

Impact of BCC Programs in an Output-Based Aid Project for non- HIV Sexually Transmitted Infections in Southwestern Uganda

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Hello and welcome to the presentation entitled “Impact of Behavior Change and Communication in an Output-Based Aid Project for Non-HIV Sexually Transmitted Infections in Southwestern Uganda”. My name is Ben Bellows and together with my colleague, Richard Lowe, we will take you through this presentation today.

Presentation Outline

What is Output based aid in Uganda?

- Need for expanded STI treatment
- Description
- Use of vouchers

Do BCC programs affect utilization?

- Description of activities and messages
- Geographic distribution of BCC activities
- Impact on clinic use

The talk is divided into 2 sections. In the first section “What is Output Based Aid or OBA in Uganda” – we quickly describe the burden of disease, the OBA program structure, and the use of vouchers in the project.

In the second half, we will look at how behavior change and communication programs, generally referred to as BCC, impact utilization of treatment services for sexually transmitted infections. We will address this question by describing BCC activities and messages, explaining the geographic distribution of BCC activities and finally highlighting the BCC impact on clinic utilization.

High burden of disease & Large unmet need for healthcare

A 2006 population-based survey of adults (15-49 years) in southwestern Uganda found high STI prevalence and under utilization of accessible healthcare.

- 7% syphilis (VDRL)
- 5% *Neisseria gonorrhoeae* cultures
- 37% of respondents who had STI complaints did not seek treatment – most for lack of funds

The Department of Community Health at the Mbarara University of Science and Technology in Uganda, together with the California-based NGO Venture Strategies for Health and Development, conducted a population-based survey in 2006 as the baseline to a program evaluation. Among other things, the survey measured healthcare utilization and the prevalence of syphilis and gonorrhoea in the region. The results indicate a very high disease burden and an under utilization of healthcare. Among respondents who indicated they had recently had an STI complaint, nearly 40% in the follow-up question said they did not go to a health facility and many of those failing to seek treatment did so because they lacked the funds. A targeted healthcare subsidy can address this need.

What is Output-based Aid (OBA) in Uganda?

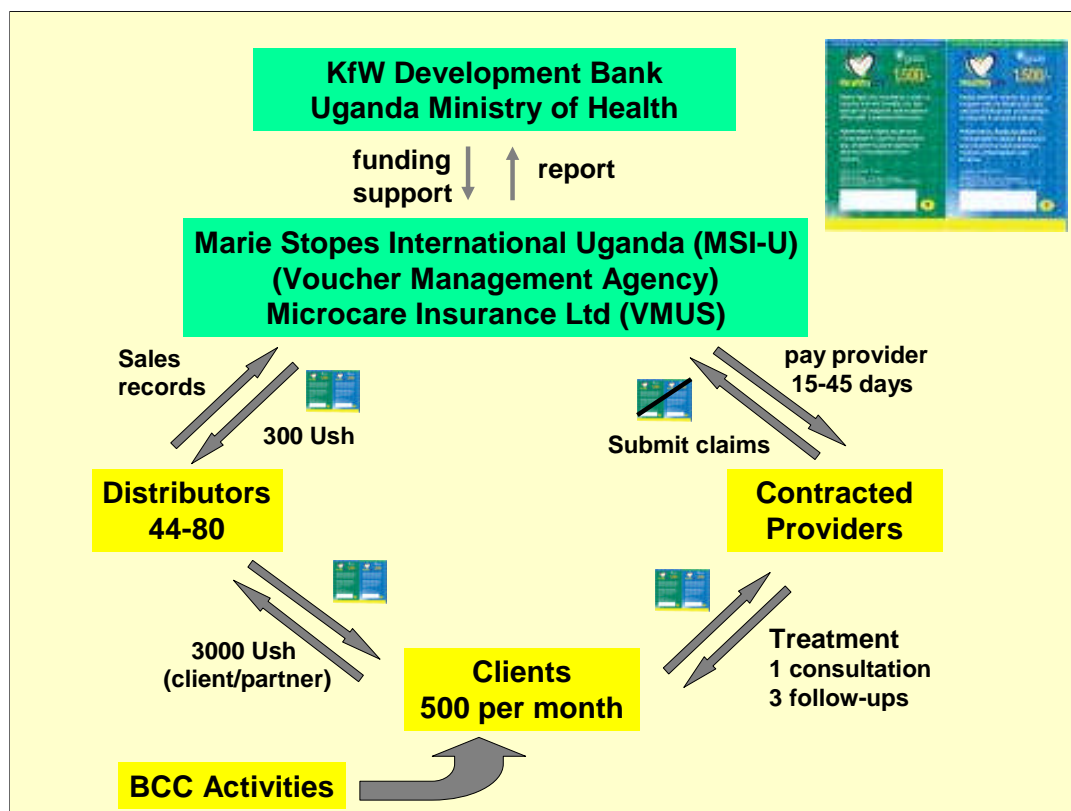
Ministry of Health contracts private clinics

