

# PROGRESS IN SCALE-UP OF MALE CIRCUMCISION FOR HIV PREVENTION IN EASTERN AND SOUTHERN AFRICA:

Focus on service delivery

2011  
revised



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# TABLE OF CONTENTS

|                                                                                                              |           |
|--------------------------------------------------------------------------------------------------------------|-----------|
| <b>Abbreviations</b>                                                                                         | <b>2</b>  |
| <b>Acknowledgments</b>                                                                                       | <b>3</b>  |
| <b>Section 1. Introduction and overview</b>                                                                  | <b>4</b>  |
| 1.1 Introduction                                                                                             | 4         |
| 1.2 Overview of national progress for male circumcision for HIV prevention                                   | 5         |
| <b>Section 2. Progress in service delivery of male circumcision for HIV prevention in priority countries</b> | <b>10</b> |
| Botswana                                                                                                     | 10        |
| Kenya                                                                                                        | 11        |
| Lesotho                                                                                                      | 12        |
| Malawi                                                                                                       | 12        |
| Mozambique                                                                                                   | 13        |
| Namibia                                                                                                      | 13        |
| Rwanda                                                                                                       | 14        |
| South Africa                                                                                                 | 14        |
| Swaziland                                                                                                    | 15        |
| Tanzania                                                                                                     | 15        |
| Uganda                                                                                                       | 16        |
| Zambia                                                                                                       | 16        |
| Zimbabwe                                                                                                     | 17        |
| <b>Section 3. Innovations to accelerate and sustain delivery of services</b>                                 | <b>18</b> |
| 3.1 Campaigns                                                                                                | 18        |
| 3.2 Efficiencies                                                                                             | 19        |
| 3.3 Leadership, partnership and coordination: ministries of health and partners                              | 21        |
| 3.4 Sustainability                                                                                           | 23        |
| 3.5 Synergies: reaching males for HIV testing                                                                | 24        |
| <b>Section 4. Key lessons, challenges and summary</b>                                                        | <b>25</b> |
| References                                                                                                   | 26        |

## ABBREVIATIONS

|                   |                                                                               |
|-------------------|-------------------------------------------------------------------------------|
| <b>AIDS</b>       | acquired immunodeficiency syndrome                                            |
| <b>ART</b>        | antiretroviral therapy                                                        |
| <b>AIS</b>        | HIV/AIDS indicator survey                                                     |
| <b>ASI</b>        | Accelerated Saturation Initiative                                             |
| <b>CDC</b>        | Centers for Disease Control                                                   |
| <b>DHS</b>        | Demographic and Health Survey                                                 |
| <b>DMPPT</b>      | Decision-Makers Programme Planning Tool                                       |
| <b>FHI</b>        | Family Health International                                                   |
| <b>HIV</b>        | human immunodeficiency virus                                                  |
| <b>HTC</b>        | HIV testing and counselling                                                   |
| <b>ICAP</b>       | International Center for AIDS Care and Treatment Programs                     |
| <b>M&amp;E</b>    | monitoring and evaluation                                                     |
| <b>MC</b>         | male circumcision                                                             |
| <b>MCH</b>        | maternal and child health                                                     |
| <b>MMC</b>        | medical male circumcision                                                     |
| <b>MOH</b>        | ministry of health                                                            |
| <b>MOH&amp;CW</b> | Ministry of Health and Child Welfare                                          |
| <b>MOH&amp;SW</b> | Ministry of Health and Social Welfare                                         |
| <b>MOVE</b>       | models for optimizing the volume and efficiency of male circumcision services |
| <b>NASCOP</b>     | National AIDS and STI Infection Control Programme                             |
| <b>NDOH</b>       | national department of health                                                 |
| <b>PEPFAR</b>     | The US President's Emergency Plan for AIDS Relief                             |
| <b>PSI</b>        | Population Services International                                             |
| <b>RRI</b>        | Rapid Results Initiative                                                      |
| <b>SCMS</b>       | Supply Chain Management System                                                |
| <b>STI</b>        | sexually transmitted infection                                                |
| <b>UNAIDS</b>     | Joint United Nations Programme on HIV/AIDS                                    |
| <b>USAID</b>      | United States Agency for International Development                            |
| <b>USG</b>        | United States Government                                                      |
| <b>VCT</b>        | voluntary counselling and testing                                             |
| <b>WHO</b>        | World Health Organization                                                     |

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# SECTION 1. INTRODUCTION AND OVERVIEW

## 1.1 Introduction

In 2007, the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) recommended that male circumcision (MC) be recognized as an additional, important strategy for the prevention of heterosexually acquired HIV infection in men, particularly in countries with hyperendemic or generalized HIV epidemics and low MC prevalence.<sup>1</sup> Thirteen eastern and southern African countries were identified as priorities for MC scale-up: Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. The Gambella province of Ethiopia has also been identified as a priority for the United States (US) President's Emergency Plan for AIDS Relief (PEPFAR) and limited information on Ethiopia is included in the present report. Impact and costing estimates suggest that, by scaling up adult medical male circumcision (MMC) to reach 80% of males 15 - 49 years in these countries by 2015 and maintaining such coverage until 2025, about 4 million HIV infections could potentially be averted by 2025 with total cost savings of about US\$ 20 billion.<sup>2</sup>

WHO and UNAIDS are monitoring progress in scale-up and impact in these priority countries. As most countries have the key elements of programmes in place, the present report provides an overview of progress by the end of 2010 with a focus on the numbers of MCs performed for HIV prevention.

In support of monitoring and evaluation (M&E), WHO and UNAIDS, in collaboration with PEPFAR, developed *A guide to indicators for male circumcision programmes in the formal health care system*<sup>3</sup> in 2009, suggesting indicators that should be used by countries. Key indicators from the guide for which data were reported from at least some countries for 2010 and which are presented in this report include:

- number of MCs performed for HIV prevention;
- number and percentage of persons seeking MC services who were tested for HIV.

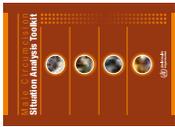
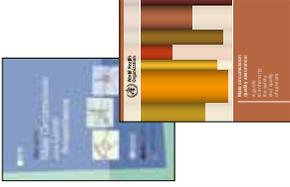
Information for this report has been contributed by ministries of health, WHO, UNAIDS and PEPFAR programmes.

