Contemplating Circumcision for HIV Prevention in a Low-Uptake Environment

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Abstract: This paper presents evidence from 64 in-depth interviews with a sample of urban men who participated in a quantitative study of prospects for increasing medical male circumcision for HIV prevention in Malawi. Despite genuine interest in circumcision, stumbling blocks in the decision-making process deterred men from undergoing the surgery. The high cost of circumcision, including time off from income generation during the recovery period, forced men to choose between circumcision and other responsibilities. Men were often hesitant to give high priority to circumcision because of fear of the surgery. Moreover, men had limited access to accurate information on medical circumcision, which they could have used to allay their fears. Finally, inadequate service provision meant that some men who attempted to get circumcised were turned away by the clinic. Many of these barriers in the decision-making process were especially problematic because medical male circumcision is relatively rare in Malawi.

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1 Introduction

Recent studies showing that medical male circumcision lowers the risk of HIV transmission by up to 60 percent have inspired the promotion of circumcision in global efforts to halt the spread of HIV. Scaling up voluntary medical male circumcision has the potential to greatly improve health in Eastern and Southern Africa, where HIV prevalence remains high (Nagelkerke et al. 2007; Williams et al. 2006). Male circumcision is not a new practice in the region and studies of acceptability give reasons to be optimistic about the prospects for the success of widespread circumcision campaigns. Research throughout sub-Saharan Africa consistently finds that a majority of uncircumcised males express hypothetical willingness to get circumcised in response to questions about the surgery (Westercamp & Bailey 2007).

Given the high levels of reported willingness to get circumcised, and the large benefits for HIV prevention, it is reasonable to expect rapid uptake of male circumcision when services are made available. In the current study, however, only a very small percentage of the men offered an opportunity to obtain a circumcision opted to undergo the procedure. The findings presented in this paper are part of a larger study that combines qualitative and quantitative data from urban Malawi to examine the prospects for scaling up circumcision as an HIV prevention strategy. Our quantitative data indicate that among a large sample (approximately 1,700) of uncircumcised men, approximately 50 percent indicated willingness for a circumcision, but less than eight percent actually did get circumcised in the year between the baseline and follow-up surveys.

In this paper we use in-depth interviews with 64 men to examine the decision-making process of men who are contemplating circumcision. Interview participants were asked to describe their knowledge and opinions of circumcision, as well as how they decided whether or

not to get circumcised and any efforts they undertook to get circumcised. Many of the men in our study described genuine motivation to get circumcised. At the same time, they needed time to contemplate the decision, consult with trusted sources, and logistically prepare for the surgical procedure. The majority of the respondents who did get circumcised explained that they had decided that they wanted the surgery even before the arrival of the research team. They had both a high level of motivation and a head start in the decision-making process.

Our paper has several advantages over existing studies. First, we have data on *actual* circumcisions and barriers, rather than *hypothetical* willingness and barriers. Second, our in-depth interviews allow us to examine respondents' narratives of their actions in response to the offer of a circumcision subsidy voucher. We are able, therefore, to examine men's decisions about circumcision as complex and evolving; in other words, we are able to investigate the *process* of decision-making.

The paper proceeds as follows: Section 2 provides background on male circumcision and Malawi. Section 3 describes the data. Section 4 describes the study setting and the qualitative sample. Section 5 presents the results from the interviews. Finally, Section 6 concludes.

2 Background: Male Circumcision, HIV, and Malawi

Circumcision, one of the oldest surgical procedures in the world, has gained recent attention as a potential HIV prevention strategy. Randomized control trials in South Africa, Kenya, and Uganda provided overwhelming evidence that medical male circumcision can be up to 60 percent effective in reducing female to male HIV transmission risk (Auvert 2005; Bailey et al., 2007; Gray et al., 2007). Following the randomized control trials, recognized HIV/AIDS

organizations such as the WHO and UNAIDS made official recommendations encouraging voluntary medical male circumcision as an HIV prevention strategy (WHO 2007).

Sub-Saharan Africa—with the greatest proportion of HIV/AIDS cases in the world—has varying rates of male circumcision. Up until the recent medical male circumcision trials, the main reasons for getting a circumcision were religious or cultural. In Malawi, where our study takes place, the patterns of male circumcision are similar. According to the Malawi Demographic Health Survey in 2004, an average of 24 percent of men reported that they are circumcised; male circumcision is strongly correlated with ethnicity and religion.[1]

Given the relatively low rates of male circumcision, and its effect on HIV transmission, widespread male circumcision has the potential to produce substantial health benefits. In Malawi, a country with one of the highest rates of HIV prevalence in the world at approximately 11.9 percent (UNAIDS 2007), male circumcision could be effective for HIV prevention. Despite the potential, circumcision services are not currently readily available in Malawi and the government, unlike those in many neighboring countries, did not outline a national policy for the promotion of circumcision until very recently.[2] While uptake of adult male circumcision for HIV prevention in Malawi is rare, it is difficult to know if this is due to the lack of demand, or because of the limited supply.

[1] Two ethnic groups in particular contain the majority of men who are circumcised – the Yao, with 86% of men who are circumcised, and the Lomwe, with 33% circumcised. Other ethnic groups have much lower rates of male circumcision, such as among the Chewas (9%) and Tumbukas (2%). Religion is also important: approximately 93 percent of Yao's in Malawi are Muslim, as opposed to less than 2 percent among other ethnic groups (DHS 2004). Both the Yao and the Lomwe typically practice initiation ceremonies for adolescent boys that include circumcision as well as rituals involving receiving instruction for future life as a man (Stannus and Davey, 1913).

[2] Ministry of Health authorities and other government officials in Malawi suggest that clinical circumcisions can be conducted free of charge in government hospitals and clinics. In reality, this is rarely the case. Circumcisions are performed infrequently in government clinics because the procedure is considered "low-priority" compared to other surgical procedures. In some areas where traditional circumcision ceremonies are common, certain days or weeks are reserved as "circumcision days" in order to accommodate demand for the surgery among youth who request a clinical circumcision as part of their initiation. Some private clinics and hospitals have also begun to offer the service for a fee.

Studies examining the hypothetical acceptability of male circumcision in Malawi and elsewhere in the region find consistent and substantial support for circumcision among uncircumcised men and their female partners with a median rate of 65 percent saying they would be willing to get a circumcision (Westercamp and Bailey 2006). Ngalande et al. (2006) conducted focus group discussions in Malawi in 2003 among men and women ages 16-80 and found that male circumcision is generally acceptable and many people would welcome the provision of male circumcision services. Bengo et al. (2010) asked individuals in Malawi about their hypothetical willingness to be circumcised, and 35 percent reported being willing. These papers asked individuals to state the hypothetical motivations and barriers to obtaining a circumcision. Importantly, this paper differs in that we observe actual choices to obtain or not obtain a circumcision, and we can further investigate the decision-making processes.

