

Sheema District Community Knowledge and Practices LQAS Survey Report

Management Sciences for Health (STAR-E)

April 2011

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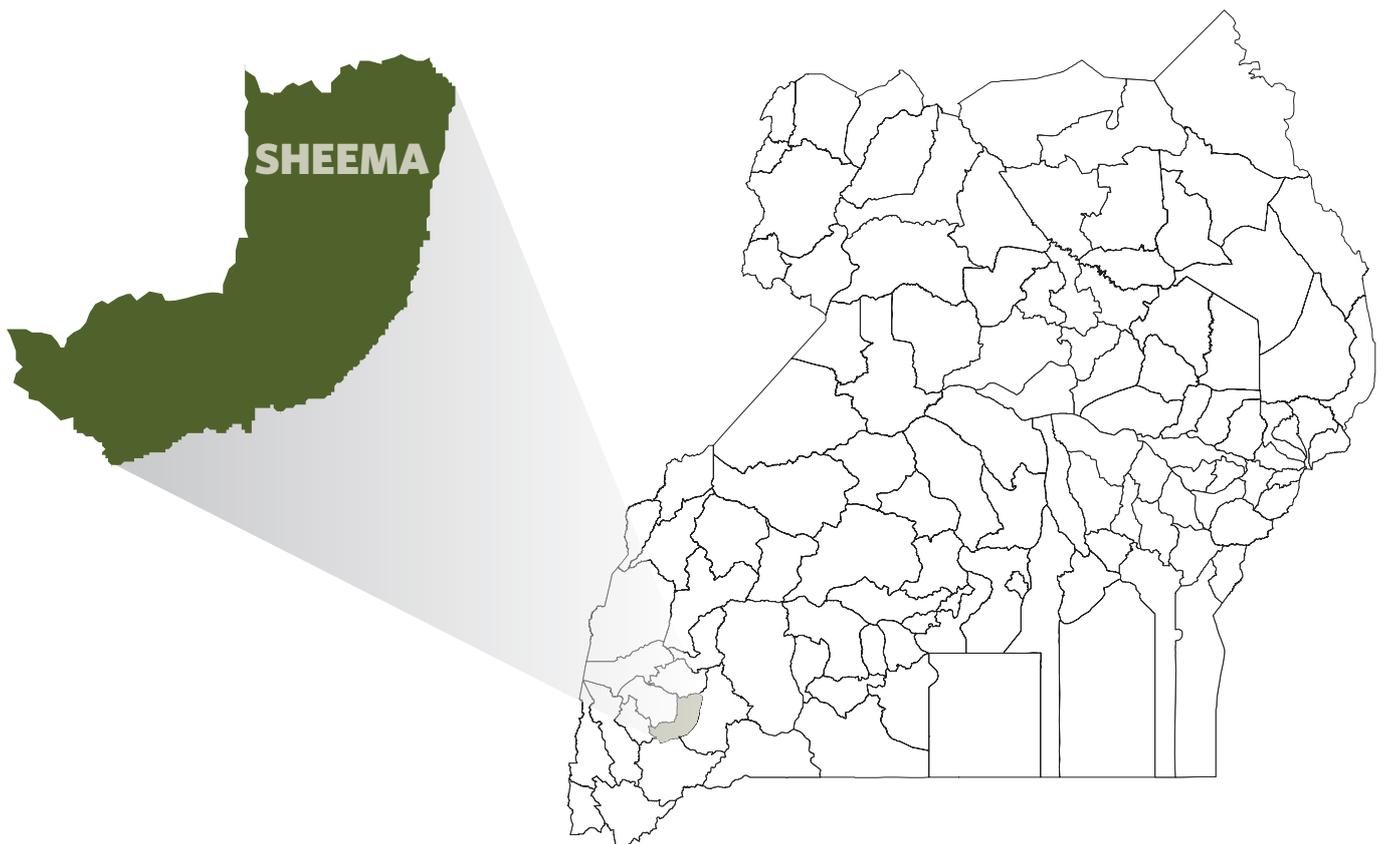
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SHEEMA DISTRICT

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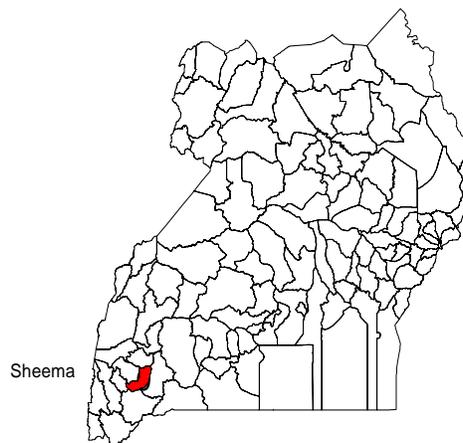


SHEEMA DISTRICT

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APRIL 2011

Prepared by STAR- E LQAS



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Message from the Chief Administrative Officer



THE REPUBLIC OF UGANDA

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Message from the Chief Administrative Officer

Sheema District Local Government acknowledges the need for timely and updated information as an essential element of realistic planning, budgeting, service delivery, monitoring and evaluation which is always lacking for many reasons. As a new district, lack of realistic data to guide the service delivery process has been a challenge especially in areas health and community wellbeing. This lack of information is due to shortage of human and financial resources needed to gather the necessary data as and when it is needed.

This initiative taken by USAID in collaboration with the Government is a blessing that cannot be underestimated, as it offered training to the staff of this district in LQAS methodology. Both the theory and practical skills acquired while conducting community Surveys to assess district programmes performance was a valuable opportunity that has strengthened capacity for Monitoring and Evaluation.

When the first community survey was conducted in Sheema, we were able to obtain preliminary information on the key health indicators which were immediately applied in the district development planning process and have formed a benchmark for the interventions in the next five years.

This report has provided the district with definitive information on the levels of delivery of social services in the sub counties of Sheema district. This will continue to guide us in directing the district resources and efforts towards improving the service delivery in the poor performing areas of the district,

It gives us pride to be part of this initiative as look forward to participating in the next round of surveys and pledge our commitment to supporting them.


Kuruhiira Godfrey M.A
Chief Administrative Officer
Sheema District Local Government



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Abbreviations

AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Antenatal care
CI	Confidence interval
DHS	Demographic Health Survey
DR	Decision rule
EGPAF	Elizabeth Glazer Pediatric AIDS Foundation
HCT	HIV counseling and testing
HIV	Human Immunodeficiency Virus
ITN	Insecticide treated nets
KPB	Knowledge, practices and behavior
LC	Local Council
LQAS	Lot quality assurance sampling
MSH	Management Sciences for Health
MTCT	Mother to child transmission (of HIV)
NA	Not applicable
PMTCT	Prevention of mother to child transmission (of HIV)
SA	Supervision area
STAR-E	Strengthening TB and AIDS Response (project) in the Eastern Region
STAR-SW	Strengthening TB and AIDS Response (project) in the South Western Region
STI	Sexually transmitted infections
UBOS	Uganda Bureau of Statistics
USAID	US Agency for International Development

1. Introduction

Sheema district in South Western Uganda is bordered by Buhweju District to the north, Mbarara District to the east, Ntungamo District to the south, Mitooma District to the southwest and Bushenyi District to the west. Sheema District was carved out of Bushenyi District in July 2010. Prior to then, the district was known as Sheema County. The district is made up of ten sub counties of Bugongi, Kabwohe – Itendero Town Council, Kagango, Kasaana, Kibingo Town Council, Kigarama, Kitagata, Kyangyenye, Masheruka and Shuuku. The altitude of the district is about 1,500 Meters (4,921 ft) above sea level.