## **1.2 Overview of national progress for male circumcision for HIV prevention**

WHO and UNAIDS developed *Operational guidance for scaling up male circumcision services for HIV prevention* in 2008 to support countries in the development of national programmes on this intervention. Ten essential components were identified for programmes: leadership and partnerships, situation analysis, advocacy, enabling policy and regulatory environment, strategy and operational plan for national implementation, quality assurance and improvement, human resource development, commodity security, social change communication, and M&E. Table 1 provides an overview of the components by country and the WHO and UNAIDS guidance that has been developed to support country efforts to achieve them.

By the end of 2010, among 13 of the priority countries (information from Ethiopia not included) at least one component of a situation analysis had been conducted and most of these countries had developed national policies and strategies. Many countries have a strategy for the coming five years as well as a longer-term strategy that focuses on the provision of early infant and adolescent services. Leadership and advocacy vary greatly between countries and over time. All countries have coordination structures but the effectiveness of their functioning differs by country. The *Decision-makers' program planning tool (USAID: Health Policy Initiative and UNAIDS, 2010)* has been used to estimate the cost, impact and pace of scale-up. Regulations have been assessed in some countries and revised as needed to address key issues such as task-shifting. Several countries have developed quality assurance plans and monitoring and evaluation frameworks. Systems for strengthening the procurement of commodities and supplies and for waste management vary by country. Many of the countries have communication strategies. See Table 1 for more details on selected elements by country.

Table 1. WHO/UNAIDS and national guidance and progress in support of scaling up male circumcision as of December 2010  
(based on *Operational guidance for scaling up male circumcision services for HIV prevention*, 2008)

| Country                                 | Key elements of MMC programme scale up                                              |                                                 |                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                         | Situational analysis completed (full or selective)                                  | Leadership: prominent national champion engaged | Leadership: national dedicated focal point in place | MMC policy or similar guidance approved*                                          | National strategy and operational/ implementation plan approved*                  | Decision-makers' programme planning tool implemented                              | Pilot/ demonstration sites: government involvement                                |
| <b>Selected WHO and UNAIDS guidance</b> |  |                                                 |                                                     |  |  |  |  |
| Botswana                                | 3                                                                                   | 3                                               | 3                                                   | 3                                                                                 | 2                                                                                 | 3                                                                                 | 2                                                                                 |
| Kenya* Nyanza                           | 3                                                                                   | 3                                               | 3                                                   | 3                                                                                 | 2                                                                                 | 1                                                                                 | 3                                                                                 |
| Lesotho                                 | 3                                                                                   | 0                                               | 1                                                   | 1                                                                                 | 1                                                                                 | 3                                                                                 | 1                                                                                 |
| Malawi                                  | 1                                                                                   | 0                                               | 1                                                   | 1                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 |
| Mozambique                              | 3                                                                                   | 0                                               | 1                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 |
| Namibia                                 | 3                                                                                   | 1                                               | 1                                                   | 1                                                                                 | 1                                                                                 | 3                                                                                 | 2                                                                                 |
| Rwanda                                  | 1                                                                                   | 1                                               | 1                                                   | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                 |
| South Africa                            | 2                                                                                   | 2                                               | 2                                                   | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                 |
| Swaziland                               | 3                                                                                   | 1                                               | 2                                                   | 2                                                                                 | 2                                                                                 | 3                                                                                 | 3                                                                                 |
| Tanzania                                | 2                                                                                   | 0                                               | 1                                                   | 1                                                                                 | 2                                                                                 | 0                                                                                 | 2                                                                                 |
| Uganda                                  | 2                                                                                   | 0                                               | 1                                                   | 1                                                                                 | 0                                                                                 | 2                                                                                 | 1                                                                                 |
| Zambia                                  | 2                                                                                   | 0                                               | 2                                                   | 2                                                                                 | 2                                                                                 | 1                                                                                 | 2                                                                                 |
| Zimbabwe                                | 3                                                                                   | 0                                               | 1                                                   | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 |

\*Kenya initially focused in Nyanza Province.

3 = completed by 2008

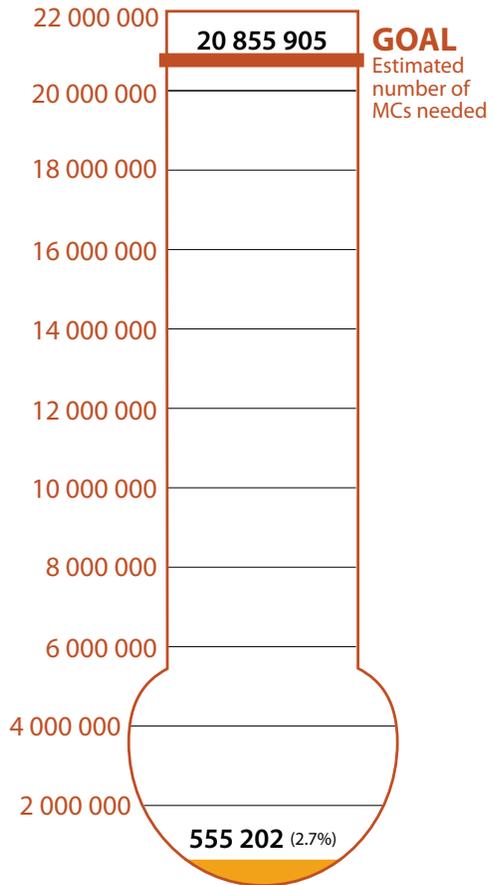
2 = completed by 2009

1 = completed by 2010

0 = not yet completed

Estimated number of medical male circumcisions needed to reach 80%\* prevalence among 15 - 49 year old males and number done by end of 2010

The potential exists to avert 22% of HIV infections between 2011-2025 among the 14 priority countries of eastern and southern Africa if 80% of males 15 - 49 years are circumcised by 2015 and that coverage is maintained. By the end of 2010, 555 202 MCs were reported to have been performed for HIV prevention. The largest numbers were done in 2010 when there was a fourfold increase from the number in 2009. Kenya has performed the most MCs (232 287), achieving nationally 27% of their target number of MCs needed by 2015\* and 62% of their target in Nyanza Province, followed by South Africa (145 475) and Zambia (81 849). See Table 2 for more details.



\* Estimated number of MCs needed is based on a target of 80% prevalence among males 15 - 49 years old; except in Kenya where it is based on the national goal of 94% of males 15 - 49 years old.

