

# **Output-Based Aid to Treat Sexually-Transmitted Infections in Southwestern Uganda**

**A Study of the Impact of the Program on Participating Clinics**

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## TABLE OF CONTENTS

<b>Executive Summary and Key Findings</b> .....	3
<b>Introduction</b> .....	5
<b>A. Clinic Evaluation</b> .....	7
<b>Evaluation Strategy</b> .....	7
<b>B. Establishing Suitability of Clinics for Data Collection</b> .....	9
<b>Clinic Record Keeping</b> .....	12
<b>Accessing Clinic Laboratory Records</b> .....	13
<b>C. Data Collection</b> .....	15
<b>Collection of Data from Laboratory Records</b> .....	15
<b>Issues Concerning Laboratory Data and Record Keeping</b> .....	16
<b>D. Facility Infrastructure Survey Information</b> .....	18
<b>E. Analysis of Laboratory Data from Records</b> .....	23
<b>Client Visits at Clinics</b> .....	23
<b>Financial Benefits for OBA Clinics</b> .....	25
<b>Prevalence of Sexually Transmitted Infections (STIs) in Patient Populations</b> .....	26
<b>F. Conclusions and Recommendations</b> .....	28
<b>Appendix 1. Facility Infrastructure Survey</b> .....	29
<b>Appendix 2. Reasons why claims are adjusted or rejected during processing</b> .....	34
<b>Appendix 3: Performance graphs related to claims processing for individual clinics in the OBA program (July 2006 – August 2007)</b> .....	35

## Executive Summary and Key Findings

The Healthy Life voucher program, a treatment initiative for sexually transmitted infections (STIs) and financed on an output-based aid model (OBA), was implemented in southwestern Uganda by Marie Stopes International, Microcare Limited, the Ministry of Health and the KfW Development Bank in July 2006. Between June and August 2007, an evaluation was conducted to assess the impact of the program on participating clinics.

Clinics were assessed for suitability for data collection based on a number of factors. Details of how clinics recorded the type of client seeking the test (OBA or non-OBA client) and how client details and laboratory test findings were recorded are documented as is the process used to convert this information into data suitable for analysis. A short facility infrastructure survey was also conducted at each provider clinic and informal discussions with staff provided information regarding provider perceptions of the ONS program.

Laboratory records of selected participating clinics in the year of the OBA program and the year prior to the start of the program were analyzed to determine whether program-related activities such as the Behavior Change and Communication (BCC) strategies had resulted in an increase in the number of clients seeking STI treatment in the year of OBA. Key findings are shown below:

- 12,303 client visits recorded in year one at the 18 clinics that began the program
- Seven clinics found to be suitable for data collection.
- Among the seven clinics surveyed, non-OBA client visits for STI-related laboratory tests increased by an average of 32% in the first year of OBA compared to the year prior to OBA. Some clinics saw considerable increases while others recorded a decrease in non-OBA client numbers.
- Total client visits (OBA and non-OBA) increased by 226% for the same period, with all clinics experiencing an increase from the first year to the second. This indicates a large contribution to client visits from OBA clients.

An assessment of clinic performance based on claims submitted for processing gave an indication of clinics' adherence to program guidelines. For all clinics, high performance is judged by percent of monthly claims that are fully paid as opposed to adjusted, quarantined or rejected. Key findings are shown below:

- Percent fully paid at all clinics increased from around 30% at the start of the program to over 70% after one year.
- Considerable variation in claims quality was seen at individual clinics. Some reported over 90% of claims were fully paid each month while others were around 50%, with considerable inconsistencies from month to month.

Characteristics of STI-related tests were also collected and analyzed and key findings are shown below:

- Percent of STI tests as a fraction of all laboratory tests increased from 13% to 18% from the first to second year.
- Percent of syphilis tests and percent of positive of syphilis tests decreased slightly.
- Percent positive gonorrhea tests more than doubled, indicating increased awareness of this infection in the community and at provider clinics.

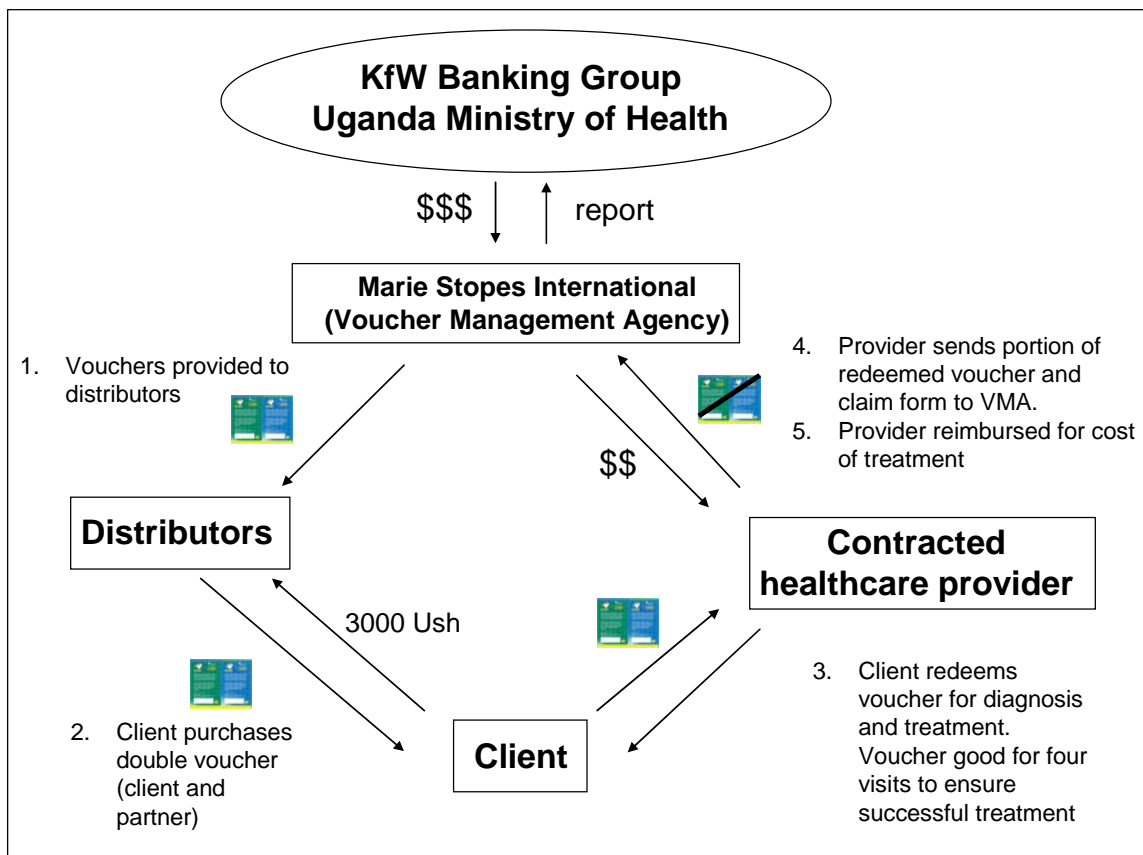
The clinic evaluation has showed that the OBA program has had a significant impact on the numbers of clients seeking STI diagnosis and/or treatment both within the OBA program and outside of it. Whether patient substitution from non-OBA clinics is occurring is not known, but use of control clinics, either government or private would help to answer this question. Graphical representation of individual clinic performance shows that the level of adherence to program guidelines by clinics varies considerably. However, this assessment also helps to identify clinics that require further assistance and training. Analysis of the reasons why claims are adjusted, quarantined or rejected could also help in identifying specific areas of training required by clinics. Finally, collection of laboratory test data from clinics entering the program could help identify the most common complaints among a community and help to direct further training at participating clinics.

## Introduction

The Healthy Life program was implemented by Marie Stopes International (MSI), in collaboration with the Ugandan Ministry of Health (MOH) and the KfW Banking Group in July 2006 in four districts of southwestern Uganda: Mbarara, Ibanda, Kirihera and Isingiro. The program treats sexually transmitted infections (STI) reimbursing providers for the diagnosis and full course of treatment under an output-based aid (OBA) model.

Client treatment is monitored using a system of vouchers which are purchased at general retailers and community drug shops and then redeemed for STI treatment at contracted providers. During the client consultation, the provider completes a claim form which contains client demographics, the examination and laboratory results, a diagnosis and details of the course of treatment prescribed. Clients are entitled to a total of four visits to ensure that they have been successfully treated. A new claims form is completed at each visit. Claims forms are sent to the voucher management office in Mbarara town. Following a review for irregularities and non-compliance with program treatment guidelines, the provider is reimbursed using an electronic transfer of funds to the provider's bank account. A program schematic is shown in Figure 1.

