Future of Voluntary Medical Male Circumcision In Southern Africa

Pathways to Sustainability In a Transformed Financing Landscape

Technical Brief

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World Health Organization
UNAIDS

Contents

Executive Summary

This technical brief addresses the sustainability of voluntary medical male circumcision (VMMC) programmes in eastern and southern Africa. It builds on the WHO and UNAIDS VMMC sustainability tools and the 2021 baseline implementation findings across 15 priority countries, which identified country specific strengths, gaps and pathways toward sustainability (African Development Bank, 2024). The central argument is that VMMC sustainability requires strategic transformation rather than programme abandonment, operationalized through a differentiated, four-tiered approach as follows:

- Preservation and optimization, where programmes remain functional with domestic ownership and funding.
- Emergency stabilization and phased transition, where capacity exists.
- Strategic rebuilding with integration-first approaches, where systems have collapsed.
- Locking in VMMC gains by embedding the programme into routine care, such as in Kenya and the United Republic of Tanzania, which have achieved ≥80% coverage.

Core position: VMMC remains cost-effective and warrants sustained investment

Findings from five independent models confirm that VMMC continuation remains cost-effective, and often cost-saving, through 2030 and beyond in most high burden settings, with the discounted cost per infection averted ranging from cost-saving up to $8000 (Bansi-Matharu et al., 2023; Stover et al., 2025). The 60% efficacy of VMMC in reducing female–to–male HIV transmission, combined with one-time permanent protection, provide critical insurance against treatment system vulnerabilities despite 81% regional viral suppression (Auvert et al., 2005; Bailey et al., 2007; Gray et al., 2007; UNAIDS, 2024b).

Operational reality demands differentiated strategic response

As of June 2025, based on the VMMC Framework Progress Update, rapid operational assessments indicated that 13 of 15 priority countries experienced severe programme disruptions following the withdrawal of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), with only South Africa and, to a lesser extent, Botswana maintaining functional services (UNAIDS/WHO Technical Working Group, 2025). Most programmes funded by the United States Agency for International Development (USAID)—about 80–90%—experienced immediate cessation when funding was stopped. The consequences included massive loss of a trained workforce, supply chain breakdowns and the collapse of quality assurance and

monitoring systems. This operational reality necessitates honest acknowledgement of constraints alongside evidence-based sustainability pathways.

Building on the WHO and UNAIDS VMMC Sustainability Framework

These pillars are *not a new framework*. They operationalize and update the sustainability building blocks already articulated through WHO/UNAIDS work with countries, reflecting the additional constraints and opportunities arising from the post-2025 financing environment (WHO & UNAIDS, 2023).

Pillar 1: Domestic funding and innovative financing mechanisms. Sustained VMMC delivery depends on a minimum level of domestic co-financing to anchor programmes within national systems. This protects them during donor contractions, as demonstrated by South Africa's RT-35 model, which maintained services despite declining external funding. A co-financing pathway, with minimum domestic contribution thresholds plus donor match ratios, is proposed. Structured donor transition frameworks, with gradually increasing domestic contributions over 3–5 years, are therefore essential to ensure continuity, leverage donor resources and embed VMMC as a core public health investment.

Pillar 2: Health system integration and task shifting. This approach reduces unit costs, mitigates constraints on the specialist workforce and enhances integration within primary health-care platforms. Evidence from Lesotho and Zimbabwe confirms that, with standardized training, clear scopes of practice and appropriate supervision, task shifting to primary care nurses and clinical officers maintains clinical quality while significantly improving long term programme sustainability. (Feldblum et al., 2014).

Pillar 3: Evidence-based geographical targeting. Subnational incidence analysis reveals substantial geographical variation. This geographical heterogeneity creates strategic opportunities: 23% of the population live in areas with HIV incidence above 0.35%, where VMMC remains highly cost-effective, while reallocation of resources from areas with incidence below 0.05% (29% of the population) enables optimized targeting (Stover et al., 2025).

Pillar 4: Comprehensive men's health gateway. This approach maximizes value and justifies multisector investment, positioning VMMC as an entry point for HIV prevention and treatment linkage and comprehensive primary health-care services. It addresses the critical gap whereby more than half of men aged 24–35 living with HIV in many countries remain unaware of their status. The approach leverages the demonstrated capacity of VMMCs to reach 40 million males who otherwise have minimal contact with health systems (Cornell et al., 2017; WHO & UNAIDS, 2024).

Pillar 5: Social franchising and private sector participation. To achieve long-term sustainability, VMMC must move beyond an exclusive reliance on public sector delivery and donor funded nongovernmental organizations (NGOs) and leverage

the private sector through social franchising and structured public–private partnerships (PPPs) to expand access and enhance service delivery efficiency.

A 2026–2030 Accountability Compact for VMMC Sustainability

Achieving sustainability requires coordinated stakeholder action with clear accountability: The Global Fund to Fight AIDS, Tuberculosis and Malaria must allocate $150 million over five years for transition financing and explicitly support VMMC in country funding requests. In addition, partners like PEPFAR should set up a $10 million annual technical assistance fund ($50 million over five years) and maintain regional centres of excellence in each country for training, quality assurance and benchmarking. National governments must commit 3–5% of HIV prevention budgets to VMMC, integrate services into health insurance benefit packages and implement innovative financing mechanisms. Regional bodies must establish coordination platforms and pooled procurement mechanisms, achieving 15–20% cost reductions. Technical agencies must update normative guidance for the integration era and develop sustainability toolkits.

The timeline for these actions include: obtaining stakeholder commitments by mid-2026, with transition financing flowing by 2027 and sustainability targets achieved by 2030.

Conclusion

An estimated 250 000 HIV infections through 2023 have been averted through VMMC, with the potential for 1.5 million infections averted by 2030 if it is maintained. Its sustainability is both epidemiologically sound and operationally achievable through differentiated strategies that recognize varying country contexts, coordinated stakeholder action with clear accountability and strategic integration to maximize efficiency. This technical brief provides evidence-based pathways and specific recommendations enabling stakeholders to preserve VMMC's public health gains while adapting to a transformed financing landscape. Success requires political will, stakeholder coordination and operational commitment from the outset[1].

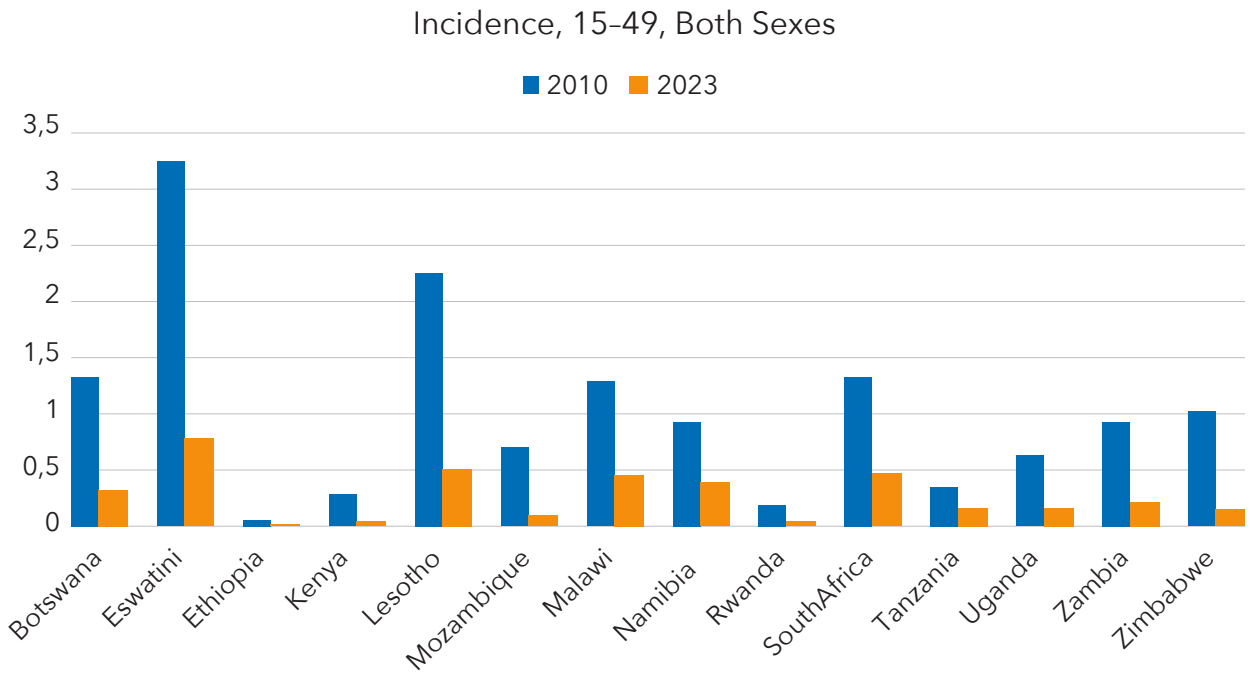
[1] Note on financial figures: The amounts presented represent a combination of: (a) confirmed allocations where explicitly cited; (b) cost estimates derived from documented unit costs, historical spending patterns and projected service volumes; and (c) advocacy targets illustrating the scale of resources required for minimum service continuity. Figures should not be interpreted as formal commitments by named institutions unless accompanied by specific source citations. The $150 million Global Fund estimate over five years is based on proportional allocation models from historical VMMC transition financing needs. The $10 million annual PEPFAR technical assistance figure reflects the scaled continuation of regional centres of excellence support documented in previous Country Operational Plans. Bilateral donor gap financing ($100 million annually) represents the aggregate need assessment across priority countries experiencing service disruption. Domestic budget allocation targets (3–5% of HIV prevention budgets) align with WHO/UNAIDS sustainability framework recommendations (WHO & UNAIDS, 2023).

