#### CASE STUDY

Developing Continuous Quality Improvement Teams to Improve South Africa's Voluntary Medical Male Circumcision Programme







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# **Executive Summary**

This case study will document the process of developing continuous quality improvement (CQI) teams to monitor and improve the Voluntary Medical Male Circumcision (VMMC) programme in South Africa.

CQI is a management philosophy for improving the quality of VMMC services by reducing waste, increasing efficiency and improving internal and external satisfaction. It is an ongoing process that evaluates how the VMMC programme operates and continuously improves its processes. And it is critical to the development and sustainability of VMMC in South Africa.

There are often other crucial HIV prevention activities competing with VMMC for both time and resources, which is why it has proven critical to develop a broad understanding of and demand for CQI. This case study will examine how Medical Male Circumcision Scale and Sustainability to Avert New HIV Infections (MMC SUSTAIN), in collaboration with various levels of the Department of Health (DoH) and partner organisations, is growing interest in and recognition of the importance of CQI.



# At a Glance

CQI is an essential component of sustainable health interventions, including VMMC. However, when MMC SUSTAIN began providing support to South Africa's VMMC programme, few CQI teams were operational and most were concentrated in districts supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR).

In collaboration with partners and district DoH, MMC SUSTAIN project managers began developing the CQI teams. These multidisciplinary groups were drawn from district or sub-district officials, in an effort to ground CQI services within those offices and increase official engagement with the VMMC programme.

The training was essential to prepare team members to take on their responsibilities, but it was first necessary to develop localised materials. Ongoing training opportunities have helped to keep CQI teams engaged and to improve their capabilities.

To deliver on their responsibilities, including conducting assessments, monitoring services and facilitating mentorships, MMC SUSTAIN project managers have provided critical support to the CQI teams. These efforts have also created opportunities to build a stronger commitment to CQI at a district level.

In South Africa, CQI is increasingly being recognised as essential to the sustainability of VMMC services. However, challenges remain, including finding time and resources to conduct the CQI activities.

# Continuous Quality Improvement in the Context of South Africa's VMMC Efforts

In 2010, the South African government adopted VMMC as an additional HIV prevention strategy to halt the spread of HIV among men. Officials have set an ambitious target of circumcising at least 80% of HIV-negative men by 2022 as a key intervention in the effort to achieve epidemic control (South African National AIDS Council, 2017).

VMMC is an important element of that effort, as evidence shows VMMC effectively reduces HIV acquisition among heterosexual males by 60%, with indirect benefits for their female partners (Auvert et al., 2008). It is the most efficacious biomedical prevention intervention, in addition to being one of the most cost-effective under South Africa's Investment Case (South Africa Department of Health, South African National AIDS Council, 2016).

In South Africa, the VMMC programme fits within the country's combination HIV approach, which includes biomedical, socio-behavioural and structural interventions.

The National Department of Health (NDoH) has overall responsibility for VMMC quality assurance programmes, including CQI, which ensures that all stakeholders are held responsible and accountable. The Provincial Department of Health (PDoH) guarantees an adequate budget for all quality assurance activities and specifically oversees the functionality of the district CQI teams, while the district DoH maintains operational oversight of the VMMC programme.

Within South Africa's VMMC programme, the fundamental purpose of CQI is to ensure that the VMMC services that clients in South Africa are receiving meets the highest level of safety and is of the best quality, in line with NDoH and World Health Organization (WHO) guidelines. Though this responsibility for patient safety is shared by the range of actors involved in providing and overseeing VMMC services, the CQI teams offer a focused commitment to ensuring and improving the quality of those services.

To contribute to the development of CQI, the NDoH expects all VMMC implementing partners to have experience in quality measurement and improvement and to build the capacity of district DoH staff for self-efficacy and management of these quality improvement systems.

The CQI teams should be multidisciplinary, with the ability to evaluate the range of services offered by VMMC facilities. The teams provide action plans and corrective measures, including targeted training, that help facilities address any problems or respond to identified challenges. The teams monitor facility performance, including adverse event (AE) reports and client feedback to identify potential challenges. They also assist in organising mentorships and ongoing training that expand the capacity of health workers to provide VMMC services and improve the quality of those services.

Members of the CQI teams are drawn from district and sub-district DoH officials, depending on availability. Assuming responsibility for improving the quality of the VMMC programme underscores the importance of that service and helps inculcate a district-level commitment to CQI, while also building institutional memory of best practices and approaches that will outlast current partner involvement.

