Republic of Kenya

Ministry of Health

National Voluntary Medical Male Circumcision Strategy 2014/15 - 2018/19

Second Edition: 2014/15 - 2018/19

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National AIDS and STI Control Program (NASCOP)

July 2015

Strategy and Operational Plan to guide implementation of VMMC in Kenya (July 2014/15 - June 2018/19)

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Acknowledgments

The Ministry of Health through the National AIDS and STI Control Programme (NASCOP) is pleased to publish the second National Voluntary Medical Male Circumcision (VMMC) Strategic and Operational Plan for July 2014/15 – June 2018/19. The strategic plan is developed pursuant to the objectives of the Kenya Health Policy 2012 – 2030, the Kenya AIDS Strategic Framework (KASF) 2014/15 – 2018/19 and the National Guidelines for VMMC in Kenya (2008).This strategic plan was developed in collaboration with various stakeholders involved in VMMC. The lessons learnt during the first 5 years of program implementation and the recommendations from various research done were incorporated. The strategic plan provides guidance to enhance successful, efficient and effective VMMC program implementation towards an HIV-free generation over the next five years.

The rigorous process of developing this document was initiated in late 2013. It involved wide consultations with several stakeholders, including key Ministry of Health staff at National and County levels, VMMC implementing partners, technical agencies, researchers and donors. We acknowledge with deep gratitude the contributions of the United Nations family, through the WHO for their technical support. We thank the US Government for its invaluable support through the Centers for Disease Control and Prevention (CDC), United States Agency for International Development (USAID) and the President's Emergency Plan for AIDS Relief (PEPFAR) as well as the Bill and Melinda Gates Foundation.

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The Ministry of Health is committed to ensuring delivery of the highest standards of VMMC services through efficient use of resources and transparent management of the implementation.

Dr. Nicholas Muraguri
Director of Medical Services (DMS)

Foreword

This strategic plan is aligned to the Kenya AIDS Strategic Framework (KASF) 2014 -2018 and operationalises the National Guidance for Voluntary Medical Male Circumcision in Kenya (2008). The Strategy is informed by the lessons learnt during the first phase of VMMC program implementation (2008-2013). It highlights national priorities, targets and guidelines for implementation of VMMC from July 2014 to June 2018. It takes into account emerging issues and opportunities for further scale up of VMMC services. These include; widening of the target group for VMMC to include boys aged 10-14 years; use of dorsal slit as the preferred approach for circumcising the younger boys; introduction of Early Infant Male Circumcision (EIMC); Increasing the focus on program safety including increased vigilance on the risk of tetanus; and use of WHO prequalified male circumcision (MC) devices.

Amongst the traditionally circumcising communities, emphasis will be on addressing surgical safety and HIV prevention messaging. The role of women in promoting VMMC uptake and in supporting compliance with post circumcision guidelines such as on wound care and abstinence is re-emphasized. The new devolved governance structure presents an opportunity to further decentralise coordination of VMMC implementation to counties with improved chances of ownership and- sustainability.

The essential components of the document provide the key steps for continued scale-up of VMMC to reach at least 95% circumcision coverage nationally amongst males aged 15-49 years from the current 92%. The strategy presents what needs to be done and how it should be done to achieve that aim. The document is divided into four sections:

- Section I: Background. This section develops the rationale for the second national VMMC strategy and recognises the scientific, policy and programmatic context of the program.
- Section II: Strategic Directions. This section outlines the vision of the document and highlights the specific objectives and intended outcomes of the VMMC programme. It provides the targets and the intended impact.
- Section III: Implementation Framework. This section outlines how the strategic objectives will be achieved and recognises appropriate coordination, service delivery and monitoring as critical approaches to a functional VMMC program.
- Section IV: National Plan of Operations and Cost. This section provides the expected outputs aligned with relevant activities for the next 5 years in line with the National Plan of Operations in the Kenya AIDS Strategic framework.

I encourage health care providers throughout Kenya, including administrative and support staff, to implement the strategic plan articulated herein with utmost dedication.

Dr Martin Sirengo
Head, NASCOP

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CASCO	County AIDS and STI Coordinator
DMS	Director of Medical Services
AE	Adverse Event
EIMC	Early Infant Male Circumcision
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSSF	Health Sector Stakeholder Forum
UVI	Unit of Vaccines and Immunisation
KAIS	Kenya AIDS Indicator Survey
KASF	Kenya AIDS Strategic Framework
KEPH	Kenya Essential Package for Health
KNASP	Kenya National AIDS Strategic Plan
KNHSSP	Kenya National Health Sector Strategic Plan
M&E	Monitoring and Evaluation
MC	Male Circumcision
MOH	Ministry of Health
MNCH	Maternal Neonatal and Child Health
NACC	National AIDS Control Council
NASCOP	National AIDS and STI Control Program
SCASCO	Sub County AIDS and STI Coordinator
STI	Sexually Transmitted Infection
TWG	Technical Working Group
UNAIDS	Joint United Nations Programme on HIV/AIDS
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organisation

SECTION I:

Background

1.1 Introduction

Human Immunodeficiency Virus (HIV) infection has remained a major challenge in Kenya since 1984 when the first case was diagnosed. The highest rates of infection were initially concentrated in marginalised and special risk groups; including female sex workers and their partners, and men in mobile occupations such as long-distance truckers. Presently, the HIV epidemic in Kenya is viewed generally as being primarily driven by heterosexual transmission. According to the Kenya AIDS Indicator Survey of 2012[1], approximately 5.6% of Kenyans are infected with HIV. Regionally, variations in HIV prevalence among persons aged 15-64 years ranged from 2.1% in Eastern North region to 15.1% in Nyanza region (Fig. 1). KAIS 2012 data did not cover North Eastern Region due to insecurity during the time of conducting the survey.

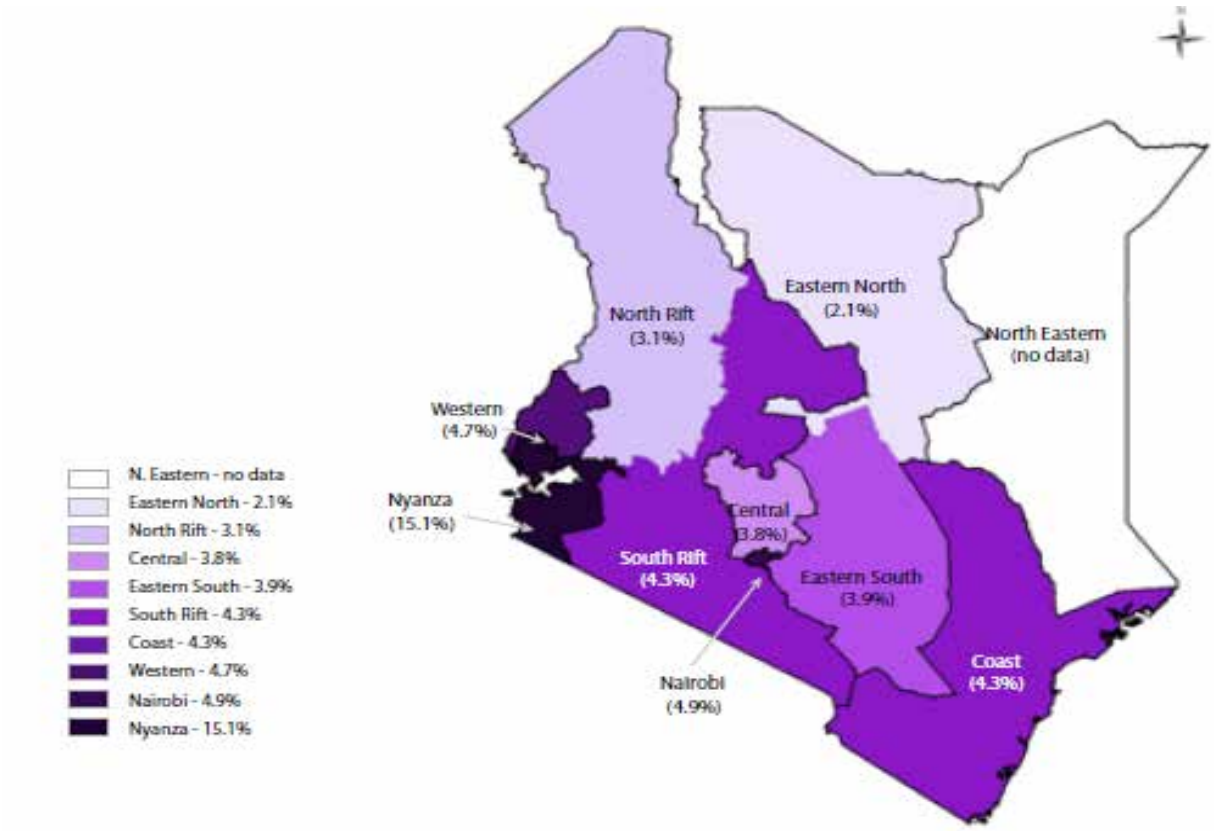

Figure 1: HIV prevalence in Kenya by region, KAIS 2012

The recent National HIV estimates (2014)[2] suggest a general decline in HIV prevalence among the adult population from 15% in late 1990s. The National HIV prevalence of 5.6% amongst persons aged 15-64 years reported in KAIS 2012 represented a statistically significant decline in national HIV prevalence from 7.1% in 2007. However, there were no declines in HIV prevalence in Nyanza and Central regions.

1 National AIDS and STI Control Programme (NASCOP), Kenya. Kenya AIDS Indicator Survey 2012: Final Report. Nairobi, National NASCOP. June 2014

2 NACC/NASCOP. Kenya HIV Estimates 2014 Report. June 2014.

According to KAIS 2012, HIV prevalence was higher amongst women (6.9%) compared to men (4.4%). Among women, HIV increased linearly with increasing age, with the highest increase between the ages of 22 and 23 years. Among men, HIV prevalence remained low and stable until age 24 years. HIV prevalence peaked at 35-39 years age group for women and 45-54 years for men. HIV prevalence also varies by marital status; with prevalence being higher among widowers (19.2%) and widows (20.3%), compared to men (1.4%) and women (6.9%) who have never been married. Uncircumcised males aged 15-64 years had more than five times higher prevalence of HIV than circumcised men, at 16.9% and 3.1%, respectively.

Association between male circumcision and HIV prevalence has been observed for decades[3]. Three randomised controlled trials[4,5,6] conducted in the mid - 2000s, at Orange Farm in South Africa, Kisumu in Kenya and Rakai in Uganda found that male circumcision reduces female-to-male transmission of HIV by at least 60%. Based on the results of these trials and pre-existing body of evidence, the World Health Organization (WHO) and the Joint United Nations Programme on HIV and AIDS (UNAIDS) concluded in March 2007 that "the efficacy of male circumcision in reducing female to male HIV transmission has now been proven beyond reasonable doubt". They recommended that male circumcision be considered as part of a comprehensive HIV prevention package including HIV testing and linkage to care and treatment, safe sex education, promotion of condom use and STI screening and management. Extended follow-up of participants in the Uganda and Kenya RCTs mentioned above through 5 and 6 years post-trial indicated that the protective effect of male circumcision against acquisition of HIV is sustained or increased at 67-73% and 58%, respectively[7,8].

Research has suggested a number of potential biological explanations for the association between male circumcision status and HIV prevalence. Studies of human foreskin tissues have demonstrated that the foreskin is more susceptible to HIV infection than other penile tissue[9]. After MC the skin covering the glans becomes keratinised thus making it less susceptible to tearing and STI infections including HIV.

In addition to HIV prevention benefits, male circumcision has been shown to reduce the incidence of infection with human papilloma virus[10], the agent that causes penile cancer in men and cervical cancer in women. Further, lack of circumcision in men increases the risk of bacterial vaginosis in their female sex partners and also increases the risk of urinary tract infection in young boys. It also eliminates the chance of occurrence of phimosis and paraphimosis and their associated complications.

Subsequent to recommendation by the WHO and UNAIDS, Kenya added VMMC to its HIV prevention

3 Cameron D.W., Simonson J.N., D'Costa L.J., Ronald AR, Maitha GM, Gakinya MN., et al. (1989). Female to Male Transmission of Human Immuno Deficiency Virus Type I: Risk Factor for Seroconvertion in Men. Lancet, ii: 403-407.

