FOREWORD

South Africa is facing one of its greatest challenges, that of HIV and AIDS. The generalised epidemic has impacted hugely with around 5.6 million people being HIV infected[1]. There is sparse evidence to show that HIV prevention programmes have impacted significantly on HIV incidence. However medical male circumcision (MMC) has been shown in recent randomised clinical trials to provide around 60% reduction in the risk of HIV acquisition in men[2].The results of these trials support the results of observational studies showing a strong correlation between high rates of male circumcision and lower rates of HIV prevalence[3]. Providing MMC in the public sector provides men with the opportunity of protecting themselves and their partners from HIV infection.

Men have been marginalised from many HIV interventions that have largely focused on women and children. Women are more likely to be HIV infected for social and biological reasons. Yet, it is important to recognise that MMC ultimately will be beneficial to women as well and thus beneficial to all South Africans.

South Africa has practiced male circumcision traditionally for cultural and religious reasons for many years. Inter-provincial variations are from 67% in the Western Cape to 25.2% in Gauteng[4]. Similarly HIV rates differ from 25.8% in KwaZulu-Natal to 5.3% in the Western Cape[5]. MMC is particularly effective as an HIV prevention strategy in areas where there are low rates of circumcision and high HIV prevalence.

Providing a package of HIV prevention services to men that include HIV counselling and testing, STI screening and treatment, condom provision, medical male circumcision, risk reduction counselling and referral to male sexual health and reproductive services will strengthen HIV prevention efforts across South Africa.

These guidelines provide all stakeholders with the necessary guidance for the provision of safe, effective and accessible voluntary MMC services. The guidelines also promote cost effective and efficient methods for rapid implementation of this potentially life-saving HIV prevention intervention, which promises to have a population level impact on the HIV epidemic across South Africa.

Minister of Health

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DATE

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
CCMT	Comprehensive HIV Care, Management and Treatment
CDC	Centers for Disease Control and Prevention
CHAPS	Centre for HIV and AIDS Prevention Studies
GP	General Practitioner
HCT	HIV Counselling and Testing
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
M&E	Monitoring & Evaluation
MEC	Member of the Executive Council
MMC	Medical Male Circumcision
NDOH	National Department of Health
NSP	HIV, AIDS and STI National Strategic Plan 2007-2011 for South Africa
SADC	Southern Africa Development Community
SANAC	South Africa National AIDS Council
SFH	Society for Family Health
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
TMC	Traditional Male Circumcision
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development
WHO	World Health Organization

SECTION 1: BACKGROUND

1.1 Purpose of the implementation guidelines

These implementation guidelines operationalise the ***South African National Guidelines for Medical Male Circumcision (MMC) under Local Anaesthesia*** and the ***HIV, AIDS and STI National Strategic Plan (NSP) 2007-2011*** **for** ***South Africa[6].*** They intend to provide programmatic and operational guidance for decision-makers, programme managers, technical support agencies and potential funders. This document outlines the key steps for scale-up. It also provides guidance on *what* needs to be done and *how* it can be done.

1.2 Introduction

This implementation guideline responds to the call of the NSP to review the evidence for male circumcision to prevent HIV infection and to develop a guideline for MMC roll-out in South Africa to assist in the reduction of the number of new HIV infections by 50% by 2011[7].

This guideline recognises the rich diversity of cultural, traditional and religious groups that have long practiced male circumcision. Traditional male circumcision within the South African context differs with some cultures practicing full circumcision and others partial circumcision.

These implementation guidelines recognise that MMC needs to be promoted in combination with other HIV prevention efforts including delayed sexual debut, reduction in concurrent multiple partners, consistent condom use, HIV testing and sexual and reproductive health.

A consultation meeting was held with representatives of all Provincial Health Departments in January 2010 and feedback from the meeting has been incorporated into these guidelines.

1.3 Situational analysis

It has been shown beyond reasonable doubt that male circumcision significantly lowers the risk of heterosexual HIV transmission for males. Male circumcision has been shown to reduce men's risk of becoming infected with HIV by about 60% in three randomised clinical trials (South Africa, Uganda and Kenya).[8,9,10] This finding confirms over 50 observational and other studies that found a strong correlation between rates of male circumcision and reduced HIV prevalence[11,12,13,14]. However, there is no definite evidence that male circumcision reduces the risk of HIV transmission from men to women or between men who have sex with men.

Research findings suggest that the effectiveness of male circumcision in reducing the risk of female-to-male transmission occurs only when the foreskin is completely removed. There is no evidence that incomplete removal of the foreskin reduces the risk of HIV infection. Strong evidence has also been cited that failure to abstain from sexual activity for six weeks after circumcision increases the risk of transmission of HIV because of an unhealed wound[15]. Resumption of sexual activity, therefore, before the wound heals in HIV-positive men increases the risk of HIV transmission to a partner.

Male circumcision has been found to reduce other sexually transmitted infections such as herpes, chancroid, syphilis and penile *human papilloma virus* (HPV) which in turn greatly reduces the risk of penile cancer in men as well as cervical cancer in female partners.[16] Cervical cancer remains the most common cancer among South African women. Male circumcision reduces other medical conditions like urinary tract infection in children, phymosis (adherence of the foreskin to the penis) and balanitis (infection of the penis).[17,18,19]

There are three potential biological explanations as to why male circumcision reduces the risk of HIV infection. These include:

- The foreskin has high concentrations of target cells that are very susceptible to HIV infection[20];
- The underside of the foreskin is susceptible to micro-tears and trauma during sexual intercourse that provide an entry point for HIV infection; and
- After complete circumcision, the skin of the penis thickens and becomes a stronger barrier (like skin on other parts of the body) to HIV infection.

Male circumcision provides an indirect benefit to women by reducing the number of men who are HIV-infected thereby decreasing male-to-female HIV transmission.

HIV is one of the greatest challenges facing South Africa today. South Africa has a generalised HIV epidemic with an estimated 5.2 million people (10.6% of the population) infected and an estimated prevalence rate of 29.4% amongst pregnant women[21]. HIV prevalence varies among provinces from 25.8% in KwaZulu-Natal and 23.1% in Mpumalanga to 5.3% in the Western Cape and 9.0% in the Northern Cape[22]. It is further estimated that 85% of infections occur through heterosexual sex[23]. HIV prevalence among men peaks in the age cohort of 30 – 34 at 25.8% while among women it peaks at 32.7% between the ages of 25 – 29[24].