At the same time, because the teams are multidisciplinary, members can bring their expertise to bear on other health services, leading to the overall improvement in quality.

## MMC SUSTAIN Introduction and Context

South Africa's VMMC programme was at a point of transition in 2018, as it shifted from a focus on scaling up to prioritising sustainability.

To support this transition, the Bill and Melinda Gates Foundation provided assistance through the MMC SUSTAIN programme, a consortium led by Genesis Analytics and the Foundation for Professional Development that provides technical assistance at both national and sub-national levels to help achieve programme sustainability.

When MMC SUSTAIN began its work, CQI teams were already recognised as an important component of district-level HIV prevention efforts but were mostly operational only in some PEPFARsupported districts.

Along with the NDoH, partner organisations, district and sub-district DoH officials, MMC SUSTAIN recognised that reviving or building district-level CQI teams was both a critical opportunity to contribute to the sustainability of VMMC programmes, but also to encourage quality improvement efforts across all HIV prevention programmes.

# **Developing CQI Teams**

## **Building the Teams**

In collaboration with its partners, MMC SUSTAIN project managers began by assessing the capacity of existing district-level CQI teams. In some locations, there were opportunities to revive the previously existing teams, while in other districts it was necessary to start from scratch.

### The specific responsibilities of the team helped clarify the necessary roles.



**Team leader:** Ensures that the team functions effectively and that all members contribute to the CQI processes. *Recommended cadre: HIV, AIDS, STI and TB (HAST) manager* 



Safety of Procedure Assessor: Oversees surgical procedures and emergency supplies Recommended cadre: Clinician



Quality of Services Assessor: Considers whether the infrastructure is appropriate for VMMC service provision and whether adequate supplies of medicines and commodities are available for non-surgical aspects of VMMC service provision; oversees infection prevention and control *Recommended cadre: Clinician* 



HTS Assessor: Oversees group education, risk assessment, informed consent processes and HIV testing, as well as whether a client is eligible to pass through all the elements of comprehensive VMMC services in an efficient manner *Recommended cadre: Clinician or counsellor* 



Quality of Programme Assessor: Assesses standards to ensure data are used for planning and improvement of service delivery, moderate and severe AEs or complications are reviewed and that the facility has a functional supply and equipment ordering system.

Recommended cadre: Monitoring and evaluation or health information official

#### **CQI Team Development Best Practices**

- CQI team roles are filled by district or sub-district officials, helping to develop a more sustainable VMMC service that is owned by the district DoH. Tapping district officials ensured the CQI teams will outlast the departure of MMC SUSTAIN or any other partners, while also building institutional memory not only of best practices in CQI but also in VMMC. It also helps to ensure that VMMC will not be siloed off but recognised as an essential component within the district's overall HIV prevention efforts.
- The MMC SUSTAIN project managers, on a district-by-district basis, have helped to determine what capacity exists and how granular the CQI services should be. In some districts, they have been able to develop sub-district CQI teams, which can facilitate more regular assessments and training than district-level teams. However, at the sub-district level, it can be difficult to find enough team members with experience in VMMC service provision, necessitating a tradeoff between specialisation and frequency of assessments.
- Though serving on the CQI teams was a component of their overall responsibilities, many of the selected members were cautious about assuming the positions, whether out of concern about the time commitment or because of their unfamiliarity with the role. In many districts, it helped to have senior district officials assign people to the CQI teams, formalising the process and deepening official engagement with the VMMC programme.

#### **CQI Tool Development**

Guided by the NDoH VMMC Quality Assurance Assistant Director, the MMC SUSTAIN quality assurance/quality improvement (QA/QI) advisor reviewed the NDoH CQI tools that had been adapted from the WHO/PEPFAR guidelines to make them relevant for the South African context. Some of the outcomes of these reviews included the development of a site readiness tool to assess the suitability of a facility to provide VMMC services even before the initiation of VMMC services and, more recently, the inclusion of COVID-19 risk reduction components into the CQI assessment tools.

#### **CQI Tool Best Practices**

• To ensure that all team members were familiar with the revised tools, orientation training was completed in a few districts, initially by the QA/QI advisor. The responsibility then cascaded to the project managers in their respective districts and sub-districts.

### Training

Training was an essential component of this process, giving the CQI teams the confidence to perform their responsibilities. It proved particularly essential for members who did not have a background in VMMC. MMC SUSTAIN project managers helped to coordinate formal VMMC and CQI training through the Regional Training Centres for the identified CQI team members. This offered team members the needed familiarity with VMMC services for conducting CQI in the facilities.

