



Progress Report on Kenya's  
**Voluntary Medical Male  
Circumcision Programme**



REPUBLIC OF KENYA

2008-10

## **Photos**

**Cover:** *Young men in Kenya (Jim Daniels).* **Page v:** *Fishermen in Nyanza Province (Beth Robinson).* **Page 1:** *Training in infection prevention (Tom Otieno).* **Page 8:** *Providers perform a male circumcision at an outreach site (Tom Otieno).* **Page 18:** *Members of a quality assurance and improvement team review the surgical theatre register at the Manyada Health Centre (Tom Otieno).* **Page 22:** *A mother accompanies her 17-year-old son to a male circumcision clinic in Lodwar, Kenya (Beth Robinson).*

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# Acronyms

APHIA	AIDS, Population and Health Integrated Assistance
BMGF	Bill & Melinda Gates Foundation
CDC	Centers for Disease Control and Prevention (United States)
DAIDS	Division of AIDS (U.S. National Institutes of Health)
EH	EngenderHealth
GoK	Government of Kenya
HPI	Health Policy Initiative
IRDO	Impact Research and Development Organization
KAIS	Kenya AIDS Indicator Survey
KNASP	Kenya National AIDS Strategic Plan
LCE	Luo Council of Elders
MCC	Male Circumcision Consortium
M&E	monitoring and evaluation
MoH	Ministries of Health
NASCOP	National AIDS and STI Control Programme
NGO	nongovernmental organisation
NIAID	National Institute of Allergy and Infectious Diseases (United States)
NIH	National Institutes of Health (United States)
NRHS	Nyanza Reproductive Health Society
PASCO	provincial AIDS/STI control officer
PEPFAR	President's Emergency Plan for AIDS Relief
PITC	provider-initiated testing and counselling
QA/QI	quality assurance/quality improvement
RCT	randomised controlled trial
RRI	Rapid Results Initiative
STI	sexually transmitted infection
TSF	Technical Support Facility (South Africa)
UIC	University of Illinois at Chicago
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNIM	Universities of Nairobi, Illinois and Manitoba
USAID	United States Agency for International Development
UW	University of Washington
VMMC	voluntary medical male circumcision
WHO	World Health Organization



## Part I. Preparation

### Introduction

On 13 December 2006, the results of two landmark studies were released, confirming that male circumcision dramatically reduces a man's risk of acquiring HIV infection through vaginal intercourse. In Kenya, where one of these studies was conducted, the government and its development partners had already begun planning how they might put the research into practice, should male circumcision prove effective.

Doing so took time and careful consideration, as the government and its partners grappled with the political, cultural and logistical challenges of scaling up services. Yet by the end of December 2010, more than 230,000 men and boys in Nyanza Province had been circumcised through a government-led programme designed to increase access to safe and voluntary male circumcision services offered by well-trained health care providers.

This report describes Kenya's experience in translating the clinical research results on male circumcision for HIV prevention into a successful service delivery programme. It documents the challenges, lessons and achievements of this initiative from its inception in 2008 to the end of 2010.

Part I of the report describes the rationale for the programme and the political and cultural environment in which the programme was developed and advanced. This section outlines Kenya's strategy on voluntary medical male circumcision (VMMC) for HIV prevention and chronicles how the government and its partners laid the foundation for an effective initiative.

Part II of the report examines implementation, identifying the factors that helped the programme meet its goals and describing how challenges in coordination, service delivery, social mobilisation and communication were addressed. It also describes two 30-day Rapid Results campaigns, which enabled the programme to serve tens of thousands of clients in a short time.

Part III of the report addresses quality assurance, monitoring and evaluation, and research. It illustrates how these aspects of the programme have improved the quality, reach and efficiency of VMMC services.

Part IV presents the results to date and the lessons from the first two years of programme implementation. It also describes plans for strengthening the programme based on research results and lessons learned.

## Voluntary Medical Male Circumcision Programme Highlights: 2008–2010

- Community engagement initiated in April 2007
- National programme launched in November 2008
- More than 230,000 men and boys circumcised from October 2008 through December 2010
- 1,385 surgeons, surgical assistants, counsellors and infection prevention officers trained by the end of 2010
- Circumcision services accessible at 268 health facilities in Nyanza, Western and Nairobi provinces by the end of 2010
- National task force established in October 2007 to coordinate the VMMC programme
- Provincial task forces formed in July 2008 to coordinate activities
- District steering committees initiated in May 2009 to coordinate district-level activities
- Communication guide and materials developed and in use by March 2010
- Monitoring and evaluation tools and guidelines developed and distributed by September 2010

### The Evidence

The announcement that studies in Kenya and Uganda had found that male circumcision offers men significant protection against HIV infection was a milestone in HIV prevention. The results, published in the British medical journal *The Lancet* on 24 February 2007,<sup>1,2</sup> confirmed the findings of a similar randomised controlled

trial conducted in South Africa<sup>3</sup> and of numerous observational studies that had identified an association between male circumcision and reduced risk of men acquiring HIV infection through vaginal intercourse.

In the Kenya, Uganda and South Africa trials, men who wished to be circumcised were randomly assigned either to be circumcised immediately or at the end of the studies. All three trials were stopped early, because the evidence from each was so strong it was considered unethical to withhold the procedure from the men who had been assigned to the delayed cir-

1 Bailey R, Moses S, Parker C, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. *The Lancet*: 369(9562), 647-656, 24 February 2007. doi:10.1016/S0140-6736(07)60312-2.

2 Gray R, Kigozi G, Serwadda D et al. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial. *The Lancet*: 369(9562), 657-666, 24 February 2007. doi:10.1016/S0140-6736(07)60313-4.

3 Auvert B, Taljaard D, Lagarde E, et al. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 trial. *PLoS Medicine*: 2(11), e298, October 2005. doi:10.1371/journal.pmed.0020298.

### Kenya's VMMC Programme: Timeline of Key Events

2006	2007	2008
<b>13 December 2006</b> Results of trials in Kenya and Uganda announced	<b>24 February 2007</b> Kenya and Uganda results published in <i>The Lancet</i> <b>6-8 March 2007</b> WHO/UNAIDS Technical Consultation on Male and HIV Prevention convened	<b>April 2007</b> Meeting convened to share research results with the Luo Council of Elders (LCE) <b>27 December 2007</b> Kenyan presidential election held
		<b>28 February 2008</b> National Accord and Reconciliation Act signed into law <b>17-18 April 2008</b> Meeting held with LCE and youth and women's groups
		<b>18 July 2008</b> Meeting held with wider representation of stakeholders <b>22 September 2008</b> Meeting held with stakeholders at which Kenya's prime minister endorsed VMMC



cumcision groups. The risk of HIV infection among circumcised men was reduced by 60 percent in the South Africa trial, by 51 percent in the Uganda trial and by 59 percent in the Kenya trial.

These three male circumcision studies were the first HIV prevention trials since 1999 to identify an effective intervention. A review by the influential Cochrane Library later concluded that the results provided strong evidence of safety and effectiveness against heterosexually acquired HIV infection in men.

The World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) convened experts to review the evidence on male circumcision for HIV prevention and released recommendations in March 2007. Stating that “the efficacy of male circumcision in reducing female-to-male HIV transmission has now been proved beyond reasonable doubt,” WHO and UNAIDS recommended expanding access to the procedure in geographic areas with low levels of male circumcision and high rates of heterosexually acquired HIV infection. The procedure was to be offered as part of a comprehensive package of HIV prevention services including HIV counselling and testing, condom promotion and counselling about how to reduce the risk of acquiring or transmitting HIV and other sexually transmitted infections (STIs).

