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#### **Background**

Voluntary medical male circumcision (VMMC) is a one-time prevention measure that has demonstrated reductions of HIV acquisition of approximately 60% in males engaging in heterosexual sex and is an essential part of the Joint United Nations Program on HIV/AIDS (UNAIDS) strategy for ending AIDS by 2030.1-3 Since 2007, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) has supported the majority of VMMCs performed in 15 prioritized countries in Southern and Eastern Africa (Figure 1).4 Countries include Botswana, Eswatini, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Tanzania, Uganda, Zambia, and Zimbabwe.

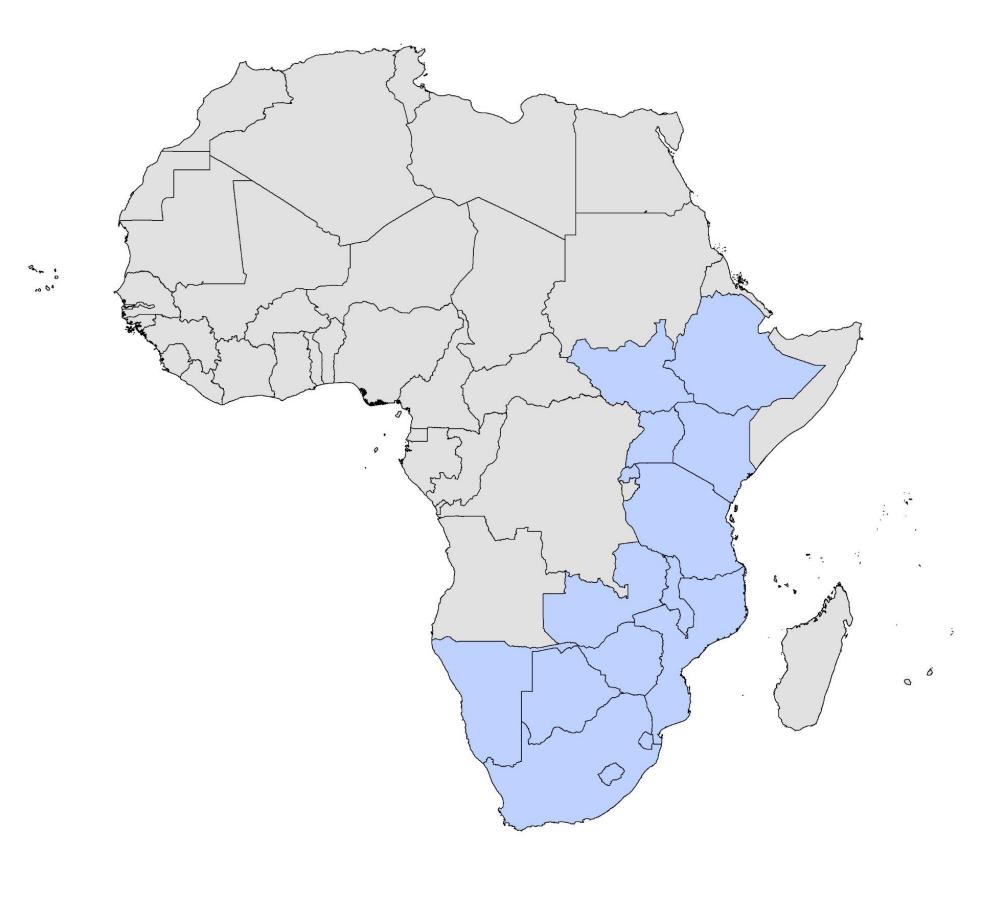


Figure 1. 15 Countries prioritized for VMMC in Eastern and Southern Africa

In 2020, the COVID-19 pandemic, caused by the 2019 novel coronavirus (SARS-CoV-2), led to a disruption in PEPFAR supported VMMC services in Southern and Eastern Africa. In April 2020, in accordance with local mitigation policies, PEPFAR recommended countries consider delaying VMMCs to minimize SARS-CoV-2 transmission risk.<sup>5</sup>