3 Data and Methods

The data for this paper come from qualitative in-depth interviews with 64 uncircumcised men ages 18-35, who were randomly selected from a private clinic catchment area in Lilongwe, Malawi's capital city. The qualitative interviews were conducted as part of a larger quantitative survey experiment investigating prospects for scaling-up male circumcision for HIV prevention. The quantitative survey is described first below, followed by a description of the qualitative data collection.

Quantitative Survey

The quantitative survey consisted of two waves of data collection among a random sample of eligible men. Approximately 1,700 uncircumcised men were interviewed during baseline data

collection in March 2010. The sample was drawn from the catchment area of the private clinic that partnered with the research team to offer male circumcision services. Respondents were randomly selected from each household within selected areas. [3] Approximately one year later, in June 2011, the study team attempted to re-contact all baseline respondents for a follow-up survey. The wave 2 response rate was approximately 77 percent.

The quantitative study included two interventions that were randomly assigned during the baseline interview. First, respondents were given a price subsidy voucher to cover a portion of the cost of a circumcision at the nearby private clinic. The amount of the vouchers was randomly assigned at the individual level and varied from a price reduction of only 50 Kwacha ($0.33) to a complete subsidy, making the service free.[4] The second treatment was the provision of information: some of the respondents were informed that circumcision is partially protective against contraction of HIV.[5]

Vouchers were redeemable at the local partner clinic, a private clinic that primarily provides reproductive health care. The clinic has been expanding their services to include male circumcision. Men who wish to get circumcised may walk in at any time during regular business hours to undergo counseling and to schedule or undergo surgery. Although, as discussed further below, patients were often told that the circumcision specialist was not available and were asked

[3] The catchment area included several census enumeration areas, which were further divided into blocks using landmarks such as roads, streams, and large footpaths. Two blocks were randomly selected from each enumeration area. Within each block selected into the study, a full household census was conducted in which all members of the household were listed. During this time men who were eligible for the study were identified. In particular, eligibility was defined as any man – regardless of circumcision status – who was a permanent resident in the household, aged 18 to 30. In households in which more than one eligible man resided, one man was randomly selected. Only uncircumcised men were included in the full interview.

[4] Vouchers contained an identification number so that they could be tracked when they were redeemed at the clinic. Data from the clinic on which respondents had used the vouchers to obtain circumcisions was collected at the time of the follow-up survey.

[5] With selected respondents, interviewers read through a standardized information sheet that explained the three randomized control trials in Uganda, South Africa, and Kenya, as well as the results from these trials. They also discussed some of the medical reasons why circumcision is partially protective against HIV.

to return on another day. Patients must pay in advance of receiving any services. In 2010, the clinic offered male circumcision for 950 Malawian Kwacha (approximately $6.75).[6]

Qualitative Interviews

In-depth interviews were conducted with a total of 64 young men[7]. Participants in the in-depth qualitative interviews were randomly selected from respondents to the quantitative study. Panel A in Table 1 shows the distribution of baseline survey respondents while Panel B shows the number of respondents approached and interviewed in the qualitative study. Using clinic data, respondents were first divided into a group who chose to get circumcised after the baseline survey interview and those who did not. Approximately 3.3 percent of the respondents from the baseline sample were reported as receiving a circumcision from the data at the partner clinic. Within these two groups—circumcised and not circumcised—respondents were randomly selected, stratified on their intervention treatment group. Sampling for the qualitative interviews was done to maximize the breadth of experimental treatment and outcome combinations. This purposive sampling was important for an in-depth investigation of men's decision-making regarding circumcision. If one of the respondents selected for a qualitative interview was not successfully interviewed by the quantitative survey team at follow-up, he was removed from the qualitative sample and replaced with another randomly selected respondent from the same group.

[6] Average total monthly expenditures in the Lilongwe region was approximately 25,000 Kwacha ($178) (IHS, 2004/05). Therefore, the cost of circumcision at the clinic is approximately 4 percent of total monthly expenditures. This fee covered all surgery expenses, pain medications, follow-up review, and the treatment of any complications. Before the surgery, each patient receives counseling on the risks and benefits of circumcision. They are counseled that circumcision is only partially protective against HIV transmission and that they should continue using other prevention methods. The counselors explain that circumcision is recommended only for HIV negative men and offer a voluntary HIV test before surgery. Men who decline to be tested for HIV may still get a circumcision. A local anesthetic is administered for the surgery. After surgery, patients are reminded how to take care of the wound and are sent home with pain killers. They are advised to avoid activities that can re-open the wound until it dries completely and are told that they should abstain from sex for six weeks. Patients are supposed to return to the clinic within the first week so that the surgeon can verify that the wound is healing correctly, although many do not go back unless they are experiencing problems.

[7] In addition, 19 pilot interviews were conducted in one block of the clinic's catchment area.

In addition to the random sampling based on treatment groups, some respondents were added based on their responses to the follow-up survey or from the clinic records. Four respondents who were reported by the clinic to have attended for counseling but who did not eventually get circumcised were added to the sample. These respondents had taken steps toward circumcision but had ultimately failed to follow through and, therefore, had an important perspective on the decision-making process. Interviews were conducted with 14 respondents who were not recorded in the partner clinic data as having had a circumcision, but who reported to the follow-up survey team that they had been circumcised since the baseline survey. These respondents could have been circumcised at another clinic, or records of their circumcision could have been missing from the clinic data. Of in-depth interview participants, 29 were circumcised between the baseline and follow-up surveys.

Respondents in the qualitative portion of the study participated in a semi-structured interview lasting between 45 minutes and 3 hours. The interviews were conducted in Chichewa by male Malawian interviewers. Before data collection, the interviewers were trained on the purpose of the study and the interview guide. The interview guide contained open-ended questions on knowledge and opinions of male circumcision, factors considered when deciding whether or not to get circumcised, and the circumcision experience for those who underwent the surgery. Interview guide translation from English to Chichewa was done as part of the interviewer training, which facilitated further discussion of the interview goals. A third party back-translated the guide into English, providing an additional check of the translation. The interview guide and the skill of the interviewers were tested in pilot interviews. Four interviewers were retained at the end of the training and piloting period.

Before each interview, respondents were informed of their rights as research participants and gave written informed consent. With additional consent, a digital audio recorder was used to record the interview. All respondents were offered 250 mobile phone airtime units (approx. value of $1.67) at the end of the survey to thank them for their participation. The interviews were transcribed into Chichewa and English. The English transcripts were coded using a commercial software package designed for the analysis of qualitative data. We next turn to describing the setting and sample characteristics.

4 Setting and Sample Characteristics

The setting for this study is an urban area with considerable heterogeneity in socio-economic conditions. The area is accessible by public transportation (mini-bus) from the main bus depot and the two commercial and business centers of the city. The most densely populated section of the area contains a grocery, police station, and many small shops. This is where the clinic is located. Walking from there to the furthest parts of the clinic's catchment area can take at least 40 minutes. The variety of house constructions provides visible evidence of the socio-economic heterogeneity. Houses range from mud constructions in disrepair with no privacy fence to structures made of cement with corrugated iron roofs, brick fences, and iron gates. The wealthier houses have electricity and water running directly to the house; others collect water from community water pumps. Most residents of the area are renting their accommodations; relatively few well-off families own their own homes.