1. Introduction: The sustainability imperative

1.1. Public health impact and programme scale

Sustainability has been a core objective of the VMMC programme for years (WHO & UNAIDS, 2022). The programme has been central to HIV prevention in eastern and southern Africa following 2007 WHO/UNAIDS recommendations based on three randomized controlled trials demonstrating approximately 60% reduction in female–to–male HIV transmission (Auvert et al., 2005; Bailey et al., 2007; Gray et al., 2007). Through 2023, more than 38 million procedures were performed across 15 priority countries, with PEPFAR supporting over 80% of services (WHO & UNAIDS, 2024; Davis, et al., 2018). These programmes averted an estimated 250 000 HIV infections, with modelling projecting 1.5 million infections averted by 2030 if they were sustained (Figure 1) (Kripke et al., 2021; WHO & UNAIDS, 2022; Stover et al., 2025).

Figure 1. Decline in HIV incidence in VMMC priority countries, 2010–2023 (average 74% decline in HIV incidence across 15 VMMC priority countries)

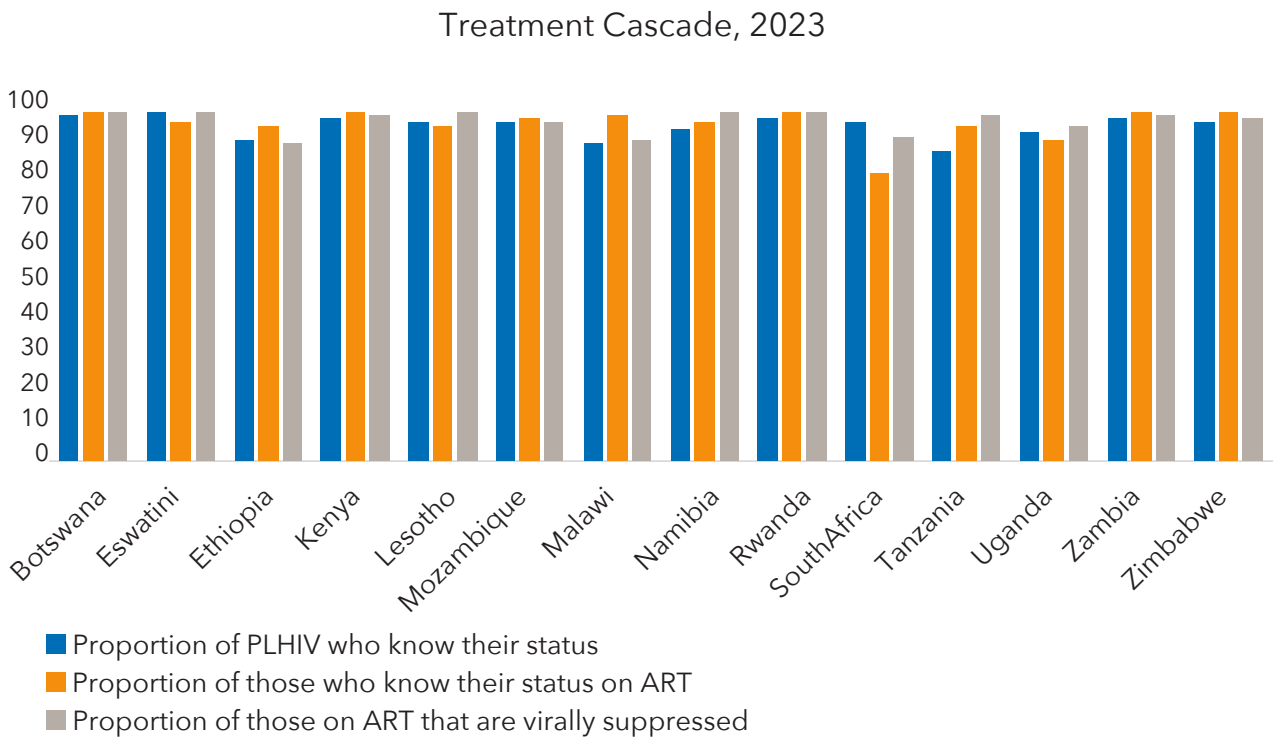


Source: UNAIDS AIDSinfo online (Stover et al. 2025).

Progress in coverage has been heterogeneous. By 2023, three countries (Ethiopia, Kenya and United Republic of Tanzania) achieved 80% coverage during at least one survey period, with Mozambique reaching 77% (UNAIDS, 2024b). However, across all 15 priority countries, cumulative achievement represents only 43% of targets needed for 80% coverage among men aged 15–49 by 2014 benchmarks (Davis et al., 2018). This coverage gap, combined with population growth and annual cohort

replacement of uncircumcised adolescents entering sexually active ages, creates ongoing prevention needs despite historical programme achievements. Many countries are close to global treatment targets, with an average 81% of people living with HIV being virally suppressed (Figure 2) (UNAIDS, 2024b).

Figure 2. Progress in the treatment cascade towards global targets, 2023 (ART: antiretroviral therapy; PLIV: people living with HIV)



Overall, 81% of people living with HIV are virally suppressed across the region. Countries exceeding 85% viral suppression include: Botswana; Eswatini; Namibia; Rwanda; and Zimbabwe.

Source: UNAIDS AIDSinfo; Stover et al., 2025.

1.2. The transformed financing and epidemiological context

The financing landscape changed dramatically in 2025, with PEPFAR's budget reduced from $7.1 billion (2024) to $2.9 billion (proposed fiscal year 2026) (Council on Foreign Relations, 2025); VMMC funding declined from approximately $285 million to $147 million since 2020 (WHO, 2023). Current funding budgets are not clear, and for heavily donor dependent countries, the budget cuts have been catastrophic.

Simultaneously, the HIV epidemic has transformed since the VMMC programme's inception. Annual new infections in eastern and southern Africa declined by 59%, from 1.1 million (2010) to 450 000 (2023), with VMMC priority countries averaging a 74% reduction in incidence (UNAIDS, 2024b). This decline resulted primarily from massive antiretroviral treatment scale-up, achieving 81% regional viral suppression and approaching the UNAIDS 95–95–95 targets (Table 1) (UNAIDS, 2024b).

