.2	44.4		62.5	19.2		31.3	25.0		18.2	16.7								38.6	25.9
		c. material		11.8	10.0		12.5	0.0		42.9	10.0		14.3	25.0		17.7	25.0		10.0	50.0		25.0	15.4		26.7	18.8		0.0	8.3								20.7	17.1
		d. social		18.8	70.0		14.3	9.1		55.6	20.0		42.9	50.0		33.3	50.0		33.3	50.0		6.7	12.0		35.7	33.3			16.7								29.0	30.3
C3	(Of those with termillary ill persons) % of respondents who reported they would be willing to care for a terminally ill person	Total	100.0	86.4	77.8	93.1	77.8	100.0	100.0	100.0	91.7	100.0	100.0	92.3	96.2	100.0	100.0	95.7	91.7	100.0	100.0	94.1	92.3	95.7	95.5	73.7	100.0	100.0	91.7		92.3	90.9		96.8	89.1	99.3	94.3	90.1
	TUBERCULOSIS																																					
T1	% of adults who know that it is possible for a person to have TB and HIV at the same time	Total	82.9	88.7	88.4	76.7	85.2	92.6	83.1	88.2	89.6	85.3	90.5	93.3	81.2	90.5	87.7	83.9	90.9	93.2	78.4	84.9	93.3	72.3	78.6	85.0	80.4	84.4	81.5	84.4	88.2	88.4	81.9	86.0	88.9	81.9	86.9	88.9

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			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
T2	% of adults who know that TB is a curable disease	Total	60.9	70.1	62.7	38.7	59.3	82.7	58.8	69.7	68.9	43.0	77.9	88.0	58.5	72.4	74.8	49.3	75.0	84.2	59.7	72.4	76.8	56.2	72.1	82.1	51.7	53.6	61.6	64.3	74.0	79.2	49.9	66.0	73.9	55.4	69.1	75.5
T3	% of adults who know of the signs and symptoms of TB	Total	84.4	91.3	90.7	70.1	86.1	91.3	84.9	88.1	88.6	81.1	91.8	96.8	85.2	88.4	90.2	81.7	89.3	95.1	84.4	90.2	91.9	75.4	80.3	91.9	86.3	87.5	96.1	87.1	89.2	92.5	82.6	87.4	92.6	84.4	88.1	92.6
**	% of adults who know at least two signs and symptoms of TB			50.0			40.5			65.0			62.4			59.5			56.3			48.4			52.6			48.4									54.2	
T4	% of adults who know what to do if they suspect family member of TB	a. take them to health unit	80.0	86.8	86.3	66.8	83.2	89.3	77.6	85.5	85.7	75.3	87.4	93.5	78.2	82.9	86.7	73.2	85.5	90.7	77.9	86.1	88.1	70.3	75.8	87.8	79.7	85.0	93.9	83.5	86.5	89.7	74.7	82.8	89.0	78.1	84.2	89.2
		b. provide continuous family care	10.5	4.5	3.4	2.4	1.8	8.8	12.9	12.9	5.1	14.0	4.7	35.4	17.1	18.4	12.4	9.5	11.3	20.0	9.2	17.1	3.5	8.4	12.6	34.1	15.0	14.7	7.0	12.6	10.7	15.0	13.4	11.0	13.6	13.1	10.9	14.0
		c. take preventive measures against TB at home	16.3	6.3	8.6	11.8	9.2	14.7	24.5	15.8	4.6	21.3	25.3	37.9	17.1	24.7	22.5	16.8	16.3	12.6	13.2	7.1	5.8	16.8	13.2	18.3	24.7	15.5	10.9	17.3	14.4	16.5	20.9	15.1	14.1	19.5	14.8	14.8
**	% of individuals who know the risk of not completing TB treatment			81.1			86.6			77.6			87.4			81.3			83.2			76.1			76.1			66.1									79.5	
	BEHAVIORAL CHANGE AND COMMUNICATION																																				
BC1	% of households that received at least one message about HIV&AIDS prevention in the last 3 months	Total	62.1	63.5	71.9	45.8	70.9	83.3	80.7	90.5	79.2	64.1	89.7	75.9	64.6	87.4	66.4	51.1	74.0	88.7	48.5	71.2	75.6	42.6	61.0	85.1	58.4	71.1	53.4							63.1	75.5	74.9