Overall, respondents included in this sample are wealthier and better educated than the average Malawian citizen. They also have more access to media and more chances for interaction with Malawian and foreign elite. In that way, respondents in the sample are likely to

be more comparable to other young men living in relatively large metropolitan areas in Malawi and other countries than they are to rural Malawians.

The demographic characteristics of the interview participants are listed in Table 2. The information presented in the table was collected during the baseline survey in 2010. The table shows means and standard deviations of continuous variables and proportions for dichotomous variables. The mean age of the sample at the time of the baseline survey was approximately 25 years old, which is reasonable given that the sample age restrictions were ages 18-35. Almost all respondents are literate in both Chichewa and English. They have completed an average of more than 11 years of school.

The sample is ethnically diverse, although there were very few Yao interview participants since only respondents who were uncircumcised at baseline were eligible to participate in the survey experiment. Similarly, all respondents are Christian, since nearly all Muslims in the area were already circumcised as of the baseline survey. Wealth was measured using an asset scale, an estimate of monthly expenditures, and a question capturing whether the respondent's household has electricity. Eight items are included on the asset scale: sofa, television, bicycle, car, computer, stereo system, hotplate/stove, and refrigerator. The scale is additive, with one point assigned to each asset that the respondent or the respondent's household owns. Interview participants own an average of 3.4 assets. Sofas were the most common asset, with 78 percent of respondents reporting ownership. Only 13 percent of respondents own a computer, the least commonly owned asset.

Respondents were asked to estimate how much they personally spend every month on clothes, medical expenses, food, transportation, and mobile phone air time. These figures were added to derive the total monthly expenditure estimate, which is converted to U.S. dollars using

an average exchange rate. The median monthly expenditure total among interview participants was $117. That the standard deviation of monthly expenditures is $93 is an indication of the considerable variation in wealth among interview respondents. Almost two-thirds of the sample respondents have electricity in their household.

Table 2 also includes indicators of respondents' health and sexual behaviors, as well as their knowledge and attitudes about circumcision. More than 90 percent of respondents have had sex in their lifetimes and the average number of sexual partners in the year before the survey was just under two. More than three-quarters of respondents report that they have ever used a condom. As of the baseline survey, not quite half of the respondents had ever visited the study partner clinic for any reason. Given that circumcision is promoted for the prevention of HIV transmission, respondents' beliefs about their HIV risk are important. Of the in-depth interview participants, 48 percent had been tested for HIV as of the baseline survey. Respondents were also asked, what is the likelihood that you will become infected with HIV in the future? Approximately one-fifth of respondents said they were at medium to high risk of HIV infection. Almost 40 percent said they were low risk and about one-third said they were at no risk of contracting HIV.

At the baseline survey, 60 percent of respondents said that they would be willing to get circumcised. Among those who said they would not get circumcised, reasons for their lack of interest included pain, negative health consequences, disinterest in the religious practice, distrust of the doctors, age, and fear of dying. Approximately one-quarter of respondents had heard of someone who was circumcised at the partner clinic. Before any information was provided by the research team during the baseline survey, almost 60 percent of respondents reported that circumcised men have a lower risk of contracting HIV than uncircumcised men. The next section

presents further data on respondents' thoughts about circumcision and their decision-making process about whether or not to become circumcised, based on the qualitative interview data. All the names used are pseudonyms to protect the identity of the respondents.

5 Results

Willingness to Undergo Circumcision

In the baseline survey data collection of this study in 2010, approximately 50 percent of the total quantitative sample indicated that they would be willing to be circumcised. Despite this evidence of demand for male circumcision in Malawi, very few of the respondents in this study were circumcised during the year between the baseline and follow-up surveys. One possible explanation is that survey respondents over-estimate their willingness to get circumcised, perhaps due to social desirability bias. This is especially plausible given that members of the survey research team are inevitably associated with efforts to promote circumcision, despite their best efforts to appear neutral. Although this may explain part of the discrepancy between the hypothetical acceptability and the actual uptake, the qualitative data provide additional evidence that a substantial portion of the men in this study have genuine motivation to get circumcised.

As we read through the interview transcripts, three categories of respondents emerged from the data: 1) respondents who had gotten a circumcision, 2) those who had not gotten circumcised but still had interest in circumcision, and 3) those who expressed either no interest or outright opposition to circumcision for adult men. Of the 35 interview participants who had not gotten circumcised, 19 respondents, or 54 percent, were coded as genuinely interested in circumcision. This figure approximates the proportion of men who reported at the baseline that they would be willing to undergo circumcision.

The most distinct group of interview participants were the men who clearly had no interest in becoming circumcised, who were approximately 46 percent of the respondents who did not undergo circumcision. They explained that circumcision was irrelevant in their lives. For example, an interview participant named Joseph said, *"I don't even desire to do it in any way even though it is good and I know its advantage. But for me to go and get it, no, I don't do that."* He explained that circumcision is fine for younger people, but at his "old" age (Joseph is 30), he felt that circumcision would be too painful and he was not interested. A similar statement came from Matthews: *"In my heart I doubted that I could have gone there. I knew that I couldn't have gone there because I do not take part in those things."* He was unwilling to discuss his reasoning and instead continually reiterated his lack of interest. These respondents make it clear that regardless of any potential benefits, they do not believe that circumcision is for them. Patrick was more explicit about why he was not interested in circumcision. He reviews two of the common explanations offered for why people get circumcised—increased sexual pleasure and reduced risk of contracting sexually transmitted infections (STIs)—and he dismisses them both as inadequate reasons for getting circumcised:

> *I may have a girlfriend but I feel it is good not to have sex until you are married. I do not think that I should get circumcised so that I increase my sexual pleasure… I do not think that is worth doing. People have the right to their opinion. What I believe is that once I get married I will have to discuss with my partner what we should do for us to be enjoying sex. I cannot afford to deliberately inflict myself with a wound just because I would like to enjoy sex. That I cannot do.*

And later he continued,

> *It should be people who indulge themselves in risky behaviors who rush to get circumcised. Aaah… Why should someone get circumcised because he would like to prevent STIs when there are several ways of preventing HIV, which include use of condoms as*

> *well as abstinence? That I should get wounded for seeking prevention from STIs that is something I cannot do.*

These respondents are unlikely to become circumcised in the near future, regardless of their circumstances or the design of potential interventions. Their answers are remarkable because they are in stark contrast to the way other respondents discussed their decision-making regarding circumcision.

