Formative Research to Inform the Rollout of Medical Male Circumcision in Communities where Traditional Male Circumcision is Practiced in Uganda

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ABBREVIATIONS & ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
DHS	Demographic Health Survey
EC	Ethics Committee
FHI	Family Health International
HIV	Human Immunodeficiency Virus
IRB	Institutional Review Board
MMC	Medical Male Circumciser
MOH	Ministry of Health
OHRP	U.S. Office for Human Research Protection
PHSC	Protection of Human Subjects Committee
RA	Research Assistant(s)
SPA	Uganda Service Provision Assessment Survey
STI	Sexually Transmitted Infections
THETA	Traditional and Modern HEalth practitioners Together against AIDS
TMC	Traditional Male Circumcision
TPMC	Traditional Practitioners of Male Circumcision
USAID	US Agency for International Development
VCT	HIV voluntary counseling and testing
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organization

1.0 INTRODUCTION

1.1 Background

Voluntary medical male circumcision (VMMC) has been established as one of the most effective measures to prevent male acquisition of HIV infection during heterosexual intercourse, second only to condom use. Results from three randomized controlled trials have demonstrated that circumcised men are up to 60 percent less likely to become infected with HIV than uncircumcised men [1-4]. However, because VMMC confers only partial protection, the World Health Organization (WHO) has recommended that VMMC be offered as part of a minimum package of services to provide circumcision candidates with more comprehensive protection against HIV. The package includes: (1) offer of HIV testing and counseling; (2) active detection of symptomatic sexually transmitted infections (STIs) and syndromic treatment as indicated; (3) provision of male and female condoms and promotion of their correct and consistent use; (4) counseling on sexual behavior risk reduction; and (5) voluntary medical male circumcision, as described in the WHO/UNAIDS/JHPIEGO Technical Manual for Male Circumcision under Local Anesthesia [5].

Given limited health care resources and strained health care infrastructures in the areas most affected by the HIV epidemic, the WHO has encouraged targeting the roll-out of voluntary medical male circumcision services to areas with low prevalence of male circumcision and high HIV prevalence [5]. In response to the scientific findings and WHO recommendations, momentum is building for mass-scale VMMC roll-out in Uganda, where HIV prevalence is 6.5% and almost three-quarters of males 15-49 report that they are not circumcised [6]. Provision of the WHO minimum VMMC package has the potential to greatly reduce the sexual health risks of young men in Uganda, who report frequent sex with high-risk partners, high levels of STI and STI symptoms, low knowledge about HIV prevention, a low prevalence of VCT and low levels of male circumcision.

Despite the WHO recommendation to target areas with low male circumcision prevalence, the government of Uganda plans to roll out VMMC services throughout the entire country, including areas where traditional male circumcision (TMC) is practiced [16]. Because HIV prevalence is high throughout Uganda, regardless of local TMC practices, the government hopes to ensure that TMC communities have equal access to safer[1] male circumcision services with documented efficacy for HIV prevention[2]. Currently, there is no legal framework or policy to support VMMC and no guidelines exist to describe preferred age for VMMC, the category of personnel who could provide the procedure at Ugandan health facilities, and the feasibility of integrating VMMC with traditional circumcision and other health services.

However, promotion of medical male circumcision will undoubtedly impact local TMC practices, where they exist. Currently, there is limited information about traditional male

[1] High levels of adverse events have been associated with the practice of TMC in Kenya [7] and in South Africa, attempts to reduce adverse events through regulation of TMC have been unsuccessful [8].

[2] Efficacy of TMC in the prevention of HIV is undocumented, but could differ based on variations in the amount of foreskin removed through different types of TMC [9].

circumcision in Uganda to inform VMMC roll-out among traditionally circumcising communities. In Uganda, between eight and 11 percent of the population belong to cultural groups who practice TMC[3]. Cultural groups in which male circumcision is traditionally practiced include the Bagisu and Sebei in the Eastern region and the Bakonzo and Baamba in the Western region [10]. According to the 2004/2005 Uganda HIV/AIDS Sero-Behavioural Survey, 80% of males aged 15-49 among the Bagisu/Sebei are circumcised [6]. Prevalence of male circumcision (MC) among the Bakhonzo and Baamba is undocumented. Rituals surrounding TMC practice, the age of initiates, and the behaviors expected of initiates and the implementers of TMC vary, according to ethnographies collected over the past century [11-15].

Given the potential impact on cultural practices that VMMC could have in traditionally circumcising communities, it is important to understand the traditional practice of TMC so that VMMC services can be scaled up in the most culturally appropriate way possible. As a first step forward FHI undertook formative research to explore TMC populations and informed the development of a subsequent protocol for this study (*see Section 1.2*).

1.2 Formative Research

In March of 2009, a series of participatory community meetings were led by FHI Uganda staff to collect up-to-date information about TMC among the four cultural groups who practice this tradition.

The information gathering process was held in eight districts where the four major Ugandan TMC practicing communities are concentrated, as identified by the Uganda Bureau of Statistics[4]. Between 20 and 25 individuals participated in the meeting in each district. Participants included community leaders, traditional male circumcision practitioners, health educators from the District Health Office (DHO), and DHO clinicians (Clinical Officers, Nurses, Surgeons, and Medical Officers). Not less than five members from each of these four categories participated in each district meeting.

TMC populations were identified and mapped at the district, constituencies, sub-counties and township level. During each meeting, stakeholders knowledgeable about TMC were identified. Additionally, potential challenges to recruitment as well as methods for overcoming those obstacles were identified. Local TMC cutting procedures and rituals surrounding initiation were described, and any geographic differences in

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[3] The Bagisu/Sebei make up 5.9 percent of 15-49 year old males according to the UHSBS [6]. The 2002 Uganda Population and Housing Census enumerated between 25,000 and 100,000 Baamba (0.1 – 0.4% of the Ugandan population) and between 500,000 and 1,000,000 Bakhonzo (2.2 – 4.3% of the Ugandan population). Ignoring distortion introduced by extrapolating the national prevalence of the Bagisu/Sebei ethnicity from the prevalence of the Bagisu/Sebei among 15-49 year old males and therefore assuming that the population level prevalence of the Bagisu/Sebei is 5.9 percent, then between approximately 8.2 and 10.6 percent of the Uganda population belongs to groups who practice TMC.

[4] Eight districts were subsequently selected to be part of the study; viz: Sironko, Bududa, Mbale, Manafwa, Bukwo, Kapchorwa, Kasese, and Bundibugyo.

TMC practices were explored. No geographic variation, including urban/rural differences, in TMC practices were identified at the district level.

In Uganda, each cultural group is made up of networks of families called Clans who trace their origin back to a commonplace or ancestry. During the meetings, Clan leaders were identified as the stakeholder most knowledgeable about TMC practices. Meeting participants agreed that Clan Leaders would be best placed to identify TMC practitioners in each district.

In addition to traditional practitioners of male circumcision (TPMC) who carry out the TMC cutting procedure, other important categories of TMC implementers who provide counseling, training or care to initiates were identified within each cultural group. These other types of TMC implementers are termed TPMC "assistants", "guardians", "mentors" and "traditional nurses" and were deemed important to include in a study of the practice. Finally, during the information gathering sessions, it was noted that, in some of the districts, there are occasions when TMC practitioners interact with the health care system.

2.0 GOAL AND OBJECTIVES

2.1 Research Goal

The goal of this study is to provide contextual information about the practice of traditional circumcision that will inform the development of policies and strategies for VMMC rollout in TMC areas.

2.2 Specific Research Objectives

The specific research objectives of this study, within the four major ethnic groups who practice TMC in Uganda, were to:

1. Provide an overview of the practice of traditional male circumcision, in terms of the circumcision procedure, the pre/post procedure events and rituals, and the typical characteristics, roles and responsibilities of key figures.
2. Explore perspectives on the rollout of medical male circumcision in TMC communities from community leaders, TMC providers and health care providers, including possible barriers to the rollout and what factors might facilitate VMMC rollout in these communities.
3. Identify and explore current interactions between the health care system and traditional circumcising communities that are focused on TMC or involve TMC implementers, and explore attitudes about involving the TMC implementers in the rollout of the minimum package of medical male circumcision services.

3.0 METHODS

3.1 Research Setting

The research was conducted in four traditionally circumcising districts in Uganda. Population data from the 2002 Census obtained from the Uganda Bureau of Statistics was used to identify districts where at least 20,000 males aged 15-49 from TMC groups reside. These study sites included Bundibugyo and Kasese district in the West and in Sironko, Mbale, Manafwa, Bududa, Bukwo and Kapchorwa districts in the East.

3.2 Research Design

This descriptive study incorporated focus group discussions (FGDs) and individual in-depth interviews (IDIs) to describe community perceptions, values, experience, and individual behavior with regard to circumcision behavior and practices. Additionally, a structured interview component to both FGDs and IDIs was used to collect additional data from participants regarding training for circumcision duties, payment received, sources of income, interactions with TMC community and demographic information.