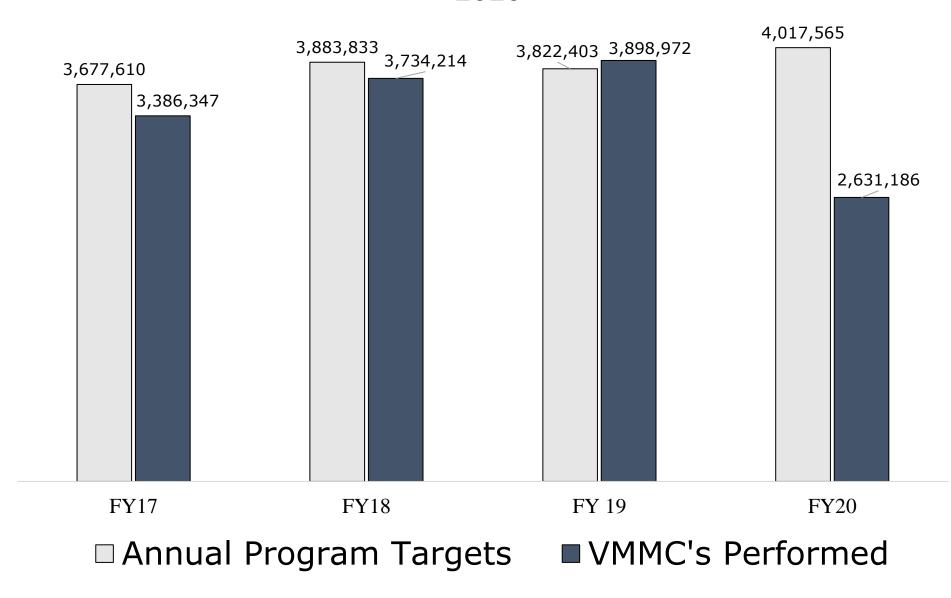
## Methods

PEPFAR Monitoring, Evaluation, and Reporting data were analyzed to characterize VMMC service disruption during the COVID-19 pandemic among 15 sub-Saharan African countries. PEPFAR program data are reported every quarter in accordance with the U.S. government FY October 1 through September 30. VMMC annual and quarterly performance in PEPFAR fiscal year (FY) 2020 were compared to FYs 2017 to 2019, including the number of males circumcised and achievement of national targets.

