

# **Mitooma District Community Knowledge and Practices LQAS Survey Report**

---

Management Sciences for Health (STAR-E)

April 2011

This report was made possible through support provided by the US Agency for International Development, under the terms of Cooperative Agreement Number 617-A-00-09-00006-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development.

---

Strengthening TB and HIV & AIDS Responses in Eastern Uganda (STAR-E)  
Management Sciences for Health  
784 Memorial Drive  
Cambridge, MA 02139  
Telephone: (617) 250-9500  
[www.msh.org](http://www.msh.org)



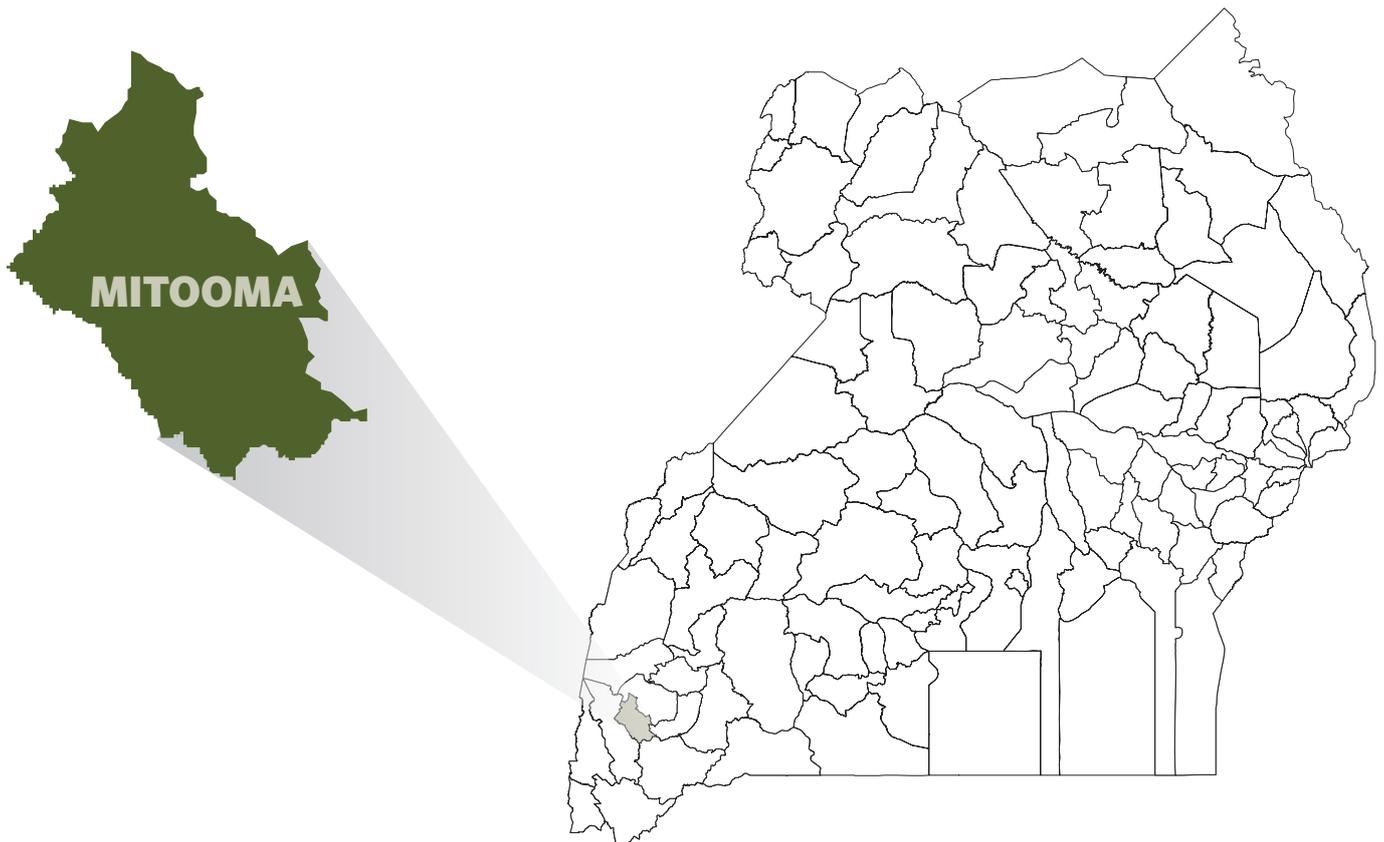
**USAID**  
FROM THE AMERICAN PEOPLE



**MITOOMA** DISTRICT

# COMMUNITY KNOWLEDGE AND PRACTICES SURVEY REPORT

APRIL 2011





**USAID**  
FROM THE AMERICAN PEOPLE



## **MITOOMA DISTRICT**

# **COMMUNITY KNOWLEDGE AND PRACTICES SURVEY REPORT**

**APRIL 2011**

**Prepared by STAR- E LQAS**

---



This document may be cited as:

Author: Management Sciences in Health (STAR-E) and Elizabeth Glaser Pediatric AIDS Foundation (STAR-SW)

Title: *Community knowledge and practices LQAS survey, 2010. Mitooma district report, May 2011.*

Contacts: Stephen K. Lwanga ([Slwanga@msh.org](mailto:Slwanga@msh.org)) and Edward Bitarakwate ([ebitarakwate@pedaids.org](mailto:ebitarakwate@pedaids.org))

## **Acknowledgements**

STAR-E acknowledges with appreciation the cooperation it has received from the partners contributing to the 2010 LQAS survey in Mitooma district: the communities that participated, the district authorities for oversight and supervision, the district officials for carrying out the survey under the management and guidance of the STAR-SW and STAR-E projects. STAR-E thanks STAR-SW for providing the electronic survey raw data sets as soon as they were ready.

STAR-E also acknowledges the support it receives from USAID Mission through the Agreement Officer's Technical Representative (AOTR). This survey was made possible through Cooperative Agreements 617-A-00-09-00006-00 with MSH and AID-617-A-00-10-00005 with EGPAF.

## Message from the Chief Administrative Officer

While timely and up-to-date information is an essential element for the district planning and monitoring service delivery, it is often lacking for many reasons. The major reason for lacking of information is shortage of human and financial resources to gather the necessary data as when they are needed. I welcome the initiative taken by USAID in collaboration with the government to support the strengthening of Monitoring and Evaluation system of Mitooma district through training of our people in the application of rapid community surveys.

When the first community survey was done in Mitooma district we were able to obtain the preliminary information on key health indicators immediately after the survey which we used for planning in the health sector and is reflected in the district five year development plan.

This report, given the district definitive information on the level of delivery of social services in the sub counties in Mitooma district, will guide us in directing the district resources towards improving the services in those poor performing areas in the district.

We look forward to the next round of surveys and we commit ourselves to supporting them.