## The Context

In Kenya, government officials and their partners were anticipating the results of the trial. “Even before the results were announced, we had begun to ask, ‘If the results

turn out well, are we prepared?’ and to think about what kind of activities would be needed,” says Dr. Zebedee Mwandu, technical advisor on HIV prevention for the U.S. Centers for Disease Control and Prevention (CDC), which coordinates activities supported by the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) in Kenya.

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*The efficacy of male circumcision in reducing female-to-male HIV transmission has now been proved beyond reasonable doubt.*

— World Health Organization and Joint United Nations Programme on HIV/AIDS, March 2007

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Overall, Kenya has a relatively high prevalence of male circumcision. In the Kenya AIDS Indicator Survey (KAIS) of 2007, 85 percent of men reported that they were circumcised. But male circumcision rates vary by province, ranging from 48 percent in Nyanza to 97 percent in Coast and North Eastern.

In Kenya, as in other parts of Africa, HIV rates tend to be high in areas where the prevalence of male circumcision is low. Nyanza Province, for example, has the lowest rate of male circumcision and the highest prevalence of HIV infection: almost 15 percent of adults are infected with the virus, and fewer than half the men are circumcised. Nationwide, the KAIS 2007 found that HIV prevalence was 13.2 percent among uncircumcised men and 3.9 percent among circumcised men.

	2009		2010	
<b>24 Nov 2008</b> VMMC for HIV prevention programme launched by the Government of Kenya (GoK)	<b>20 May 2009</b> District steering committees formed	<b>9 November 2009</b> First Rapid Results Initiative launched	<b>22 March 2010</b> Third meeting with stakeholders held	<b>18 November 2010</b> Second Rapid Results Initiative launched
	<b>17 June 2009</b> Policy allowing nurses to be trained to perform male circumcision announced by the GoK		<b>29 June 2010</b> VMMC programme expanded to Nairobi and Teso	

Given the potential benefits, health officials and their partners were eager to integrate male circumcision in their HIV prevention efforts. They already had a core group of experienced providers and trainers who had worked on the Kenya male circumcision trial. Moreover, that trial had been conducted in Nyanza, the province where male circumcision promised to have the greatest impact on Kenya's HIV epidemic.

But political and cultural considerations dictated a measured approach. While male circumcision is part of the rites of passage of many ethnic groups in Kenya, it is not traditionally practiced by the Luo people, who make up the majority of the population in Nyanza Province. Some Luos considered male circumcision an alien cultural practice rather than a medical intervention.

Male circumcision had political significance as well. Some politicians had raised the issue of male circumcision in political campaigns as one of the reasons to support particular candidates, and this had raised political temperatures.

At an April 2007 meeting in Nyanza convened by the scientists who had conducted the clinical trial to share their findings, members of the Luo Council of Elders urged caution. The elders' main message was to wait until after the presidential elections in December before rolling out male circumcision for HIV prevention in Nyanza.

Political violence following disputed presidential elections in 2007 further delayed the programme's start, but the delay had the advantage of creating time for consensus-building and preparation. During that period, government officials worked with their partners to lay the groundwork for the VMMC programme, developing strategies and guidance and establishing task forces to coordinate activities at the national and provincial levels.

Perhaps most important was the time spent in extensive consultation with community members and their leaders, according to Dr. Peter Cherutich, deputy director and head of HIV prevention for the National AIDS/STI Control

Programme (NASCOP). "We took the time to listen to the community's concerns and to address them in our plans and strategies," he says.

## The Strategy

An 18-page document, developed during the year-and-a-half before the VMMC programme's official launch in November 2008, provides the framework and the guiding principles for the ambitious effort by the Government of Kenya (GoK) to make male circumcision services safe, accessible and sustainable.<sup>4</sup>

The strategy outlined in the document is designed for rapid public health impact. It aims to meet 80 percent of the estimated need for medical male circumcision within five years. This would increase the proportion of Kenyan men ages 15 to 49 who are circumcised from 84 percent to 94 percent.

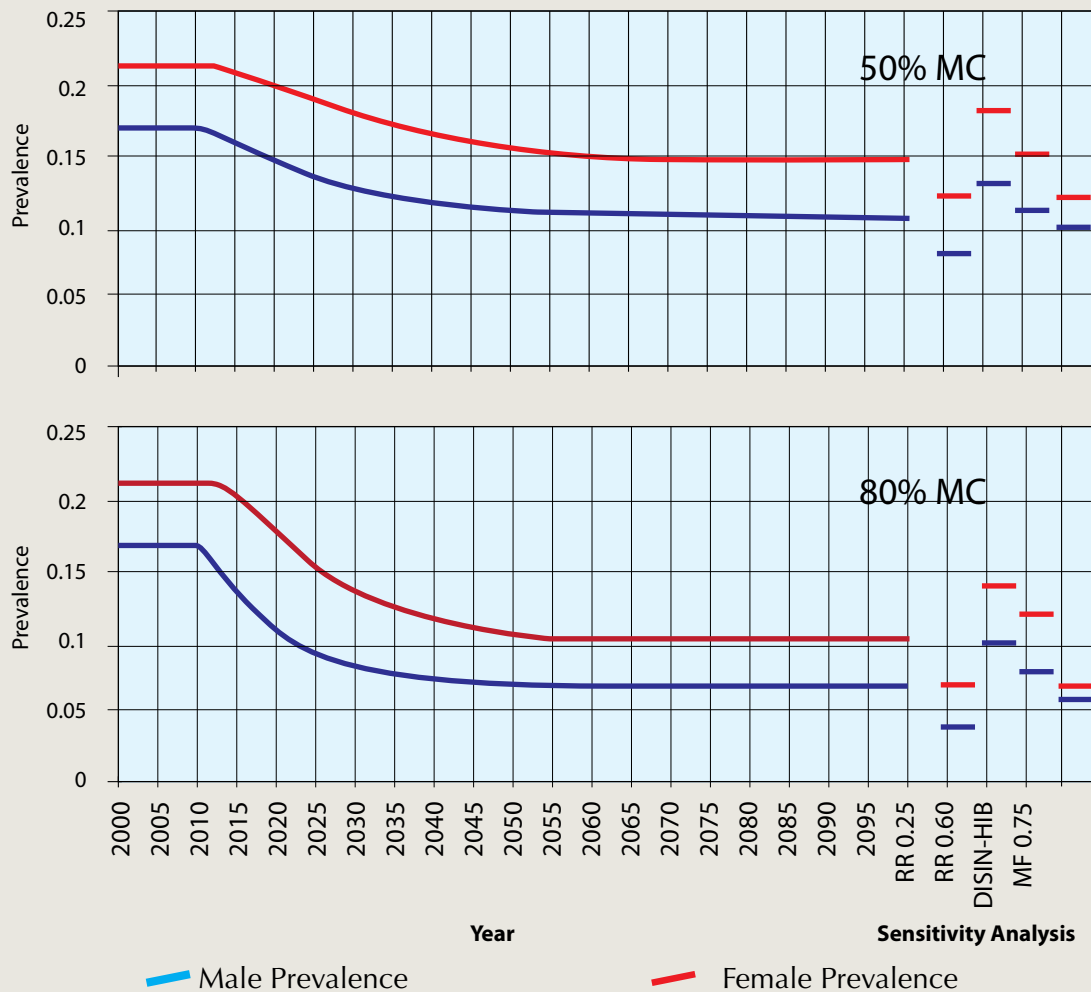
These goals are based on mathematical modelling studies showing that the impact of male circumcision on Kenya's epidemic will be greatest if most of the eligible men can be reached within five years. As Nyanza Provincial Commissioner Francis Mutie explains, "The sooner we provide comprehensive VMMC services to men who wish to become circumcised, the more HIV infections we will prevent."