Those who did not get circumcised and who were coded as having interest in circumcision explicitly expressed a continued desire for the surgery. Moreover, some also explained why they wanted a circumcision despite the availability of other methods of preventing HIV. Two main issues were raised repeatedly: problems with condoms and lack of trust in partners. Respondents explained that because of these issues, circumcision made sense as an additional strategy for preventing HIV transmission.

The commonly discussed problems with condoms were that they were not always appropriate, desirable, or available. Emmanuel explained that condom use in marriage is generally seen as inappropriate because it implies a lack of trust in your partner. He said, "*Condom use is also a better method, but people who are married see it as a problem. This is the case because if you are using that, it's like you are still untrusting each other*." This concern is echoed in the findings of many other studies on HIV and condom use in Malawi and beyond (e.g. Tavory and Swidler 2009; Hirsch et al. 2009). Peter described a general dislike of condoms, which is common in Malawi. He explained, "*A lot of young men hate using condoms because they do not feel anything. [They say,] 'I may just lose my money by having sex while putting on a condom.*'" He is saying that they will not get anything out of the sex if they use a condom. Goodwin was circumcised, and he says he encourages his friends to do the same because he

knows that they do not like using condoms: "*so I see that most of my friends have a tendency of having sex with different kinds of women, so I do take part in explaining to them to say; I think maybe the best thing is maybe if you can consider this circumcision. Maybe you can be half way protected. Because there are other people who don't like to use condoms but they want to have sex with a woman plain [no condom on]*." Condoms are generally disliked because they destroy the "sweetness" and the pleasure of sex (Watkins 2004).

Respondents also talked about how they didn't always have condoms available when they needed them. In part, this is a result of the other two commonly cited problems with condoms; men do not want to carry condoms because of what it would signal about their sex lives and because they do not always want to use them. In any case, several men gave examples of situations where unprotected sex occurred because condoms were not available or were forgotten. Christopher, who was circumcised between the baseline and follow-up surveys, illustrates, "*one may use protection against STIs, but you may not always be ready to do that [use a condom]. You may want to have sex when you do not have condoms. In my case, I travel quite a lot. I was in Zomba yesterday and I might be travelling to Karonga today. Such things happen. It may happen sometimes that we have a breakdown and you are found at an awkward place unexpectedly and forced to sleep. You may have sexual desires that you cannot control. You may not have an opportunity to use a condom*." Edward also describes this problem, "*So, I am a man, [who thinks] 'I should drink one here' [Bottle of beer]. You may meet prostitutes, yeah. When you meet those prostitutes you do things under intoxication and you cannot remember a condom. You just say, 'Ah, you, I will give you money. Let us have sex here.' So, those things can cause a person... you will find that you will do that alright, but you will find that [after] three days, four days something has started itching in the body, yeah*." In sum, condoms

are not seen as a universal solution to the need for HIV prevention because they are not always appropriate, desirable, or available.

Remaining faithful to one partner is not seen as adequate protection from HIV either, because many men feel unable to trust the faithfulness of their partners. Emmanuel explains, "*As you know, our major problem is diseases. You may be in marriage and say you are trusting each other, but since we don't know what each other thinks… But this [circumcision] might be a better way to protect myself if my partner is not faithful*." Joshua expresses that he wants a circumcision because his partners might not disclose their HIV status to him: "*Yeah, I was confident that male circumcision is significant in HIV prevention, because if one is circumcised then you can have a reduced chance of getting the HIV from someone, let's say your girlfriend, who in the first place hides from you that she is HIV positive*." Daniel got circumcised, but we quote him here because he perfectly summarized why a lack of trust in partners would lead men to opt for circumcision as an HIV prevention strategy. He explained, "*Ah, trusting one another on issues of health? It's like every one of us stays separate from the other. I cannot know the way she is conducting herself there and me here. We are people who when we meet, we chat, and then everybody goes to her home. But on the issue of health these days it is everybody takes care of their own affairs; you take care of yourself on issues of health*."

By describing the limitations of other methods of HIV prevention, these men demonstrated a real interest in circumcision. Certainly, their degrees of motivation to get circumcised varied, but it is clear that on some level, many of them continue to consider undergoing the surgery. And yet, only a very small percentage of the men who were offered vouchers to discount the price of circumcision actually did get circumcised in the year between the baseline and follow-up surveys. An examination of respondents' decision-making processes

illuminates that simply removing the barrier of the cost of the surgery did not remove some of the other barriers that prevented them from getting circumcised. Opting for circumcision is a decision that requires time, planning, and courage. In an environment where few men are getting circumcised for HIV prevention, access to accurate information on circumcision, and to circumcision provider services is often inadequate. These contextual factors make an already complicated decision even more difficult. Each of these barriers to circumcision is reviewed in the following sections.

The Decision Takes Time

Opting to get circumcised as an adult male is a big decision, no matter what the potential benefits of the surgery. The decision requires considerable planning for various costs and the accumulation of motivation and encouragement to overcome the fear and anticipated pain. A few of the respondents explicitly addressed the need for time to make the decision to get circumcised. When the interviewer asked Solomon what came to his mind when he received the subsidy voucher, the respondent explained, "*Ah, what came that time... I was still thinking to say; should I do this or not? I was thinking about it and it was found that I had not yet made the real decision until when he came the second time [the follow-up survey enumerator]; when you came in July, yeah. After he came this period in July this year I made a real decision to say, at least this thing is helpful, yeah*." The interviewer probed, asking what helped him make the decision. And he responded, "*Ah, that time what I was thinking was that... since it was first time [learning about circumcision], it was something very confusing to me, but now I have grown a bit. I am able to know a lot of things. So that is what caused me to make the right decision, yeah*."

Thomas used his voucher to get circumcised, but he admitted that he had wanted a circumcision for 1.5 years before the arrival of the research team and had never attempted to get the surgery. He explained his period of inaction by saying that it takes people time to accept a new social practice: "*Yes, there is something I would like to add and it is that when you people are doing research there is need for you to tell the people things "zogwira mtima" [that touch their heart]. We people have difficultly to understand what we knew a long time ago to be changed within a matter of a day; it is something difficult*." Later he continues, "*Because when you are putting into the mind of a person something that you are saying is good, you have to oppose something that he knows before you tell him, you see that? Or what their parents told them, yeah*." He highlights the fact that when adult male medical circumcision is introduced as an HIV prevention strategy, it means that circumcision suddenly becomes a relevant option for men who previously thought that circumcision did not apply to them. Furthermore, the new messages about circumcision conflict with previous understandings of circumcision, learned from older generations, as a practice that was conducted only on young Yao or Muslim boys. He explained that it takes time for people to change their minds.