Table 2. Numbers of male circumcisions performed, achievement and potential infections averted in eastern and southern Africa, 2010

| Countries    | Number of MCs done by MMC programme by calendar year |                   |                      | Number of MCs done by MMC programme by |   | Estimated number of MCs needed to reach 80% prevalence* | Potential infections averted by scaling up MC to reach 80% prevalence* in 5 years |                  | Achievement towards estimated number of MCs needed (%) |
|--------------|------------------------------------------------------|-------------------|----------------------|----------------------------------------|---|---------------------------------------------------------|-----------------------------------------------------------------------------------|------------------|--------------------------------------------------------|
|              | 2008                                                 | 2009              | 2010                 | Total                                  | % |                                                         | Number                                                                            | %                |                                                        |
| Botswana     | 0                                                    | 5424              | 5773                 | 11 197                                 |   | 345 244                                                 | 62 773                                                                            | 28               | 3.2                                                    |
| Ethiopia     | 0                                                    | 769               | 2689                 | 3458                                   |   | 40 000                                                  | 1479                                                                              | 17               | 8.6                                                    |
| Kenya        | 11 663                                               | 80 719            | 139 905 <sup>a</sup> | 232 287 <sup>a</sup>                   |   | 860 000 <sup>a*</sup>                                   | 73 420 <sup>**</sup>                                                              | 16 <sup>**</sup> | 27.0*                                                  |
| Lesotho      | 0                                                    | 0                 | Unknown <sup>b</sup> | Unknown <sup>b</sup>                   |   | 376 795                                                 | 106 427                                                                           | 34               | 0.06                                                   |
| Malawi       | 589 <sup>c</sup>                                     | 1234 <sup>c</sup> | 1296 <sup>c</sup>    | 3119 <sup>c</sup>                      |   | 2 101 566                                               | 240 685                                                                           | 28               | 0.1                                                    |
| Mozambique   | 0                                                    | 100               | 7633                 | 7733                                   |   | 1 059 104                                               | 215 861                                                                           | 13               | 0.7                                                    |
| Namibia      | 0                                                    | 224               | 1763                 | 1987                                   |   | 330 218                                                 | 18 373                                                                            | 25               | 0.6                                                    |
| Rwanda       | 0                                                    | 0                 | 1694                 | 1694                                   |   | 1 746 052                                               | 56 840                                                                            | 29               | 0.1                                                    |
| South Africa | 5 190 <sup>d</sup>                                   | 9168 <sup>d</sup> | 131 117 <sup>d</sup> | 145 475 <sup>d</sup>                   |   | 4 333 134                                               | 1 083 869                                                                         | 20               | 3.4                                                    |
| Swaziland    | 1110                                                 | 4336              | 18869                | 24 315                                 |   | 183 450                                                 | 56 810                                                                            | 34               | 13.3                                                   |
| Tanzania     | 0                                                    | 1033              | 18 026 <sup>e</sup>  | 19 059 <sup>e</sup>                    |   | 1 373 271                                               | 202 900                                                                           | 9                | 1.4                                                    |
| Uganda       | 0                                                    | 0                 | 9052                 | 9052                                   |   | 4 245 184                                               | 339 524                                                                           | 25               | 0.2                                                    |
| Zambia       | 2758                                                 | 17 180            | 61 911               | 81 849                                 |   | 1 949 292                                               | 339 632                                                                           | 30               | 4.2                                                    |
| Zimbabwe     | 0                                                    | 2801              | 11 176               | 13 977                                 |   | 1 912 595                                               | 565 751                                                                           | 42               | 0.7                                                    |
| <b>Total</b> | <b>21 310</b>                                        | <b>122 988</b>    | <b>410 904</b>       | <b>555 202</b>                         |   | <b>20 855 905*</b>                                      | <b>3 364 345</b>                                                                  | <b>22</b>        | <b>2.7</b>                                             |

\* Estimated number of MCs needed is based on a target of 80% prevalence among males 15 - 49 years old; except in Kenya where it is based on the national goal of 94% of males 15 - 49 years old.

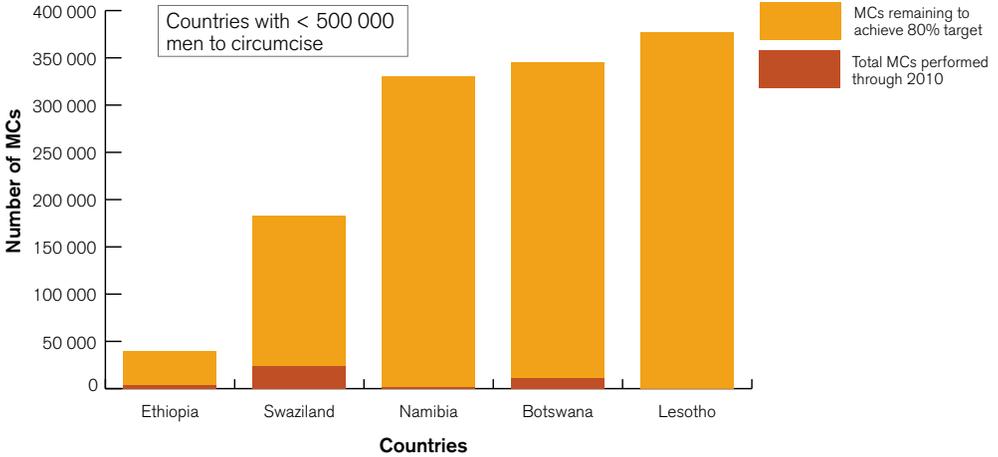
\*\* Nyanza Province only

Sources: PEPFAR Male Circumcision Technical Working Group unless otherwise indicated; <sup>a</sup>Kenya NASCOF; <sup>b</sup> Lesotho MOH; <sup>c</sup> Malawi MOH; <sup>d</sup> South Africa NDOH; <sup>e</sup> Tanzania MOH

**Fig 1a. Number (000s) of male circumcisions performed by country and number remaining to achieve target\***

(countries ordered by total number of male circumcisions needed to achieve target)

