

Project SOAR's Voluntary Medical Male Circumcision Portfolio

Randomized controlled trials have shown that voluntary medical male circumcision (VMMC) reduces males' risk of HIV acquisition by about 60 percent,¹ and follow-on studies have shown that this level of protection increases over time to reach 74 percent.² In March 2007 the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) recommended male circumcision as an additional method of HIV prevention for men, and urged countries with low male circumcision prevalence and generalized HIV epidemics to rapidly scale up VMMC programs in the context of combination HIV prevention. VMMC is now a central pillar in a multi-national strategy to reduce the transmission of HIV in high-prevalence regions of eastern and southern Africa.

Project SOAR has developed an extensive VMMC portfolio to support multiple countries with data to make informed policy and programmatic decisions about VMMC that address their specific needs and environments. The portfolio encompasses three types of activities: 1) VMMC modeling and costing; 2) tools and capacity strengthening; and 3) data dissemination and use.

A critical component of Project SOAR's VMMC portfolio is research utilization. At the country level, Project



RICHARD LORD

A man learning about VMMC as an HIV risk reduction strategy.

SOAR seeks to generate data to support planning, implementing, and monitoring VMMC programs and increase access to and use of this data through user-friendly interfaces and dissemination strategies. Simultaneously, SOAR aims to advance VMMC as a vital prevention strategy by filling important data gaps in the global discourse around VMMC.

VMMC MODELING AND COSTING

Population and cost estimates for VMMC planning in Mozambique, Namibia, Kenya, Lesotho, and Zimbabwe

Recent analyses in several sub-Saharan African countries have prompted reexamination of the target age groups and subnational regions for country VMMC strategies and operational plans. To help governments in the five countries address current implementation realities and strategically plan and monitor their programs, Project SOAR is providing impact and target population size estimates for VMMC—as well as program cost, cost per infection averted, and cost-effectiveness—disaggregated by province or district and age. These estimates are based on the Decision

Research Partners: Avenir Health and Palladium

Location: East and Southern Africa

Study Duration: 2014–2018

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Makers' Program Planning Tool (DMPPT) 2.0 model, which has previously been used in other countries in partnership with ministries of health, U.S. President's Emergency Plan for AIDS Relief (PEPFAR) teams, VMMC implementing partners, and other stakeholders (see Journal collection and articles). The results of the modeling exercises in these five countries are being presented to in-country stakeholders for use in VMMC planning.

December 2014–March 2018

The cost of VMMC service provision by private providers in South Africa

Private practitioners have offered VMMC to clients for a number of years and are able to do so in a safe, efficient, and cost-effective way. Private sector providers present a strategic potential to increase access to VMMC services, as they attract clients who may not necessarily go to public facilities for services, thereby reaching pockets of the population that may have otherwise gone unreached.

The private sector unit cost for VMMC service provision, however, and the cost variation across the private sector are not well known. Additionally, the cost drivers are not sufficiently understood. Project SOAR conducted a costing analysis of VMMC service provision at 10 private sector facilities in three provinces (Gauteng, Mpumalanga, and KwaZulu Natal) as a follow on to a costing study of male circumcision through public facilities in South Africa. Results from this study are important for informing discussions with private insurance providers in South Africa about standardization of VMMC tariffs. It also provides a strong rationale for reimbursing private sector providers for circumcisions of uninsured clients.

May 2016–August 2017

TOOLS AND CAPACITY STRENGTHENING

Site capacity/site utilization tool

Project SOAR is finalizing a user-friendly, Site Capacity and Productivity Assessment Tool (SCPT) that PEPFAR staff, government counterparts, and VMMC implementing partners can use on an ongoing basis to determine a site's current capacity to provide VMMC services, and compare it to what should be its

optimum capacity. The tool measures the efficiency of each site based on the relation between VMMC output levels and the inputs available (or capacity) of each site, and uses this ratio to produce site-specific utilization rates and productivity indices. The purpose of this tool is to determine whether VMMC sites are efficiently using resources, and to ensure that the supply of services is sufficient to meet demand. A preliminary version of this tool was developed in an Excel format and Project SOAR is finalizing the tool. The tool will be available online and in a mobile application.