The 2002 national census estimated the population of Kabale district at 180,200. The current population is not known.

2. Background to the survey

Sheema district carried out a community-based LQAS survey to assess the level of delivery of services for HIV/AIDS, TB, child health, reproductive health and malaria. The survey was conducted in November 2010 by the USAID funded STAR-SW project with technical support from the STAR-E project. The indicators assessed were selected in consultation with district managers as well as national programme managers. The survey targeted orphans (5-17 years), the youth (15-24 years), women (15-49 years), men (15-54 years), mothers of babies under one year of age and mothers with babies between 12 and 23 months. The survey did not target pregnant women. Appendix 1 presents the list of indicators assessed by the survey.

Questionnaires were developed for each target group in consultation with various stakeholders at national and district levels to ensure conformity with national surveys such as the Demographic and Health Survey (DHS) and international survey requirements. Key terms and phrases in the questionnaires were translated into Rukiga and Runyankole language to allow uniform translation to, and understanding of, the local language phrases during face-to-face interviews in the communities.

This report presents district results based on “cleaned” data sets on those indicators that could not be reliably reported on using the hand tabulation process. Preliminary results were available to the district within a week of the end of the data collection exercise. Those results were obtained through hand tabulation by the district workers who had collected the data.

3. Selection of Interview Villages

The UBOS 2009 list of villages with corresponding number of households was used as a sampling frame. The district was partitioned by the district managers into seven supervision areas (SAs) with STAR-E LQAS’ guidance. The SAs were non-overlapping and had a programmatic link to supervisory roles in the district.

A random sample of 19 villages was selected from each SA using the probability proportional to size (PPS) sampling technique. The randomly selected villages were verified by the district to confirm their existence and correcting the misspellings of village names.

4. Selection of Households and Respondents

A starting household for conducting the interview was randomly selected using, as far as possible, up-to-date LC1 household registers. In situations where it was not possible to establish such a list of households, community maps were used to partition the village into small sections with evenly distributed known household sizes, with one section then randomly selected and a household list developed for the selected village section. This list would form a sampling frame from which a starting household would be identified at random.

A randomly selected starting household was used to minimize sampling errors. Movement from household to household followed specific instructions. Households were judged as nearest to each other by the distance *walked* from door to door.

Eligible respondents for the six target groups in a household were listed and one randomly selected. If the selected respondent qualified for more than one category, he/she was randomly assigned to one target group for interview. *Only one interview was conducted in any household.* Identification of other eligible respondents would continue in the households nearest to the front door of the previous interview until all the six categories of respondents were interviewed in each sampled village.

5. Data Collection

The data collection exercise was carried out in one week in November 2010 immediately after a week's training in the LQAS methodology and data collection tools. Each SA had a team of two data collectors and one supervisor. Community leaders supported data collectors in locating the villages and households. Data were collected from 19 respondents for each target population in each supervision area. One hundred and thirty three respondents were interviewed from each target group for the entire district. Apart from the orphans aged 5-12 years where caregivers were interviewed, the rest of the questionnaires were administered directly to the respondents.

Findings

Sheema district is comprised of five supervision areas of: Kyangyenyi, Masheruka & Kigarama; Kagango, Kabwohe-Itendero TC & Kibingo TC; Shuuku; Bugongi & Bugongi TC; and Kasana & Kitagata.

Sheema district had not set any targets for the assessed indicators, decisions on the level of delivery of services in the SAs were based on district average coverage for each indicator. The table in Appendix 2 was, therefore, used to determine the thresholds for each indicator. The *thresholds* are based on the sample size (in this case 19 for each target group in each SA), the district average for the indicator

estimate (20%, 30%, etc.) and a precision of the indicator estimate of 92%. Each district indicator average is given with a 95% confidence interval (CI).

The LQAS survey enables identification of SA that may be below the benchmark (in this case the district average) which are “red flagged” for special attention. Kagango, Kabwohe-Itendero TC & Kibingo TC was the most flagged supervision area while Bugongi & Bugongi TC was least flagged for any indicator as shown in Table 1.

Table 1: Number of indicators below threshold by service and supervision areas*

Service area	Supervision Area					Indicators		
	Kyangyenyi, Masheruka & Kigarama	Kagango, Kabwohe-Itendero TC & Kibingo TC	Shuuku	Bugongi & Bugongi TC	Kasana & Kitagata	Flagged	Total	Percent flagged
HIV counseling and Testing (HCT)	0	0	0	5	5	10	140	7.1
Prevention of Mother to Child Transmission of HIV (PMTCT)	1	6	0	0	7	14	80	17.5
HIV Knowledge and Sexual Behavior	1	6	8	0	3	18	115	15.7
Sexually Transmitted Infections (STI)	2	10	0	0	2	14	100	14
Tuberculosis	3	4	4	2	3	16	75	21.3
Malaria Prevention and Treatment	2	5	0	0	0	7	40	17.5
Reproductive Health and Family planning	1	0	0	0	0	1	15	6.7
Child Health	1	0	1	0	1	3	10	30
Sanitation	0	5	0	0	0	5	25	20
Total number of red flags	11	36	13	7	21	88	600	14.7

*Counts are pooled for the target group.

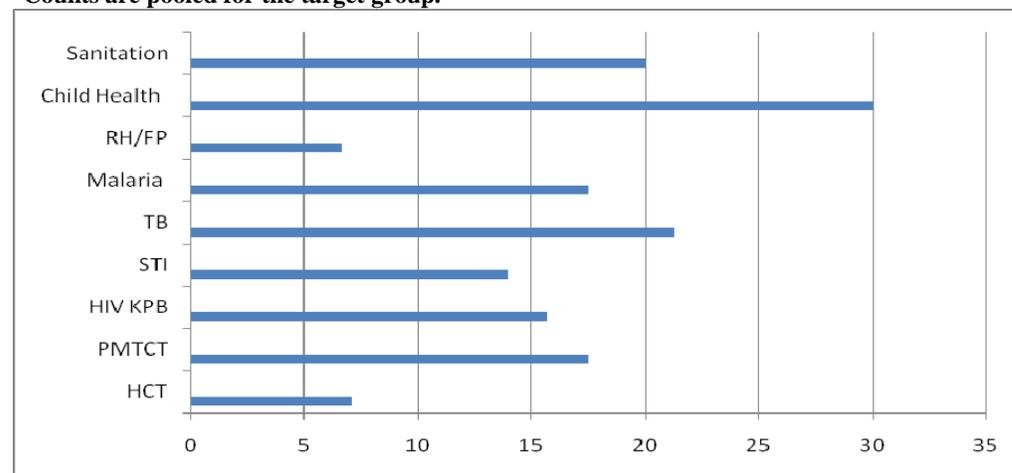


Figure 1: Percentage of indicators below threshold out of the total indicators for the service area

In the following results tables, supervision areas with indicators below thresholds are marked by an asterisk (*). Thresholds of indicators with a district survey target population average below 20% are marked as “not applicable” (NA).

6.1 HIV counseling and Testing (HCT)

Figure 2 shows the distribution of flagged indicators of HCT in Sheema district SAs. Tables 2 – 10 give the survey results regarding knowledge and practices in HIV Counseling and Testing (HCT) across SAs in the district.