4 Auvert, B., Taljaard, D., Lagarde, E., Sobngwi-Tambekou, J., Sitta, R., &Puren, A. (2005). Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial. PLoS Med, 2, e298

5 Bailey, R., Moses, S., Parker, C., Agot, K., Maclean, I., Krieger, J., et al. (2007). Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. Lancet, 369, 643 - 656.

6 Gray, R. H., Kigozi, G., Serwadda, D., Makumbi, F., Watya, S., Nalugoda, F., et al. (2007). Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial. Lancet, 369(9562), 657-666.

7 R.H. Gray, G Kigozi, X Kong, V Ssempiija,F Makumbi,S Wattya,D. Serwadda,F Nalugoda, NK Sewenkambo,andMJ Wawer. The effectiveness of male circumcision for HIV prevention and effects on risk behaviors in a post-trial follow up study in Rakai, Uganda. AIDS. 2012 Mar 13; 26(5): 609–615. doi: 10.1097/QAD.0b013e3283504a3f

8 Mehta SD, Moses S, Agot K, Odoyo-June E, Li H, Maclean I, Hedeker D, Bailey RC. acquisition. AIDS. 2013 Nov 28;27(18):2899-907. doi: 10.1097/01.aids.0000432444.30308.2d

9 Donoval BA, Landay AL, Moses S, Agot K, Ndinya-Achola JO, Nyagaya EA, et al. HIV-1 TargetCells in Foreskins of African Men With Varying Histories of Sexually Transmitted Infections.Anatomic Pathology 2006;125:386–391.

10 Aaron, A. R., Tobian, M. D., Serwadda, D., Quinn, T. C., Kigozi, G., Gravitt, P. E., et al. (2009). Male Circumcision for the Prevention of HSV-2 and HPV Infections and Syphilis. The New England Journal of Medicine, 360, 1298-1309

program and published the National Guidance on Male Circumcision (2008), and the Kenya National Strategy for Voluntary Medical Male Circumcision (2009) to guide program implementation. Large scale implementation of the VMMC program was rolled out starting with Nyanza region (where male circumcision prevalence was lowest and HIV prevalence highest) and subsequently expanded to other regions including Nairobi and parts of Rift Valley and Western. The overall goal of the strategy was to increase the proportion of circumcised males aged 15–49 years from 85% to 94% nationally. By 2012, the proportion of circumcised males aged 15-64 years had increased to 92%. The highest increase in the proportion of males circumcised occurred in the Nyanza region where MC prevalence increased from 48.2% in 2007 to 66.3% in 2012.[11]

1.2 Situation Analysis

In November 2008, the MOH launched the National VMMC program with a target of circumcising 860,000 men aged 15-49 years by the end of 2013 and thereby increasing the national MC prevalence from 85 to 94%. Initial VMMC service provision began in October 2008 through financial support from PEPFAR and the Bill & Melinda Gates Foundation. Since then, over 3,000 service providers including VMMC surgeons, surgical assistants, counsellors and infection prevention officers were trained of which about 1,725 were from Nyanza region. At least 575 integrated and outreach VMMC service provision facilities were renovated and upgraded to provide VMMC services in Nyanza, Western, Rift Valley, Nairobi and other regions, thereby greatly enhancing access to services. By the end of 2013, 792,931 circumcisions had been performed on males of all ages. However of all the regions, only Nyanza attained the target number of circumcisions (Fig. 2).

Despite the significant increase in male circumcision in Nyanza from 48.2% to 66.3%, there is need for more efforts to attain the 80% target circumcision coverage for this region. It is important to note that the VMMC program target of circumcising 426,500 men to reach 80% coverage in Nyanza was based on projections from the 1999 Population and Housing Census, which was an underestimate. Figure 3 presents the increase in the proportion of circumcised males by region between 2007 and 2012.

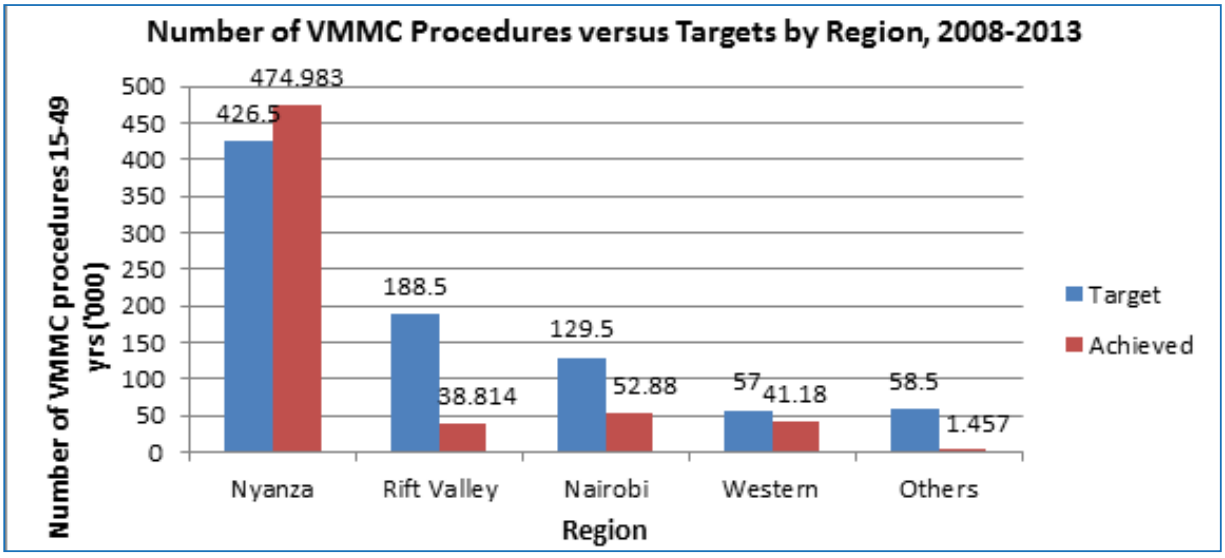

Figure 2: Service delivery 2008-2013: VMMC procedures vs. target by region: VMMC Program data (NASCOP)

11 Galbraith JS, Ochieng A, Mwalili S, Emusu D, Mwandi Z, Kim AA, et al,. Status of voluntary medical male circumcision in Kenya: Findings from two nationally representative surveys in Kenya, 2007 and 2012. J Acquir Immune DeficSyndr. 2014; 66(Suppl 1):S37-45

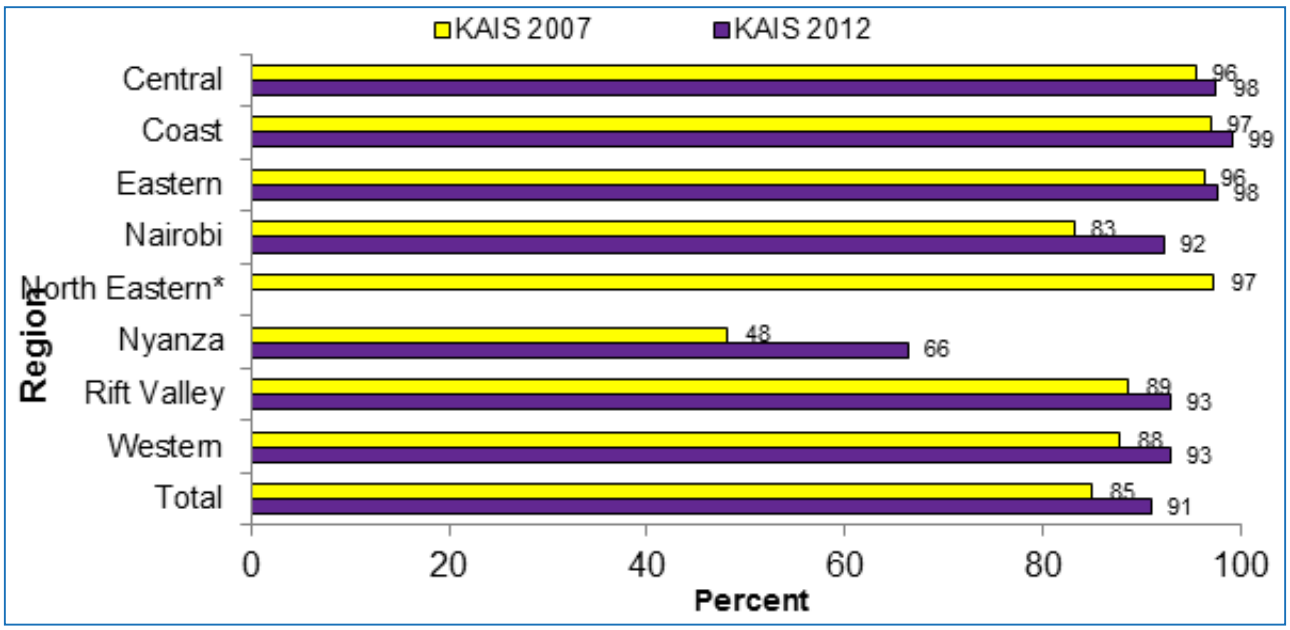

Figure 3: Self-reported male circumcision prevalence among men aged 15-64 years by region, KAIS 2007 versus 2012, Kenya AIDS indicator Survey, 2012 Survey

A number of factors contributed to the achievements of the first phase of the program implementation[12]. Firstly, was the strong coordination mechanisms established through the national multi-sectoral task-force on VMMC, chaired by the Head of NASCOP on behalf of the Director of Medical Services. A similar coordination mechanism was replicated at provincial level through the provincial VMMC Task-forces particularly in Nyanza and Nairobi, and at district level as VMMC District-Steering Committees particularly in the districts of the former Nyanza province. With the devolution of government functions, Nyanza province has now been split into 6 counties; (Kisii, Nyamira, Kisumu, Siaya, Homabay and Migori) with four of these (Kisumu, Siaya, Homabay and Migori) remaining VMMC priority counties. The 4 counties have formed an inter-County Task-force for coordination and experience-sharing on VMMC and will be co-opting other VMMC priority counties in the neighbouring regions.

Secondly, guided by results from the operations research studies, Kenya was able, in the initial stages of the implementation of VMMC programme, to 'task-shift' VMMC services to nurses who form the bulk of the national health workforce in peripheral health care facilities. This move enabled widespread VMMC service coverage and access by a large number of eligible male clients.

Thirdly, multiple innovative service delivery strategies such as mobile and moonlight services (offering VMMC services at night for men who are either too busy during the day, men who needed more privacy and those who did not want to queue for services with younger males) helped to reach high-risk and hard-to-reach men. The rapid results initiatives (RRIs) and accelerated VMMC campaigns ensured high coverage of schoolboys and college men during school holidays.

The first VMMC strategic plan outlined a phased approach which envisioned that the long-term or sustainable phase of the VMMC program in Kenya would emphasize EIMC services which is cheaper, easier to perform and could be easily integrated into maternal, neonatal and Child Health (MNCH) services. Operational

12 Mwandi, Z., Murphy, A., Reed, J., Chesang, K., Njeuhmeli, E., Agot, K., Llewellyn, E.,et al., (2011) Voluntary Medical Male Circumcision: Translating Research into the Rapid Expansion of Services in Kenya, 2008–2011. PLoS Medicine

research conducted in Nyanza have shown that EIMC is safe and acceptable[13], thus laying the foundation for phased introduction of EIMC services starting with Nyanza region and gradually expanding to other regions depending on results of acceptability studies. In the interim, young boys will be targeted for VMMC as soon as they reach 10 years to attain a large proportion of adolescents who are circumcised.

Recognising that technology may hold a key to simplifying male circumcision procedures, operational studies were conducted to explore the use of three devices for adult male circumcision, namely PrePex, Shang Ring and Alisklamp. Of these three devices, PrePex has been prequalified by the WHO for phased introduction depending on country preferences.

Having completed pilot implementation of PrePex adult circumcision in routine male circumcision settings, Kenya will further evaluate this in the context of active Adverse Events (AE) surveillance and if results are favourable, endorse it for widespread circumcision of HIV negative adult males. However, since there is biological plausibility for increased risk of tetanus following PrePex procedure, efforts will be made to ensure that all clients getting circumcised through the PrePex device receive immunization against tetanus as recommended by WHO and the PrePex manufacturer. In addition, the risk of tetanus and other infections following circumcision will be mitigated through appropriate post-circumcision wound care. Clients will routinely be informed to avoid practices that may increase the risk of infections including tetanus. Closer monitoring of all AEs will be conducted to help update guidelines and practices.