Table 1. VMMC programme status and transition readiness, June 2025

Country	Programme status	Transition readiness	Funding status	Key constraints
South Africa	Functional	High	MoH RT-35; CDC TA	–
Botswana	Unclear	Medium–high	MoH led	Data gaps
Tanzania, United Rep.	Transitioning	Medium–high	CDC until September 2025	Donor dependence
Kenya	Scaling down	Medium–high	CDC + USAID uncertain	–
Zimbabwe	Reduced scale	Low–medium	CDC TA only	No domestic budget
Malawi	Reduced scale	Low–medium	CDC TA only	USAID stopped
Eswatini	Minimal	Low–medium	USG ends September 2025	–
Lesotho	Stopped	Low	No funding	Dependent up to 95% on USG
Mozambique	Unclear/stopped	Low	No confirmed funding	USAID historic
Namibia	Stopped	Low–medium	No funding	USG withdrawal
Uganda	Stopped	Low–medium	No funding	USAID ended
Zambia	Stopped	Low	No funding	USAID ended
Rwanda	Minimal	Medium	Minimal donor support	Low demand
Ethiopia	Unclear	Low	Unknown	Low priority
South Sudan	Very limited	Low	Minimal	Humanitarian context

CDC: United States Centers for Disease Control and Prevention; MoH: Ministry of Health; TA: technical assistance; USAID: United States Agency for International Development; USG: United States Government.

Source: VMMC Framework Progress Update, June 2025.

1.3. Operational reality: system collapse and strategic imperatives

Operational assessments reveal severe programme disruptions following the withdrawal of PEPFAR funding. Based on a rapid analysis in June 2025, VMMC programmes are operational only in South Africa, with partially or scaled down operations in Botswana, Eswatini, Malawi and Zimbabwe. Programmes in Lesotho, Mozambique, Namibia, Uganda and Zambia have been completely halted (UNAIDS/WHO Technical Working Group, 2025). Most programmes that were funded up to 90–100% by the United States Government immediately ceased all operations when the funding stopped. Only two of 15 countries have alternative financing mechanisms. The consequences include massive losses of a trained

clinical workforce, supply chain breakdowns with widespread VMMC kit stockouts, collapsed quality assurance systems that create severe safety risks, non-functional monitoring and evaluation (M&E) systems and the complete cessation of outreach and demand creation activities.

1.4. What this brief adds

This technical brief synthesizes validated sustainability findings and updates for 2025–2030 (WHO & UNAIDS, 2023). It also clarifies country-led transition implications (WHO & UNAIDS, 2023) and translates sustainability building blocks into immediate programme decisions under constrained financing.

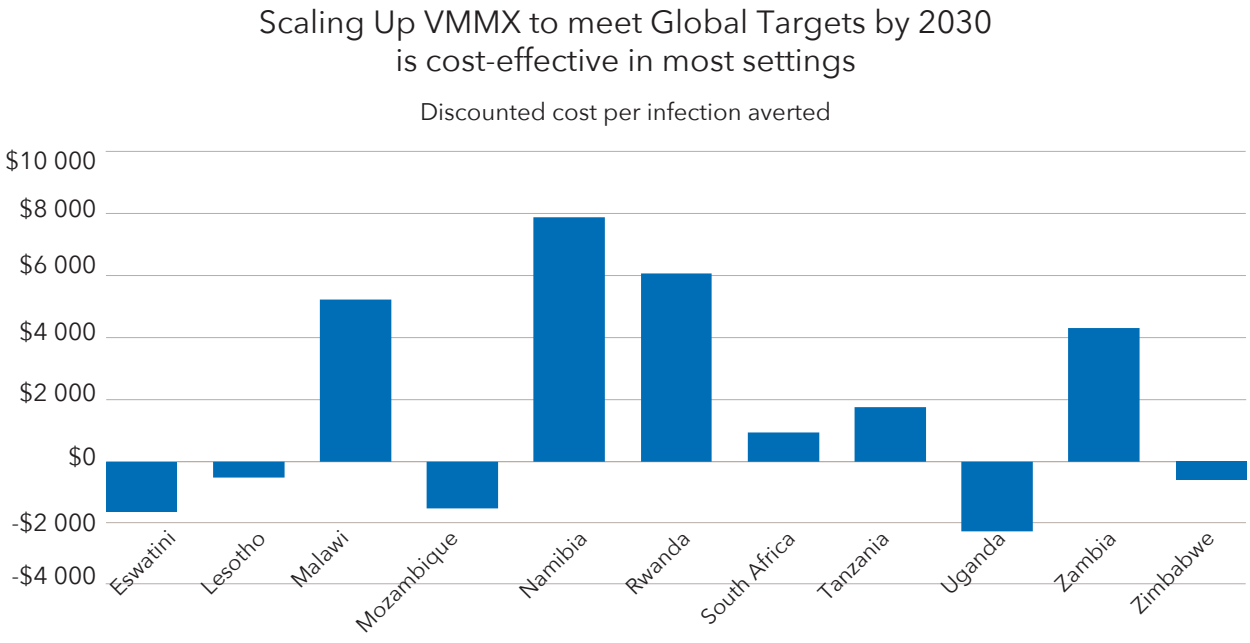
2. Continued Rationale for VMMC Investment

2.1. Evidence of cost-effectiveness

Despite declining incidence, recent modelling confirms VMMC's cost-effectiveness in most settings in the short to medium term. Analysis by Bansi-Matharu et al. (2023) across five independent models found that VMMC continuation in South Africa and Malawi for five years resulted in cost savings and health benefits, assuming a $90/procedure cost. The median cost per HIV infection averted was $4400 in the antiretroviral therapy (ART) scale-up context, comparing favourably with other prevention interventions.

New analysis by Stover et al. (2025) demonstrated that scaling VMMC to 90% coverage by 2030 was cost-effective and often cost-saving in most priority countries, including Eswatini, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, United Republic of Tanzania, Uganda, Zambia and Zimbabwe. The discounted cost per infection averted from 2022 to 2090 ranges from a cost-saving up to $8000 within established cost-effectiveness thresholds (Figure 3) (Stover et al., 2025).

Figure 3. Cost-effectiveness of VMMC scale-up by country



Discounted (at 3%) net cost per infection averted from 2022 to 2090 of scaling up male circumcision coverage from 2021 levels to 90% of all men aged 15 to 49 years by 2030 compared to no further VMMC programme. All other interventions are held constant. Net costs include the cost of the VMMC programme minus any savings in treatment costs. The projections are based on the Goals ASM model.

Source: Stover et al., 2025.

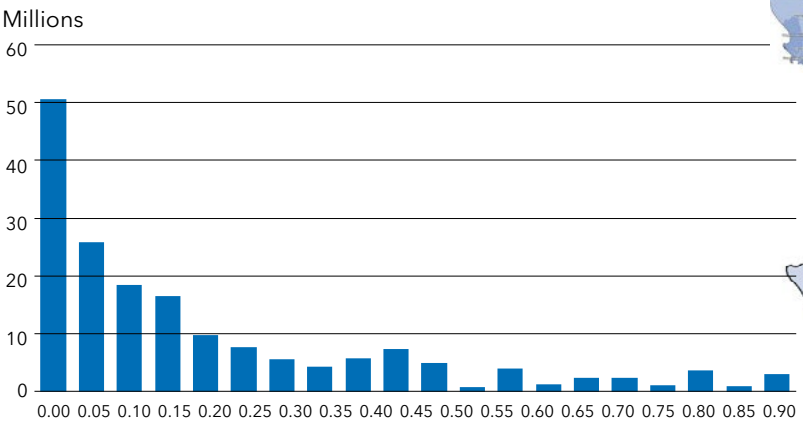
In Figure 3, countries with cost-saving results are shown by negative bars: Eswatini; Lesotho; Malawi; Mozambique; Namibia; South Africa; United Republic of Tanzania; Uganda; Zambia and Zimbabwe. Countries with positive cost per infection averted include Rwanda (~$6000).