In South Africa between 32% and 45% of men report being circumcised (medical and traditional) with circumcision rates being the highest in the Free State (70.7%) and Western Cape (67.5%) and the lowest in KwaZulu-Natal (26.8%) and Gauteng (25.2%). Reported levels of circumcision are highest amongst men over the age of 30 (53%)[25].

In certain cultures male circumcision is practiced as a rite of passage to manhood. For some of the South African men who self-report that they are circumcised, the foreskin is only partially removed. This type of circumcision compromises the effectiveness of circumcision in reducing the risk of HIV transmission. Research indicates that male circumcision reduces the risk of HIV infection only when the foreskin is completely removed. There is no evidence that incomplete removal of the foreskin reduces the risk of HIV infection.[26]

Studies conducted in 2001 and 2002 in South Africa indicate high levels of acceptability of male circumcision amongst both men and women. More than 50% of men indicated that they are willing to undergo male circumcision and more than 50% of women indicated that they would be in favour of male circumcision.[27, 28]

Based on the data from the randomised clinical trials, models have estimated that routine MMC across sub-Saharan Africa could prevent up to six million new HIV infections and three million deaths in the next two decades. The impact of MMC would be greater in countries with high HIV prevalence and low to moderate male circumcision rates; both factors apply to South Africa.

1.4 Integration of MMC services for HIV prevention

It is recognised that men seldom visit health services unless they are very sick. This is reflected in the lower proportion of men testing for HIV and fewer men accessing antiretroviral treatment. MMC provides an opportunity to link men to other health services and increase awareness of their sexual and reproductive health. HIV counselling and testing should be offered routinely as part of MMC, however male circumcision should not be declined if the HIV test is refused. Similarly male circumcision should not be refused if the man is infected with HIV.

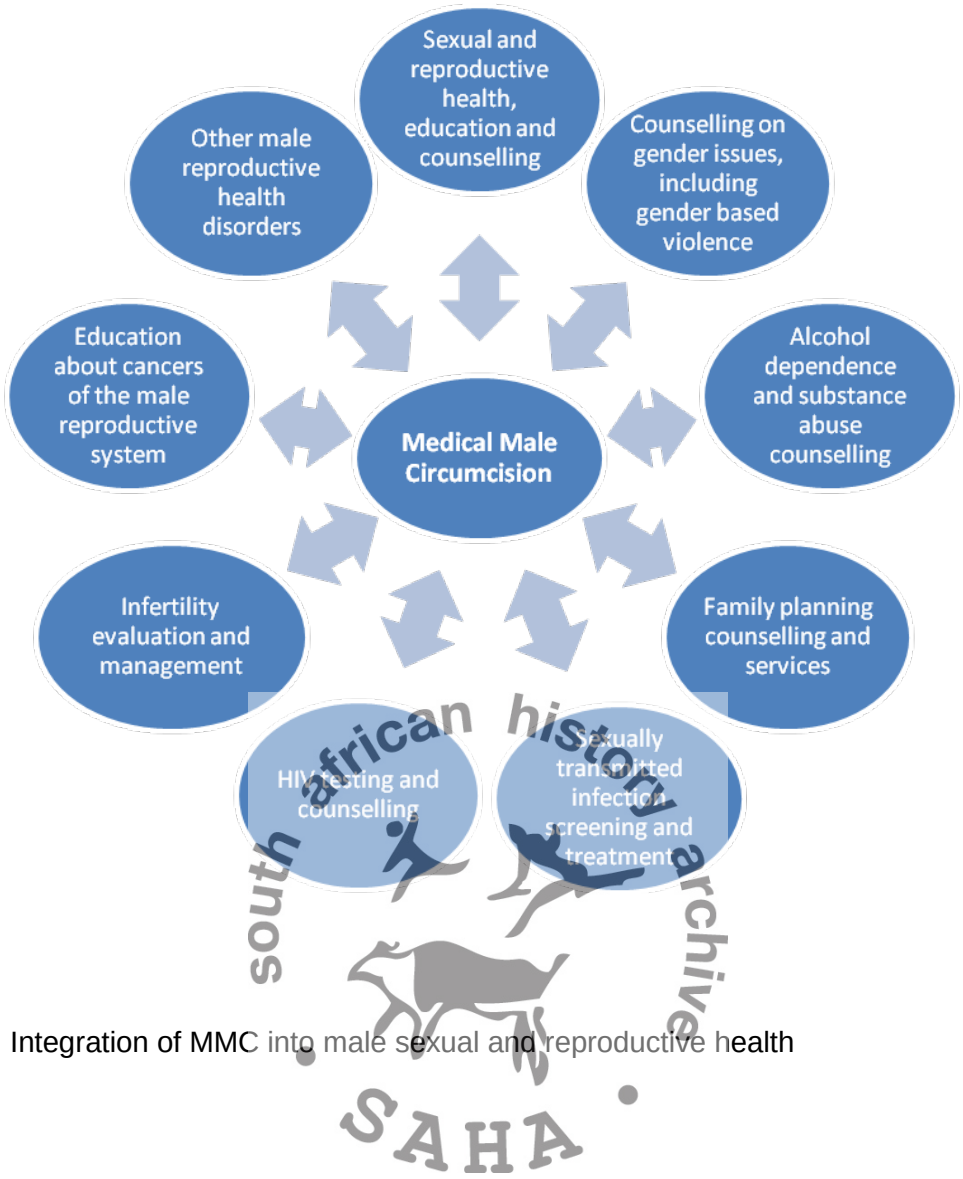

Figure 1: Integration of MMC into male sexual and reproductive health

SECTION 2: GOALS, MISSION AND KEY PRINCIPLES

The ***Implementation Guidelines*** provide a framework within which the ***South African National Guidelines for Medical Male Circumcision (MMC) under Local Anaesthesia*** can be actualised by various stakeholders intending to provide MMC as part of male sexual and reproductive health services and as one of the strategies for HIV prevention in the country.

