Background

In response to clear evidence that voluntary medical male circumcision (VMMC) can reduce the risk of HIV transmission in heterosexual men by approximately 60%, numerous countries in Eastern and Southern Africa have initiated the scale-up of VMMC services for adolescent and adult males. To meet the demand, the international community has sought ways to increase the efficiency of VMMC service delivery.

An expert committee convened by the World Health Organization outlined six elements to increase efficiency of VMMC services through their 2010 report, Models for Optimizing the Volume and Efficiency for Male Circumcision Services. SYMMACS was designed to assess the extent of adoption of these six elements in VMMC scale-up in four countries: Kenya, South Africa, Tanzania, and Zimbabwe. The first round of data collection took place in 2011 and is the basis for this interim report.

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Key Findings

Adoption of the six elements of efficiency of VMMC service delivery

Results from the 2011 data collection showed that the four countries differed in their adoption of WHO’s six elements for increasing voluntary medical male circumcision (VMMC) efficiency.

1. South Africa, Tanzania, and Zimbabwe demonstrated optimizing the use of facility space, as measured by the presence of multiple bays in the operating theater.

2. South Africa and Zimbabwe had adopted the practice of using purchased pre-bundled supplies and disposable instruments.

3. Kenya and Tanzania practiced task shifting, or allowing well-trained clinicians who are not medical doctors to perform VMMC.

4. All four countries demonstrated task-sharing, or allowing non-physicians to conduct certain aspects of the procedure.

5. South Africa employed the use of electrocautery to stop bleeding instead of ligaturing sutures, and Zimbabwe had also partially adopted this procedure.

6. All four countries implemented the forceps-guided surgical method in the vast majority of cases.

Positive evidence on quality and safety of VMMC services

SYMMACS provided positive evidence of quality and safety across all four countries:

- Providers in all countries adhered to the surgical protocols for performing VMMC (with one exception: correctly tying the surgical knot).

- Tanzania and Zimbabwe achieved close to 100% HIV testing and counseling during VMMC services, whereas Kenya and South Africa continue to work toward this goal.

- VMMC sites in all four countries scored high on the provision of group education for HIV prevention.
Areas for improvement of VMMC services (in two or more countries):

- The systems for monitoring and reporting adverse events (AEs) were inadequate.
- Sites often lacked post-exposure prophylaxis (PEP) and guidelines for administering it onsite.
- Occasional lapses were observed in maintaining a sterile operating field.
- Providers tended not to follow WHO guidance on a post-operative review of vital signs and use of protective eye gear.
- WHO service delivery guidelines were not readily available at many VMMC sites.

Recommendations

Adoption of efficiency elements
To achieve the six efficiency elements for VMMC services, we recommend the following improvements:

- **Task-shifting**: Work toward changing the national policy in South Africa and Zimbabwe that currently prohibits task-shifting (i.e., allowing well-trained clinicians who are not medical doctors to perform all aspects of the procedure).
- **Task-sharing**: Provide more systematic training of non-medical personnel to assist in all aspects of the procedure (e.g., administering local anaesthesia and completing interrupted sutures).
- **Electrocautery**: Consider expanding the use of electrocautery in Kenya and Tanzania, if appropriate given local conditions.
- **Pre-bundling of kits**: Encourage the more widespread use of purchased pre-bundled kits with disposable instruments in Kenya and Tanzania.

Program Management

- **Effective monitoring and reporting of adverse events**: Train personnel in the use of consistent definitions to classify AEs (e.g., WHO classification); improve staff performance in consistently screening for, recording, and reporting AEs, especially severe AEs; and provide external monitoring of this process.
- **Supervision**: Establish a system of regular supervisory visits to each VMMC site, including reporting of adverse events.

- **Training**: in training of primary providers, emphasize (1) correct tying of surgical knot and (2) maintenance of a sterile field at all times, in addition to the current curriculum.
- **Protocols and guidelines**: Ensure that key guidelines (e.g., WHO protocol for performing VMMC, national sexually transmitted infections guidelines, guidelines for administration of PEP) are available at or near the operating theatre.
- **Provider burnout**: Identify ways of diversifying the work of primary providers to avoid burnout from an exclusive focus on performing VMMC.

**Next Steps**

Next steps for SYMMACS include finalizing the data collection for 2012 in a minimum of 30 sites per country during high-volume periods and disseminating the complete set of findings.

Data collection from 2012 will allow for further assessment of capacity in these four countries to deliver VMMC services and continued progress toward the adoption of the six elements of efficiency. The final SYMMACS report, which will include data from both 2011 and 2012, will provide further insights into the dynamics of VMMC service delivery. These insights and lessons learned will inform the continuous improvement of VMMC service delivery in these four countries and throughout the region of Eastern and Southern Africa.