February 2017–May 2018

Geo-spatial information system (GIS) dashboard for VMMC

Project SOAR is leveraging available geo-coded VMMC data to develop a tool to enable easy visualization and mapping of VMMC data. Using data visualization techniques, the online VMMC GIS dashboard allows PEPFAR teams, ministries of health, national AIDS control programs, and VMMC implementers to access available national and sub-national data on important program indicators. These indicators can include VMMC coverage, need, and costs; population density; HIV prevalence and incidence; transport routes; service utilization; and health facility staffing and stock-outs in "real time." The dashboard has been designed and piloted in partnership with stakeholders in South Africa, and allows users of any technical level to easily access, map and interpret VMMC data for more effective programming. It visualizes data captured from Data for Accountability, Transparency, Impact, and Monitoring, and other VMMC tools such as the DMPPT 2.0 and the SCPT (once complete and online). The dashboard provides data visualizations from VMMC priority countries with DMPPT 2.0 and SCPT applications in order to facilitate strategic planning and resource allocation. Furthermore, the dashboard will be adapted and tailored to the needs of various stakeholders as requested and can include additional VMMC indicators as needed.

December 2015–July 2018

Online tool for VMMC planning

Project SOAR is generating VMMC coverage estimates and projected targets for five-year age bands and at national and district levels for about 10 of the 14

VMMC priority countries* using the DMPPT 2.0 Online. This online tool, updated every year with program data, models the impact and coverage levels, and estimates VMMC targets by age for countries to achieve national overall VMMC objectives. The tool allows users to set a variety of target scenarios and to download Excel-based output tables that presents the specific age-disaggregated targets, coverage levels, VMMC uptake rate, impact estimates (HIV infections averted), and increases in overall VMMC coverage. The output table also produces specific data to be used as inputs into the PEPFAR Data Pack for country operational plan development processes. The DMPPT 2.0 Online also produces results that provide specific analyses around various age prioritization strategies. This online tool will allow VMMC stakeholders to look up VMMC targets, coverage, and impact projections for each country. <http://avenirhealth.org/policytools/DMPPT2/>

November 2015–May 2018

CAPACITY STRENGTHENING

Project SOAR is convening a series of regional workshops to present an integrated package of the above three tools and strengthen local capacity to use them. Participants are drawn from central-level public sector VMMC programs and implementing partners, and engage in practical, real-world exercises highlighting how the tools can provide data that address issues and challenges met by VMMC programs. The expectation is that, once trained, the participants will be able to cascade the training down to sub-national units and VMMC sites. In addition, SOAR is hosting a series of webinars to introduce the tools and train U.S. Government, WHO, UNAIDS, World Bank, Bill & Melinda Gates Foundation, and various staff at ministries of health and implementing partners on the use of the three tools. Finally, SOAR is creating a short video tutorial describing the operation and features of the SCPT to be included in a Data for Decision Making module for the U.S. Agency for International Development VMMC Online Training Hub.

*WHO and UNAIDS identified 13 priority countries for scale-up of VMMC: Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe. PEPFAR is supporting activities to implement VMMC in these 13 countries and also in Ethiopia (Gambella Province only), making a total of 14 priority countries.

DATA DISSEMINATION AND USE

The DMPPT 2.0 has been successfully used in various countries to improve targeted VMMC programming. As the new tool package is introduced, SOAR aims to understand how they are used to inform programmatic and policy level decision-making. Through qualitative research methods, SOAR is documenting how the tool suite has been used to inform decision making, and highlighting the barriers and facilitators of use. SOAR will conduct a formative stakeholder/decision mapping exercise, combined with follow-up support and monitoring after tools are launched.