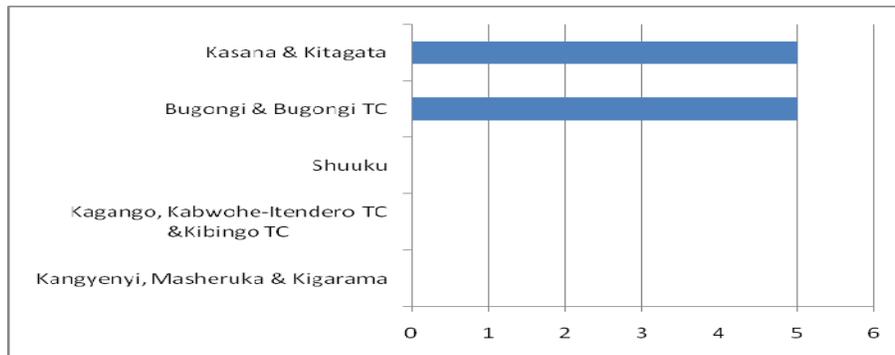


Figure 2: Number of indicators below thresholds for HCT

Table 2: Individuals who know where they can be tested for HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Kyangyenyi, Masheruka & Kigarama	15	18	18	18	18
Kagango, Kabwohe- Itendero TC & Kibingo TC	16	19	16	19	19
Shuuku	18	19	19	18	19
Bugongi & Bugongi TC	14	17	19	18	18
Kasana & Kitagata	13	17	18	19	18
Average coverage (95% CI)	80 (71.8-88.2)	94.7 (90.2-99.3)	94.7 (90.2-99.3)	96.8 (93.3-100)	96.8 (93.3-100)
Threshold	13	16	16	16	16
Number of SAs below threshold	0	0	0	0	0

Knowledge of where HIV counseling and testing services can be accessed was generally above the district average for all the supervision areas which informs that the population in Sheema district are knowledgeable of where these services are offered.

Table 3: Individuals who know two or more benefits of HCT

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Kyangyenyi, Masheruka & Kigarama	13	14	14	15	14
Kagango, Kabwohe- Itendero TC & Kibingo TC	13	16	15	13	13
Shuuku	17	16	15	16	16
Bugongi & Bugongi TC	14	14	16	17	15
Kasana & Kitagata	6*	12*	15	15	16
Average coverage (95% CI)	66.3 (56.6-76.0)	75.8 (67.0-84.6)	78.9 (70.6-87.3)	80 (71.8-88.2)	77.9 (69.4-69.3)
Threshold	11	13	13	13	13
Number of SAs below threshold	1	1	0	0	0

There were varied levels of knowledge of HCT benefits among SAs, especially among the youth and men. Lack of knowledge of HCT benefits was more prominent in Kasana & Kitagata among the youth and men.

Table 4: Individuals who have ever been counseled and tested for HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	10	14	13
Kagango, Kabwohe-Itendero TC &Kibingo TC	11	15	17
Shuuku	9	10	13
Bugongi & Bugongi TC	7	8*	15
Kasana & Kitagata	6*	11	12
Average coverage (95% CI)	45.3(35.1-55.5)	61.1(51.1-71.0)	73.7(64.7-82.7)
Threshold	7	10	12
Number of SAs below threshold	1	1	0

Table 5: Individuals who have ever been counseled, tested and received their HIV test results

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	10	13	12
Kagango, Kabwohe-Itendero TC &Kibingo TC	11	15	17
Shuuku	9	10	12
Bugongi & Bugongi TC	7	8*	13
Kasana & Kitagata	6*	11	12
Average coverage (95% CI)	45.3 (35.1-55.5)	60 (50.0-70.0)	69.5 (60.0-78.9)
Threshold	7	9	11
Number of SAs below threshold	1	1	0

Kasana & Kitagata was below the district average threshold for accessing HCT services and receiving the test results among the youth whereas for Bugongi & Bugongi TC it was the men who were red flagged for this indicator as shown in

Table 4 and Table 5.

Table 6: Individuals who were counseled and tested for HIV in the past 12 months

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	5	7	6
Kagango, Kabwohe-Itendero TC & Kibingo TC	5	8	9
Shuuku	6	5	5
Bugongi & Bugongi TC	5	3	6
Kasana & Kitagata	2	4	4
Average coverage (95% CI)	24.2 (15.4-33.0)	28.4 (19.2-37.7)	31.6 (22.1-41.1)
Threshold	2	3	4
Number of SAs below threshold	0	0	0

There were no SA with poor results for the history of HIV counseling and testing since none was red flagged.

Table 7: Individuals who were counseled and tested for HIV in the past 12 months and know their HIV results

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	6	5	7
Kagango, Kabwohe-Itendero TC & Kibingo TC	4	8	11
Shuuku	5	6	7
Bugongi & Bugongi TC	5	4	7
Kasana & Kitagata	3	4	3*
Average coverage (95% CI)	24.2 (15.4-33.0)	28.4 (19.2-37.7)	36.8 (27.0-46.7)
Threshold	2	3	5
Number of SAs below threshold	0	0	1

The results in Table 7 show completion of the HIV counseling, testing and receiving their results. It shows that the women in Kasana & Kitagata were below the threshold.

Table 8: Mothers who were counseled and received an HIV test during the last pregnancy and know their results

Supervision Areas	Mothers of children (0-11 months)
Kyangyenyi, Masheruka & Kigarama	16
Kagango, Kabwohe-Itendero TC & Kibingo TC	18
Shuuku	16
Bugongi & Bugongi TC	17
Kasana & Kitagata	16
Average coverage (95% CI)	87.4 (80.6-94.2)
Threshold	15

Supervision Areas	Mothers of children (0-11 months)
Number of SAs below threshold	0

The survey showed that expectant mothers in Sheema district have been counseled and tested for HIV and know their results as shown in Table 8.

Table 9: Individuals who have ever tested for HIV and received their results as a couple

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	5	7
Kagango, Kabwohe-Itendero TC & Kibingo TC	5	5
Shuuku	6	3
Bugongi & Bugongi TC	1*	3
Kasana & Kitagata	3	2
Average coverage (95% CI)	21.1 (12.7-29.4)	21.1 (12.7-29.4)
Threshold	2	2
Number of SAs below threshold	1	0

The good delivery of HCT services to pregnant women is not extended to the general public in any of the supervision areas of the district as shown in table 9 above.

Table 10: Individuals who were tested for HIV and received their results and disclosed to their spouse/partner

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	10	13	14
Kagango, Kabwohe-Itendero TC & Kibingo TC	11	15	16
Shuuku	9	11	14
Bugongi & Bugongi TC	6	8*	10*
Kasana & Kitagata	6	11	12
Average coverage (95% CI)	44.2 (34.0-54.4)	61.1 (51.1-71.0)	69.5 (60.0-78.9)
Threshold	6	10	11
Number of SAs below threshold	0	1	1

More than half of the men and women who tested for HIV and received their results disclosed the results to their partners.

Bugongi & Bugongi TC performed poorly compared to other SAs in the district in terms of HCT knowledge and practices among the men and women. Focus should be placed in improving performance among the poor-performing target populations of Bugingo & Bugingo TC.

6.2 PMTCT knowledge and practices

Tables 11 – 14 give the details of the results for PMTCT knowledge and practices in Sheema district. Figure 3 shows that three of the five SAs had below district average performance for PMTCT across target groups.