#### **CQI Training Best Practices**

- In many instances, the heads of the facilities providing VMMC services were included in these trainings, which proved helpful in easing subsequent assessments of their facilities. Ultimately, all relevant stakeholders need to buy into how the quality of VMMC services are measured and to understand the CQI tools and processes.
- Finding a location to conduct the training proved difficult, as the regional training centres where the sessions were supposed to be conducted were often understaffed and under-resourced. MMC SUSTAIN officers took on additional responsibilities of organising and facilitating the sessions in many instances.
- These trainings were not one-time endeavours. Regular training is built into the CQI process to keep teams updated on best practices and evolving tools.
- In some districts, there was not a clear plan for the quality improvement activities the newly trained CQI teams were meant to perform. In these instances, MMC SUSTAIN project managers coordinated with HAST managers and other district DoH officials to develop a framework for these activities.

#### Assessments

#### **1. Routine Facility Assessments**

Facility assessments, utilising an NDoH-approved, standardised VMMC assessment tool, are foundational CQI activities. Quality improvement assessment tools for safe male circumcision cover eight major areas or standards:

**Leadership**, **Planning and Sustainability** - Evaluates the facility and district management processes and accountability mechanisms.

Management Systems - Assesses the availability of all prescribed guidelines and standard operating procedures, the human resources on-site, demand creation plans and the availability of quality improvement systems

Monitoring and Evaluation - Assesses overall data management and availability of data tools on-site

**Registration, Group Education and Information, Education and Communication (IEC)** -Determines whether group education meets standards and considers the availability of age-appropriate IEC material

Individual Testing and Counselling - Assesses if HIV testing is done according to South African HIV Testing Services guidelines, including VMMC message reinforcement on wound care, AE identification and post-circumcision follow-up visits.

Infrastructure, Supplies, Equipment and Environment - Evaluates the infrastructure, availability and storage of all VMMC commodities and client records.

Surgical Procedure - Assesses the pre-operative client preparation, the surgical room and whether the surgical procedure is conducted as per NDoH requirements

Infection Prevention and Control (IPC), and Waste Management - Evaluates whether staff are adhering to infection prevention guidelines and protocols for disposal and management of waste

Based on these day-long baseline assessments, the CQI teams work with facilities to develop Quality Improvement Plans (QIP) responding to the identified challenges. Baseline assessment findings determine the level and frequency of quality improvement support required at each facility (see Table I). The CQI teams also establish a timeline for improvement and conduct followup assessments to determine progress.

# Recommended level and frequency of CQI team support based on facility assessment findings

Provision of Site-Level CQI Support and Technical Assistance	Weekly support	<ul> <li>Weekly support is recommended for sites with significant quality gaps (red dashboard).</li> <li>Data criteria: &lt;70% for MMC procedure and/or; &lt;70% for infection control and/or; &lt;50% average compliance with all components/indicators.</li> <li>Frequency of support: Need-based monthly coaching visits accompanied by CQI teams</li> <li>Frequency of CQI re-assessments: Monthly</li> <li>Approach: Use of quality improvement methodologies and tools; Track MMC indicators; Identify gaps; Test changes; Integrate, hold monthly CQI meetings; Use of data to inform improvement and decision making; Client assessment (history taking and examination)</li> </ul>
	Monthly support	<ul> <li>Monthly support should be provided to all sites with moderate quality gap (amber dashboard).</li> <li>Frequency of support: Quarterly CQI support visits alternated with quarterly CQI re-assessment visits.</li> <li>Frequency of CQI re-assessments: Quarterly</li> <li>Approach: Site will be requested to forward their CQI meeting minutes/reports to the district</li> </ul>
	Quarterly support	<ul> <li>Quarterly support will be provided to all sites with minimal quality gaps (green dashboard).</li> <li>Frequency of support: Quarterly. Sites will develop an overall program-level QIP.</li> <li>Frequency of CQI re-assessments: Quarterly</li> <li>Benchmarking/Showcasing Results: Quarterly support sites will be asked to share their best practices at annual meetings and learning sessions.</li> </ul>

#### 2. Site Readiness and Capacity Assessments

CQI teams can also contribute to preparing facilities to perform VMMC services by conducting readiness assessments. This centralises a key task while helping to expand VMMC services. MMC SUSTAIN has helped teams develop specific tools to evaluate site readiness, including during the COVID-19 pandemic, when sites also had to meet additional national safety guidelines to prevent the spread of the virus.