**Figure 1. Road Map of the STI OBA Voucher Program in Southwestern Uganda**





## **A. Clinic Evaluation**

The purpose of the evaluation described in this report is to determine the impact of the OBA program on the participating provider clinics. While the number of clients treated at each clinic under the OBA program can be determined from the information provided on the claims forms, the numbers of clients seeking STI treatment in the period preceding the program was not known. The two time periods selected for study were July 2005-June 2006, the year directly preceding the implementation of the OBA program, and July 2006-June 2007, which represents the first year of the OBA program.<sup>1</sup>

Answers to a number of pertinent questions were sought and an evaluation strategy was designed with the following questions in mind.

1. Did clinics seeing greater numbers of STI patients in the first year of OBA compared to the year before OBA, and more importantly, did these clients represent a larger percentage of the total clients seen at the clinic?
2. Did a greater percentage of clients seeking STI diagnosis and treatment testing positive for a specific STI in the first year of OBA compared to the previous year?
3. Do clinics still see significant numbers of non-OBA clients seeking STI diagnosis and treatment or did most STI clients switch to the OBA voucher when seeking STI treatment?
4. Has the quality of STI diagnosis and treatment improved at the provider clinics as a result of the training of clinic staff in these areas?
5. Are clinics seeing an increase in overall client numbers as a result of advertising and marketing of the program through the Behaviour Change and Communication (BCC) strategy?
6. Has the OBA program benefited clinics financially and is the reimbursement sufficient?

### **Evaluation Strategy**

Laboratory and out-patient records from nine of 16 clinics provided information regarding numbers of clients who sought diagnosis and treatment for STIs. Records from six clinics were not reviewed given a lack of time. At the nine clinics, records of clients in the year prior to the OBA program (July 2005-June 2006) were compiled to provide a baseline picture of the situation in clinics before the program. Records of non-OBA clients seeking STI treatment during the first year of the OBA program (July 2006-June 2007) were also analyzed to determine whether, among other questions, significant numbers were still seeking treatment without OBA vouchers.

A short facility survey was also carried out to investigate whether the resources available at clinics affect the numbers of clients successfully diagnosed and treated. The providers' resources and skills vary greatly among the 16 clinics and an effort was made to determine

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<sup>1</sup> Clinics began serving clients on July 17, but vouchers were distributed to drug shops and retailers before this date. The timing of the evaluation (June – mid-August 2007) meant that it was not feasible to collect all clinic data up to July 17 2007. Records were compiled up to June 30 2007.

whether these factors affect the quality of service being provided. Informal discussions with clinical and laboratory staff gave information on providers' impressions of the OBA program.

Information for OBA clients attending clinics was provided using information from the Voucher Management Utilisation System (VMUS) database. This database was designed and is managed by Microcare Limited of Uganda and was compiled from claims forms completed by providers at the time of the client visit. 52 fields regarding demographics, presenting syndromes, results of laboratory findings, diagnoses and treatment details are created from the claim form and can be used to monitor the progress of the OBA scheme.

Information from this database, together with the data collected from the clinics enabled us to draw comparisons between utilization of STI diagnosis and treatment services before OBA and during the first year of the OBA program.

## **B. Establishing Suitability of Clinics for Data Collection**

Eighteen clinics were initially contracted to provide STI diagnosis and treatment in the OBA program. After several months of the program, two clinics had dropped out of the scheme (Kazo Central Clinic and Zzimbe Clinic) and treatment at a third had been suspended pending a review of its services (Ibanda Central Clinic). Another clinic was contracted in late April 2007 (Clinic Africa Medical Centre, Isingiro).

The evaluation began on June 4 2007 at which time there were 16 clinics in the program. We recognized that it would not be possible to collect data from all the clinics in the time permitted for the evaluation (two months) so up to 10 clinics were selected from which to collect data. Clinic selection was based on three factors:

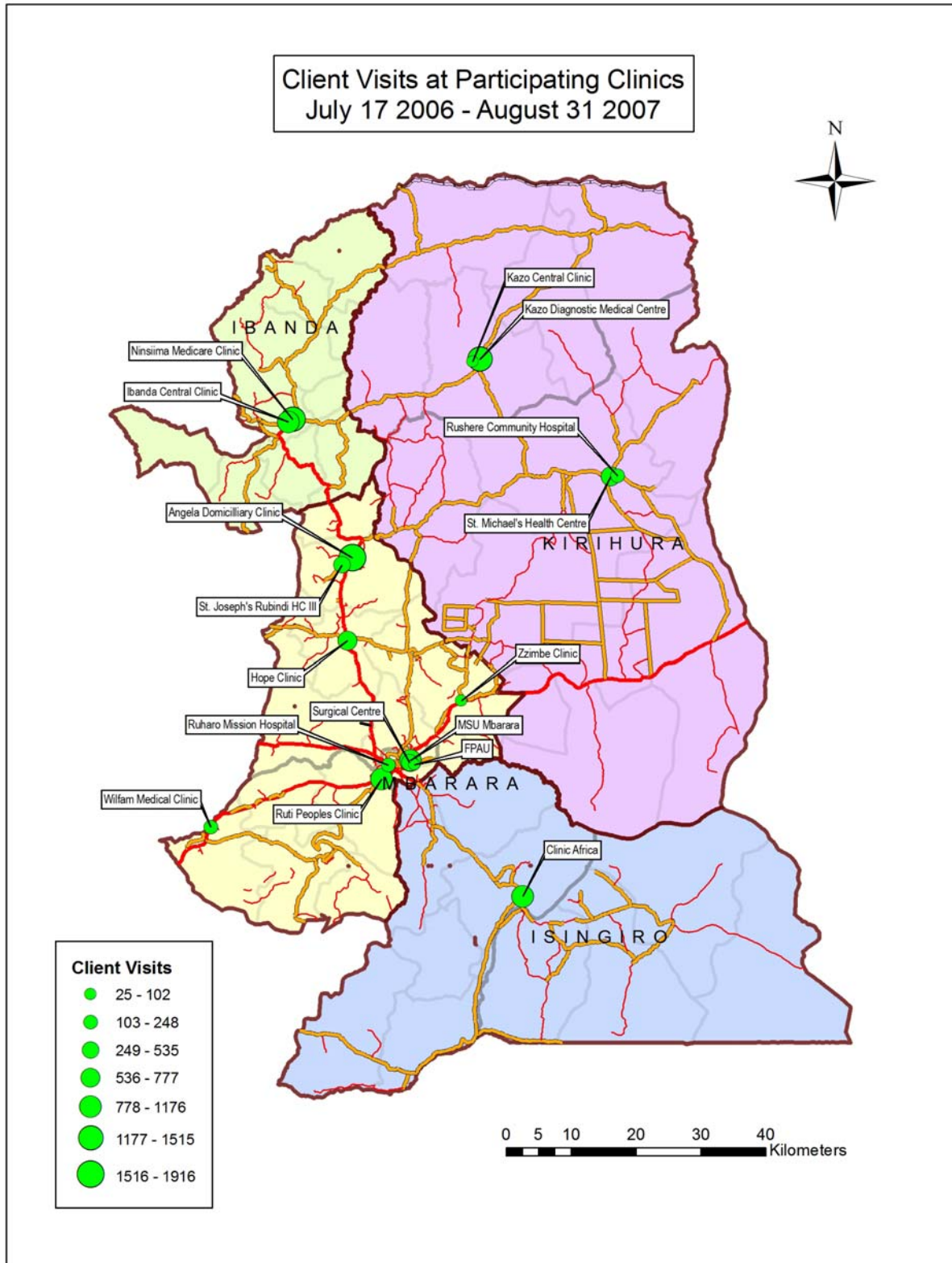
- numbers of clients seen up to the end of May 2007
- geographical location
- quality of record keeping

At the start of the evaluation, total numbers of client visits were available up to the end of May. These numbers came from the VMUS database and it is important to stress, do not represent numbers of new clients seen at clinics. Rather they represent the total numbers of client visits at each clinic, whether they were consultations or follow-up visits. The claims were entered as they appeared before screening at the Mbarara office. The voucher claims entered in VMUS were not adjusted for vetting by the medical advisor. Numbers of client visits (consultations plus follow-up visits) are shown in Table 1 and displayed in a map in Figure 1.