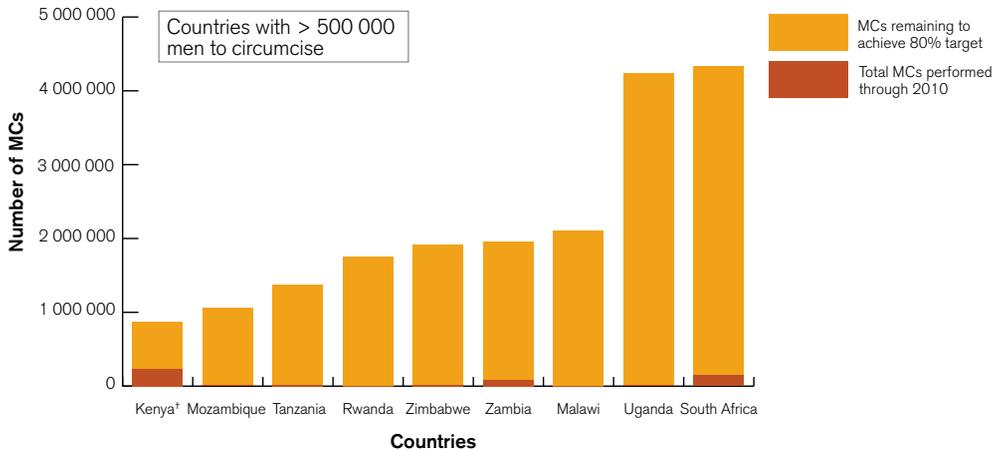
\* target is 80% of males 15 - 49 years



**Fig 1b. Number (000s) of male circumcisions performed by country and number remaining to achieve target\***

(countries ordered by total number of male circumcisions needed to achieve target)

\* target is 80% of males 15 - 49 years



† The goal in Kenya is 94% of males 15 to 49 years old.  
Source: PEPFAR and Ministries of Health

## SECTION 2. PROGRESS IN SERVICE DELIVERY OF MALE CIRCUMCISION FOR HIV PREVENTION IN PRIORITY COUNTRIES

During 2010, countries have been using one or a combination of service delivery approaches, including: health-facility-based services integrated into routine activities; stand-alone MC service sites; outreach and mobile services; and mass campaigns. All the priority countries have adopted at least the minimum service package recommended by WHO/UNAIDS, which includes STI management, HIV testing and counselling, condom promotion, and safer sex education. Most countries have conducted national training for service providers and some countries have extensively expanded training for health-care providers, often using a mixed-cadre team-training approach.

(Sources of data for figures in country boxes below: HIV prevalence from UNAIDS 2010 Global Report;<sup>4</sup> MC prevalence from DHS or HIV/AIDS Indicator Survey or MOH; numbers of MCs performed from MOH and/or PEPFAR).

### BOTSWANA



Adult  
HIV prevalence:  
17.6% (MOH)

Male circumcision  
prevalence: 11%

(Preliminary Botswana AIS 2009)

Total number MCs  
2008-2010: 11197

*Service delivery strategy:* Integration of male circumcision within current services and preparation for early infant MC services were under way during 2010, including the development of clinical guidance.

*Service delivery statistics:* Among the 5773 MCs performed in 2010, detailed age-specific data were available for 89% (5161) of males among which:

- 88% of MCs were performed among males aged 15–49 years;
- 58% of MCs were performed among males aged 15–29 years.

HIV testing and counselling (HTC) was provided to more males (at least 6247) than those who had a MC performed as part of the MC services. Among the 5161 MCs performed with detailed HIV testing information available, 91% of males were HIV-negative and 3% were HIV-positive; the HIV status of 6% was unknown.

*Demand:* Demand has been created through billboards and television, particularly at district level.

*Achievements:* A monitoring and evaluation system is being instituted with disaggregated data by sex, place of procedure and HIV test results.

*Key Challenges:* Limited human resources, logistics including delayed procurement of equipment, weak coordination.

# KENYA



HIV  
prevalence:  
6.3 %

MC prevalence: 86%  
(Kenya AIS 2010)

Total number MCs  
2008—2010:  
232,287

*Service delivery strategy:* Kenya used a mixed delivery model with mobile and outreach services, routine stand-alone and integrated services, and mass campaigns. Two Rapid Results Initiative (RRI) mass campaigns were conducted in Nyanza Province during school holidays in 2009 and 2010. More than 37 000 men were reached during six weeks in 2009 and 50 500 in 2010 with an additional 5300 in Nairobi (MOH). The programme has expanded to Nairobi as well as the Western and Rift Valley Provinces. As the programme reaches the MC target,

the mode of service delivery will focus on integrating MC into routine services for sustainability.<sup>5</sup>

*Service delivery statistics:* Kenya was leading the priority countries in the total number of MCs performed through 2010 (232 287) and the proportion achieved towards the national target (27%).

*Demand:* Demand increased and social mobilization approaches and messaging were being refined on the basis of experience and operations research. Community mobilizers were activated to help prepare the communities and discuss the subject on a one-to-one basis.

*Achievements:* A high level of political commitment continued at the national level and in all focal provinces. To address the human resource gap, additional health-care providers were mobilized through innovative mechanisms, e.g. using retired personnel who were reimbursed for their services. The Kenyan Government changed policy in 2009 to permit nurses to perform MCs. The Kenyan Ministry of Public Health and Sanitation, with support from the Male Circumcision Consortium, has learnt from practical experience and through operations research, both of which inform programming nationally.

*Challenges:* Kenya was on course to achieve the target in Nyanza province (62%), but a slow start in other regions has hindered the achievement of national coverage targets. Emerging issues were the quality of MCs performed by medical or traditional providers, and reaching the target group, as the largest number of MCs has been performed among people aged 15–19 years.

## LESOTHO



HIV prevalence:  
24%

MC prevalence: 52%\*  
(DHS 2010)

Total number  
2008—2010: \*\*

\*52% figure includes both traditional and medical MCs.

\*\* As yet there are no data from the routine national programme.

*Service delivery strategy:* Lesotho's approach will be to concentrate on early infant MC within maternal health services and adolescent services within a sexual and reproductive health framework. Adolescent and adult MC was not yet integrated into HIV prevention services.

*Service delivery statistics:* Routine national data were not available for 2010.

*Demand:* The magnitude of overall demand was not clear; there were waiting lists for services in at least some facilities.

*Challenges:* The level of buy-in among several key stakeholders and the capacity of human resources remain limited, as well as a lack of task-shifting.

## MALAWI



HIV  
prevalence:  
11%

MC prevalence: 21%  
(DHS 2005)

Total number MCs  
2008—2010:  
3,119

*Service delivery strategy:* Free-standing clinics provide services complemented by campaigns during the school holidays and selected seasons.

*Service delivery statistics:* 1296 MCs were performed for HIV prevention in 2010.

*Demand:* Demand is currently greater than supply.