- Negotiated fee-for-service output
- Clinics must meet accreditation before being contracted
- Clinics must comply with service guidelines to receive payment

Vouchers and health information marketed to STI clients

- Clients purchase subsidized double voucher (client/partner)
- Health services provided in exchange for voucher
- Clinic reimbursed for treatment costs after review of submitted claims

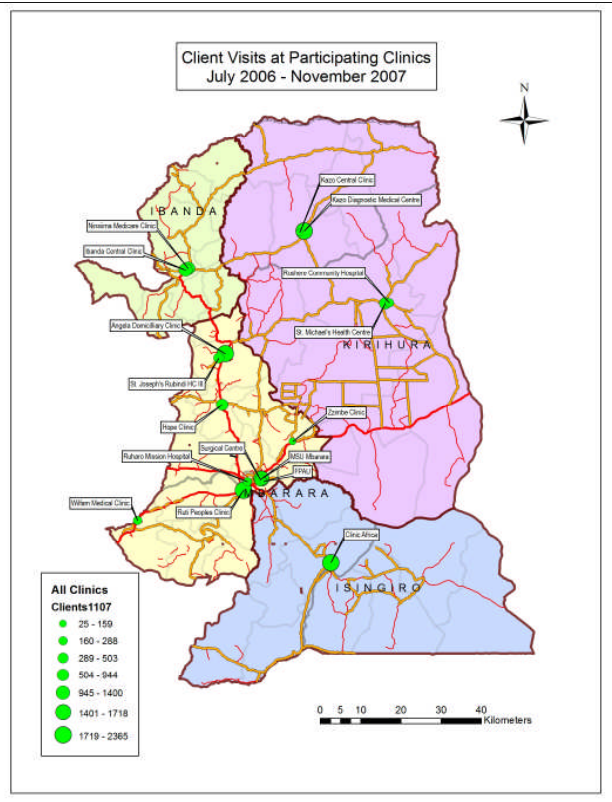
So what exactly is the OBA model in Uganda and how does it provide services to treat sexually-transmitted infections? In this program, the MOH has contracted private clinics on a negotiated fee for service structure. Clinics must meet accreditation standards before a contract can be signed and once they are members of the program, must comply with STI treatment guidelines in order to receive payment for services provided. In the second part of the program, vouchers and health information are marketed to clients who feel they may be at risk, or be suffering from, an STI. Clients purchase the subsidized double voucher for themselves and a partner and then take their half of the voucher to a clinic where it is exchanged for screening and treatment services. The clinic is reimbursed for the cost of the service once it has submitted a claim form to the Voucher Management Agency.



This slide presents a diagram of the program's design. The KfW Development Bank and the Uganda Ministry of Health provide funding to support the Voucher Management Agency, Marie Stopes International and, in return, receive ongoing progress reports. MSI provides vouchers to distributors who then sell to **clients**. Distributors receive a 10% commission on each voucher sold and return information on sales records and revenue to MSI. A client pays 3000 UgSh (around \$1.70) for the double voucher and can exchange this voucher for free clinical screening, laboratory testing, and treatment at one of the contracted private provider clinics. Up to three follow-up visits are permitted to ensure that the infection has cleared. On providing evidence that the correct treatment has been given according to program guidelines, the provider is reimbursed for the treatment. Incorrect treatment may result in the claim being adjusted and a lower amount reimbursed. The role of BCC programs is to both educate the population and to motivate potential **clients** to buy vouchers for an extremely low cost clinic visit.