3.3 Study Population

Information was gathered from four respondent categories:

Clan Leaders: Traditional leader most knowledgeable about TMC, they provided an overview of TMC practices and an important perspective on VMMC rollout

TMC Implementers (TPMC, assistant TPMC, "guardians", "mentors" and "traditional nurses"): Persons with roles in TMC cutting or TMC initiate counseling/care in one or more of the four ethnic groups in the study. This group provided an overview of TMC practices and an important perspective on VMMC rollout, their current interactions with the health care system and ways in which they could be involved in provision of portions of the VMMC package

Medical Male Circumcisers (MMC): Medical and clinical officers who practice within hospitals and level IV health facilities are legally permitted to perform VMMC in Uganda. They provided a medical perspective on VMMC rollout and identified ways in which TMC implementers could be involved in provision of the WHO VMMC package

Individuals Involved in Health Care/Traditional Interactions/Collaborations: Staff of health facilities or other organizations involved in interactions between the health care system and the community which are TMC-focused or involve TPMC. They provided an important perspective on VMMC rollout, their current interactions with TMC implementers and ways in which TMC implementers could be involved in provision of portions of the VMMC package

3.4 Study Methods

The research objectives of this formative study were met through focus group discussions, in-depth interviews, and a structured interview component.

Focus group discussions were chosen as the primary method of data collection for use with Clan leaders and TMC implementers in order to engage these groups in an interactive discussion of how TMC may affect social norms and expectations in VMMC rollout, and vice versa, and to elicit group interaction regarding the role of TMC implementers in the roll-out.

Semi-structured interviews were chosen as the primary method of data collection for use with providers of VMMC and persons involved in TMC or TMC implementer-focused interactions between the health care system and the community. This method provided an open-ended format in which to explore individual attitudes and opinions about VMMC rollout in TMC areas but also ensure that specific topics of interest were explored.

Structured interviews tailored for every category of study participant were used to gather data on respondent demographic and background characteristics and included open-ended questions regarding training for duties, payment received, sources of income, and interactions with TMC community.

***Table 1*. Number of FGDs and IDIs that were conducted for each socio-cultural group**

	Sebei	Bagisu	Bakonzo	Baamba	Total
Traditional community leaders (Clan leaders)	1 FGD	1 FGD	1 FGD	1 FGD	**4 FGD**
TMC implementers who provide or assist in TMC cutting (TPMC "Cutters" or TPMC "Assistants")	-	1 FGD	1 FGD	1 FGD	**3 FGD**
TMC implementers who provide initiates with education or training	2FGD*	1 FGD	1 FGD	1 FGD	**5 FGD***
Providers of VMMC at hospitals and level IV health facilities in the study area	2 IDIs	4 IDIs	3 IDIs	3 IDIs	**12 IDIs**
Persons involved in interactions between the health care system and the community focused on TMC or involving TMC implementers (Interactors)	3 IDIs	3 IDIs	3 IDIs	3 IDIs	**12 IDIs**

* *TPMC who provide cutting among the Sebei come from neighbouring Kenya among the Luhya people or from Bagisu districts and therefore were not accessible for FGD participation. Two focus groups were held in this area with TPMC "guardians" who are involved with the cultural and traditional aspects of TPMC.*

3.3 Outcomes

The research objectives of the study were focused on twelve domains of inquiry. *Table 3* summarizes the study research outcomes in detail, by the targeted study population and study methods.

Research outcomes are summarized below, by study objective.

Objective 1: Provide an overview of the practice of TMC

- Confirmation of the rites, rituals and process involved in TMC that were obtained during the Information Gathering in March 2009
- Confirmation of the types of local TMC implementers and their roles
- Description of typical initiate background characteristics
- Description of TMC implementer background characteristics such as training for TMC duties, payment received, and sources of income aside from TMC

Objective 2: Explore perspectives on VMMC rollout from viewpoint of community leaders, TMC implementers and health care providers

- Descriptions of perceived negative consequences of VMMC roll-out for the local community and TMC implementers.
- Description of participant attitudes on the relative safety of TMC vs. VMMC.
- Description of participant attitudes on the importance of HIV prevention, and their knowledge regarding the role of VMMC in HIV risk reduction.
- Description of participant-identified strategies to overcome barriers to VMMC roll out in their communities.
- Summary of participant ideas on how to facilitate VMMC roll-out in TMC communities such as possible ways in which the cultural aspects of rites and rituals could be combined with the medical procedure.
- Description of perceived acceptability on the part of the community to have VMMC over TMC.

Objective 3: Explore current interactions between the health care system and the community which are TMC-focused or involve TPMC and explore attitudes about involving TMC implementers in VMMC rollout

- List and description of existing interactions between the medical community and traditional circumcisers/circumcision.
- Description of the views of TPMC, medical providers and others about how TPMC could be engaged in any components of the WHO minimum VMMC

package, what roles they could play and what would be needed to engage them.

***Table 2*. Overview of research outcomes, by research objective, type of respondent and method of data collection**

Research outcomes, by objective:	**Clan Leaders** (1 FGD per culture)	**TPMCs** (2 FGD per culture)	**VMMCs** (2-3 IDI per culture)	**Interactors** (2-3 IDI per culture)
(1) Provide an overview of the practice of traditional male circumcision				
Confirmation of TMC rites, rituals and processes	FGD			
Confirmation of the TPMC identity and roles	SI	FGD		
Description of typical initiate background	SI	SI		
Description of TPMC characteristics		SI		
(2) Explore perspectives on the rollout of VMMC in TMC communities				
Descriptions of perceived negative consequences of VMMC roll-out	FGD	FGD	IDI	IDI
Description of attitudes on the relative safety of TMC vs. VMMC				
Description attitudes and knowledge regarding the role of VMMC in HIV risk reduction				
Strategies for VMMC roll-out in local community				
Strategies for VMMC roll-out in TMC areas				
Description of perceived acceptability of VMMC over TMC				
(3) Explore current interactions between the health care system and the community that are focused on TMC or involve TPMCs				
Description of existing interactions MMCs and TPMCs		FGD		IDI
Opinions on TPMC engagement in components of WHO minimum VMMC package		FGD	IDI	IDI

KEY: **FGD**- Focus Group Discussions **IDI**- In-depth Interviews **SI**- Structured Interviews

Sampling Strategy and Sample Size

A different sampling strategy was used for each of the four respondent categories:

Clan leaders

Clan leaders were purposively selected from each cultural group that practices TMC. Lists of Clan leaders were made available at the district level. Approximately 400 Clan leaders for each cultural group were identified. A purposive sample of 12 clan leaders was selected from each cultural group and approached for participation in a focus group discussion. Leaders were selected primarily to maximize the geographic variability of the sample and to maximize logistical convenience for convening a focus group.

TMC Implementers

Traditional male circumcisers were sampled using a snowball sampling strategy. Two focus groups were conducted with each cultural group. The first FGD included TMC implementers who perform the procedure (termed TPMC) and the second focus group include those individuals who provide TMC initiates with counseling and care.[5]

Clan leaders who participate in focus group discussions were the starting point for the snowball sample.

VMMC providers

Health care providers who perform voluntary medical male circumcision (VMMC) were sampled from randomly selected hospitals and level IV health facilities, the two types of facilities where VMMC provision is currently permitted in Uganda.

Persons involved in TMC or TPMC-focused interactions between the health care system and community (Interactors)

Clan leaders, TMC implementers and local VMMC providers were asked to identify persons or organizations involved in any interactions between the health care system and the community, which focused on TMCs or involved TMC implementers ("Interactors"). A purposive sample of participants was selected based on the geographic distribution of the respondents identified, participant availability, and the logistic and time constraints of the study team.

Tables 3 and 4 summarize data collection and key characteristics of all focus group and interview participants.

[5] TPMC who provide cutting among the Sebei come *from neighbouring Kenya among the Luhya people* or from Bagisu districts and therefore were not accessible for FGD participation. Two focus groups were held in this area with TPMC "guardians" who are involved with the cultural and traditional aspects of TPMC.

Table 3. **Overview of data collection**

Respondent Category	# of Participants
Clan Leaders	50
TPMC "Cutters" & TPMC "Assistants"	95
Medical Male Circumcisers	12
Interactors	12
Total	169

Table 4**. Key characteristics of all focus group and in-depth interview participants**

Characteristics	% of Participants (N=141)*
Socio- Cultural Group	
Bagisu	24
Sebei	25
Baamba	25.5
Bakonzo	25.5
Age Range	
28-38	18
39-49	43
50-60	21
61-71	13
72-82	5
Gender	
Male	99
Female	1
Religion	
Catholic	30
Protestant	51
Muslim	12
Ancestral	1
Other	6
School Level	
None	13
Primary	50
O level	22
A level	3
University/ Tertiary	5
Other	7

** Twenty-eight participants who participated in the focus group discussion for TPMCs (18) and Clan Leaders (10) took part in the structured interview process however the data from this part of data collection was not by the research team and could not be used in analysis*

3.5 Data Collection

Data collection was carried out by research assistants (RAs) who were experienced in qualitative research methods, including: administration of structured interview instruments, translation and typing. Two study investigators oversaw data collection. An investigator from Family Health International (FHI) oversaw the data collection in the Eastern region. The second investigator from **T**raditional and modern **HE**alth practitioners **T**ogether against **A**IDS and other diseases (THETA) oversaw data collection in the Western region.