Planning to Cover the Costs

Part of contemplating circumcision is considering the various costs that will be incurred during the process. As described above, the circumcision itself costs approximately the equivalent of between 1.5 and 2.5 days of average earnings (although many in the sample earn well below average). The subsidies offered by the vouchers varied, and many of the men in the study did not manage to make it to the clinic for circumcision during the three-month voucher validity period. Even more problematic to the majority of the respondents was the expectation that they would be out of work for approximately one week while their wound healed. Given that

many of the respondents use their daily earnings to feed themselves and their families, taking this much time off of work would require advance planning or external support. Edward explained the advanced preparation necessary:

> "*And also by the time I shall be going there, I should be ready, since I have a wife, I have children. For me to be home full time for one week, there is need for food. So, I will have to prepare very well to say, 'If I will be home these will be sufficient for me up to the time I will get healed.' Those can be my words that I am ready, but there is need to get well prepared because you can't say you are prepared but there is need to get well prepared. I can go there, they will circumcise me but I will be home. The wife will be looking at me, there is no food. That means I have also brought some problems in the home. But there is need for me to get well prepared and then I should go there, sure, sure*."

An interview participant named Justice said at one point during the interview, "*I wish I was circumcised*." But at another point he explained all of the costs involved:

> "*Yeah, money was just a problem but that circumcision is very important. Because for you to go to the hospital, then that means you should keep money, transport, K3000 so that they can circumcise you [3,000 Malawi Kwacha is the price of circumcision surgery at some clinics in Lilongwe]. And also when you get circumcised there is need that here in the home there should be some support. You should be using that money during the days that you are not moving, but male circumcision is very important. It is very important; it is only the money for going to the hospital that is scarce for you to get circumcised*."

David explained that his income supports many family members, so it is not easy for him to forgo earnings:

> "*The time was there to go to hospital, but because I was busy with work, because we get our wages at the end of each day. So I thought not to go because that would have taken me a lot of days without working, considering that the family relies on me now. If the money I get was enough, it could have been better. Currently I have my younger brother, who I support his education with the same money. So, I thought that if I go I will lose the money for*

> *several days that I could have used for supporting my family and my younger brother*."

Echoing the concerns about caring for family while healing from the circumcision, Michael said, "*I have a family and one child, I pay rent, and everything I do it on my own. So I say; aah, with that, if I can go to the hospital to do that [get circumcised] how am I going to pay rent, what am I going to eat?*" Francis also worried about how he would find money for food if he was not working every day: "*like I have said that I really want that circumcision...even today I can go there [to the clinic], but like I have said that I do some piece works to find food...so for me to go there I may stay for about one week laying down but then what will I eat?*"

In the research site, most men have both low and uncertain incomes, as well as family members who rely on them. It was difficult, therefore, to prioritize circumcision over an income generating opportunity. Of course, many of these men probably experience emergencies or periods of crisis where they are without income for a week or much longer, and they manage to get through those emergencies. However, planning for an optional loss of income is quite different from coping with an emergency situation. Planning and saving for an elective loss of income during the recovery period necessitates prioritizing circumcision over other potential uses for those resources, which requires a high degree of commitment. When men are asked hypothetical questions about circumcision, they are usually asked whether they would be willing to undergo circumcision, but they are not asked what they would be willing to give up in order to undergo the surgery. The data presented here provide evidence that when making actual decisions about circumcision men consider the trade-offs. In addition to considering the merits of circumcision, they also evaluate the costs when deciding whether to make circumcision a priority.

Overcoming Fear and Anticipated Pain

As just described, to prepare for all of the costs, men had to prioritize circumcision over other ways they could spend their resources. At the same time, fear of potential damage that could result from botched surgery and fear of the pain discouraged men from making circumcision a priority. When asked what disadvantages of circumcision he considered, an interview participant named Blessing said, "*Okay, the problem that I thought of is... on the issue of circumcision, just hearing from people they say, but when you do that like that... when you get circumcised, you feel much pain. So, that was what I feared... the thing that I was fearing a lot was the pain*." James echoed the same concerns when asked if he had fears, "*Yes. That cannot fail. I am a person. We expect that even when someone just touches the luggage [penis] you feel awkward just at the touch so imagine someone cutting your foreskin; for sure you would have some fears so yes I had some fears*."

Many of the respondents described their fears in vivid imagery, suggesting that they had spent time visualizing the worst-case scenarios. Zachariah explained his fears most succinctly: "*My only fears concerned the outcome of poor surgery, which would consequently lead to one being disabled and that would compel the surgeons to completely cut the whole thing off*." When asked what he considered when deciding whether or not to get circumcised, Robert said, "*the other thing was that maybe as a person you might become abnormal, that's considering how they have done it there [circumcision]. The way they have done it maybe instead of doing things orderly they have rushed through the process...so maybe you might find yourself...I can say...maybe that organ is now having some abnormalities or complications like maybe swelling like that*." Edward explained that he will get circumcised when he becomes "courageous:" "*the time I will be courageous I should go there and see how they will deal with me."* He feared that,

"*it happens that after they have circumcised you it [the penis] swells. So, it is found that you get destroyed; the entire sex organ gets destroyed*." Thomas, who got circumcised, echoed the sentiment that circumcision requires courage. When he was trying to convince a friend to also get circumcised, Thomas reports that his friend was "*saying that I was courageous*."

The level of fear and the need for courage to undergo circumcision is not surprising. Jonah, who was so afraid that he was coded as having no interest in circumcision, put it plainly during his interview. He pointed at his penis and said, "*You know, this is life*." The men who told stories of circumcision gone terribly wrong acknowledged that their fears were based on unfounded rumors, but the rumors were scary. Their decisions about circumcision were not simply rational calculations; emotions played an important role. The difficulties of preparing for the material costs of circumcision were compounded by the fears associated with the surgery. Moreover, in the Malawian context where few men have undergone circumcision as adults, there are relatively few first-hand accounts that men can rely on to allay their fears. The inadequate availability of accurate information about circumcision is the subject to which we turn next.

Availability of Accurate Information

Men in our study reported receiving both encouragement and discouragement from friends, partners, and families. Importantly, they also reported receiving a lot of conflicting information. So, in addition to the preparation necessary to cover the costs and the courage necessary to overcome the fear of circumcision, respondents were also confronted with uncertainty about the circumcision process itself. Many respondents were unsure of the unsubsidized cost of circumcision and the length of the healing period. This uncertainty led to stalling in the decision-making process.

Juma gave a detailed explanation of his decision-making. When he got the voucher for circumcision from the research team, he first went to his friends for advice. Some of his friends relayed rumors they had heard about circumcisions gone wrong, while others encouraged him to get the surgery. They also gave him a variety of responses to his questions about how much the circumcision would cost and the length of the recovery period. When asked what he considered when deciding whether or not to get circumcised, he said, "*Obviously the first thing was what my friends told me that once I get circumcised the wound would not heal and eventually my private parts will start to disintegrate up to the point that they will just cut them so as to prevent me from dying. Then I said to myself that it was not worth dying for. I said I was going to think deeply over this. And then I asked another person, then another one, and again another one, then I said I think the other one was telling me lies. Then I said this one is telling the truth, just like this one is also saying the truth. I said to myself that I was still going to get the real answer*."