Distribution of Clinics

District	Clinics	
	Jul 06	Dec 07
Ibanda	2	1
Isingiro	0	1 (April 07)
Kirihura	4	3
Mbarara	11	9
	17	14



This slide shows the region where the program operates. There are 4 districts, Ibanda, Isingiro, Kirihura and Mbarara. At the start of the program in July 2006 17 clinics were contracted. On the map, the clinics are represented by different sized green circles depending on the numbers of **clients** treated from the program's start to October 2007. The main commercial town in the region is the university town of Mbarara lying on the main transport route between Kampala to the east and Rwanda and Congo to the west. The regional population is 1.1 million with Ibanda and Mbarara the more densely populated districts. Kirihura to the northeast is a large and relatively wealthy region where the main business is cattle-keeping. Isingiro to the south is sparsely populated and poorly connected by roads, and there are two large refugee camps within the district.

OBA is right strategy for the region

- In first year of OBA, 16 private OBA clinics saw ~9000 STI patient-visits (~560 patients /clinic/yr)
- Greater Mbarara region has 143 government health posts with 65,000 STI visits per year (~454/clinic/yr)
- In first year of OBA, 200% increase in STI patients (both OBA and non-OBA) at contracted clinics compared to same clinics in the year before OBA

Private clinics see more STI clients as result of OBA contracts and BCC social marketing

This slide shows voucher utilization in the first year. OBA appears to complement existing STI treatment options in the region. Contracted providers saw somewhat more **clients** per clinic than the regional government health posts.

Based on the data collected at clinics in July 2007, in the first year of OBA, participating clinics saw considerably more STI patients than they did in the previous year before the OBA program began. Included in these increased numbers are **clients** who sought treatment using a voucher as well as those who sought treatment paying out-of-pocket.

Behavior Change and Communication (BCC)

Objective: Increase utilization of the program by clients

Strategy: Use **live community presentations** and **radio programs** to educate general public how to recognize sexually transmitted infections (STIs), how to use the OBA voucher, and where to seek treatment

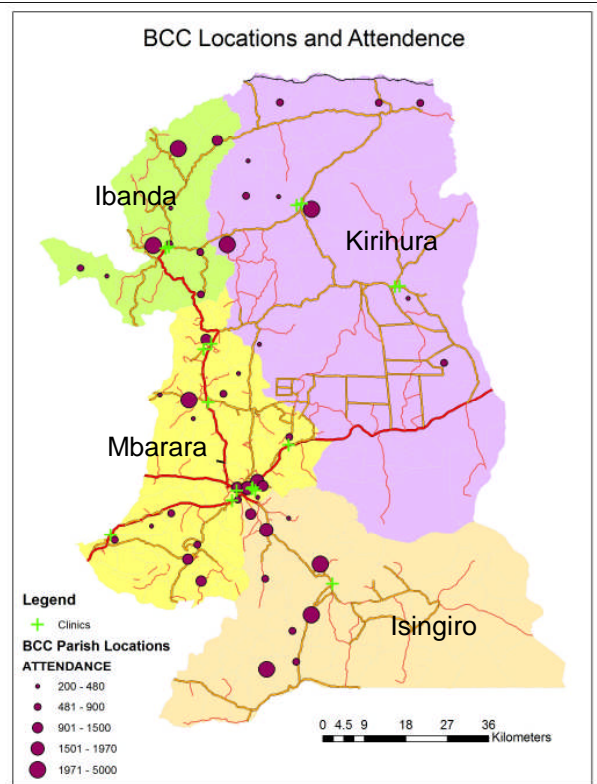
Target audiences in region (2002 census population 1.1 million) overlap but include general adult population over 15 years who are likely to be sexually active, have poor understanding of STI symptoms, and have poor access to health facilities (rural or economically deprived). High risk groups also targeted such as the military forces in the region.