Roughly half of the men circumcised and the HIV infections averted are expected to be in Nyanza. Reaching 80 percent of sexually active uncircumcised men in the province by 2013 would prevent an estimated 900,000 infections among men, women and children over a 20-year period.

The national guidance document also describes the mechanism for coordinating programme activities and ensuring the programme's technical quality: a national male circumcision task force, to be convened by the Ministries of Health (MoH) and chaired by a representative of NASCOP.

<sup>4</sup> National AIDS and STI Control Programme. *National Guidance for Voluntary Medical Male Circumcision in Kenya*. Nairobi: Ministry of Health, Government of Kenya, 2008. Available at: [http://www.malecircumcision.org/programs/country\\_implementation\\_updates.html](http://www.malecircumcision.org/programs/country_implementation_updates.html)

### Estimated HIV Prevalence in Nyanza with 50% and 80% Uptake of Male Circumcision



During 2008 the members of this national task force began working on a more detailed document describing not only what would be done to expand access to male circumcision for HIV prevention, but also how that would be done. The Kenya National Strategy for Voluntary Medical Male Circumcision addresses issues critical to implementation, such as communication, human resources, commodities, quality assurance and monitoring and evaluation. It describes the roles and responsibilities of the task force and recommends that provinces and districts establish similar coordinating bodies.<sup>5</sup>

The strategy acknowledges that Kenya’s public health services require dedicated investment to increase their capacity to meet the

anticipated demand for male circumcision services. Citing the need for a rapid roll-out to achieve maximum public health benefit, the strategy calls for a mix of facility- and community-based approaches to service delivery during the first three to five years of the programme. During that first phase, medical male circumcision would be offered primarily through outreach and mobile services, while the capacity of health facilities to provide the surgery and related services would be gradually strengthened.

The focus of the first phase has been on expanding access to male circumcision where the percentage of men who are circumcised is low and the prevalence of HIV is high — primarily in selected districts of Nyanza, Western, Rift Valley and Nairobi provinces (see Table 1). In subsequent phases, the programme

5 National AIDS and STI Control Programme. *Kenya National Strategy for Voluntary Male Circumcision*. Nairobi: Ministry of Public Health and Sanitation, Government of Kenya, 2009.

will expand services to reach traditionally circumcising communities and promote infant male circumcision.

The strategy also places the male circumcision initiative firmly on track with the goals of the Kenya National HIV/AIDS Strategic Plan (KNASP) III.<sup>6</sup> The results of the male circumcision trials were so compelling that the plan for the years 2005 to 2010 (KNASP II) was updated a year early so that medical male circumcision and other evidence-based interventions could be included in the KNASP III (2009/2010 to 2012/2013). This plan addresses HIV prevention, the care and treatment of people living with HIV, and mitigation of the epidemic's impact on families and communities. The strategic objective for HIV prevention is to achieve universal access to proven interventions, such as HIV testing and counselling, antiretroviral prophylaxis to prevent mother-to-child transmission of the virus, and medical male circumcision.

### Consulting with Stakeholders

In 2007 — the year the *Lancet* published the results of the Kenya and Uganda trials of male circumcision and HIV prevention — Kenya was preparing for a national election to be held in December. The circumcision status of candidates had been raised as an issue in some past elections, and MoH officials and community leaders decided that it would be prudent to delay the implementation of the male circumcision programme until after the

<sup>6</sup> National AIDS Control Council. Kenya National AIDS Strategic Plan, 2009/10 – 2012/13: *Delivering on Universal Access to Services*. Nairobi: National AIDS Control Council, 2009. Available from: [http://www.nacc.or.ke/2007/default2.php?active\\_page\\_id=247&id=345](http://www.nacc.or.ke/2007/default2.php?active_page_id=247&id=345).

general election. “We were treading on a most sensitive topic that divides cultures in Kenya at a most sensitive time,” explains Dr. Kawango Agot, an investigator who worked on the Kenya trial and head of the Impact Research and Development Organization (IRDO), a local nongovernmental organisation (NGO).

From April to November 2008, government officials and their partners engaged in extensive consultation with those who had a stake in whether and how the VMMC programme would be implemented. They met, individually and in small or large groups, with community leaders, health workers and men and women of all ages.

Two large forums were held in Kisumu — the largest city in Nyanza Province — to share the science behind medical male circumcision for HIV prevention and discuss the community's perspectives on expanding access to the procedure. The first, on 18 July 2008, drew 156 participants, including representatives from women's groups, youth groups, faith-based organisations, professional caucuses, social groups, the media and trade unions. All of these groups and more were represented by the 260 participants at the second forum, on 22 September 2008.

Both meetings were carefully planned, offering opportunities for spirited but respectful dialogue. Women and young people voiced strong support for expanding male circumcision services. Some participants expressed concerns about introducing the procedure in a traditionally noncircumcising community, and were reassured that male circumcision would be offered as a medical — not a cultural — intervention.

**Table 1. Male Circumcision Targets for Kenya's VMMC Programme (2009 – 2013)**

Province	2009-10	2010-11	2011-12	2012-13	4-Year Total
Nyanza	76,500	100,000	125,000	125,000	426,500
Rift Valley	28,500	40,000	60,000	60,000	188,500
Nairobi	19,500	30,000	40,000	40,000	129,500
Western	12,000	15,000	15,000	15,000	57,000
Other	13,500	15,000	15,000	15,000	58,500
<b>TOTAL</b>	<b>150,000</b>	<b>200,000</b>	<b>255,000</b>	<b>255,000</b>	<b>860,000</b>



*The Luo Council of Elders participated in a stakeholders' meeting on male circumcision for HIV prevention in Kisumu in February 2010. Photo: Silas Achar/FHI 360*

The keynote speech at the second stakeholders' meeting was a turning point for the programme. In an influential speech that was widely reported in the Kenyan media, Prime Minister Raila Odinga encouraged uncircumcised men to consider male circumcision for HIV prevention.

"Whether to circumcise or not should be an individual rather than a communal choice," he said. "What I highly recommend is that individuals be allowed to make choices in practices that have health consequences."

Another milestone came shortly afterward, when Ker Riaga Ogalo, then chairman of the Luo Council of Elders, signed the report summarising the meeting as an official statement of support by the elders, who are the custodians of the Luo culture.

The chairman's signature was the culmination of a series of consultations with the council that began in April 2007. During the process, the elders had acknowledged male circumcision as an additional strategy to help prevent HIV infection. However, they had sought assurance that the procedure would be completely voluntary and that there would be wide consultation with community groups and leaders.

At the crux of the elders' concerns was a word in the title of the draft guidance document. The original title was *Policy on Male Circumcision in Kenya*. The elders feared that "policy" meant that male circumcision would eventually become mandatory. Based on recommendations from a meeting that the council held in July 2008, the national task force revised the document and changed its title to one that better reflected the guiding principles listed in the document: *National Guidance on Voluntary Male Circumcision in Kenya*.

"The way the political, cultural and religious leadership was engaged really opened up the space for male circumcision," says national task force member Dr. Mores Loolpapit of FHI 360, an international health and development organisation. (Dr. Loolpapit is associate director of the Male Circumcision Consortium, or MCC, which is a partnership of FHI 360, EngenderHealth and the University of Illinois at Chicago, working with the Nyanza Reproductive Health Society, formed in 2007 to support the male circumcision programme in Kenya.) "With proper engagement and open discussion, it was possible to move forward with a sensitive programme."



## Part II. Implementation

### Building Blocks

The government's Voluntary Medical Male Circumcision Programme was officially launched at an event in Nairobi on 24 November 2008. By then, says NASCOP head Dr. Nicholas Muraguri, the "building blocks" for implementation — partnerships, coordinating structures, infrastructure assessments and training — had been assembled.