In addition, SOAR's VMMC portfolio has produced the following publications and webinars to foster the use of VMMC data for decision-making:

Briefs and reports

Estimating the costs of providing voluntary medical male circumcision in South Africa

Tchuenche, M. et al. 2016. *Project SOAR Results Brief*. projsoar.org/resources/southafrica-vmmc-privcstng-resbrief/

Private sector costing of voluntary medical male circumcision in South Africa

Tchuenche, Michel and Steven Forsythe. 2017. *Project SOAR Final Report*. projsoar.org/resources/private-sector-costing-vmmc-south-africa/

Journal collection and articles

VMMC for HIV Prevention: Introducing New Mathematical Models—PLOS Collections

<http://collections.plos.org/vmmc2016>

Project SOAR-related articles include:

- **Assessing progress, impact, and next steps in rolling out voluntary medical male circumcision for HIV prevention in 14 priority countries in eastern and southern Africa through 2014**
Kripke, K et al. 2016. *PLOS ONE* 11(7): e0158767. <http://bit.ly/2eNZEZ5>
- **Cost and impact of voluntary medical male circumcision in South Africa: Focusing the program on specific age groups and provinces**
Kripke, K. et al. 2016. *PLOS ONE* 11(7): e0157071. <http://bit.ly/2G4UyoQ>

- **Estimating client out-of-pocket costs for accessing voluntary medical male circumcision in South Africa**
Tchuenche, M. et al. 2016. *PLOS ONE* 11(10): e0164147. <http://bit.ly/2erm87X>
- **Impact and cost of scaling up voluntary medical male circumcision for HIV prevention in the context of the new 90-90-90 HIV treatment targets**
Kripke, K. et al. 2016. *PLOS ONE* 11(12): e0169500. <http://bit.ly/2dT99J2>
- **Modeling costs and impacts of introducing early infant male circumcision for long-term sustainability of the voluntary medical male circumcision program**
Njeuhmeli, E. et al. 2016. *PLOS ONE* 11(7): e0159167. <http://bit.ly/2o5aSPp>
- **Modeling impact and cost-effectiveness of increased efforts to attract voluntary medical male circumcision clients ages 20–29 in Zimbabwe**
Kripke K. et al. 2016. *PLOS ONE* 12(1): e0169696. <http://bit.ly/2eOGbZE>
- **Modeling the impact of Uganda’s safe male circumcision program: Implications for age and regional targeting**
Kripke, K. et al. 2016. *PLOS ONE* 11(7): e0158693. <http://bit.ly/2sn87y9>
- **The cost of voluntary medical male circumcision in South Africa**
Tchuenche, M. et al. 2016. *PLOS ONE* 12(1): e0169710. <http://bit.ly/2eCozEO>
- **Voluntary medical male circumcision for HIV prevention in Malawi: Modeling the impact and cost of focusing the program by client age and geography**
Kripke, K. et al. 2016. *PLOS ONE* 11(7): e0156521. <http://bit.ly/2EjQt3X>
- **Voluntary medical male circumcision for HIV prevention in Swaziland: Modeling the impact of age targeting**
Kripke, K. et al. 2016. *PLOS ONE* 11(7): e0156776. <http://bit.ly/2BnfRmF>

Webinar

Maintaining HIV prevention benefits of male circumcisions by incorporating VMMC into routine newborn and adolescent health service delivery (2015)

“Sustainability implications for different VMMC plans”

Rachel Sanders, Katharine Kripke

This presentation, targeted to policymakers and implementers throughout the VMMC field, explored what it will take to make increases in VMMC coverage sustainable over the long term. Countries will need to choose between programs focused on circumcising newborns, adolescents, or a combination of the two, based on a number of factors, including cost, implementation, feasibility, acceptability, health system capacity, and funding sources.

<http://healthcommcapacity.org/wp-content/uploads/2015/07/Client-Age-and-Human-Resource-Needs-for-Sustainability.pdf>

REFERENCES

1. Weiss, H. A. et al. 2008. “Male circumcision for HIV prevention: from evidence to action?,” *AIDS* 22(5): 567–574.
2. Gray, R. et al. 2012. “The effectiveness of male circumcision for HIV prevention and effects on risk behaviors in a posttrial follow-up study,” *AIDS* 26(5): 609–615.

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Population Council leads the Project SOAR consortium in collaboration with Avenir Health, Elizabeth Glaser Pediatric AIDS Foundation, the Johns Hopkins University, Palladium, and The University of North Carolina at Chapel Hill.

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