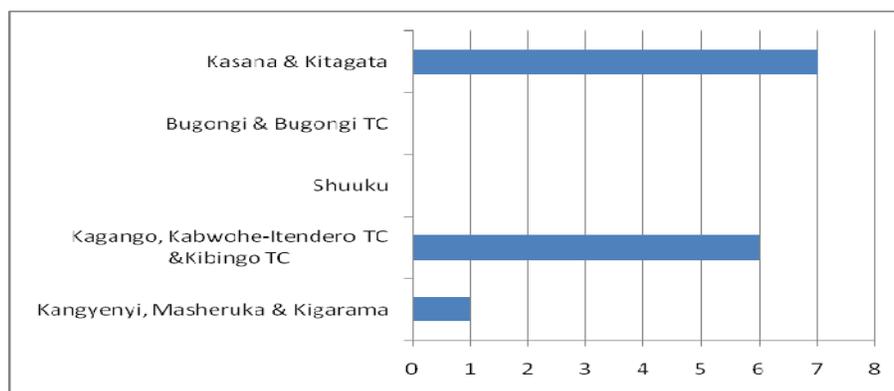


Figure 3: SAs flagged for PMTCT knowledge and practices.

Table 11: Individuals who know all 3 ways when HIV transmission occurs from an infected mother to child

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kyangyenyi, Masheruka & Kigarama	3	6	6	9	10
Kagango, Kabwohe-Itendero TC & Kibingo TC	1*	0*	1*	1*	0*
Shuuku	14	10	10	12	10
Bugongi & Bugongi TC	3	4	8	8	4
Kasana & Kitagata	2	3	2*	5	8
Average coverage (95% CI)	24.2 (15.4-33.0)	24.2 (15.4-33.0)	28.4 (19.2-37.7)	36.8 (27.0-46.7)	33.7 (24.0-43.4)
Threshold	2	2	3	5	4
Number of SAs below threshold	1	1	2	1	1

There were below threshold levels of knowledge of all three ways when HIV transmission occurs from an infected mother to child in all target populations. The supervision areas of Kagango, Kabwohe-Itendero TC and Kibingo among all target groups and Kasana & Kitagata among the women were below district threshold.

Table 12: Individuals who know at least two key actions that reduce MTCT of HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)

Kyangyenyi, Masheruka & Kigarama	9*	11	11	15	15
Kagango, Kabwohe-Itendero TC & Kibingo TC	9*	13	13	14	14
Shuuku	18	15	16	18	18
Bugongi & Bugongi TC	15	15	16	18	15
Kasana & Kitagata	8*	12	9*	3*	17
Average coverage (95% CI)	62.1 (52.2-72.0)	69.5 (60.0-79.0)	68.4 (58.9-77.9)	82.1 (74.3-90.0)	83.2 (75.5-90.8)
Threshold	10	11	11	14	14
Number of SAs below threshold	3	0	1	1	0

Knowledge on how HIV transmission from mother to child can be reduced is low in Kasana & Kitagata among the youth, women and mothers of children 0-11 months. Kyangyenyi, Masheruka & Kigarama and Kagango, Kabwohe-Itendero TC & Kibingo TC also have population groups that need education on how vertical transmission of HIV can be reduced.

Table 13: Individuals who know where they can get information and services to reduce the risk of HIV MTCT

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kyangyenyi, Masheruka & Kigarama	16	18	18	19	17
Kagango, Kabwohe-Itendero TC & Kibingo TC	19	17	16	18	18
Shuuku	19	17	18	16	16
Bugongi & Bugongi TC	18	18	18	17	16
Kasana & Kitagata	10*	13*	12*	19	18
Average coverage (95% CI)	86.3 (79.3-93.4)	87.4 (80.6-94.3)	86.3 (79.3-93.4)	93.7 (88.7-98.7)	89.5 (83.2-95.8)
Threshold	15	15	15	16	15
Number of SAs below threshold	1	1	1	0	0

The results in Table 13 show that the people in Sheema district know where information on reduction of HIV MTCT can be obtained, but those in Kasana & Kitagata and some population groups in Kyangyenyi, Masheruka & Kigarama and Kaganga, Kabwohe-Itendero TC & Kibingo TC fall below the district threshold in this knowledge, as shown in Table 12.

Table 14: Mothers of children (0-11 months) who were counseled for PMTCT services during last pregnancy

Supervision Areas	Mothers of children (0-11 months)
Kyangyenyi, Masheruka & Kigarama	16
Kagango, Kabwohe-Itendero TC & Kibingo TC	16

Shuuku	17
Bugongi & Bugongi TC	14
Kasana & Kitagata	15
Average coverage (95% CI)	82.1 (72.3-90.0)
Threshold	14
Number of SAs below threshold	0

Knowledge of ways that HIV transmission occurs from an infected mother to child is very low in Sheema across all survey target groups. Kasana & Kitagata and Kagango, Kabwohe-Itendero TC & Kibingo and Kyangyenyi, Masheruka & Kigarama SAs also tended to have below average levels of knowledge on PMTCT, especially in the general population (the youth, women and mothers of babies 0-11 months). Although the survey results show that not all recently pregnant women were counseled on how to prevent HIV vertical transmission, nearly 85% were counseled as shown in Table 14.

6.3 HIV/AIDS knowledge and sexual behavior

Tables 15 - 21 show details of the results for HIV/AIDS knowledge and sexual behavior. Figure 4 shows that all SAs, apart from Bugongi & Bugongi TC, had a red flag on this service area for at least one target group.

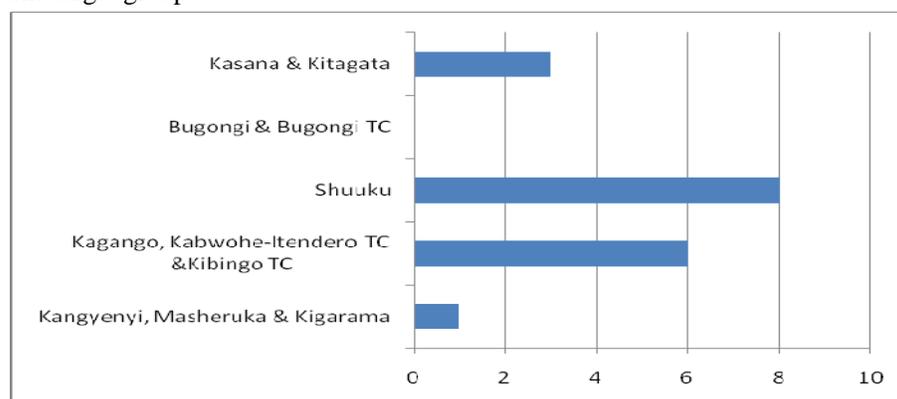


Figure 4: SAs flagged for HIV/AIDS knowledge and sexual behavior

Table 15: Individuals who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Kyangyenyi, Masheruka & Kigarama	6	10	11	6	5
Kagango, Kabwohe-Itendero TC & Kibingo TC	6	4*	6	4*	3*
Shuuku	4	6	4*	10	7
Bugongi & Bugongi TC	7	5	10	10	8
Kasana & Kitagata	8	12	9	6	10

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Average coverage (95% CI)	32.6 (23.0-42.2)	38.9 (29.0-48.9)	42.1 (32.0-52.2)	37.9 (28.0-47.8)	34.7 (25.0-44.5)
Threshold	4	5	6	5	4
Number of SAs below threshold	0	1	1	1	1

The survey population in Sheema district demonstrated very poor knowledge of ways of preventing the sexual transmission of HIV and the majority do not reject major misconceptions about HIV transmission. The poor level of knowledge is prominent among men and mothers of babies in Kagango, Kabwohe-Itendero TC & Kibingo TC and among women in Shuuku supervision areas.