BC1a	(Of those households that received at least one message about HIV&AIDS prevention in the last 3 months) % by format:	a. Advert/ radio spot	20.8	32.9	42.1	31.6	38.8	47.6	37.6	36.1	39.7	34.6	46.5	59.4	23.3	16.6	21.9	31.4	57.7	44.7	43.1	36.1	42.5	19.8	57.4	42.0	36.5	15.9	10.4							32.4	37.1	39.8
		b. Song	9.3	10.0	4.4	2.9	13.1	13.3	3.6	17.2	15.3	10.3	23.8	61.9	10.6	15.7	12.4	4.1	7.5	8.2	7.7	15.2	42.5	17.9	12.6	39.2	2.7	4.4	9.2							7.3	13.8	23.7
		c. Radio talk show	58.5	48.3	45.8	75.3	75.0	71.8	55.2	77.0	63.7	61.7	84.4	68.9	58.8	77.1	87.7	61.9	59.9	61.0	37.6	68.0	53.3	49.4	43.0	73.7	42.3	78.9	58.6							53.2	69.5	64.6
		d. VHT/ peer educator	36.4	42.9	34.7	20.7	7.5	20.6	14.7	27.3	19.3	35.0	46.2	66.1	26.5	22.0	21.1	17.0	37.3	24.5	33.2	26.4	41.1	39.5	30.4	43.9	32.9	28.2	34.3							28.9	29.9	34.0
		e. Health Facility	7.2	4.2	8.5	5.8	5.2	0.6	5.9	3.8	3.0	6.6	5.3	3.5	2.5	13.3	1.2	6.7	2.2	0.0	3.3	4.8	0.3	4.9	3.5	1.3	3.6	6.7	4.0							5.0	5.6	2.3
BC2	Of those who rejected major HIV misconceptions) % who received atleast one message about the prevention of HIV in the last 3 months.	Total	65.3	69.9	80.4	54.4	70.6	87.8	83.5	92.9	81.9	68.2	92.1	77.4	69.4	89.6	72.8	52.8	88.1	90.6	52.2	77.3	75.6	45.0	65.6	89.3	61.7	76.8	58.8							66.6	80.6	78.8

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			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
BC3	% of households that received at least one message about HIV&AIDS care and treatment in the last 3 months	Total	57.9	59.3	65.7	43.2	71.2	75.0	72.6	84.7	78.3	54.1	85.0	75.1	56.7	83.2	65.5	47.6	63.6	89.7	43.7	67.0	72.1	38.5	60.1	84.4	50.0	61.0	49.8							55.9	70.6	72.2
BC3a	(Of those households that received at least one message about HIV&AIDS care and treatment in the last 3 months) % by format:	a. Advert/ radio spot	23.6	30.8	46.1	29.3	39.8	47.2	38.0	34.7	39.2	30.7	44.1	57.0	20.0	16.8	22.3	28.2	56.1	40.4	42.3	34.9	47.6	17.1	59.9	43.6	34.2	17.8	10.7							31.3	36.7	40.3
		b. Song	8.6	12.1	2.9	4.3	11.2	9.6	2.5	15.3	10.8	9.8	25.8	60.2	10.2	16.5	10.9	2.2	7.1	6.3	6.1	11.9	44.9	13.0	12.3	38.2	2.1	2.2	9.0							6.5	13.4	22.4
		c. Radio talk show	60.5	46.9	44.1	75.6	78.1	73.8	51.8	78.1	65.5	59.0	88.2	68.0	64.2	79.1	85.4	61.9	66.1	64.8	41.1	76.2	57.2	54.1	43.6	75.2	42.1	78.3	56.2							53.7	72.0	65.7
		d. VHT/ peer educator	30.5	41.1	34.3	14.6	6.7	25.2	14.9	26.9	22.0	37.6	45.7	66.2	22.8	21.5	23.5	17.7	41.8	28.3	31.3	24.2	43.7	37.0	31.3	45.5	31.1	27.8	37.8							27.1	29.5	36.5
		e. Health Facility	5.5	2.7	7.4	4.3	4.5	0.4	5.4	2.5	3.4	5.9	4.7	3.9	2.8	10.4	0.8	7.2	0.8	0.0	3.7	4.0	0.6	4.1	3.5	1.0	4.7	6.0	2.6							4.7	4.5	2.1