RA training was conducted by both researchers, in collaboration with additional FHI staff. RAs received ethics training (using the FHI ethics curriculum), training about the design of the present study, and extensive training with the data collection instruments (focus group and semi-structured interview guides and the structured survey instrument).

Following training, selected Clan Leaders and TMC implementers were approached by a member of the research team about participation in a scheduled focus group discussion of approximately one and one half to two hour's duration.

Prior to beginning the FGD, a study team member obtained individual oral informed consent from each participant. At the beginning of each focus group discussion, the informed consent process was repeated with the entire group. RAs used a semi-structured focus group discussion guide with open-ended questions to guide the discussion.

Interactors and MMC providers were approached by a member of the research team and recruited to participate in a scheduled semi-structured interview for approximately one hour. Prior to beginning the interview, the RA obtained oral and written informed consent from each participant. Next, respondents were asked to respond to questions from a brief structured interview.

At the conclusion of each focus group and in-depth interview discussion, a brief, structured interview including both closed and brief open-ended questions was administered to each participant.

3.6 Data Management

Audio recordings of semi-structured interviews and focus group discussions were made using hand-held battery operated digital recording devices. When possible digital files from all interviews and discussions were downloaded from recorders and backed up onto a laptop and onto two different DVD data storage disks at the end of each day of data collection. RAs simultaneously transcribed and translated digital audio recordings from the original language to English. Translation and transcription, in most cases, began in the field and continued when RAs returned from data collection to the research office. Once translation and transcription was complete, a typist transferred written documents to an electronic format.

After RAs began transcription, transcribed text was read and re-read carefully by the appropriate site researcher, in order to: (1) identify text that was un-clear; and (2)

identify areas where transcription techniques could be improved. Site researchers provided feedback to RAs for the duration of the translation/ transcription period.

Transcripts were sent electronically via email to FHI for coding and analysis on an on-going basis. All databases and transcripts were password protected prior to sending. Data management logs were created at FHI to track and monitor data (i.e., data collection, data transcribed, date translation, etc).

Data from interviews with FGD participants and the portion of semi-structured interviews that are recorded on a paper questionnaire rather than digitally recorded was entered into an Excel database, which was developed at FHI – North Carolina. Database data was sent electronically via email to FHI– North Carolina for data cleaning and analysis.

All interview notes, transcripts, and digital recordings are stored securely at FHI offices in Kampala and North Carolina. Digital recordings and interview notes were destroyed after data analysis. All data forms and electronic files and databases will be stored securely at FHI in North Carolina for up to 5 years after the completion of the study.

3.7 Data Analysis

A team approach to thematic analysis was used. The field team discussed both focus groups and interviews as part of a weekly meeting that was implemented for management and coordination of research. In parallel, a team of qualitative analysts at FHI – North Carolina read through the English-version transcripts and used common exploratory techniques used by anthropologists, sociologists, and other qualitative researchers to develop a detailed thematic code book (17-21). Thematic analysis was then performed on the text data using qualitative data analysis software, NVivo. Using a standardized iterative process, the codebook was refined and finalized (22 & 23). To identify key themes, code frequency reports were generated

Data from closed-ended structural interviews, such as age and level of education, was analyzed in Excel. Descriptive analyses were conducted and ranges of demographic or other characteristics of the study population by type of study respondent were identified.

3.8 Limitations

The data collection included only a small sample of the four ethnicities and may not reflect the views and opinion of the four traditionally circumcising communities in Uganda. In addition, of the 169 participants in focus group discussions and in-depth interviews only 141 structured interviews were used for this analysis due to transcription omission. Therefore, the data analyzed may not be representative of all study participants.

Two out of twelve “Interactor” transcripts were not used in qualitative data analysis because participants that were interviewed did not respond to interviewer questions regarding TPMC involvement in MMC activities.

Also, twenty-eight participants who participated in the focus group discussion for TPMCs (18) and Clan Leaders (10) took part in the structured interview process. However, the data from this part of data collection was not completely entered into the Excel database and could not be used in analysis.

Nevertheless, the assessment provides important contextual information about the practice of traditional male circumcision that can inform the development of policies and strategies for VMMC rollout in TMC areas.

4.0 RESULTS

Results are presented to address the three objectives of the study.

4.1 Objective 1

Provide an overview of the practice of traditional male circumcision, in terms of the circumcision procedure, the pre/post procedure events and rituals, and the typical characteristics, roles and responsibilities of key figures

Confirmation of the rites, rituals and processes involved in TMC

An information gathering process was held prior to data collection in eight districts where the four TMC practicing communities are concentrated (*See section 1.2 Formative Research*). Rites, rituals and processes involved in TMC, which were identified during the formative research stage, were confirmed during focus groups with Clan Leaders in each ethnic group. Suggestions for additions and revisions to the rites, rituals and processes identified during the formative research stage were collected. A summary of the rites, rituals and processes surrounding circumcision for each socio-cultural group can be found in *Appendix 1.*

Confirmation of the identity and roles of different categories of TMC implementers

Table 5 describes key characteristics of traditional circumcisers who took part in the focus group discussions. No significant regional variation in general demographics was observed for the ethnic groups in terms of age or religious affiliation. Differences in level of education were observed but due to the small size of the sample no generalizations can be made.

TPMCs in both Eastern and Western region were on average in their mid- to late forties. Over half of all TPMCs had attended primary school with one-fifth of Western TPMC indicating attendance of ‘O’ Level schooling. About two-thirds of all TPMCs were Catholic or Protestant. A small percentage of TPMC in each region reported being Muslim and only one traditional circumciser indicated he followed an ancestral religion.

***Table 5*. Overview of characteristics of TPMC implementers by region**

		% of Eastern TPMC (N= 37)*	% of Western TPMC (N=40) *
Age	Average	46	48
Level of Education	None	13	15
	Primary	68	57
	O' Level	5	20
	A' Level	-	-
	University/Tertiary	3	-
	Other	-	-
Religious Affiliation	Catholic	35	27
	Protestant	38	47
	Muslim	13	12
	Other/Ancestral	3	2

*** Twenty-eight participants who participated in the focus group discussion for TPMCs (18) and Clan Leaders (10) took part in the structured interview process however the data from this part of data collection was not by the research team and could not be used in analysis*

Participants from the Western and Eastern regions included both TMC "cutters" and TMC "assistants". *Table 6* provides an overview of the role and duties of both TPMC and TPMC Assistants by region.

No regional variation in TPMC roles and duties were reported by traditional circumcisers. Additionally, Western and Eastern assistant had similar roles and duties. The only difference in duties that was reported was provision of pain management medication or anesthetic by TMC "assistants" in Western region.

Table 6. **Key characteristics of Traditional Practitioners of Male Circumcisions (TPMC) by Region**

TMC Implementer Category	Role/ Duties
Eastern TPMC "Cutters"	• Provide traditional male circumcision • Provide counseling to initiates and parents regarding wound care • Provide blessing of initiates in preparation of their graduation into manhood.
Western TPMC "Cutters"	• Provide traditional male circumcision • Provide counseling to initiates and parents regarding wound care
Eastern TPMC "Assistants"	• Support TPMC during circumcision ceremony, including: holding cutting tools and/or penis, provider care during adverse events such as over-bleeding. • Guide participants through all aspects of TMC procedure from identification of initiates through post circumcision celebration and graduation into manhood. • Provide training to initiate on cultural traditions surrounding TMC such as circumcision songs, traditional dances and body decoration prior to circumcision event. • Provide counseling to initiates regarding sexual behavior and bravery/courage during the circumcision procedure. • Provide care to initiates after traditional circumcision procedure. • Provide other services to the family of initiates such as protection from witchcraft and traditional medicines.
Western TPMC "Assistants"	• Support TPMC during circumcision ceremony, including: holding cutting tools and/or penis, provider care during adverse events such as over-bleeding. • Guide participants through all aspects of TMC procedure from identification of initiates through post circumcision celebration and graduation into manhood. • Provide training to initiate on cultural traditions surrounding TMC such as circumcision songs, traditional dances and body decoration prior to circumcision event. • Provide counseling to initiates regarding sexual behavior and bravery/courage during the circumcision procedure. • Provide care to initiates after before and after traditional circumcision procedure (e.g., washing of penis, caring for wound). • Provide other services to the family of initiates such as protection from witchcraft and traditional medicines. • Provide pain medication or anesthetic (injectable or topical) to initiates prior to circumcision.

Description of TMC implementer characteristics such as training for TMC, payment received for TMC, and other livelihoods

There were important differences in reported traditional and medical training among TPMC in Eastern and Western regions. Almost three-quarters of TPMC's from Eastern socio-cultural groups (Sebei and Bagisu) compared with 1/3 of Western circumcisers indicated that they had received formal training in TMC.

Several different sources of circumcision training were identified, including: previous traditional circumcisers, training by government agencies (DOH, MOH) trainings and training by other local medical staff/lay health workers.

A majority of Eastern TPMCs indicated that they had received training in male circumcision, infection control and bleeding control. Far fewer in Western reported receiving similar training. Conversely, two-thirds of TPMC in Western reported receiving training in wound care while only about one-fifth of Eastern TPMC received such training (see *Table 7*).