Table 16: Individuals who know at least two ways of preventing sexual transmission of HIV

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0- 11 months)	Mothers of children (12- 23 months)
Kyangyenyi, Masheruka & Kigarama	16	15	16	18	12*
Kagango, Kabwohe- Itendero TC & Kibingo TC	13	16	14	12*	12*
Shuuku	10*	12*	9*	15	15
Bugongi & Bugongi TC	16	16	18	17	18
Kasana & Kitagata	14	18	17	15	16
Average coverage (95% CI)	72.6 (63.5-81.8)	81.1 (73.0-89.1)	77.9 (69.4-86.4)	81.1 (73.0-89.1)	76.8 (68.2-85.5)
Threshold	12	14	13	14	13
Number of SAs below threshold	1	1	1	1	2

Although the survey showed that over 70% of the people in all target groups know at least two ways of preventing sexual transmission of HIV, there are supervision areas where knowledge is below par- for example among the youth, men and women in Shuuku, targeted mothers in Kagango, Kabwohe-Itendero TC & Kibingo TC and mothers of babies 12-23 months in Kyangyenyi, Masheruka & Kigarama supervision area.

Table 17: Individuals who have ever used a condom when having sexual intercourse

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)
Kyangyenyi, Masheruka & Kigarama	9	7	5
Kagango, Kabwohe-Itendero TC & Kibingo TC	13	11	6
Shuuku	1*	0*	3
Bugongi & Bugongi TC	8	6	3
Kasana & Kitagata	4*	2*	2
Average coverage (95% CI)	44.3 (33.1-55.5)	31.7 (21.4-42.0)	20 (11.8-28.2)

Threshold	6	4	1
Number of SAs below threshold	2	2	0

Condom use is extremely low in Sheema district as shown in Table 17. Authorities need to identify reasons for the low use, as this is a core HIV prevention strategy.

Table 18: Individuals who had sex with more than one sexual partner in the last 12 month

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	8	13
Kagango, Kabwohe-Itendero TC & Kibingo TC	3	2
Shuuku	1*	0*
Bugongi & Bugongi TC	2	2
Kasana & Kitagata	6	1
Average coverage (95% CI)	21.1 (12.7-29.4)	18.9 (10.9-27.0)
Threshold	2	1
Number of SAs below threshold	1	1

Table 19: Individuals who have had sex with one sexual partner in last 12 months and report using a condom at last sexual intercourse

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	2	2
Kagango, Kabwohe-Itendero TC & Kibingo TC	0	0
Shuuku	0	0
Bugongi & Bugongi TC	2	0
Kasana & Kitagata	4	1
Average coverage (95% CI)	12.3 (4.1-20.5)	4.7 (0.64-10.2)
Threshold	NA	NA
Number of SAs below threshold	NA	NA

The very low average rates of declared sexual behavior needs to be reviewed.

Table 20: Individuals who perceive low or no risk of getting HIV/AIDS infection

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	6	1	0
Kagango, Kabwohe-Itendero TC & Kibingo TC	5	0	0
Shuuku	6	2	2
Bugongi & Bugongi TC	9	7	6
Kasana & Kitagata	3*	3	0
Average coverage (95% CI)	30.5 (21.1-40.0)	13.7 (6.6-20.7)	8.4 (2.7-14.1)

Threshold	4	NA	NA
Number of SAs below threshold	1	NA	NA

Table 21: Sexual behavior and circumcision among the youth

Supervision Areas	Youth (15-24 yrs) who		
	initiated intercourse before 15yrs	know at least three correct steps on how to use a condom	are circumcised
Kyangyenyi, Masheruka & Kigarama	1	6	0
Kagango, Kabwohe-Itendero TC & Kibingo TC	0	1*	3
Shuuku	0	2	3
Bugongi & Bugongi TC	0	8	0
Kasana & Kitagata	2	4	0
Average coverage (95% CI)	3.2 (0.4-6.7)	22.1 (13.6-30.6)	6.3 (1.3-11.3)
Threshold	NA	2	NA
Number of SAs below threshold	NA	1	NA

The district authorities need to reinforce condom use strategies among all population groups, including proper use.

6.4 Sexually Transmitted Infections (STI) knowledge

Tables 22 – 25 show survey results about knowledge of sexually transmitted infections (STI). Figure 4 shows that only two SAs: Shuuku and Bugongi & Bugongi TC- had no groups whose knowledge of STIs was under par.

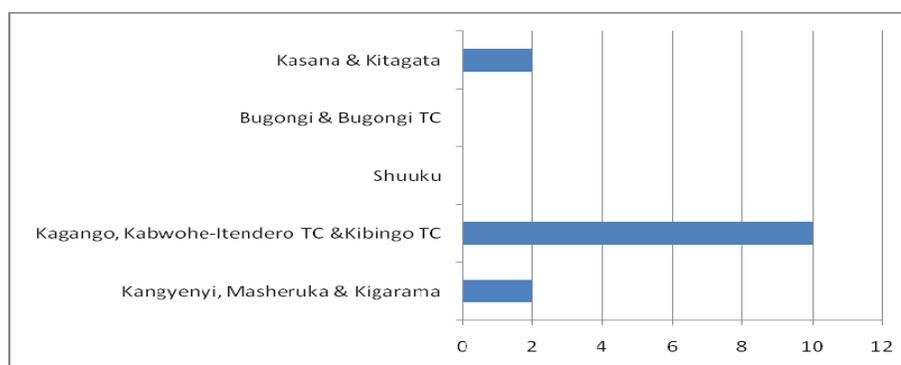


Figure 5: SAs flagged for STI knowledge

Table 22: Individuals who correctly identify at least two common symptoms of STIs in men

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kyangyenyi, Masheruka & Kigarama	12	13	13	11	9*
Kagango, Kabwohe-Itendero TC & Kibingo TC	9*	17	10*	11	8*
Shuuku	16	14	15	15	16
Bugongi & Bugongi TC	15	13	13	14	13
Kasana & Kitagata	12	18	12	12	12
Average coverage (95% CI)	67.4 (57.8-77.0)	78.9 (70.6-87.3)	66.3 (56.6-76.0)	66.3 (56.6-76.0)	61.1 (51.1-71.0)
Threshold	11	13	11	11	10
Number of SAs below threshold	1	0	1	0	2

Table 23: Individuals who correctly identify at least two common symptoms of STIs in women

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kyangyenyi, Masheruka & Kigarama	8*	10	14	16	13
Kagango, Kabwohe-Itendero TC & Kibingo TC	8*	8*	14	12*	14
Shuuku	16	13	16	15	16
Bugongi & Bugongi TC	15	12	16	16	16
Kasana & Kitagata	10	16	12*	15	13
Average coverage (95% CI)	60 (50.0-70)	62.1 (52.2-72.0)	75.8 (67.0-84.6)	77.9 (69.4-86.4)	75.8 (67.0-84.6)
Threshold	9	10	13	13	13
Number of SAs below threshold	2	1	1	1	0

Kagango, Kabwohe- Itendero TC & Kibingo TC performed lowest as a SA in the district on this indicator, as shown in Table 22 and. 23

Table 24: Individuals who know three or more actions to take when she/he has a sexually transmitted infection

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kyangyenyi, Masheruka & Kigarama	7	6	7	8	6
Kagango, Kabwohe-Itendero TC &Kibingo TC	3*	4*	4*	5*	6
Shuuku	7	9	8	7	7
Bugongi & Bugongi TC	11	13	13	12	14
Kasana & Kitagata	6	9	6	8	8
Average coverage (95% CI)	35.8 (26.0-45.6)	43.2 (33.0-53.3)	40 (30.0-50.0)	42.1 (32.0-52.2)	43.2 (33.0-53.3)
Threshold	5	6	5	6	6
Number of SAs below threshold	1	1	1	1	0

The LQAS survey findings in Sheema highlighted the need for educating the population, the youth, men and women, on STIs. People do not know the common symptoms and consequently do not know what to do if they have an STI. Kagango, Kabwohe-Itendero TC &Kibingo TC SA performed the most poorly in terms of individuals identifying corrective actions to take when they had an STI.

