

# SCALING UP VOLUNTARY MEDICAL MALE CIRCUMCISION FOR EPIDEMIC CONTROL

## OVERVIEW

Three randomized controlled trials have demonstrated that voluntary medical male circumcision (VMMC) reduces the risk of HIV transmission from women to men by up to 60 percent.<sup>1,2,3</sup> In 2007, the World Health Organization (WHO) and UNAIDS recommended VMMC for scale-up as an HIV prevention intervention in 15 priority countries in Sub-Saharan Africa (SSA), with a high burden of HIV and low male circumcision prevalence. VMMC is embedded within a comprehensive HIV prevention package that includes HIV testing and counseling, screening and treatment for sexually transmitted infections, risk-reduction education, condoms, and linkage to HIV care and treatment services for HIV-positive clients.

VMMC is a critical component of the UNAIDS Fast-Track Strategy to End the AIDS Epidemic by 2030. Mathematical modeling suggests that achieving fast-track VMMC coverage targets by 2020 would prevent approximately 1.4 million new HIV infections by 2030.<sup>4</sup> VMMC is also saving costs by preventing HIV infection and, as a result, reducing costs needed for HIV treatment.<sup>5</sup> The U.S. Centers for Disease Control and Prevention (CDC) supports VMMC as a core component of the U.S. President's Emergency Plan for AIDS Relief's (PEPFAR) high-impact interventions to reduce HIV infections. CDC monitors and provides technical guidance to the 15 priority countries and is directly involved in implementation of VMMC in 13 of these.

## CDC'S ROLE

CDC implements research to enhance service delivery, evaluates strategies to generate demand for VMMC, assesses the feasibility and acceptability of device-based VMMC, and studies delivery models that are most sustainable; develops training materials and tools to ensure that VMMC services meet the accepted global standards for safety and quality; and works with ministries of health (MOHs) to assess quality of services, improve mobilization strategies, and use program data to make evidence-based decisions about VMMC service delivery.

## ACCOMPLISHMENTS / RESULTS

Under PEPFAR, CDC has directly carried out its mission through:

- Supporting over 9.4 million VMMCs through 2018 (see graph below). VMMC uptake has increased by over 1200% since 2010. Mathematical modeling suggests that all VMMCs done to date have already averted an estimated 230,000 new HIV infections through 2017 and were projected to prevent more than 1 million HIV infections by 2030.<sup>6</sup>
- Working in close collaboration with implementing partners, MOHs, and other stakeholders to ensure and maintain quality services through VMMC External Quality Assurance (EQA) assessments, CDC conducts routine monitoring to detect and manage adverse events and ensure voluntarism and linkage to HIV treatment.
- Analyzing data from the PEPFAR-supported Population-based HIV Impact Assessments (PHIAs) to determine the association between male circumcision status and HIV incidence. These data help to inform programmatic prioritization to maximize the impact of VMMC by targeting men with the highest HIV incidence.
- Supporting the evaluation of device-based VMMCs in several priority countries, helping to improve uptake of VMMC across countries;
- Conducting and supporting several studies testing interventions to increase demand creation for VMMC services among men.

<sup>1</sup> Auvert B, Taljaard D, Lagarde E, Sobngwi-Tambekou J, Sitta R, Puren A. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk : the ANRS 1265 Trial. *PLoS Med.* 2005;2(11):e298.

<sup>2</sup> Gray RH, Kigozi G, Serwadda D, et al. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial. *Lancet.* 2007;369(9562):657-666.

<sup>3</sup> Bailey RC, Moses S, Parker CB, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. *Lancet.* 2007;369(9562):643-656.

<sup>4</sup> Auvert B, Taljaard D, Lagarde E, Sobngwi-Tambekou J, Sitta R, Puren A. Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk : the ANRS 1265 Trial. *PLoS Med.* 2005;2(11):e298.