BC4	% of households that received at least one message about TB in the last 3 months	Total	42.9	53.6	60.6	36.1	70.6	74.1	42.7	79.0	69.9	48.3	84.4	73.4	40.5	70.0	61.1	36.4	69.2	89.5	29.2	62.7	72.6	27.4	60.5	82.8	35.5	63.2	45.8							39.9	68.1	69.4
BC4a	(Of those households that received at least one message about TB in the last 3 months) % by format:	a. Advert/ radio spot	20.9	30.2	42.0	30.7	38.6	45.3	31.5	32.7	41.5	27.9	42.5	57.6	15.7	17.7	18.6	29.7	47.3	44.9	49.5	34.2	39.6	14.4	61.0	46.0	41.5	12.1	8.4							29.8	35.2	39.5
		b. Song	8.6	8.9	1.8	2.2	8.6	7.6	0.6	12.3	11.7	7.7	21.9	62.2	10.5	12.4	13.0	2.2	6.2	6.3	7.3	11.0	44.4	10.6	7.0	40.5	2.2	3.3	9.8							6.2	10.7	23.3
		c. Radio talk show	62.0	53.0	41.2	78.8	79.4	73.7	57.4	82.0	66.0	61.8	88.1	70.5	59.5	80.1	85.7	63.8	71.3	62.3	39.5	74.7	55.4	51.0	39.5	68.0	39.5	83.3	58.6							54.6	73.8	64.6
		d. VHT/ peer educator	23.9	40.6	31.0	12.4	7.1	25.9	13.6	30.3	20.0	32.2	45.9	64.4	24.8	19.2	25.5	12.3	37.2	21.6	25.7	21.1	42.9	37.5	36.0	52.1	28.9	38.8	36.7							24.9	30.7	36.0
		e. Health Facility	7.4	0.5	6.6	2.9	4.5	0.4	3.7	1.7	1.9	7.7	3.1	4.0	2.6	10.9	0.0	7.3	1.6	0.0	6.4	3.4	0.3	7.7	3.5	0.0	4.4	3.3	1.9							5.4	3.7	1.5
BC5	% of households that received at least one message about ART treatment in the last 3 months	Total	41.8	51.3	56.2	35.8	67.6	72.9	46.4	77.9	73.3	46.2	78.5	71.7	38.1	63.0	60.0	36.1	58.2	79.8	33.5	57.0	65.3	25.0	53.5	77.1	37.1	52.8	37.0							40.6	62.2	65.2

Appendix 1: STAR-EC Annual Household LQAS Survey Results- 2009-2015

			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
BC5a	(Of those households that received t least one message about ART treatment in the last 3 months) % by format:	a. Advert/ radio spot	23.3	31.4	51.7	25.0	38.0	46.9	30.1	28.7	36.1	30.3	47.0	56.8	16.7	15.6	18.6	33.6	56.2	43.4	43.2	30.7	41.5	16.8	54.7	45.3	34.8	14.0	8.7							29.4	35.3	40.3
		b. Song	6.3	10.8	0.0	2.2	6.3	9.5	2.3	7.8	10.5	8.6	24.7	62.7	13.2	16.8	10.6	1.5	6.9	5.1	4.8	11.6	46.2	4.2	8.0	39.8	1.4	2.5	8.7							6.1	11.1	23.0
		c. Radio talk show	56.0	50.5	41.6	80.9	81.2	73.1	61.4	79.1	67.2	60.0	88.9	67.2	61.1	82.8	88.9	55.5	69.1	63.6	41.6	80.5	58.8	57.9	37.8	72.7	40.4	76.5	59.0							54.2	73.4	66.2
		d. VHT/ peer educa-tor	28.3	45.9	35.4	14.0	6.7	25.8	9.7	27.4	25.6	34.3	44.6	64.9	30.6	16.0	19.5	19.0	38.7	21.9	31.2	24.2	45.2	36.8	32.8	51.9	27.7	31.5	37.0							26.5	29.5	36.7
		e. Health Facility	5.7	3.6	7.7	2.9	3.1	0.4	5.1	2.0	2.5	6.9	2.7	3.3	1.4	10.1	0.9	8.8	1.8	0.0	2.4	3.3	0.0	8.4	3.0	0.7	5.0	6.0	2.9							4.6	3.9	1.8
BC6	% of households that received at least one message on AB in the last 3 months.	Total	60.3	56.6	59.2	31.3	67.7	72.3	70.8	87.4	72.3	56.3	76.8	72.8	57.4	80.4	63.2	41.4	69.0	83.9	45.0	62.7	72.3	33.5	60.0	85.0	61.8	66.3	48.4							58.6	69.7	69.4