Table 25: Individuals who know a health facility where they can receive STI treatment

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kyangyenyi, Masheruka & Kigarama	18	19	19	19	19
Kagango, Kabwohe-Itendero TC &Kibingo TC	17	19	19	17	17
Shuuku	19	19	19	19	18
Bugongi & Bugongi TC	16	19	19	19	19
Kasana & Kitagata	12*	18	17	16	17
Average coverage (95% CI)	86.3 (79.3-93.4)	98.9 (96.9-101)	97.9 (95.0-100)	94.7 (90.2-99.3)	94.7 (90.2-99.3)
Threshold	15	16	16	16	16
Number of SAs below threshold	1	0	0	0	0

6.5 Knowledge on Tuberculosis

Figure 6 shows there are TB-related issues that need to be addressed in all supervision areas. Tables 26 -30 provide details of population groups that need action for specific indicators

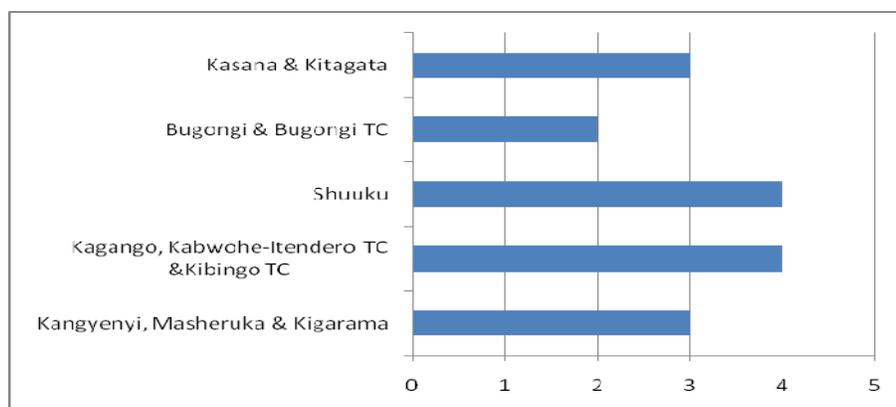


Figure 6: SAs flagged for TB knowledge

Table 26: Individuals who know that TB is a curable disease

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyei, Masheruka & Kigarama	17	18	16
Kagango, Kabwohe-Itendero TC & Kibingo TC	11*	15	17
Shuuku	18	17	17
Bugongi & Bugongi TC	18	17	14*
Kasana & Kitagata	12*	17	18
Average coverage (95% CI)	80 (71.8-88.2)	88.4 (81.9-95.0)	86.3 (79.3 -93.4)
Threshold	13	15	15
Number of SAs below threshold	2	0	1

While there is high knowledge that TB is a curable disease among the population, there are still pockets of low knowledge among the youth in Kagango, Kabwohe-Itendero TC & Kibingo TC and Kasana & Kitagata among the youth and among women in Bugongi & Bugongi TC supervision area respectively.

Table 27: Individuals who know at least two signs and symptoms of TB

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyei, Masheruka & Kigarama	7*	10*	11*
Kagango, Kabwohe-Itendero TC & Kibingo TC	13	15	14
Shuuku	17	18	16
Bugongi & Bugongi TC	13	11*	15
Kasana & Kitagata	12	17	11*
Average coverage (95% CI)	65.3 (55.5-75.0)	74.7 (65.8-83.6)	70.5 (61.2-80.0)
Threshold	11	12	13
Number of SAs below threshold	1	2	2

Table 28: Individuals who know how TB is transmitted

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
5.3 Individuals who know how TB is transmitted			
Kyangyenyi, Masheruka & Kigarama	16	17	17
Kagango, Kabwohe-Itendero TC & Kibingo TC	12*	13*	10*
Shuuku	17	18	17
Bugongi & Bugongi TC	15	15	17
Kasana & Kitagata	12*	18	16
Average coverage (95% CI)	75.8 (67.0-84.6)	85.3 (78.0-92.5)	81.1 (73.0-89.1)
Threshold	13	15	14
Number of SAs below threshold	2	1	1

Knowledge on TB signs and mode of transmission ranged between 65% and 90% (**Error! Reference source not found.**) but there are supervision areas with below district average threshold knowledge such as Kyangyenyi, Masheruka & Kigarama (among men, youth and women), Bugongi & Bugongi TC (among men) and Kasana & Kitagata (among the youth).

Table 29: Individuals who know the risk of not completing TB treatment

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	15	16	14
Kagango, Kabwohe-Itendero TC & Kibingo TC	11	16	15
Shuuku	7*	5*	6*
Bugongi & Bugongi TC	15	14	17
Kasana & Kitagata	11	17	19
Average coverage (95% CI)	62.1 (33.8-72.0)	71.6 (62.3-80.8)	74.7 (65.8-83.6)
Threshold	10	12	12
Number of SAs below threshold	1	1	1

Knowledge of the risks associated with not completing TB treatment was high across target populations but low in Shuuku across target populations.

Table 30: Individuals who know the nearest place to receive TB treatment

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Kyangyenyi, Masheruka & Kigarama	17	19	19
Kagango, Kabwohe-Itendero TC & Kibingo TC	19	19	19
Shuuku	14	19	14*

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)
Bugongi & Bugongi TC	15	19	19
Kasana & Kitagata	14	19	18
Average coverage (95% CI)	83.2 (75.5-90.8)	100	93.7 (88.7-98.7)
Threshold	14		16
Number of SAs below threshold	0	0	1

6.6 Knowledge and practices of Malaria prevention and treatment among mothers of children (0-11 months)

Figure 77 shows that Kagango, Kabwohe-Itendero TC and Kibingo TC performed poorly in comparison with other SAs for most malaria knowledge and prevention practices indicators. It was closely followed in poor performance by Kyangyenyi, Masheruka & Kigarama SA. Details of the malaria indicators are given in Tables 31 and 32

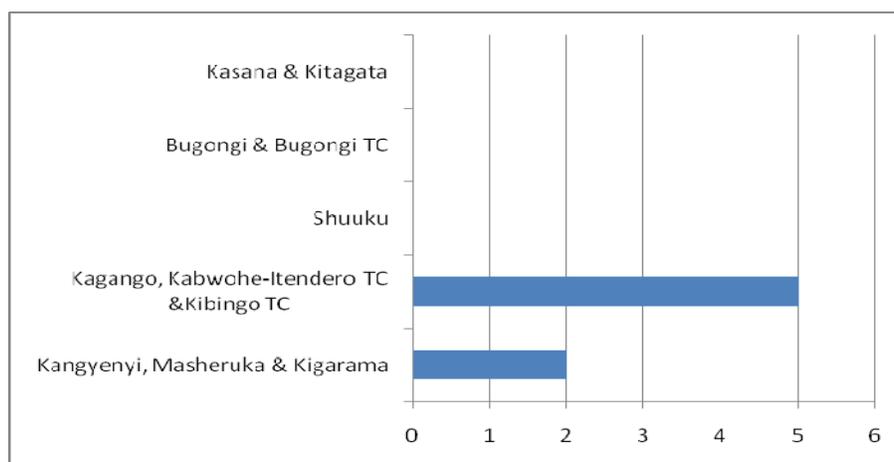


Figure 7: SAs flagged in knowledge and practices of Malaria prevention and treatment among mothers of children (0-11 months)