The OBA program is structured on two pillars: output-based contracts and socially marketed vouchers. The objective of the marketing program is to both educate the population and encourage those who feel they may have an STI to seek treatment primarily through the OBA program. Two communication channels – live community presentations and radio programs - are used for both health education and voucher marketing.

Live community presentations are conducted in towns and villages by members of the BCC team from the voucher management agency in Mbarara and we'll talk a little more about those in a minute. Radio programs are hosted by local stations and involve program staff from Mbarara as well as invited health experts.

Types of community targeted for live presentations:

- densely populated areas
- under-served by health facilities
- military communities
- markets near providers
- youth and women's groups



This slide lists the target groups for live presentations and also shows the distribution with audience size at each event represented by graduated circles. Some of these communities are targeted because they are in areas of high population density and high traffic where the incidence of STIs is likely to be high. For instance, four small but densely populated towns lie along the Ibanda road running north of Mbarara town and that area sees considerable commercial traffic. Other communities are remote and underserved by health facilities. Several towns and communities in the region also host weekly markets which are very well attended and these markets provide a good opportunity to reach large numbers of people from remote areas.

Community Presentations

Typical Program shown in public space

- Health documentary film ("Silent Epidemic")
 - Video drama "skit" on stigma
 - Health educators Q&A session
- } Education about STIs
-
- Education about OBA program
 - Information on clinics and distributors
 - Distribution of leaflets and posters (30,000 in 18 months)
 - Selling "Healthy Life" vouchers
- } Marketing OBA program

Locations

Community centers and village meeting places (4-10 per month) presented in the evenings just after sunset (6-8 pm)

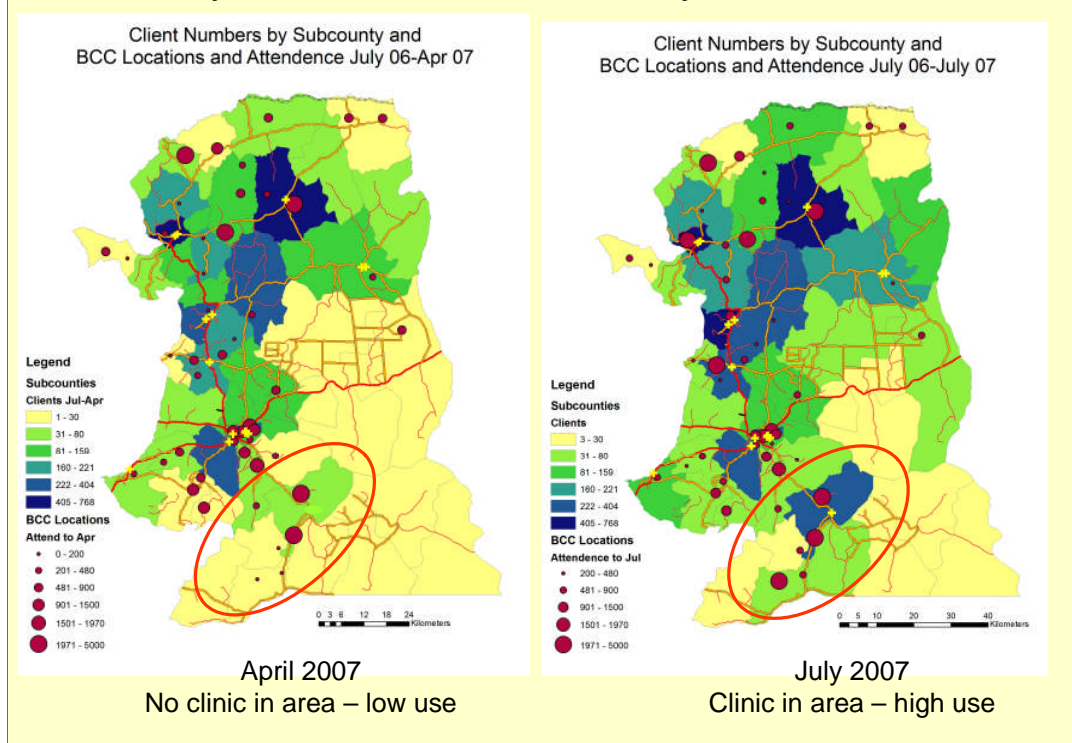
Regional marketplaces attended 30 times in 18 months, each time for full day at booths staffed by BCC personnel