***Table 7*. Key characteristics of TPMC traditional and medical training**

Training Received	% of Eastern TPMC (N= 37)*	% of Western TPMC (N=40) *
Male circumcision training	72	32
Health and safety training in infection control	70	32
Health and safety training in bleeding control	62	27
Health and safety training in wound care	22	67

** Twenty-eight participants who participated in the focus group discussion for TPMCs (18) and Clan Leaders (10) took part in the structured interview process however the data from this part of data collection was not by the research team and could not be used in analysis*

While about two-thirds of Western TPMC reported use of sterilized blades as part of traditional cutting, less than half of Eastern TPMC did so. Additionally, almost half of all traditional circumcisers indicated that they used gauze and about one-fifth of TPMC's from both regions reported the use of antibiotics. Most TPMCs reported that they did not use scalpels, topical anesthetics or injectable anesthetics as part of the traditional circumcision procedure though injectable anesthetics were used more in Western *(see Table 8*).

Table 8. **TPMC reported usage of medical supplies**

	% of Eastern TPMC (N= 37)*	% of Western TPMC (N=40) *
Sterilized Blades	43	67
Antibiotics	27	20
Gauze	43	45
Topical Anesthetic	8	12
Injectable anesthetic	8	20

*** Twenty-eight participants who participated in the focus group discussion for TPMCs (18) and Clan Leaders (10) took part in the structured interview process however the data from this part of data collection was not by the research team and could not be used in analysis*

Finally, almost all participants interviewed indicated that they received payment (both monetary and non-monetary) for their services. Both Eastern and Western circumcisers and TPMC assistants indicated that they receive, on average, between 3,000-10,000 shillings (approximately between 1 USD – 4 USD), or equivalent non-monetary goods, per initiate. Almost all Eastern TPMCs and TPMC Assistants indicated that payment usually comes in a combination of money, and locally brewed alcohol. Western TPMCs and assistants indicated that non-monetary good usually took the form of goats or chickens. Western participants made no mention of local alcohol as payment.

Almost all TPMC implementers indicated that they had additional sources of income, aside from their traditional circumcision. There was no regional variation in responses and most frequently farming was identified as an additional income source. Other livelihoods that were mentioned included; small business owner, truck driver, traditional medicine and priest/pastor.

Description of Difference in Traditional Circumcision Initiate's Age.

Differences in initiate characteristics across regions were confined to differences in age. Traditional practitioners of male circumcision from the Eastern region (Sebei and Bagisu) indicated that initiates were typically between 14 and 20 years old. One the other hand, TPMCs from Western regions indicated two ranges of responses. About one-quarter of Western TPMCS indicated that initiates in their community were infants or young children (1-8 years old), while the rest of TPMCs indicated that initiates in their community were usually between the ages of 14-20.

TPMCs from communities that mentioned infants and children as initiates cited two dominant reasons: (1) the decrease in pain felt during circumcision by younger initiates and (2) increased membership in religious (Evangelical Christian) groups that support circumcision at infancy.

4.2 Objective 2

Explore perspectives on the rollout of medical male circumcision in TMC communities from community leaders, TMC providers and health care providers, including possible barriers to the rollout and what factors might facilitate VMMC rollout in these communities (negative consequences, safety, acceptability, importance of HIV prevention, strategies of overcome barriers)

Descriptions of perceived negative consequences of MMC roll-out for the local community and TMC implementers.

TPMC, Clan leaders, MMC and Interactors all voiced multiple concerns about the impact of the rollout of VMMC on the local community and TMC implementers. Concerns focused on the impact on cultural traditions, access to MC services and the impact on HIV risk behaviors.

Almost all participants across Eastern and Western districts indicated that VMMC roll-out in traditionally circumcising areas would lead to lost cultural tradition and/or cultural disintegration. As exemplified by one clan leader, *"The traditional circumcision helps in clearing the bush around the ancestral graves and appeasing the gods and dancing was part of it. But, if your son is taken to the hospital for circumcision where will you dance from?"*

Both groups of traditional circumcisers from the Eastern district (Bagisu) also expressed fears that roll-out of MMC would lead to TPMC deaths.[6] Bagisu traditional circumcisers described circumcising not only as a livelihood but also as a vocation for which they have been selected by ancestral gods. TPMC indicated that traditional circumcisers' in the Bagisu culture have a covenant with ancestral spirits during circumcision season and if they discontinue their work the ancestral spirits would see the discontinuation of TMC and a break in the covenant punishable by the death of the traditional circumciser.

Additionally, traditional circumcisers from both Eastern and Western districts worried that voluntary medical male circumcision would lead to a loss of their livelihood. As a Bagisu traditional circumciser explains, *"When you mentor around three or more children well then you remain rest assured that you will get some income to sustain you. So when the children go to the hospital we will definitely become jobless".*

Aside from cultural considerations, issues of the cost of MC and access to the procedure were also discussed. Clan Leaders, TPMC, MMC and Interactors from both Eastern and Western districts reported that roll-out of VMMC could be associated with a reduction of access to male circumcision due to increased costs for the medical procedure. Additionally, several clan leaders and traditional circumcisers mentioned that non- monetary payment (e.g., hens, goats and local alcohol), which is currently used to pay for TPMC would not be accepted in medical centers and could lead to decrease in male circumcision procedures. *"The charge at*

[6] TPMC who provide cutting among the Sebei come from Kenya or from Bagisu districts.

a medical facility might be higher than the one charged by the traditional circumcisers… this might discourage parents…and they won't have their sons circumcised" - Medical Circumciser Interview

Respondents from the Western district (Bakonzo and Baamba) had an additional concern; all indicated a lack of accessibility of health centers offering VMMC. Concerns were associated both by distance to current health centers offering VMMC and lack of health centers in certain areas. For instance one traditional circumciser noted that, *"In the whole district of Bundibugyo we have only one doctor, this may discourage people from taking their sons to get circumcised"*

Additionally, TPMC in Western district mentioned concerns regarding wound care and adverse events noting that medical staff would not be able to treat adverse events in a timely fashion because of the distance between health centers and villages. *"If they remove us [TPMC], people will have problems because for us we reach people in case of an emergency because we live in the same villages. It will take time for a medical worker to reach a patient with an emergency"*

Finally, Medical Male Circumciser in Western district noted that a possible negative consequence of a national roll-out of medical male circumcision as a HIV prevention strategy could be the decreased perception of HIV risk among communities. Medical circumcisers indicated that communities could misunderstand the role of male circumcision as part of a package of HIV prevention strategies and, instead, see VMMC as a protective barrier against HIV infection. Misinterpretation of perceived risk was discussed as leading to decreased use of condoms and increased higher risk sexual behavior. In the words of one medical circumciser, *"People may misinterpret it [medical circumcision as HIV prevention method] and use circumcision as a basis for exclusive method of prevention for HIV and this would rather encourage the spread of HIV in the communities."*

Description of participant attitudes on the relative safety of TMC vs. MMC.
TMC Implementers and Clan Leaders from both districts indicated that TPMC was safe, in most cases. These groups mentioned a historical tradition of sharing knives, but reported that sharing knives had been eliminated from the TMC procedure and replaced by one knife/razor per initiate. TPMC and Clan Leaders also indicated an emphasis on hygiene and sanitation during TMC rituals. As one TPMC indicates *"What I have seen is that it [TPMC] has no problems..if you are going to circumcise traditionally you can first go buy some medicine for healing the wound just like they do in the hospital."*

However, a majority of Clan Leaders and TMC implementers also mentioned unsafe practices related to cultural traditions and celebrations, such as: dancing all night, drinking of local brew, and sexual initiation which they associate with higher risk sexual behavior and increased risk of HIV transmission. As one Clan Leader denotes, *"For us the most dangerous time of contracting HIV is the time of the dance. Girls go around dancing and when nightfall comes there is a lot of sexual immorality, which is beyond control. Among that there is this ugly saying that a man is not supposed to sweet talk a girl to have sex with her during the circumcision dance, what a man needs to do is just to force someone into sex so he no longer*

feels he wanted a woman. So such things are most likely to expose people to the risk of contracting HIV".

Additionally most traditional circumciser and Clan Leaders indicated that VMMC was "unsafe" due to the use of anesthesia which many indicated causes impotence, sterility or erectile dysfunction. Some Clan Leaders and TPMCs also indicated that medical circumcision could lead to amputation of the penis or excessive cutting.*" Our thinking here is that anesthesia is what has led to high rates of impotence among men, and the person whose penis [was circumcised medically] is weaker [than] the one circumcised traditionally".*

Finally, almost all medical male circumcisers (MMC) and Interactors indicated that medical circumcision was safe and effective. Additionally, a majority of MMC and Interactors indicated that traditional circumcision was unsafe and pose health risks, including: unsterilized equipment, sharing knives, transmission of disease from blood contact, infection from traditional practices (sprinkling dust on penis/washing of penis in river after circumcision), lack of post-op/ wound care and over cutting and other adverse events (e.g., sepsis, hemorrhage, cutting of vein, amputation of penis). As one Interactor explains *"He [candidate] can lack medical attention, if he over-bleeds the candidate can easily become anemic or even dies…another problem that happens is that during traditional circumcision the circumciser may amputate the boy's penis…the circumciser may make the boy disabled".*

Description of perceived acceptability on the part of the community to have VMMC over TMC.