Having laid this foundation for the programme, the MoH requested financial and technical support from PEPFAR. And with this evidence that Kenya was ready for scale-up, PEPFAR provided resources for VMMC through its implementing partners and also directly to NASCOP to support coordination and the development of guidelines. The Bill & Melinda Gates Foundation also stepped forward, primarily through its support of the MCC, to help PEPFAR match with financial contributions the GoK's in-kind contribution of facilities and human resources.

The funds would support the efforts of the government and a mix of local and international NGOs working on HIV prevention in Nyanza Province. They had met early in 2008 to determine where each group might focus its work on male circumcision, in order to build on one another's strengths and avoid duplication.

Each NGO involved in the VMMC programme is represented on the National Task Force on Male Circumcision, which is chaired by the deputy director and head of HIV prevention at NASCOP. Representatives work together on the task-force subcommittees for service delivery, communication, and monitoring and evaluation.

The national task force has been effective, because it meets regularly and has strong leadership, says Dr. Walter Obiero, clinical manager for the Nyanza Reproductive Health Society (NRHS). "Top-level Ministry of Health people are taking the lead at the national level," he says. "Their willingness to lead the programme and be accessible to partners has made it easy to address issues of policy clarification. At the provincial level, too, there has been across-the-board ownership."

A provincial task force modelled after the national task force was formed in July 2008 to coordinate VMMC activities in Nyanza Province. The director of medical services and the director of public health and sanitation for the province are its co-chairs. Members attribute this task force's effectiveness to government leadership, partner participation and the coordination provided by an active, responsive secretariat.

## VMMC Implementing Partners, 2008 to 2010

- AIDS, Population and Health Integrated Assistance (APHIA II) Nyanza
- Catholic Medical Mission Board
- University of California at San Francisco/ Family AIDS Care and Education Services
- Impact Research and Development Organization
- Male Circumcision Consortium
  - FHI 360
  - EngenderHealth
  - University of Illinois at Chicago, working with the Nyanza Reproductive Health Society
- Marie Stopes Kenya
- Nyanza Reproductive Health Society
- Eastern Deanery Aids Relief Programme

“At the provincial level, we are like a family,” says Dr. Charles Okal, the provincial AIDS/STI control officer (PASCO). “We have regular meetings, regular consultations and regular sharing. We have divided ourselves into three teams: one for service delivery, one for communications and one for monitoring and evaluation.”

Dr. Okal consults most days with Isaac Onyango Oguma of FHI 360/MCC, who serves as the provincial task force’s secretariat. “We meet first thing in the morning, and then go out in the field,” he says. “By 4 p.m., we’re back again, sharing what we have learned.”

Among the first activities undertaken in Nyanza before the programme’s launch were assessments of the capacity of facilities in the province to offer VMMC services. (Seven criteria determined by the GoK guided these reviews.) The results were not encouraging. For example, NRHS assessed 81 facilities in Nyando and Kisumu districts and found none prepared to provide comprehensive male circumcision services.

These findings influenced the national strategy, with its emphasis on mobile and outreach services in the early phases of the programme. The assessment also spurred efforts to build the VMMC capacity of those facilities in Nyanza that did meet most or many of the GoK’s criteria.

Capacity-building often meant refurbishing facilities and procuring supplies. It always involved training. The training course is based on the GoK’s *Clinical Manual for Male Circumcision under Local Anaesthesia*,<sup>7</sup> an adapted version of a curriculum developed by WHO, UNAIDS and Jhpiego (a nonprofit health organisation based at Johns Hopkins University, in the United States). Conducted by NRHS trainers, the course consists of two to three days of classroom learning followed by a six- to eight-day practicum.

During the practicum, each clinical trainee observes two circumcisions and assists with another before performing the surgery with the assistance of a trainer. The trainee is then expected to perform 20 additional circumcisions under supervision and is evaluated in accord with a checklist.

The original model was to bring everyone to the Universities of Nairobi, Illinois and Manitoba (UNIM) Research and Training Centre, which was the site of the Kenyan male circumcision trial, for training. But sending providers away for two weeks of training posed a hardship for many health facilities. Therefore, most of the practical training has been done in the field, primarily in district hospitals.

<sup>7</sup> Ministry of Public Health and Sanitation, Government of Kenya. *Clinical Manual for Male Circumcision under Local Anaesthesia*. Adapted from WHO/UNAIDS/Jhpiego *Manual for Male Circumcision under Local Anaesthesia*, Version 2.5, February 2008.

Providers from MoH and partner-supported facilities are trained in teams composed of a surgeon, a surgical assistant, a counsellor and an infection prevention officer. The trainers ensure that team members not only learn to perform their individual roles but are also equipped with information and skills to provide male circumcision as part of a comprehensive package of HIV prevention services.

## Delivering Services

Clients have found that the VMMC programme offers much more than just a surgical procedure. Those who come for “the cut” are counselled not only about the procedure and postoperative care, but also about the need to abstain from sexual activity during the healing period and to practise other HIV prevention measures thereafter. They are offered HIV counselling and testing and receive free condoms, screening and (if needed) treatment for other STIs, and referrals to other health and social services they may need.

These services are the minimum package prescribed in Kenya’s *Clinical Manual for Male Circumcision under Local Anaesthesia*. Providers encourage clients to bring in their female partners to receive these additional services, as well.

“The counselling is taken very seriously,” says Dr. Okal, the PASCO for Nyanza. “The message goes out very clearly that male circumcision is not 100-percent effective.”

The lack of adequate infrastructure and the long distances between facilities equipped to provide VMMC services pose challenges to service delivery. In response, the programme has developed three models of service delivery: static, mobile and outreach.

Static sites are public or private health facilities that have the capacity and space to offer male circumcision services on demand. Most do so with support from teams deployed by the VMMC partners. Outreach services are provided by partner teams on specific days at health facilities that do not have the capacity to offer the services on their own. And mobile teams bring VMMC services to remote com-

munities, setting up surgical theatres in dispensaries, school classrooms, chiefs’ offices and even large banquet tents.

Another important innovation involved a change in GoK policy. To address the shortage of medical officers and clinical officers available to perform male circumcisions, the government made a strategic decision in June to train nurses to perform the surgery, which is a routine medical procedure. Most health care providers in Kenya are nurses, so this decision was instrumental in expanding access to VMMC services.

Even with such task shifting, it was clear from the results of the facility assessments that the programme could not achieve its goals by introducing the VMMC package only as part of a site’s routine health services. So the programme relies primarily on teams of providers employed by the partner organisations for the short term, while gradually building the capacity of MoH-employed health care providers to offer the service.

Integrating a new health service is never easy, and VMMC has been no exception. The AIDS, Population and Health Integrated Assistance (APHIA) II Nyanza Project, which trained and supported MoH teams to provide VMMC services, found that staff shortages and competing priorities posed challenges. “If you have a convulsing child and a person waiting for male circumcision, then the male circumcision client must wait,” explains Judy Odondi, who was an HIV and AIDS officer with the Christian Health Association of Kenya, an APHIA II partner.

Some MoH providers consider VMMC a separate initiative, unlike other HIV prevention services such as HIV counselling and testing that have been integrated in health services. But that is beginning to change. The GoK’s implementing partners work closely with the district health management teams, whose members identify the trainees and decide when and where the training will occur. The leadership and support of the district medical officers of health reinforce the importance of male circumcision as an HIV prevention service.



Steering committees in each of the Nyanza districts where the programme is being implemented are led by the district medical officers of health. Some of these committees are beginning to assume greater ownership of the programme in their districts.

The steering committee in Rongo District is particularly strong, meeting monthly to plan and coordinate VMMC activities. "They do joint supervision with partners, and they divide into smaller teams to do quality assurance," says FHI 360's Oguma. The committee even raised funds for VMMC from a local businessman.