Community programs consist of educational and marketing components and usually take place in the evening. After arriving in the village and meeting with local leaders, the program truck drives around the community announcing the BCC presentation over a loudspeaker. Popular music videos are usually shown before the real business of the presentation begins.

The film "Silent Epidemic", a 30 minute documentary about STIs, is presented with medical footage on STI symptoms, and is followed by a video skit on stigma and STIs recorded by a local youth group. A question and answer session on the issues surrounding STIs, their symptoms and treatment, is then held.

Following the Q&A session, information about the OBA program, local distributors, and clinics is provided. One leaflet printed in English and Runyankole, the local language, provides STI information, how to identify symptoms, and explains how the OBA program works. A second leaflet lists the participating clinics and provides contact information. At the end of the show, vouchers are made available for sale.

Community talks far from clinics may be ineffective



This slide indicates value of holding BCC programs in areas relatively close to clinics. The map on the left shows cumulative numbers of patients by subcounty up to April 2007. Note the subcounties of the southern Isingiro district, circled in red. Several large community presentations were conducted over the initial 10 months, despite the fact that the nearest clinic was only accessible by dirt road to Mbarara 30 kms away. Clinic utilization by people in this region was very low. Note also the pattern of use in the other areas. There are several subcounties to the north with quite high numbers of cumulative patients and not surprisingly these are located near clinics or near roads that connect to contracted clinics.

At the end of April 2007, a new clinic was opened in Kabingo, the main town in Isingiro district. Three months after opening, OBA clinic visits by Isingiro district residents had increased dramatically and the map on the right clearly shows this. Many more people from the subcounty in which the clinic is located sought treatment and people also began visiting the clinic from nearby subcounties to the south.

It appears that despite extensive BCC marketing, there may have been a maximum distance that people would travel to seek treatment given the trade-offs in time and cost. It is also interesting to see from this slide that in areas of high population density, such as the towns of Ibanda, Kazo and Rubindi to the north, there was consistently high use of the clinics over the course of the program. It was anticipated that these would be areas of high demand for STI treatment, and clinic use seems to bear this out.

BCC on the radio

62% of households in region have a radio (2002 census)

6 major radio stations – overlapping coverage of entire region

54% of Mbarara residents receive STI information from radio (2006 survey)

BCC advertisements: 8 recorded

- 1-2 minutes long
- Songs and STI messages
- multiple times daily

BCC talk shows: 27

- 60 minutes long
- Health expert panels
- Call-in quizzes and Q&A

Talk show topics

- | | |
|-------------|---|
| STIs | <ul style="list-style-type: none">• Signs and symptoms of STIs - Characteristics and Misconceptions• Vulnerability to STDs by sexually active men and women• Benefits of prompt STI management• Partner Management and Follow up Treatment |
| OBA program | <ul style="list-style-type: none">• Access and Benefits of the Health life Voucher• OBA interactive feedback on STD information• Reassurance of quality OBA Services & Voucher Benefits |