  
Abenaitwe Robert  
For: Chief Administrative Officer  
Mitooma District



## Contents

Acknowledgements.....	ii
Message from the Chief Administrative Officer.....	i
List of Tables .....	iii
List of Figures.....	iv
Abbreviations.....	v
1. Introduction.....	1
2. Background to the survey .....	1
3. Selection of Interview Villages.....	1
4. Selection of Households and Respondents .....	2
5. Data Collection .....	2
6. Findings .....	2
6.1. HIV counseling and Testing (HCT).....	4
6.2. PMTCT knowledge and practices.....	9
6.3. HIV/AIDS knowledge and sexual behavior.....	11
6.4. Sexually Transmitted Infections (STI) knowledge .....	15
6.5. Knowledge on Tuberculosis.....	17
6.6. Knowledge and practices of Malaria prevention and treatment among mothers of children (0-11 months) .....	20
6.7. Reproductive Health and Family planning .....	22
6.8. Child survival.....	22
6.9. Sanitation .....	23
7. Conclusion .....	24
Appendix 1: List of indicators .....	24
Tally of assessed indicators .....	26
Appendix 2: LQAS Decision Rule table.....	27

## List of Tables

Table 1: Number of indicators below threshold by Service and Supervision Areas.....	3
Table 2: Individuals who know where they can be tested for HIV .....	4
Table 3: Individuals who know two or more benefits of HCT .....	5
Table 4: Individuals who have ever been counseled and tested for HIV .....	5
Table 5: Individuals who have ever been counseled, tested and received their HIV test results.....	6
Table 6: Individuals who were counseled and tested for HIV in the past 12 months.....	6
Table 7: Individuals who were counseled and tested for HIV in the past 12 months and know their HIV results .....	7
Table 8: Mothers who were counseled and received an HIV test during the last pregnancy and know their results.....	7
Table 9: Individuals who have ever tested for HIV and received their results as a couple .....	8
Table 10: Individuals who were tested for HIV and received their results and disclosed to their spouse/partner .....	8
Table 11: Individuals who know all 3 ways when HIV transmission occurs from an infected mother to child .....	9
Table 12: Individuals who know at least two key actions that reduce MTCT of HIV .....	10
Table 13: Individuals who know where they can get information and services to reduce the risk of HIV MTCT .....	10
Table 14: Mothers of children (0-11 months) who were counseled for PMTCT services during last pregnancy.....	11
Table 15: Individuals who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission.....	12
Table 16: Individuals who know at least two ways of preventing sexual transmission of HIV .....	12
Table 17: Individuals who have ever used a condom when having sexual intercourse.....	13
Table 18: Individuals who had sex with only one sexual partner in the last 12 month .....	13
Table 19: Individuals who have had sex with one sexual partner in last 12 months and report using a condom at last sexual intercourse .....	13
Table 20: Individuals who perceive low or no risk of getting HIV/AIDS infection.....	14
Table 21: Sexual behavior and circumcision among the youth .....	14
Table 22: Individuals who correctly identify at least two common symptoms of STIs in men.....	15
Table 23: Individuals who correctly identify at least two common symptoms of STIs in women.....	15
Table 24: Individuals who know three or more actions to take when she/he has a sexually transmitted infection .....	16
Table 25: Individuals who know a health facility where they can receive STI treatment .....	17
Table 26: Individuals who know that TB is a curable disease .....	18
Table 27: Individuals who know at least two signs and symptoms of TB.....	18
Table 28: Individuals who know how TB is transmitted .....	18
Table 29: Individuals who know the risk of not completing TB treatment .....	19
Table 30: Individuals who know the nearest place to receive TB treatment .....	20
Table 31: Details of the results for malaria treatment and practices among mothers of children (0-11 months) .....	21

Table 32: Details of the results for knowledge of malaria prevention among mothers of children (0-11 months) .....	21
Table 33: Details of the results for reproductive health and family planning knowledge and practices among women.....	22
Table 34: Children who are fully vaccinated .....	22
Table 35: Children with any of fever, diarrhea or pneumonia seeking care from health workers within 24 hours of illness .....	23
Table 36: Individuals Who Wash their Hands with Soap after Visiting the Toilet .....	23

**List of Figures**

Figure 1: Percent of indicators below threshold out of the total indicators for the service area.....	3
Figure 2: Number of indicators below thresholds for HCT .....	4
Figure 3: Number of flagged SAs for PMTCT .....	9
Figure 4: Number of flagged SAs for HIV/AIDS knowledge and sexual behavior .....	11
Figure 5: Number of flagged SAs for STI knowledge.....	15
Figure 6: Number of flagged SAs for TB knowledge.....	17
Figure 7: SAs flagged in knowledge and practices of Malaria prevention and treatment among mothers of children (0-11 months).....	20

## 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**

Mitooma district in South Western Uganda is bordered by Sheema District to the east, Rukungiri District to the west, Bushenyi District to the north and Ntungamo District to the south. Mitooma District was carved out of Bushenyi District in July 2010. Prior to then, the district was known as Ruhindi County. The district is made up of twelve sub counties of Bitereko, Kabira, Kanyabwanga, Kashenshero, Mitooma, Town Council, Mutara, Mitooma, Mayanga, Katenga, Kashenshero Town Council, Kiyanga and Rurehe. The altitude of the district is 1,600 Meters (5,249 ft) above sea level.

The 2002 national census estimated the population of Kabale district at 160,800, and as of January 2011, the exact of the district is not known.

## **2. Background to the survey**

Mitooma 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 program 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. 95 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.

#### **6. Findings**

Mitooma district is comprised of five supervision areas of: Kabira (Kabira, Rurehe & Mayanja), Mitooma (Katenga, Mitooma TC & Mitooma), Bitereko & Kashenshero, Mutara and Kiyanga & Kanyabwanga. Mitooma 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. Kiyanga & Kanyabwanga was the most flagged supervision area while Mutara had the least number flags for any indicator as shown in Table 1.

Table 1: Number of indicators below threshold by Service and Supervision Areas

Service areas	Supervision areas					Indicators		
	Kabira (Kabira, Rurehe & Mayanja)	Mitooma (Katenga, Mitooma TC & Mitooma)	Bitereko & Kashenshero	Mutara	Kiyanga & Kanyabwanga	Flagged	Total	Percent flagged
HIV counseling and Testing (HCT)	9	0	3	5	3	20	140	14.3
Prevention of Mother to Child Transmission of HIV (PMTCT)	1	0	1	0	2	4	80	5
HIV Knowledge and Sexual Behavior	3	5	5	0	3	16	105	15.2
Sexually Transmitted Infections (STI)	4	6	3	0	10	23	100	23
Tuberculosis	5	1	1	2	4	13	75	17.3
Malaria Prevention and Treatment	2	0	0	3	1	6	40	15
Reproductive Health and Family planning	0	0	0	1	1	2	20	10
Child Health	0	0	1	0	1	2	10	20
Sanitation	3	0	2	0	4	9	25	36
<b>Total number of red flags</b>	<b>27</b>	<b>12</b>	<b>16</b>	<b>11</b>	<b>29</b>	<b>95</b>	<b>595</b>	<b>16.0</b>