2.2. Geographical heterogeneity and strategic targeting

Subnational incidence analysis reveals substantial geographical variation: 23% of the population live in areas with HIV incidence above 0.35% where VMMC remains highly cost-effective, while 29% reside in areas where the incidence fell below 0.05%, suggesting opportunities for resource reallocation rather than blanket service withdrawal (Stover et al., 2025). Mathematical modelling demonstrates that targeting VMMC to geographical areas and age groups with the highest HIV burden optimizes programme impact and cost-effectiveness (Sgaier et al., 2014).

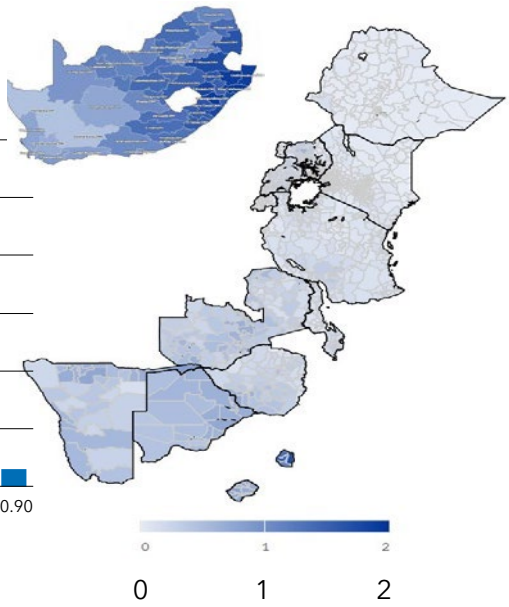
Figure 4. Distribution of subnational population by HIV incidence

Incidence varies significantly across the region. Areas of high incidence still remain.



For 29% of population, incidence < 0.05%, for 25% it is 0.05%–0.10%, for 23% it is 0.10%–0.35%, for 23% it is >0.35%

HIV incidence, 15–49, Both, December 2021



Source: UNAIDS Naomi Model estimates; Stover et al., 2025

This heterogeneity supports strategic adaptation through evidence-based geographical targeting. Where programmes remain functional, such targeting extends cost-effectiveness timelines and improves efficiency. Where reconstruction is required, resources can be strategically redirected to the highest-burden populations through alternative delivery platforms.

2.3. Prevention insurance and complementarity

VMMC provides preventive insurance against vulnerabilities in the treatment system. Unlike treatment-as-prevention, which requires sustained health-care engagement and daily adherence, VMMC provides a one-time, permanent risk reduction benefit. This complementarity strengthens the prevention architecture, ensuring protection during disruptions to the treatment programme. The COVID-19 pandemic demonstrated the health system's fragility; VMMC's permanent protection persists through system shocks that might otherwise interrupt treatment services.

Long-acting, injectable pre-exposure prophylaxis (PrEP), including lenacapavir, creates opportunities for combination prevention rather than rendering VMMC obsolete (Bekker et al., 2024; NAM aidsmap, 2025). While VMMC provides one-time, permanent, partial protection suitable for general adolescent and young adult males, PrEP/lenacapavir provides near-complete protection, requiring ongoing engagement, which is optimal for the highest-risk populations.

3. VMMC as a Gateway to Comprehensive Men's Health Services

3.1. Alignment with WHO men-centred service frameworks

The positioning of VMMC as a gateway to comprehensive men's health services is fully aligned with WHO's person-centred and differentiated service delivery approaches aimed at improving men's engagement across the HIV prevention and treatment cascade. WHO guidance emphasizes reducing structural and service delivery barriers that limit men's access to care, improving service responsiveness to men's needs, and integrating supportive services that enhance retention and long-term engagement.

Framing VMMC as an entry point for broader preventive and primary health services operationalizes this approach by leveraging a high acceptability intervention to strengthen men's sustained interaction with the health system rather than treating circumcision as a stand-alone vertical activity (WHO, 2024a; WHO, 2024b). WHO also highlights faith-based platforms as potentially effective, trusted community entry points for reaching men with HIV-related and other health services, particularly where faith-based organizations operate health facilities or have strong community networks. Incorporating VMMC demand creation, referral and linkage support through faith platforms can be a practical extension of men-centred service delivery strategies (WHO, 2025). Translating this alignment into a practical VMMC programme design implies the following integration choices:

- **Extended and flexible service hours.** Offering evening, weekend and outreach services to accommodate working age men in line with WHO recommendations to reduce structural access barriers for men (WHO, 2024a).
- **Male-friendly service environments.** Ensuring privacy, respectful communication and streamlined client flow to address concerns related to stigma, confidentiality and long waiting times (WHO, 2024a).
- **Integrated HIV prevention and treatment service.** Embedding provider-initiated HIV testing and counselling; immediate linkage to ART for those testing positive; PrEP referral, where appropriate; sexually transmitted infection (STI) screening and management; and condom provision within VMMC service delivery platforms (WHO, 2024a; WHO, 2024b).
- **Supportive services to enhance retention.** Including peer navigation; community follow-up mechanisms; digital appointment reminders; and clear referral pathways to primary care and chronic disease services (WHO, 2024a).
- **Partnerships with faith-based platforms (where appropriate).** Engaging faith leaders and faith-based organizations to support demand creation normalizes HIV testing and strengthens referrals and linkage, especially in settings where faith networks are influential and trusted (WHO, 2025).

- **Service integration within routine primary health-care platforms.** Gradually embedding VMMC within outpatient, reproductive health, or adolescent health services to support sustainability and normalize male engagement with health services (WHO, 2024a).

3.2. Male health engagement gap

Men in eastern and southern Africa systematically underutilize health services, creating critical gaps in HIV response and broader health outcomes. More than half of men aged 24–35 years living with HIV in many countries in the region are unaware of their status and are not on treatment, imperilling their health and increasing transmission risk (Cornell et al., 2017). Primary health-care services emphasize women of reproductive age, with reproductive, maternal and child health services offering ideal entry points for HIV services—similar entry points for men are not commonplace.

VMMC programmes demonstrated a unique capacity in reaching adolescent boys and young men with minimal health system contact. Between 2007 and 2023, VMMC platforms reached nearly 38 million men, many of whom accessed health services for the first time (WHO & UNAIDS, 2024). This creates an opportunity to transform VMMC from a single-purpose HIV prevention intervention to a comprehensive gateway for male health engagement.

3.3. Integrated service package and gender-transformative approaches

The UNAIDS/WHO Framework for VMMC (2016–2021) provided strategic direction for transformation, promoting integration within broader sexual and reproductive health and primary care services for men and boys (WHO & UNAIDS, 2016). Effective VMMC sustainability requires expanding beyond circumcision to deliver integrated services addressing men's holistic health needs.

3.4. Sustainability implications

Positioning VMMC as a men's health gateway rather than a single-purpose intervention strengthens a sustained investment case by: maximizing value per client contact through service integration; addressing multiple health priorities simultaneously (HIV, STIs, TB, noncommunicable diseases (NCD), mental health); creating ongoing health-care relationships beyond one-time circumcision; justifying domestic health budget allocation across multiple disease programmes; aligning with universal health coverage objectives; and improving cost-effectiveness through shared infrastructure and staffing.

4. Pathways to Sustainability

4.1. Domestic funding and innovative financing mechanisms

Experience from South Africa demonstrates that domestic financing is the single most decisive factor in sustaining VMMC during donor contraction. Through the RT-35 contract, the National Department of Health has continued to implement VMMC in priority districts and age groups not supported by PEPFAR—particularly boys aged 10–15 years—ensuring uninterrupted service delivery despite declining external funding. While most donors have shifted toward co-funding or matching models, recent funding cuts have led to widespread programme cessation across the region, with South Africa the sole country where VMMC delivery continues at scale. This experience provides compelling evidence that **domestic budgetary commitment is essential for resilience and continuity**.