At the facility level, a collaborative approach fosters integration. The GoK's implementing partners work closely with the facility in-charges to schedule days for VMMC services. Sometimes when male circumcision providers do not have clients waiting, they help facility staff by providing other health care services, such as HIV or maternity care.

## Mobilising the Community

The programme enlisted volunteer community health workers, who are trained by the MoH to provide preventive health services, and other volunteers to spread the word about VMMC. These community mobilisers post flyers and use loudspeakers to tell potential clients where and when VMMC services are available. They also educate people about the procedure and why it is offered with other HIV prevention services.

"You really have to prepare the people you send out," says Dr. Agot of IRDO. "Making a decision to get circumcised is not easy. You need to talk to people one-on-one and in small groups, because people have a lot of questions."

The mobilisers are trained to answer those questions and to refer potential clients to the VMMC programme's counsellors for additional information. They meet monthly with the VMMC teams to discuss some of the questions they encounter and to refresh their own knowledge.



*A surgeon performs the male circumcision procedure Photo: Michael Stalker/FHI 360*

"In some areas where acceptability was low, we did a lot of mobilisation rather than offering surgeries," says Ronnie Asino, NRHS district coordinator for Bondo District. "In areas where acceptability was very high, most clients are ready when they come. There we worked long hours to meet demand."

At first the mobilisers focussed on talking to potential clients. Now they also reach out to wives, girlfriends and mothers, who often play an important role in a man's decision to become circumcised.

The mobilisers stay in close contact with the VMMC teams, to keep them informed about where VMMC services are in demand on a given day. It is not unusual for a mobile team of VMMC providers to be diverted from one site with few clients to another where mobilisers have reported heavy demand.

"We see these mobilisers as community ambassadors," says Dr. Kennedy Serrem, male circumcision medical officer for the Catholic Medical Mission Board, another GoK partner. "That is one reason why Kenya has done many male circumcisions."



*A mobiliser discusses male circumcision with students during an HIV/AIDS and sports event at Miranga Secondary School in Kisumu West District. Photo: Silas Achar/FHI 360*

## Harmonising Messages

When service delivery began, the national task force was working on a communication strategy for the VMMC programme. The draft strategy outlined the programme's communication objectives, target audiences and key messages.

The objectives were defined as raising awareness of male circumcision as a safe and voluntary method to prevent HIV infection, promoting VMMC as part of a comprehensive strategy, and creating and maintaining demand for the service among men. A fourth objective was designed to build capacity to communicate the key messages — and support for VMMC — among health workers.

The aim was to harmonise messages and approaches, and then develop a common set of materials. In the meantime, most of the partners used or adapted materials that the NRHS had developed, such as brochures and client cards.

GoK partner PSI, a global health organisation, took the lead in developing new materials,

beginning with a programme logo. "There were a lot of materials out there, so it was important to create a common look," says Ndung'u Kiri, behaviour change communication manager at PSI/Kenya. "We developed a creative brief based on discussions with the national task force and the provincial task force, and then contracted with a firm that developed logos and tag lines."

After extensive pretesting in Nyanza in the second half of 2009, the logo was approved in February 2010, clearing the way for publication of materials that the MoH and all partners could use to explain VMMC to clients, potential clients and their families.

Another partner, Communication for Change, or C-Change (an international social and behaviour-change project funded by the U.S. Agency for International Development and implemented by FHI 360), developed a framework to begin harmonising VMMC communications in Nyanza. C-Change conducted focus group discussions in the province in early 2010 to gain a better understanding of community perceptions of VMMC. These discussions revealed a need for more nuanced communication on male circumcision, addressing the partial protection it provides and the importance of sexual abstinence during the healing period after the procedure.

Thus informed, C-Change worked with the communications subcommittee of the National Task Force on Male Circumcision to develop a communication toolkit for the VMMC programme.<sup>8</sup> The toolkit contains materials for specific audiences or users and a communication guide that builds on the national strategy. The first set of materials, developed for use in Nyanza, consists of billboards, posters, video vignettes, radio spots, flip charts for health workers and a handbook for community mobilisers.

C-Change conducted several workshops in Nyanza, Teso and Nairobi to disseminate the toolkit to potential users. Participants in these workshops found the materials easy to use,

<sup>8</sup> *Voluntary Medical Male Circumcision Communication Toolkit*. C-Change/Academy for Educational Development, 2010. Available at: <http://www.c-hubonline.org/7815/?cp14>.



*Journalists conduct an interview at a training workshop. Photo: Beth Robinson*

relevant, credible and culturally sensitive. They said the toolkit would help them educate community members about male circumcision and urged that it be widely disseminated. These materials have since been adapted for audiences in Swaziland, Rwanda and Uganda.

## **Engaging the Media**

While word-of-mouth remains the most important source of information about male circumcision in Nyanza, mass media are a close second. Knowing that the subject lends itself to sensationalistic coverage, the task forces sought to engage journalists early on to encourage accurate coverage of VMMC.

The national and provincial task forces convened a workshop for print and broadcast journalists from national media houses in Nyanza following the September 2008 stakeholders' meeting. Supported by the MCC, the workshop featured presentations by researchers about the science behind male circumcision for HIV prevention and question-and-answer sessions. A baseline questionnaire showed that some participants were "not convinced" that male circumcision should be adopted as an HIV prevention measure in Kenya, but at the end of the workshop all participants expressed confidence in the initiative.

The workshop established a basis for a positive relationship between the journalists and

the task force members. In 2009, the MCC organised similar workshops for local journalists in Nyanza and for national and local editors and broadcast managers. The task force's continued engagement with these and other journalists, including editors from local and national media houses, has helped promote frequent and largely accurate coverage of VMMC in the Kenyan media.

One PEPFAR-supported partner, Internews, was also instrumental in selecting journalists and editors and training them to report on VMMC. In September 2010, the MCC and Internews collaborated to conduct training workshops to continue to educate journalists and also to orient radio presenters, reporters and call-in show hosts, who play an increasingly important role in informing the public about male circumcision for HIV prevention.

While the VMMC programme encouraged media coverage, it postponed direct use of mass media for VMMC communications at first. "There was the fear that we might create demand we couldn't meet," explains Dr. Mwandi of the CDC.

As the capacity to deliver services expanded, the programme turned to local radio stations in Nyanza and Nairobi to inform men and women about VMMC and its role in HIV prevention. Radio call-in shows were a particularly effective means of community engagement.

## Voluntary Medical Male Circumcision Campaigns Achieve Rapid Results

In November 2010, the Kenyan government and its partners mobilised hundreds of health care providers to carry out a campaign in Nyanza and Nairobi provinces, aiming to circumcise 40,000 men and boys over 30 working days.

By the end of the 30-day campaign, they had surpassed that ambitious goal. More than 55,000 men and boys had sought and received voluntary medical male circumcision (VMMC) services through the programme's second Rapid Results Initiative (RRI).

The programme also succeeded in increasing the proportion of clients who accepted testing for HIV and in reaching a higher number of clients ages 15 and older than it had during the first RRI in 2009, when more than 36,000 men and boys received VMMC services over 30 working days.

Together, the two campaigns account for 39 percent of all the male circumcisions performed by the VMMC programme through December 2010. These intensive efforts to expand access to VMMC services and promote the services during periods of peak demand have been a cost-effective way to reach the large numbers of clients needed to have a real impact on the HIV epidemic in Kenya.



*Godfrey Kenboi-Menego of the Nyanza Reproductive Health Society displays a chart showing the daily progress of the 2009 Rapid Results Initiative in Siaya District. Photo: Kathleen Shears/FHI 360*

### The Approach

The plans for the 2009 and 2010 RRIs drew on the experience of campaigns that had jump-started immunisation and HIV counselling and testing in Kenya. The timing — late November into December — was chosen to take advantage of the school holidays, when providers have noticed increased demand for VMMC services.