After searching for accurate information among his friends, he finally sought advice from a trusted advisor at a local youth center, who convinced him that circumcision was a good option. He went to the clinic for more information on the process, only to find the clinic closed for the day. Failing at the clinic after dealing with so much uncertainty from his friends led him to temporarily abandon his interest in circumcision. At the end of the interview, however, he said, "*I would now go and get circumcised since I now know the truth about circumcision*." He had invested a lot of energy in discovering the "truth."

An interesting contrast is provided by Andrew, who did get circumcised. He also had some friends tell him horror stories about the possible negative consequences of circumcision gone wrong, as well as some friends who encouraged him. In addition, however, he was friends with a neighbor and many men from his work at the taxi rank (taxi stand) who had gotten

circumcised as adults. Hearing their experiences helped him to disregard the fearful rumors he had heard elsewhere. He explained that while considering the horror stories relayed by his friends, he remembered, "*three quarters of the men at Kawale rank also got circumcised, and they would be saying that such such a person has been circumcised and such such a person has been circumcised. So I said if they did not die, why should I be the first person to die? So I said no, I will go and I will get circumcised*." Also, he saw his neighbor the day after the neighbor's circumcision and was reassured that the surgery itself is not a painful process. For him, having personal connections with several men who had been circumcised as adults convinced him that it was safe to get circumcised. Unfortunately, many of the men in the sample did not have this level of access to first-hand information about the circumcision process. Moreover, as discussed in the next section, accessing information from official sources was often difficult as well.

Inadequate Service Provision

The availability of circumcision services from the clinic in the research site was often unreliable. Most of the interview respondents who were circumcised between the baseline and follow-up surveys had to go to the clinic more than once before they managed to get the surgery. Moreover, some respondents tried several times to get circumcised and finally gave up after a few failed visits to the clinic. The specialist who performed circumcisions was often unavailable and patients were asked to return another day. At other times, the number of men seeking circumcisions exceeded the clinic's capabilities for one workday.

An interview participant named Prince went to the clinic three times to try to get circumcised and failed all three times. He was so discouraged by this experience that he has not attempted to go back. He explained, "*When I received the voucher, I managed to abide by the*

dates. I went there and I was told the doctor was not available. I waited for an hour and later left. I went there the following morning where I produced the voucher and had to wait again for an hour or so and the doctor did not show up. I was told to wait because the doctor was coming. I went there again. I really wanted to do it but the person [doctor] I was looking for was not available. This is what brought this whole thing to a halt." He had gotten as far as seeking the services and was dissuaded by the lack of availability of the doctor.

Francis went to the clinic to get circumcised shortly after receiving his voucher, but the specialist was not available that day. The interviewer asked if he had gotten counseling when he was at the clinic and the respondent said, "*Aah, they just told me to come again, they did not explain to me to say; this will be like this and that...*" After this attempt to get circumcised, his friends discouraged him, so he never went back to the clinic. Patrick had a similar experience, except that it was his girlfriend who talked him out of returning to the clinic for a circumcision after his first failed attempt to get the services.

Blessing went to the clinic for circumcision and was turned away. He had to leave town shortly thereafter and did not manage to go back to the clinic before his subsidy voucher expired. He said, "*They said that, right now we are busy. So why don't you come tomorrow? When the next day came I started to do what? It was like a sudden journey to the home village and to do other things. When I came back from there, I found that my voucher had expired. They told me that, your voucher has expired and it cannot be used.*" As discussed above, getting a circumcision requires courage and advanced planning to assemble the required resources. For many respondents, it was discouraging to get as far as the clinic reception only to find that they would have to return another day. The delay often led to further consideration of the resources

required and of their fears of circumcision, which ultimately meant they did not make returning to the clinic a priority.

Previous Interest in Circumcision

The few respondents who did undergo circumcision also had concerns about the resources required to get circumcised, felt fear about the surgery, and faced inadequate service provision. The majority of them, however, had contemplated the pros and cons of circumcision before the arrival of the research team, and had made the final decision that they wanted to be circumcised. Out of the 29 interview respondents who were circumcised during the research project, 21 of them stated clearly that they knew before their first survey interview that they wanted a circumcision. This is the most distinguishing feature of the group of respondents who got circumcised. As described earlier, the decision to undergo circumcision is difficult and it takes time. These respondents had already taken the time to contemplate circumcision and had decided that it was in their best interest. When the research team arrived, therefore, and offered a substantial discount on the price of circumcision, many of them were eager to take advantage of the opportunity.

Nathaniel had a long-standing interest in circumcision, but he had been discouraged by the cost of the surgery, so he was excited when the research team offered him a voucher. The interviewer asked, "Could you explain to me how you decided to go for circumcision?" And he responded,

> *"What really drove me to this was.....I already had the interest, so when I went for other reasons… like I said, I was told that the cost of circumcision was one thousand something kwacha, but because at that time I did not really have a reliable source of income, I just went back home. So when these research guys came, the first ones they were giving out vouchers. I also asked about the cost of the*

> *circumcision at that time I went to the hospital, by the way. They said that if one was lucky they could get a voucher that would mean that they would have to pay less money towards the cost of the circumcision. After they did their random selection, I was given a 950 kwacha voucher, which meant that I could just go to the clinic and get circumcised free of charge because the voucher was catering for the whole cost. So for me it was something like a chance because now what I had wanted all along would become possible..."*

Paul had a similar story. When the interviewer asked him about the factors he considered when contemplating circumcision, he said, "*You know what? When you have wanted something for some time and when you find it free of charge it is priceless to you and you immediately want to go for it. That also drove me to make the decision because it was also free of charge. I did not want to even tell my friends for fear of them making me afraid again by telling me that circumcision is painful so I went.*" He clearly faced fear of pain and financial constraints, but having already made up his mind that he wanted a circumcision, he did not want to miss the chance to get circumcised for free. Thomas was also happy to receive the voucher: "*I received it happily because that time I also had the thoughts to do things like these [to get circumcision], yeah. So, when I received that voucher I was very happy to say, 'Maybe now I can do the things I wanted freely,' yeah*." The vouchers made it possible for these respondents to meet their goals of getting circumcised.