Innovative service delivery technologies will be explored to simplify circumcision and alleviate challenges related to staff burnout[14,15] and inefficient use of resources. New technologies with potential clear advantage to the program will be evaluated for possible adoption as they become available[16]. If multiple WHO-prequalified MC devices are evaluated and found to be appropriate for use in Kenya, the National VMMC technical working group will initiate objective review to prioritise the device(s) to be used in the national program.

1.3 The Policy Environment

This strategic plan is anchored on three main policy documents: The Kenya Health Policy 2012 – 2030; The Kenya AIDS Strategic Framework 2014 - 2019 and the National Guidance for Male Circumcision in Kenya (2008).

The Kenya Health Policy 2012 – 2030 provides guidelines on improvement of population health status to ensure economic development and the right to 'attaining the highest possible health standards'. Its overall objective is to 'attain universal coverage of essential services that positively contribute to the realisation of the overall policy goal' through provision of equitable, affordable, quality health and related services to the highest attainable standards to all Kenyans[17].

13 Young MR, Odoyo-June E, Nordstrom SK, et al., (2012). Factors associated with uptake of infant male circumcision for HIV prevention in Western Kenya. Pediatrics,130:e175-82. PMID: 22711723.

14 Perry L., Rech, D., Mavhu, W., Frade, S., Machaku, M. D., Onyango, M., et al., (2014).Work Experience, Job-Fulfillment and Burnout among VMMC Providers in Kenya, South Africa, Tanzania and Zimbabwe.PLoS ONE, 2014.9(5): p. e84215.

15 Perry L., Rech, D., Mavhu, W., Frade, S., Machaku, M. D., Onyango, M., et al., (2014).Work Experience, Job-Fulfillment and Burnout among VMMC Providers in Kenya, South Africa, Tanzania and Zimbabwe.PLoS ONE, 2014.9(5): p. e84215.

16 Bertrand, J. T., Rech, D., Omondi Aduda, D., Frade, S., Loolpapit, M., Machaku, M. D., et al. (2014)Systematic Monitoring of Voluntary Medical Male Circumcision Scale-Up: Adoption of Efficiency Elements in Kenya, South Africa, Tanzania, and Zimbabwe.PLoS ONE, 2014.9(5): p. e82518

17 Transforming Health: Accelerating attainment of Health Goals. Health Sector Strategic and Investment Plan (KHSSP). July 2013 – June 2017. The Second Medium Term Plan for Health

The principles related to elimination of communicable conditions, provision of essential health care and minimising exposure to risk underscored by the policy are particularly pertinent to the VMMC strategic plan. Based on these principles, this plan will promote effective coverage, and provision of efficient and equitable VMMC services through enhanced coordination, as well as evidence-based communication and interventions.

The Kenya AIDS Strategic Framework (KASF) 2014- 2019 was developed based on lessons learnt during implementation of the Kenya National HIV/AIDS Strategic Plan. As per this framework, the VMMC program will be implemented under the 'Three Ones' principle:

- **One** agreed HIV/AIDS Action Framework that provides the basis for coordinating the work of all partners;
- **One** National AIDS Coordinating Authority, with a broad based multi-sector mandate; and
- **One** agreed Country-level Monitoring and Evaluation System.

This VMMC strategic and operational plan expands the KASF 2014– 2019 with a focus on implementing VMMC as part of a comprehensive HIV prevention package. The National VMMC Task-force established during the implementation of the first VMMC strategy will be transformed into a Technical Working Group (TWG) to conform to terminology of such groups within NASCOP. The TWG will continue to provide National guidance for the scale-up of VMMC under the overall leadership of the Director of Medical Services.

It is anticipated that facilities operated by non-public players in the health sector will align their operations, resources and capacity with the stipulated MOH policies and strategies, and that data from these facilities will be included in the MOH health management information system (HMIS). Linkages and cross-referrals among the various networks of service providers will be strengthened in order to achieve the desired goals of equitable, affordable and quality health and related services at the highest attainable standards to the population.

The National Guidelines for Male Circumcision in Kenya was developed by the Ministry of Health to provide a framework for ensuring the promotion of safe VMMC services in a culturally and socially acceptable manner. It provides the guiding principles upon which VMMC services are offered. The guidance states that "Male circumcision reduces the risk of acquiring HIV by 60 percent and is an effective intervention for reducing the risk of HIV and sexually transmitted infections; therefore, safe, voluntary medical male circumcision alongside other HIV prevention strategies should be promoted in Kenya."

Following its publication, the first National VMMC Strategy and Operational Plan (2008 - 2013) was developed based on its key tenets. The second VMMC strategy (2014– 2019) builds on the progress achieved from 2008 to 2013.

SECTION II:

Strategic Directions

2.0 Introduction

This section outlines the vision of this strategic plan and highlights the specific objectives and intended outcomes of Kenya's VMMC programme from July 2014 to June 2019. It builds on the lessons learnt from the previous five years of implementing VMMC. It provides program targets and the expected impact, and also incorporates new priorities including expansion of target age group for VMMC to include boys from 10 years old, phased introduction of EIMC and the introduction of WHO prequalified male circumcision device(s). In addition there will be increased focus on safety and infection prevention including measures to mitigate tetanus and other infections. Overall, it takes a national approach to VMMC implementation while maintaining focus on counties with high burden of HIV and low male circumcision prevalence. In traditionally non circumcising communities, the focus will be to circumcise as many eligible males as possible and eventually make male circumcision an embraced social practice. In traditionally circumcising communities, the emphasis will be on safety and integration of HIV prevention messaging.

2.1 Vision

A Kenya Free of new HIV infections, stigma and discrimination, and AIDS related deaths.

2.2 Mission

To provide a framework for universal, safe and sustainable VMMC services.

2.4 Goal

To provide safe, accessible, equitable and sustainable services that contribute to the reduction of new HIV infections and improved reproductive and general public health.

2.4 Guiding Principles

1. Ensure that VMMC services are provided safely, respecting the rights of clients and without stigma or discrimination for circumcising and non-circumcising communities.
2. Ensure people-centred MC is integrated with adolescent, maternal, neonatal, child and male reproductive health services, HIV treatment and care, vaccination and other relevant services.
3. Ensure that VMMC is part of a comprehensive HIV prevention package that is based on informed consent, HTC, risk-reduction counselling, condom promotion and provision, and STI screening and management.

4. Ensure that VMMC is performed by well-trained and certified practitioners in settings that meet the standards prescribed in the national service guidelines.
5. Ensure sustainable financing for VMMC through increased domestic resources at national and county levels, including public-private partnerships and ensure that VMMC does not interrupt or divert resources from other primary health care services.
6. Ensure MC monitoring and accountability so that quality data for decision-making and safety monitoring are available and used.
7. Ensure operations research where and when necessary to inform the strengthening of male circumcision services.

2.5 Key areas of Focus for the National VMMC Strategy 2014-2019

2.5.1 Priority Age Groups

During this phase, young infants aged 0-60 days, adolescents (10-14 years) and older men 15-49 years will be offered an age-appropriate package of comprehensive male circumcision services.

2.5.1.1 Males Aged 15-49 years

The single overriding objective will be to increase and maintain prevalence of MC amongst men aged 15-49 years above 80%. Latest modelling estimates indicate that male circumcision has the most rapid impact on HIV prevention and is cost effective if provided to males aged between 15-49 years, thus, this age group will be particularly targeted for VMMC[18].

2.5.1.2 Boys Aged 10-14 years

Inclusion of pre-adolescent boys (10-14 years) as target group is necessitated by a high demand for MC amongst this age group, as reported during the previous five years of VMMC program implementation. Further, 10-14 years is the preferred age of circumcision in Nyanza region[19] and most traditionally circumcising communities. Sex before complete wound healing in this age group is likely to be less common than amongst older sexually active men.[20] This strategy also increases the chances of safe circumcision of young men before they become sexually active. Likewise, MC to younger boys provides an opportunity to introduce them to a wide range of HIV prevention messages and services before they become sexually active.

2.5.1.3 Early Infant Male Circumcision (Infants Aged 0-60 days)

Kenya's phased approach to rolling out MC for HIV prevention prioritizes EIMC for long term sustainability and to eventually make male circumcision the norm in all Kenyan communities, regardless of cultural background. A pilot study conducted in Nyanza region to assess safety and acceptability of EIMC showed that EIMC is safe and acceptable in

18 Hankins, C., Forsythe, S., &Njeuhmeli, E. (2011). Voluntary Medical Male Circumcision: An Introduction to the Cost, Impact, and Challenges of Accelerated Scaling Up. PLoS Med, 8(11), e1001127.

19 Mattson CL, Muga R, Poulussen R, Onyango T, Bailey RC. (2004): Feasibility of medical male circumcision in Nyanza Province. East Afr Med J. 81(5):230-5.

20 Odoyo-June E, Rogers J, Jaoko W, Bailey RC. Factors associated with resumption of sex before complete wound healing in circumcised HIV-positive and HIV-negative men in Kisumu, Kenya. Journal of Acquired Immune Deficiency Syndrome, 2013 ; 62(4)465-470

the region[21,22].Based on these results, EIMC services will initially be introduced in Nyanza region as an integral component of MNCH services. The introduction of EIMC services will start with site preparation, then training and facility assessment and certification before introduction of services in health facilities with pre-requisite capacity and infrastructure as described in the Clinical Manual for Early Infant Male Circumcision under Local Anesthesia.

Roll out of EIMC to traditionally circumcising communities will follow availability of acceptability data and development of local capacity to deliver the services. Given the risk of tetanus infection in the MC program, the program will work closely with the division of vaccines and immunization in the MOH to promote high coverage of immunization against tetanus for antenatal mothers.

2.5.2 Introduction of Devices for Adult Male Circumcision

Adult MC devices have the potential to accelerate the delivery of VMMC by reducing the time to perform the procedure, simplifying and making the procedure more acceptable. Initial evaluation of PrePex was completed in Kenya in 2013[23]. The device was found to be safe and acceptable both in static facilities and outreach settings. Based on the results, Kenya will implement active AE surveillance for PrePex-based circumcision to guide decisions on its widespread use in the country. If active AE surveillance for PrePex MC yields favourable results, the country will proceed to passive surveillance and widespread use of this device as a complement to conventional surgical circumcision giving men the opportunity to choose between the two methods.

Other MC devices, prequalified by the WHO in future, may also be evaluated for possible use in the national VMMC program. Necessary device-specific indicators will be added to the routine VMMC client data and monthly aggregates submitted to the national HMIS.

2.5.3 Expanding Focus to Traditionally Circumcising Communities

Structured consultations will be initiated with opinion leaders and gatekeepers in the traditionally circumcising communities to encourage safer surgical practices, and inclusion of HIV prevention risk-reduction counselling in traditional male circumcisions. Such consultations will include creation of awareness on medical benefits and advantages of EIMC. Incorporating strategies that include traditional circumcisers mainly as advocates and champions will be explored in order to promote safety whilst being sensitive to cultural practices. This evolution will also require capacity building for traditional non-medically trained providers working in traditionally circumcising communities to enable them to provide appropriate messages about VMMC service package.

Expanding VMMC service delivery to the country's traditionally circumcising communities, if acceptable, will require innovative demand creation strategies in order to link awareness of VMMC to client demand. Special operations research studies will be incorporated to monitor

21 Young MR,Odoyo-June E, Nordstrom SK, et al., 2012; Factors associated with uptake of infant male circumcision for HIV prevention in Western Kenya. Pediatrics 2012;130:e175-82. PMID: 22711723.

22 Young MR, Odoyo-June E, Nordstrom SK, et al., 2012; Factors associated with uptake of infant male circumcision for HIV prevention in Western Kenya. Pediatrics 2012;130:e175-82. PMID: 22711723.

23 Felblum PJ, Odoyo-June, E, Obiero W et al.,(2014)Safety, effectiveness and acceptability of the PrePex device for adult male circumcision in Kenya. PLoSONE.9(5)e95357.

and improve the implementation of VMMC in traditionally circumcising communities.

2.5.4 Mitigating Risk of Tetanus Infection in VMMC Program

Occurrence of tetanus, which is a potentially fatal infection, has been reported in some countries implementing VMMC, including Kenya. As of December 2014, WHO had reported a total of 8 tetanus cases amongst VMMC clients from four countries following conventional or PrePex circumcision[24].