During the campaigns, the VMMC programme enlisted many permanent MoH staff to work with dedicated VMMC staff employed by the MoH's partners to provide VMMC services. Trained health care providers who were on leave joined the effort, and additional providers were hired and trained.

Promotional activities were also expanded. Social mobilisation for each RRI began six weeks before implementation, involving a wide range of community allies to raise awareness of the benefits of male circumcision.

Intensive publicity began two weeks before the launch of each campaign. Outreach events were held at public gatherings, in churches, at sporting events and even on lake beaches. Print media, drama presentations, radio broadcasts, flyers and banners were used to encourage men to seek VMMC at convenient locations in their communities. Satisfied clients advocated VMMC in the communities and on the radio.

Partners distributed supplies to district stores one week before the RRI launch. Their use was recorded and monitored daily to ensure timely resupply. Each district received a large pool of vehicles (loaned by the MoH, other ministries and NGOs) to deploy providers and supplies where they were needed.

The VMMC teams employed a number of strategies to make the surgery more efficient. They used two operating tables per team to reduce the preparation time between surgeries. They also used prepackaged kits containing all the supplies needed for the procedure, and they shared tasks among different cadres



A march through Kisumu helped publicise the launch of the Rapid Results Initiative. Photo: Silas Achar/FHI 360

of providers. In high-volume areas, some clients received counselling the day before surgery so surgeons could start performing circumcisions first thing in the morning.

All of these efforts were planned and guided by a provincial coordinating committee of MoH and partner representatives, who es-

tablished coordinating committees in each district, led by the district medical officers of health. The committee members set targets for each district according to the number of qualified providers available and the assumption, based on past experience, that each VMMC team could perform 12 circumcisions a day.



Provincial Commissioner Francis Mutie speaks at the launch of the Rapid Results Initiative in Kisumu. Photo: Silas Achar/FHI 360

### Rapid Results in 2009

During the first RRI, 36,077 men and boys sought and received VMMC services at MoH facilities, mission hospitals and a variety of outreach and mobile sites.

The 2009 RRI showed that “if you take services to the people, the uptake is huge,” says Dr. June Oduyo, UNIM coordinator and editor of a report about the 2009 RRI.<sup>9</sup> The first initiative also demonstrated that an accelerated campaign could provide male circumcision services safely. The rate of complications was below 2 percent, and most were moderate complications, such as bleeding or mild infections, that were easily resolved. More serious complications were rare.

<sup>9</sup> Government of Kenya, Ministry of Public Health and Sanitation, *Voluntary Medical Male Circumcision for HIV Prevention in Kenya: Report of the First Rapid Results Initiative*. November/December 2009. Nairobi: Government of Kenya, October 2010.

The services provided along with male circumcision had additional health benefits. During the first RRI, 400 men tested positive for HIV and were referred to care and treatment programmes. A total of 202 STIs and previously unrecognized genitourinary disorders were diagnosed and treated or referred for treatment.

Nevertheless, monitoring data raised some concerns. It revealed that more than 38 percent of VMMC clients during the 2009 RRI were younger than 15. Many parents, particularly in urban areas, brought their sons in to be circumcised. While it is encouraging that these parents recognize the benefits of male circumcision for their sons, boys younger than 15 are not the programme's primary audience. Circumcising such young clients will not have an immediate impact on the HIV epidemic, because most of them are not sexually active.

The data also showed that only 39 percent of clients had opted to be tested for HIV. (Another 17 percent reported that they had been tested elsewhere.) These rates were much lower than those achieved during routine service delivery, when there are fewer clients. Given these results, raising the HIV testing rate and reaching greater numbers of older clients became objectives of the 2010 RRI.

## Applying Lessons Learned

The 2009 RRI yielded many lessons that helped improve routine programme implementation throughout the year. These lessons also helped the government and its partners design a plan to reach even more clients during the second RRI.

For example, efficiency measures introduced during the first RRI were effective, but the programme found that the time saved with such measures can be lost without a steady flow of clients. Matching client flow with deployment of staff remained a challenge throughout the campaign, and social mobilisation proved to be the most important factor determining the number of clients served each day.

Flexibility helped VMMC programme managers achieve a better balance between supply and demand during the second RRI. The number of teams at each site and the size of the teams were adjusted as client flow shifted. Additional teams were sent to high-volume sites. Unexpectedly high demand was also met by temporarily adding extra nurses, counsellors or hygiene officers to the teams. Full-time, more experienced providers were partnered with less-experienced providers and served as team leaders to ensure the quality of the services.

The second RRI built on the mobilisation efforts of the first, with an even greater emphasis on community advocacy and the use of local radio. Satisfied VMMC clients spoke at road shows staged to attract men to specific service delivery sites and also gave testimonials on local-language radio shows. These messages, reinforced by community leaders and mobilisers, dispelled misconceptions about the procedure. Women trained to advocate VMMC in their communities also proved to be influential mobilisers.

Targeted mobilisation and advocacy were part of a concerted effort to reach men 15 and older, and particularly those in the critical 18-year-old to 49-year-old age group. Some mobilisers even went door-to-door to discuss VMMC with men in the privacy of their homes. These volunteers were offered monetary and nonmonetary incentives for referring clients, and those who successfully referred clients older than 18 received greater monetary incentives (100 Kenyan shillings, compared to 50 Kenyan shillings each for successful referrals of boys ages 15 to 17 years).

Offering "moonlight" services to make male circumcision more accessible to men who work during the day was another measure adopted during the second RRI to reach a greater proportion of older clients. VMMC services were offered at night — sometimes as late as 3:30 a.m. — at more than 20 locations in Bondo, Rarieda, Kisumu East, Siaya and Migori districts.

To increase the proportion of clients accepting HIV testing and also to improve efficiency, the programme added counsellors during times of peak demand. In sites with a high volume of VMMC clients, pre-operative counselling was conducted in group sessions, increasing the number of counsellors available to provide pre- and post-test HIV counselling to individual clients. All sites used an approach known as provider-initiated testing and counselling (PITC), in which trained and confident health care providers offer the HIV test (which clients are, of course, free to decline) rather than waiting for clients to request it. These measures encouraged more clients to accept the offer of HIV testing and post-test counselling during the second RRI.

### 2010 RRI Results

The VMMC programme circumcised 55,376 men and boys during the 2010 RRI, exceeding its goal by 38 percent. The campaign focused on Nyanza Province, but also reached 4,759 men in the new programme area of Nairobi Province.

The programme also achieved its objectives of reaching older clients and increasing acceptance of HIV testing and counselling. More than 84 percent of clients during the second RRI were 15 and older, and 80 percent of all clients chose to be tested and receive post-test counselling. The low rate of complications — 1.53 percent — among clients returning for postoperative follow-up on the seventh day after surgery suggests that these goals were reached with a high degree of safety.

However, only about 41 percent of clients returned for the seventh-day follow-up visit. While this follow-up rate is an improvement over the 23 percent recorded during the 2009 RRI, it is still a concern. Additional measures to improve follow-up are planned for the third RRI, which will be held in November and December 2011. Other improvements based on the lessons from the 2010 RRI will include a streamlined plan for transporting providers and clients and programme-wide adoption of a comprehensive system for monitoring and evaluation.



*A surgeon performs a male circumcision procedure at a mobile site. Photo: Michael Stalker/FHI 360*

Like the first RRI, the 2010 campaign was highly cost-efficient. The number of procedures performed over six weeks tripled during the campaign. This high volume of clients reduced the cost per procedure by 43 percent, from \$48 during regular programme implementation to \$27 during the 2010 RRI.