#### **Results**

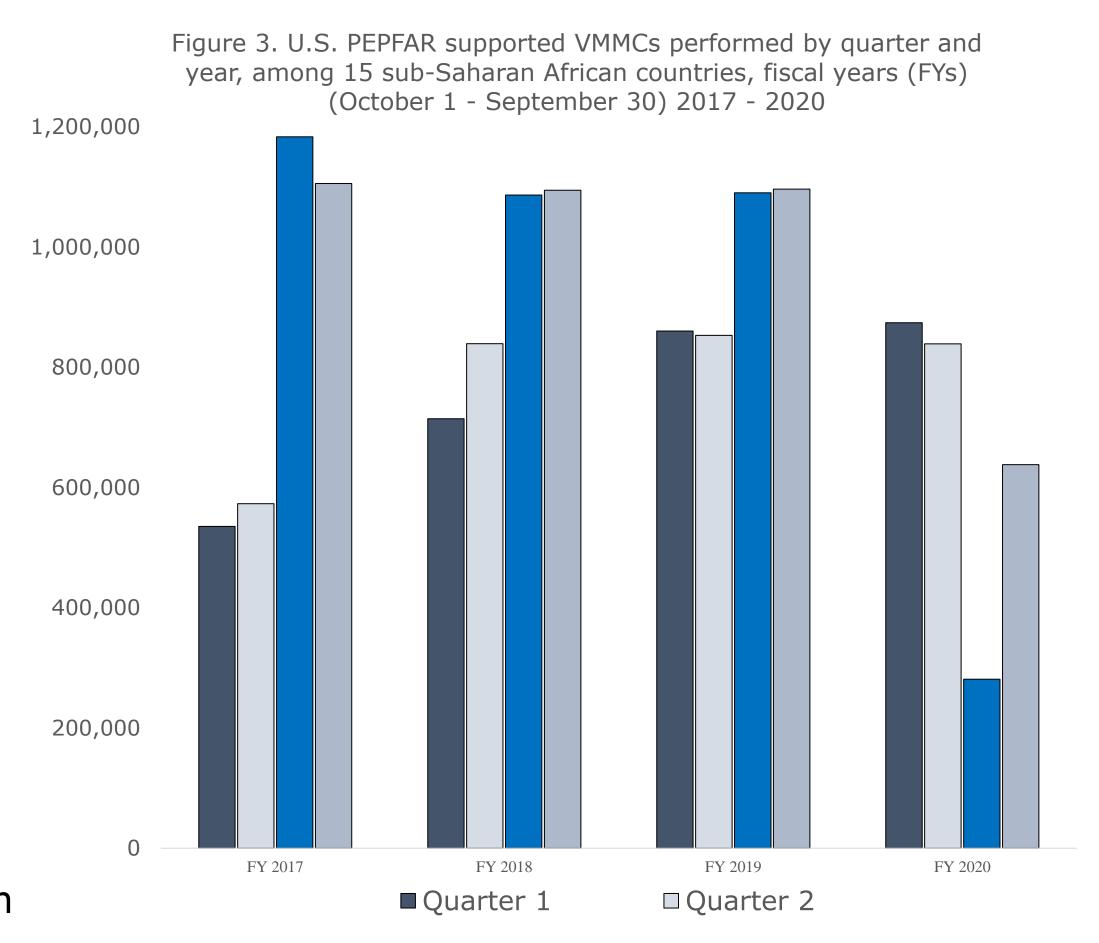
Among all 15 countries combined, annual VMMC performance decreased 33% from 4,017,565 VMMCs performed in 2019 to 2,631,186 performed in 2020. Globally, 65% of the VMMC annual target was met in 2020 compared to 102% in 2019 and the majority, 12 of 15 countries, did not meet their annual national target. 2020 had the lowest achievement of annual targets for the period of 2017 – 2020 (Figure 2).

Figure 2. Annual U.S. President's Emergency Plan for AIDS Relief-supported voluntary medical male circumcisions and program targets among 15 sub-Saharan African countries, fiscal years (FYs) 2017 - 2020



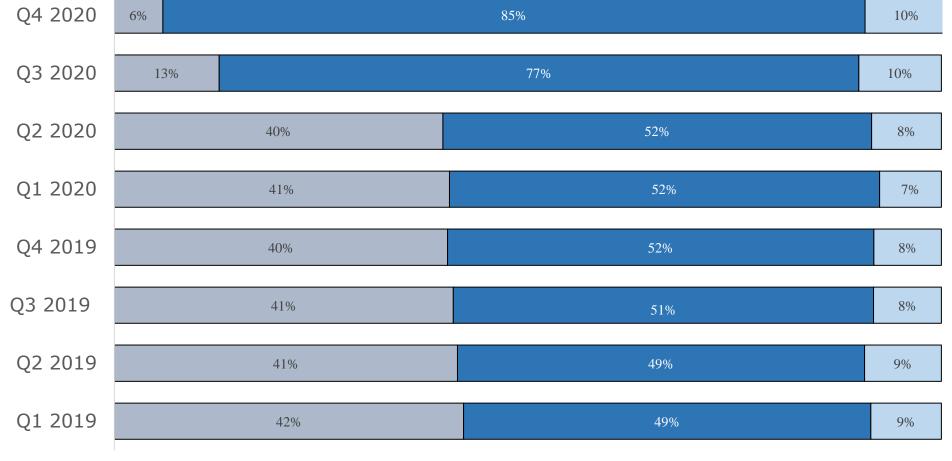
Among the 12 countries that did not meet their national target in 2020, ten countries either surpassed or achieved at least 90% of their annual target in 2019. Countries such as South Africa and Zimbabwe, that exceeded their targets (101% and 105% respectively) in 2019, achieved less than half (31% and 43% respectively) of their annual target in 2020.