Other respondents described how they had been interested in circumcision and the arrival of the research team provided the final incentive they needed to make the circumcision happen. Nile explained that receiving the voucher was the motivation he needed and he used the voucher to get circumcised: "*So, it was like we found a better opportunity to do that because [before] we lacked a certain pressure from some people or advice to say, 'Let's go.' So, because a voucher was available I saw that this is the opportunity*." Paul clarified that the research team's arrival

helped him decide to ignore his fears, "*Since my Standard eight [school] days, I wanted to go to the Central Hospital to get circumcised, but I was discouraged by my friends. They made me afraid. That time for one to get circumcised they had to pay four hundred and fifty kwacha. They told me that it would be very painful, so I decided not to get circumcised, up to the point you came and gave me a voucher, and I said to myself that a chance had availed itself to me. Then I said to myself that I will go there and experience the pain myself. That was when I went to get circumcised*…"

Steven explained that he took advantage of the offer of a subsidy voucher for circumcision because he had already been interested in getting circumcised. He hypothesized that others did not use their vouchers because they were not prepared to receive the new information about circumcision. He thinks that people hearing about circumcision for the first time would begin to doubt as soon as the researcher left their home. He said,

> *"Like for me I feel that the goodness was that that thing found me when I already had the thought, you see? Yeah, so when the person [researcher] came and gave me the voucher, it was like he was just adding onto the thought that I already had. But let's suppose the way you came, you have just come and you have found me in other thoughts and you are introducing another topic that is not in my head. Being a person, I will be looking at what you are telling me. So I can be through with you, maybe you have given me a voucher. So, when you are gone, on my own, some wisdom starts coming to me to say, 'ah, no.' It is easy to change thoughts to say, 'no, maybe I should not do those things, yet I have received that voucher.' So, maybe that is why, they changed thoughts after they had already received the voucher. That's why maybe those people did not go. But I see that we people who went maybe we already had those thoughts, yeah."*

The majority of the interview respondents who had previous interest in circumcision got circumcised. This finding fits with the results presented earlier that the decision to get circumcised takes time. Having already made up their minds that they wanted circumcisions,

these men were motivated by the price reduction to find the courage and resources necessary to get the surgery.

Of course, previous interest in circumcision is not a perfect predictor of the interview participant's decision regarding circumcision. Some of those who got circumcised did not indicate that they had previous intentions to get the surgery. Most of those respondents reported receiving support and encouragement from friends, relatives, and wives/girlfriends. For example, one man had a Yao girlfriend who encouraged him because circumcision is part of her culture; another man was accompanied to the clinic by supportive relatives; and a third man was accompanied to the clinic by his wife.

Other respondents who got circumcised and did not talk about having interest before the arrival of the research team seemed particularly fearful of HIV/AIDS, which provided their motivation. Mark says he "*cannot trust a woman*." He trusts his girlfriend "*0.5 percent*" and says, "*That is the highest percentage I have ever trusted a woman in my life*." His motivation is extra protection from HIV that does not rely on the cooperation of a partner. Another interview participant, Benjamin, who got circumcised, expressed his fear of HIV by saying, "*These days, things are not okay*." He continued, "*Most of the people that are being found to be HIV positive these days are the youth. Most of them are less than 25 years old, which is our group, we youth*." His heightened sense of vulnerability to HIV seems to have provided a high level of motivation for circumcision. As he says, "*Things are not ok, so without circumcision, eishh! So for me I support circumcision.*" These cases show that interested men with enough support and motivation can overcome the challenges of resource constraints and fear and can make a decision in favor of circumcision within a reasonable time frame.

On the other side, there were two men who clearly indicated that they were interested in circumcision before the research team arrived and yet they still did not manage to get circumcised after they were given the subsidy voucher. For both of them, cost issues prevented them from getting circumcised. Zachariah had wanted a circumcision since he was young because his mother was from a circumcising ethnic group and because some of his friends had experienced the protective power of circumcision against sexually transmitted infections. His precarious financial situation prevented him from getting circumcised despite his motivation. Even with the subsidy voucher, he could not manage to pay the remainder that was due to the clinic. He explained, "*The only problem I had on that day was that I had a K500 voucher. I did not have enough money to pay for the difference*." He tried going to the clinic for a circumcision in the hopes that they would assist him even if he couldn't pay, but they turned him away: *"As for me, I completely had nothing on me. I returned home even after having filled the forms. I was told I could not be assisted*."

David learned about the benefits of circumcision in school. He had gone to the clinic before the arrival of the research team to enquire about the cost of a circumcision and he decided that he could not afford it. At that time he was a student and he relied on his mother for support. Although she favored his decision to get circumcised, she was unable to provide him with the required funds. Several years later when the research team arrived and gave him a voucher to cover most of the cost of the circumcision, he had become the income earner for his family and he was unable to take time off of work for the circumcision and the healing period. He explained, "*What actually happens is that when our work is in progress, it goes as far as working the whole day until morning. I understand if you get circumcised it takes about 7 days, so I took it as a long period, considering that it's a work that is more like wage labor, not the kind of work that you*

get monthly salary." He could not justify forgoing a week's worth of income for a circumcision. Both Zachariah and David faced such large financial constraints that they were unable to act on their desires for a circumcision.

In sum, there were a couple of respondents who had long-standing interest in circumcision but who were financially unable to get circumcised, even with the help of the subsidy vouchers. There were other respondents who did not have interest in circumcision before the arrival of the research team and yet they had enough support and motivation to get circumcised when offered the opportunity. The majority of respondents who got circumcised, however, were those who had decided before the arrival of the research team that they wanted a circumcision. They had had time to contemplate how they would overcome the material and emotional barriers to circumcision. When the subsidy voucher made the surgery cheaper, they took advantage of the opportunity.

6 Conclusion

The results described in this paper come from in-depth interviews with a sub-sample of the men in a survey experiment designed to investigate prospects for scaling-up male circumcision for HIV prevention in urban Malawi. The research project was innovative because its longitudinal and experimental design allowed us to measure actual acceptability of adult male circumcision, rather than hypothetical acceptability. The survey participants were offered an opportunity to obtain a subsidized circumcision at the private clinic in their neighborhood and their decisions were captured in a follow-up survey approximately one year later. The quantitative survey results indicate that while approximately half of the survey respondents indicated in the baseline survey

that they would be willing to get circumcised, less than eight percent of them actually did get circumcised.

This research took place in urban Malawi among 18-35 year old men in a mixed- to low-income neighborhood. As urban dwellers, these men have more access to healthcare services, more access to media, and higher educational attainment than their rural counterparts. In addition, they live in more socially heterogeneous communities and they may be more removed from the customs and influence of their elders. For those reasons, the interview participants' decision-making processes regarding circumcision should not be generalized to the whole population of Malawi. Further research on decision-making regarding adult male medical circumcision in a variety of settings is needed because, as discussed below, contextual factors influence the decision-making process.

The in-depth interview component of this study provides critical insights into the complex decision-making processes of the research participants. We found, first of all, that about half of the respondents had no real interest in circumcision, which corresponds with the fifty percent who reported in the survey that they would not be willing to get circumcised. The other half of the interview respondents who did not get circumcised continued to express some level of interest in undergoing circumcision. Many of them demonstrated their motivations by describing the flaws in other HIV prevention methods. Having learned that these respondents were not driven purely by social desirability and, instead, that they had genuine interest, we then turned to understanding why so few of them managed to get the circumcisions that they claimed to want.