Recognizing that many countries face severe fiscal constraints and that VMMC may compete with other health priorities, sustainability will require pragmatic, innovative domestic financing models rather than full budget substitution. Viable mechanisms include:

- **Integration into national health insurance and benefit packages.** In Rwanda, mutual health insurance coverage exceeds 90% (Rwanda Ministry of Health, 2023).
- **Innovative domestic resource mobilization**, including earmarked health levies and sin taxes. **Zimbabwe** mobilized approximately US$ 28 million through health levies and sugar taxes (Chimbindi et al., 2022).
- **Results-based and performance-linked financing.** This is aimed at incentivizing quality and efficiency rather than volume.
- **Structured donor transition frameworks.** Given declining external contributions, these seek to match these reductions with gradually increasing domestic allocations over a five–seven year horizon.

Collectively, these approaches position domestic funding not as a replacement for donor support, but as a **foundational co-investment** that anchors VMMC within national systems, enables donor leverage, and secures long-term sustainability in constrained fiscal environments.

4.2. Country case studies on domestic financing

South Africa demonstrates the strongest domestic ownership, with the National Department of Health funding the RT-35 programme. It had an HIV budget of $2.56 billion (2022), with over 80% coming from domestic resources (Simbayi et al., 2019). Key success factors include: high domestic HIV spending; strong health system infrastructure; and government commitment, as evidenced by budget allocations and technical assistance from the CDC to maintain quality.

Zimbabwe's health levies and sugar tax, raising $28 million for health system strengthening, demonstrate innovative domestic resource mobilization (Chimbindi et al., 2022). Performance-based financing for VMMC created accountability mechanisms adaptable to other contexts. Lessons learned include the following: dedicated health taxes are politically feasible in some contexts; performance incentives can improve quality and efficiency; verification mechanisms are essential for accountability; and community engagement is critical for sustainability.

Rwanda's success in achieving 90%+ mutual health insurance coverage provides a model for VMMC financing through insurance mechanisms (Rwanda Ministry of Health, 2023). Transferable elements include: community-based insurance schemes; government subsidies for vulnerable populations; integration of preventive services in benefit packages; and a strong primary care platform for service delivery.

4.3. Primary care integration and task shifting

As a core mechanism to entrench VMMC sustainability, **task shifting** has emerged as a proven and cost-effective strategy, enabling lower clinical cadres to assume a greater share of service delivery. **Zimbabwe** and **Lesotho** have successfully advocated for and implemented models in which **nurses and nurse assistants perform VMMC**, demonstrating sustained quality, safety, and programme performance over multiple years. Evidence demonstrates that task-shifting VMMC to nurses and clinical officers can maintain quality outcomes with appropriate training and supervision (Feldblum et al., 2014).

4.4. Evidence-based geographical targeting

Mathematical modelling demonstrates that targeting VMMC to geographical areas and age groups with the highest HIV burden optimizes programme impact and cost-effectiveness (Sgaier et al., 2014). Subnational incidence mapping enables identification of the highest priority areas in which VMMC remains most cost-effective. Implementation of targeted approaches requires: incidence mapping at the subnational level; criteria and thresholds based on local epidemiology; resource reallocation from low to high burden areas; and equity considerations to ensure access for priority populations.

4.5. Social franchising and private sector participation

To achieve long-term sustainability, VMMC must move beyond an exclusive reliance on public sector delivery and donor funded NGOs. Leveraging the private sector through social franchising and structured public–private partnerships (PPPs) to expand access, enhance efficiency and access non-traditional financing overall reduces the public sector financial burden. Other considerations include:

- **Market segmentation and cost recovery.** By developing a tiered service model, countries can transition 'able to pay' clients to private providers. This allows public resources and donor 'bridge financing' to be prioritized for the most vulnerable and highest incidence populations.
- **Social franchising for quality standardization.** Utilizing social franchising models—similar to those used in reproductive health—allows for the rapid scale-up of standardized, high quality VMMC services through networks of private general practitioners. These franchises receive technical support and commodities in exchange for adhering to national quality assurance (QA) and reporting standards.

5. Addressing Transition Challenges: Differentiated Strategic Response

5.1. Differentiated response by country context

This response does not introduce a new WHO classification system. Rather, it provides operational implementation categories derived from the WHO and UNAIDS VMMC sustainability landscape assessment and country-level sustainability planning processes. These categories are intended to support programmatic decision-making under current financing constraints and should be interpreted as practical archetypes rather than formal country typologies (WHO & UNAIDS, 2023).

Countries may move between these implementation categories over time and classification should be based on nationally validated sustainability assessments rather than external designation. These implementation categories are intended to support country-led planning and do not replace or supersede WHO sustainability assessment tools or nationally validated transition frameworks (WHO & UNAIDS, 2023).

To operationalize this differentiated approach with transparent, evidence-based criteria, Table 2 presents a three-tier financing pathway framework that classifies the 15 VMMC priority countries based on economic capacity (GDP per capita), cost-effectiveness (cost per infection averted), and government readiness. This framework translates the conceptual differentiation into actionable country groupings that align with the sustainability strategies described in the subsequent sections.

Table 2. Financing Pathways for VMMC Sustainability: A Three-Tier Country Framework

Country	Financing Strategy Tier	GDP per Capita (USD)	Health Exp. (% of GDP)	VMMC Coverage (%)	Cost per Infection Averted (USD)	Government Readiness	Key Sustainability Indicators
Tier A – Domestic Financing Leaders							
Upper-income VMMC countries with GDP per capita >$3000 positioned for rapid transition to government-led domestic financing of VMMC programmes.							
Botswana	Tier A – Rapid Domestic Transition	$7696	6.3%	Maintained	N/A	Strong	Highest GDP per capita; MoH-led programme; strong health systems; near Abuja target (14.6%)
South Africa	Tier A Rapid Domestic Transition	$6267	8.9%	Scale	$931	Strongest	80%+ domestic funding; meets Abuja target (15.3%); largest total GDP ($401B); active scaled programme
Namibia	Tier A – Rapid Domestic Transition	$4413	9.5%	<40%	$7919	Low	High GDP and health spending (9.5% GDP); fiscal capacity exists but programme stopped; requires political re-engagement
Eswatini	Tier A – Rapid Domestic Transition	$3910	7.5%	<40%	**-$1622**	Low	Cost-saving model; high GDP; economy linked to South Africa; USG exit Sep 2025; fiscal capacity for domestic ownership
Tier B – Co-Financed Transition Economies							
Middle- and lower-income countries requiring graduated international co-financing to sustain and strengthen VMMC programmes during phased domestic ownership transition.							
Kenya	Tier B – Co-Financed Transition	$2132	4.4%	80%	N/A	Medium-High	80% coverage milestone; EIMC integration; health financing reforms underway; large economy ($120 billion GDP)
Tanzania, United Rep.	Tier B – Co-Financed Transition	$1187	3.1%	80%	$1769	Medium-High	80% coverage achieved; active transition; >5% projected govt health spending growth; large population base
Zambia	Tier B – Co-Financed Transition	$1187	6.0%	~50%	$4325	Low	Adequate health spending (6% GDP); programme stopped; low demand; strategic purchasing reforms underway
Ethiopia	Tier B – Co-Financed Transition	$1134	2.8%	80%	N/A	Low	80% coverage at risk; large population (150 million+); health harmonization reforms; 6% GDP growth projected