**Table 1. Submission of claims forms from providers – total numbers of client visits July 17 2006 to August 31 2007**

District	Clinic	2006						2007								TOTAL	
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
MBARARA	<b>Mbarara Municipality</b>																
	Marie Stopes Uganda (Mbarara Clinic)	48	45	100	89	57	91	0	0	88	59	104	159	155	161	<b>1156</b>	
	Surgical Center	8	2	0	14	24	38	0	24	15	35	15	44	105	211	<b>535</b>	
	Ruharo Mission Hospital	13	2	0	35	0	0	0	50	42	0	14	0	35	0	<b>191</b>	
	Ruti Peoples Clinic	0	0	118	0	90	0	0	46	117	106	0	185	145	217	<b>1024</b>	
	Zzimbe Clinic	NA	25	0	0	0	0	0	0	0	0	0	0	0	0	<b>25</b>	
	Family Planning Assoc. Uganda (FPAU)	0	0	0	0	23	0	30	0	0	26	0	0	23	0	<b>102</b>	
	Wilfam Medical Centre	0	0	0	24	28	4	11	0	4	0	28	25	29	83	<b>236</b>	
	<b>Bwizibwera Town</b>																
	Hope Clinic	0	53	0	0	64	0	82	95	0	50	0	100	100	100	<b>644</b>	
<b>Rubindi Town</b>																	
Angela Domiciliary Clinic	32	34	100	133	0	0	143	73	77	0	429	0	504	391	<b>1916</b>		
St Joseph Rubindi Health Centre III	0	0	26	29	60	0	60	54	0	31	32	0	50	79	<b>421</b>		
IBANDA																	
<b>Ibanda Town</b>																	
Ibanda Central Clinic	244	766	166	0	0	0	0	0	0	0	0	0	0	0	<b>1176</b>		
Ninsiima Medicare Center	80	269	100	0	0	69	0	0	168	0	100	100	149	200	<b>1235</b>		
KIRIHURA																	
<b>Kazo Town</b>																	
Kazo Diagnostic Center	63	162	36	183	97	76	21	27	53	0	62	197	196	336	<b>1509</b>		
Kazo Central Clinic	0	38	26	0	0	0	0	0	0	0	0	0	0	0	<b>64</b>		
<b>Rushere Town</b>																	
Rushere Community Hospital	0	100	0	0	0	0	0	0	0	0	86	0	48	14	<b>248</b>		
St.Michael Medicare Center	0	15	5	0	0	0	8	0	0	15	42	41	239	412	<b>777</b>		
ISINGIRO																	
Clinic Africa Medical Centre, Isingiro	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	164	90	291	499	<b>1044</b>		
	Clinic dropped out		Clinic suspended treatment													<b>All Clinic Total</b>	<b>12303</b>

**Figure 1. Map showing location of participating OBA clinics and numbers of client visits in the first year of the program.**



The initial plan was to collect laboratory and outpatient records from clinics to establish use of clinics for STI diagnosis and treatment. Realizing that repeat visits to clinics would probably be necessary to design and develop the tools for collecting data, clinic selection was prioritized such that those in Mbarara district with the highest numbers of client visits were targeted first. We hoped that this strategy would give us the opportunity to learn and understand the style of laboratory reporting at these clinics and then apply this knowledge when collecting records from more rural clinics further away from Mbarara that might prove difficult to visit more than once. In practice though, clinics were visited on an *ad hoc* basis determined by the availability of doctors, clinicians and laboratory staff. In general though, it was possible to begin data collection at clinics close to Mbarara and gradually move on to clinics increasingly further afield.

Preliminary discussions with clinicians and laboratory staff quickly indicated that laboratory records rather than outpatient (OPD) records would provide the most useful indication of numbers of clients seeking treatment at clinics. Clients would often visit a clinic for the sole purpose of getting a laboratory test. They would then take the result of the test to a pharmacy or drug shop where advice on medications would be dispensed or just self-medicate based on the test result, particularly if malaria were diagnosed. The client only pays the laboratory technician for the test and thus avoids paying the consultation fee to see a doctor. This pattern of behavior results in many more client visits to the laboratory than to the doctor and this was borne out by the examination of clinic records and OPD records.

A second important factor influencing data collection was the style and quality of reporting at clinics. Many clinics in Uganda, particularly those without laboratory facilities practice syndromic management of STIs, a strategy recommended by the World Health Organisation and the Ugandan Ministry of Health which has produced a set of algorithms for treatment. To ensure that collection of laboratory records would provide an accurate picture of STI diagnosis in the year before OBA, it was crucial to establish whether clinicians had used a syndromic approach or laboratory-based approach to manage STIs in that period of time. Those that had only used a laboratory-based approach were selected for evaluation ahead of those that had used a syndromic approach. Using this approach, it was possible to determine numbers of clients who had sought a diagnosis at a particular clinic but not necessarily received treatment.

Clinics using a syndromic approach were not ruled out of the analysis. In these cases out-patient records, most of which documented a presumptive diagnosis based on a syndrome, provided information on how many people sought treatment, regardless of the type of management approach used at the clinic.

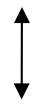
### **Clinic Record Keeping**

It was important to establish a standard approach to record keeping at clinics participating in OBA. Because we were interested in all clients, i.e. those who used an OBA voucher and those who sought treatment outside the OBA program, we needed to ensure that these patients could be distinguished from each other in the laboratory and out-patient records. We found that at the beginning of the OBA program in July 2006, many clinics had started a new laboratory

book in which only OBA client results were recorded. At some clinics these clients were not included in OPD records but instead the copies of the claim forms were used as records of client visits. There were other clinics that had one new book for the laboratory but used the same OPD record book with an indication as to whether there were OBA clients somewhere in the record. Though it would have been ideal to be able to match client laboratory records against OPD records the variable but generally poor quality of record keeping across the 16 clinics prohibited this. The quality of records kept at the clinics and an estimation of the associated degree of difficulty in collecting non-OBA client data are shown in Table 2.

1. Clinics with separate laboratory books for OBA clients that did not record OBA clients in the OPD records
2. Clinics without separate laboratory books for OBA clients but who clearly indicated in the record the type of client (i.e. OBA written alongside client name or result). Clinic may have OPD book with record of OBA clients
3. Clinics without separate laboratory books for OBA clients but who did not indicate on laboratory records the type of client. Clinic may have also used same OPD book but again, did not record whether client was OBA or not.

**Table 2. Types of record keeping encountered at clinics**

<b>Laboratory Records</b>	<b>OPD Records</b>	<b>Data Collection</b>
Separate book for OBA clients	OBA clients not recorded	Easy
	OBA clients recorded and clearly marked	
Same book for all clients, OBA clients clearly marked	OBA clients not recorded	
	OBA clients recorded and clearly marked	
Same book for all clients, OBA clients not marked	OBA clients recorded but not clearly marked	Difficult

While these findings established early on in the evaluation program helped us shape and develop the evaluation tool, it should be stressed that there was by no means a single method of data collection that we could apply to all the clinics. We found that the strategy had to be adapted to suit each clinic and the different practices encountered at each of them.

### **Accessing Clinic Laboratory Records**

Clinics selected for evaluation were approached and told of the reasons for the study and why their laboratory records would provide valuable information and lessons about the program and how it could be improved. They were told that only patient ages and gender where possible would be collected, together with the type of date of the tests, the types and the results. In seeking the cooperation of clinics, clinicians and doctors were asked the following questions.

- Did clinics have laboratory records from July 2005 to June 2007?
- Did clinics have outpatient records from July 2005 to June 2007?
- Would they be willing to provide these records for analysis?
- Would clinics prefer that the records were examined and data collected at the clinic, or would they allow for records to be taken off the premises and returned later?

In all cases, clinics allowed record books to be removed and returned later following collection of the data. For those clinics whose current record books were not complete, they often allowed us to remove them overnight and return them in the morning following data collection. For those clinics further afield in Kirahura district, a two day trip was made to collect data on-site.

## C. Data Collection

The resources available at private clinics in Uganda such as the ones participating in the OBA program vary greatly and are usually dependent on clinic size and location. Laboratories in particular are often equipped with only the most rudimentary equipment. This is due in large part to a lack of money and infrastructure (principally electricity and running water). To examine whether clinic size and available facilities might have an effect on client numbers and quality of STI management, clinic facilities were assessed using a short survey. Questions on opening hours, availability of a doctor or clinician, standard STI laboratory tests, equipment available in the laboratory, availability of electricity and staffing levels were asked. (Appendix 1: Facility Survey Instrument)

### Collection of Data from Laboratory Records

To assess the impact of the program at clinics by measuring whether more people sought treatment for STIs in the year of the program, clients' laboratory results were reviewed.