Most TPMC and Clan Leaders, from both districts, indicated that their community would not accept voluntary medical male circumcision over traditional male circumcision. Again, loss of culture and tradition was frequently cited as well as the importance to the community of cultural initiation of initiates from boyhood to manhood that takes places after traditional circumcision. TPMC and Clan Leader indicated that courage and bravery that are showcased in traditional circumcision are necessary to being recognized as a man in these ethnic groups. As one Clan Leader explains*, "To us when a child is circumcised in the hospital we feel that he is not circumcised at all. That is why when elections for political positions come; such people are not elected at all. They are regarded as cowards, so how can a coward lead brave men"*.

Most TPMC and Clan Leaders indicated the acceptability of VMMC roll-out in non traditionally-circumcising areas and community members who did not belong to their ethnic groups (e.g., evangelical Christians and migrant laborers).

Conversely, medical male circumcisers from the Eastern and Western regions indicated that there was increasing acceptability for VMMC in traditionally circumcising socio-cultural groups/ communities. MMC indicated that educated community members accepted VMMC over TPMC. They indicated that education surrounding the benefits of VMMC could increase acceptability in lower-educated segments of the community. Also, medical circumcisers indicated that the age for circumcision was changing as community members were increasingly choosing to

circumcise their sons at infancy. Traditional circumcision usually occurs during teenage years and parents who wish to circumcise infant sons have accepted medical circumcision over TMC. As one medical circumciser explained*" In communities where people have heard some education, the perception is changing, people now prefer MMC and they also prefer circumcising their children while they are still young"*.

Finally, MMCs also reported that communities have reported adverse events from TPMC and accept VMMC as an alternative because of the ability to treat adverse events on-site. One MMC indicated *"They [the community] accept it because they have seen results. We have been getting cases from the villages from those that have been circumcised from the villages some of them have been coming when they are bleeding so much so actually we have been helping them in the clinics that is why now people are preferring to come up from the villages and be circumcised in clinics so that those consequences don't continue to occur".*

Description of participant-identified strategies to overcome barriers to VMMC roll out in their communities & summary of participant's ideas on how to facilitate VMMC roll-out in TMC communities such as possible ways in which the cultural aspects of rites and rituals could be combined with the medical procedure.

Almost all TMC implementers indicated that VMMC could not be rolled-out in traditionally circumcising communities and did not offer strategies to facilitate roll-out. They indicated, as mentioned in Section 4.2.1 and 4.2.5, that VMMC would lead to cultural degradation and loss of important socio-cultural traditions that community members would not accept. As one TPMC indicated *"Culture means culture and what we are discussing now is eroding the culture because one is circumcised in the health facility that is not culture because culture is when one goes to the circumcision site in the bush. Culture is someone performing rituals ….all this is not done in a medical setting"*.

However, TMC implementers also indicated that if they were trained to conduct MMC sanctioned procedures the community would accept the roll-out. Almost all Clan Leaders, MMC and Interactors, independently, emphasized the suggestion of training TPMC to perform/assist with VMMC procedures. As one Interactor noted *"The only way to maintain…. culture is not to deprive the traditional circumcisers of their work … join them with the medical circumcisers… it gives traditional circumcisers the right to work together with medical providers. They should then train them"*.

Variations of medical-traditional integration were also reported, including having medically trained staff on-site to provide adverse event treatment or having initiates receive post-op wound care by medical staff on-site or at a health center. Additionally, many participants, again, emphasized this strategy when asked for feedback on combining cultural aspect of circumcision with VMMC. As a TMC implementer explained*, "We said before that we can cut our candidate in our local way, after circumcising, and then the medical person can come in to administer his treatment as required. I cannot make my child to go through all the rituals and I*

accept him to go to hospital... It is better my son takes traditional circumcision then after that, he can be given treatment by the medical person".

A minority of participants indicated that a potential strategy for combining the cultural aspects of circumcision with VMMC would be to have medically trained staff offering VMMC at the traditional circumcision sites, thus integrating them into the traditional cultural aspects of TMC. One clan leader indicated *"So for me if the doctors can agree to [circumcise] out in public after my son has danced the whole night and circumcise him from home I have no problem with that but when it comes to taking the person to the hospital that is what we don't want"*.

Clan Leaders, MMC and Interactors also offered several strategies for facilitating VMMC roll-out. One suggestion, proposed by MMCs was that cultural rites could be divided with all cultural rites and rituals taking place prior to a candidate travelling to a health center for VMMC. Interactors and medical circumcisers additionally proposed involving TPMCs in VMMC community engagement. As one Interactor explained "*If the cultural leaders are involved with mobilizing it [MMC] with the due respect the involvement of them[TPMC] can be identifying new initiates and even taking them after they do the counseling and the post counseling. The medical people should involve the traditional circumcisers in actually helping to bring these people [initiates] to safe places and that becomes their responsibility of mobilizing them and making follow-ups. That way they will know they are part of the system and they would realize their limitation but the moment you knock them out then you create resistance and I can assure you when they talk to these communities they listen to them"*.

Finally, MMCs and Clan Leaders indicated that simplifying transportation to medical circumcision sites and having a large scale government backed campaign to educate community members about benefits of VMMC would both aid in the roll-out of VMMC. As one MMC explained *"What I could suggest is that people to be sensitized until they become internally convinced that it is good… because no one would like their child to get HIV, but it is important to sensitize before you take off. We have radio stations which need to be used, church leaders and also holding meeting for sensitization"*.

4.3 Objective 3

Identify and explore current interactions between the health care system and traditional circumcising communities that are focused on TMC or involve TMC implementers, and explore attitudes about involving the TMC implementers in the roll-out of the minimum package of medical male circumcision services.

Description of existing interactions between the medical community and traditional circumcisers/circumcision

Traditional Circumcisers listed a variety of interactions with the medical community. Almost half indicated direct cooperation with medical providers. TMC implementers reported providing traditional circumcision in health facility with medical personnel

providing post-op care and treatment. As one TMC implementer explained *"I have on many occasions gone to ----Hospital to circumcise boy from there. What happens is the doctors first [applies anesthesia] then I do the cutting, then the doctor comes back to treat and dress up the wound"*. TPMC also reported medical providers attending traditional circumcision events to provide adverse event treatment and post-op care. One TPMC explained *"We [TPMC and MMC] actually work together with medical people, soon as we finish circumcising; medical treatment is administered then and there. We no longer use leaves for treating wounds, the medical people use modern treatment"*.

TPMCs reported a variety of interactions that did not involve medical personnel, including: hospitals/health centers providing medical supplies to TMC implementers, health workers providing guidance of health related issues and TPMCs referring initiates to medical providers for treatment of disease (e.g., STI, tetanus, urethral disorders)

Additionally, while medical circumcision providers were not asked directly regarding interaction with TPMC, more than half reported interactions similar to those mentioned by TPMCs.

Interactors reported that health workers were provided to circumcising communities during circumcision periods to provide guidance of health related issues and oversee TMC events. Additionally, Interactors mentioned medical personnel attending traditional circumcision events to provide health training, post-op care and treatment of adverse events. A few interactors also mentioned organizations providing medical supplies and/or medicine to TPMCs (e.g., topical anesthetics, pain relievers, antibiotics, sterilization equipment, gauze and wound care supplies and fresh blades or other surgical tools).

Finally, two Interactors reported that their organization had no interaction with TPMC communities but was involved directly with VMMC providers in TMC communities. One organization recruited and referred candidates from TMC communities to medical facilities for VMMC. The second organization provided information to TMC community members on benefits of VMMC and offered referrals and transportation to health centers for VMMC.

Description of opinions about how TPMC could be engaged in any components of the WHO minimum VMMC package, what roles they could play and what would be needed to engage them

TPMC Involvement in HIV Testing and Counseling

A majority of TMCs, MMCs and Interactors indicated that traditional male circumcisers could assist HIV counseling and referral for testing. Participants cited TPMCs leadership role in the community and rapport with initiates as reason for including them in this aspect. All groups also indicated that training and compensation for TPMCs time would be needed in order to involve TPMCs in this activity. As one MMC notes "*These people [TMC] can do it because these boys are more confident with them than the medical personnel … if their clan leaders or these traditional circumcisers tell them what to do they will …do it"*.

All groups indicated that traditional circumcisers could not be integrated into the actual testing component. TPMC indicated concerns regarding stigma from the community if they had to diagnose initiates as HIV+, and possible repercussion this would have on their TMC livelihoods. Additionally, Interactors and MMC were concerned with TPMC's lack of medical experience and the potential for confidentiality breaches with testing results. As one TMC implementer explained *"They [the community] may think that you [the TPMC] know that they are sick and then fear to bring other people to us for circumcision and they also think that we will tell other people about their status"*.