*Achievements:* Commitment continued at the highest level of government to support evidence-based interventions towards the fight against HIV. The Malawi National HIV Prevention Strategy identifies low levels of MC as one of the drivers of the epidemic, and the operational plan adopts voluntary MMC as one of the strategies to be deployed along with other interventions. A communications strategy has been developed to address religious and cultural aspects.

*Challenges:* Shortages of human resources, a need for more training of service providers, logistics requirements for adequate supplies, and inadequate funds have been the greatest barriers.

## MOZAMBIQUE



HIV  
prevalence:  
12%

MC prevalence: 52%  
(Mozambique AIS 2010)

Total number MCs  
2008—2010:  
7,733

*Service delivery strategy:* Mozambique has begun pilot projects which will inform programme decisions along with an assessment of system readiness which was conducted to address concerns about the ability to meet demand. Adolescent and neonatal MC are foreseen as the longer-term strategy.

*Service delivery statistics:* 7733 MCs have been performed for HIV prevention, with an increase from 100 in 2009 to 7633 in 2010. The complication rate has remained under 2%.

*Demand:* Informal feedback suggests that demand was increasing slightly; so new approaches were being explored.

*Achievements:* Pilot projects in two provinces have primarily reached adults.

*Challenges:* Need for strengthened coordination and collaboration and more prioritisation of specific populations; need for a national MC policy, strategy and operational plan; need to strengthen M&E, including systematic MC data collection and analysis.

## NAMIBIA



HIV  
prevalence:  
13%

MC prevalence: 21%  
(DHS 2008)

Total number MCs  
2008—2010:  
1,987

*Service delivery strategy:* Stand-alone, mobile, outreach and mass campaigns (potentially with volunteers) were considered. Currently MC services were being integrated into hospital services.

The long-term plan includes expanding neonatal MC services.

*Service delivery statistics:* 1763 MCs were performed in 2010.

*Demand:* In general, demand seems to be low. However, some facilities have waiting lists. In addition, young boys were being brought in by parents during holidays in response to school talks. Traditional circumcisers have been consulted. No demand-creation campaigns have been carried out although there have been radio talk shows and education materials have been made available.

*Achievements:* Commitment continues to be strong and an MC policy was approved in September 2010. Hospital managers have been oriented and trained to solicit their support for dedicated MC staff. Staff at 24 hospitals were trained. Nurses are being trained under the supervision of medical officers.

*Challenges:* Human resources and funds were limited, particularly to support dedicated nurses and camps / dedicated campaigns.

## RWANDA



**HIV prevalence:**  
3%

**MC prevalence: 12%**  
(Interim DHS 2009)

**Total number MCs**  
2008—2010: 1,694

*Service delivery strategy:* Plans include the integration of MC into existing services with campaigns and mobile services to increase coverage. Service delivery has begun at selected sites, including military settings. Neonatal and adolescent MC is articulated in the longer-term plan.

*Service delivery statistics:* 1694 MCs were performed in 2010.

*Demand:* Unmet demand existed in pilot districts. A communication strategy will be needed to generate further demand but not until service capacity is strengthened.

*Achievements:* Rwanda has strong political commitment and there is a detailed operational plan. Services have begun in several selected districts. Financial resources were mainly provided from international sources, including the US Government.

*Challenges:* Scaling-up at an increasing pace has been the greatest challenge. Client access has been limited because of transport constraints. Inadequate human resource capacity, including limited numbers of health-care workers, has limited service provision. Equipment and supplies were limited, partly because of the process used to quantify these items.

## SOUTH AFRICA



**HIV prevalence:**  
18%

**MC prevalence: 42%**  
(NCS 2009<sup>6</sup>)

**Total number MCs**  
2008—2010:  
145,475

*Service delivery strategy:* A mix of delivery approaches has been used as services expand into all nine provinces. Fixed sites (mainly district hospitals) were used with MC services integrated into these settings. Linked services were also used where HTC and other elements of the minimum service package were provided at routine public health sites with links to a dedicated facility for the MC procedure. Camps/campaigns have been organized in some provinces. As a means of strengthening the health system and minimizing the accumulation of biomedical waste, South Africa

decided not to use disposable kits or medical devices for MMC in health facilities. All health facilities use the conventional surgical technique, forceps-guided method, for MMC.

*Service delivery statistics:* During 2010 over 130 000 MCs were performed at 143 sites.

*Achievements:* South Africa is moving towards scaling-up services with all provinces now initiating the provision of services. Funds have been provided by the Government to cover the costs of MCs for the coming three years and additional funds are available from The Global Fund to Fight AIDS, Tuberculosis and Malaria.

*Challenges:* Inadequate commodities and human resources present the major barriers.

## SWAZILAND



**HIV prevalence:**  
26%

**MC prevalence: 8.2%**  
(DHS 2008)

**Total number MCs through 2010:**  
24,315

*Service delivery strategy:* Service delivery options include free-standing sites (about 80%) and service integration. A national catch-up MC campaign, the Accelerated Saturation Initiative (ASI), has been planned for 2011. Adolescent and neonatal MC is foreseen as the longer-term strategy.

*Service delivery statistics:* During 2010, 24 315 MCs were performed; about 15% of clients declined HIV testing.

*Achievements:* Swaziland has good financial and technical commitment nationally and from numerous players. The number of facilities providing services has increased. Progress is on track for service delivery, human resources and facility capacity.

*Demand:* Demand was static despite a number of communication activities, so new approaches were being explored.

*Key Challenges:* Strengthened consultations with key local stakeholders; coordination and collaboration.

## TANZANIA



**HIV prevalence:**  
5.7% (MOH)

**MC prevalence: 67 %**  
(Tanzania AIS 2008)

**Total number MCs 2008—2010:**  
29,443

*Service delivery strategy:* The strategy for MC for HIV prevention recommended to initiate services in eight regions with high HIV prevalence and low MC prevalence. The experiences of demonstration sites further informed the national strategy to use a combination of static and campaign-style services delivery approaches; to prioritize specific regions which were led by local public sector teams supported by international agencies assigned by the MOH.

*Service delivery statistics:* The total number of MCs in 2010 was 28 562. During June and July 2010 a mass campaign reached 10 352 men. The largest numbers were in Iringa which has the most service sites. Nearly all men also received HIV testing and counselling; the overall proportion of HIV-negative males was 91%.

*Achievements:* Under strong national leadership, this first MC campaign was conducted in the public sector, led by regional health officials and staffed predominantly by public sector staff assisted by Jhpiego staff. Nurses have been approved as MC 'surgeons'. Tanzania has also put in place a number of the MOVE (models for optimizing volume and efficiency) recommendations in the public sector.