2.1 Goal

The goal of the ***South African National Implementation Guidelines for Medical Male Circumcision*** is to make accessible, safe MMC services available to all South African men. The priority age group is young men aged between 15 and 49. This will contribute to the reduction of new HIV infections among men and their partners by providing integrated, safe and accessible voluntary services.

2.2 Guiding principles

The principles guiding the ***South African National Implementation Guidelines for Medical Male Circumcision*** include the imperatives of the Constitution, Batho Pele as well as those outlined in the Comprehensive HIV Care, Management and Treatment Plan (CCMT), those guiding the implementation of the NSP 2007-2011 as well as those guiding male sexual and reproductive policy. These principles include:

Supportive and committed leadership: South Africa's political leadership shall promote the expansion of MMC services in conjunction with other comprehensive HIV prevention strategies.

Safe and effective MMC: Safe and effective MMC will be performed with informed consent by trained MMC providers.

Promoting human rights: Implementation of MMC shall uphold human rights principles including informed consent, confidentiality, service delivery without discrimination, equitable access, the absence of coercion and adherence to medical ethics. This includes an undertaking to ensure that appropriate laws, regulations and supervisory mechanisms are developed so that MMC services are accessible and provided without discrimination.

Ensuring gender sensitivity: This document recognises that MMC impacts both men and women and gender sensitivity is an integral part of all the guiding principles and components of the implementation of MMC services. The involvement of women, both as sexual partners and mothers, will be promoted to the greatest extent possible. Men who wish to be circumcised will be encouraged to discuss the decision with their sexual partner. Individual – and where possible – couple testing for HIV shall be routinely offered on a voluntary basis to all men and their partners prior to circumcision.

Socio-cultural sensitivity: Sensitivity to cultural and traditional practices will be shown at all times and the government of South Africa will ensure that MMC is promoted and delivered in a culturally appropriate manner. This includes seeking the engagement and participation of key community leaders including the National and Provincial House of Traditional Healers and Leaders that play a critical role in addressing socio-cultural issues and overcoming barriers to safe MMC.

Promoting comprehensive HIV prevention: This document recognises that MMC needs to be undertaken within the broader framework of a comprehensive HIV prevention response that includes delayed sexual debut, reduction in total number of partners including concurrent partnership and correct and consistent male and female condom usage. MMC services should be provided as part of a comprehensive HIV prevention package, embracing and complementing all the other HIV prevention strategies under the umbrella of male sexual and reproductive health.

Effective collaboration: Implementation in collaboration with the public and private health sectors, traditional and religious leaders, faith-based organisations and other civil society sectors to promote MMC as part of their comprehensive HIV prevention response. The link between the public and private sector will be improved to provide quality services collaboratively and efficiently.

Effective communication: To ensure that in both circumcising and non-circumcising communities, education programmes provide correct information about MMC.

Strengthen health systems: To ensure that MMC programmes do not interrupt or divert resources from other health care services.

Quality assurance, monitoring and evaluation: Routine programme quality assurance, monitoring and evaluation shall be a component of MMC services to ensure quality and guide the planning of services.

Operations research: Support and conduct operations research to strengthen MMC services and to implement effective, comprehensive HIV prevention programmes that target men in the context of sexual and reproductive health.

2.3 Integrated approach

An integrated approach will be followed in the implementation of MMC services in South Africa. Initially men between the ages of 15-49 will be prioritised and targeted. Infrastructure, skills development and training will be prioritised. Facilities that are ready to conduct adult MMC will be encouraged to start. Thereafter, early infant (0-2 months) medical circumcision will be considered. Safe and effective MMC services and comprehensive HIV prevention will be emphasised. In communities where traditional circumcision is routinely practised, there will be linkage with MMC to ensure complimentarity of service delivery.

SECTION 3: IMPLEMENTATION ACTIVITIES

3.1 Management and coordination

Management and coordination will take place at different levels. At the National level strategic guidance and direction will be provided. At the Provincial level plans will be developed that take into account current levels of male circumcision and HIV. Implementation will take place at the district level.

3.1.1 National level coordination

A National Committee on MMC will provide oversight of the policy, guidelines and implementation plans for scaling up MMC. This committee will have senior representation from national and provincial level of key stakeholders.

A National task team on MMC will be responsible for the implementation of MMC in South Africa and the chair will report to the National Committee on MMC. The task team will support the provinces and its partners in the planning and development of programmes for the expansion of safe, accessible and sustainable MMC services.

The task team will operate within the guiding principles of the NSP 2007-2011 in achieving these objectives. The task team will coordinate with the SANAC task team on prevention, communication as well as other relevant SANAC structures. The task team will also involve other entities within the health infrastructure, such as provincial and district health management teams, to ensure that safe MMC services are utilised.

3.1.2 Provincial level coordination

Provincial task teams shall be convened to carry out tasks similar to those of the National body but with a greater emphasis on providing services. The provincial task teams will coordinate the activities of the various health facilities and partners in their areas of jurisdiction to ensure that the population has access to MMC services.

The provincial task teams will benefit from guidance developed at the National level, such as service delivery standards and communication efforts. Therefore regular communication and interaction between the National and provincial task teams is recommended.

Provincial task teams are urged to consider the levels of male circumcision (traditional and other), HIV prevalence and to consider cultural practices in the development of Provincial MMC plans.

3.2 Service delivery

3.2.1 Package of services for medical male circumcision

MMC will be provided as an integral component of a comprehensive package of male sexual and reproductive health services and HIV prevention strategies. The package of services offered should include:

Behavioural interventions:

- Promotion of safer sex practices that include delaying primary sexual debut and reduction of multiple partners including concurrent partnerships;
- Promotion, provision and correct and consistent use of male and female condoms;
- Identification and reduction of co-factors like alcohol and substance abuse;
- Male sexuality including anal sex;
- Education and counselling about family planning, pregnancy, maternal health and prevention of mother to child transmission; and
- Counselling on gender based violence.

Clinical Services:

- Provider-initiated HIV counselling and testing (HCT), treatment or referral for those infected with HIV as indicated (NB: HIV positive men can be offered MMC after counselling);
- STI screening and syndromic management;
- Counselling on the risks and benefits of MMC;
- Informed consent and parental consent for minors;
- Safe surgical services conforming to the South African National Guidelines for Medical Male Circumcision under Local Anaesthesia;
- Post-operative counselling on the medical aspects of post-operative care, early identification of complications and six week follow-up – particularly to reinforce the

need to abstain from sex until the surgical wound is completely healed and verified as such by a trained MMC provider; and

- Assuring that proper referral systems and linkages are in place between various health facilities.