### III. Monitoring, Evaluation, and Research

Kenya's VMMC programme has established systems to monitor and evaluate the quality and impact of the services provided and to ensure that data from these systems are used to continue improving service delivery. Multiple quality assurance reviews and routine monitoring and evaluation (M&E) are complemented by research to identify ways to enhance services and to evaluate their impact on the HIV epidemic.

#### Assuring Quality

Health officials at every level, partners and outside experts participate in reviews of the VMMC programme for quality assurance and quality improvement (QA/QI). The purpose of these reviews is to ensure that all components of the VMMC package of HIV prevention services are delivered as they should be.

Partners have been conducting routine quality assurance visits since the beginning of the programme to ensure that VMMC teams maintain a high standard of care. During 2009 they began conducting joint assessments with the district steering committees. The goal is eventually to have the steering committees lead annual QA/QI reviews in each district.

Two external quality assessments were conducted in March and November of 2009 by

the MoH, WHO and PEPFAR. These led to improvements in the safety and quality of VMMC. The assessment teams found, for example, that management of STIs was weak in many facilities. The programme responded by adding a module on STI management to the national VMMC training curriculum.

The assessments established that although few patients experience complications after the male circumcision procedure, the capacity to address those rare adverse events could be improved. The national and provincial task forces instituted a 24-hour telephone hotline that clients can call at any time if they experience problems after the surgery. All health care staff providing VMMC services received training in basic life support, and this skill was added to the training curriculum.

The government and its partners also worked with WHO to review a rapid assessment toolkit that was pilot-tested, with good results, in several districts in Nyanza in 2010. The MoH will adopt the QA/QI tools that were used during the external assessments for routine use.

#### Monitoring and Evaluation

The members of the national task force's subcommittee on monitoring and evaluation (M&E) first met in March 2008 to begin devel-



oping guidelines and tools. Their starting point was the data collection forms that UNIM had used for its male circumcision research.

In the meantime, partners used a variety of forms to collect M&E data. Although most were shorter versions of the UNIM forms, the variations made it difficult to combine and compare data collected in different districts during the first year of the project.

The forms that UNIM had used for research were considered too detailed for day-to-day clinical use. For the M&E forms, subcommittee members culled the key questions, seeking to reduce the burden of data collection while meeting the VMMC programme's information needs.

The forms the subcommittee produced are designed to obtain the necessary data but can also serve as basic checklists for providers and supervisors. The form the providers fill out for each client reminds the provider to confirm that all vital signs are fine and to check for certain medical conditions that could affect the outcome of the procedure. An STI, for example, must be treated before male circumcision is performed. The form also asks whether the client received counselling and was tested for HIV so that the provider can reinforce appropriate HIV risk-reduction messages.

The subcommittee coordinated its efforts with the development of male circumcision indicators by UNAIDS, WHO and PEPFAR to ensure that the measures used were compatible with those of other programmes. Once those organisations' indicators had been finalised, the MoH moved ahead to include the subcommittee's VMMC indicators in its health and management information system.

The M&E subcommittee worked on the data collection forms and M&E training guidelines throughout 2009 and began pilot-testing them in January 2010. Once programme staff had been trained and had used the tools, the subcommittee conducted an assessment, evaluating the quality of the data that were being collected and how staff members were reporting and using the data. A review meeting was held in July 2010 to discuss providers' experience

with the tools and to identify improvements. The recommendations from that meeting and from the data quality assessment were then used to refine the M&E tools, setting the stage for training of MoH personnel and greater standardisation of data in 2011.

## Research to Practice

Research on male circumcision for HIV prevention in the Kenyan programme focuses on practical issues. It is designed to address the real challenges of providing access to safe, high-quality VMMC services in low-resource settings.

At least 20 studies on male circumcision for HIV prevention were being conducted in Nyanza Province by the end of 2010 (see Table 2). They include a study of the long-term impact of male circumcision on a cohort of the original trial participants, assessments of a new adult male circumcision device, a study on how to communicate the concept of partial protection against HIV, and operations research to identify ways to improve the quality, effectiveness and reach of service delivery.

As early as 2009, research and M&E findings were already being used to improve the VMMC programme. For example, the 2008 assessment of all the health facilities in Kisumu and Nyando districts found that only about 12 percent of facilities had adequate numbers of clinical officers to incorporate male circumcision in their routine services, but 85 percent had adequate numbers of nurses. These data were used to advocate the training of nurses to perform male circumcisions — a policy the GoK adopted in June 2009.

In another example, data from an M&E study showed that only a quarter of VMMC clients were being tested for HIV. This led the programme's organisers to consider adopting PITC, which had resulted in significant increases in acceptance of HIV testing and counselling by clients of both primary health care services and services to prevent mother-to-child transmission of HIV in Kenya. With the adoption of PITC in April 2009, acceptance of HIV testing among VMMC clients increased rapidly, to more than 80 percent by the second quarter of 2010.

**Table 2. Male Circumcision Research in Kenya, 2010\***

Title of Study	Sponsor/Funder**	Status as of November 2010/ Results Expected
<b>RCT FOLLOW-UP</b>		
Randomised Controlled Trial of Male Circumcision to Reduce HIV Incidence: HIV and STI Incidence Cohort Study	UIC/DAIDS, NIAID, NIH	Continuing follow-up
<b>HUMAN RESOURCES</b>		
Responding to the Human Resource Capacity Development and Training Needs	EH/BMGF via FHI 360/MCC	Completed/2011
Assessment of Non-Physician Clinicians Performing Male Circumcision in Nyanza	EH/BMGF via FHI 360/MCC	Completed/2011
Private Sector Health Providers Assessment	FHI 360/BMGF via FHI 360/MCC	Completed/2011
<b>SERVICE DELIVERY</b>		
Assessment of Male Circumcision Services at Outreach Health Care Facilities in Nyanza	EH/BMGF via FHI 360/MCC	Completed/2011
Systematic Monitoring of Male Circumcision Scale-up (SYMMACS)	Project SEARCH/USAID	Results expected 2011
<b>DEVICES</b>		
The Shang Ring: Pilot Study of a Novel Male Circumcision Device for HIV Prevention	EH, Weill Cornell Medical College, NASCOP/ BMGF via FHI 360/MCC	Completed/2011
The Shang Ring: Evaluation of Healing at Three Time Intervals and Potential for Spontaneous Detachment	EH, Weill Cornell Medical College, NASCOP/BMGF via FHI 360/MCC	Completed/2011
Comparison of the Shang Ring with Conventional Surgical Methods	EH, Weill Cornell Medical College, NASCOP/BMGF via FHI 360/MCC	Completed/2011
The Safety Profile and Acceptability of Alisklamp among Kenyan Men Undergoing Voluntary Medical Male Circumcision	Turkish Professional Circumcisers Association & NASCOP	Completed/2011
<b>BEHAVIOURAL RESEARCH</b>		
A Prospective Study of Behavioural Risk Compensation Related to Male Circumcision as an HIV Prevention Method	UIC & NRHS/BMGF via FHI 360/MCC	Under way/2012
Impact of Male Circumcision on Sexual Risk Behaviours	UIC & NRHS/BMGF via FHI 360/MCC	First round (of 3) data collection completed/2013