\*Counts are pooled for the target group

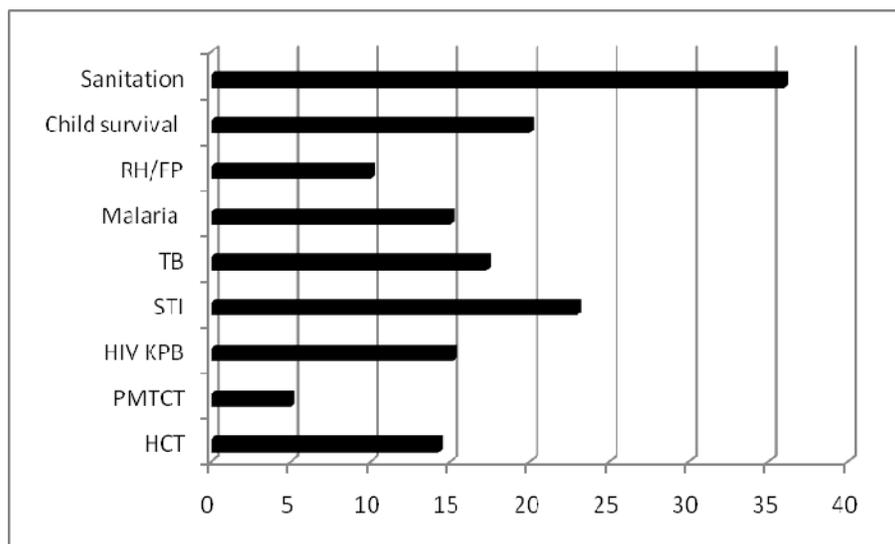


Figure 1: Percent of indicators below threshold out of the total indicators for the service area

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 for flagged indicators for HCT in Mitooma district SAs. Tables 2 – 10 give the survey results regarding knowledge and practices in HIV Counseling and Testing (HCT) across SAs in the district.

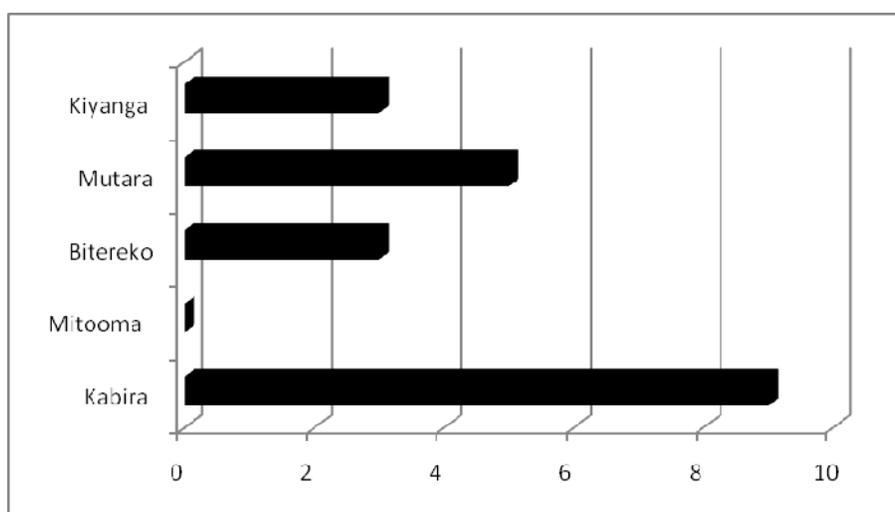


Figure 2: Number of indicators below thresholds for HCT

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)
Kabira (Kabira, Rurehe & Mayanja)	14	18	16	19	19
Mitooma (Katenga, Mitooma TC & Mitooma)	17	17	17	19	18
Bitereko & Kashenshero	17	18	19	18	19
Mutara	13*	18	17	17	16
Kiyanga & Kanyabwanga	16	18	14*	19	18
Average coverage (95% CI)	81.1 (73.0-89.1)	93.7 (88.7-98.6)	87.4 (80.6-94.2)	96.8 (93.2-100)	94.7 (90.2-99.3)
Threshold	14	16	15		16
Number of SAs below threshold	1	0	1		0

Knowledge of where HIV counseling and testing services can be found was below district average thresholds in Mutara among the youth and Kiyanga & Kanyabwanga among women. Men and mothers with babies knew where these services are offered as shown in Table 2.

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)
Kabira (Kabira, Rurehe & Mayanja)	9	9*	8*	12	11*
Mitooma (Katenga, Mitooma TC & Mitooma)	10	13	14	13	14
Bitereko & Kashenshero	7*	11	9	11*	12
Mutara	15	15	11	16	17
Kiyanga & Kanyabwanga	11	15	11	17	16
Average coverage (95% CI)	54.7 (44.5-64.9)	66.3 (56.6-75.9)	55.8 (45.6-65.9)	72.6 (63.5-81.7)	73.7 (64.6-82.7)
Threshold	8	11	9	12	12
Number of SAs below threshold	1	1	1	1	1

Table 3 shows that there were varied levels of knowledge of HCT benefits among the supervision areas. At least one target group performed poorly in each SA in the district with regard to lack of knowledge of HCT benefits.

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)
Kabira (Kabira, Rurehe & Mayanja)	12	10	9*
Mitooma (Katenga, Mitooma TC & Mitooma)	11	11	17
Bitereko & Kashenshero	5*	15	18
Mutara	4*	10	18
Kiyanga & Kanyabwanga	8	13	14
Average coverage (95% CI)	42.1 (31.9-52.2)	62.1 (52.1-72.0)	80.0 (71.8-88.2)
Threshold	6	10	13
Number of SAs below threshold	2	0	1

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)
Kabira (Kabira,Rurehe & Mayanja)	10	10	8*
Mitooma (Katenga, Mitooma TC & Mitooma)	11	11	17
Bitereko & Kashenshero	5	15	18
Mutara	2*	10	16
Kiyanga & Kanyabwanga	7	13	11*
Average coverage (95% CI)	36.8 (26.9-46.7)	62.1 (52.1-72.0)	73.6 (64.7-82.7)
Threshold	5	10	12
Number of SAs below threshold	1	0	2

Mutara SA was below the district average threshold for accessing HCT services and receiving results among the youth whereas for Kabira (Kabira,Rurehe & Mayanja) SA it was the women 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)
Kabira (Kabira,Rurehe & Mayanja)	4	3	3*
Mitooma (Katenga, Mitooma TC & Mitooma)	8	1	8
Bitereko & Kashenshero	4	4	9
Mutara	1*	1	8
Kiyanga & Kanyabwanga	5	4	6
Average coverage (95% CI)	23.2 (14.5-31.8)	13.6 (6.6-20.7)	35.8 (25.9-45.6)
Threshold	2	NA	5
Number of SAs below threshold	1	0	1

Mutara and Kabira (Kabira,Rurehe & Mayanja) supervision areas had each at least one target group with poor results for history of HIV counseling and testing as shown in Table 6.