Three types of samples are used for the laboratory tests, blood, urine or a sample of a vaginal or urethral discharge collected from a high vaginal swab (HVS) or a urethral swab (US) respectively. Blood samples are used for one or more of three tests available to detect the presence of either a current or past infection of syphilis. Microscopy of wet preparations or gram stains of urine or discharge samples is used to detect organisms responsible for common infections of the reproductive organs or the urinary tract. A summary is shown in Table 3.

**Table 3. Laboratory testing for common STIs**

Sample	Laboratory Test	Finding	Suspected Infection
Blood	Rapid Plasma Reagin (RPR)	reactive / non-reactive	Syphilis (current infection)
	VDRL	reactive / non-reactive	
	TPHA strip test	positive / negative	Syphilis (current or past infection)
high vaginal swab (HVS) urethral swab (US) urinalysis	Wet preparation Gram stain	"clue" cells yeast, budding yeast cells motile trichomonads gram negative diplococci pus cells	Bacterial vaginosis <i>Candida albicans</i> <i>Trichomonas vaginalis</i> <i>Neisseria gonorrhoea</i> Urinary tract infection (UTI)

The tool used to collect laboratory data was designed after reviewing the OBA program guidelines and assessing standard practices in the Facility Survey<sup>2</sup>. Information collected on each client who had a STI test included age and gender where possible, the type of test, the sample and the findings. Records were coded using a simple scheme (Table 4) and entered into an excel sheet (see Figure 1).

<sup>2</sup> "Management of Sexually Transmitted Infections Based on a Laboratory Diagnosis". Unit 17, Sexually Transmitted Infections Treatment Guidelines for Use by Selected Health Service Providers in the Output-Based Aid (OBA) Pilot Project in Mbarara. Health Services International, Uganda Ministry of Health, Marie Stopes International and Kreditenstadt fur Wiederaufbau (KfW). 2006

**Table 4. Coding scheme used for recording laboratory data**

Field	Coding <sup>¶</sup>
Age	777= child; 888= adult; 999= age not specified
gender	0 = female; 1 = male; 9 = gender not specified
syphilis RPR	0 = not reactive; 1 = weakly reactive; 2 = moderately reactive and above; 9 = no result recorded
syphilis VDRL	0 = not reactive; 1 = weakly reactive; 2 = moderately reactive and above; 9 = no result recorded
syphilis TPHA	0 = negative; 1 = positive; 9 = no result recorded
swab, urine	1 = microscopy carried out on this sample
microscopy findings	1 = recorded in laboratory findings

<sup>¶</sup> blank entry indicates that no test was carried out

**Figure 2. Excel sheet used for data entry of laboratory results at clinics**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Standard Medical Centre Laboratory Results																	
2													microscopy findings					
3	date	age	gender	syphilis RPR	syphilis VDRL	syphilis TPHA	swab	urine	swab pus	swab yeast	swab yeast budding	swab gonorrhoea	swab trichomonas	urine pus	urine yeast	urine yeast budding	urine gonorrhoea	urine trichomonas
4	23/07/05	AD	0	0														
5	25/07/05	4	1	0														
6	25/07/05	AD	1	0				1							1			
7	26/07/05	999	0		1			1										
8	26/07/05	999	1		2			1							1			
9	26/07/05	AD	0		2			1							1			
10	26/07/05	AD	0		2			1							1			

### Issues Concerning Laboratory Data and Record Keeping

A number of issues regarding data collection emerged from the evaluation. In almost all clinics, records are kept in lined A4 size notebooks containing around 100-200 pages of coarse, low-quality paper. Books at some clinics were divided into columns using ruler- or hand-drawn lines and sometimes, but not always, column headings were given. In most cases but not consistently, columns were provided for the client name, age and gender, the type of laboratory test and the findings. Occasionally a column for the cash amount of the test was provided. The column headings encompass all the fields that should be represented in a laboratory book, but not all were included at all clinics. In addition, some clinics did not have all the record books dating back to July 2005. In some cases, laboratory staff had changed over time and new staff did not know the whereabouts of older books, but in others, clinics had simply misplaced the books.

The style of recording and handwriting of laboratory staff also varied widely throughout the clinics. At the best clinics, dates of tests were indicated and the number of the laboratory test was accurately recorded, based on tests carried out monthly or yearly. Client ages for children were usually recorded, but cultural practice usually meant that ages of adults were simply marked as “Ad”. The type of laboratory tests and the findings were almost always marked, but at each clinic, it was necessary to go through several pages of the books with laboratory staff to

establish their styles of reporting and ensure that laboratory tests and findings could be spotted and accurately recorded in the data sheet.

A more significant issue with laboratory records concerned practices at the clinics. Some clinicians did not carry out high vaginal swabs on female clients to collect samples of discharges, and instead resorted to urinalysis to collect samples for microscopy. Other clinics used both methods of sample collection. When examining these records, it was almost impossible to determine whether microscopy of a urine sample was done specifically to look for a possible STI or whether another infection (i.e. UTI) was suspected. In these instances, results were collected and marked for query and if possible, laboratory staff were consulted for their opinion on the reason for the test. If there was still doubt, the test and the findings were recorded although in many cases, urinalysis showed no abnormal diagnosis.

Laboratory staff also had different ways of describing their findings, some of which were incorrect. For example, one clinic recorded findings of “motile bacteria” when describing the organism responsible for *Trichomonas vaginalis*, when the finding should be reported as “motile trichomonads” or “motile protozoa”. In other cases, the organism responsible for gonorrhoea was sometimes described as “cocci” when they should be correctly described as “cocci in pairs” or “diplococci”. In these cases, laboratory staff were consulted for confirmation of the findings and the suspected infection.

Data collected in this manner could be manipulated to provide information on types of infections seen at clinics, client and infection numbers and percent positives. These data allow us to make inference on program performance between OBA and non-OBA clients and OBA and non-OBA years.

Several other clinics were also assessed for suitability for collection of laboratory and outpatient data. Due to the nature of their record-keeping practices, however, it was not possible to collect data in the manner described earlier and illustrated in Table 4. In these instances, the data were assessed for suitability and a decision made on whether to collect all of the data, selected sections or none at all.

For example, at Rushere Community Hospital, monthly data was summarized using the format that is used at government health centers throughout Uganda. Cases of syphilis are reported while all other STIs are reported in one group under the heading “STI”. Information from the laboratory provided monthly numbers of syphilis tests and the number that were positive but did not provide any information regarding the findings of other tests such as microscopy of wet preparations and gram stains of genital swab or urine samples. Laboratory records were also incomplete for the two years making an accurate assessment impossible. The Family Planning Association of Uganda (FPAU) had an altogether different way of recording data from visiting clients.

## **D. Facility Infrastructure Survey Information**

16 private clinics were contracted by the Ministry of Health to participate in the pilot OBA program beginning in July 2006. Within a few months, two clinics had dropped out, Kazo Central Clinic and Zzimbe Clinic, and service was suspended at a third, Ibanda Central Clinic while management protocols were reviewed. In April 2007 Clinic Africa Medical Centre, Isingiro joined the program. When the evaluation began in June 2007, there were 14 clinics available for impact evaluation. Facility Surveys were conducted at all of the clinics and a summary of this information is shown in Table 5.