Health system integration

MMC services should be provided in an integrated manner with numerous contact and referral points including:

- Male and sexual reproductive health services;
- HIV prevention, counselling and testing services; and
- Maternal health and family planning programmes for prospective mothers who might consider neonatal circumcision, private health clinics and facilities.

HIV counselling and testing (HCT) will be offered using a provider-initiated counselling and testing approach. Necessary support systems must be in place to ensure complete and routine implementation. Appropriate spatial modifications may be required in some settings to accommodate these associated services. Men who test HIV positive will be referred to the nearest care and support services. HIV positive men will not be denied MMC however, counselling should emphasise that there will be no protection conferred to their sexual partners, and safer sexual practices should still be encouraged.

3.2.2 Models of service delivery

To ensure optimal uptake, all healthcare providers should promote MMC. Effective optimal referral systems should be established between various programmes and services as there are multiple entry points into the care delivery system. For example, clients can access services via HCT, clinics offering reproductive health and STI services as well as through primary health care clinics, TB clinics and in-patient settings.

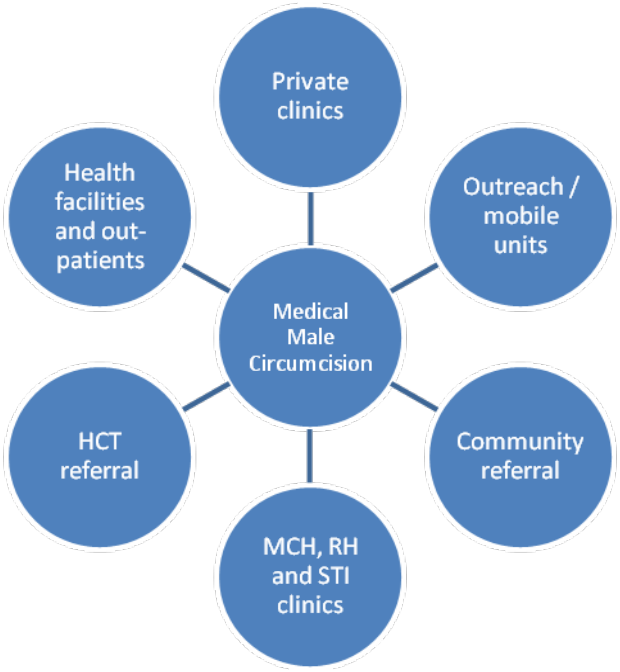

Figure 2: Entry points that can contribute in scaling up MMC in South Africa

In order to rapidly scale-up MMC to achieve the desired impact and ensure sustainability of the service we shall adopt a high quality, high volume approach combined with other innovations such as camps(for both civilian and military populations), GP services and collaborations with TMC services.

The delivery of a package of services will depend on the model of approach and facility type. MMC services may be delivered through facility-based systems initially at district and sub-district centres.

In most cases MMC services will be set up in already-established health care facilities within the district health care system, many of which may be already performing or are able to perform male circumcision. However, in order to scale-up MMC it will not be sufficient to simply depend on health facilities alone as large numbers of males will have to be circumcised as quickly as possible. MMC specialised centres and mobile units may be established. This is necessary so that MMC can have an impact on HIV incidence and prevention of other male sexual and reproductive health problems.

The following criteria should be considered when deciding whether a facility can be included in efforts to scale-up MMC services:

- Minor surgery is performed under fully hygienic and aseptic conditions;

- Appropriate resuscitation equipment is available;
- Staff are appropriately trained and competent;
- Sterilisation facilities and infection control exist[29]; and
- Facilities for rest and recovery are available before patients are sent home.

Where these criteria are not met, the facilities must be improved so that they are able to deliver MMC services to clients. Services can be delivered at one, some or all the facility types in the health districts. However it is advisable that as many health facilities as possible offer MMC services, as long as they comply with the above criteria.

The initial priority is to roll-out MMC in district hospitals. Various models of service delivery shall be employed in order to scale-up MMC, including mobile clinics, tents and MMC specialised centres. These facilities will be part of a 'catch up' strategy. Key to the success of scale-up is assuring that effective referral systems are in place between all facilities offering MMC. Such referral systems are important links to a more extended package, such as those that address gender-based violence and male sexual and reproductive health issues. This allows effective follow-ups if mobile clinics and tents are no longer in the area.

It is critical that irrespective of the model of delivery of MMC services the minimum requirements set out must be met in order to assure safe and effective MMC procedures.

An important consideration is the partnership between the private and public medical sectors. In particular the services of general practitioners, found in many smaller towns and communities, should be considered provided their facilities and skills meet the required standards. It is imperative that such a partnership be fostered and that objectives be streamlined in order to scale-up MMC services in South Africa. One challenge that must be considered is the fact that, currently, most private medical aid schemes do not pay for elective MMC.

Key issues that need to be addressed in order to select appropriate models of delivery for MMC services in South Africa are:

- Site and delivery mode selection according to resource availability and community context and needs;
- Pre- and in-service training of MMC service providers and overall preparation of sites;
- Standardisation of quality of services throughout all facility types according to the minimum requirements;

- Establishing effective referral systems between and amongst different levels of health care facilities; and
- Fostering effective public-private partnerships to scale-up MMC services.

3.2.3 Traditional male circumcision

These are circumcisions performed for religious or cultural reasons in South Africa. Such procedures generally take place outside of formal medical settings and are performed by providers who may have special training but who are normally not health professionals. Traditional male circumcision is usually associated with a religious or cultural ceremony and certain religious and cultural groups are circumcised. Muslim boys may be circumcised at any age between birth and puberty and a Jewish male infant is traditionally circumcised on his eighth day, while other cultures circumcise before or during puberty.

When traditional male circumcision is performed on young men it marks a transition from boyhood to manhood and the ceremony teaches the young men about their responsibilities and duties as an adult member of the community. This usually requires demonstrations of bravery and manhood to confirm that the initiate is ready and worthy to become an adult member of the community. The actual cutting of the foreskin is one component of the whole process. The limited data available on the safety of traditional male circumcision point to high rates of complications and adverse events.