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

<b>Supervision Areas</b>	<b>Youth (15-24 yrs)</b>	<b>Men (15-54 yrs)</b>	<b>Women (15-49 yrs)</b>
Kabira (Kabira,Rurehe & Mayanja)	3	3	3*
Mitooma (Katenga, Mitooma TC & Mitooma)	8	1	7
Bitereko & Kashenshero	4	4	9
Mutara	1*	1	7
Kiyanga & Kanyabwanga	5	4	7
Average coverage (95% CI)	22.1 (13.6-30.6)	13.6 (6.6-20.7)	34.7 (24.9-44.4)
Threshold	2	NA	4
Number of SAs below threshold	1	0	1

The results in Table 7 show a possible improvement in the 12 months prior to the survey, completion of the HIV counseling, testing and informing the clients of their results compared with the results in Table 5. The youth of Mutara and women of Kabira (Kabira,Rurehe & Mayanja) supervision areas were below the district average thresholds.

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

<b>Supervision Areas</b>	<b>Mothers of children (0-11 months)</b>
Kabira (Kabira,Rurehe & Mayanja)	18
Mitooma (Katenga, Mitooma TC & Mitooma)	19
Bitereko & Kashenshero	19
Mutara	18
Kiyanga & Kanyabwanga	15*
Average coverage (95% CI)	93.6 (88.7-98.7)
Threshold	16
Number of SAs below threshold	1

The survey showed that expectant mothers in Mitooma district have been counseled and tested for HIV and know their test 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)
Kabira (Kabira,Rurehe & Mayanja)	1	0
Mitooma (Katenga, Mitooma TC & Mitooma)	1	1
Bitereko & Kashenshero	4	5
Mutara	0	2
Kiyanga & Kanyabwanga	2	1
Average coverage (95% CI)	8.4 (2.7-14.1)	9.5 (3.5-15.5)
Threshold	NA	NA
Number of SAs below threshold	0	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.

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)
Kabira (Kabira,Rurehe & Mayanja)	10	10*	8*
Mitooma (Katenga, Mitooma TC & Mitooma)	10	11	15
Bitereko & Kashenshero	5	18	18
Mutara	3*	10*	17
Kiyanga & Kanyabwanga	6	13	12
Average coverage (95% CI)	35.7 (25.9-45.6)	65.3 (55.5-75.0)	73.6 (64.7-82.7)
Threshold	5	11	12
Number of SAs below threshold	1	2	1

Over 70% of the women and over 65% of the men who tested for HIV and received their results disclosed the results to their partners. The results in Table 10 show that the youth are still lagging on this indicator particularly in Mutara supervision area.

Kabira (Kabira,Rurehe & Mayanja) SA performed poorly compared to other SAs in the district in terms of HCT knowledge and practices among the men, women and mothers 12-3 months. Similarly, Bitereko & Kashenshero SA performed poorly among the youth and mothers of babies under one year old. Focus should be placed in improving performance among the poor performing target populations of Kabira (Kabira,Rurehe & Mayanja), Mutara , Kiyanga & Kanyabwanga and Bitereko & Kashenshero supervision areas.

## 6.2. PMTCT knowledge and practices

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

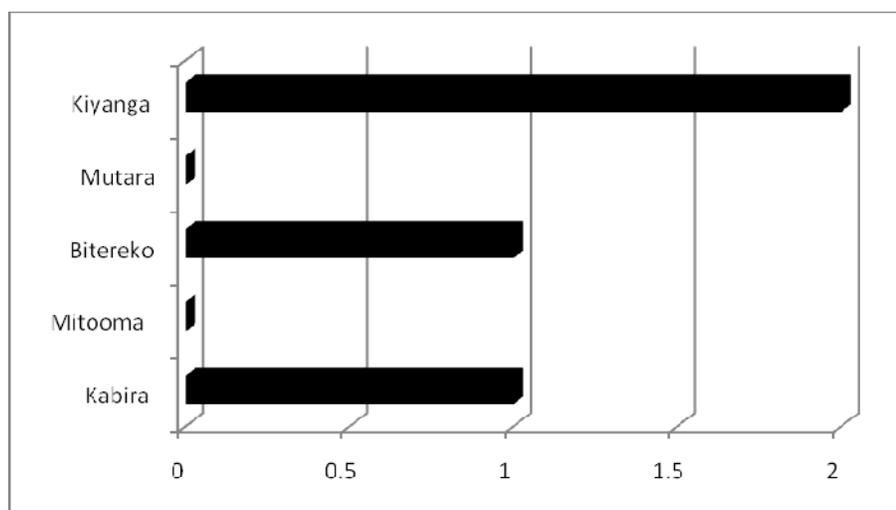


Figure 3: Number of flagged SAs for PMTCT

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)
Kabira (Kabira,Rurehe & Mayanja)	0	4	1*	2	1
Mitooma (Katenga, Mitooma TC & Mitooma)	0	0	3	2	2
Bitereko & Kashenshero	0	1	2	0*	3
Mutara	8	9	16	14	11
Kiyanga & Kanyabwanga	2	0	0*	2	0*
Average coverage (95% CI)	10.5 (4.2-16.8)	14.7 (7.5-21.9)	23.2 (14.5-31.7)	21.1 (12.7-29.4)	17.9 (10.0-25.7)
Threshold	NA	NA	2	2	1
Number of SAs below threshold	0	0	2	1	1

There were very low district average of knowledge of all three ways when HIV transmission occurs from an infected mother to child in all target populations. Supervision areas of Kabira (Kabira,Rurehe

& Mayanja) and Kiyanga & Kanyabwanga were below the district average threshold for women. Bitereko & Kashenshero and Kiyanga & Kanyabwanga SAs were below the district average thresholds for mothers with children under 1 year and mothers with children 12-23 months respectively as shown in Table 11.

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)
Kabira (Kabira,Rurehe & Mayanja)	10	12	11	13	19
Mitooma (Katenga, Mitooma TC & Mitooma)	14	12	12	14	14
Bitereko & Kashenshero	9	9	12	17	13
Mutara	11	12	14	12	14
Kiyanga & Kanyabwanga	10	12	14	13	16
Average coverage (95% CI)	56.8 (46.7-66.9)	60.0 (49.9-70.0)	66.3 (56.6-75.9)	72.6 (63.5-81.7)	80.0 (71.8-88.2)
Threshold	9	9	11	12	13
Number of SAs below threshold	0	0	0	0	0

Table 12 shows that no supervision area was flagged on the indicator for knowledge on how HIV transmission from mother to child can be reduced is fair across all SAs in the district.