Country	Financing Strategy Tier	GDP per Capita (USD)	Health Exp. (% of GDP)	VMMC Coverage (%)	Cost per Infection Averted (USD)	Government Readiness	Key Sustainability Indicators
Rwanda	Tier B – Co-Financed Transition	$1000	5.1%	<40%	$6098	Medium	Strong health systems; 52% projected fiscal space increase; low coverage needs demand generation; expensive per IA
Lesotho	Tier B – Co-Financed Transition	$972	12.6%	~60%	**-$531**	Very Low	Cost-saving model; highest health exp/GDP (12.6%); 95% donor-dependent; programme stopped; task-shifting proven
Malawi	Tier B – Co-Financed Transition	$523	6.5%	~60%	$5250	Low-Medium	Bridge financing plans; USAID stopped; expensive per IA ($5250); needs substantial rebuilding
South Sudan	Tier B – Co-Financed Transition	$341	11.6%	<10%	N/A	Very Low	Humanitarian context; state fragility; <10% coverage; oil-dependent economy (80% GDP); maintenance mode only
Tier C – High-Return Strategic Investment Priorities							
Lower-income countries with demonstrated cost-saving VMMC models where continued international investment yields exceptional epidemiological and economic returns.							
Zimbabwe	Tier C – Sustained International Financing for Scale	$2497	2.9%	~50%	**-$604**	Medium	Cost-saving model (-$604/infection averted); $28 million domestic funding; proven PBF model; task-shifting success
Uganda	Tier C – Sustained International Financing for Scale	$1078	4.2%	~50%	**-$2249**	Low	Highest cost-savings (-$2249/IA); large unmet need; USAID ended; health financing reforms; $54 billion GDP base
Mozambique	Tier C – Sustained International Financing for Scale	$657	8.5%	77%	**-$1523**	Low	Highly cost-saving (-$1523/IA); 77% coverage near target; 69% projected fiscal space increase; at funding risk

This three-tier framework demonstrates the substantial heterogeneity across VMMC priority countries. Notably, four countries (Eswatini, Lesotho, Zimbabwe, Uganda, and Mozambique) demonstrate cost-saving models where VMMC investment generates net savings through averted treatment costs. The framework recognizes that upper-income countries (Tier A) possess fiscal capacity for rapid domestic transition, even where political commitment requires strengthening. Middle-income countries (Tier B) require graduated co-financing that balances donor transition with domestic system capacity building. Lower-income countries with cost-saving models (Tier C) represent exceptional investment opportunities where sustained international financing generates both epidemiological and economic returns. The following sections detail programmatic approaches aligned with these differentiated contexts.

5.2. Sustain and optimize (established sustainability trajectory)

Countries in this category have demonstrated substantial progress across the WHO/UNAIDS VMMC sustainability dimensions, including domestic financing commitments, integration within national HIV strategies and functioning QA mechanisms. The priority is not expansion, but consolidation and optimization (WHO & UNAIDS, 2023).

Key programmatic priorities include:

- Protecting minimum QA and safety standards through integration into national supervision and clinical governance systems.
- Transitioning remaining donor supported inputs (commodities, outreach support, data systems) into domestic financing or pooled procurement mechanisms.
- Strengthening integration of VMMC within routine outpatient, adolescent and reproductive health services to reduce parallel delivery structures.
- Using national data to refine geographical targeting based on incidence and demographic shifts (Stover et al., 2025).
- Institutionalizing VMMC indicators within national health information systems rather than maintaining vertical reporting structures.

The focus is on sustainability through normalization—embedding VMMC as a routine preventive service rather than a campaign driven intervention.

5.3. Stabilize and transition (domestic integration in progress)

Countries in this category have initiated sustainability planning and domestic resource mobilization, but remain partially dependent on external financing or parallel implementation structures. The immediate objective is stabilization while accelerating integration into national systems (WHO & UNAIDS, 2023).

Priority actions include:

- Conducting updated transition readiness assessments using existing WHO sustainability tools (WHO & UNAIDS, 2023).
- Defining a time-bound domestic financing roadmap with ministries of finance and national HIV coordinating bodies.
- Prioritizing high burden regions and age cohorts, where the impact is greatest under constrained resources (Stover et al., 2025).
- Integrating VMMC service delivery within existing public health facility staffing and procurement systems.
- Protecting core safety and infection prevention standards during workforce realignment.

The emphasis is on a deliberate transition—avoiding abrupt service disruption while reducing vertical dependence.

5.4. Rebuild with an integration-first approach (service recovery contexts)

Countries in this category are experiencing significant service disruption due to financing reductions, workforce loss, or supply chain interruptions. In these settings, rebuilding VMMC should not replicate previous vertical models, but instead prioritize integration from the outset (UNAIDS/WHO Technical Working Group, 2025).

Recovery priorities include:

- Protecting essential safety standards and minimum clinical competency requirements.
- Rapidly re-establishing commodity supply chains through national procurement systems or pooled mechanisms.
- Focusing on the highest incidence districts rather than attempting broad national coverage (Stover et al., 2025).
- Embedding VMMC within broader HIV prevention, STI and adolescent health platforms rather than restoring stand-alone outreach campaigns.
- Leveraging community-based platforms, including faith-based and civil society networks, to rebuild demand and referral pathways (WHO, 2025).

The objective is strategic recovery—restoring impact while accelerating long-term sustainability.

5.5. Maintain gains in high coverage settings (epidemic control contexts)

In countries or subnational areas that have achieved high circumcision coverage and reduced HIV incidence, the sustainability objective shifts from scale-up to maintenance of protective population-level effects.

Priority considerations include:

- Maintaining surveillance to detect potential coverage decline in younger age cohorts.
- Integrating VMMC into routine adolescent and young adult health services to sustain cohort replacement.
- Avoiding unnecessary outreach campaigns in already saturated regions.
- Ensuring continued QA and adverse event monitoring despite lower service volumes.
- Aligning VMMC within broader epidemic control strategies and primary health-care reforms.

Here, sustainability is defined by maintaining epidemiological gains with efficient, domestically anchored service delivery.

Countries may move between these implementation categories over time and classification should be based on nationally validated sustainability assessments rather than external designation. These implementation categories are intended to support country-led planning and do not replace or supersede WHO sustainability assessment tools or nationally validated transition frameworks (WHO & UNAIDS, 2023).

5.6. Risk mitigation and realistic timelines

- **Quality assurance.** Mitigation strategies include: maintaining minimum supervision structures even during reduced operations; leveraging technology for remote quality monitoring; integrating VMMC quality indicators into broader health system QA; partnering with professional associations for peer review; and prioritizing safety over volume during transition periods.
- **Workforce continuity.** Trained VMMC providers represent critical assets. As such, they require retention through integration into permanent health workforce, competitive remuneration matching other clinical roles, professional development and career pathways, cross-training in other services maximizing utility, and maintaining certification and credentialing systems.

Realistic timelines:

- Short-term (2025–2027). Prevent complete programme collapse in countries with transition potential; maintain core capacity at reduced volumes; develop financing transition plans; begin early infant male circumcision (EIMC) integration pilot initiatives; and mobilize emergency bridge financing.
- Medium-term (2027–2030). Phase domestic financing assumption with co-financing models; advance health system integration; scale EIMC through maternal and child health (MCH) platforms; implement geographical targeting (Stover et al., 2025). complement with new technologies (lenacapavir) (NAM aidsmap, 2025); and transition technical assistance from service delivery to systems strengthening.
- Long term (2030+). Achieve primarily domestically financed programmes, fully integrate initiatives into health insurance and primary care budgets; ensure EIMC is the primary circumcision modality; use evidence-based targeting maintaining cost-effectiveness (Bansi-Matharu et al., 2023); implement regional technical cooperation networks, maintain ongoing adaptation based on epidemic dynamics.

6. Policy Considerations and Advocacy Asks

6.1. Global financing institutions

6.1.1. VMMC service delivery

The amounts presented in Table 3 represent a combination of: (a) confirmed allocations where explicitly cited; (b) cost estimates derived from documented unit costs, historical spending patterns, and projected service volumes; and (c) advocacy targets illustrating the scale of resources required for minimum service continuity. They should not be interpreted as formal commitments by the institutions mentioned unless accompanied by specific source citations. The $150 million estimate by the Global Fund to Fight AIDS, Tuberculosis and Malaria estimate over five years is based on proportional allocation models from historical VMMC transition financing needs. The $10 million annual PEPFAR technical assistance figure reflects scaled continuation of regional centre of excellence support documented in previous country operational plans. Bilateral donor gap financing ($100 million annually) represents aggregate need assessment across priority countries experiencing service disruption (UNAIDS/WHO Technical Working Group, 2025). Domestic budget allocation targets (3–5% of HIV prevention budgets) align with WHO/UNAIDS sustainability framework recommendations (WHO & UNAIDS, 2023).