BC6a	(Of those households that received at least one message on AB in the last 3 months) % by format:	a. Advert/ radio spot	17.5	33.2	47.3	9.3	42.6	44.9	28.3	35.5	37.6	23.1	52.9	58.2	20.1	16.5	18.0	29.9	58.5	45.8	45.3	35.0	43.7	17.3	56.4	43.4	31.8	39.1	11.0							26.9	39.1	39.8
		b. Song	8.1	7.9	1.8	3.4	7.0	9.2	4.4	11.1	18.3	7.5	24.7	62.9	6.9	16.1	15.1	4.5	6.2	8.3	7.9	11.0	44.0	16.5	8.9	39.6	0.5	4.0	13.2							5.8	11.2	25.0
		c. Radio talk show	62.6	46.7	39.2	81.4	76.6	72.8	57.1	77.1	61.0	58.8	81.4	68.4	59.2	81.9	80.3	56.7	61.9	62.2	42.5	77.2	57.5	52.8	43.1	73.9	45.0	69.8	53.7							54.7	69.8	63.7
		d. VHT/ peer educa-tor	31.3	44.9	30.6	11.9	7.8	23.9	12.5	28.9	17.2	31.3	36.1	65.8	28.2	17.1	24.3	17.8	36.5	25.6	30.2	25.7	44.9	39.4	35.1	51.6	30.2	27.0	38.8							27.2	28.3	36.4
		e. Health Facility	6.1	1.9	11.7	3.6	3.9	0.7	1.5	4.5	2.9	4.7	3.8	3.3	1.4	12.5	0.8	4.6	1.2	0.0	2.9	4.2	0.0	4.9	1.8	0.9	3.0	3.6	2.6							3.2	4.4	2.3
BC7	% of households that received at least one message on other HIV prevention (OP) methods in the last 3 months.	Total	60.3	51.6	54.4	37.1	64.3	71.2	71.0	86.6	65.5	56.6	84.7	73.8	57.7	77.6	50.4	45.9	57.2	74.1	45.8	57.4	69.3	37.9	58.1	82.4	61.8	50.0	43.8							58.9	65.3	64.5
BC7a	(Of those households that received at least one message on other HIV (OP) methods in the last 3 months) % by format:	a. Advert/ radio spot	18.8	31.8	50.3	25.7	37.9	46.4	30.1	36.5	37.3	34.1	46.6	56.3	24.3	17.4	19.0	31.0	60.3	46.9	45.6	35.5	39.3	22.2	59.6	43.8	40.0	11.7	8.8							31.6	37.5	40.1
		b. Song	8.7	9.7	0.5	2.9	8.6	8.2	3.7	13.1	19.4	9.8	22.8	60.9	8.7	16.7	11.1	4.0	6.5	6.6	5.3	11.5	48.1	15.3	7.3	41.9	3.4	2.7	12.8							6.5	12.0	25.7
		c. Radio talk show	56.8	48.7	37.0	80.0	77.4	72.7	53.2	78.7	63.2	60.8	86.9	68.1	50.9	78.6	76.3	59.2	65.0	63.3	42.7	75.6	61.6	53.5	42.7	74.0	40.4	83.0	55.4							51.1	72.3	64.2
		d. VHT/ peer educa-tor	29.7	45.6	32.5	12.9	7.0	22.1	11.9	29.8	21.9	31.3	42.8	65.6	28.9	16.7	23.2	14.9	40.7	24.0	33.9	29.0	46.5	38.2	31.2	52.6	26.8	29.8	33.8							26.3	29.9	37.2
		e. Health Facility	5.7	0.5	6.8	4.3	3.5	0.7	4.5	3.0	1.8	5.1	3.1	2.2	1.4	10.5	0.4	7.5	1.5	0.0	2.3	4.2	0.0	6.9	3.1	0.9	3.4	0.4	1.3							3.8	3.5	1.4

Appendix 1: STAR-EC Annual Household LQAS Survey Results- 2009-2015

			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
BC8	% of households that received at least one BCC message/IEC about the prevention of HIV&AIDS from a place of worship in the last 3 months	Total	46.9	47.5	46.9	25.3	57.8	66.1	50.5	64.3	58.1	51.3	60.9	63.5	50.3	70.8	50.0	38.6	47.4	69.0	32.0	44.3	56.0	51.6	57.0	78.8	43.8	42.3	41.4							45.8	54.7	58.4
BC9	(Of those households that received at least one BCC message/IEC about the prevention of HIV&AIDS in the last 3 months) % who know where to access condoms	Total		92.9	95.4		88.4	94.6		89.4	91.1		94.4	96.5		96.7	94.8		93.8	97.3		94.4	94.0		92.6	94.7		89.9	95.1			93.7		92.6	94.8
	MALE CIRCUMCISION																																				