The teams are also trained to diagnose under- or overperformance and to help facilities reach equilibrium. Sites operating above capacity may be at risk of safety breaches due to overworked providers and counsellors burdened with too many clients.

Other sites operate below capacity, which can signal an inefficient use of scarce resources. A root cause analysis examines service delivery processes, staff shortages, demand creation or saturation of the catchment area for inefficiencies.

#### **CQI Assessment Best Practices**

- It is recommended that facilities have site-level CQI teams. The district teams empower their facility-level counterparts to take greater accountability for identifying and addressing potential problems even outside of these assessments.
- Conducting assessments can be challenging, given the constraints on time and transportation that members of the CQI teams face in some districts. MCM SUSTAIN project managers have played a crucial role in encouraging and coordinating these assessments.

### **Ongoing Monitoring, Mentorship and Support**

CQI is not limited to on-site assessments. District-level CQI teams continuously monitor a variety of performance indicators at VMMC facilities to be alert to potential gaps or challenges. These include reports on AEs and quarterly assessments of client perceptions of and overall satisfaction with VMMC service points.

**Training**: The district CQI teams provide pertinent training to VMMC service providers based on gaps identified during the assessments, alongside regular training designed to share learnings and improve the overall capacity of the facilities in the district.

**Stakeholder coordination**: The CQI teams also organise regular meetings of DoH officials, donor agencies, implementing partners and other representatives to review how VMMC sites are performing across standard areas and to discuss successes and challenges. This has proven effective in addressing common issues and sharing best practices.

Mentorship: During the training process, clinicians are required to secure a mentorship before they can be certified to perform circumcisions. This step ensures that new clinicians can translate theoretical skills into practice. CQI teams play an important role in connecting trainees to mentors.

#### **Ongoing Support Best Practices**

• In some districts, MMC SUSTAIN provided the mentors on the condition that the district would ultimately take over this responsibility. This helped to rapidly expand the pool of eligible VMMC clinicians, while also setting in motion the development of a more sustainable mentorship process.

# Conclusion

The CQI teams are contributing to improving the overall quality and capacity of VMMC services across South Africa and deepening the recognition of the importance of continuous quality improvement. MMC SUSTAIN has contributed to these efforts, ensuring that all stakeholders now agree on the importance of CQI and the need to report on it regularly. Participation in CQI activities is now written into the RT35 National Treasury contracts to provide VMMC services that local organisations have with the government.

Despite these efforts, there is still work to be done in maintaining engaged, high-functioning CQI teams to improve the quality and ensure the sustainability of VMMC programmes. District cooperation remains uneven and the COVID-19 pandemic has temporarily sidelined VMMC efforts in some locations.

The CQI teams can continue to build district commitment to VMMC through their ongoing assessments and trainings, as well as their regular meetings and consultations, which offer an opportunity to highlight and address persistent challenges. It is a process that will take time.

# **In Summary**

#### **1.** Establishing multidisciplinary CQI teams is critical to the success of CQI activities

Though CQI is essential to providing sustainable, high-quality VMMC services, it takes effort and commitment to build and maintain. Mandating quality improvement activities in the creation of any programme is a crucial starting point.

Multidisciplinary teams contribute to the success of CQI activities. The assessments and evaluations draw on different skills, necessitating a variety of expertise. Establishment of these teams provides opportunities for learning by exposing a wide range of district and sub-district officials to VMMC, increasing the awareness and the impact of the programme.

#### 2. Inclusive and comprehensive training and mentorship is critical

Training, particularly localised training, is essential. It becomes even more critical when members of the CQI team do not have a background in VMMC.

By integrating as many people as possible into early training efforts, it helps create demand for CQI and eases the process of conducting assessments and creating action plans. CQI teams also play an important role in connecting trainees to mentors to fulfil the requirement to achieve certification to perform circumcisions.

#### 3. The benefits of CQI teams can extend beyond VMMC programmes

Because these teams are drawn from a wide range of backgrounds, they can also leverage their CQI skills to evaluate and improve other HIV prevention efforts and other health areas.

There are multiple opportunities in the process of creating and maintaining CQI teams to draw district officials into the process, including commissioning them to write letters assigning people to the teams and organising and involving them in training and mentorships. This helps compel stronger district ownership of the CQI teams and the VMMC programme.

Ongoing coordination with stakeholders provides a forum for implementing partners to share challenges and successes, as well as to recognise efforts made to improve quality.

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