Title of Study	Sponsor/Funder**	Status as of November 2010/ Results Expected
<b>HEALING</b>		
A Study of Post-Surgical Wound Healing	UIC & NRHS/BMGF via FHI 360/MCC	Under way/2012
<b>COMMUNICATIONS</b>		
Communicating Partial Protection	FHI 360/BMGF via FHI 360/MCC	Completed/2011
Text Messaging to Improve Adherence to Postoperative Clinic Appointments and Reduce Early Resumption of Sexual Intercourse	UW with UIC & NRHS/ Fogarty	Under way/2011
<b>COSTING</b>		
Estimating the Costs, Cash Flow Analysis, and Impact of Male Circumcision in Kenya and Zimbabwe	HPI & TSF/USAID & UNAIDS	Completed/2011
<b>INFANT CIRCUMCISION</b>		
Evaluation of Safe Voluntary Infant Medical Male Circumcision in Selected Facilities in Nyanza Province	UIC & NRHS/BMGF via FHI 360/MCC	Completed/2011
<b>MONITORING</b>		
A Monitoring and Evaluation Study to Assess the Implementation of Male Circumcision as an HIV Prevention Strategy in Kisumu and Nyando Districts	UIC/BMGF via FHI 360/MCC	Completed/2011
Home-based Study of Post-operative Adverse Events	PEPFAR/Westat	Protocol under development
Evaluation of Moderate and Severe Adverse Events following Adult Male Circumcision in Nyanza Province, Kenya	UW/CDC	Planned

\*For detailed information, see WHO/UNAIDS. Progress in Implementation: Country Implementation and Research Update. Available at: [http://www.malecircumcision.org/programs/country\\_implementation\\_updates.html](http://www.malecircumcision.org/programs/country_implementation_updates.html)

\*\*See Acronyms, page vi.



## IV. The Way Forward

### Results

During its first two years, Kenya's VMMC programme laid the foundation for scale-up of male circumcision, established VMMC services in Nyanza, mounted two rapid-response campaigns and provided comprehensive VMMC services to more than 230,000 men and boys.

"Kenya by far is in the lead in terms of how they got their policy done, and in the number of circumcisions they've done," says Dr. Kim Eva Dickson, a senior advisor on HIV and AIDS at WHO during that time. "What has impressed me about Kenya is the speed with which they've been able to move from policy to strategy, and then to service delivery."

Ninety-seven percent of clients reported being satisfied with the services they received, and complications from the surgery were low, at less than 1 percent. Most of these complications were mild ones, such as bleeding and swelling.

The number of circumcisions performed in Nyanza by December 2010 exceeds the programme's goal for the first two years, but many of the clients were not in the age group of 15 to 49 years that the programme needed to reach for greatest and most immediate

impact on Kenya's rate of new HIV infections. The high percentage of clients younger than 15 — particularly during the first RRI — has raised concern about whether Kenya can achieve its goal of reaching 426,000 of Nyanza's men and boys in the desired age group by 2013. It has also prompted a concerted effort to make VMMC services more accessible and attractive to older clients.

M&E data have revealed additional areas for improvement, such as increasing the follow-up rates and acceptance of HIV testing and counselling. The GoK continues to consider evidence from its M&E system and from research conducted in Kenya and other countries to make decisions on how best to improve the VMMC programme and safely achieve an impact on public health within the shortest time possible.

### Lessons Learned

Kenya continues to learn from research and from programme experience and to apply these lessons to improve the VMMC programme in Nyanza and in other traditionally noncircumcising communities. In 2010, the programme began offering VMMC services in Nairobi's Lang'ata District and — through a World Bank-funded pilot project — in Western's Teso District.

The following lessons that Kenya has learned from its VMMC programme may be useful to male circumcision programmes in other countries.

**Political support at every level of government is essential to advance a national male circumcision programme.** In Kenya, MoH officials at the national, provincial and district levels have provided strong, consistent leadership to the VMMC programme. A speech by the prime minister was pivotal in building community support for the programme.

**Dedicating MoH employees to male circumcision speeds the development of standards, guidelines and tools.** Key NASCOP officials are committed to the VMMC programme and have been as responsive as possible, but they have many other responsibilities. The posting of a male circumcision officer at NASCOP in November 2009 has facilitated the completion of key documents; additional staff members would enable the programme to achieve even more.

**Taking the time to build community support and ownership pays off.** Stakeholders' meetings and other forums gave community members many opportunities to ask questions and voice concerns about male circumcision. By listening carefully to opposing views and answering people's questions, programme representatives were able to reassure community members that male circumcision is a medical intervention, and not a cultural one.

**Coordination is crucial to the effectiveness of the programme, and it requires dedicated structures, personnel and funding.** The national and provincial task forces function well because of the active participation of their members. The joint planning and coordination by PEPFAR and MCC through the male circumcision task force has resulted in minimal duplication and optimal use of available resources. The Bill & Melinda Gates Foundation's support for such coordination through the MCC and the dedicated funding for service delivery from PEPFAR have been instrumental to progress on VMMC scale-up.

**Implementation may sometimes move ahead of policy.** Kenya was fortunate to have manuals and tools from the trial in Kisumu that it could use and adapt to begin service delivery. The programme did not wait for the finalisation of every strategy or manual, but used drafts of these documents to guide training and service delivery and incorporated lessons from implementation in the final versions.

**Communication planning should be incorporated in VMMC programmes from the outset.** Communication professionals should be involved in every stage of the development of strategies, messages and materials. Demand creation must be coordinated with capacity building to ensure that the health infrastructure is prepared to meet the demand for services. Demand creation activities must also be balanced with dialogue to promote informed choice and reduce risk behaviour.

**Evaluation indicators should be standardised before service delivery begins, to ensure that data will be comparable.** Revisions can be made as a programme gains experience, but effort should be made to ensure that all partners collect the same data from the start.

**VMMC programmes may need to rely on implementing partners to deliver services during the early "catch-up" phase.** Countries facing severe health care shortages may not be able to integrate VMMC services into routine health services quickly enough to achieve a rapid impact on the HIV epidemic. In Kenya, local and international partner organisations employ most of the service delivery teams. These partnerships have enabled Kenya to make significant progress toward reaching its goal of 80-percent prevalence of male circumcision in five years, while gradually building the capacity of public-sector providers to integrate VMMC services into the public health system.

**Taking VMMC services to communities improves uptake.** The success of the RRI campaigns is a dramatic illustration of the value of outreach and mobile services. Sending out mobile teams has been particularly effective, because the teams are flexible and can go where the clients are.

**Client flow is a key determinant of the efficiency of service delivery.** During the RRI campaigns, the VMMC teams used many strategies to make the surgery more efficient. But they found that the time saved with such measures can be lost without a steady flow of clients. Matching client flow with deployment of staff remained a challenge throughout the campaigns. Social mobilisation was the single most important factor determining the number of clients served each day.

**Task shifting and task sharing among members of the VMMC teams allow more efficient use of limited human resources.** In a health system facing chronic shortages of clinical officers and medical officers, the most important innovation in VMMC services has been the training of nurses to perform the procedure.

**Provider-initiated testing and counselling increases acceptance of HIV testing.** Uptake of testing rose dramatically after the programme trained counsellors to recommend HIV testing to their clients rather than rely on the clients to ask for the service.

**Women play an influential role in men's decisions about circumcision, and they should be a primary audience for VMMC communications.** Wives and girlfriends can benefit

from the other HIV prevention services offered, and they also need to understand how they can support their partners in postoperative abstinence during healing and in maintaining safe sex practices.

**Promoting male circumcision for HIV prevention among men older than 25 can be challenging.** Male circumcision is popular among boys and young teens in Nyanza, but uptake has been slower among those older than 25. Research is under way to determine how to adjust communication and service delivery strategies to attract more of the sexually active older men who are the programme's primary audience. One strategy that has helped the programme reach this group is to offer VMMC services at night.

**Campaigns can be a highly cost-effective way to meet demand for VMMC services.** In Kenya, the two RRI campaigns accounted for 39 percent of all the male circumcision procedures performed by the programme through December 2010. These carefully planned and well-coordinated efforts to promote and expand access to VMMC services during times of peak demand required considerable resources, but they were cost-effective. Overall, the cost per procedure dropped by 43 percent during the RRIs.



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