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)
Kabira (Kabira,Rurehe & Mayanja)	14	16	14	19	19
Mitooma (Katenga, Mitooma TC & Mitooma)	18	14	15	17	19
Bitereko & Kashenshero	14	13	15	18	19
Mutara	13	17	18	18	18
Kiyanga & Kanyabwanga	13	13	14	19	18
Average coverage (95% CI)	75.8 (67.0-84.5)	76.8 (68.2-85.5)	80.0 (71.8-88.2)	95.7 (91.6-99.9)	97.8 (94.9-100)
Threshold	13	13	13		
Number of SAs below threshold	0	0	0		

The results in Table 13 show that the people in Mitooma district know where information on reduction of HIV MTCT can be obtained.

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)
Kabira (Kabira,Rurehe & Mayanja)	15
Mitooma (Katenga, Mitooma TC & Mitooma)	15
Bitereko & Kashenshero	17
Mutara	15
Kiyanga & Kanyabwanga	12*
Average coverage (95% CI)	77.8 (69.4-86.4)
Threshold	13
Number of SAs below threshold	0

Knowledge of ways when HIV transmission occurs from an infected mother to child is extremely low in Mitooma across all survey target groups and in all supervision areas. Although the survey results show that not all recently pregnant women were counseled on how to prevent HIV vertical transmission, nearly 80% were counseled as shown in Table 14.

### 6.3. HIV/AIDS knowledge and sexual behavior

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

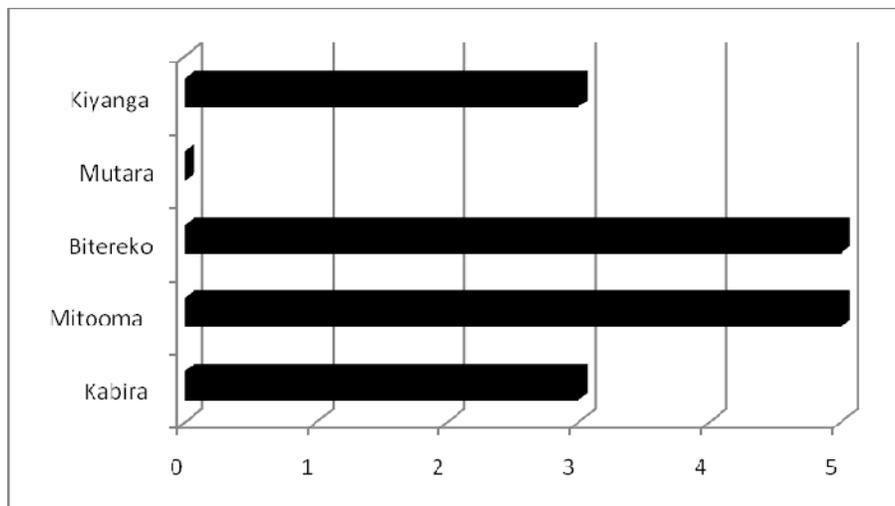


Figure 4: Number of flagged SAs for HIV/AIDS knowledge and sexual behavior

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)
Kabira (Kabira,Rurehe & Mayanja)	5	5	5	2	4
Mitooma (Katenga, Mitooma TC & Mitooma)	3	7	3	3	2
Bitereko & Kashenshero	1*	2*	3	1*	0*
Mutara	9	9	11	11	9
Kiyanga & Kanyabwanga	7	6	6	4	5
Average coverage (95% CI)	26.3 (17.3-35.3)	30.5 (21.1-39.9)	29.5 (20.1-38.8)	22.1 (13.6-30.6)	21.1 (12.7-29.4)
Threshold	3	4	3	2	2
Number of SAs below threshold	1	1	0	1	1

The survey population in Mitooma district demonstrated very poor knowledge of ways of preventing the sexual transmission of HIV, and rejection of major misconceptions about HIV transmission. Table 15 shows that the situation is prominent among the youth, men, and mothers with young babies in Bitereko & Kashenshero supervision area.

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)
Kabira (Kabira,Rurehe & Mayanja)	11	12	9*	8*	9
Mitooma (Katenga, Mitooma TC & Mitooma)	10	13	8*	7*	6*
Bitereko & Kashenshero	13	15	12	13	12
Mutara	12	16	18	17	13
Kiyanga & Kanyabwanga	11	12	12	11	12
Average coverage (95% CI)	60.0 (49.9-70.0)	71.6 (62.3-80.8)	62.1 (52.2-72.0)	58.9 (48.8-69.0)	54.7 (44.5-64.9)
Threshold	9	12	10	9	8
Number of SAs below threshold	0	0	2	2	1

Although the survey showed over 50 percent 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 women and mothers of very young children in Kabira (Kabira, Rurehe & Mayanja) and Mitooma (Katenga, Mitooma TC & Mitooma) supervision areas.

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)
Kabira (Kabira, Rurehe & Mayanja)	6	3	3
Mitooma (Katenga, Mitooma TC & Mitooma)	6	3	3
Bitereko & Kashenshero	9	6	2
Mutara	5	3	1
Kiyanga & Kanyabwanga	2*	3	4
Average coverage (95% CI)	32.6 (22.4-42.7)	20.7 (12.0-29.4)	11.5 (5.0-18.1)
Threshold	4	2	NA
Number of SAs below threshold	1	0	0

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

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

Supervision Areas	Men (15-54 yrs)	Women (15-49 yrs)
Kabira (Kabira, Rurehe & Mayanja)	13*	13*
Mitooma (Katenga, Mitooma TC & Mitooma)	16	17
Bitereko & Kashenshero	14	17
Mutara	18	17
Kiyanga & Kanyabwanga	16	16
Average coverage (95% CI)	81.1 (71.7-88.3)	84.2 (75.3-90.8)
Threshold	14	16
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)
Kabira (Kabira, Rurehe & Mayanja)	12*	16
Mitooma (Katenga, Mitooma TC & Mitooma)	10*	16
Bitereko & Kashenshero	13*	17
Mutara	18	18

Kiyanga & Kanyabwanga	14	14*
Average coverage (95% CI)	81.7 (73.1-90.3)	98.8 (96.4-100)
Threshold	14	NA
Number of SAs below threshold	3	NA

Table 19 shows the high level of safe sexual behavior among the men and women of Mitooma district. Men, however, Kabira (Kabira, Rurehe & Mayanja), Mitooma (Katenga, Mitooma TC & Mitooma) and Bitereko & Kashenshero supervision areas were below the district average threshold.

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)
Kabira (Kabira, Rurehe & Mayanja)	8	2	2
Mitooma (Katenga, Mitooma TC & Mitooma)	7*	3	3
Bitereko & Kashenshero	17	1	1
Mutara	13	3	2
Kiyanga & Kanyabwanga	4*	2	1
Average coverage (95% CI)	51.6 (41.3-61.8)	11.6 (5.0-18.1)	9.5 (3.5-15.5)
Threshold	8	NA	NA
Number of SAs below threshold	2	0	0

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
Kabira (Kabira, Rurehe & Mayanja)	1	8
Mitooma (Katenga, Mitooma TC & Mitooma)	0	5
Bitereko & Kashenshero	0	3
Mutara	0	0*
Kiyanga & Kanyabwanga	1	7
Average coverage (95% CI)	2.1 (0.1-5.0)	24.2 (15.4-32.9)
Threshold	NA	2
Number of SAs below threshold	0	1

The district authorities need to reinforce proper condom use strategies among all population groups as evidenced by the information in Table 20 and Table 21

#### 6.4. Sexually Transmitted Infections (STI) knowledge

Tables 22 – 25 show survey results of knowledge of sexually transmitted infections (STI). Figure 5 shows that only Mutara SA had no group whose knowledge about STI was under par.