Infection prevention will remain a key priority in the next phase of VMMC implementation. Client information and informed consent will be updated for men opting for VMMC by any method to receive full information on the benefits and risks of the procedure, including the risk of tetanus infection, and protection offered by the tetanus vaccine. Patient information and counselling will emphasize good genital hygiene and preoperative washing, and wound care practices that avoid use of home remedies that may potentially be contaminated with Clostridium tetani spores.

Education on early symptoms of tetanus as well as the need to seek immediate care for such symptoms will be emphasized. Each VMMC site will keep a list of facilities with capacity to effectively manage tetanus for purpose of efficient referral of any client who develops tetanus.

Furthermore, health care providers will be retrained to re-emphasize standard protocols to ensure sterility in skin preparation and satisfactory equipment processing, appropriate wound care, the signs and symptoms of tetanus, the need for a rapid response and recommended care including tetanus immunoglobulin. For clients opting to be circumcised using PrePex, providers will ensure immunization against tetanus as recommended by the WHO. Monitoring of all AEs will be emphasised through post-surgical follow-up and regular review of AEs by the National VMMC TWG.

2.6 Strategic Objectives

1. To increase the proportion of males aged 15-49 years who are circumcised in Kenya from 92% to 95% by 2019
2. To increase in traditionally non-circumcising communities, the proportion of males aged 15-49 years who are circumcised to 80% by 2019
3. To maintain moderate and severe AEs below 2% of all VMMC performed
4. Initiate EIMC services as a component of MNCH in eligible health facilities within counties where EIMC services are generally acceptable.
5. To circumcise at least 40% of male infants who come into contact with EIMC providing facilities within 60 days after birth by 2019

2.7 Service Delivery Targets

24 WHO Information Note: Considerations for tetanus risk mitigation in voluntary medical male circumcision for HIV prevention programmes 8 December 2014

Annual MC service delivery targets are set by counties and age groups based on projected population of uncircumcised males aged 10-49 years. EIMC service delivery targets are not set in numeric terms because planned activities are preparatory and may not result in significant numbers. However, by the end of the program phase (2019), each site that initiates EIMC service delivery should circumcise at least 40% of male infants born at or who come into contact with the facility within 60 days after birth.

VMMC target by county and age group is presented in table 1. Steps taken to arrive at the targets are detailed in Annex III and are aimed at:

a. Increasing MC coverage amongst men 15-49 years to 80% in counties where baseline MC coverage was below 80% according to KAIS, 2012.

b. Circumcising 80% of the uncircumcised men 15-49 years in counties where MC coverage was above 80% (KAIS, 2012). Counties with clearly defined pockets of population with high proportion of uncircumcised men will be mapped and targeted

Note 1: A table showing the population projection 10-49 years for 2019 based on 2009 Population and Housing Census, MC coverage amongst men 15-64 years, overall HIV rate and number of uncircumcised men is also presented in annex III.

Note 2: Need for VMMC was determined based on geometric mean of MC coverage and HIV rate i.e. $\sqrt{\{1\text{-MC) HIV rate}\}}$ (Figure 4). Based on this calculation the need for VMMC is greatest in Homabay, Siaya, Kisumu, Migori, Turkana, Busia and Nairobi counties in decreasing order.

Table 1: VMMC target by counties and age group 2014-2019

	TARGET BY YEAR (2014/5- 2018/9)						TARGET BY AGE GROUP				
County	2014/5	2015/6	2016/7	2017/18	2018/19	TOTAL	10-14	15-24	25-29	30-49	TOTAL
Homa Bay	40,645	38,797	36,950	35,102	33,255	**184,749**	73,900	94,222	11,167	5,460	**184,749**
Kisumu	41,490	39,604	37,718	35,832	33,946	**188,590**	75,437	96,180	10,899	6,074	**188,590**
Nairobi	38,563	36,810	35,057	33,304	31,552	**175,286**	70,115	89,395	8,570	7,206	**175,286**
Siaya	32,768	31,279	29,789	28,300	26,811	**148,947**	59,579	75,963	8,790	4,615	**148,947**
Turkana	30,614	29,223	27,831	26,439	25,048	**139,155**	55,662	70,968	8,565	3,960	**139,155**
Migori	19,234	18,359	17,485	16,611	15,737	**87,426**	34,970	44,587	5,194	2,675	**87,426**
Busia	8,299	7,921	7,544	7,167	6,790	**37,721**	15,089	19,237	2,193	1,202	**37,721**
Kericho	928	886	844	802	759	**4,219**	1,687	2,152	230	150	**4,219**
Nakuru	1,068	1,019	971	922	874	**4,854**	1,942	2,475	255	182	**4,854**
Mombasa	212	202	192	183	173	**962**	385	490	47	40	**962**
Other *	6,566	6,268	5,970	5,671	5,373	**29,848**	11939	15222	1,607	1,080	**29,848**
TOTAL	220,387	210,368	200,351	190,333	180,318	**1,001,757**	400,705	510,891	57,516	32,645	**1,001,757**

Key
* Other includes counties not listed in the table, with overall MC coverage above 80% but with pockets of non-circumcising subgroups where MC coverage is much lower than 80%

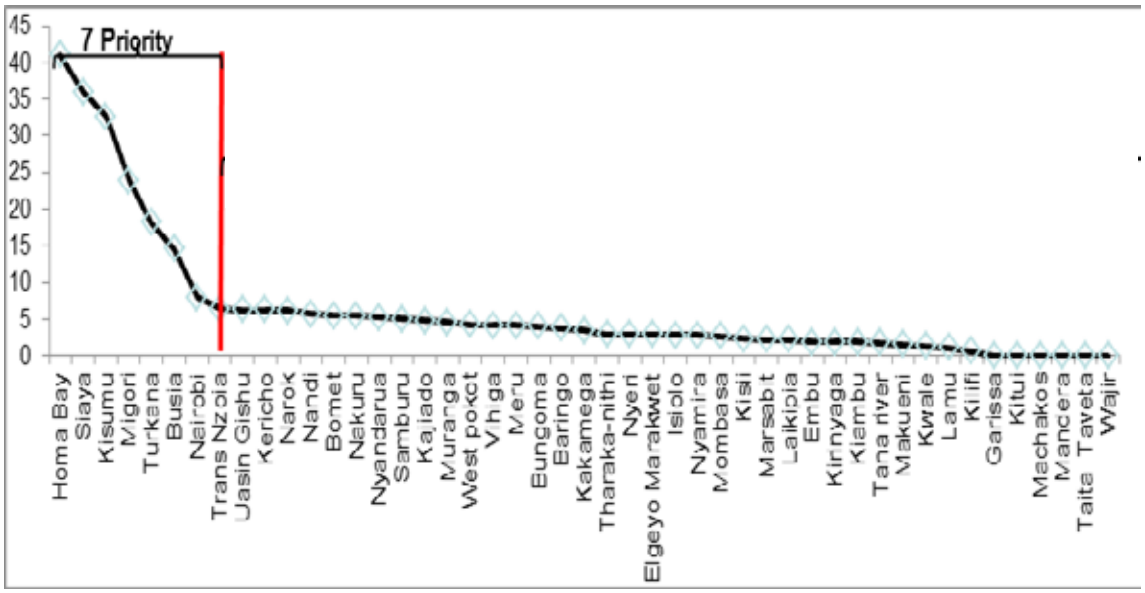

Figure 4: VMMC need by county based on HIV prevalence and proportion of uncircumcised men

2.8 Anticipated Impact

Mathematical models indicate that the higher the MC coverage, the greater the impact on HIV incidence and prevalence amongst men and ultimately also amongst women and infants in the community. In addition, mathematical modeling has shown huge benefits of male circumcision amongst heterosexual men in low male circumcision communities, high HIV prevalence settings, with one HIV infection being averted for every 5 to 15 male circumcisions performed[25]. It is anticipated that by conducting 1,001,757 circumcisions as detailed in Table 1, the proportion of males 15-49 who are circumcised will increase to 80% and above in all counties and the national coverage in circumcision in this age group will increase from 92 to 95%. The largest increase is expected in the traditionally non-circumcising communities.

Using mathematical models it has been estimated that with 80% MC uptake in Nyanza region over a 10 year period, HIV prevalence amongst females will decrease from 22% to 10% and for males from about 17% to 7%[26]. Estimates using the Decision Makers' Program Planning Tool (DMPPT) 2.0 model[27] developed by the USAIDS Health Policy Project, indicate that reaching 80% coverage of male circumcision amongst men aged 10–49 years in Nyanza by the year 2019 and maintaining this level of coverage through 2029, would result in more than 50,000 infections averted amongst men and women over this 15 year period.

Additional infections would be averted in infants as fewer pregnant women would be living with HIV. Furthermore, these models have shown that circumcising sexually active males of any age not only saves lives but is also more likely to be cost saving[28]. Assuming a weighted VMMC unit cost of $75 and an average annual weighted per person cost of $385[29] to provide antiretroviral therapy, the DMPPT 2.0 model predicts that this same scenario would result in cost savings of nearly $250 million. The variation in results from those included in the first VMMC strategic plan are explained by changes in the unit cost and the epidemiological environment of the disease over time which have been characterized by a plateau in HIV and AIDS prevalence in Nyanza region as the benefits of HIV programming set in. It is expected that if efforts are sustained, we should be soon see a reduction in prevalence.

25 UNAIDS/WHO/SACEMA Expert Group on Modelling the Impact and Cost of Male Circumcision for HIV Prevention (2009). Male Circumcision for HIV Prevention in High HIV Prevalence Settings: What Can Mathematical Modelling Contribute to Informed Decision Making? PLoS Med 6(9): e1000109. doi:10.1371/journal.pmed.1000109

26 Nagelkerke NJ, Moses S, de Vlas SJ, Bailey RC. (2007). Modelling the public health impact of male circumcision for HIV prevention in high prevalence areas in Africa BMC Infect Dis. 7:16

27 http://www.malecircumcision.org/programs/DMPPT.html

28 Kahn JG, Marseille E, Auvert B. (2006). Cost effectiveness of male circumcision for HIV prevention in a South African setting. PLoS Med 3: e517. doi:10.1371/journal. pmed.0030517

29 Kioko. U, Mwai. D and Korir. J (2014) "Cost Requirements for Kenya Aids Strategic Framework (KASF) 2014/15-2018/19" Ministry of Health, Kenya National AIDS Control Council and USAID health policy project. Nairobi. Kenya

SECTION III
Implementation Framework

3.1 Management and Coordination

3.1.1 National level Coordination

The MOH has the mandate to provide and ensure quality, accessible, affordable and equitable health care. MC services will be further integrated within the health system, so the MOH will continue to play a central role in the oversight of VMMC service provision. The multi-sectoral VMMC taskforce which has operated under the MOH with NASCOP as the convener since 2007 will be transformed into a TWG as highlighted above. Given that VMMC is primarily for HIV prevention, the National AIDS Control Council (NACC) will be a member of the national VMMC TWG and will continue to promote the participation of relevant stakeholders in further development and expansion of VMMC. Relevant UN agencies, donor representatives and VMMC implementing partners will be essential members of the national TWG.

The principal mandate of the national TWG will be to advise the government and partners on planning and development of programmes for the expansion and integration of safe, accessible and sustainable VMMC including introduction of EIMC services and MC devices. The national VMMC TWG will operate within the guiding principles of the current Kenya National Health Sector Strategic Plan (KNHSSP) and Kenya AIDS Strategic Framework (KASF). The TWG will work in close collaboration with the NACC Prevention Taskforce and other relevant national and county level structures, in coordination, monitoring and evaluation of VMMC services at the national, county and sub-county levels.

The national VMMC TWG will be expanded to include Division of Family Health, Division of Vaccines and Immunization, Child Health Unit, health promotion and other relevant departments within the MOH. In addition, the national VMMC TWG membership will expand and diversify to include representation from other national ministries, academia and professional organizations to enhance stakeholder representation and promote integration of VMMC services within the health system. The stakeholders ideally will represent various ministries associated with VMMC provision, as well as religious groups, educational associations, clinical associations, community leaders and the private sector. This realignment will establish VMMC as a national HIV prevention intervention in various forums to broaden its scope, not just as an HIV prevention strategy but also as a reproductive health service. The national VMMC TWG will also support counties operating within the same geographical regions to create county and inter-county forums that bring together all implementers for exchange of ideas, experiences sharing, and for standardization of practice. The functions of the national TWG are detailed in the National Guidance on VMMC (2008) under the heading 'Functions of the Task Force'.