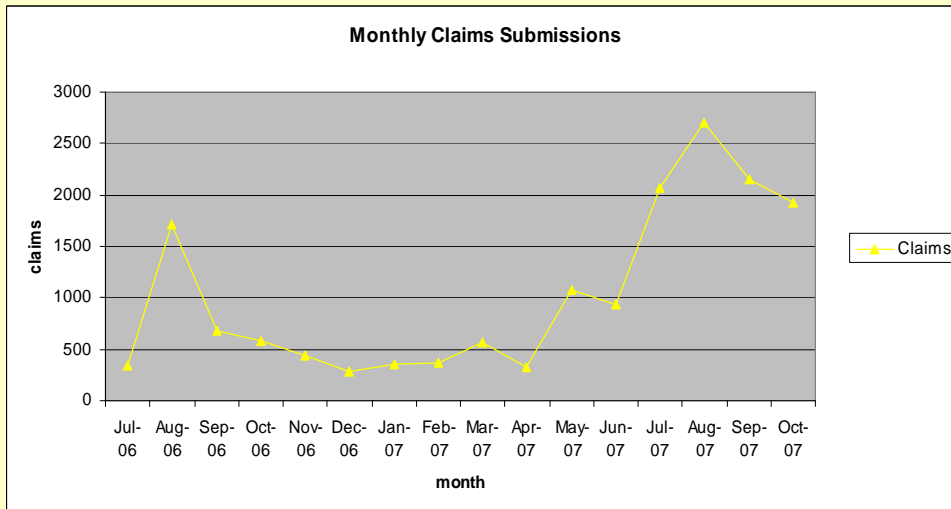
Participants

- OBA Medical advisors, program director, BCC personnel, doctors, clinicians and laboratory staff from OBA clinics

The second approach to BCC uses local radio stations. According to the Uganda census in 2002, almost two thirds of households in the greater Mbarara region have a radio. The Venture Strategies/Mbarara University population-based survey in 2006 found that over half of the respondents received health information via the radio. This has the potential to be a very effective method of mass communication.

In the course of the OBA program, 8 different radio advertisements were developed. One example is available on this conference's "electronic exhibition floor". These typically contain songs and health education messages and are played multiple times daily, depending on the contract signed with the radio station. Around once a week, a 1 hour talk show featuring health experts and program staff is broadcast and depending on the format, there may also be a Q&A session or call-in quiz show. Talk show topics vary but in general are of two types. Those aimed at education have topics on types of STIs, people's risk and misconceptions and treatment management. The other type of show explains the OBA program structure, how good-quality services are maintained, and provides general information on where to purchase vouchers and receive treatment.

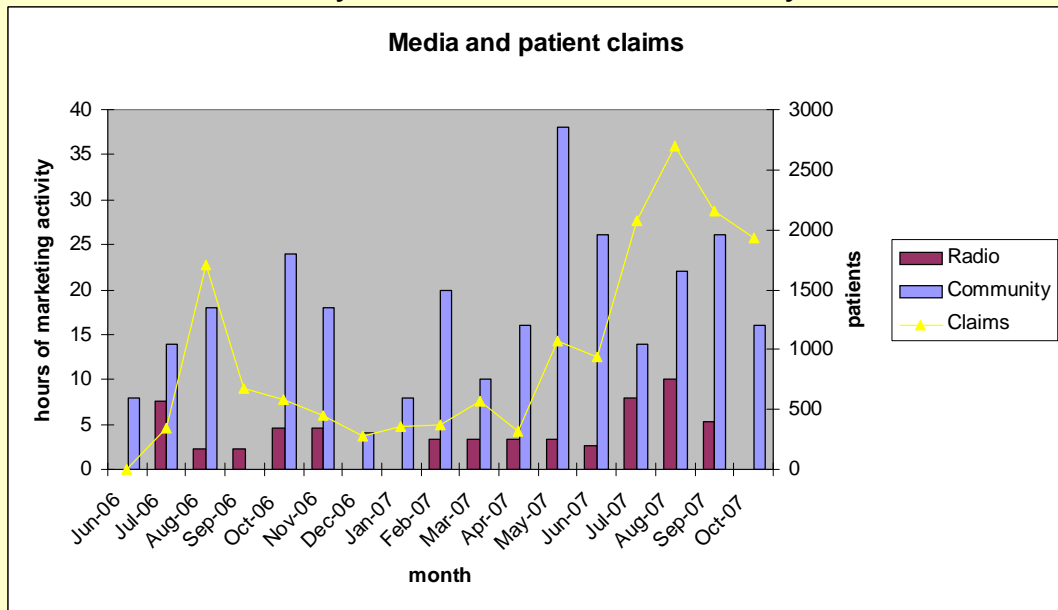
Client Visits to OBA Clinics



- Rapid uptake at program initiation (largely one clinic's claims submissions)
- Slow but steady uptake of vouchers from Sept 2006 to May 2007
- **Rapid increase from June-August 2007**
- Peak claims in August 2007 coincide with peak radio hours