We found that for men in urban Malawi today, it takes time to contemplate the pros and cons of circumcision. Given that many of the men in our sample had both low and uncertain

incomes, it was difficult for them to prioritize circumcision over any potential income generating opportunity. Choosing to take time out of productive activities or the search for productive activities for an optional and not widely practiced HIV prevention measure was seen as a big decision. To prepare for circumcision, they would need to have saved not only enough money to pay for the surgery, but also enough money to maintain their households (pay rent, buy food, etc.) during the one-week recovery period. To do so requires real commitment to obtaining a circumcision. Men indicate that they want to be circumcised in response to hypothetical questions, but that does not mean that they are willing to prioritize getting circumcised over other responsibilities in their lives.

Fear of the wounds and pain from the surgery often attenuated men's level of commitment. Many of the respondents described, in vivid detail, the worst-case scenarios that could result from a surgery gone wrong, including disfiguration, amputation, or death. This emotional reaction to the idea of circumcision led to hesitancy, even among those who had calculated that circumcision was a good option for them.

The relative inaccessibility of accurate information on the medical circumcision process from either first-hand sources or medical experts meant that men had limited means to assuage their fears. Because adult male circumcision is still relatively rare in Malawi, many men were unable to get a first-hand account of the process. Men sought general information about circumcision from their Yao friends who had been circumcised as youth during a rite of passage, but they often did not trust their Yao friends to give them the whole truth or to give them correct information about the process of circumcision at the clinic. Quite a few interview respondents stalled in their decision-making process because they did not know basic facts about the surgery, such as the price and the estimated length of the recovery period. Moreover, men usually

received conflicting advice from different friends and relatives; some encouraged circumcision and others discouraged the practice, usually by emphasizing rumors of circumcision gone wrong.

Finally, men's choices about circumcision were influenced by the inadequacy of circumcision service provision. Men who tried to get circumcised had to return repeatedly to the clinic, and some gave up after multiple failed attempts. For some men, it was discouraging to get as far as the clinic reception only to find that they would have to return another day. The delay often led to further consideration of the resources required and of their fears of circumcision, which ultimately meant they did not make returning to the clinic a priority.

Choosing to undergo circumcision is a complex and difficult decision, and men often loose interest before ultimately committing to the surgery. This finding was underscored by the discovery that the majority of the interview participants who got circumcised had decided before the arrival of the research team that they wanted a circumcision. They had already contemplated how to prepare for the material and emotional costs of circumcision. When offered a chance to get circumcised at a reduced price, they eagerly took advantage of the opportunity.

The men who demonstrated real interest in circumcision but who failed to get circumcised during the period of the research project most often stalled in their decision-making process because they could not prioritize circumcision enough to invest the required resources or because they were dissuaded by fear. These challenges were compounded when they could not obtain accurate information on the circumcision process, and/or when the service providers could not meet their needs. Each one of these stumbling blocks prevented men from accessing a service that they claimed to want.

Each of these barriers must be considered within the context of an environment where adult male circumcision is relatively rare. Other interventions that have introduced male circumcision for HIV prevention have included extensive community mobilization efforts and have launched special clinics to facilitate rapid uptake of circumcision by large proportions of adult males in the target communities. For example, in the township of Orange Farm, South Africa, an intensive pilot intervention introduced a center for medical male circumcision and within two years almost 40 percent of previously uncircumcised men over the age of 15 had undergone circumcision (Lissouba *et al*. 2010). In Kenya, more than 230,000 circumcisions have been performed in target communities since the launch of a national program in late 2008 (Herman-Roloff *et al*. 2011). Kenya's circumcision campaign is promoted by national political elites and boasts extensive resources including mobile circumcision clinics.

These programs contrast sharply with our research intervention in Malawi where we did not undertake community mobilization and where national efforts to promote circumcision have been limited so far. It is likely that the decision-making processes of men who are contemplating circumcision vary substantially between low-uptake and high-uptake environments. Most obviously, men in communities where adult circumcision has become a common choice would not face the barriers to accurate information on the circumcision process that were faced by the respondents in our research site. Moreover, ready access to accurate information may help to assuage some of the fears associated with circumcision, which are generally fueled by rumors of the ill effects of botched surgeries.

The calculations regarding whether to prioritize circumcision over productive activities would also be different in an environment where circumcision is a common practice for adult men. Men would not need to worry as much that their decision would be criticized. Also, in a

community where adult male circumcision is common, it is easy to imagine that there would be more social support for men and their families that would sustain them during the circumcision recovery period. Finally, a more robust system of circumcision service delivery would mean that men who decide to have the surgery are able to obtain the desired service.

The results of this study indicate that there are many stumbling blocks in the decision-making process that prevent men from ultimately choosing to undergo circumcision surgery. Some of the decision-making hurdles likely result from the fact that adult male circumcision is not currently common in Malawi. And yet, we find that there is genuine interest in circumcision for HIV prevention among a substantial portion of the study participants. Successful interventions will need to tap into this latent demand. If the supply of circumcision services can be expanded and uptake of circumcision increased, there may be a reduction in some of the barriers in the decision-making process that now prevent men with moderate levels of interest in circumcision from choosing to undergo the surgery.

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Table 1: Sample Size and Stratification

Panel A: Baseline Survey Sample Size	
	170
Quantitative Baseline Survey	6
Stratified by Circumcision Decision 3 months after Baseline:	
Circumcised	37
	166
Not Circumcised	9
Panel B: Qualitative Sample	
Number Approached for Participation in Qualitative Sample:	
Circumcised	20
Not Circumcised	31
Counseled, Not Circumcised:	4
Circumcised, Not in Clinic Records:	16
Proportion Successfully Interviewed for Qualitative Study:	
Circumcised	0.90
Not Circumcised	0.90
Counseled, Not Circumcised:	1.00
Circumcised, Not in Clinic Records:	0.88

Table 2: Characteristics of the Sample

		Mean (std. deviation)
Demographics:	Age	25.30 (5.26)
	Years of education	11.03 (2.57)
	Literate in Chichewa	0.968
	Literate in English	0.937
Ethnicity:	Chewa	0.254
	Lomwe	0.175
	Ngoni	0.333
	Tumbuka	0.111
	Yao	0.032
	Other	0.095
Religion:	Christian	1.000
Wealth:	Assets scale (0-8)	3.365 (2.17)
	Median monthly expenditures (USD)	116.7 (93.51)
	Has electricity	0.607
Health and Sexual Behavior:	Ever had sex	0.919
	Number of sexual partners in past year	1.806 (2.65)
	Ever used a condom	0.787
	Ever been to the study partner clinic	0.460
	Ever been tested for HIV	0.476
	Perceived risk of HIV:	
	High	0.129
	Medium	0.081
	Low	0.371
	None	0.323
	Never had sex/Don't know	0.097
Circumcision:	Willing to be circumcised	0.603
	Reason(s) why not interested in circumcision:	
	Pain	0.160
	Bad for my health	0.320
	Don't agree with the religious practice	0.360
	Don't trust the doctors	0.040
	I am too old	0.280
	Afraid of dying	0.040
	Heard of someone circumcised at partner clinic	0.270
	Believes circumcised men have lower risk of HIV	0.587