TPMC Involvement in STI Screening and Syndromic Treatment

The majority of all groups who were asked (TMC, MMC and Interactors) indicated that TPMCs would not be able to help with STI management or syndromic treatment but could be involved with STI education and referral for testing or syndromic treatment. Again, participants cited TPMC's leadership role in the community and rapport with initiates as reasons for including them in this aspect. All groups also indicated that training and compensation for TPMC's time would be needed in order to involve TPMCs in this activity. As one TMC implementer noted *"The fact that a parent gave me [TPMC] his son to circumcise means that he trusts me, so if I tell him about STI testing both parent and son will listen to me"*.

Additionally, all groups indicated that traditional circumcisers could not be integrated into the actual STI testing component. TMC implementers indicated concerns regarding stigma from the community due to diagnosing initiates as having STI's, and possible repercussions this would have on their TMC livelihoods. Additionally, traditional male circumcisers indicated that there was not enough time in their schedule for STI testing and syndromic management.

Finally, Interactors and MMCs were concerned with TPMC's lack of medical training with regard to testing and disease management and the potential for confidentiality breaches with STI testing results. As one MMC remarked *"I really don't think they [TPMC] can do much unless we give them a bit of knowledge so that before the initiation they can be able to ask and know if some of the candidates have signs of STIs so that incase of any then they will have to be referred to a health setting where appropriate or confirmation tests are done and then treatment is given"*.

TPMC Involvement in Condom Provision and Promotion

MMC and Interactors indicated that traditional circumcisers' could be involved in the provision and promotion of condoms. Again, participants cited TMC implementers' leadership role in the community and rapport with initiates as reason for including them in this aspect. Both MMCs and Interactors indicated that training and compensation for TMC implementers' time would be needed in order to involve TPMCs in this activity. As one Interactor noted, *"You know traditional circumcisers are people who are believed in so much by the local people and if they can say something, they usually believe in them. So if they can [come] to an area while looking for the candidate for circumcision, I think during that time, he can be used to transmit that message*".

TPMCs had mixed views on provision and promotion of condoms. A majority of TPMC indicated that they could not be involved with the provision/promotion of condoms. Traditional circumcisers indicated a variety of reasons, including: lack of time during circumcision season. Additionally, a few TPMCs from Western regions that had reported initiates were infants or young children indicated that condom provision would not be practical (See section 4.1.4). *"It is impossible this [condom provision] to be done because we circumcise boys who are aged two or three who can not even pick an erection who have not yet developed sexual feelings"*.

Finally, TPMCs indicated concern regarding the perception of condoning immorality with regard to condom distribution. One TPMC indicated *"For me I am not interested in because if we support it, we will be encouraging prostitution in people. They continue buying prostitutes because they know they will use condoms for protection. The best thing to do is to believe in God and also to abstain from sex".* Additionally, several TPMC indicated they do not use condoms and could therefore not promote condom usage.

TPMC Involvement in Risk Reduction

A majority of TMC implementers, MMCs and Interactors indicated that traditional male circumcisers could assist risk reduction counseling and referral for testing. Participants cited TPMCs leadership role in the community and rapport with initiates as reasons for including them in this aspect.

Finally, all groups also indicated that training and compensation for TPMCs' time would be needed in order to involve TPMCs in this activity. One medical circumciser indicated,*" On issues to do with counseling especially on changing sexual behavior to reduce the risk of HIV, traditional circumcisers have a role to play because they are respected in their communities, so whatever they tell the initiates is always believed to be true. This means that if they got involved in that sector, they would help greatly in changing sexual behaviors of initiates and thereby extending the same to the already circumcised men"*.

TPMC Involvement in VMMC

The majority of all groups who were asked (TPMC, MMC and Interactors) indicated that TPMCs would not be able to help with voluntary medical male circumcision that is performed by a medical professional in a health center. All indicated that TPMC loss of livelihood would prevent traditional circumcisers from accepting a role in VMMC referral or education.

Medical male circumcisers and Interactors suggested that TPMC could be involved in referral of initiates to health centers for VMMC and education if they were granted a stipend to substitute their TMC salary. All traditional male circumcisers indicated that they would have concerns with not only their loss of livelihood but with the cultural degradation and loss of traditions surrounding the replacement of traditional circumcision. Medical circumcisers indicated that TMC implementers would need to be compensated for their loss, as one indicated **"***They [TPMC] need motivation and reward so that they get to know that this work is no longer ours but it belongs to some one else so that kind of motivation needs giving them some counseling so that*

they forego their work they have been doing and now they have taken up a new job of counseling only". Several traditional circumcisers and Medical circumcisers suggested training current TPMCs to assist with medical circumcision operations. As one medical circumciser indicated *"He cannot because if people go to hospital, it will be a loss to him. And the clan will always want traditional circumcision be done so that they eat meat and take the local brew"*.

Finally, several traditional circumcisers mentioned the possibility of performing circumcision in health centers, as was previously described in Section 3.1. As one TMC implementers indicated *"For us as circumcisers, try to tell them to go to hospital. For example there is a policeman whom I circumcised from his home, later he called me to go and circumcise his children from hospital and I was the one who circumcised them. And another one, he called me and I went and circumcised him from the hospital. So we do agree that they get circumcised as required"*.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The results of this study confirm that community members in traditionally circumcising districts have mixed views on the acceptability of integrating VMMC, and aspects of VMMC, with traditional circumcision. Some of the major issues to consider include:

Minimize fears of Cultural Disintegration*:* The large majority Clan Leaders and Traditional Practitioners of Male Circumcision and TPMC Assistants interviewed for this study indicated serious concerns with loss of culture and traditions that are integrated into traditional circumcision rituals and ceremonies. The social role of TMC implementers, at least, must be maintained in the roll-out of VMMC services to protect traditions and ceremonies associated with circumcisions.

Support Existing Interactions: A wide range of interactions between the TMC-VMMC communities exists which could be expanded. In traditionally circumcising districts some TPMCs already work with medical personnel, at health centres, as assistant circumcisers and aid in both the surgical and/or pre-and post care of circumcision patients. Both Traditional Practitioners of Male Circumcision and medical personnel support interactions that exist and emphasized the community importance of TMC implementers maintaining a role in circumcision activities. Building on models of successful interactions that exist in Uganda for integrating traditional practitioners' into the medical community, such as traditional midwives that now operate as nurse's assistant could be useful when developing models for interaction.

Involve TMC implementers in a Subset of WHO Activities: TPMCs' assistance with subset of WHO package requirements is supported by lay and medical community. Even though there is hesitation from TPMCs to take on additional roles in their communities, there may be a role for traditional circumcisers in HIV prevention education, condom provision and HIV/STI testing referrals. Community support for TMC is high. TPMCs are valued and respected members of these communities. Traditional circumcisers are seen as cultural leaders in the community and their

rapport with initiates would enable them to participate in these aspects of the WHO toolkit. Support, including training, reimbursement, and government support, will be needed to involve traditional circumcisers in providing these services.

Engage Community Stakeholders: Key opinion leaders, such as Clan Leaders and TPMCs, will need to be mobilised to support the VMMC roll-out and promote it in their communities. Community engagement activities will need to be prioritized throughout the roll-out of VMMC and key opinion leaders should be consulted and involved in development of campaign messaging, local roll-out of VMMC and national discussions surrounding the integration of the WHO HIV prevention toolkit.

Additionally there are many resources at the national and local levels that can be utilised to promote VMMC: Radio stations, newspapers, churches, schools, and community groups are available and can be used as channels for advocacy. Testimonials from men who have undergone VMMC should be incorporated as promotional aids.

Continue dialogue on national policy on VMMC: Medical providers and Clan Leaders want a structured policy on VMMC to support any efforts to shift community members from traditional to medical circumcision. In the absence of a legal framework or policy to support VMMC, a number of issues need to be addressed at the policy level, before roll-out of VMMC is undertaken. Such issues include: the recommended age for VMM and the category/categories of personnel who can do MC at health facilities. In addition, further operations research is needed on the feasibility of integrating VMMC with traditional circumcision and other health services. Many of these issues are currently being incorporate into the National Circumcision Policy that has been drafted.

Political leadership and donor support should be utilised to build on the current momentum and to help with implementation of a national VMMC policy and VMMC program that build on the cultural traditions of circumcising communities in Uganda while integrating current VMMC practices.

6.0 REFERENCES

1. Hallett, T.B., et al., *Understanding the impact of male circumcision interventions on the spread of HIV in southern Africa.* PLoS ONE, 2008. **3**(5): p. e2212.

2. Auvert B., et al., *Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 trial.* PLoS Medicine, 2005. **2**(11): p. e298.

3. Gray, R.H., et al., *Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial.* Lancet, 2007. **369**(9562): p. 657-66.

4. Bailey, R.C., et al., *Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial.* Lancet, 2007. **369**(9562): p. 643-56.

5. WHO, UNAIDS and JHPIEGO. Manual for male circumcision under local anaesthesia, Version 2.5C. 2008 [cited 2008 Oct]. Available from: http://www.malecircumcision.org/programs/documents/WHO_MC_Manual_Local_Anaesthesia_v2-5C_Jan08.pdf

6. Uganda Ministry of Health and ORC Macro: Calverton, Maryland, USA.

7. Bailey, R.C., Egesah, O., Rosenberg, S., *Male circumcision for HIV prevention: a prospective study of complications in clinical and traditional settings in Bungoma, Kenya.* Bull World Health Organ, 2008. **86**(9): p. 669-77.