The historical context of VMMC specific funding shows a decline from $285 million (2020) to $147 million (2024) (WHO, 2023). These figures do not constitute formal commitments by the institutions mentioned unless explicitly cited as confirmed allocations. Annex 2 sets out in greater detail the calculations upon which the proposed bridge funding per country is based.

6.2. Accountability and monitoring framework

6.2.1. Country level: integration within national systems

Sustainable monitoring of VMMC services should be embedded within existing national health system structures rather than maintained through parallel, donor specific reporting mechanisms. Countries are encouraged to integrate VMMC indicators into national health information systems (HIS), including DHIS2 where applicable, and align reporting with routine HIV programme and primary healthcare data flows.

Key system integration actions include:

- Incorporating VMMC indicators into national DHIS2 reporting modules or equivalent electronic health information platforms.
- Embedding VMMC quality indicators within national clinical governance and QA frameworks.

- Including VMMC service delivery in routine district and facility supervision checklists.
- Aligning commodity tracking (surgical kits, devices, consumables) within national logistics management information systems (LMISs).
- Ensuring adverse event monitoring is integrated within broader national patient safety reporting systems.

This approach reduces the reporting burden, strengthens domestic ownership and ensures that VMMC performance is visible in national health sector performance reviews.

Table 3. Suggested funding request per stakeholder

Stakeholder	Action area	Key actions	Financing/scale	Timeline	Source
Global Fund to Fight AIDS, Tuberculosis and Malaria	Transition financing.	■ Establish dedicated VMMC transition financing window. ■ Include VMMC in HIV prevention guidance. ■ Fund technical assistance for integration, financing transition and QA. ■ Develop sustainability indicators.	$150 million over five years (2026–2030).	Policy decisions by June 2026; funding active 2027–2030.	Proposed advocacy target (author estimate).
Global Fund to Fight AIDS, Tuberculosis and Malaria	Efficiency and procurement.	Support pooled regional procurement mechanisms.	15–20% cost savings.	Operational by 2027.	Estimated from pooled mechanisms (SADC models).[a] Illustrative scenario assumption per regional procurement benchmarks.
PEPFAR	Technical assistance (TA) and systems.	■ Establish VMMC TA fund. ■ Maintain regional centres of excellence ■ Support M&E systems; provide structured transition support. ■ Fund subnational incidence mapping	$10 million annually	FY2026 onward; centres operational by the end of 2026.	(Confirmed advocacy request: $10 million per year to sustain TA under constraints. Confirmed per VMMC Framework Progress Update (2025; June.sync-conflict-20251201-105730-G2ZBLPN.pdf).
Bilateral donors	Bridge and innovation financing.	■ Provide gap financing. ■ Support results based financing (RBF) pilot schemes. ■ Fund EIMC integration. ■ Support domestic financing and insurance integration.	$100 million annually (gap); $30 million EIMC.	Commitments by mid-2026; funding from 2027.	(Estimate: See Annex 2 for bridge calculations).

Stakeholder	Action area	Key actions	Financing/scale	Timeline	Source
Ministries of Health	Policy and service integration.	▪ Include VMMC in essential benefit packages. ▪ Allocate 3–5% of HIV prevention budgets. ▪ Integrate EIMC into MCH platforms. ▪ Implement incidence-based targeting. ▪ Establish QA systems. ▪ **Policy alignment (2026):** Ministries of Health must update regulatory frameworks to allow private providers to claim reimbursements for VMMC under national health insurance or RBF schemes.	Domestic budgets (3–5% HIV prevention).	Policy commitments by end 2026; budgets 2027–2028.	Estimate based on average VMMC unit cost of $90 × projected min volume (Stover et al., 2025); e.g. Zimbabwe mobilized $28 million through levies (~4% on HIV) (WHO & UNAIDS, 2023; Chimbindi et al., 2022).
Ministries of Finance	Financing and insurance.	▪ Approve insurance reimbursement for VMMC. ▪ Support innovative financing. ▪ Increase health spending toward Abuja targets. ▪ Establish transition financing mechanisms.	Domestic fiscal allocations.	Budget cycles 2026–2027; insurance integration by 2027–2028.	
African Union/ SADC/ East African Community	Regional coordination.	▪ Establish Regional VMMC Sustainability Task Force. ▪ Support pooled procurement. ▪ Facilitate South–South learning. ▪ Coordinate regional monitoring.	Regional coordination mechanisms.	Task force by mid-2026; procurement by 2027.	
WHO/UNAIDS/ Africa CDC	Normative guidance and learning.	▪ Update VMMC guidance. ▪ Develop sustainability toolkit. ▪ Provide TA for national plans. ▪ Facilitate learning networks and monitor global progress.	Technical assistance support.	Guidance by end of 2026; toolkit early 2027.	

Note: Unless otherwise indicated, financial figures are illustrative estimates intended to inform strategic planning discussions. They should not be interpreted as confirmed funding commitments.

[a] Illustrative scenario assumption per regional procurement benchmarks.

SADC: Southern African Development Community; TA: technical assistance.

6.3. Core country-owned indicators

Countries may consider adopting a focused set of core indicators that can be fully owned and reported through national systems. These indicators should be limited, actionable and aligned with broader HIV and primary health-care monitoring frameworks.

- **Number of VMMC procedures performed (by age group and district).** Integrated into routine service reporting within DHIS2 or national HIS.
- **VMMC coverage among priority age cohorts (e.g. 15–29 years).** Calculated using national population denominators and service data.
- **Proportion of VMMC clients tested for HIV during service delivery.** Reflects integration of HIV testing services.
- **Linkage rate to ART among clients testing HIV positive at VMMC sites.** Measures integration with treatment services.
- **Moderate and severe adverse event rate (%).** Embedded within national quality and patient safety monitoring systems.
- **Geographical targeting efficiency.** Proportion of VMMC services delivered in high-incidence districts.
- **Domestic financing share (%) of total VMMC programme costs.** Reflects progress toward financial sustainability.
- **Integration index (binary or categorical measure).** Whether VMMC services are delivered through routine facility platforms versus stand-alone campaigns.

Countries may adapt this list based on national context, epidemiology and system capacity. The emphasis should be on indicators that support decision-making at district and national levels rather than global reporting requirements.

At the global level, WHO/UNAIDS and partners can support **optional aggregation** of country-reported indicators to facilitate peer learning and regional visibility.

6.3.1. Reporting and governance

Country-level performance reviews should be integrated into:

- National HIV programme review meetings.
- Annual health sector performance reviews.
- District health management team supervision cycles.
- National quality assurance and clinical audit platforms.

Where useful, aggregated country-reported indicators may be shared regionally to support peer learning. However, primary accountability should remain within national governance structures.

6.3.2. Timeline milestones

- Mid-2026: All stakeholder commitments announced.
- End of 2026: Global Fund policies updated; WHO/UNAIDS guidance released; regional task force operational.
- 2027: Transition financing flowing; EIMC integration accelerating; domestic budget increases evident.
- 2028: Mid-term sustainability assessment; course corrections based on progress.
- 2030: Sustainability targets achieved; sustainable integrated delivery established

7. Conclusion: Strategic Adaptation for Sustained Impact

A substantial foundation for VMMC sustainability already exists. Normative guidance, quality standards, country-led sustainability tools and baseline assessments have been developed and validated. At the same time, the post-2025 contraction in external financing strengthens—not weakens—the case for accelerated country ownership and integration within national systems (WHO & UNAIDS, 2023).

The future of VMMC in eastern and southern Africa, therefore, requires a deliberate strategic transformation: from donor dependent, vertical programming to sustainable, integrated services embedded within national health systems. Recent evidence unequivocally confirms that VMMC remains highly cost-effective through 2030 and beyond (Stover et al., 2025; Bansi-Matharu et al., 2023). The central challenge is not whether VMMC works, but how to operationalize this transition through political commitment, strategic clarity and coordinated stakeholder action.

