Voluntary Medical Male Circumcision for HIV Prevention (VMMC)

An Introductory Factsheet

November 2017

This fact sheet provides basic information on VMMC, an HIV prevention strategy for HIV-negative men. For more basic fact sheets in this series on emerging HIV prevention strategies visit www.avac.org/intro.

What is medical male circumcision?

Medical male circumcision is the removal of all or part of the foreskin of the penis facilitated by a trained health professional. The primary approach to medical male circumcision is a simple surgery. Additionally, non-surgical devices, placed by a health provider, can be worn for seven days to remove the foreskin, and are being used to conduct the procedure. The term voluntary medical male circumcision differentiates circumcision that is performed by a trained health professional from traditional circumcision, which is performed as part of a religious ritual or cultural rite of passage.

Resources and links

AVAC (www.avac.org)

Africans Telling the Truth About VMMC (www.vmmctruth.org)

Clearinghouse on Male Circumcision (www.malecircumcision.org

Why is VMMC a key part of combination prevention?

VMMC reduces men's risk of acquiring HIV from their female partners by roughly 75 percent. And when sufficient numbers of men in a community have undergone the procedure, then women's overall risk of acquiring HIV drops too. Once a man is circumcised, the procedure cannot be reversed and the partial protection continues throughout his lifetime. Epidemiologists studying the AIDS epidemic have developed models that show scaling up VMMC will have a major impact on rates of HIV acquisition in both men and women. The most current model suggests countries seek to achieve coverage of 80 percent of men aged 15-29, and then maintain this coverage while expanding medical circumcision to infants. In some communities with high coverage of VMMC, these models are turning into reality. Rates of HIV acquisition are dropping in men and women as VMMC coverage expands. Along with ART for people living with HIV, VMMC is a core component of combination prevention. Other elements of combination prevention include HIV testing, access to PrEP for HIV-negative people, immediate access to ART for people living with HIV, male and female condoms and harm reduction programs.

What are the data supporting VMMC for HIV prevention?

Three large-scale randomized controlled clinical trials enrolled a total of approximately 10,000 men in Kenya, Uganda and South Africa. Each of these trials used surgical techniques proven safe and effective over years of use in other contexts. Participants in these trials have been followed for several years. A follow-up study in Uganda showed the effect of circumcision climbed over time to a 73 percent decrease in HIV risk at five years. In Kenya, protection persisted at 60 percent at 4.5 years. A program in Orange Farm, South Africa found that VMMC had reduced the rate of HIV acquisition among men by up to 76 percent outside of the controlled trial setting. Recent data from this community show decreased rates of HIV acquisition in women, as rates of HIV in men have also declined. These follow-up studies did not identify increases in sexual risk behavior among men after VMMC. There have been an array of other studies exploring whether men undergoing VMMC change their rates of risk behavior—this is known as "behavioral disinhibition." Overall, this is not a major concern based on research to date.

What types of research are still ongoing?

Even though VMMC is a proven strategy, there is still ongoing research. To reach the targeted number of circumcisions needed to have the greatest impact on the global epidemic programs need to be efficient, cost-effective, and supported by communities. Current operational research is exploring these issues. There is also a range of evaluation studies focused on non-surgical devices. Two such devices, PrePex and ShangRing, have been "prequalified" by the World Health Organization, which signals that such a device has met international regulatory standards and is pre-approved for

purchase by global funding entities. These two devices are currently being offered to men in priority countries to varying degrees. For more on devices see our related fact sheets, available at *www.avac.org/vmmc-devices*.

Why does male circumcision work as an HIV prevention method?

There is no single answer to why medical male circumcision reduces men's risk of HIV infection during vaginal sex, but there are several possible explanations. The foreskin of the penis has many cells that are vulnerable to HIV infection. Removing the foreskin removes these "target cells" and makes the penile skin more durable, which may also reduce risk. Medical male circumcision also reduces rates of genital ulcer disease, which can increase HIV risk.

What is the status of VMMC implementation?

VMMC rollout was slow in the beginning; the pace increased between 2012 and 2014, but the rate of scale-up has varied since 2014. WHO reported roughly 20 percent fewer procedures in 2015 than in 2014. The most recent WHO update reports that the annual number of procedures increased by 9 percent in 2016. Totals for 2016 were estimated at around 14.5 million procedures. While this increase is welcome, there is significant progress needed to reach UNAIDS' ambitious target of 41 million by 2021. To meet this target, advocacy, action and resource commitments are urgently needed.

What are the key considerations for implementation advocacy for VMMC?

- *Strengthening national strategy.* Countries need to have updated estimates of their resource and program needs and gaps in order reach new target. These estimates should guide budgeting and planning at the national level, and funding and implementation planning with partners including PEPFAR and GFATM.
- *Improving VMMC data collection and sharing.* PEPFAR, national governments and WHO/UNAIDS all track annual numbers of VMMCs performed. Their respective numbers come out at different times and sometimes reflect different trends. There must better coordination of data collection and sharing amongst these key players to improve efficiency.
- *Clearer messaging.* Messages to country stakeholders about how to position VMMC must remain clear and consistent. Messages should clearly present the rationale for high-coverage goals and state the minimum level of service to be delivered to clients seeking VMMC. While VMMC is most ideal when it is the foundation for a platform of services, particularly for young men, it is also highly impactful as a one-off procedure. In fact, the successes to date have hinged on campaigns that saturate specific geographies and then move on.
- *Informing decisions about devices.* Each country needs to make an informed decision about if and how to add non-surgical devices to existing programs. Device cost and programmatic expansion needs to be calculated, and messages about surgical versus non-surgical procedures need to be clear and accurate.
- *Securing political and community leadership.* There is a need throughout the targeted countries for local, national and international champions to foster political will and demand for circumcision.
- *Demanding financial support to scale up VMMC.* This is currently available from the Global Fund, the Bill & Melinda Gates Foundation, PEPFAR, World Bank and UNITAID. Over time, greater reliance on national and local resources will be needed, and planning for this should be initiated or strengthened.
- *Engaging women.* Women play a pivotal role in VMMC's scale-up—influencing partners' and sons' decisions, and providing clear messages in the community. Messaging and demand creation campaigns need to keep women's role in mind. Women advocates can help amplify the benefits of high coverage rates of VMMC, which reduce women's risk.
- *Addressing VMMC for gay men and other men who have sex with men.* It remains unclear whether medical male circumcision could have an impact on HIV transmission among gay men and other men who have sex with men. Protection might depend on whether the individual is insertive or receptive during anal sex. Recent findings suggest circumcision might help reduce transmission in MSM who report a preference for insertive sex.

For regular updates on progress in VMMC scale-up, programming information, advocacy and more, visit the Male Circumcision Clearinghouse*, and sign up for the* Clearinghouse e-newsletter.