*Challenges:* MC services were seen as an add-on. Incorporating MC services into hospital schedules and implementing efficiency approaches, e.g. MOVE, were challenges to service organization. Human resources were inadequate to meet demand and funding was insufficient.

## UGANDA



HIV  
prevalence:  
6.4%<sup>7</sup>

MC prevalence: 25 %

Total number MCs  
2008—2010:  
9,052

*Service delivery strategy:* Service delivery pilots were carried out through the military and a mobile site. Routine service delivery also provided limited services. Further implementation modalities were yet to be determined.

*Service delivery statistics:* All the reported 9052 MCs were performed in 2010. No national statistics were available for 2010 and the figure reported here is from PEPFAR-supported project sites.

*Achievements:* Policies, strategies and a road map have been developed but service delivery implementation has not yet started and clear responsibility has not yet been assigned to a programme.

*Challenges:* Limited commitment politically; inadequate human resources; facility and other health system constraints.

## ZAMBIA



HIV  
prevalence:  
14%

MC prevalence: 12.8 %  
(DHS 2009)

Total number MCs  
2008—2010:  
81,849

*Service delivery strategy:* Service delivery options included static and outreach/mobile sites in public and private facilities. Safe MC services were integrated into STI and HIV services to optimize the resources available. These services were further linked to other programmes such as ART, VCT and MCH. Zambia uses a multisectoral approach involving the defence forces, the police and prison services, and the private sector. In parallel to the catch-up phase with adolescents and men, Zambia has commenced neonatal MC at three sites.

*Service delivery statistics:* The MC target for 2010 was 100 000 males. As of December 2010, the cumulative total was 81 849; about 62 000 MCs were performed in 2010, representing a 62% achievement of the annual target.

Demand was affected by geographical location and season; the number of MCs increased during the school holidays. About 40% of clients learned about MC sites from friends or family members, followed by posters, newspapers or leaflets.

*Achievements:* The MOH has established mechanisms to coordinate and lead the programme for MC scale-up with several partners who are involved and have contributed to this process. High-level commitment has been sustained. Zambia adopted task-shifting to nurses, midwives and clinical officers as a model to expand services.

*Challenges:* Limited demand partially attributable to culture and beliefs: MC is not traditional and circumcising tribes were stigmatized in the past. The management of commodities needs to be strengthened.

# ZIMBABWE



**HIV  
prevalence:  
14%**

**MC prevalence: 10 %  
(DHS 2007)**

**Total number MCs  
2008—2010:  
13,977**

*Service delivery strategy:* Services were offered at free-standing sites, in mobile services and integrated within public health clinics. Three campaigns, during 11 days, were organized by the public health sector and staff of the Islamic Medical Association. In addition, working with a traditional community, the Tshangani, over 20 days, 1391 clients were reached with an average of 70 MCs performed per day and 100% HTC uptake. Once the country has moved forward successfully with this catch-up phase, neonatal MC will be implemented to scale.

*Service delivery statistics:* Zimbabwe slowly increased the number of MCs performed from 2801 in 2009 to 11 176 in 2010. During the campaigns, 1043 clients were reached, contributing 10% to national MC figures; HTC uptake was 100%.

*Demand:* Services cannot meet the demand, which was increasing around established sites and in other locations.

*Achievements:* Political commitment continued to be good. Health workers have been trained and they were receptive to support this intervention.

*Challenges:* The major limiting factor was inadequate funding.

## SECTION 3. INNOVATIONS TO ACCELERATE AND SUSTAIN DELIVERY OF SERVICES

This section focuses on innovations that have been used to accelerate service delivery and on means of sustaining it. Approaches used to accelerate the pace of MC service delivery included conducting mass campaigns and implementing MOVE principles that enhance efficiency and permit more procedures to be performed in a safe and timely manner. Additional efficiencies were gained through the coordination of various organizations. Experiences on campaigns and approaches to efficiencies from selected countries are highlighted in this section. Finances through The Global Fund to Fight AIDS, Tuberculosis and Malaria are summarized as a means of sustaining service delivery.

### 3.1 Campaigns

Campaigns of a short-term, intensified nature were conducted successfully in Kenya, Tanzania, and Zimbabwe to accelerate the numbers of males circumcised. In South Africa an HIV counselling and testing campaign promoted MMC as an integral part of the campaign. In 2010, Swaziland planned for a campaign (ASI) during 2011.

- **Kenya:** Two Rapid Results Initiative (RRI) of six weeks each in 2009 and 2010 were implemented in Kenya. 37 000 MCs were performed in Nyanza Province in 2009 (see Fig. 2), and in 2010 over 50 500 were performed in Nyanza Province and 5300 were performed in Nairobi. This demonstrated that taking services to the people improved uptake and that services in mass campaigns can be delivered safely and efficiently and can include the minimum service package. Unit costs during the RRIs were approximately US\$10 less than unit costs in routine service delivery because of the larger demand during the mobilization process. Coordinated stakeholder involvement was vital and included the provincial administration, political leadership, health administrators and the public. Additionally, campaigns build momentum for increased public support and the normalization of MC. The RRI campaigns have proven to be a good strategy for scaling up MC.
- **Tanzania:** During the five-week campaign in June and July 2010 about 10 400 men were circumcised. The campaign was led by regional health officials and staffed predominantly by public sector workers assisted by Jhpiego staff. Nearly all men also received HIV testing and counselling. Measures to maintain staff motivation included: rotation among sites and services, extra duty allowance, refreshments, and mentoring of newly trained personnel. Temporary, local solutions were found to space constraints, e.g. moving counselling sites, post-operative services and data collection to other parts of the facilities.

- **Zimbabwe:** The Ministry of Health and Child Welfare (MOHCW) collaborated with religious and traditional circumcising communities in the national roll-out of MC for HIV prevention. Muslim communities have had campaigns in the past; they participated in the MC Technical Working Group, and the Islamic Medical Association requested support from the Technical Working Group and MOHCW to conduct HTC before MC campaigns. The Tshangani community, who traditionally circumcise, requested support from MOHCW and others for the procedure to be done in camps rather than hospitals. During 2010, camps for these specific groups contributed 2500 MCs and permitted lessons to be learnt for the future. Some of the challenges in these campaigns were the acceptance of female health workers, the high numbers of people who attended, the difficulty for HIV-positive patients to opt out, and the limited time given to prepare all the logistics required for conducting a safe MMC campaign with traditional circumcising groups. Engaging more traditional providers and women along with more time for preparation will be needed for success in the future. Success was attributed to good partnership (National AIDS Council, Population Services International, John Snow International, UNFPA, WHO, Uniformed Forces, MOHCW, Zimbabwe National Family Planning Council) and good collaboration with religious and traditional male circumcisers.