MC1	% Males who have been circumcised	Total	43.1	61.3	77.4	15.9	33.8	54.0	42.8	59.7	69.9	16.1	41.8	52.0	30.2	35.2	35.0	29.6	37.2	65.2	62.3	51.8	70.3	26.1	32.0	48.6	31.4	52.2	46.9							37.4	45.0	57.5
MC2	of those circumcised, % of males circumcised and how long ago they were last circumcised	less than 12 months	1.6	29.1	11.5	15.0	31.3	27.3	1.6	18.0	12.8	4.4	43.3	11.8	11.6	34.7	32.7	4.9	28.0	19.3	2.3	19.2	14.8		42.2	47.9	4.4	11.5	15.5							3.8	26.8	20.1
		12-23 months	3.3	7.0	20.4	5.0	6.3	36.4	1.6	11.2	8.5	8.7	11.7	36.8	7.0	4.1	25.5	4.9	4.0	32.5	1.2	2.7	6.3	13.5	17.8	32.4	0.0	2.6	36.2							2.8	7.3	24.6
		24-59 months	4.9	2.3	1.8	5.0	4.2	6.5	6.6	1.1	8.5	4.4	5.0	17.1	4.7	2.0	7.3	7.3	4.0	8.4	7.0	2.7	4.6	5.4	6.7	8.5	4.4	2.6	8.6							5.6	3.1	7.5
		5yrs+	90.2	61.6	66.4	75.0	58.3	29.9	90.2	69.7	70.2	82.6	40.0	34.2	76.7	59.2	34.6	82.9	64.0	39.8	89.5	75.3	72.2	73.0	33.3	11.3	91.3	83.3	39.7							87.8	62.8	47.8
MC3	of those circumcised, % of males circumcised and the reasons they were circumcised	Religious	65.0	51.2	33.6	81.0	63.3	26.6	88.5	66.3	61.7	81.8	35.0	37.3	81.0	47.1	27.3	76.2	52.9	19.8	74.5	63.4	57.8	32.4	13.6	10.0	66.7	78.8	35.0							76.7	55.1	36.2
		Cultural	23.3	5.8	8.0	4.8	0.0	1.3	1.6	1.1	3.2	0.0	1.7	0.0	2.4	3.9	3.6	0.0	2.0	1.2	8.9	4.2	2.8	43.2	9.1	1.4	6.7	0.0	0.0							8.4	2.9	2.7
		Minimizing HIV risks	10	9.3	27.4	4.8	14.3	40.5	8.2	19.1	17.0	4.6	26.7	34.7	11.9	21.6	27.3	9.5	19.6	53.5	8.9	14.1	9.2	21.6	45.5	55.7	15.6	6.3	11.7							10.0	17.9	30.0
		Prevention of STIs		15.1	8.0	4.8	22.5	20.3		6.7	5.3		13.3	16.0		21.6	30.9	11.9	15.7	10.5		8.5	22.0	21.6	13.6	18.6		12.5	36.7								13.6	17.1
		Cleanliness		16.3	20.4	4.8	0.0	11.4		6.7	11.7		21.7	12.0		5.9	10.9	2.4	7.8	14.0		7.0	7.3	2.7	18.2	14.3		2.5	16.7								9.5	13.2
		Others	1.7	2.3	2.7	0.0	0.0	0.0	1.6	0.0	1.1	13.6	1.7	0.0	4.8	0.0	0.0	0.0	2.0	1.2	3.8	2.8	0.9	0.0	0.0	0.0	11.1	0.0	0.0							4.9	1.0	0.8
MC4	of those who have ever been circumcised, % of males circumcised and where they underwent circumcised	Gov't Health Facility	16.7	38.4	36.4	5.0	18.8	53.9	7.8	26.4	39.8	9.5	50.0	57.1	7.0	44.0	70.6	9.8	25.0	61.0	5.1	21.4	23.9	21.6	64.4	86.8	14.3	21.1	63.0							9.7	33.2	51.0
		Private Health Facility	5.0	8.1	2.7	0.0	0.0	11.5	2.0	5.8	1.1	4.8	13.3	12.9	11.6	2.0	3.9	9.8	16.7	8.5	11.5	10.0	6.4	10.8	11.1	0.0	5.7	4.0	3.7							7.3	7.7	5.6
		cultural/ religious	50.0	36.1	43.6	35.0	52.1	23.1	56.9	39.1	30.7	38.1	28.3	20.0	48.8	32.0	21.6	29.3	43.8	26.8	35.9	40.0	51.4	62.2	22.2	7.4	40.0	47.4	31.5							45.1	38.3	30.7
		Others	28.3	17.4	17.3	60.0	29.2	11.5	33.3	28.7	28.4	47.6	8.3	10.0	32.6	22.0	3.9	51.2	14.6	3.7	47.4	28.6	18.4	5.4	2.2	5.9	40.0	27.6	1.9							37.9	20.9	12.7

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			DISTRICT RESULTS																										REGIONAL RESULTS								