Public private collaboration

Existing partnerships between the public health system and the VMMC stakeholders will be strengthened and expanded through public-private partnerships. The public health sector has the legal mandate and infrastructure to provide and regulate health services within the Republic of Kenya. Despite this predominant position, the public health infrastructure often falls short of having the means to fulfil its mandate without external assistance. In the past and, more specifically, in the introduction of numerous new HIV services, public-private partnerships have been established to scale up the implementation of services. Membership in the partnerships should be on the basis of unity of purpose and mutual respect. Concerted efforts will be made to maintain existing partnerships and reach out to more strategic partners in the public and private sectors.

VMMC program will continue to work with community groups to undertake a communication process in partnerships with service providers. Linkages shall also be promoted between community groups and professional associations to facilitate service delivery, and particularly outreach services. The local health authorities and infrastructure shall be included in these arrangements, because they will provide the continuing care of the clients and public oversight of services. Organisations of traditional circumcisers and community gate-keepers will be important partners in the evolution of the traditional circumcision process to encompass safer practices and increased emphasis on HIV prevention, as well as embracing EIMC

3.1.2. County level coordination

It is envisioned that each county will constitute a VMMC task force with mandate similar to those of the national VMMC TWG, except in provider certification. Membership will include relevant ministries or organs of the county government and VMMC implementing partners. Based on mutual interest, like-minded counties may form or be members of inter-county VMMC task forces for benchmarking and experience sharing. Depending on county priorities and to avoid mushrooming of task forces or TWGs, counties may opt to merge VMMC task forces with existing relevant TWGs or forums at the county level. The primary function of the county taskforces will be to coordinate the activities of the various partners in their areas of jurisdiction to ensure equitable coverage, access, safety and effective integration of VMMC services with other health services. The county task forces shall adopt guidelines developed at the national level, such as service delivery standards, implementation guidelines and communication strategies. County task forces shall also help inform the development of national guidelines based on their 'on the ground' experiences. Therefore regular communication and interaction between the national and county task forces will be required. County Directors of Health will be the conveners of the county task forces.

3.1.3 Sub-County Level Coordination

The Sub-County Health Management Teams (SCHMT) will provide leadership on VMMC service delivery in each sub-county. This will be through the HSSF, the VMMC Sub County Steering Committees, or any other appropriate structures. In each sub-county the Sub County AIDS and STI coordinator (SCASCO) shall be the focal person with day-to-day responsibility for the provision of VMMC and EIMC services. Through the annual operational plans, sub-

counties will develop appropriate VMMC targets in their respective areas to contribute to the county targets.

3.1.4 Facility Level

Health facilities, being the primary service delivery points, are expected to play a critical role in the implementation of the Kenya Health Strategic Plan. Managed by the facility health management Teams, facilities are responsible for health promotion, curative and rehabilitative care, maintaining and improving the health systems and quality management. In terms of provision of VMMC and EIMC services, the facility health management Teams will ensure requisite environment for provision of services, availability of appropriately trained staff, efficient referral mechanism and quality assurance. They will be responsible for delivering VMMC targets, which contribute to sub county targets, county targets and ultimately national targets. They will contribute to the process of developing VMMC and EIMC Annual Work Plans (AWPs) under the Sub County and county health management teams. Facilities may organise outreach or mobile service provision within their areas of jurisdiction to respond to demand. For continuum of care and quality assurance, all VMMC services planned and carried out outside health facility must have the participation and ownership of the nearest facility.

3.2 Service Delivery

3.2.1 Minimum Package

MC services will continue to be offered as part of a comprehensive HIV prevention package. The minimum package of services includes:

i. HIV Testing and Counselling (HTC)
ii. Active exclusion of symptomatic STIs and syndromic treatment
iii. Provision and promotion of condoms
iv. Counselling on risk reduction and safer sex
v. MC procedures for infants, adolescents and adults performed as per the current national guidelines and clinical manuals published by the MOH
vi. Linkages and referrals of infants, adolescents and adults to appropriate services including care and treatment
vii. Ensuring a coordinated approach to ensure safety and to prevent infections, including anti-tetanus vaccine for protection against any risk of tetanus infection after MC

*Note: For EIMC, the first 4 components of the minimum package which do not apply to the infants directly are recommended to parents or guardians.

HIV counselling and testing will be offered using an opt-out approach, and the necessary support systems must be in place to ensure that this aspect of the service is not overlooked or downplayed. Appropriate modifications may be required in new settings to accommodate these associated services. Men (and/or partners or parents/guardians of the male infants/adolescent) who test positive will be linked to the nearest care and treatment centres of their choice. HIV infected men or HIV exposed infants will not be denied MC services if they meet the eligibility criteria for circumcision as per the national VMMC guidelines. However, HIV-

infected men who request for circumcision must be provided with appropriate counselling on risks and benefits of circumcision to People Living with HIV and AIDS (PLWHA) and their sexual partners.

3.2.2 Circumcision Procedure for Boys 10-14 years and Individuals with Immature Penile Anatomy

Since the launch of Kenya's national VMMC program in 2008, the forceps guided approach has been the preferred method of medical MC. However, this method of circumcision may be associated with clinical risk of injury to the glans penis or urethra when used in males below 14 years or other individuals with immature penile anatomy. This risk was not a major concern in the first phase of Kenya's VMMC programme because only older males 15 years and above were prioritized for VMMC.

This strategy includes boys 10-14 years in the target group for VMMC and there may be increased risk of injury to the glans penis or urethra if the forceps guided method of circumcision is used in these cases. To minimize this risk of injury, forceps guided circumcision will not be performed on boys 10-14 years of age or older clients with immature penile anatomy. Service providers will receive refresher training on dorsal slit circumcision and supported to ensure that boys below 15 years and older individuals with underdeveloped or mal-developed penile anatomy are circumcised through the dorsal slit method. Sleeve resection may be used as an alternative to the dorsal slit method in these circumstances but the forceps guided method must not be used. Clients identified with congenital penile disorders will be appropriately referred to consultant surgeons for review and further action. For older males or those with mature penile anatomy, the method for circumcision will be forceps guided, sleeve resection method, dorsal slit or approved devices according to the discretion of the provider or choice of the client. For EIMC, the method of circumcision will be the Mogen Clump or any other MOH approved EIMC device.

3.2.3 Models of Service Delivery

Kenya will continue to implement high quality high volume approach to achieve efficiency of service delivery. VMMC services will be delivered through a mix of both community and facility-based approaches. It is recommended that at all times the community services such as mobiles and outreaches should have functional linkages with the adjacent health facilities for commodity supply, linkages, reporting and quality assurance. Community VMMC services (otherwise known as mobile outreaches) may be delivered in health facilities, schools, churches and tented camps.

Recent findings from Systematic Monitoring of Male Circumcision Male Circumcision Scale-up (SYMMACs) have reinforced the importance of task-shifting and service integration as a means of enhancing efficient resource use[30]. Concerted efforts will be made to integrate VMMC into routine healthcare services whilst mobile and outreach VMMC services will be used to reach special or hard to reach populations or to respond to increased demand. EIMC services will only be delivered in health facilities with requisite staff, infrastructure and environment as spelt out in the Manual for Early Infant Male Circumcision Under Local Anaesthesia.

30 Jennings, L., Bertrand, J., Rech, D., Harvey, S. A., Hatzold, K., Samkange, C. A., et al., (2014)Quality of Voluntary Medical Male Circumcision Services during Scale-Up: A Comparative Process Evaluation in Kenya, South Africa, Tanzania and Zimbabwe.PLoS ONE.9(5): p. e79524

In this phase, special focus will be on short and medium term outcomes to improve human and infrastructural capacity at all levels of service delivery in order to meet the demand for services. It is expected that in the long term, health facilities will be the primary sites of VMMC service delivery with strong community linkages as better integration of health services is achieved. To advance the integration of VMMC into routine health services, service package and delivery approaches will be reassessed progressively while maintaining and scaling up coverage. The progressive integration of VMMC services into routine health services will be regularly assessed by the Ministry of Health and its partners, and will require close coordination across departments within the MOH. In regions where VMMC saturation will have been attained, resources previously dedicated for VMMC will be redirected to providing other health services.

Recent operations research studies on VMMC scale up have demonstrated that high quality services can be implemented and sustained at scale[31,32]. One successful complementary strategy for providing VMMC services to large numbers of males is the RRI that follows accelerated demand creation campaigns. This service delivery model is encouraged and will be expanded during this phase. Innovations such as moonlighting, school holiday campaigns, model for optimizing volume and efficiency (MOVE) strategies have been seen to be successful and will be encouraged to continue.

3.2.4 VMMC Service Delivery Teams

Whilst it is possible that one provider can deliver all components of the VMMC package, it is recommended that the package be offered by a team of providers to maximize the number of clients who can be reached in the shortest time possible whilst ensuring quality and safety of the services.

The recommended team for conventional adolescent and adult VMMC includes at least ONE of each of the following cadres: surgeon (medical doctor, clinical officer or nurse), surgical assistant (nurse or clinical officer), counsellor (nurse or non-medical counsellor) and an infection prevention officer (any support staff trained in infection prevention). These staff may provide VMMC in addition to other services that they already provide. However, for EIMC, the complete package of services can be provided by one trained and certified health service provider. The number and type of staff needed for the provision of adolescent and adult VMMC using medical device will be determined based on the type of device(s) adopted for use in the national program.

Depending on the model of service delivery, additional staff may be incorporated into the team for special initiatives such as community mobilization and quality assurance. Those who perform circumcisions will be required to undergo standardized training that will include a mentorship programme to review their practice at their respective sites. To enhance technical capacity for quality assurance, teams and supervisors will be trained to enable them establish appropriate quality improvement strategies in their regions.

31 Perry, L., Rech, D., Mavhu, W., Frade, S., Machaku, M. D., Onyango, M., et al. (2014).Work Experience, Job-Fulfillment and Burnout among VMMC Providers in Kenya, South Africa, Tanzania and Zimbabwe.PLoS ONE.9(5): p. e84215.

32 Bertrand, J. T., Rech, D., Omondi Aduda, D., Frade, S., Loolpapit, M., Machaku, M. D., et al. (2014)Systematic Monitoring of Voluntary Medical Male Circumcision Scale-Up: Adoption of Efficiency Elements in Kenya, South Africa, Tanzania, and Zimbabwe.PLoS ONE. 9(5): p. e82518

3.2.5 Other Considerations

In planning for the location of VMMC services, the following factors should be considered:

a. Infrastructure

Facilities and services should be distributed in a way that they increase accessibility to as many people as possible. Provision should be made for space in VMMC facilities to allow for surgery, recovery, resuscitation and infection control activities. Availability of adequate lighting, water, and consumable supplies are basic minimum requirements for quality VMMC.

b. Infection Prevention and Control.

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 over-emphasized. Infection prevention needs to be strengthened, particularly in improving the safety of traditional circumcisions. A standardized approach will be developed for working with traditional practitioners to improve safety of surgery and reduce risk infections including tetanus.

3.3 Communication

The national infant, adolescent and adult MC communications and messaging will build on the foundation of the 2009-2013 communication strategy and subsequent versions. Communications will be expanded to address the factors influencing the uptake of infant, adolescent and adult MC. This is in addition to health benefits of MC for prevention of HIV, STI, urinary tract infection, and reproductive system cancers. It will also address potential risks and misconceptions surrounding adult and infant MC for HIV prevention. Communication strategy will also address new themes such as EIMC, use of MC devices and issues arising from the traditionally circumcising communities.

National VMMC communication objectives are as follows:

1. To increase the level of awareness of infant, adolescent and adult VMMC as a safe and voluntary health improvement and disease prevention strategy
2. To promote infant, adolescent and adult MC as part of a means to improving reproductive health
3. To create and maintain demand for comprehensive infant, adolescent and adult VMMC services
4. To improve the commitment and communication skills of health workers and other players in the sector to deliver accessible and timely quality infant, adolescent and adult VMMC services
5. To ensure that communication and demand creation strategies are in tandem with availability of safe and timely MC service provision

3.3.1 Target Audiences

The broad target outlined in the communication strategy is as follows:

Primary

- Health workers
- Community health volunteers

- Males aged between 10 – 14 years; 15 – 24 years; 25+ years
- Parents and guardians of males between 0 and 17 years
- Pregnant mothers and their spouses
- Traditional circumcisers

Secondary

- Opinion leaders: religious, community, local administrators, politicians, teachers
- Community change agents (gate keepers)
- Women and girls
- Male Peers
- Editors and media owners, rural based media correspondents in target areas, health specialist writers/ reporters, photographers

In order to be responsive to the needs and characteristics of each region, region-specific objectives may be further developed based on programme data and community feedback. New approaches to strengthen demand will be supported. This will look at offering VMMC through additional relevant service entry points such as reproductive health, antenatal, neonatal and child health services, as well as integrating demand creation strategies into other ongoing programmes.