8. Meissner O., and Buso D.L., *Traditional male circumcision in the Eastern Cape -- scourge or blessing?* South African Medical Journal, 2007. **97**(5): p. 371-373.

9. Brown, J.E., et al., *Varieties of male circumcision. A study from Kenya.* Sexually Transmitted Diseases, 2001. **28**(10): p. 608-12.

10. Ntozi, J., *The East African AIDS epidemic and the absence of male circumcision: what is the link?* Forum: Health Transition Review, 1997. **5**: p. 97-117.

11. Goldschmidt, W., ed. *Culture and Behavior of the Sebei: A Study in Continuity and Adaptation*. 1976, University of California Press: Berkeley.

12. Goldschmidt, W., ed. *The Sebei: A Study in Adaptation*. 1986, Holt, Rinehart and Winston: New York.

13. Heald, S., ed. *Manhood and Morality: Sex, violence and ritual in Gisu society*. 1999, Routledge: New York.

14. Winter, E.H., ed. *Bwamba: A structural-functional analysis of a patrilineal society*. 1956, W. Heffer & Sons Limited: Cambridge.

15. Winter, E.H., ed. *Beyond the Mountains of the Moon*. 1959, University of Illinois Press: Urbana.

16. Uganda Ministry of Health. *Progress on Medical Male Circumcision Programme Planning in Uganda.* Oral presentation at the Inaugural Meeting of the National Medical Male Circumcision Task Force, Ridar Hotel, Kampala, April 2009.

17. Dey I; *Qualitative Data Analysis: a User Friendly Guide for Social Scientists*. London: Routledge and Kegan Paul; 1993.

18. Strauss A, Corbin J; *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, CA: Sage Publications; 1990.

19. Ryan G, Bernard HR. Identifying themes in qualitative data. *Field Methods.* 2003;15:85-109.

20. Strauss A, Corbin J; *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, CA: Sage Publications; 1990.

21. Ryan G, Bernard HR. Identifying themes in qualitative data. *Field Methods.* 2003;15:85-109.

22. MacQueen KM, McLellan E, Kay K, Milstein B. Codebook development for team-based qualitative analysis. Cultural Anthropology Methods. 1998;10:31-36.

23. Carey JW, Morgan M, Oxtoby MJ. Intercoder agreement in analysis of responses to open-ended interview questions: examples from tuberculosis research. *Cultural Anthropology Methods.* 1996;8:1-5.

ANNEX 1: SUMMARY OF RITES, RITUALS AND PROCESSES SURROUNDING TRADITIONAL MALE CIRCUMCISION (TMC) IN EASTERN AND WESTERN SOCIO-CULTURAL GROUPS

1.0 BAKONZO SOCIO-CULTURAL GROUP (WESTERN DISTRICT)

Fifteen community stakeholders, including clan leaders, TPMC, health educators, and clinicians, took part in a one day workshop at the district headquarters of Kasese district to discuss male circumcision traditions, roles and rituals.

1.1 Overview of Circumcision Traditions

Participants in the discussion indicated that traditional male circumcision *(* locally called *Olhutende*) season occurs once every five years. Candidates for TMC are usually 15 years or older, though there is no legal requirement of age. The circumcision event begins when the TPMC (locally called "*Omusamba*") mobilizes eligible candidates and leads them to "*Ebsumba*" (traditional circumcision theatre/site). *Ebusamba* is located in Ntandi forest which is found in the neighboring Bundibugyo District. Upon reaching *Ebusumba*, candidates are fed local food, prepared by the TPMC and the TMC assistants (locally called "*Kabira*"), for two days. On the third day following the candidate's arrival to *Ebusumba* they are circumcised.

Participants additionally mentioned that a candidate's parents are required to abstain from sex from the time when the candidate leaves to travel to *Ebusumba* until he returns following the circumcision (approximately 2 ½ months).

1.2 Rituals Practiced During Traditional Male Circumcision

In the day leading up to the circumcision ceremony several rituals are practiced to prepare candidates for the procedure, including:

- Candidates and community members who are present sing traditional *Olhutende* songs. These songs are supposed to stop anxiety throughout the days leading up to the circumcision event.

- Candidates, who are all wearing special bark cloth attire (locally called *Omubindo*) are told by the *Kabira* to remove their attire prior to the ceremony which symbolizes the shedding of youth.

1.3 Male Circumcision Procedure

Participants in the discussion indicated that traditional male circumcision procedure included several rites and rituals:

- The candidate is brought to the circumcision stage by the *Kabira* and told to stand upright in a completely still pose with arms outstretched to the side. Candidates

are told that any movement, or touching of the TPMC, will be considered an act of cowardice.

- The TPMC checks the candidate (locally called the *Omutende*) for glans penis exposure, and if there is exposure the glans penis is forcefully pushed inwards by pulling the foreskin as the thumb pushes in the glans penis.

- The TPMC then cuts the foreskin completely off. Following the foreskin cut the TPMC cuts the inner skin halfway, the remainder is retracted to the initial incision point of the foreskin cut and then sutured. The wound is wrapped in a clean, white cotton cloth material.

- Participants indicated more "traditional" communities cut both, the foreskin and inner skin, off completely at the same time. Additionally more "traditional" communities use apply a local herb *Blackjerk* –locally called *Omusoni* – to the wound to stop bleeding, instead of cloth bandages.

Participants in the discussion reported no diversity in TMC procedure across the district. Additionally, no rural / urban differences were reported.

1.4 Rituals Practiced After Traditional Male Circumcision

Participants indicated that newly circumcised candidates are taken by the circumciser to a nearby thatched grass shelter, which is constructed for this singular purpose, where they are cared for by the *Kabiras'* for two days. For approximately two months following circumcision the newly circumcised are taken to a river where their wounds are cleaned and dressed until they are healed. After the circumcision wound has healed, a graduation ceremony follows where each candidate is escorted from village to village by the *Omusamba* and the candidate's family celebrates their arrival with a large feast for the community.

2.0 BAAMBA SOCIO-CULTURAL GROUP (WESTERN DISTRICT)

Fifteen community stakeholders, including clan leaders, TPMC, health educators, and clinicians, took part in a one day workshop at the district headquarters of Bundibugyo district to discuss male circumcision traditions, roles and rituals.

2.1 Overview of Circumcision Traditions

Participants in the discussion indicated that traditional the male circumcision season for Baamba men (locally called *Lyamba*) occurs once every ten years. Clan members that are over the age of 10 years are eligible for circumcision; and it is the role of a candidate's father to nominate him for circumcision. Additionally, participants indicated that consent is not needed from the candidate for the father to nominate him for traditional male circumcision. Once a clan has identified their TMC candidates, Clan Leaders from surrounding Baamba regions meet to announce their

candidates for the *Lyamba*. The Clan Leaders then approach a respected TPMC (locally called a *Mubuki*) to circumcise the initiates.

2.2 Rituals Practiced During Traditional Male Circumcision

In the day leading up to the circumcision ceremony several rituals are practiced to prepare candidates for the procedure, including:

- The night prior to the circumcision large festivities take place with dancing by women members of the Clan. Dancing by the women symbolizes happiness that the initiates will finally become men in the Clan.

- The nights prior to circumcision Clan Leaders commemorate the initiates and their "age group" which is compromised of the specific set of initiates that make-up that years' *Lyamba.* The commemoration of the age group bonds all the initiates in a symbolic brotherhood.

- On the day of the circumcision event candidates are dresses special bark cloth attire (locally called *Kitulu*)

- Initiates are taken to the traditional circumcision site which has a circumcision stage which is screened from the community spectators by large bunches of banana leaves. Additionally, sturdy tree branches line the stage and are set up to offer the circumcision candidate support while standing.

- Prior to the circumcision procedure Clan elders join the stage wielding spears and stand behind the trees on the stage. The elders stand on-guard ready to spear to death the *Mubuki* in the case of any adverse events during the circumcision procedure.

- The circumcision event begins with the circumcision of a "nephew" of the clan. This initiate is considered a demi-god and his circumcision symbolizes the cleansing of misfortune from the initiates.

2.3 Male Circumcision Procedure

The TMC procedure involves both the *Mubuuki* and an assistant TMC, called a *Mujombi*. Participants in the discussion indicated that traditional male circumcision procedure included several rites and rituals:

- The senior TPMC – *Mubuki* – initiates the circumcision by pulling the foreskin with one hand while retracting the glans penis with the other hand's thumb.

- The *Mubuki* will then instruct the assistant – *Mujoimbi* – to completely cut the inner skin in a circular motion, while gently lifting it. Upon reaching the frenulum, the *Mujombi* will carefully cut around the frenulum and continue cutting the inner skin until the inner skin and foreskin is completely removed.

Mubuki and *Mujombi* across the district are required to be born and bred in Bundibugyo district and are descendants of previous TPMC's.

Participants in the discussion reported no diversity in TMC procedure across the district. Additionally, no rural / urban differences were reported.