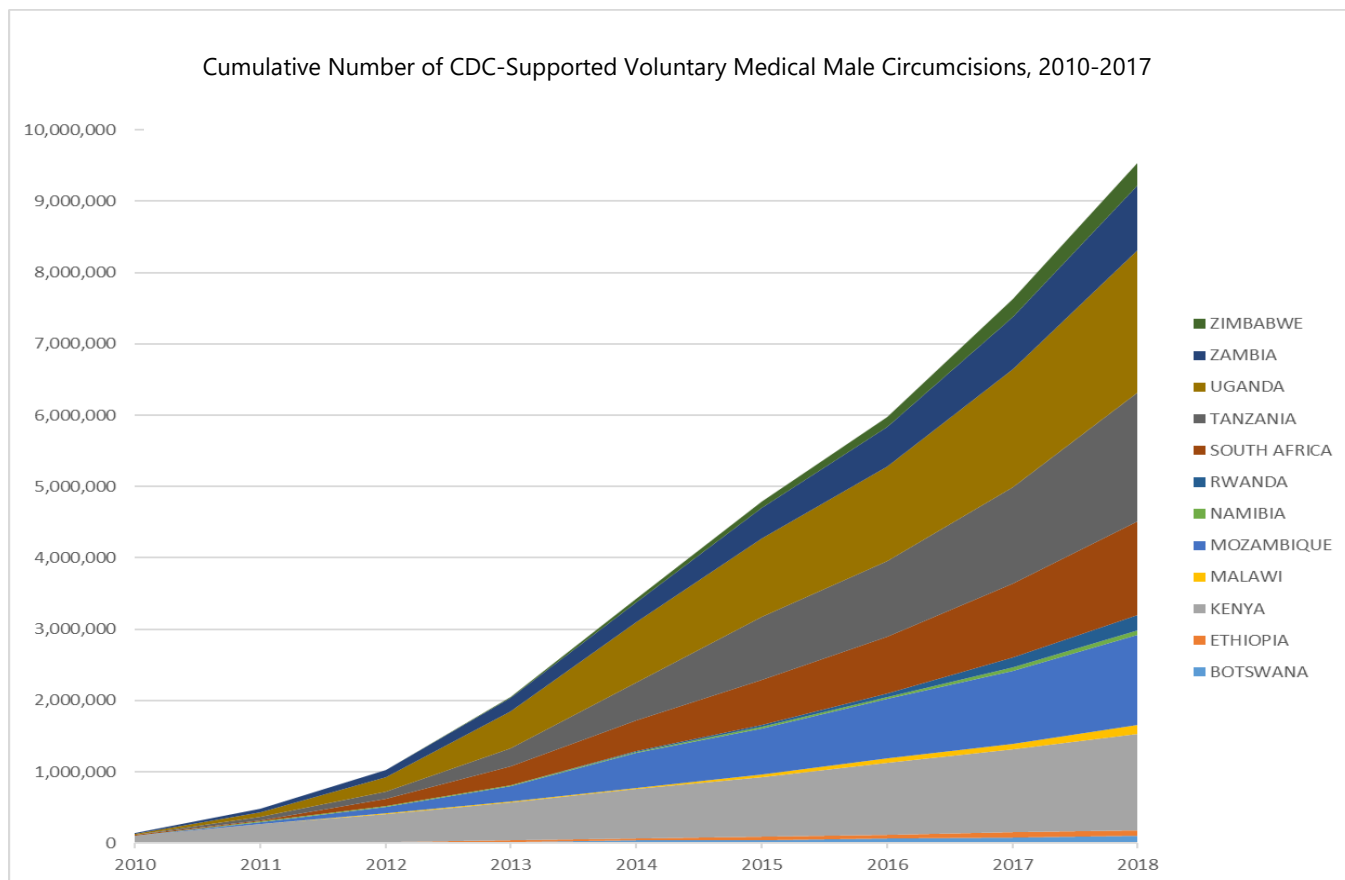
<sup>5</sup> Gray RH, Kigozi G, Serwadda D, et al. M

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<sup>6</sup> Bailey RC, Moses S, Parker CB, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. *Lancet.* 2007;369(9562):643-656.

or HIV Prevention. WHO Progress Brief. July 2018. WHO/HIV/2018.

- Working closely with partners to provide and disseminate technical guidance for VMMC.



**FUTURE EFFORTS**

CDC will continue to:

- Partner with UNAIDS, MOHs, and other stakeholders to scale up VMMC in SSA priority countries.
- Support efforts to identify and target the age groups where VMMC services will have a more immediate impact on the HIV epidemic,
- Support countries and implementing partners as they test interventions to drive demand, introduce new circumcision devices, and create sustainable models for VMMC.
- Continue to provide quality assurance and improvements to ensure the safe delivery of VMMC services.
- Work with countries in areas where they reach saturation (circumcision rates of 80 percent or more of men, ages 15 to 29 years), and sustain the prevention benefit of VMMC to adolescent boys 10 to 14 years of age.

**BENEFITS OF OUR WORK**

Some of the benefits of CDC's work on VMMC include:

- Building local capacity in priority countries strengthens their national governments' response to HIV and provides a platform to improve health across a variety of infectious diseases.
- Generating knowledge regarding effective strategies to reach and connect men with health services, which is particularly critical, as men are difficult to reach and do not typically seek health and preventive services.
- Strengthening and increasing clinical expertise, particularly surgical skills, across a broad range of service providers.
- Reducing the HIV-disease burden worldwide, improving people's lives, and helping to protect the health of the American people.