3.4 Communication Materials

Information, Education and Communication (IEC) Materials Review

The IEC materials will be contextualized to also address emerging areas such EIMC, the use of MC devices, amongst others.

Below are general recommendations on IEC materials:

1. Update messages to address any new myths and misconceptions as well as emerging themes such as EIMC and use of MC devices to address the major barriers towards uptake of adult and infant MC. Messaging should also promote other public health benefits of adult, adolescent and infant MC.
2. In general all the materials need to be culture sensitive, age appropriate, pictorial and less text driven. Communication materials will be designed centrally at the national level for uniformity of messaging. Thereafter, production can be done either at the national or county level in such a way that they are cost effective to reproduce.
3. Utilize innovative and modern ways and methods of communication targeting the different audiences needed.

All referral forms should be designed with a space where implementing partners or mobilizers can adapt with their contact details and local design.

All communication materials developed will be made available with region appropriate visuals and in 2 languages: English and Kiswahili. The local translation should be reproduced based on need of the target audience.

NB: For more details on communication and demand creation, refer to VMMC Communications strategy, 2015

3.5 Advocacy

There is need for continued advocacy to cultivate positive attitudes towards adult and infant MC services, which will translate into greater commitment to ensuring that the programme achieves its objectives. Advocacy will be targeted at various actors, including political and cultural leaders (both at the county and national levels), health managers, key community gatekeepers and health workers. Advocacy is also required to ensure that resources are not diverted from the other aspects of primary health care and HIV prevention to MC. MC is not to be seen as a replacement but a complement to other known preventive measures hence attention to these other measures should be similarly sustained so as to achieve a synergistic effect.

Continued media engagement can help promote local messages to all segments of the populations involved in adult, adolescent and infant MC scale-up. County and local champions have a crucial role to play in galvanizing action, changing social attitudes and norms, and will, therefore, continue being identified and involved in advocating for MC services. National VMMC TWG and county TWGs and sub-county steering committees shall ensure that advocacy efforts feature prominently in their work plans, and that the resources needed to make this happen are allocated. The leadership of the various committees shall designate advocacy activities as a central output for their teams. As the MC programme moves into new areas, advocacy messages need to be refined and localised in order to speak accurately to these new communities.

3.6 Human Resources

Medical Officers, Clinical Officers and Nurses shall be eligible for training to provide adult, adolescent and infant MC services through conventional surgery or using approved devices. These providers must be legally registered by the appropriate regulatory boards. Training on conventional surgical MC will be based on the Clinical Manual for VMMC under Local Anaesthesia. Training on EIMC will be based on The Kenya Clinical Manual for Early Infant Male Circumcision under Local Anaesthesia. Specific training guidelines will be developed for approved MC devices. Concerted efforts will be made to integrate the training in the pre-service curriculum in all medical training institutions. Consultant surgeons will provide oversight for MC services and participate actively in training, mentorship, supervision and evaluation of MC services where possible.

Capacity building based on routine competency assessment is essential for all cadres approved to provide MC services, to ensure a consistent standard of quality at all health facilities. The capacity for in-service training of providers will be built, as much as possible, through the existing training infrastructure. Training teams will be constituted at county level to build capacity of providers from facilities within their jurisdiction.

Medical training colleges and universities will be supported to integrate the appropriate competencies for comprehensive MC in their curricula. Proficiency in MC will eventually be a requirement for satisfactory completion of the respective courses. In order to achieve and maintain competency, trained providers and medical students will participate in routine VMMC settings. The training institutions could partner with organisations carrying out such activities including in-service training.

It is recommended that regional centres of excellence be established to provide the appropriate back-stopping in capacity building (training, mentorship, quality assurance and support supervision) for in-service providers. Ideally, these centres of excellence shall be designated at established high-volume sites.

To address shortage of providers and to replace those exiting the service, it is recommended that health care managers ensure that all facilities have at least two staff members trained in providing MC services. Ultimately, all health care providers who are eligible as per the national VMMC TWG will need to be trained on MC.

Considering that implementing partners often provide a large proportion of MC services, national and county governments will provide increased financial and human resources to support MC as the programme transitions towards sustainability. This will ensure smooth transition of the programme from implementing partners to the national and county governments. In addition, private medical practitioners will be engaged to provide MC services to those male clients who are willing to pay or prefer paying for the service. All private practitioners who provide MC for HIV prevention must be appropriately trained and certified as MC providers and be supported to report through the national health information system.

3.7 Financing

The national and county governments will commit funds during the life of the Kenya AIDS Strategic Framework, to support VMMC. Efforts will be made to leverage internal resources, such as funds from the central and devolved governments with external donor funding.

MC will continue to be provided at no cost to the consumer, but free services are unlikely to be sustained; in the longer term some degree of cost recovery will be instituted over time to ensure that health facilities can sustain the services when external support dwindles or ceases. Cost recovery will call for advocacy and a strategy for communicating information in a timely manner, especially in the traditionally non-circumcising areas. In traditionally circumcising communities, people expect to pay for this service. Caution should be taken to make sure this shift in financing where there is sufficient demand for the service would not undermine the programme. The procedure should be priced at a level that is manageable for the majority of people in the locality desiring the service, and appropriate systems of fee waiver used for those who may not be able to afford the services.

3.8 Commodities

Ensuring that adequate commodities are available for all aspects of the service is a critical element of providing quality MC services. The Clinical Manual for Male Circumcision under Local Anaesthesia and Kenya Clinical Manual for Early Infant Male Circumcision under Local Anaesthesia both outline the necessary medicines, supplies and equipment, encompassing all aspects of the minimum package of services described above. The health facilities and VMMC supporting partners must

ensure adequate stocks of VMMC supplies to meet expected demand at all times together with systems for monitoring, reviewing, and replenishing them. In the implementation of the first national VMMC strategy, commodities were supplied partially by implementing partners and partially by the MOH through the Kenya Medical Supplies Agency (KEMSA). During implementation of this strategy, concerted efforts will be made to ensure VMMC commodities are procured from a single unit. Any vaccines needed should be sourced from the Unit of Vaccines and Immunisation (UVI) and maintained in adequate stock.

3.9 Monitoring and Evaluation

It is important to monitor carefully the adult, adolescent and infant MC program at national, county and sub-county levels to track programme performance, outcomes and impact, and make necessary improvements. In order to track targets at all levels, an M&E framework with clear indicators and monitoring and evaluation strategies will be developed as a complement of this strategy. VMMC targets will be included in the Annual Work Plans (AWPs) at all levels to ensure accountability. The national TWG and county task forces will be accountable for monitoring progress and overseeing M&E and research activities within their areas of jurisdiction. In priority counties, sub county VMMC steering committees will be responsible for monitoring progress of the program and over seeing M&E activities.

The national TWG, in collaboration with the county TWGs, and sub-county steering committees shall maintain the M&E structures, which will be updated based on their targets and priorities. This system will continue to keep track of the progress of various aspects of service delivery and implementation. During this phase, more emphasis will be put on improving data quality and use of that data for programme improvement. Additional indicators on EIMC and devices will be developed and incorporated into the national health information system – the District Health Information Software (DHIS). Efficient service provision is a critical component of this initiative; thus a complimentary M&E system will be created to improve efficiency of service delivery by matching demand and supply, by redistributing service delivery teams and supplies accordingly.

It is important to monitor other programmatic indicators including but not limited to number of providers trained and number of facilities providing VMMC services. Since these indicators are not part of the DHIS, separate programme specific M&E instruments will be developed to allow implementing partners and appropriate MOH staff to collect and collate data on relevant programmatic/customised indicators and submit to the national level on a regular basis.

3.10 Operations Research

During the implementation of the last VMMC strategy, a number of operations research studies were conducted. The respective results improved understanding in the areas such as partial protection and risk compensation; safety, acceptability, and scalability of EIMC and MC devices. These studies have informed the programme and the transition to the new VMMC strategy where the focus of operations research will for instance include but not be limited to exploring the use of more devices as well as use of devices in HIV positive men, nomadic pastoralists, and males below 18 years.

Operations research on novel ideas to simplify the circumcision process or general service delivery will also be promoted.

Program evaluation and cost-effectiveness studies will be conducted periodically to determine the effect of rapid and widespread coverage on HIV transmission, health systems, and socio-cultural issues, and to guide efficient use of resources. Such studies will also assess the adequacy of the current level of funding. Similar studies will provide guidance on the scope of effort that would be needed to sustain the desired levels of circumcision coverage over the long term, with a view to aligning resources in order to achieve the desired public health effect. Other studies will be on demand creation to improve uptake of VMMC services and population-level effect of VMMC on reducing the incidence and prevalence of HIV.

Mid-term evaluation will be conducted to assess whether the implementation is on track. An end-term evaluation will be conducted to identify useful lessons to be incorporated in the next phase. To monitor longer-term impact of circumcision nationally and by county, VMMC specific questions will be included in national and regional surveys, such as the Demographic and Health Surveys (DHS), KAIS, and Behavioural Surveillance Surveys (BSS).

3.11 Quality Assurance and Quality Improvement

Adult, adolescents and infant MC quality assurance standards (manual and checklist) define quality for the programme. These standards provide the basis for measuring the quality of VMMC services and guidance for improving the quality of services.

The purposes of the VMMC quality assurance include:

1. Ensuring adherence to VMMC standards of provision of care (the ten VMMC standards as per WHO) minimum package of services and overall service quality.
2. Ensuring that safety for clients is optimised through provision of high quality services.

Based on the WHO's Male Circumcision Quality Assurance: A Guide to Enhancing the Safety and Quality of Services, the program has put in place a National Male Circumcision Services Quality Assessment Toolkit to assist facility managers and staff to assess and improve the quality of their services. The toolkit is used by programme and facility managers to guide the set-up of services and to improve ongoing service provision. In addition, it helps to measure progress towards meeting standards and can be used by external assessors to certify or accredit facilities. Several members of the sub county and facility health management teams have been trained on the toolkit to help them provide support supervision and quality assurance and control for VMMC services within their areas of jurisdiction. The toolkit will be updated to reflect the experiences from the first strategy and to include critical elements of MC devices and EIMC. Refresher trainings based on revised QA guideline will be conducted for those already trained while fresh training will be extended to the relevant people who have not yet been trained. All health facilities will be required to align adult, adolescent and infant MC services to these national standards by setting up quality improvement teams.

The strategy will make use of the revised national QA guidelines to provide unbiased assessment of service quality and to guide improvement efforts. It is recommended that programme/health facility managers, through the sub-county steering committees undertake VMMC specific QA self-assessment every quarter (or more frequently as warranted), using the National Male Circumcision Services Quality Assessment Toolkit, to determine the status of the set standards. In addition key elements of the QA standards will be incorporated into the routine supervision checklist for the MOH as part of internal quality assurance. Further, the national VMMC TWG has established a special MC devices sub-committee, which will recommend and monitor the introduction of prequalified devices, monitor AEs and advise on guideline development/revision to the national TWG.

County VMMC task forces will have the responsibility of ensuring that all health facilities including mobile outreaches are accredited annually based on the results of the QA assessments. Facilities not meeting the standards will undergo rigorous mentoring and other support as may be required. The National VMMC TWG will plan for an external QA assessment on a sample of health facilities and provide timely feedback for improvement and scaling up best practices.

SECTION IV
The Second Kenya VMMC Operational Plan 2014–2019

This section details the operational plan. It aligns each strategic objective with outcome and output results, description of necessary activities, responsible people or agencies, indicators, resources required and timelines.