Historically, Quarters 3 and 4 were the highest performing of the FY, performing on average 60% of the annual VMMC total in FYs 2017 – 2019. Quarter 3 2020 had the most significant reduction, with 13 countries experiencing a reduction in services ranging from 18% to 100% compared to the same quarter in 2019.



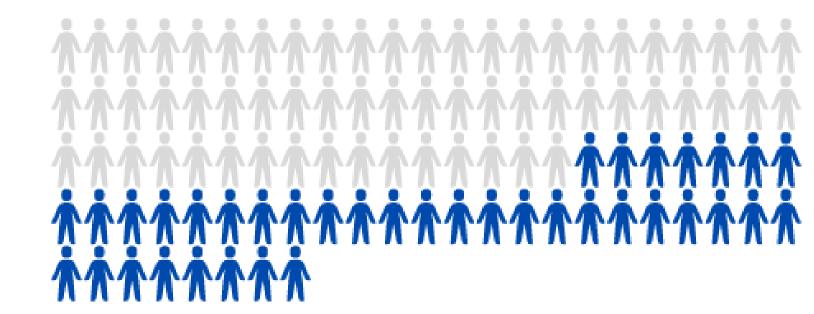
In 2020, VMMC programs successfully adapted programs to adhere to new PEPFAR guidance to stop VMMCs in males aged 10-14 years and had the largest decline in VMMCs among males under 15 years of age in the history of the program (Figure 4).

Figure 4. Proportion of VMMCs performed by age group and quarter, 2019 - 2020



**□**<15 **■**15-29 **□**30+

The total number of sites performing VMMCs and the number of clients circumcised per site were analyzed for 2020 across 14 countries. One country, South Sudan, was excluded from this analysis because it does not report disaggregated VMMC performance data at the site level. Among 14 countries, the number of clients visiting VMMC sites decreased 62%, from a mean of 1,519 clients per site during January through March (Quarter 2) 2020, to a mean of 577 clients per site during Quarter 3.



62% reduction in mean # of clients receiving VMMC services per site, FY20 Q3 vs. Q2

## Conclusions

The COVID-19 pandemic caused substantial disruptions to VMMC services in 2020 due to response measures limiting programmatic activities. PEPFAR recommends VMMC sites resume when national mitigation measures can be adhered to and that programs implement mitigation efforts to ensure safety to continue providing services in the context of COVID-19. Continued decreases in VMMC performance may lead to short term increases in susceptible populations, and potential reductions in male circumcision coverage.

# References

1. Bailey RC, Moses S, Parker CB, Agot K, Maclean I, Krieger JN, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomized controlled trial. Lancet. 2007;369:643-56. 2. Gray RH, Kigozi G, Serwadda D, Makumbi F, Watya S, Nalugoda F, et al. Male circumcision for HIV prevention in men in Rakai, Uganda: a randomized trial. Lancet. 2007;369:657-66. 3. 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:e298. 4. World Health Organization, Joint United Nations Programme on HIV/AIDS. New data on male circumcision and HIV prevention: policy and programme implications: WHO/UNAIDS Technical Consultation on Male Circumcision and HIV Prevention: Research Implications for Policy and Programming, Montreux, 6–8 March 2007: conclusions and recommendations. Geneva: World Health Organization; 2007 5. US President's Emergency Plan for AIDS Relief. PEPFAR Technical Guidance in Context of COVID-19 Pandemic. 2020. Accessed October 19, 2020. Available at: https://www.state.gov/wpcontent/uploads/2020/04/04.17.20 PEPFAR-Technical-Guidance-during-COVID.pdf 6. US President's Emergency Plan for AIDS Relief. Monitoring, evaluation, and reporting indicator reference guide, version 2.4. Washington, DC: US President's Emergency Plan for AIDS Relief; 2020. Accessed January 11, 2021. Available at: https://datim.zendesk.com/hc/en-us/articles/360000084446-MER-Indicator-Reference-Guides

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