	Indicator definitions		Bugiri			Buyende			Iganga			Kaliro			Kamuli			Luuka			Mayuge			Namayingo			Namutumba			Males (15-54 years) unless indicator specifies otherwise e.g biological mothers of 0-11 months babies			Females (15-49 years) unless indicator specifies otherwise e.g biological mothers of 12-23 months babies			TOTAL		
			2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2010	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015	2009	2012	2015
MC4b	of those who have been circumcised in the last one year prior to the survey, % of males circumcised and where they underwent circumcised	Gov't Health Facility	16.7		76.9			71.4			81.8			100.0			94.1			100.0			60.0			93.8			68.9							9.1	74.2	85.1
		Private Health Facility	5.0		0.0			9.5			0.0			0.0			5.9			0.0			13.3			0.0			0.0							9.1	8.6	3.6
		cultural/ religious	50.0		7.7			14.3			9.1			0.0			0.0			0.0			20.0			0.0			11.1							72.7	9.9	6.4
		Others	28.3		15.4			4.8			9.1			0.0			0.0			0.0			6.7			6.3			0.0							9.1	7.3	5.0
MC5	of those who have never been circumcised, % of males who say they would accept to undergo circumcision in case they were offered a chance at a health facility	Total	69.5	69.8	72.7	68.9	76.3	70.0	60.7	86.4	55.0	68.1	89.5	80.8	66.0	68.1	64.9	74.8	73.7	62.8	67.3	73.1	59.6	70.5	65.1	36.7	67.6	86.8	86.8							66.6	75.9	65.7
MC6	of those who have never been circumcised, % of males who say they would not accept to undergo cicumcision in case they were offered a chance at a health facility and the reason why	Against ones religion/ culture	33.3	43.8	40.0	20.0	40.0	38.9	59.3	37.5	26.7	41.9	25.0	45.5	16.1	11.5	21.7	23.5	20.0	25.0	15.4	15.4	40.0	25.9	59.3	10.3	44.4	0.0	25.0							36.7	30.9	25.5
		its too painful	38.9	37.5	40.0	42.9	20.0	50.0	33.3	62.5	73.3	32.3	62.5	27.3	54.8	65.4	69.6	41.2	66.7	66.7	53.9	53.9	50.0	66.7	29.6	82.1	48.2	37.5	75.0							42.9	47.1	65.3
		No funds	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	3.2	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	7.7	7.7	0.0	0.0	3.7	2.6	0.0	0.0	0.0							2.0	1.5	1.4
		poor quality services	0.0	0.0.		2.9	0.0		0.0	0.0		3.2	0.0		6.5	11.5		0.0	0.0		0.0	0.0		7.4	0.0		0.0	0.0								2.0	2.2	
		Others	27.8	18.8	20.0	34.3	40.0	11.1	3.7	0.0	0.0	19.4	12.5	18.2	22.6	11.5	8.7	35.3	13.3	8.3	23.1	23.1	10.0	0.0	7.4	5.1	7.4	62.5	0.0							16.3	18.4	7.8
	* all results in blue text show disaggregations by 0-11 months and 12-23 months .																																				

STAR-EC Headquarters
Plot 10 Kiira Lane, Mpumudde Division, P.O Box 829, Jinja
Tel: +256 434 120225, +256 434 120 277, +256 332 260 182, +256 332 260 183, Fax: +256 434 120232
www.starecuganda.org

STAR-EC Kampala Liaison Office
Plot 36/37A Martyrs Way, Ntinda, P.O.Box 40070, Nakawa, Uganda,
Tel: +256 414 222 864, +256 312 262 164