This slide shows the number of client visits to clinics and includes follow-up visits, which constitute about 15% of the total patient load. At the start of the program, there was rapid uptake of vouchers, largely attributed to one clinic which was subsequently suspended for submitting questionable claims. From September 2006 to April 2007, clinics filed around 400 per month. Beginning in May 2007, utilization increased rapidly to a peak of over 2500 patients in August 2007. This period coincided with an expansion in BCC activities.

BCC community and radio activities vary over time



Radio tentatively appears to be a more effective medium for marketing STI vouchers

In this graph, the yellow line shows client visits per month and covers the same period as the graph in the previous slide. The axis on the left shows hours of marketing activity for both community presentations, shown in blue, and radio which is shown in dark red or maroon.

The number of marketing hours spent in the community increased considerably beginning in February 2007 with the most community hours recorded in May, June and September of this past year. Radio efforts expanded in July 2007, and involved 5 regional radio stations. Consequently, the number of radio hours of exposure increased three-to four-fold in the months of July, August and September and includes talk shows and advertisements. The absence of radio broadcasting in October reflects budget constraints. The number of client visits more than doubles in the same three month period and suggests that radio exposure, which has the potential to reach a very large number of people in the region, particularly if several different stations are used, has resulted in a considerable increase in the numbers of **clients** using the program.

Conclusions

- Live community presentations more effective when conducted in communities near contracted clinics
- Large increase in OBA clinic use (Jul-Aug '07) coincided with greater use of radio
- Patient loads increased during OBA first year including additional numbers of STI patients without voucher (no substitution effect within contracted clinics)
- Community presentations can target high-risk groups

BCC activities, notably radio, appear to generate large patient numbers at OBA clinics

In this presentation we have described community- and radio-based BCC activities designed to increase utilization of a voucher-driven OBA program to treat STIs. It appears that community activities are most effective when conducted in regions in which a provider clinic is located close-by. There is likely to be a maximum distance, related to availability and cost of transport beyond which people are unlikely to travel. The large increase in clinic utilization coincided with an expansion in BCC activities, particularly those carried out on the radio, showing that this medium is potentially more effective in generating large patient numbers. However, community-based efforts should be useful to target hard to reach high risk groups.

Additional research is needed to measure the costs and benefits associated with each type of media campaign, however. We hope to conduct a cost-effectiveness analysis in the near future.

Our presentation has not touched upon other issues related to clinic use such as existing popularity of participating clinics and quality of care. The numbers of **clients** seeking treatment at clinics was not equal and some clinics are likely more popular than others. Consideration of these currently unmeasured characteristics would provide us with a better understanding of how BCC efforts can be more effectively targeted to increase uptake of services over the whole region.

The Uganda OBA program is expanding this year with funding the Global Programme on Output Based Aid (GPOBA). New services for safe maternal deliveries and expanded STI treatment will be offered more widely in western Uganda. BCC activities will continue to play an important role in health education and marketing of OBA services.

Acknowledgements

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Before going, I want to acknowledge all of the partners in the OBA Uganda program and evaluation. The KfW Development Bank funded the program and evaluation, the Uganda Ministry of Health developed the program's structure with input from many experts, Marie Stopes International has managed a strong program since the voucher launch in July 2006, and Microcare Limited deployed the current health management information system. The Department of Community Health at Mbarara University of Science and Technology together with Venture Strategies for Health and Development in Berkeley, California have been excellent partners in evaluating the program's impact in the greater Mbarara region. To all the partners, "*webare*" or thank you.