There are several important differences between traditional male circumcision procedures and the clinical procedures adopted in the randomised controlled trials of male circumcision for HIV prevention. These include variations in the equipment used, the counselling provided to the men before and after surgery and the overall context for and meaning of the circumcision.

Another important difference is how much of the foreskin is removed. Some traditional male circumcisions involve only a small cut to the foreskin or partial removal. Although there is no evidence to determine exactly how much foreskin must be removed in order to reduce the risk of HIV infection in men, complete foreskin removal is thought to be necessary. The partial removal of the foreskin may help explain why some communities practicing traditional male circumcision still have high HIV prevalence. It is important to document and understand variations in the amount of foreskin removed by traditional circumcisers so that the benefits of male circumcision for HIV prevention can be maximised.

Despite these important differences in procedures, there are many ways that clinical and traditional male circumcision services can work together. Traditional and clinical providers can collaborate to improve the safety and acceptability of circumcision, reduce complications, enhance the health education content of civic education and rituals, and improve the sexual and reproductive health of men and women, while preserving the sociocultural importance of the circumcision process. Examples of such collaboration include:

- Training traditional providers in anatomy, aseptic technique, control of blood loss and general wound management;
- Reinforcing the importance of nutrition in wound healing;
- Ensuring supply of necessary instruments and dressings to reduce complications from circumcision;
- Cooperating on the information provided and training given to circumcision initiates to maximise good health outcomes for the participants and their current or future partners and family members;
- Ensuring a smooth and rapid transfer to, or intervention by, clinical services if a medical complication associated with the circumcision arises;
- Developing models by which clinical and traditional providers can cooperate and share responsibility for the tasks involved in the circumcision process, while respecting the different skills that each contributes; and
- Understanding more about the cultural and social significance of circumcisions performed by traditional providers according to the setting and age of the initiate.[30]

3.2.4 MMC services

MMC services should be available to all males on a voluntary basis with appropriate informed consent. However MMC services shall prioritise men aged 15-49 years of age so as to ensure maximum reduction in HIV infection and cost effectiveness.

Due to the added risks of performing circumcision under general anaesthesia for young boys (aged 2 months-7 years), circumcision will not be encouraged.

Men infected with HIV who still want to access circumcision services will be counselled on the specific risks and issues related to their HIV infection and immunologic status (i.e those with CD4 T cell count < 200 cells/mm^3 will be advised to defer circumcision and initiate ARV

treatment until their CD4 T cell count is > 200 cells/mm^3 for at least 6 months); should they still desire services these will not be denied based on their HIV status. All men infected with HIV will be referred to HIV and AIDS care and treatment services.

To expedite the process MMC should be phased in at all existing public and private health facilities that have the necessary health infrastructure and trained staff.

Health facilities providing MMC services must have the following in place:

- Trained MMC providers (those currently trained and authorised to perform surgery do not need to be trained);
- Support staff who are trained in the risks and benefits of male circumcision when integrated within a comprehensive HIV prevention programme;
- The necessary health infrastructure;
- The necessary commodities and equipment, (e.g. emergency supplies like a face mask, oxygen, intravenous saline and injectable epinephrine);
- Infection control policies, procedures and standards;
- Patient referral systems for surgical complications;
- A system to monitor surgical outcomes (number of patients circumcised, number of minor and major complications at six weeks); and
- Referral to male sexual and reproductive health services.

3.2.5 MMC service delivery teams

While it is possible that one provider could provide all of these services, it is more likely that the package will be offered by a team of providers to maximise the number of men who can be reached in the shortest time possible while ensuring the quality of the services. The team composition would depend on the model of service. The recommended team includes a medical doctor, nurses, counsellors, administrators and an infection control officer.

However, additional staff may be incorporated into the team for special initiatives like community mobilisation, quality assurance etc. Those who perform circumcisions will be required to undergo standardised training that will include a mentorship programme to review their practice at their respective sites.

3.2.6 Other considerations

In planning for the location of the services, certain factors need to be kept in mind including:

Infrastructure: The spatial distribution of facilities and services should be a consideration to make them accessible to as many people as possible. Additionally, provisions should be made for space for surgery, recovery, resuscitation and infection control practices. Availability of electric lighting, water and expendable supplies are basic minimum elements for quality MMC.

Infection prevention: The infrastructure for infection prevention and the capacity of providers to carry out these important measures also deserves special attention. The importance of following standard infection prevention procedures to ensure safety in service delivery cannot be overemphasised.

Support supervision and mentorship: Given that there is a surgical component to this service, systems of supervision need to be developed that include mentorship in the surgical procedure. As this happens the quality of the service should improve. Before a newly trained provider can independently perform male circumcision, the trainee must be certified to do so.

Task-shifting and task-sharing: The current scope of practice for nurses precludes them from performing the surgical procedure. However, they are able to assist and share some of the tasks during the procedure that will reduce the doctor's input. It is recommended that the nurse's scope of practice is amended to include MMC surgery.

Guiding legal documents: All legislated documents including the Children's Act 38 of 2005 (as amended by the Children's Amendment Act 41 of 2007) will be adhered to ensure all protocols are observed in the provision of MMC services.

3.3 Clinical guidelines

The South African National Guidelines for MMC under Local Anasthaesia provide comprehensive clinical guidance for healthcare providers to establish and maintain high quality care during service delivery. Quality assurance lies at the core of scale-up of MMC services and is usually defined by the recommended service standards. Service standards define the desired performance for a healthcare system or service and provide the basis for measuring quality.

3.4 Communication

The National MMC Communications Strategy will promote the health benefits of MMC. This will be the national message, which can then be adapted locally.

There are a number of communication concerns around the introduction of MMC services. For example, a key target group for the services is communities that do not traditionally carry out male circumcision. Certain prevailing notions about the procedure could act as a barrier to seeking the services in these communities. These notions include concerns about pain, the cost of the procedure, the length of time taken to heal and cultural acceptability.

One of the key issues that will be addressed is the evidence that male circumcision has a substantial, but partial, protective effect against male acquisition of HIV. This message will be communicated effectively to avoid giving the impression of total protection and inadvertently encouraging more risky behaviour among circumcised men (a potential effect known as "risk compensation").