**Table 5. Summary of Facilities at Provider**

<b>Clinic</b>	<b>Type</b>	<b>Location</b>	<b>Hours per day</b>	<b>24 hour service</b>	<b>Days per week</b>	<b>STI diagnosis always</b>	<b>STI treatment always</b>	<b>Lab equipment</b>	<b>Lab tests</b>	<b>Power</b>	<b>Staff</b>
<b>Marie Stopes Uganda Mbarara</b>	PFP	Urban	10	No	5.5			microscope (electric and rechargeable) centrifuge (electric) refrigerator autoclave	RPR/VDRL TPHA wet prep Gram stain	grid generator	1 doctor – FT 1 laboratory technician – FT
<b>Surgical Centre</b>	PFP	Urban	10.5	Yes	7	Yes	Yes	Microscope (light) centrifuge (electric) 2 sterilizers refrigerator	RPR/VDRL TPHA wet prep Gram stain	Grid battery back-up system (200 hours)	2 doctors - PT 1 clinical officer – FT 7 nurses – PT 1 in-charge – FT
<b>Ruharo Mission Hospital</b>	FBO	Peri-urban	10	Yes	7	Yes	Yes	2 binocular microscopes (electric) 2 centrifuges (electric) Sterilizer Refrigerator Calorimeter Micropipettes Drier	RPR/VDRL Wet prep Gram stain	grid solar	1 doctor - FT 2 clinical officers – FT 2 laboratory technicians 7 nurses or midwives – FT 1 youth counselor - FT 3 social workers - FT
<b>Ruti People’s Clinic</b>	PFP	Peri-urban	17	No	7	Yes	Yes	microscope (electric) refrigerator drier (light bulb) sterilizer	RPR/VDRL Wet prep Gram stain	grid	1 doctor – PT 1 nurse – FT 1 laboratory assistant - FT
<b>Family Planning Association of Uganda, Mbarara</b>	NGO	Peri-urban	8.5	No	5.5	Yes	Yes	microscope (electric) centrifuge (electric) refrigerator drier (light bulb) 2 sterilizers	RPR/VDRL Wet prep Gram stain	grid generator	2 nurse / midwives – FT 1 laboratory technician – FT 60 community educators - FT 1 youth counselor - FT 2 social workers - FT

<b>Clinic</b>	<b>Type</b>	<b>Location</b>	<b>Hours per day</b>	<b>24 hour service</b>	<b>Days per week</b>	<b>STI diagnosis always (OBA)</b>	<b>STI treatment always (OBA)</b>	<b>Equipment</b>	<b>Lab tests</b>	<b>Power</b>	<b>Staff</b>
<b>Hope Clinic</b>	PFP	Rural						microscope (light) centrifuge (hand) refrigerator drier (light bulb)	RPR/VDRL Wet prep Gram stain	grid candles / lamps	1 doctor – PT 1 clinical officer - FT 1 laboratory assistant – FT 1 nurse - FT
<b>Wilfam Medical Clinic</b>	PFP	Rural	10	No	6	Yes	No <sup>1</sup>	microscope (light) centrifuge (hand) drier (light bulb) refrigerator sterilizer	RPR/VDRL Wet prep Gram stain	grid candles / lamp	1 clinical officer – FT (possibly PT) 3 nurses – FT 1 laboratory assistant - FT
<b>Angela Domicilliary Clinic</b>	PFP	Rural	24	Yes	7	Yes	Yes	microscope (light) centrifuge (hand) drier refrigerator	RPR/VDRL Wet prep Gram stain	grid candles / lamps	1 nurse/midwife – FT 3 nurses – FT 1 laboratory assistant – FT 1 youth counselor (Nurse/midwife in this role) – FT
<b>St. Joesph’s Rubindi HC III</b>	NGO	Rural	9	Yes	6.5	ND	ND	microscope (light) centrifuge (hand) drier (light bulb) refrigerator (at Priest’s facility)	RPR/VDRL TPHA Wet prep Gram stain	grid candles / lamp	1 comprehensive nurse – FT 1 laboratory assistant – FT 1 nurse/midwife – FT (also acts as in-charge)
<b>Ninsiima Medicare Clinic</b>	PFP	Peri-urban	16	No	7	Yes	No <sup>2</sup>	microscope (light) drier (light bulb) refrigerator (clinical officer’s house) sterilizer	RPR/VDRL TPHA Wet prep Gram stain	grid generator	1 clinical officer – FT 1 laboratory assistant - FT 2 nurses - FT
<b>Kazo Diagnostic Clinic</b>	PFP	Rural	16	No	7	No <sup>1</sup>	No <sup>3</sup>	microscope (light) centrifuge (hand)	RPR/VDRL TPHA Wet prep Gram stain	No	1 clinical officer – FT 1 laboratory assistant – FT 2 nurses – FT 1 midwife - PT

Clinic	Type	Location	Hours per day	24 hour service (OPD)	Days per week	STI diagnosis always (OBA)	STI treatment always (OBA)	Equipment	Lab tests	Power	Staff
<b>St. Michael's Clinic</b>	PFP	Peri-urban	10-11	Yes	7	No <sup>1</sup>	Yes	microscope (electric) centrifuge (hand) drier (light bulb) 2 refrigerators sterilizer	RPR/VDRL TPHA Wet prep Gram stain	grid candles / lamps	1 doctor – PT (every two months) 1 clinical officer – FT 2 laboratory assistants – FT 2 nurses – FT 1 youth counselor (clinical officer)
<b>Rushere Community Hospital</b>	NGO /PFP	Peri-urban	8.5	No	5.5	No <sup>4</sup>	No <sup>1</sup>	2 microscopes (binocular electric) 2 centrifuges (electric) rotator drier (oven) 4 refrigerators 3 sterilizers/autoclaves culture incubator CD4 counter haematocrit Coulter haematology	RPR/VDRL TPHA Wet prep Gram stain	grid generator	3 doctors – FT 2 clinical officers - FT 14 nurses – FT (shifts) 1 laboratory technician 2 laboratory assistants 1 community-based distributor 6 midwives – FT (shifts)
<b>Clinic Africa Medical Centre of Isingiro</b>	PFP	Rural	14	Yes	7	No <sup>5</sup>	Yes	microscope centrifuge (hand) drier (light bulb) refrigerator	RPR/VDRL Wet prep Gram stain	grid generator (not working at time of visit)	1 clinical officer – PT 2 nurses – 1 FT, 1 PT 1 laboratory assistant – FT 1 nurse/midwife – PT

PFP – private for profit; NGO – non-governmental organization; FBO – faith-based organization

FT – full time; PT – part-time

ND – not determined

<sup>1</sup> Supplies not available; <sup>2</sup> Forms being checked at MSI resulted in 1 month suspension of service; <sup>3</sup>OBA client forms not available; <sup>4</sup>Power outage; <sup>5</sup>Trained staff not available

Of the 14 clinics in the program, 12 are private for profit (PFP), one is a faith-based organization (FBO), one is a non-governmental organization (NGO) and one, Rushere Community Hospital, is an unusual combination of a PFP and an NGO clinic partially sponsored by the government. Only three of the clinics have full-time doctors and four have part-time doctors whose time at the clinics varies from once every two months to two or three times a week. The remaining seven clinics are staffed by full time clinical officers, comprehensive nurses or nurses.

All except three clinics are open at least 10 hours of the day, eight are open seven days a week while six clinics have 24 hour emergency service, usually because the clinic staff live on site or very close by.

Four clinics reported that in the first year of the OBA program they were occasionally unable to give a STI diagnosis due to reasons including lack of supplies, problems with power supply to the laboratory and a lack of trained staff.

All facilities possessed at least the basic laboratory equipment necessary to run the STI diagnostic tests, but the range of equipment varied widely, with the FBO or NGO clinics usually having the greatest amount of equipment. Eleven of the 14 clinics had access to a refrigerator on site, two were forced to use refrigerators off site while of greatest concern was Kazo Diagnostic Clinic, which did not have a refrigerator; it was the only clinic to lack any electricity supply.

## E. Analysis of Laboratory Data from Records

A combination of time constraints and style of record keeping meant that laboratory and outpatient department (OPD) data collection was limited to nine clinics which are shown in Table 6 and on the map in Figure 2

**Table 6. Clinics at which laboratory data was collected**

Clinic	Town	District
Marie Stopes Uganda Surgical Centre	Mbarara Municipality	Mbarara
Ruti People's Clinic		
Ruharo Mission Hospital <sup>1</sup>		
Hope Clinic	Bwizibwera	
Angela Domicilliary Clinic	Rubindi	
Kazo Diagnostic Clinic	Kazo	Kirihura
St. Michael's Clinic <sup>2</sup>	Rushere	
Ninsiima Medicare Clinic	Ibanda	Ibanda
Clinic Africa	Kabingo	Isingiro

<sup>1</sup> missing data – not used in analysis

<sup>2</sup> missing data – estimates used in analysis

### Client Visits at Clinics

For the ten clinics studied, we were able to collect information from laboratory records on clients who had visited clinics seeking a laboratory test that would have revealed presence of an STI. No identifiers (names or resident locations) were collected. For the period July 2005-June 17 2006, all client visits for STI-confirming laboratory tests were non-OBA but for the period July 2006-June 2007, we had to ensure that laboratory findings for non-OBA clients were clearly recorded separately from OBA clients. Total numbers of non-OBA client visits for laboratory tests are shown in Table 7 together with percentage change from the previous year. Numbers of OBA clients who visited the clinics are also shown. This information comes from the VMUS database compiled using the claim forms completed by each clinic during the visit of an OBA client.