Table 31: Details of the results for malaria treatment and practices among mothers of children (0-11 months)

Supervision Areas	Malaria treatment and prevention among mothers of children 0 – 11 months			
	Children who had fever in the two weeks preceding the survey and received treatment with ACTs within 24 hours of onset of fever	Mothers who received two or more doses of IPTp during their last pregnancy in the last two years	Children who slept under a ITN the night preceding survey	Mothers who always slept under an ITN during last pregnancy
Kyangyenyi, Masheruka & Kigarama	4	5	13	9*
Kagango, Kabwohe-Itendero TC &Kibingo TC	4	7	10*	9*
Shuuku	5	10	18	15
Bugongi & Bugongi TC	7	8	18	15
Kasana & Kitagata	2	8	17	12
Average coverage (95% CI)	23.2 (14.5-31.8)	40 (30.0-50.0)	80 (71.8-88.2)	63.2 (53.3-73.0)
Threshold	2	5	13	10
Number of SAs below threshold	0	0	1	2

Table 32: Details of the results for knowledge of malaria prevention among mothers of children (0-11 months)

Supervision Areas	Malaria treatment and prevention among mothers of children 0 – 11 months			
	Mothers who know two or more ways to prevent malaria	Mothers who know two or more signs and symptoms of malaria	Mothers who know how malaria is transmitted	Households with at least 1 ITN
Kyangyenyi, Masheruka & Kigarama	9	15	19	14*
Kagango, Kabwohe-Itendero TC &Kibingo TC	3*	12*	17	14*
Shuuku	12	16	19	18
Bugongi & Bugongi TC	18	18	18	19
Kasana & Kitagata	9	16	17	18
Average coverage (95% CI)	53.7 (43.5-63.9)	81.1 (73.0-89.1)	94.7 (90.2-99.3)	87.4 (80.6-94.2)
Threshold	8	14	16	15
Number of SAs below threshold	1	1	0	2

Error! Reference source not found.31 shows that treatment for malaria among children is low in the district, as is IPT use to the minimum recommended dosage during the previous pregnancy. There were generally good levels of knowledge about how malaria is transmitted in all SAs (32). Similarly, fewer households in Kagango, Kabwohe-Itendero TC & Kibingo TC and Kyangyenyi, Masheruka & Kigarama had at least one ITN in comparison with other SAs.

6.7 Reproductive Health and Family planning

Half the number of mothers did attend the minimum required ANC visits during their previous pregnancy (see Table 33). The performance was lowest in Kyangyenyi, Maseruka and Kigarama SA. Deliveries however tended to have occurred in a health facility, without any SAs performing below average. In most deliveries (95%), a health worker was involved

Table 33: Details of the results for reproductive health and family planning knowledge and practices among women

Supervision Areas	Mothers of children 0 – 11 months who		
	attended ANC at least 4 times during last pregnancy	delivered their last baby in a health facility	were assisted by a skilled health worker during last delivery
Kyangyenyi, Masheruka & Kigarama	7*	17	18
Kagango, Kabwohe-Itendero TC & Kibingo TC	11	14	17
Shuuku	9	17	16
Bugongi & Bugongi TC	9	13	18
Kasana & Kitagata	13	14	17
Average coverage (95% CI)	51.6 (41.3-61.8)	78.9 (70.6-87.3)	90.5 (84.5-96.5)
Threshold	8	13	16
Number of SAs below threshold	1	0	0

6.8 Child survival

Table 34 and 35 show details of the results for Child Survival practices among the women with 12-23 months old children. Kyangyenyi, Masheruka & Kigarama SA performed poorly in having children fully immunized as shown in Table .

Table 34: Children who are fully vaccinated

Table 34: Children who are fully vaccinated

Supervision Areas	
Kyangyenyi, Masheruka & Kigarama	13*
Kagango, Kabwohe-Itendero TC & Kibingo TC	18
Shuuku	19
Bugongi & Bugongi TC	18
Kasana & Kitagata	16
Average coverage (95% CI)	88.4 (81.9-95.0)
Threshold	15
Number of SAs below threshold	1

Table 35: Children with any of fever, diarrhea or pneumonia seeking care from health workers within 24 hours of illness

Supervision Areas	
Kyangyenyi, Masheruka & Kigarama	14
Kagango, Kabwohe-Itendero TC & Kibingo TC	6
Shuuku	5*
Bugongi & Bugongi TC	9
Kasana & Kitagata	5*
Average coverage (95% CI)	41.1 (31.0-51.1)
Threshold	6
Number of SAs below threshold	2

6.9 Sanitation

Sanitation results are given in table 36. Hand washing with soap after visiting a toilet was an indicator showing poor performance across all population groups surveyed in Kagango, Kabwohe-Itendero TC & Kibingo TC SA in comparison with the district average performance.

Table 36: Individuals Who Wash Their Hands with Soap after Visiting the Toilet

Supervision Areas	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12-23 months)
Kyangyenyi, Masheruka & Kigarama	18	19	19	17	16
Kagango, Kabwohe-Itendero TC & Kibingo TC	11*	12*	12*	15*	9*
Shuuku	19	19	19	18	18
Bugongi & Bugongi TC	14	16	19	19	15
Kasana & Kitagata	18	18	17	17	18
Average coverage (95% CI)	84.2 (76.7-91.7)	88.4 (81.9-95.0)	90.5 (84.5-96.5)	90.5 (84.5-96.5)	80 (71.8-88.2)
Threshold	14	15	16	16	13
Number of SAs below threshold	1	1	1	1	1

7.0 Conclusion

The LQAS survey results show that performance improvement effort is most required in the, Kagango, Kabwohe-Itendero TC & Kibingo TC and Kasana & Kitagata supervision areas. The district should investigate the reasons for poor performance in all service areas, apart from reproductive health and family planning. Lessons may be found in the delivery of services in Bugongi & Bugongi TC which was less red flagged on majority of indicator.