4.1: Strategic Objective 1. To promote with clear, accurate information, safe and voluntary medical male circumcision for HIV prevention in Kenya.
Outcome result: By 2019, 95% of adult men 15-49 in Kenya are circumcised
(Indicator): percentage of adult men self-reporting that they are circumcised (disaggregated by age and county)
Output Result 1: By 2019 90% of the population has comprehensive information on male circumcision for HIV Prevention.
(Indicator): Percentage of individuals with correct knowledge, attitudes and practices on VMMC (disaggregated by age, gender, target audience, location and medium and information type)

Activity description	**Responsible/lead/ organization/agency/ or division/unit**	**Indicator (s)**	**Resources required**	**Scheduled Timeline**									
				14/5		15/6		16/7		17/8		18/9	
1. Review, update and roll out VMMC policies, standard operating procedures (SOPs), and guidelines (the new strategy and operation plan, MC under local anaesthesia, and PrePex SOP)	NASCOP, CHMTs Implementing partners	# of VMMC policies, SOPs and guidelines reviewed and updated #sensitization/ dissemination) meetings held	Technical Assistance Printing and dissemination Travel support	X	X	X							
2. Review, update and implement a VMMC strategic communication plan including an advocacy campaign targeting policy and opinion leaders in circumcising and non-circumcising communities.	NASCOP NACC, Department of Health Promotion, CHMTs, Implementing Partners	National VMMC communication strategy developed # advocacy campaigns in circumcising and non-circumcising communities done	Technical Assistance Production and printing of materials and dissemination Travel support		X								

3. Review, update, produce or develop and disseminate VMMC behavior change communication messages and materials through different campaigns and media channels	NASCOP, NACC, Department of Health Promotion, CHMTs Implementing Partners	#communications materials updated or developed # BCC campaigns conducted # media spots # of persons reached with at least one VMMC message or IEC material	Logistics for outreach services (cars, staff, and other logistics -Media spots - Meeting logistics		X	X	X						
4. Facilitate meetings and implementation of agreed actions/activities of the National and TWG and county/other regional MC taskforces as necessary	NASCOP CHMTs, Implementing Partners	# of national and regional stakeholder meetings held # of regional MC taskforces Established	-Logistics for Meeting -Travel support	X	X	X	X	X	X	X	X	X	X
5.VMMC service provision	NASCOP CHMTs, Implementing Partners	# VMMC services provided # VMMC clients tested for HIV # of VMMC clients experiencing one or more moderate or severe AE	Logistics for outreach services (cars, staff, testing kits, consumables and other logistics	X	X	X	X	X	X	X	X	X	X

4.2: Strategic Objective 2. To map communities and regions with large proportions of non circumcised men and innovatively target them with clear, accurate information, safe and voluntary medical male circumcision for HIV prevention in Kenya

Outcome result: By 2019, 80% of adult men 15-49 in traditionally non-circumcising communities are circumcised.
(Indicator): percent of adult men self-reporting that they are circumcised (disaggregated by age and county)

Output Result 1: By 2019, all communities and regions with high prevalence of non circumcised men are mapped out and targeted with comprehensive information and services on male circumcision for HIV Prevention.
(Indicator): Percent of individuals with correct knowledge, attitudes and practices on VMMC (disaggregated by age, gender, target audience, location and mechanism and information type)

Activity description	Responsible/lead/ organization/agency/ or division/unit	Indicator (s)	Resources required	Scheduled Timeline									
				14/5		15/6		16/7		17/8		18/9	
1. Identify and map out areas/regions with high prevalence of uncircumcised populations throughout the country	NASCOP, National Bureau of Statistics, CHMTs	National VMMC mapping document	Technical assistance Printing and Travel support			X							
2. Community involvement and mobilization e.g. stakeholder meetings, community entry activities, sensitization and mobilizations.	NASCOP Department of Health Promotion CHMTs Traditional council of elders	#sensitization/dissemination) meetings held # advocacy campaigns Done # of persons reached with at least one VMMC message/ IEC	Communication materials Meetings Travel support			X	X	X					
3. Training of traditional circumcisers on VMMC messaging, sexual risk reduction counseling, positive gender norms, and infection prevention	NASCOP Department of Health Promotion Traditional council of elders CHMTs	#of traditional circumcisers trained	Trainers Training materials Travel support				X	X	X				
4. Innovative service delivery to pockets of population with high prevalence of uncircumcised populations e.g. outreaches, mobile services, rapid results initiatives	NASCOP Department of Health Promotion, CHMTs Traditional council of elders	#outreach services provided # Mobile services provided # RRI or accelerated services provided	Logistics for out reach services (cars, staff, testing kits, consumables and other logistics -communication material - Meeting logistics		X	X	X	X	X	X	X	X	

4.3: Strategic Objective 3. To deliver safe VMMC and EIMC services.

Outcome result. By 2019, no more than 2% of adult, adolescent an infant males who undergo VMMC and EIMC experience moderate and severe adverse events
(Indicator). percent of men and infants with moderate or sever adverse events (during and post procedure)

Output Result 1. 4 Regional centres of excellence (Nyanza, Nairobi, North Rift and Coast) established for training, mentoring and quality assurance
Output Result 2. Quarterly national and regular regional QA supervision conducted
Output Result 3. National QA guidelines and tools updated and disseminated including facility accreditation process and regular assessment

Activity description	Responsible/lead/ organization/ agency/ or division/unit	Indicator (s)	Resources required	Scheduled Timeline									
				14/5		15/6		16/7		17/8		18/9	
1. Identify, assess and equip 4 sites to be used as regional centers of excellence on VMMC, EIMC and approved devices	NASCOP, CHMTs Implementing partners	#sites assessed as centers of excellence #sites equipped as centers of excellence	Technical assistance Printing and dissemination Travel support		X								
2. Conduct quarterly national and regular regional quality assurance activities	NASCOP and partners	# of national QA supportive supervision # of Regional supportive supervision	Logistics for Meeting Travel support	X	X	X	X	X	X	X	X	X	X
4. Review and update national QA guidelines and tools to incorporate lessons learnt, and components of EIMC, devices and traditional male circumcision	NASCOP Implementing partners	Revised national QA guideline Revised national QA tools	Technical assistance Printing and dissemination Travel support		X	X							
5. Disseminate national quality assurance guidelines and tools	NASCOP, CHMTs Implementing partners	# Dissemination meetings	Logistics for meetings -Travel support				X						
6. Formulate VMMC facility continuous assessment and accreditation process	NASCOP CHMTs	Facility assessment and accreditation plan	Technical assistance Printing and travel support	X	X								

4.4: Strategic Objective 4. Initiate EIMC services as a component of MNCH in eligible facilities in counties where EIMC is generally acceptable

Outcome result. By 2019, EIMC services are initiated, as a component of MNCH, in eligible facilities in counties where EIMC is generally acceptable
(Indicator). Number of facilities providing EIMC services as a component of MNCH services in counties where EIMC is generally acceptable.

Output Result 1. Mapping of EIMC demand done
Output Result 2. Facility needs assessment conducted in counties where EIMC is acceptable
Output Result 3. All eligible facilities in counties with high acceptability of EIMC equipped to provide safe EIMC services
Output Result 4. EIMC training guideline and plan developed and disseminated
Output Result 5. At least two staff in eligible facilities in counties where EIMC is acceptable trained and mentored to provide safe EIMC services

Activity description	Responsible/lead/ organization/agency/ or division/unit	Indicator (s)	Resources required	Scheduled Timeline									
				14/5		15/6		16/7		17/8		18/9	
1. Carry out EIMC demand mapping	NASCOP, Reproductive Health Unit National Bureau of statistics	EIMC demand mapping report	Technical assistance Printing and dissemination Travel support		X	X							
2. Carry out facility needs assessment	NASCOP, CHMTs Reproductive Health Unit National Bureau of statistics	Facility needs assessment report	Technical assistance Printing and dissemination Travel support			X	X						
3. Equip selected EIMC facilities in selected counties to provide EIMC services	NASCOP, CHMTs Reproductive Health Unit PEPFAR agencies and other funders	# facilities equipped	Equipment Contractual services				X						
4. Develop and disseminate EIMC training guideline and plan	NASCOP Reproductive Health Unit Implementing partners WHO	Training guideline document Training plan document	Technical assistance Printing and dissemination Travel support			X							
5. Integrate EIMC indicators into routine reporting system – District Health Information Software	NASCOP CHMTs HMIS Reproductive Health Unit	EIMC indicators in the DHIS	Technical assistance Printing and dissemination			X	X						
6. Train staff to provide safe voluntary EIMC services	NASCOP Reproductive Health Unit Implementing partners CHMTs WHO	# Staff trained and mentored on EIMC	Logistics for Meeting -Travel support			X	X	X	X	X	X		

4.5: Strategic Objective 5. To promote with clear, accurate information, safe and voluntary early infant male circumcision for reproductive health and HIV prevention in Kenya.

Outcome result. By 2019, 40% of male infants who come into contact with selected EIMC eligible facilities within 60 days after birth are circumcised
(Indicator). percentage of infant males circumcised within 60 days of birth (disaggregated by age and region)

Output Result 1. By 2019, all communities and regions with moderate or high acceptability of EIMC are targeted with accurate information about EIMC. (Indicator). percent of individuals with correct knowledge, attitudes and practices on EIMC (disaggregated by age, gender, target audience, location and mechanism and information type)

Activity description	Responsible/lead/ organization/ agency/ or division/unit	Indicator (s)	Resources required	Scheduled Timeline									
				14/5		15/6		16/7		17/8		18/9	
4.5. 1.1. Community involvement and mobilization e.g. stakeholder meetings, community entry activities, sensitization and mobilizations.	NASCOP Department of Health Promotion CHMTs Reproductive Health Unit	#sensitization/dissemination meetings held # advocacy campaigns done # of persons reached with at least on VMMC message/IEC	Communication materials Meetings Travel support	X	X	X	X	X					
4.5.2.1. Innovative EIMC service delivery	NASCOP Reproductive Health Unit CHMTs	#male infants circumcised	staff, EIMC kits, consumables and other logistics -communication material			X	X	X	X	X	X	X	X

Table 3. Estimated Programme Costs in US $ (2015 to 2019)

Year/ Component	2015	2016	2017	2018	2019
Consumable Costs (US$)	2,619,150	2,500,093	2,381,035	2,261,990	2,142,933
Non-Consumable Costs (US$)	1,091,312	1,041,705	992,098	942,496	892,889
Personnel Costs (US $)	1,200,444	1,145,876	1,091,308	1,036,745	982,178
Mobilization Costs (US$)	1,855,231	1,770,899	1,686,567	1,602,243	1,517,911
Overheads (US $)	1,309,575	1,250,046	1,190,518	1,130,995	1,071,467
Facility Management Costs (US$)	545,656	520,853	496,049	471,248	446,444
Programme Management Costs	2,291,756	2,187,581	2,083,406	1,979,241	1,875,066
National Coordination (US$)	47,727	50,114	52,619	55,250	107,147
COST / YEAR	10,960,851	10,467,166	9,973,600	9,480,209	9,036,034
TOTAL COST	49,000,000				

Source: Forceps Guided –Medial Male Circumcision Costing Tool Version2

Budget notes.

These figures are based on the best information available as of August, 2014. As new information becomes available, some of the assumptions on which the costing is based may be altered.