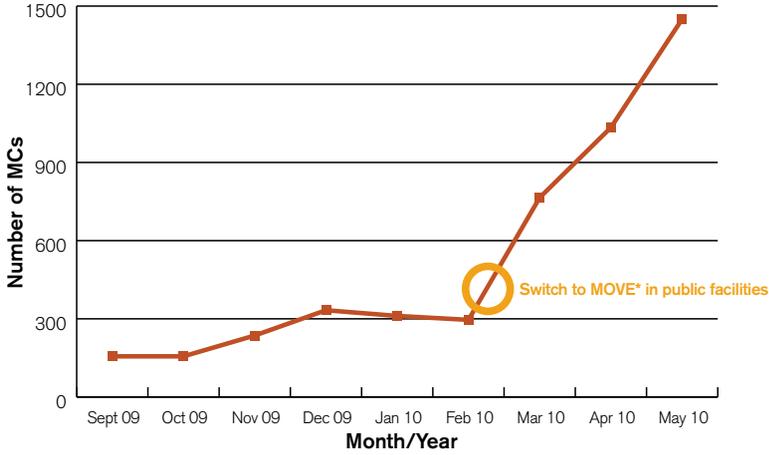
### **3.2 Efficiencies**

Several approaches to efficiency, including the MOVE principles outlined in the WHO document *Considerations for implementing models for optimizing the volume and efficiency of male circumcision services*, have been applied in several countries, including Kenya, Swaziland, Tanzania, Zambia, and Zimbabwe. Efficiency principles include clinical, client, staff and supply management considerations. Kits have been used to provide commodities in an efficient manner.

#### **MOVE principles in Tanzania**

In Tanzania from September 2009 to May 2010 over 4700 male circumcisions were performed at pilot sites. A dramatic increase was documented when the MOVE efficiency measures were implemented between February and March 2010 (see Fig. 2). After the efficiency measures were instituted, the number of MMCs rose from 150 to 300 per month between September 2009 and February 2010 to 760 to 1450 per month between March and May 2010. While the implementation of efficiency measures was successful, it was initially a challenge to the way services were normally provided at regional facilities.

Fig. 2. Male circumcisions performed over time and with implementation of efficiency measures, Tanzania, 2009–2010



Source: Tanzania MOHSW  
 \* models for optimizing volume and efficiency

**Kits for supply and commodity management**

The forecasting, procurement and management of supplies and infectious waste generated by MC programmes are essential to scale-up. Good planning and coordination between implementing partners is also crucial to ensure that the necessary supplies are available and that hazardous waste is safely disposed. The USAID Supply Chain Management System (SCMS) project has worked to create standardized disposable and reusable kit options for the three circumcision procedures. In addition, SCMS has provided a comprehensive list of additional commodities that are either essential to perform MC procedures or supplemental to MC programmes. It is important to include procurement partners in the early stages of planning MC programmes in order to better manage expectations for the availability of supplies.

### 3.3 Leadership, partnership and coordination: ministries of health and partners

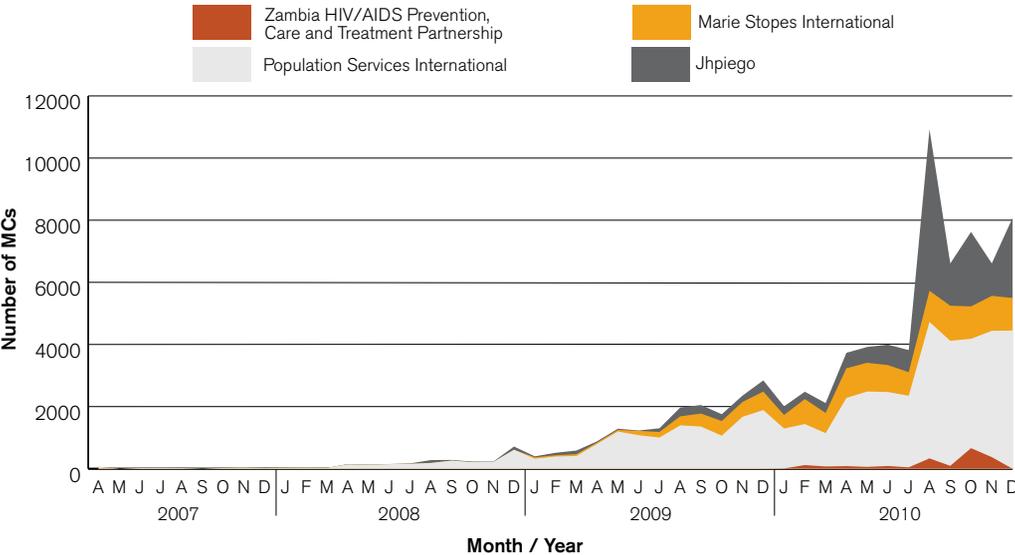
Country leadership together with partners who are supportive and coordinated has improved the effectiveness of implementation. Several countries have demonstrated national leadership and coordination with partners towards achieving country goals. In Tanzania, partners were assigned to specific priority regions. This was seen as an effective way to provide local technical assistance (see Table 3).

Table 3. Tanzania's MOH assignment of partners to regions based on need and funding support, 2010

| Region | HIV prevalence (%) | MC prevalence (%) | Partner                 | Funding source           |
|--------|--------------------|-------------------|-------------------------|--------------------------|
| Iringa | 15.7               | 37.7              | Jhpiego                 | USAID                    |
| Mbeya  | 9.2                | 34.4              | Walter Reed PharmAccess | US Department of Defense |
| Kagera | 3.4                | 26.4              | ICAP                    | US CDC                   |

In Zambia, key implementing agencies have been assigned appropriate areas of work. For example, Population Services International is responsible for communication, counselling, service delivery, and franchising; Marie Stopes International deals with service delivery, especially mobile MC services in hard-to-reach areas, and franchising; Jhpiego covers training, clinical technical assistance and quality assurance; and the Population Council covers operations and behavioural research. Data on male circumcisions performed are disaggregated according to the supporting partner (see Fig. 3).