Very large numbers of clients were seen at Ruharo Mission Hospital in the year of the OBA program and for the period July 2005-January 14 2006. Data for January 15-July 2006 were missing and due to the large numbers of clients involved (694 for the last six months of 2005) it would not be wise to try estimating numbers of STI clients for the following six months. Estimates were used for St. Michael's Clinic as client volume was low and these numbers would not significantly distort the totals. Clinic Africa opened in August 2006 and saw low volume in the months preceding the start of OBA, but has since seen high client volume, with a large proportion using OBA.

**Table 7. Client numbers at ten selected clinics July 2005-July 2007**

Clinic	Non-OBA			OBA	
	2005-2006	2006-2007	% change	2006-2007	Total % change
Marie Stopes Uganda	849	1217	+ 43	843	+143
Surgical Centre	246	339	+ 38	263	+145
Ruti People's Clinic	208	162	- 22	427	+183
Hope Clinic	356	253	- 41	441	+95
Angela Domicilliary Clinic	420	343	- 22	1034	+228
Kazo Diagnostic Clinic	309	267	- 16	783	+240
St. Michael's Clinic	158 <sup>1</sup>	174	+ 10	268	+180
Ninsiima Medicare Clinic	291	907	+ 312	983	+549
Clinic Africa <sup>2</sup>	NA	72	NA	471	NA
<b>TOTAL</b>	<b>2837</b>	<b>3734</b>	<b>+ 32</b>	<b>5513</b>	<b>+226</b>

<sup>1</sup> Estimate – missing data

<sup>2</sup> Clinic opened August 2006

The table shows that 2837 clients sought diagnosis and/or treatment at the nine clinics in the year before OBA began (2005-2006). This number increased to 3734 in the first year of OBA (2006-2007), and including OBA clients, the total number of clients visiting clinics is 9247, an increase of 226 % compared to the previous year.

For non-OBA visits to clinics for STI treatment, five out of nine clinics recorded an increase in client numbers in 2006-2007 compared to the previous year, with increases ranging from 38% to 312%. Four clinics recorded a decrease in non-OBA client visits, but this was compensated by the large numbers of OBA clients.<sup>3</sup> When OBA client visits are included in the total, all ten clinics recorded an increase in total numbers of clients visiting for STI services. The difference in percent change from the total compared percent change for non-OBA gives a measure of the contribution of OBA clients to the overall total seen in 2006-2007, the first year of OBA. This contribution ranges from 100% for the Marie Stopes Uganda Clinic (143%-43%) to 256% for Kazo Diagnostic Clinic (240% +16%) when compared to visits seen in 2005-2006.

Overall, this is an encouraging picture. Not only have non-OBA visits to clinics for diagnosis and/or treatment increased, but when OBA visits are included as well, the increase is almost 200%. What should be stressed here, however, is that non-OBA client visits recorded are based on laboratory results, and it is not known what percentage of those who tested positive go on to seek treatment, either at the clinic where testing was conducted, or at another provider or drugstore. However, it can be reasonably assumed that a high percentage of those who test positive will actively seek and receive treatment or, if cost of medicines is an issue, purchase a voucher and receive subsidized treatment.

The observed increases in numbers of clients attending clinics in the year of OBA compared to the previous year should be accompanied by a cautionary note. Client numbers were not recorded at clinics that were not participating in the OBA program and it is possible that there was patient substitution from these clinics, to those that were participating in the program. If this were the case, then the increase in clients seeking treatment seen from one year

<sup>3</sup> This finding suggests that some level substitution among STI patients at those clinics took place. Substitution effects occur when some patients who would have sought treatment without the subsidy decide to use the reduced cost healthcare.

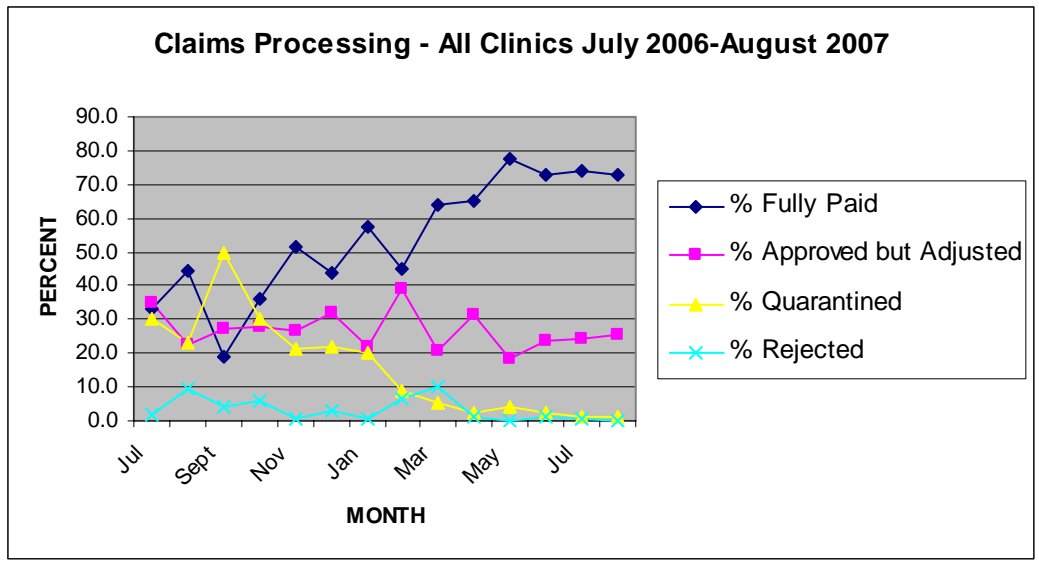
to the next would not actually represent an increase in the percentage of the region’s population seeking treatment. In future OBA programs, it would be pertinent to include several “control” clinics in the evaluation to assess whether this type of substitution is occurring and to what extent it might affect overall numbers of clients attending clinics for STI diagnosis and treatment.

**Financial Benefits for OBA Clinics**

Participating clinics receive payment based on evidence that the correct diagnosis and treatment has been provided to a client. Clinics receive 5000 Ush as a consultation fee, 3000 Ush for the laboratory tests and are reimbursed for the medicines prescribed based on a standard rate for each drug. Assessment of the quality of treatment is made by the Medical Officer at the Marie Stopes office in Mbarara. Claims are either “approved and fully paid”, “approved but adjusted”, “quarantined” or “rejected”, although several months into the program many “quarantined” claims were moved into the “approved but adjusted” group. A clinic can maximize the financial benefit to them if it ensures that all clients are treated according to the program guidelines and are thus “approved and fully paid”. Any problems with the diagnosis and treatment provided will usually result in adjustments which will result in lower payments to the clinic. The incentive for the clinic to improve its diagnosis and treatment skills is the promise of greater financial reward. Reasons for clinics not receiving full payment for treatment are shown in Appendix 2.

Reimbursement figures for all the participating clinics over the course of the first year of the program have been collated and can be expressed graphically. Figure 3 shows that over the course of the year of the program, diagnosis and treatment at clinics has been improving. There has been a steady increase in the percent of claims “approved and fully paid” up to the current value of 70%, and a decrease in the percentage of claims in the remaining three categories, all of which represent decreased reimbursement amounts.

*Figure 3. Claims processing for all participating OBA clinics*



While the graph shows a steady increase in fully paid claims, it should be noted that there are considerable differences in the performance of individual clinics. A few clinics achieved “fully paid” percentages of over 90% after several months, while others remain at around 60-70% and have significant month-to-month variations which could be indicators that new staff who are not familiar with the program have been hired. Performance graphs, together with numbers of monthly claims submission for individual clinics are shown in Appendix 3.

It is beyond the scope of this report to conduct a financial and economic analysis of the impact of the OBA program on the clinic but the short summary above together with the numbers of clients seen at each clinic indicates the potential financial rewards available to clinics through the OBA program.

### Prevalence of Sexually Transmitted Infections (STIs) in Patient Populations

Using non-OBA clinic data we were able to assess the percentage of clients seeking an STI laboratory test amongst all laboratory tests carried out. This could only be done for seven of the ten clinics under study because we were unable to obtain complete records documenting total numbers of non-OBA clients in the remaining three clinics. In these clinics there was no distinction made between these and OBS clients in the laboratory notebooks.