2.4 Rituals Practiced After Traditional Male Circumcision

Participants indicated that newly circumcised candidates have their wounds tied with fresh banana leaves by traditional male nurses (locally called *Mughbeka*). Initiates are then moved by the *Mughbeka* to the traditional nursing ward - *Kighombe*- which has been temporarily constructed to house the initiates. *Koghombe* are built in an isolate part of the community and close to a river to facilitate the cleansing of the circumcision wound. Women are not allowed to go near the nursing wards for fear that sexual excitement may re-open the circumcision wound or cause adverse events. After three days of healing initiates are taken, as a group, to a nearby river where the wound is washed and freshly dressed with banana leaves. Washing and fresh dressing of the wounds will continue for approximately one month or until the last initiate's wound heals completely.

Mughbekas are responsible for caring for the initiates wounds as well as helping initiates undergo cultural initiation which involves teaching initiates about sexual behavior and Baamba traditions.

Following the healing of the circumcision wounds, initiates return home where they are met with a community celebration to represent their entry into adulthood.

2.5 Changes in Traditional Circumcision Rites, Roles & Rituals

Participants indicted that several changes to the practice of traditional circumcision have taken place in recent years. Traditionally, initiates are 15-18 years old but in recent years there has been an increased number of TMC initiates 10 years and younger. Participants in the discussion indicated this was is due to decreased adverse vents and faster healing time for younger initiates. Additionally, participant indicated that the use of anesthesia is prevalent. TPMCs are given anesthesia by local hospitals or pharmacies to use for circumcision events in order to decrease the pain to candidates.

3.0 SEBEI SOCIO-CULTURAL GROUP (EASTERN DISTRICT)

Twelve community stakeholders, including clan leaders, Gishu TPMC[7], health educators, and clinicians, took part in a one day workshop at the district

[7] The Sebei socio-cultural group does not use traditional circumcisers from its own culture but relies on Gishu circumcisers from nearby provinces or Kenya to perform traditional male circumcision.

headquarters of Kapchorwa district to discuss male circumcision traditions, roles and rituals.

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3.1 Overview of Circumcision Traditions

Participants in the discussion indicated that the traditional male circumcision (locally called *Wonsiet*) season takes place in the month of December of each even year. *Mwaketap Wonsiet* – the even year circumcision season- is open to Sebei boys aged 16-18 years old.

Candidates for circumcision identify themselves and then inform their mother/father and guardians about their intentions during the harvest (August – October). If the candidate's intentions are accepted by the family, his parents will begin to prepare for the ceremony and celebration. Additionally, parents of initiates identify a Sebei *Maturenik* – a TMC guardian/assistant – who will guide the initiate through the circumcision process and counsel the candidate for bravery, confidentiality, and also culturally initiate the candidate into manhood.[8]

Initiates are also responsible for informing their fathers "age group" which is compromised of all the initiates from the *Mwaketap Wonsiet* that his father participated in.

After all the initiates have been identified a large celebration takes place for all Sebei clan members and extended family/ "age groups" which involved dancing, drinking and food. Participants indicated that dancing and celebrations often include sexual behaviour between initiates and girls that are assigned to be "morale boosters" by Clan Leaders.

During this initial ceremony the Sebei Clan Leaders will identify a circumcision venue, a specific date and the traditional male circumcisers from the nearby Gishu community who will perform the TMC. Additionally during this ceremony the family of initiates formally hand over their sons to the *Maturenik* who will guide the initiate through the circumcision process.

3.2 Rituals Practiced During Traditional Male Circumcision

In the day leading up to the circumcision ceremony several rituals are practiced to prepare candidates for the procedure, including:

- A week prior to the circumcision ceremony iinitiates movements are restricted by the *Maturenik* in an effort to avoid malicious witchcraft, and intimidation from evil eyes.

[8] Participants indicated that the *Maturenik* is also responsible for teaching the initiates about sexual behavior and helping them through sexual initiation but confidentiality of these rituals was strictly enforced during the discussion.

- The night before circumcision a large celebration that includes food and dancing take place in the community. Dancing rotates around different homes with candidates and the candidate's close relatives; the last home to be visited is the circumcision site.

- At dawn on the day of circumcision the *Maturenik* takes the candidates to a nearby river so they can wash their penis with cold water.

- Following the cleansing, initiates are taken to the circumcision site by the *Maturenik*. As they initiates enter the circumcision site they walk through crossed spears where an clan elder smears their faces with chyme extracted from a ram/bull's abomasums (fourth stomach) before they take their place on the stage.

3.3 Male Circumcision Procedure

Participants in the discussion indicated that traditional male circumcision procedure included several rites and rituals:

- The foreskin of the penis is retracted, by the TPMC, to expose the glans penis and the *Maturenik* places fine baked soil on the glans penis.

- The foreskin is then pulled by the TPMC past the glans penis and the inner skin is cut in a circular motion. Upon reaching the frenulum, the circumciser will carefully cut around the frenulum and continue cutting the inner skin until the inner skin and foreskin is completely removed.

Participants in the discussion reported no diversity in TMC procedure across the district. Additionally, no rural / urban differences were reported.

3.4 Rituals Practiced After Traditional Male Circumcision

Participants indicated that newly circumcised candidates are made to sit in chairs following the circumcision procedure and are covered by a clean sheet. Members of each boy's family remove the blood and cuttings and they are buried secretly. Following the burials of the blood/cuttings festivities begin and gifts are offered to the newly circumcised boys. For the next four days and nights following the celebrations initiates will stay at a host home with their fellow "Age group" where they will be cared for by the *Maturenik* and male village elders.
After 4 days, the candidate is free to return home.

After all the "age group" has healed, the *Maturenik* announces the celebration date for graduation into manhood. This celebration takes place throughout the night with intense festivities. Life virtues like integrity, respect, responsibility, bravery are emphasised through dancing and singing. Each newly circumcised candidate is given a special name that represents their ascent into manhood.

4.0 BAGISU SOCIO-CULTURAL GROUP (EASTERN DISTRICT)

Fifteen community stakeholders, including clan leaders, TPMC, health educators, and clinicians, took part in a one day workshop at the district headquarters of Sironko, Mbale, Manafwa, Bududu districts to discuss male circumcision traditions, roles and rituals.

4.1 Overview of Circumcision Traditions

Participant in the discussion indicated that traditional circumcision celebration (locally called *Sakwetap Rotwet*) usually takes place once a year. Candidates, usually at 18 years old, are expected to identify themselves as candidates for circumcision. Once a initiate has submitted his name for circumcision his father will begin making preparation and will set the date of circumcision in conjunction with the father of other initiates. The father of the candidate is also responsible for identifying a traditional circumciser (*Mutindet)* and assistant

4.2 Rituals Practiced During Traditional Male Circumcision

In the days and months leading up to the circumcision ceremony several rituals are practiced to prepare candidates for the procedure, including:

- Candidate participate in a special dancing ceremony which involved partaking in traditional dances all the way to relatives and friends homes to offer invitation to the ceremony.

- Parents organise and prepare ceremonial food and drinks like *Waragi* a potent gin and *Poriondet* which is a special millet brew into which the candidate dips his hands and cements his vows to complete circumcision. *Portiondet* is left to ferment and becomes *Komek*, a millet alcohol, used in the circumcision celebration.

- The day prior to the circumcision all candidates assemble close to the river where they get marked with white ash for identification. The initiates then dress in the traditional circumcision attire which includes a ceremonial hat made of Calabus monkey skin, a lace cloth worn around the chest, a whistle and a fly whisk.

- Initiates are then placed in a line according to their father's age/ clan and are led in a processional to the circumcision site to begin the circumcision dance at nightfall.

- Initiates dance, in line, during the night as the community members eat and sing traditional circumcision songs.

- On the morning of the circumcision event candidates are taken, in line, to the river where they are immersed in cold water to reduce pain and possible bleeding during the circumcision.

- Following the river bath, candidates are smeared with lamb dung and lined up for a procession back to the circumcision site. As initiates enter the circumcision site two elders hold up crossing spears which initiates must walk through.

4.3 Male Circumcision Procedure

Participants in the discussion indicated that traditional male circumcision procedure included several rites and rituals:

- The foreskin of the penis is retracted, by the TPMC, to expose the glans penis and the TPMC *places* fine baked soil on the glans penis.

- The foreskin is then pulled by the TPMC and the inner skin is cut in a circular motion. Upon reaching the frenulum, the circumciser will carefully cut around the frenulum and continue cutting the inner skin until the inner skin and foreskin is completely removed.

Participants in the discussion reported no diversity in TMC procedure across the district. Additionally, no rural / urban differences were reported.

4.4 Rituals Practiced After Traditional Male Circumcision

Participants indicated that newly circumcised candidates raise both hands once the circumcision is complete and upon jubilations form the community they are taken to sit in chairs and are covered by a clean sheet. Following the circumcision of all initiates festivities begin and gifts are offered to the newly circumcised boys. For the next couple of days and nights initiates will stay at a central shelter that has been constructed to house the initiates. After several days the initiates are free to return to their homes. After all initiates have returned home the community then hold s a ceremony that includes feasting, dancing and drinking of *Waragi* and *Komet*

Following the healing of the circumcision wound all the initiates are sent into the bush to fight a metaphorical lion (participants would not elaborate further on this portion of the circumcision ritual citing traditional secrecy). Upon successful completion of this task there is a graduation ceremony held and all the initiates are welcomed into the community as men.