Women are an important constituency to be targeted by the communication strategy that will support efforts to prevent the acquisition of HIV by men from women. Communication about this protective effect must not encourage people to view women as "vectors" of the disease and therefore increase the blame and stigma directed at women infected with HIV. Another concern for women is the potential for risk compensation; this would put circumcised men and their female partners at increased risk of HIV infection. There will be efforts to provide education to both men and women on gender equity and shared sexual decision making. Furthermore, efforts will be made to engage women in discussions about having a circumcised partner and what it will mean for their sexual lives.

Of immediate concern is the duration of abstinence that is necessary post-circumcision and the risk of acquiring HIV if sexual activity is resumed early (before healing is complete) and the sexual partner is already infected with HIV. Additional potential risks for women that have been identified include decreased rates of condom use, increased numbers of partners and shifts in women's ability to negotiate if, when and how sex happens. There will, therefore, be a need to ensure that there are communication strategies that ensure that men do not mistakenly feel that male circumcision provides them with such high levels of protection that they engage in risky sexual behaviour.

The purpose of the communication strategy is to:

- Raise the level of awareness and understanding of male circumcision among individuals and communities and to empower them to make appropriate choices that reduce their risk of HIV infection;
- Alter the prevailing socio-cultural context so that it supports responsible and preventive sexual and reproductive health options; and
- Advocate for effective implementation of appropriate activities and mobilisation of resources throughout the roll-out process.

The communication strategy shall emphasise that MMC services are only one of a spectrum of HIV prevention strategies and that circumcision does not negate the need to consistently practice other risk-reduction measures. This message must be continually communicated to the target population so that men who have undergone the procedure reduce their risk of getting infected.

MMC services will be provided only to men who have voluntarily agreed to the procedure under conditions of informed consent. Given different social settings across various segments of societies, the messaging that is developed needs to be clear, correct, comprehensive, focused, appropriate and relevant to the intended audiences. This tailoring process is critical to getting the right messages across. The overriding concern is to localise the messages without losing their essence.

Effective feedback mechanisms shall be developed and applied in order to ensure the efficacy of the messages and processes will be established for refining or redefining messages as necessary. This feedback mechanism shall be in place from the initiation of the communication campaign. It must have the resources necessary to detect problems before they escalate to the point where it may be too late to resolve them or may require a massive effort to institute corrective measures. It is imperative that this feedback mechanism be overseen by the respective taskforces at the various levels.

An important part of the feedback mechanism is the involvement of the community in the communication development process. Empowering community members to help convey the messages would increase trust in the initiative within communities, as well as ensuring sustainable capacity for information dissemination.

The task teams shall develop guidelines for communicating with the media to ensure that accurate information about MMC is passed on to the public.

The central messages of the communication campaign will focus on the following:

- The **health benefits** of the procedure;
- **Cultural neutrality –** that MMC for HIV prevention is not a means of cultural identity but solely a health intervention;
- **Safety:** the procedure is very safe when it is provided by appropriately trained health workers in aseptic conditions;
- **Comprehensive prevention:** male circumcision is part of a package of other known means of preventing the acquisition of HIV and other STIs;
- The **voluntary** nature of the service being offered.

Some of the key messages to be emphasised include the following:

- Male circumcision reduces the risk of men acquiring HIV infection by 60%. Because this protective effect against HIV is only partial, MMC is an additional preventative measure and is not a substitute for other proven HIV prevention methods.
- A man should not resume sexual intercourse until the wound from his circumcision has healed completely (at least six weeks). Ideally, sex should recommence only after a medical assessment confirms that the healing is complete. Because of the required abstinence period, sex partners should be involved in the decision making before and after a man opts for medical male circumcision services.
- All males, whether circumcised or not, should seek to reduce the risk of HIV transmission by using condoms correctly and consistently and by limiting the number of multiple concurrent sexual partners that they have.
- Whether circumcision takes place in a clinical or a traditional setting, the procedure should be performed by trained MMC providers in aseptic settings under conditions of informed consent, confidentiality, risk-reduction counselling and safety.

- Information on HIV risk-reduction and other benefits for male (and female) sexual and reproductive health needs will be widely available to ensure that individuals make informed choices about male circumcision. It is also important to clearly distinguish between male circumcision and female genital mutilation/cutting. Female genital mutilation/cutting must be discouraged as a harmful practice that demonstrates adverse health effects and no health benefits.

- It is recommended that MMC not be promoted for men who are already infected with HIV but it should not be denied unless medically contraindicated. For men infected with HIV there is no demonstrated public health benefit of reduced HIV transmission to their partners and men with severe immunodeficiency are at an increased risk of complications following surgery. However, men infected with HIV who become circumcised do benefit directly from reduced genital ulcer disease, HPV infections and reduced risk for penile cancer.

3.5 Leadership and partnerships

Clear leadership and partnerships are essential for successful programme implementation, especially one involving so many different sectors of the community and players. As outlined under management and coordination above, the National and Provincial task teams under the leadership of the National Department of Health will provide overall guidance and oversight of the national programme. Additionally, leadership is required at the provincial, district and community levels to help with advocacy, mobilisation and allocation of resources to create and sustain momentum for the programme. This process will be promoted through the existing district health stakeholder forums that have the mandate of monitoring performance of health programmes at district and sub-district levels.

Partnerships will be established between the public health system and others interested in providing MMC services. The public health infrastructure often falls short of having the means to fulfil its mandate without external assistance. In the recent past and, more specifically, in the introduction of numerous new HIV services, public-private partnerships have been established to accomplish the relatively successful implementation of services. Examples include the introduction of HIV testing and counselling services and of services to prevent vertical transmission of HIV. These partnerships draw on the strengths of the respective partners, enabling them to leverage resources to achieve optimal results. Membership in the partnerships should be on the basis of unity of purpose and mutual respect in order to achieve the desired ends. Examples of potential partners include

nongovernmental organisations, faith-based organisations, civil society groups and donor organisations.

The public health service has sites spread across the various districts; however, they lack some of the infrastructure required to provide safe MMC services. Frequently, these facilities do not have the funds to enable them to make the improvements that will allow them to carry out the intervention at the desired level of quality. On the other hand, partners have the resources but not the infrastructure to enable them to provide the services. These partnerships therefore create win-win situations and should be cultivated.