For the non-OBA clients, the percentages of total laboratory tests carried out that were STI-related could also be determined using laboratory record data. St. Michael’s Clinic and Clinic Africa were excluded from this analysis because we did not have an accurate figure for total laboratory tests carried out in the course of the two-year period under study. Data for the seven clinics are shown in Tables 8 and 9 and are shown for syphilis and gonorrhoea only.

*Table 8. Non-OBA client visits for laboratory tests 2005-2006*

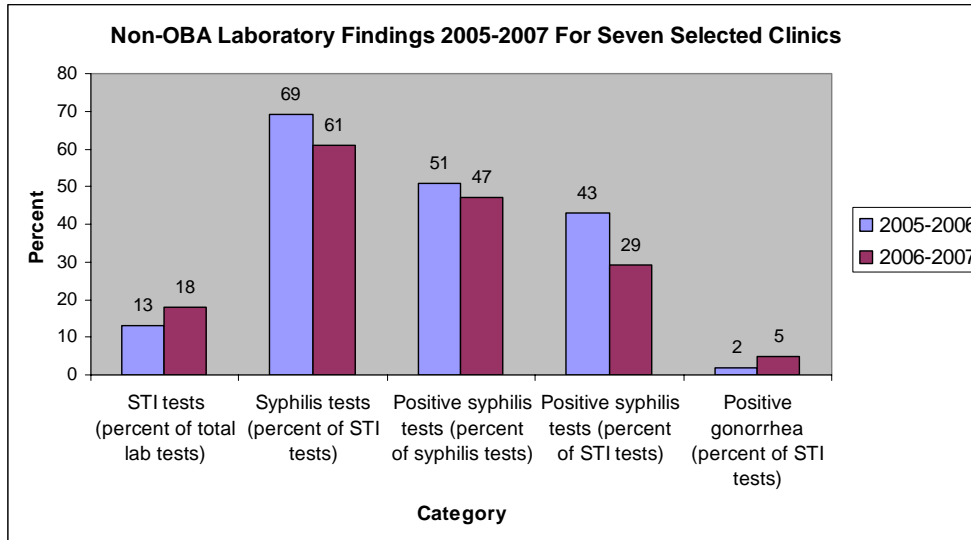
<b>2005-2006</b>	<b>All tests</b>	<b>STI Tests (%)</b>	<b>Syphilis tests (%)</b>	<b>Positive syphilis (%)</b>	<b>Positive gonorrhoea (%)</b>
Angela Domicilliary Clinic	2297	420 (18)	407 (97)	314 (75)	0 (0)
Hope Clinic	2125	356 (17)	328 (92)	135 (38)	10 (3)
Marie Stopes Uganda	5382	849 (16)	286 (34)	8 (1)	26 (3)
Surgical Center	3206	246 (8)	149 (61)	90 (37)	11 (4)
Ruti Peoples Clinic	1891	208 (11)	175 (84)	127 (61)	6 (3)
Kazo Diagnostic Clinic	4251	309 (7)	267 (86)	175 (57)	0 (0)
Ninsiima Medicare Clinic	2204	291 (13)	247 (85)	104 (36)	12 (4)
<b>TOTALS</b>	<b>21356</b>	<b>2679 (13)</b>	<b>1859 (69)</b>	<b>953 (43)</b>	<b>65 (2)</b>

*Table 9. Non-OBA client visits for laboratory tests 2006-2007*

<b>2006-2007</b>	<b>All tests</b>	<b>STI Tests (%)</b>	<b>Syphilis tests (%)</b>	<b>Positive syphilis (%)</b>	<b>Positive gonorrhoea (%)</b>
Angela Domicilliary Clinic	2172	343 (16)	268 (78)	211 (62)	1 (0)
Hope Clinic	1465	253 (17)	212 (84)	40 (16)	9 (4)
Marie Stopes Uganda	5547	1217 (22)	528 (43)	28 (2)	66 (5)
Surgical Center	2544	339 (13)	148 (44)	91 (27)	15 (4)
Ruti Peoples Clinic	1331	162 (12)	133 (82)	89 (55)	4 (2)
Kazo Diagnostic Clinic	3358	267 (8)	210 (79)	134 (50)	0 (0)
Ninsiima Medicare Clinic	2768	907 (33)	630 (69)	407 (45)	81 (9)
<b>TOTALS</b>	<b>19185</b>	<b>3488 (18)</b>	<b>2129 (61)</b>	<b>1000 (29)</b>	<b>176 (5)</b>

These tables illustrate the differences between clinics in terms of people seeking tests and percent positives of the two infections illustrated. A graphical representation of these percentages is shown in Figure 2.

**Figure 4. Bar graphs showing laboratory tests and findings recorded in 2005-2007**



At some clinics, a relatively high percentage of clients seek STI-related tests (>15%) while at others, this percentage is much lower (<10%). In general though, as a percentage of all visits to clinics, visits for STI-related tests increased from 13% in 2005-2006 to 18% in 2006-2007. This may indicate that the population had an increased awareness of STIs in the first year of OBA.

At some clinics, over 85% of the clients sought a syphilis test and many of those also had other tests such as urinalysis. The low percent of positive tests recorded at the Marie Stopes clinic reflects the fact that their clients often request routine syphilis tests whether they have symptoms or not.<sup>4</sup> At other clinics, the high percentage of positive syphilis tests recorded may provide an indication that the prevalence of syphilis is high, or that tests are not being conducted correctly. Overall, the percent of syphilis tests that were positive fell slightly in the OBA year, but when calculated as a percentage of all STI-related tests conducted, this decrease was considerably larger.

The numbers of gonorrhea cases recorded is generally very low, but increases in the OBA year, possibly due to increased awareness and knowledge of the infection at clinics. Anecdotal evidence from clinicians suggests that before the OBA training, some clinicians were not aware that gonorrhea was prevalent in the region and had not looked for it in symptomatic patients.

<sup>4</sup> Private communication from MSU, Mbarara laboratory technician, July 2007

## **F. Conclusions and Recommendations**

The clinic evaluation was conducted retrospectively to determine whether the OBA program has had an impact on the numbers of clients seeking STI diagnosis and treatment at participating clinics. With a few exceptions, it showed that participating clinics experienced a greater volume of clients in the first year of OBA compared to the year prior to OBA. Some clinics experienced small decreases in the numbers of clients seeking treatment outside of the program, indicating that there may have been some patient substitution taking place. In all clinics surveyed, the overall increase in clients was considerable. This may not reflect an increase in treatment-seeking behavior among the population of the program region, but may also reflect client substitution from other clinics not participating in the program. If the program is to be expanded to other regions, then a clinic evaluation that selects several “control” clinics that are not participating would shed further light on overall changes in treatment-seeking behavior. At the start of the expansion, efforts should be made to standardize reporting at clinics to facilitate the data collection.

Clinics were also evaluated on the basis of claims processing data. Using the four categories into which claims were sorted, the ability of clinics to adhere to program guidelines for diagnosis and treatment could be measured. Graphical representation showed that over the course of the year, the average percentage of claims fully paid increased from around 30% to 70%. However, performance levels vary between clinics and can be used to determine which clinics need further training on program guidelines to ensure they are providing high quality service. Monitoring monthly submission data in this manner should assist MSI in identifying such clinics.

Numbers of STI-related laboratory tests conducted at surveyed clinics were also counted and provided an interesting view of patterns of diagnosis- or treatment-seeking behavior. Overall, the percentage of STI tests as a fraction of all tests increased in the year of OBA which could indicate sensitization of the population with regards to STIs. The percent of syphilis tests was lower as well which could indicate that clinics were correctly identifying symptoms of other STIs and not just assuming that all were due to syphilis. Perhaps the most striking finding is that the percentage of positive gonorrhea tests as a fraction of all STI tests more than doubled, a finding that correlates with evidence from providers that indicated that they had previously thought that gonorrhea was not present in their communities. Collection of laboratory test data from clinics entering the program could help identify the most common complaints among a community and help to direct further training at participating clinics.