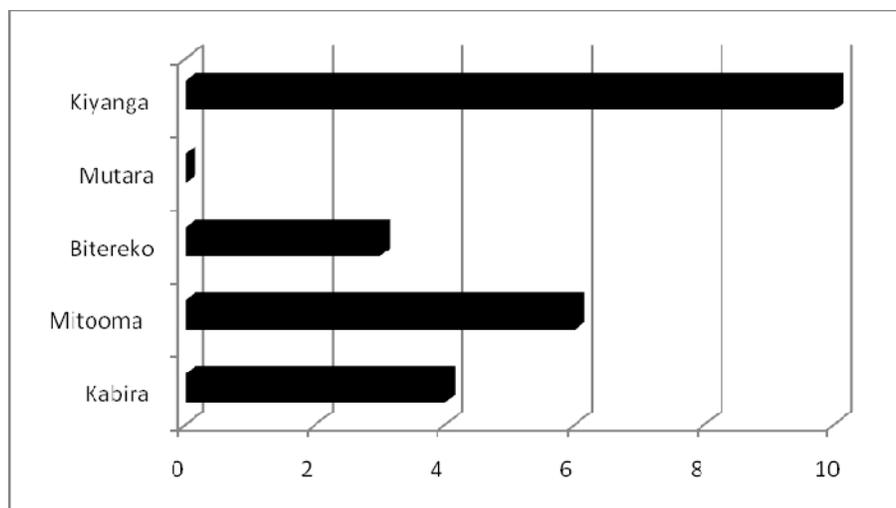


Figure 5: Number of flagged SAs for STI knowledge

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)
Kabira (Kabira, Rurehe & Mayanja)	11	17	8	6	9
Mitooma (Katenga, Mitooma TC & Mitooma)	9	11*	14	13	10
Bitereko & Kashenshero	14	17	9	10	14
Mutara	13	17	12	9	13
Kiyanga & Kanyabwanga	4*	10*	2*	3*	2*
Average coverage (95% CI)	53.7 (43.5-63.9)	75.8 (60.7-84.5)	47.4 (37.1-57.6)	43.2 (33.0-53.3)	50.5 (40.3-60.7)
Threshold	8	13	7	6	8
Number of SAs below threshold	1	2	1	1	1

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)
Kabira (Kabira, Rurehe & Mayanja)	10	15	10	10*	12

<b>Supervision Areas</b>	<b>Youth (15-24 yrs)</b>	<b>Men (15-54 yrs)</b>	<b>Women (15-49 yrs)</b>	<b>Mothers of children (0-11 months)</b>	<b>Mothers of children (12-23 months)</b>
Mitooma (Katenga, Mitooma TC & Mitooma)	11	7*	11	17	15
Bitereko & Kashenshero	11	11	16	16	17
Mutara	9	12	17	18	16
Kiyanga & Kanyabwanga	3*	6*	8*	7*	8*
Average coverage (95% CI)	46.3 (36.1-56.5)	53.6 (43.5-63.9)	65.3 (55.5-75.0)	71.6 (62.3-80.0)	71.6 (62.3-80.0)
Threshold	7	8	11	12	12
Number of SAs below threshold	1	2	1	2	1

Kiyanga & Kanyabwanga supervision area had the results the indicators as shown in Table 22 and Table 23.

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

<b>Supervision Areas</b>	<b>Youth (15-24 yrs)</b>	<b>Men (15-54 yrs)</b>	<b>Women (15-49 yrs)</b>	<b>Mothers of children (0-11 months)</b>	<b>Mothers of children (12-23 months)</b>
Kabira (Kabira,Rurehe & Mayanja)	4*	5*	6	7	5
Mitooma (Katenga, Mitooma TC & Mitooma)	7	4*	2*	4*	3*
Bitereko & Kashenshero	4*	5*	6	3*	6
Mutara	14	11	13	13	11
Kiyanga & Kanyabwanga	10	14	9	9	7
Average coverage (95% CI)	41.1 (30.9-51.1)	41.1 (30.9-51.1)	37.9 (27.9-47.8)	37.9 (27.9-47.8)	33.6 (24.0-43.3)
Threshold	6	6	5	5	4
Number of SAs below threshold	2	3	1	2	1

The LQAS community survey in Mitooma district highlighted the need for educating the population; youth, men, women and mothers of young children on sexually transmitted infections. People do not know the common symptoms and consequently do not know what to do if they have a sexually transmitted infection. Kabira (Kabira,Rurehe & Mayanja) SA among the youth and men, Mitooma (Katenga, Mitooma TC & Mitooma) SA among men, women and mothers with young babies as well as Bitereko & Kashenshero SA among the youth, men and mothers with children 0-11months had

results below the district average thresholds in identifying corrective actions on the individuals in case of 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)
Kabira (Kabira, Rurehe & Mayanja)	14*	18	16	19	19
Mitooma (Katenga, Mitooma TC & Mitooma)	18	17	18	18	18
Bitereko & Kashenshero	19	18	19	17	17
Mutara	18	19	18	18	19
Kiyanga & Kanyabwanga	18	17	17	17	19
Average coverage (95% CI)	91.5 (85.9-97.3)	93.7 (88.7-98.7)	92.6 (87.3-97.9)	93.7 (88.7-98.6)	96.8 (93.3-100)
Threshold	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.

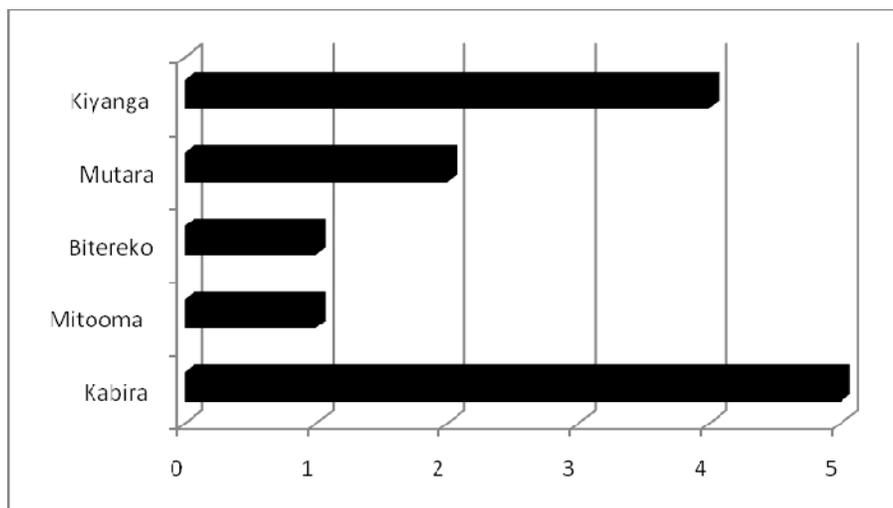


Figure 6: Number of flagged SAs for TB knowledge

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)
Kabira (Kabira,Rurehe & Mayanja)	11*	15	15
Mitooma (Katenga, Mitooma TC & Mitooma)	15	15	16
Bitereko & Kashenshero	13	18	19
Mutara	16	18	18
Kiyanga & Kanyabwanga	13	17	15
Average coverage (95% CI)	71.6 (62.3-80.8)	87.3 (80.5-94.2)	87.4 (80.5-94.2)
Threshold	12	15	15
Number of SAs below threshold	1	0	0

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 Kabira (Kabira, Rurehe & Mayanja) supervision area as shown in Table 26.