Appendix 1: List of indicators

SN	Indicator	Status
1	HIV counseling and Testing (HCT)	
1.1	% of Individuals who know where they can be tested for HIV	Assessed
1.2	% of Individuals who know two or more benefits of HCT	Assessed
1.3	% of Individuals who have ever been counseled and tested for HIV	Assessed
1.4	% of Individuals who have ever been counseled, tested and received their HIV test results	Assessed
1.5	% of Individuals who were counseled and tested for HIV in the past 12 months	Assessed
1.6	% of Individuals who were counseled and tested for HIV in the past 12 months and know their HIV results	Assessed
1.7	% of Individuals who were counseled and received an HIV test during the last pregnancy and know their results	Assessed
1.8	% of Individuals who have ever tested for HIV and received their results as a couple	Assessed
1.9	% of Individuals who were tested for HIV and received their results and disclosed to their spouse/partner	Assessed
2	Prevention of Mother to Child Transmission of HIV (PMTCT)	
2.1	% of Individuals who know how HIV transmission occurs from an infected mother to child	Assessed
2.2	% of Individuals who know two (2) key actions that reduce MTCT of HIV	Assessed
2.3	% of Individuals who know where they can get information and services to reduce the risk of MTCT of HIV	Assessed
2.4	% of Mothers of children (0-11 months) who were counseled for PMTCT services during last pregnancy	Assessed
3	HIV Knowledge and Behavior Change	
3.1	% of Individuals who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	Assessed
3.2	% of Individuals who know at least two ways of preventing sexual transmission of HIV	Assessed
3.3	% of Individuals who have ever used a condom when having sexual intercourse	Assessed
3.4	Percentage of individuals who had sex with more than one sexual partner in the last 12 months	Assessed
3.5	Percentage of individuals who have had sex with more than one sexual partner in last 12 months and report using a condom at last sexual intercourse	Assessed
3.6	Percentage of individuals who had sexual intercourse with a non marital or non cohabiting sexual partner in the last 12 months.	Not Assessed
3.7	Percentage of individuals 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	Not Assessed
3.8	Percentage of individuals who ALWAYS used a condom when they had sexual intercourse with a non marital or non cohabiting sexual partner in the last 12 months	Not Assessed
3.9	% of Individuals who perceive low or no risk of getting HIV/AIDS infection	Assessed
3.10	Percentage of never-married Youth who have ever had sexual intercourse	Not Assessed
3.11	Percentage of Youth who have had sexual intercourse before the age of 15	Assessed
3.12	Percentage of Youth who know at least three correct steps on how to use a condom	Assessed
3.13	Percentage of Youth who report the use of a condom the first time they had sexual intercourse	Not Assessed
3.14	Percentage of males who are circumcised	Assessed
3.15	Percentage of Young Males who were circumcised at a health facility	Not Assessed
3.16	Percentage of the general population aged 15+ years who know at least three benefits of ART	Not Assessed
4	Sexually Transmitted Infections (STI)	

SN	Indicator	Status
4.1a	% of Individuals who correctly identify at least two common symptoms of STIs in men	Assessed
4.1b	% of Individuals who correctly identify at least two common symptoms of STIs in women	Assessed
4.2	% of Individuals who know three or more actions to take when she/he has a sexually transmitted infection	Assessed
4.3	% of Individuals who know a health facility where they can receive STI treatment	Assessed
5	Tuberculosis	
5.1	Percentage of individuals who know that TB is a curable disease	Assessed
5.2	Percentage of individuals who know at least two signs and symptoms of TB	Assessed
5.3	Percentage of individuals who know how TB is transmitted	Assessed
5.4	Percentage of individuals who know the risk of not completing TB treatment.	Assessed
5.5	Percentage of individuals who know the nearest place to receive TB treatment.	Assessed
6	Malaria Prevention and Treatment	
6.1	% of Children 0-11 months who had fever in the two weeks preceding the survey and received treatment with ACTs within 24 hours of onset of fever	Assessed
6.2	% of mothers of children 0-11 months who received two or more doses of IPTp during their last pregnancy in the last two years	Assessed
6.3	% of Children 0-11 months who slept under a ITN the previous night	Assessed
6.4	% of mothers of children 0-11 months who always slept under an ITN during last pregnancy	Assessed
6.5	% of Individuals who know two or more ways to prevent malaria	Assessed
6.6	% of Individuals who know 2 or more signs and symptoms of malaria	Assessed
6.7	% of Individuals who know how malaria is transmitted	Assessed
6.8	% of households with at least 1 ITN	Assessed
7	Reproductive Health and Family planning	
7.1	Percentage of currently married women aged 15-49 years who are using any family planning method.	Not Assessed
7.2	Percentage of sexually active women age women 15-49 years who are using any modern method of family planning.	Not Assessed
7.3	Percentage of Individuals who attended ANC at least 4 times during last pregnancy	Assessed
7.4	Percentage of Individuals who delivered their last baby in a health facility	Assessed
7.5	Percentage of Individuals who were assisted by a skilled health worker during last delivery	Assessed
7.6	Percentage of women 15-49 years who desire to use a family planning method but cannot access it.	Assessed
8	Child survival indicators	
8.1	Percentage of children 12-23 months who are fully vaccinated	Assessed
8.2	Percentage of children under 5 years with diarrhea in the last two weeks receiving ORT	Not Assessed
8.3	Percentage of children under 5 years with any of fever, diarrhea or pneumonia seeking care from health workers within 24 hours of illness	Assessed
8.4	Percentage of individuals who wash their hands with soap after visiting the toilet	Assessed

Tally of assessed indicators

Service area	Number of assessed indicators	Total number of indicators
HIV counseling and Testing (HCT)	9	9
Prevention of Mother to Child Transmission of HIV (PMTCT)	4	4
HIV Knowledge and Sexual Behavior	9	16
Sexually Transmitted Infections (STI)	4	4
Tuberculosis	5	5
Malaria Prevention and Treatment	8	8
Reproductive Health and Family planning	4	6
Child Health	2	3
Sanitation	1	1
Total	46	56

Appendix 2: LQAS Decision Rule table

Sample Size*	LQAS Table: Decision Rules for Sample Sizes of 12-30 and Coverage Targets/Average of 10%-95%																			
	Average Coverage (Baselines) / Annual Coverage Target (Monitoring and Evaluation)																			
	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%		
12	N/A	N/A	1	1	2	2	3	4	5	5	6	7	7	8	8	9	10	11	11	
13	N/A	N/A	1	1	2	2	3	4	5	6	6	7	8	8	9	9	10	11	11	
14	N/A	N/A	1	1	2	2	3	4	5	5	6	7	8	8	9	10	11	11	12	
15	N/A	N/A	1	2	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13	
16	N/A	N/A	1	2	2	2	3	4	5	6	6	7	8	9	10	11	12	13	14	
17	N/A	N/A	1	2	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
18	N/A	N/A	1	2	2	2	3	5	6	7	8	9	10	11	12	13	14	15	16	
19	N/A	N/A	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
20	N/A	N/A	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	
21	N/A	N/A	1	2	2	3	4	5	6	8	9	10	11	12	13	14	16	17	18	
22	N/A	N/A	1	2	2	3	4	5	7	8	9	10	11	13	14	15	16	18	19	
23	N/A	N/A	1	2	2	3	4	6	7	8	10	11	12	13	14	16	17	18	20	
24	N/A	N/A	1	2	2	3	4	6	7	9	10	11	13	14	15	16	18	19	21	
25	N/A	1	2	2	4	5	6	8	9	10	12	13	14	16	17	18	20	21	21	
26	N/A	1	2	3	4	5	6	8	9	11	12	14	15	16	18	19	21	21	22	
27	N/A	1	2	3	4	5	7	8	10	11	13	14	15	17	18	20	21	21	23	
28	N/A	1	2	3	4	5	7	8	10	12	13	15	16	18	19	21	22	22	24	
29	N/A	1	2	3	4	5	7	9	10	12	13	15	17	18	20	21	23	23	25	
30	N/A	1	2	3	4	5	7	9	11	12	14	16	17	19	20	22	24	24	26	

N/A: *Not Applicable*, meaning LQAS cannot be used in this assessment because the coverage is either too low or too high to assess an SA. This table assumes the lower threshold is 30 percentage points below the upper threshold.

light-shaded cells indicate where *alpha* or *beta* errors are greater than or equal to 10%.
 dark-shaded cells indicate where *alpha* or *beta* errors are greater than 15%.

STRENGTHENING DISTRICT MONITORING & EVALUATION SYSTEMS

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