Another area of partnership will be linking with like-minded community groups that can undertake the communication process in partnership with a service provider (public or private). Linkages shall also be sought between community groups and professional associations to facilitate service delivery and particularly outreach services. The local health authorities and infrastructure managers shall also be a party to these arrangements because they will be needed to provide the ongoing care of the clients.

3.6 Human resources and capacity building

Given the package of services that has been defined for MMC for HIV prevention and the need to reach a wide segment of the population, it is recommended that a multi-disciplinary team of providers be available to provide the service. Healthcare providers may be certified to perform a MMC surgical procedure provided they are appropriately trained using the South African National Guidelines for Medical Male Circumcision under Local Anaesthesia.

However, since MMC includes comprehensive HIV prevention and sexual and reproductive health, appropriately trained HCT counsellors may provide the specific services related to MMC. It is desirable that healthcare workers provide MMC services in health facilities – but in some health facilities the assistance of trained lay counsellors may be required to address the counselling related services of MMC.

By virtue of their advanced training, experienced MMC providers will provide oversight of MMC services and participate actively in training, mentorship, supervision and evaluation of MMC services.

All MMC service providers must receive adequate training, mentorship and supervision, and must adhere to the South African National Guidelines for Medical Male Circumcision under Local Anaesthesia.

Capacity building is essential for all providers certified to provide MMC services in order to ensure a consistent standard of quality at all sites. The capacity of in-service providers should be built, as far as possible, through the existing training infrastructure. In this case, the capacity of training teams at the provincial level will be built to enable them to train teams from facilities within their province.

It is recommended that regional centres of excellence provide the appropriate support for capacity building (training, mentorship and supervision) for in-service providers. Ideally, these training centres shall be designated at district hospitals and at the provincial hospitals. Partners who have established, high-volume sites will also be involved in training of providers. This model would serve for in-service training. While the initial training shall happen centrally, there will also be an on-site mentoring process to enable the trainees to provide the services to the required standards.

In the medium to long term, it is recommended that national medical training colleges and universities integrate the appropriate competencies for newborn and adult MMC into their curriculum. Proficiency in MMC will be a requirement for satisfactory completion of the respective courses. In order to achieve and maintain competency, trained providers and students will participate in high-volume circumcision centres that could be arranged at convenient locations and times. All healthcare providers should be sensitised to the benefits of MMC, the eligible populations and the strategies for referral for the service.

3.7 Financing

At present some donor funding is supporting the catch-up MMC initiative – such as the establishment of MMC services e.g. Orange Farm. The experience with the introduction of other services has been that once the initial phase is completed, the external funding is reduced and may even cease. However, the catch-up phase is expected to be of relatively short duration, five to seven years, whereafter the annual required number of MMCs will be considerably reduced. Given the difficulties in finding resources for physical infrastructure, it would be prudent to prioritise this aspect in the short term to establish capacity to conduct the services. The mechanism for longer-term sustainability of integrated services needs to be established. Efforts should be made to leverage internal resources, such as funds from the central government and provincial funds, as far as possible. MMC will be a free service in public health facilities.

3.8 Costing

Costing is an important aspect when developing an operational plan for implementing MMC services. It goes beyond this framework to provide information on how costing can be done. There must be a prior assessment of the resource needs and resources available in order to effectively implement and scale-up MMC services. Once these are determined then resources may be mobilised and funding may be requested where gaps do occur.

A programming planning tool for decision makers can be downloaded from *http://www.malecircumcision.org/programs/DMPPT.html;* it includes a section on calculating the costs and impact of a male circumcision programme, as well as a number of Excel® spreadsheets to assist in the costing of MMC programmes in NGO health centres and hospitals, private clinics and public facilities. The Health Policy Initiative (HPI) under USAID will provide technical assistance to NDOH and provinces in estimating the cost and impact of providing MMC.

3.9 Commodities

Ensuring that adequate commodities are available for all aspects of the service is critical for providing quality MMC services. The South African National Guidelines for Medical Male Circumcision under Local Anaesthesia outlines the necessary medicines, supplies and equipment, encompassing all aspects of the minimum package of services described above. There must be adequate stocks to meet expected demand before any service is initiated, together with systems for monitoring and replenishing them. Given that the programme is introducing a new service it is particularly important to avoid unnecessary disruption. In this respect, as the service is initially being introduced, parallel systems for procuring commodities will be initiated through the collaborating partners to ensure there are no unnecessary disruptions. In the meantime mechanisms will be instituted to ensure that the necessary supplies are incorporated into the national health procurement system.

SECTION 4: QUALITY ASSURANCE

The South African National Male Circumcision Quality Assurance Guideline contains the standards that will define the quality for the MMC programme. These standards provide the basis for measuring the quality of MMC services. They also provide guidance for improving the safety and quality of services during the lifespan of the MMC programme roll-out. The goals of MMC quality assurance include ensuring that safety for clients is guaranteed through provision of high quality services; that there is provision of a minimum package of services in addition to the minor surgical procedure and that the volume of procedures is efficient to achieve impact on reducing HIV incidence.

In addition to setting minimum standards for MMC implementation, QA checklists have been developed for validating that these standards have been met. The checklists will form the basis for the specific supervision of MMC services – outlining, for example, a set minimum standard for service provision.

The implementation guidelines will make use of these standards to provide unbiased assessments to guide improvements. Health facilities will be expected to align MMC services to these standards. It is expected that programme/health facility managers will undertake MMC QA self-assessment every quarter.

SECTION 5: MONITORING, EVALUATION AND OPERATIONS RESEARCH

Monitoring and evaluating the outcomes of MMC services should be incorporated into the existing health management information systems (HMIS).

The NDOH, in collaboration with the provincial DOH, should integrate the monitoring and evaluation (M&E) framework for the MMC services into the existing national framework. This system will keep track of the various aspects of service implementation.

The data resulting from these indicators will help to determine how well the programme is working and whether it is achieving its objectives. There will be insights into how to improve the effectiveness and efficiency of interventions but the data will also assist regional and global efforts to determine the scope and effectiveness of male circumcision programmes.