**Appendix 1. Facility Infrastructure Survey**

***Marie Stopes/ Microcare – KfW STI OBA Project  
Mbarara, Ibanda, Kirihura and Isingiro Districts, Uganda***

***Provider Clinics Facilities and Services June-July 2007***

<b>BACKGROUND CHARACTERISTICS</b>			Date:
1	Name of Health Facility:		
2	District:		
3	County:		
4	Sub-County		
5	Parish:		
6	Village:		
7	Type of Facility:	Government/Ministry of Health	
	<i>(Circle appropriately)</i>	NGO	
		Missionary (FBO)	
		Private for profit	
8	Locality/Setting of Facility:	Rural	
		Urban	
		Peri-urban	
9	What time does the facility open?		
10	What time does the facility close?		
11	For how many hours does the facility stay open?	hours per day	
12	How many days per week are STD services offered at this health facility?	days per week	
13	Is there a sign indicating that STD-related services are available?	Outside building	
		Inside building	
		Both inside and outside building	
		No sign available	
14	What hours is the doctor present at the clinic	Mon	
		Tues	
		Wed	
		Thurs	
		Fri	
		Sat	
		Sun	
15	When did you join the OBA program		

**LABORATORY CAPABILITIES**

16	Is any laboratory testing available for STDs?	Yes	No				
17	Is STD diagnosis provided?	Yes	No				
18	Is there a time since OBA began July 06 that STD diagnosis has not been available?	Yes	No				
18a	If YES, please give a reason why diagnosis was not available.	Supplies not available Equipment not available Trained staff not available Other:					
19	Is STD treatment provided?	Yes	No				
20	Is there a time since OBA began July 06 that STD treatment has not been available?	Yes	No				
20a	If YES, please give a reason why diagnosis was not available.	Supplies not available Equipment not available Trained staff not available Other:					
21	Record the type of tests that are provided at this facility:	<b>Usually provided?</b>		<b>Available today?</b>		<b>Stock out since OBA began Jul 06</b>	
	<b>Type of Test:</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
	A. Syphilis RPR						
	B. Syphilis TPHP RDT						
	C. Gonorrhoea (gram stain)						
	D. Chlamydia (culture)						
	E. Gonorrhoea (First void urine)						
	F. Candida (wet mount HVS)						
	G. Herpes (Zanc test)						
	H. Trichomoniasis (wet mount)						
	G. Other						

22	Is there a test available at this facility, or are clients' specimens, or the clients themselves, sent elsewhere?	<b>Available at the facility</b>		<b>Clients' specimens sent elsewhere?</b>	
	<b>STD Test:</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>
	A. RPR syphilis				
	B. TPHP syphilis				
	C. Gonorrhoea				
	D. Chlamydia				
	E. Urinalysis				
	F. Candida				
	G. Herpes				
	H. Trichomoniasis				
	H. Other				

**ELECTRICAL FACILITIES**

23	Does the facility have electricity?	Yes	No
		<b>Number</b>	
24	How many electrical sockets are there in the facility?		
25	How many sockets from extension cords are there?		
26	How many of those sockets are in use?		
27	How many light switches are there in the facility?		
28	How many lights are there in the facility?		

29	Which of the equipment listed below is available and in working order in the facility? <i>(Circle response).</i>	Available	Working	Power Req	
				Volts	Amps
	<b>Equipment</b>				
	Microscope				
	Centrifuge				
	Rotator				
	Drier				
	Refrigerator				
	Sterilizers / Autoclave				
	Computer				
	Printer				
	Radio				
	Examination lamp				
	Cell phone charger				
	UPS				
	Power Stabililzer				
	Other:				
	Other:				

**Generator**

		Yes	No
30	Does the facility have a generator?		
31	Does the generator work?		
32	Is the generator used?		
		<b>Number</b>	
33	If YES to 30, how many times per week?		
33a	If NO to 30 please give reason (circle response)	No fuel	
		Fuel too expensive	
		Other	
34	Do you have any other source of power?		
35	If YES to 34, please name source of power		

**SERVICE STATISTICS**

**OBA Program July 06- June 07**

36	How many clients received OBA services listed
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	below since OBA began Jul 06? ( <i>ND – no data available</i> )		
	<b>Type of Service</b>	<b>No. of Clients</b>	<b>Don't know</b>
	A. STD Diagnosis		
	B. STD Treatment		
37	What is the total number of clients who received ANY services since OBA began Jul 06? ( <i>ND – no data</i> )		
	<b>Clients</b>	<b>Number</b>	<b>Don't know</b>
	Male Clients		
	Female Clients		
	Youth Clients		

**Pre-OBA Program July 05-June 06**

38	How many clients received the services listed below from July 05-June 06? ( <i>ND – no data available</i> )		
	<b>Type of Service</b>	<b>No. of Clients</b>	<b>Don't know</b>
	A. STD Diagnosis		
	B. STD Treatment		
39	What is the total number of clients who received (any) services from July 05-June 06? ( <i>ND– no data</i> )		
	<b>Clients</b>	<b>Number</b>	<b>Don't Know</b>
	Male Clients		
	Female Clients		
	Youth Clients		
40	Indicate the calendar month and year of the most recent month reported in the table above:	Month:	Year:
41	Do you keep record of each patient/client ( <i>Observe and ask</i> )	Yes	No
42	Is client follow-up conducted here?	Yes	No

**STAFFING**

43	How many of the staff positions listed below are assigned at this facility?	<b># Working Full-time</b>	<b># Working Part-time</b>	<b># On Duty Today</b>
	<b>Staff position</b>			
	A. Medical Doctor			
	B. Clinical Officer			
	C. Nurse			
	D. Laboratory Technician / Assistant			
	E. Community-Based Distributor (CBD)			
	F. Peer Educator			
	G. Youth Counsellor			
	H. Social Worker			
	I. Other:			

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**GPS Data**

	Elevation	
	Latitude	
	Longitude	

**Comments**

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## Appendix 2. Reasons why claims are adjusted or rejected during processing

CLAIM QUERY FORM/REPORT			
Query Reference	Reason	Grading	Action
1	No indication of date of treatment	Major deviation	Quarantined
2	No indication of time of treatment	Minor deviation	Could delay payment
3	Wrong visit type: Consultation or follow -up,etc.		
4	Wrong demographic information	Major deviation	Rejection of claim
5	Wrong syndrome	Major deviation	Rejection of claim
6	Wrong Clinical examination	Major deviation	Rejection of claim
7	Wrong Diagnosis/Poor diagnosis	Major deviation	Rejection of claim
8	Wrong investigation/poor lab reporting	Major deviation	Rejection of claim
9	Wrong drugs prescribed/invalid treatment	deviation	Rejection of claim
10	Over prescription: more than enough	deviation	Reduced expected payment
11	wrong consultation fees	deviation	Reduced expected payment
12	Wrong patient status: cured or not cured.	Minor deviation	Delayed payment
13	Next date of visit: wrong or not filled in	deviation	Delayed payment
14	Wrong voucher attachment	Major deviation	Rejection of claim
15	Unclear claim	Major deviation	Rejection of claim
16	partner treated on client form.	Major deviation	Rejection of claim
17	Exceeded VMUS ceiling limit	Minor deviation	Delayed payment, reduced expected pymt
18	Used drugs not on OBA list	Major deviation	Rejection of claim, reduced expected pymt
19	Unclear/wornout/blank attached vouchers	Major deviation	Rejection of claim
20	Claim with out patient thumb print	Major deviation	Rejection of claim
21	No voucher attachment	Major deviation	Rejection of claim
22	No doctors signature	Major deviation	Delayed payment/total rejection
23	Diagnosis contradicts clinical examination	Major deviation	Rejection of claim
24	Used drugs not on OBA list	Major deviation	Rejection of claim, reduced expected pymt
25	under charged/over charged drugs,double Lab charged	deviation	Quarantined
26	patient free/normal from STI or Cured Not allowed for next vist	deviation	Rejection of Claim
27	Diagnosis not catered for by the Project	Major deviation	Rejection of Claim
28	Follow up contradicts previous visits	Major deviation	Rejection of Claim

- a) Under the contract between the Voucher Service Provider (VSP) and the Voucher Management Unit (VMU), the following are the reasons for rejection and reduced amount of expected reimbursement amount;
- a) Annex 1 clearly spells out the guidelines on the voucher process and key considerations when treating patients in the voucher project. failure to comply would mean total loss of money or partial payment
  - b) Annex 2: Is the fee schedule: It clearly spells out under what circumstances the various drugs are to be given, which are drugs are to given and price to be reimbursed
  - c) Annex 3: Of contract clearly gives the guidelines STD treatment guidelines that are supposed to strictly be followed.

**Note: Deviations from the above will cause loss of funds and in the worst scenario, completeelimination from the project**

**Appendix 3: Performance graphs related to claims processing for individual clinics in the OBA program (July 2006 – August 2007)**