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)
Kabira (Kabira,Rurehe & Mayanja)	12	10*	9*
Mitooma (Katenga, Mitooma TC & Mitooma)	7*	11	10
Bitereko & Kashenshero	17	15	18
Mutara	13	18	17
Kiyanga & Kanyabwanga	9*	10*	7*
Average coverage (95% CI)	61.1 (51.1-71.0)	67.4 (57.7-76.9)	64.2 (54.4-74.0)
Threshold	10	11	10
Number of SAs below threshold	2	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)
Kabira (Kabira,Rurehe & Mayanja)	15	13	12

<b>Supervision Areas</b>	<b>Youth (15-24 yrs)</b>	<b>Men (15-54 yrs)</b>	<b>Women (15-49 yrs)</b>
Mitooma (Katenga, Mitooma TC & Mitooma)	17	15	17
Bitereko & Kashenshero	13	14	15
Mutara	10*	15	11*
Kiyanga & Kanyabwanga	14	16	12
Average coverage (95% CI)	72.6 (63.5-81.7)	76.8 (68.2-85.4)	70.5 (61.2-79.8)
Threshold	12	13	12
Number of SAs below threshold	1	0	1

Knowledge on TB signs and mode of transmission ranged between 60% and 70% (See Table 27), but there are supervision areas below district average threshold on knowledge such as Kiyanga & Kanyabwanga (among youth, men and women) and Kabira (Kabira, Rurehe & Mayanja) (among men and women).

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

<b>Supervision Areas</b>	<b>Youth (15-24 yrs)</b>	<b>Men (15-54 yrs)</b>	<b>Women (15-49 yrs)</b>
Kabira (Kabira, Rurehe & Mayanja)	12	9*	4*
Mitooma (Katenga, Mitooma TC & Mitooma)	16	17	12
Bitereko & Kashenshero	10*	12	13
Mutara	15	15	14
Kiyanga & Kanyabwanga	11	9*	11
Average coverage (95% CI)	67.4 (57.8-76.9)	65.3 (55.5-75.0)	56.8 (46.7-66.9)
Threshold	11	11	9
Number of SAs below threshold	1	2	1

Knowledge of the risks associated with not completing TB treatment was low across target populations and especially in Kabira SA (among men and women), Bitereko & Kashenshero SA (among the youth) and . Kiyanga & Kanyabwanga SA (among the men), as shown in Table 29.

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)
Kabira (Kabira,Rurehe & Mayanja)	16	19	17
Mitooma (Katenga, Mitooma TC & Mitooma)	19	18	19
Bitereko & Kashenshero	17	19	16
Mutara	19	19	17
Kiyanga & Kanyabwanga	17	19	18
Average coverage (95% CI)	92.6 (87.3-97.9)	98.9 (96.8-100)	91.6 (85.9-97.3)
Threshold	16	NA	16
Number of SAs below threshold	0	NA	0

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

Figure 7 shows that Mutara SA performed poorly in comparison with other SAs for most malaria knowledge and prevention practices indicators. It was closely followed by Kabira (Kabira,Rurehe & Mayanja) and Kiyanga & Kanyabwanga Municipality SAs. Details of the malaria indicators are given in Tables 31 and 32

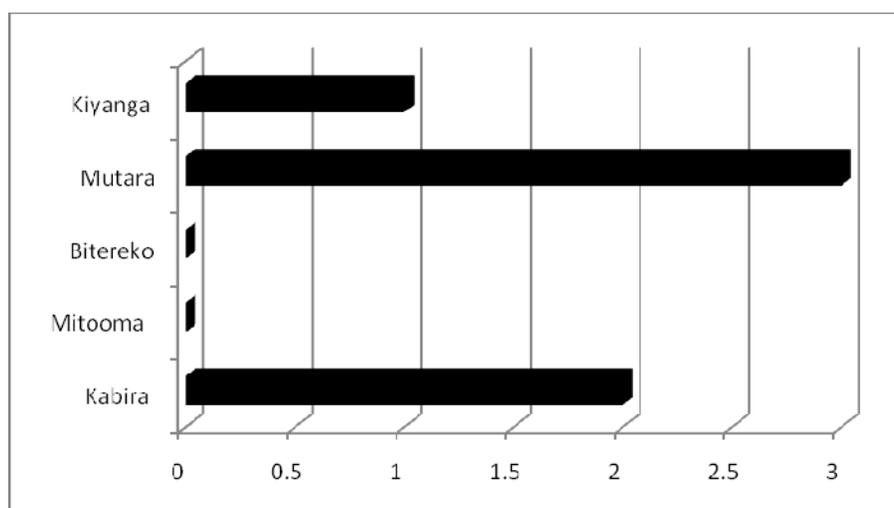


Figure 7: SAs flagged in knowledge and practices of Malaria prevention and treatment among mothers of children (0-11 months)

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
Kabira (Kabira,Rurehe & Mayanja)	2	11	17	11
Mitooma (Katenga, Mitooma TC & Mitooma)	4	11	15	13
Bitereko & Kashenshero	3	15	15	12
Mutara	6	7*	10*	12
Kiyanga & Kanyabwanga	4	6*	14	12
Average coverage (95% CI)	20.0 (11.8-28.2)	52.6 (42.4-62.8)	75.7 (67.0-84.5)	63.2 (53.3-73.0)
Threshold	1	8	13	10
Number of SAs below threshold	0	2	1	0

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
Kabira (Kabira,Rurehe & Mayanja)	3*	8*	16	18
Mitooma (Katenga, Mitooma TC & Mitooma)	6	10	19	17
Bitereko & Kashenshero	7	13	19	18
Mutara	15	17	17	11*
Kiyanga & Kanyabwanga	5	12	16	14
Average coverage (95% CI)	37.9 (27.9-47.8)	63.2 (53.3-73.0)	91.6 (85.9-97.3)	82.1 (74.3-89.9)
Threshold	5	10	16	14
Number of SAs below threshold	1	1	0	1

Table 31 shows that treatment for malaria among children is very low in the district as is IPT use to the minimum recommended dosage during the previous pregnancy. Although there was generally good levels of knowledge about how malaria is transmitted (Table 32), the knowledge among mothers

on prevention from Kabira (Kabira,Rurehe & Mayanja)SA was lower than the district average. Similarly fewer households in Mutara SA had at least one ITN in comparison with other SAs.