It is essential that information collected on male circumcision be carefully packaged and shared with the communities, with a view to improving the understanding and acceptance of the programme. Feedback requires the dissemination of results to those people who will find them useful or relevant to their personal or professional decision-making.

M&E should engage key stakeholders (including, for example, government, traditional leaders, donors and opinion leaders) in every aspect, from the needs assessment and setting of indicators to their monitoring. This reduces the likelihood of results causing alienation and surprise among those involved in the programme.[31]

M&E of service delivery should focus on demand creation and the quality, utilisation and safety of the services; it is recommended that **two sets of instruments** be developed:

- One would track service statistics (e.g. number and ages of the men circumcised and number and types of adverse events) and will be incorporated into the HMIS.
- The other would be a more programme-specific instrument. This would be used to monitor the aspects of the roll-out process that are critical for effective implementation of the MMC programme but are not really necessary for others in the health infrastructure (e.g: number of providers trained using the national training tools).

Operations research will be key to:

- Ensuring that clients understand the issues around male circumcision – such as partial protection and risk compensation;

- Adapting services and messages to local contexts and situations;
- Addressing issues that may have a negative impact on the roll-out process; and
- Retaining the programme's focus on HIV prevention,

Impact and cost-effectiveness studies will be conducted to determine the impact of rapid and widespread coverage and the level of financing needed to achieve the desired goal of a critical mass of persons who have undergone the procedure in the short term. Such studies will determine the adequacy of the current level of funding. Other studies will provide guidance on the level of effort that would be needed to sustain the desired levels of MMC prevalence over the medium term and into the long term. This would be with a view to aligning resources in order to achieve the desired public health effect.

Table 1: M&E indicators for MMC services

Number	Label	Indicator	Reporting frequency	Data source
Purpose (P): Increase the number of males circumcised in the intended population				
P1	Proportion of males circumcised	Proportion of males circumcised in the intended population	Every 3–5 years	Population based survey
P2	Number of male circumcisions performed	Number of male circumcisions performed according to national standards during the reporting period	Annually	Health Facility Based
Key objective 1 (K1): Maximization of demand for male circumcision services in an intended population				
K1	Presentation for Surgery	Number of males registered to receive male circumcision services	Annually	Health Facility Based
Key objective 2 (K2): Maximization of service delivery for male circumcision in an intended population				
K2.1	No of staff trained in MMC	Number of persons trained to provide MMC by the programme in the period disaggregated by training provider: • Doctor • Nurse • Nurse assistant • Counsellor (preoperative, postoperative, risk reduction)	Quarterly	Health Facility Based

		Ancillary staff (equipment sterilisation and preparation)		
K2.2	No of health facilities providing	Number of facilities providing MMC disaggregated by: • Province • District • Public • private	Quarterly	Provinces
K2.3	Number of male circumcision-related moderate and severe adverse events	Number of male circumcision-related moderate and severe adverse events reported by programme in the period. Disaggregated by severity: • Moderate • Severe Disaggregated by complication: • Bleeding Swelling/ haematoma • Infection related: • Infection • Wound dehiscence • Abscess formation • Scarring/ disfigurement		
Component objective 1 (C1): Increase demand for male circumcision services in an intended population				
C1.1	Correct knowledge of protective effect	Percentage of population aged 15–49 years with correct knowledge of male circumcision for HIV prevention	Every 3-5 years	Population based survey or other representative survey
C1.2	Circumcision intention	Percentage of uncircumcised males (or parents of) with a stated intention to be circumcised (have next-born or teenage sons circumcised) in the next 12 months (or at birth) in the intended population	Every 3-5 years	Population based survey or other representative survey
Component objective 2 (C2): Increase the supportive civil society, policy and legislative environment for male circumcision activities (also supports key objective 2)				
C2.1	Leadership Knowledge	Percentage of leaders with correct knowledge of male circumcision for HIV prevention	Annually	Special survey
C2.2	Government Support	Government Support	Annually	Special survey
C2.3	Civil society support	Degree of civil society participation	Annually	Special survey

Key objective 2 (K2): Maximization of supply of male circumcision services in an intended population				
K2.1	Male circumcision service supply	Number of institutions delivering male circumcision services	Every 2 years	Health facility survey
Component objective 3 (C3): Increase the capacity of health-care providers and institutions to provide male circumcision services to an intended population				
C3.1	Supply stock-outs	Percentage of facilities (distinct locations) that have the necessary medicines, supplies and equipment for providing safe male circumcision services of high quality	Annually	Health-facility-based records or survey
C3.2	Competent provider supply	Number and percentage of persons who performed at least one male circumcision surgery in the past 12 months and who had received male circumcision-specific training or who were deemed competent to provide surgery to a national standard	Annually	Health-facility-based records or survey
C3.3	Unmet demand	The difference between the number of individuals in the targeted population with an intention to be circumcised in the next 12 months (C1.2) and the projected capacity of all providers to perform male circumcisions in the intended population over the following 12 months	Annually	Indicator C1.2 and health facility survey
Component objective 4 (C4): Support the delivery of the minimum package of safe male circumcision services (also supports key objective 3)				
C4.1	Male circumcision service safety	Number and percentage of circumcised males experiencing at least one moderate or severe adverse event during or following surgery, during the reporting period	Annually	Health-facility-based records
C4	HIV Testing	The number and percentage of persons seeking male circumcision services tested for HIV on site	Annually	Health-facility-based records
C4.1	Counselling/ condoms	Percentage of males circumcised who received at least one age-appropriate risk reduction / abstinence-during wound-healing counselling session, according to national standards, and who received condoms, during the reporting period	Annually	Health-facility-based records
C4.4	Post operative follow up	Percentage of males circumcised who received at least one postoperative	Annually	Health-facility-based records

		follow up visit (routine or emergency), during the reporting period (date of surgery)		
Key objective 3 (K3): Maximization of safer sex behaviour following male circumcision				
K3.1	Number of sexual partners	The change in the percentage of men who had more than one sexual partner in the past 12 months	Every 2 years	Special survey
	Condom use	Number of sexual partners	Every 2 years	Special survey
	Sexual activity before wound has healed	Number and percentage of males circumcised reporting sexual activity before wound healing (6 weeks or certified wound healing)	Every 2 years	Special survey

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