Fig. 3. Male circumcisions performed in Zambia by month and supporting agency, 2007 - 2010



Source: Zambia MOH

### 3.4 Sustainability

The sustainability of MC programmes in countries depends on sufficient and continuing funding. Long-term sustainability will depend on national governments incorporating MC into their budgets. The Global Fund to Fight AIDS, Tuberculosis and Malaria is an important international source of HIV funds in the medium and longer terms. Among the priority countries, five have secured some level of funds through Global Fund Rounds 7 to 10. Table 4 shows the priority countries that submitted an HIV proposal for Rounds 7 to 10 and all countries that received grant funds including a budget for MC activities.

Table 4. Global Fund to Fight AIDS, Tuberculosis and Malaria Round 7 to 10 HIV proposals from priority countries that included MC for HIV prevention in the budget

- Red:* no funded HIV grant
- Yellow:* HIV grant funded but no MC budget,
- Green:* HIV grant with MC funds

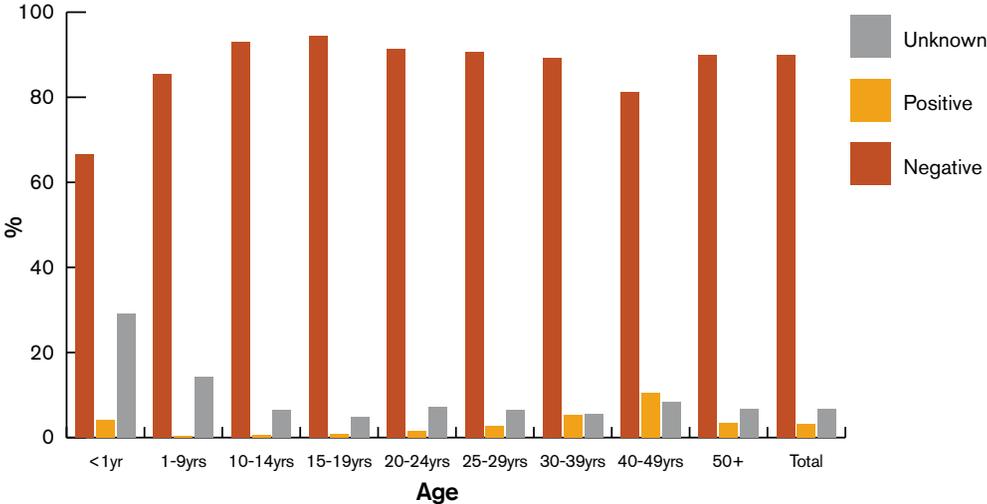
| Country      | Proposal round |        |        |        | Budget for male circumcision service delivery area        |
|--------------|----------------|--------|--------|--------|-----------------------------------------------------------|
|              | 7              | 8      | 9      | 10     |                                                           |
| Botswana     | Red            | White  | Red    | Red    |                                                           |
| Kenya        | Yellow         | Red    | Red    | Yellow |                                                           |
| Lesotho      | Yellow         | Green  | Yellow | Red    | \$284 000                                                 |
| Malawi       | Yellow         | White  | Red    | Red    |                                                           |
| Mozambique   | White          | Red    | Yellow | Red    |                                                           |
| Namibia      | Red            | Red    | Red    | Red    |                                                           |
| Rwanda       | Yellow         | Red    | Green  | White  | Funding gap to be filled by National Strategy Application |
| South Africa | Red            | Red    | Yellow | Green  | Approximately USD \$8 million over 5 years                |
| Swaziland    | Yellow         | Red    | White  | White  |                                                           |
| Tanzania     | Red            | Yellow | Green  | White  | USD\$18 million over 5 years                              |
| Uganda       | Yellow         | White  | Red    | Red    |                                                           |
| Zambia       | White          | Green  | Red    | Yellow | USD\$1.7 million; ends Nov 2011                           |
| Zimbabwe     | White          | Yellow | White  | Yellow |                                                           |

Sustainability is also predicated on a social transformation resulting in communities seeing MC as providing societal benefit. In Kenya this is happening in Nyanza Province, presenting a strong possibility that communities will provide their own resources especially for pre-adolescent MC. In this way the burden of responsibility shifts to a community-driven mechanism funded by private insurance.

### 3.5 Synergies: reaching males for HIV testing

As male circumcision provides only partial protection from HIV, nearly all the priority countries have adopted at least the minimum service package recommended by WHO and UNAIDS, including STI management, HIV testing and counselling, condom promotion and safer sex education. HIV testing and counselling has been provided with uptake rates between 56% and 98% reported from priority countries in 2010, demonstrating the unique opportunity of MMC services in reaching men for HTC.<sup>8</sup> In Botswana, the majority of males seeking MC services were tested and among those tested about 90% were HIV-negative (see Fig. 4). MC services can play a unique role in reaching adolescent and adult males to increase their access to testing and counselling.

Fig. 4. HIV status among males seeking MC services, Botswana, 2010



Source: Botswana MOH, 2011

## SECTION 4. KEY LESSONS, CHALLENGES AND SUMMARY

While further progress occurred in scaling-up MC services in 2010 in eastern and southern African priority countries, the pace will have to be accelerated to move beyond the current number of males 15-49 years having received MC for HIV prevention in order to achieve the 80% prevalence. Factors that contributed to a good pace of implementation included:

- national political leadership, commitment and advocacy, sustained over time and with diverse stakeholders;
- effective coordination and collaboration with partners and community engagement; as has been demonstrated in several countries, partners can align their interests and complementary skills with national programmes to achieve programme activities and objectives;
- sufficient and timely funds and commodities;
- the implementation of mixed service delivery approaches and efficiency measures, extending coverage and generating momentum;
- creativity at the local level, helping to solve challenges.

Human resource constraints remain a constant barrier, although countries are finding creative ways to identify staff. Advocacy at all levels from global to local will be required to improve and sustain delivery of this effective and cost-saving prevention intervention. While funds have been made available, initially by the USA and the Bill and Melinda Gates Foundation in particular, diversified funding sources are required, including national contributions; moreover, MC should be included in proposals to the Global Fund.

In summary, most national programmes in the priority countries of eastern and southern Africa have in place many of the key programmatic elements to implement MC for HIV prevention, and MCs performed for this purpose by the end of 2010 reached 550 202 (2.7%) of the approximately 20 million MCs needed for the estimated impact. Actions are now required in order to achieve a faster pace of scale-up, maximize the prevention impact, reduce costs and increase savings related to HIV/AIDS.

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