1. As per national strategic plan emphasis over this period will be continuing with the catch up phase and at the same time reaching to traditionally circumcising communities with emphasis on safety and HIV risk reduction counseling. Estimated number of target circumcisions is based on the national strategic plan 2014/15 -2018/19.
2. From scale-up experience so far we will need to have a mix of outreach, mobile and static service provision approaches. Assumptions made estimate that 80% of the demand will be met through static service delivery while 20% will be reached through outreach/ mobile service delivery models.
3. Mobile outreach team consists of a surgeon (medical doctor, clinical officer or nursing officer), surgical assistant, counselor and infection prevention officer. An annual remuneration cost per team is about US$ 41,000. This is based on actual cost estimates from partners implementing activities in Nyanza province.
4. Training cost per team, again based on partners' experience of training 2 teams at a time is about US$ 13,000.
5. Plan to train at least two teams for all the hospitals and health centre, estimated here to be a total of 600 health facilities with 40% of these facilities in Nyanza.
6. Assuming each mobile team capable of doing 8 circumcisions per day, 20 days per month gives 160 circumcisions per month or 1920 circumcisions per year or about 2000.
7. Cost for setting up a male circumcision unit whether mobile or static similar is estimated at about US$ 12,000.
8. Vehicle Cost US$ 30,000, Insurance at 5% (US$ 1,500), Fuel and Maintenance @ US$ 30 per day for 265 days = about US$ 8000 per year. These are based on experience from implementation during the first phase.
9. Cost of all consumables per MC estimated at US$ 15.
10. For public health facilities, it is to be expected that the consumables for MC might be used for other emergency surgical procedures. Assuming 50% are used for other procedures this would increase the average cost of consumables for MC's to US$ 22.5 (15 +7.5)

List of Annexes

Annex I. List of VMMC TWG Members and its subcommittees

#	Name	Affiliation
1	Dr. Martin Sirengo	NASCOP
2	Dr. Athanasius Ochieng'	NASCOP
3	Francis Ndwiga Benson	NASCOP
4	Dr. George Githuka	NASCOP
5	Dr. Kennedy Serem	Catholic Medical Mission Board (CMMB)
6	Dr. Odoyo June	Centers for Disease Control and Prevention (CDC)
7	Dr. Kiputo Chesang	Centers for Disease Control and Prevention (CDC)
8	Mathews Onyango	WHO/Consultant
9	Dr. Jared Moguche	EngenderHealth
10	Dr. Quentin Awori	EngenderHealth
11	Silas Achar	FHI360
12	Dr. Mores Loolpapit	Amref
13	Isaac Oguma	FHI 360
14	Anne Mikia	Internews
15	Dr. Kawango Agot	Impact Research Development Organization (IRDO)
16	Dr. Allan Gohole	Jhpiego
17	Geoffrey Menego	Jhiego
18	Dr. Norah Talam	WRP
19	Antony Ophwette	FHI360
20	Gordon Nyanjom	NRHS
21	Dr. James Odek	USAID
22	Dr. John Motoku	EARP
23	Fred Otieno	NRHS
24	Dr. Christine Kisia	WHO
25	Dr. Brian Pazvakavambwa	WHO
26	Dr. Rex Mpanzanje	WHO
27	Gilbert Urlike	UNICEF
28	Dr. Ken Rateng	Kenya Medical Training Institute
29	Dr. Mary Kariuki	PATHFINDER
30	Dr. Edmon Obat	NRHS
31	George Otieno	NRHS
32	Michael Owigar	Population Services Kenya

List of Validation Team - Safari Park 2 - 4 March 2015 Meeting

#	Name	Affiliation
1	Dr. Martin Sirengo	Head, NASCOP, MOH
2	Dr. Patrick Amoth	Head, Family Health, MOH HQ.
3	Dr. Ojwang Lusi	Chief Officer, Health, Kisumu County, MOH
4	Dr. Erick Ataya	Assistant Commissioner, Principal staff-Ruiru
5	Dr. Pius Musau	Senior Lecturer, Moi University
6	Dr. Charles Okal	CASCO, Siaya County, MOH
7	Dr. Wafula Jimmy	Medical Superitendent Asupe Hospital, Busia County, MOH
8	Dr. Athanasius Ochieng'	MOH - (HPU) Health Promotion Unit
9	Francis Ndwiga Benson	PVMMC Programme Manager NASCOP, MOH
10	Anna Kolodziej	Program Manager, Doctors Worldwide
11	Dr. Kennedy Serem	Catholic Medical Mission Board (CMMB)
12	Dr. June Odoyo	Centers for Disease Control and Prevention (CDC)
13	John Wanyungu	M&E Officer, NASCOP, MOH
14	Wilfred K. Towett	VMMC ELDER, Kericho County
15	Constance Were	SCASCO, Busia County, MOH
16	Monica Mwema	MOH - Nairobi
17	Lokwialuk Lotodo	CASCO, West Pokot County, MOH
18	Mathews Onyango	Consultant, WHO
19	Dr. Julius Oliech	CASCO, Siaya County -MOH
20	Fredrick Otieno	Research Director, NRHS
21	Fredrick Adera	Project Coordinator, NRHS
22	Dr. Mores Loolpapit	Ag. Chief of Party, Imarisha, Amref
23	Isaac Oguma	Secretariat, Nyanza region VMMC inter county
24	Phares Nkari	Health Promotion, MOH
25	Dr. Kawango Agot	Impact Research Development Organization (IRDO)
26	Christine Awuor	Program Officer, MOH, Nairobi
27	Clifton Kajama	Health Promotion, MOH
28	Dr. Mary W. Kariuki	PATHFINDER International (APHIAPlus Nbi/Coast)
29	Antony Ophwette	FHI360 (APHIAPlus Rift Valley)
30	Ann Kanyuga	Health Promotion, MOH
31	Christine Otieno	Kenyatta National Hospital
32	Dr. Isoe Maosa	Kenya Prisons Service Medical Officer
33	Fred Otieno	Nyanza Reproductive Health Society
34	Rahab W. Maina	Ag Deputy CCO, MOH
35	Dr. Brian Pazvakavambwa	HIV Technical Advicer (WHO)
36	Dickson Mutangili	RCO, KPS - VMMC Cordinator (Kenya Prisons Sevices)
37	Dr. Daniel Kabira	Chief of Party, KCCB-KARP
38	Leah Tielila	RCO, Kenya Wildlife Service
39	Dr Ken Rateng	Kenya Medical Training College (Senior Lecturer)
40	G. Kambo	Chairman, KIAMA Traditional Male Circumcision

41	Dr. Obat Edmon	Director, Nyanza Reproductive Health Society
42	Steve Kegoli	Program Officer, EDARP
43	Prof. Robert Bailey	Researcher, Nyanza Reproductive Health Society
44	Grace M Mwangi	Lecturer, Kenya Medical Training College
45	Daniel Oneya	CASCO Migori, MOH
46	Catherine Wanza	Field Officer, NACC
47	Winnie Muhoro	MOH HQs
48	Dr Odoyo June	Technical Advisor, CDC

49	Dr Odoyo June	Technical Advisor, CDC

Annex ii: Attendance list - 2014-2019 VMMC Strategy validation meeting March 2nd - 4th 2014

Annex iii: Target setting for the second National VMMC strategy (2014/2015-2018/2019)

1. Projected population in 2019 for different target age groups by counties were obtained from WHO-EPP. The target age groups in years are; 10-14, 15-19, 20-24 and 25-49
2. Male circumcision rate by counties was obtained from KAIS 2012

County	TOTAL POPULATION		MC rate	Uncircumcised		HIV prevalence
	10-14	Adult 15-49		10-14	Adult 15-49	
1. Baringo	44,733	144,527	95	44,733	6,793	3.0
2.Bomet	55,983	98,247	95	55,983	10,507	5.8
3. Bungoma	126,137	381,570	95	126,137	19,460	3.2
4. Busia	37,373	111,346	80	37,373	22,380	10.6
5. Elgeyo Marakwet	28,533	98,227	97	28,533	3,241	2.5
6. Embu	30,298	133,491	99	30,298	1,335	3.7
7. Garissa	24,651	106,483	`**	24,651	`**	2.1
8. Homa Bay	75,007	229,291	41	75,007	136,199	28.3
9. Isiolo	9,918	34,293	98	9,918	720	3.8
10. Kajiado	47,268	213,715	96	47,268	7,694	6.5
11. Kakamega	124,023	390,086	98	124,023	7,802	5.9
12. Kericho	54,798	219,658	89	54,798	25,041	3.4
13. Kiambu	89,123	494,269	99	89,123	4,448	3.8
14. Kilifi	88,637	284,494	100	88,637	284	4.4
15. Kirinyaga	27,768	155,400	98	27,768	3,108	1.8
16. Kisii	83,878	294,533	99	83,878	2,062	8.0
17. Kisumu	68,078	257,297	45	68,078	141,513	19.3
18. Kitui	73,683	219,312	100	73,683	-	3.6
19. Kwale	52,441	165,367	100	52,441	496	5.7
20. Laikipia	27,774	114,231	99	27,774	1,485	3.7
21. Lamu	7,213	28,673	98	7,213	459	0.9
22. Machakos	67,290	276,212	100	67,290	-	5.0
23. Makueni	60,432	201,468	99	60,432	1,410	3.7
24. Mandera	46,257	158,711	`**	46,257	`**	1.7
25. Marsabit	21,199	65,684	96	21,199	2,759	1.2
26. Meru	84,665	344,254	94	84,665	19,623	3.0
27. Migori	73,373	220,786	61	73,373	85,444	14.7
28. Mombasa	52,758	332,264	98	52,758	5,648	4.3
29. Muranga	55,927	242,642	96	55,927	9,706	5.2
30. Nairobi	194,551	1,196,772	92	194,551	93,348	8.0
31. Nakuru	110,801	482,008	94	110,801	27,474	5.3

32. Nandi	56,222	209,148	91	56,222	18,614	3.7
33. Narok	71,429	221,741	92	71,429	16,852	5.0
34. Nyamira	42,577	155,093	99	42,577	1,861	6.4
35. Nyandarua	40,848	152,108	93	40,848	11,104	3.8
36. Nyeri	37,122	194,971	98	37,122	3,899	4.3
37. Samburu	18,881	56,608	95	18,881	2,830	5.0
38. Siaya	61,246	199,962	45	61,246	109,579	23.7
39. Taita Taveta	18,235	82,114	100	18,235	-	4.9
40. Tana river	20,897	57,818	97	20,897	1,850	1.0
41. Tharaka-nithi	22,350	90,224	95	22,350	4,601	1.7
42. Trans Nzoia	63,929	222,755	94	63,929	12,920	7.1
43. Turkana	64,935	241,420	57	64,935	105,018	7.6
44. Uasin Gishu	61,256	274,196	91	61,256	24,952	4.3
45. Vihiga	39,589	123,018	95	39,589	5,659	3.8
46. Wajir	28,557	105,181	`**	28,557	`**	0.0
47. West pokot	44,700	126,626	94	44,700	8,231	2.8

`** Data not available

3. Goals.
   a. Increase MC rate to 80% for counties whose rate in 2012 (per KAIS) was below 80%
   b. Circumcise 80% of the uncircumcised men in counties where MC rate was above 80% in 2012 (Per KAIS)
4. Determination of target for counties with baseline MC rates below 80%
   a. Remember the goal is to increase MC rate from baseline rate to 80%
   b. Consider a county x where MC rate at baseline (KAIS 2012) is 44%
   c. Determine gap. 80%-44%= 36% (y)
   d. Determine projected population in 2019 (Get this from EPP)Z
   e. Total Number of MC to be done in the five year period=36%(y) x z=W
   f. Distribute the total MC to be done over 5 step years (2014/15, 2015/16, 2016/17, 2017/18, 2018/19). Based on intuition you can plan to circumcise equal numbers each year for five years. Alternatively you can circumcise decreasing numbers each year (we applied 22% for year 1, 21% for year 2, 20% for year 3, 19% for year 4 and 18% for year 5)
5. Determination of target for counties with baseline MC rates above 80%
   a. Remember the goal is to circumcise 80% of all the uncircumcised men
   b. Consider a county where MC rate at baseline (KAIS 2012) is 96%
   c. Determine projected population in 2019 (Get this from EPP)a
   d. Add 80% of 4% to the baseline MC rate (96%) to determine target coverage for the county = (80% of 4%) +96%= 99.2%
   e. Apply target from d. above to the projected population for 2019 from EPP (a) this is the total number of circumcised men in 2019
   f. Distribute the total MC to be done over 5 step years (2014/15, 2015/16, 2016/17, 2017/18, 2018/19). Based on intuition you can plan to circumcise equal numbers each year for five years. Alternatively you can circumcise decreasing numbers each year (we again applied 22% for year 1, 21% for year 2, 20% for year 3, 19% for year 4 and 18% for year 5)

6. The proportion of men in each age bracket to be circumcised each year is shown below

	2014/15	**2015/16**	**2016/17**	**2017/18**	**2018/19**
10-14	40.0%	40.0%	40.0%	40.0%	40.0%
15-19	40.5%	40.5%	40.5%	40.5%	40.5%
20-24	10.0%	10.0%	10.0%	10.0%	10.0%
25-49	9.5%	9.5%	9.5%	9.5%	9.5%

7. Final target for the strategic plan

Based on No 4 and 5 above, the total MCs to be done in all counties =1,001,757
Based on decreasing annual targets and proportionate contribution of each age group applied, the annual targets are shown below.

	Total	10 -14yr	15-19yr	20-24yr	25-49yr
year 1	220,387	88,155	89,257	22,039	20,937
year 2	210,369	84,148	85,199	21,037	19,985
year 3	200,351	80,141	81,142	20,035	19,033
year 4	190,334	76,134	77,085	19,033	18,082
year 5	180,316	72,127	73,028	18,032	17,130
Total	1,001,757	400,703	405,712	100,176	95,167

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