## 6.7. Reproductive Health and Family planning

Most mothers did not attend the minimum required ANC visits during their previous pregnancy (see Table 33). The performance was lowest in Mutara and Kiyanga & Kanyabwanga SAs. Deliveries however tended to have a higher equal chance of occurring in a health facility. In most deliveries (74%), a health worker was involved. Improvement however needs to be targeted at MutaraSA.

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			Women (15-49 yrs) 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	desire to use a family planning method but cannot access it
Kabira (Kabira,Rurehe & Mayanja)	8	13	17	2
Mitooma (Katenga, Mitooma TC & Mitooma)	11	12	15	3
Bitereko & Kashenshero	9	14	14	0
Mutara	2*	12	12	2
Kiyanga & Kanyabwanga	4*	11	12	2
Average coverage (95% CI)	35.8 (25.9-45.6)	65.3 (55.5-75.0)	73.6 (64.7-82.7)	9.5 (3.5-15.4)
Threshold	5	11	12	NA
Number of SAs below threshold	2	0	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. Kiyanga & Kanyabwanga SA performed poorly in having children fully immunized and Bitereko & Kashenshero SA was below district average for children with any of fever, diarrhea or pneumonia seeking care.

Table 34: Children who are fully vaccinated

Supervision Areas	
Kabira (Kabira,Rurehe & Mayanja)	14
Mitooma (Katenga, Mitooma TC & Mitooma)	19
Bitereko & Kashenshero	17
Mutara	18
Kiyanga & Kanyabwanga	12*
Average coverage	84.2

<b>Supervision Areas</b>	
(95% CI)	(76.7-91.7)
Threshold	14
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

<b>Supervision Areas</b>	
Kabira (Kabira,Rurehe & Mayanja)	10
Mitooma (Katenga, Mitooma TC & Mitooma)	11
Bitereko & Kashenshero	7*
Mutara	8
Kiyanga & Kanyabwanga	12
Average coverage	50.5
(95% CI)	(40.3-60.7)
Threshold	8
Number of SAs below threshold	1

## 6.9. Sanitation

In Table 36, hand washing with soap after visiting a toilet was low across most population groups surveyed in Kiyanga & Kanyabwanga SA in comparison with the district average performance. Women tended not to wash their hands in most SAs in comparison with other population groups.

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

<b>Supervision Areas</b>	Youth (15-24 yrs)	Men (15-54 yrs)	Women (15-49 yrs)	Mothers of children (0-11 months)	Mothers of children (12- 23 months)
<b>8.4 Individuals who wash their hands with soap after visiting the toilet</b>					
Kabira (Kabira,Rurehe & Mayanja)	13	1*	4*	16	0*
Mitooma (Katenga, Mitooma TC & Mitooma)	16	17	17	16	13
Bitereko & Kashenshero	12	10	7*	9*	11
Mutara	17	17	19	18	19
Kiyanga & Kanyabwanga	1*	2*	3*	13	3*
Average coverage (95% CI)	62.1 (52.2-72.0)	49.5 (39.2-59.7)	52.6 (42.2-62.8)	75.7 (67.0-84.5)	48.4 (41.3-61.8)
Threshold	10	7	8	13	7
Number of SAs below threshold	1	2	3	1	2

## 7. Conclusion

The LQAS community survey results show that performance improvement effort is most required in the Kiyanga & Kanyabwanga, Kabira (Kabira, Rurehe & Mayanja) and Bitereko & Kashenshero supervision areas. The district should investigate the reasons for pockets of poor performance in all service areas, apart from reproductive health and family planning.

## Appendix 1: List of indicators

SN	Indicator	Status
<b>1</b>	<b>HIV counseling and Testing (HCT)</b>	
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 as and disclosed to their spouse/partner	Assessed
<b>2</b>	<b>Prevention of Mother to Child Transmission of HIV (PMTCT)</b>	
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
<b>3</b>	<b>HIV Knowledge and Behavior Change</b>	
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 <b>ALWAYS</b> used a condom when they had sexual intercourse with a non marital or non cohabiting sexual partner in the last 12 months	Not Assessed

SN	Indicator	Status
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
<b>4</b>	<b>Sexually Transmitted Infections (STI)</b>	
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
<b>5</b>	<b>Tuberculosis</b>	
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
<b>6</b>	<b>Malaria Prevention and Treatment</b>	
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
<b>7</b>	<b>Reproductive Health and Family planning</b>	
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 <b>desire</b> to use a family planning method but cannot access it.	Assessed
<b>8</b>	<b>Child survival indicators</b>	
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	Assessed

SN	Indicator	Status
	from health workers within 24 hours of illness	
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
<b>Total</b>	<b>46</b>	<b>56</b>

## 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								
13	N/A	N/A	1	1	2	3	3	4	5	6	6	7	8	8	9	10	11	11								
14	N/A	N/A	1	1	2	3	4	4	5	6	7	8	8	9	10	11	11	12								
15	N/A	N/A	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13								
16	N/A	N/A	1	2	2	3	4	5	6	7	8	9	9	10	11	12	13	14								
17	N/A	N/A	1	2	2	3	4	5	6	7	8	9	10	11	11	12	13	14								
18	N/A	N/A	1	2	2	3	5	6	7	8	9	10	11	11	12	13	14	16								
19	N/A	N/A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16								
20	N/A	N/A	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17								
21	N/A	N/A	1	2	3	4	5	6	8	9	10	11	12	13	14	16	17	18								
22	N/A	N/A	1	2	3	4	5	7	8	9	10	12	13	14	15	16	18	19								
23	N/A	N/A	1	2	3	4	6	7	8	10	11	12	13	14	16	17	18	20								
24	N/A	N/A	1	2	3	4	6	7	9	10	11	13	14	15	16	18	19	21								
25	N/A	N/A	2	2	4	5	6	8	9	10	11	13	14	16	17	18	20	21								
26	N/A	N/A	2	3	4	5	6	8	9	11	12	14	15	16	18	19	21	22								
27	N/A	N/A	2	3	4	5	7	8	10	11	13	14	15	17	18	20	21	23								
28	N/A	N/A	2	3	4	5	7	8	10	12	13	15	16	18	19	21	22	24								
29	N/A	N/A	2	3	4	5	7	9	10	12	13	15	17	18	20	21	23	25								
30	N/A	1	2	3	4	5	7	9	11	12	14	16	17	19	20	22	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 5%.

# ***STRENGTHENING DISTRICT MONITORING & EVALUATION SYSTEMS***

## **Acknowledgements**

Developed with support and funding from USAID under terms of the Cooperative Agreement 617-A-00-09-00006-00 with Management Sciences for Health (MSH)