This Technical Brief advances a comprehensive sustainability framework built on three interlocking pillars. First, domestic and innovative financing mechanisms are essential to transition programmes from external dependence to domestic ownership. This includes integration into national health insurance packages, incorporation within primary care budgets, mobilization of innovative revenues such as health levies and RBF and structured donor transition supported by bridge financing. Second, health system integration embeds VMMC within primary care platforms and applies evidence-based geographical prioritization to maximize epidemiological impact (Stover et al., 2025). Third, expansion toward comprehensive men's health platforms positions VMMC as a gateway to HIV testing and treatment, STI screening, tuberculosis case-finding, NCD screening, mental health services and sexual and reproductive health—thereby maximizing value and strengthening the investment case across multiple disease programmes (WHO, 2024a; WHO, 2024b).

The empirical case for sustainability is robust. Forty million circumcisions have averted an estimated 250 000 HIV infections, with projections indicating up to 1.5 million infections could be prevented by 2030 (WHO & UNAIDS, 2024; Kripke et al., 2021; Stover et al., 2025). Cost-effectiveness modelling confirms favourable economics in high burden settings (Bansi-Matharu et al., 2023). Moreover, several countries demonstrate feasibility in practice: Zimbabwe, Rwanda and South Africa illustrate pathways for domestic financing, innovative resource mobilization and health system integration (Chimbindi et al., 2022; Rwanda Ministry of Health, 2023; Simbayi et al., 2019). Kenya demonstrates that early infant male circumcision integration within MCH platforms is operationally viable (Bochner et al., 2017).

Operational challenges, however, are substantial. Funding reductions—particularly through PEPFAR—have disrupted programmes in multiple countries, resulting in

workforce losses, supply chain fragility and system strain. Stabilization and strategic rebuilding will require sustained effort measured in years, not months. Success demands differentiated strategies aligned to country context, capacity and readiness. South Africa demonstrates that domestic ownership and financing can sustain programmes at scale. Zimbabwe illustrates that innovative financing can mobilize resources in constrained fiscal environments. Kenya shows that service integration is feasible within routine systems.

Policy action must therefore be explicit and sequenced. The Global Fund should allocate dedicated transition financing. PEPFAR should maintain technical assistance and establish regional centres of excellence. National governments must commit domestic resources, integrate VMMC into health insurance schemes and implement innovative financing mechanisms. Regional bodies should operationalize coordination platforms and pooled procurement mechanisms. Technical agencies must update normative guidance and provide implementation support (World Health Organization & UNAIDS, 2023).

The urgency is underscored by epidemiology. The region continues to record approximately 450 000 new HIV infections annually (UNAIDS, 2024b). VMMC remains a cornerstone prevention intervention, complementing treatment as prevention, oral and long-acting PrEP and behavioural strategies within comprehensive HIV prevention frameworks.

The call to action is therefore immediate. Stakeholders should formalize commitments by mid-2026. The Global Fund should establish transition financing windows. PEPFAR should maintain technical support structures. National governments should allocate domestic funding in the 2026–2027 budget cycles. Regional bodies should activate coordination mechanisms. Technical agencies should release updated guidance to support implementation.

VMMC sustainability is achievable. The evidence base is strong. The financing and integration pathways are defined. The transformation mechanisms are technically and economically viable. What remains is political will, coordinated execution, sustained resource commitment and disciplined implementation. This Technical Brief provides the roadmap; delivery now requires collective action to preserve hard-won public health gains and ensure continued HIV prevention for those at risk.

The immediate priorities include:

- Protect safety standards and minimum quality assurance.
- Prioritize highest incidence regions while maintaining gains in high coverage settings.
- Embed VMMC within routine services and broader men-centred service delivery reforms.

Acronyms and Abbreviations

AIDS	acquired immunodeficiency syndrome
ANRS	Agence Nationale de Recherche sur le Sida (French National Agency for AIDS Research)
ART	antiretroviral therapy
AU	African Union
CDC	Centers for Disease Control and Prevention (USA)
EAC	East African Community
EIMC	early infant male circumcision
HIS	health information system
HIV	human immunodeficiency virus
KFF	Kaiser Family Foundation
M&E	monitoring and evaluation
MCH	maternal and child health
MoH	Ministry of Health
NCD	noncommunicable disease
NGO	nongovernmental organization
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PLHIV	people living with HIV
PPP	public–private partnership
PrEP	pre-exposure prophylaxis
QA	quality assurance
RBF	results based financing
SADC	Southern African Development Community
STI	sexually transmitted infection
TA	technical assistance
TB	tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development
USG	United States Government
VMMC	voluntary medical male circumcision
WHO	World Health Organization

References

African Development Bank (2024). Annual Meetings 2024: old debt resolution for African countries cornerstone in reforming global financial architecture (https://www.afdb.org/en/news-and-events/annual-meetings-2024-old-debt-resolution-african-countries-cornerstone-reforming-global-financial-architecture-70791).

Associated Press (16 October 2025). South Africa welcomes $115M US bridge plan to sustain its HIV programs for 6 months.

Auvert B, Taljaard D, Lagarde E, Sobngwi-Tambekou J, Sitta R, Puren A (2005). Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial. PLoS Med. 2(11):e298 (https://doi.org/10.1371/journal.pmed.0020298).

Bailey RC, Moses S, Parker CB, Agot K, Maclean, I., Krieger, J. N., et al. (2007). Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. The Lancet. 369(9562):643–656 (https://doi.org/10.1016/S0140-6736(07)60312-2).

Bansi-Matharu L, Mudimu E, Martin-Hughes R, Hamilton M, Johnson L, ten Brink D (2023). Cost-effectiveness of voluntary medical male circumcision for HIV prevention across sub-Saharan Africa: results from five independent models. The Lancet Glob Health. 11(2):e244–e255 (https://doi.org/10.1016/S2214-109X(22)00515-0).

Bekker LG, Das M, Abdool Karim Q, et al. (2024). Twice-yearly lenacapavir or daily F/TAF for HIV prevention in cisgender women (PURPOSE-1 trial). New Engl J Med. 391:1349–1360 (https://doi.org/10.1056/NEJMoa2409002).

Bochner AF, Feldacker C, Makunike B, Holec M, Murewanhema G, Cowan FM (2017). Adverse event profile of a mature voluntary medical male circumcision programme performing PrePex and surgical procedures in Zimbabwe. J Int AIDS Soc. 20(1):21394 (https://doi.org/10.7448/IAS.20.1.21394).

Center for Global Development (2025). Analyzing USAID program disruptions: implications for PEPFAR programming and beneficiaries. Washington, DC: Center for Global Development (https://www.cgdev.org/publication/analyzing-usaid-program-disruptions-implications-pepfar-programming-and-beneficiaries).

Chimbindi N, Birdthistle I, Shahmanesh M, Osindo J, Mushati P, Ondenge K (2022). Translating DREAMS into practice: early lessons from implementation in six settings. PLoS ONE. 17(1):e0262435 (https://doi.org/10.1371/journal.pone.0262435).

Cornell M, McIntyre J, Myer L (2017). Men and antiretroviral therapy in Africa: our blind spot. Trop Med Int Health. 16(7):828–829 (https://doi.org/10.1111/j.1365-3156.2011.02767.x).

Council on Foreign Relations (2025). PEPFAR has saved tens of millions of lives. Why is it at risk? New York: Council on Foreign Relations (https://www.cfr.org/article/pepfar-has-saved-tens-millions-lives-why-it-risk).

Davis SM, Hines JAZ, Habel M, Grund JM, Brown J, Ridzon R, et al. (2018). Progress in voluntary medical male circumcision for HIV prevention supported by the US President's Emergency Plan for AIDS Relief through 2017: longitudinal and recent cross-sectional programme data. BMJ Open. 8(8):e021835 (https://doi.org/10.1136/bmjopen-2018-021835).

Feldblum PJ, Odoyo-June E, Obiero W, Bailey RC, Combes S, Hart C (2014). Safety, effectiveness and acceptability of the PrePex device for adult male circumcision for HIV prevention in Kenya. PLoS ONE. 9(5):e95357 (https://doi.org/10.1371/journal.pone.0095357).

Fleming PJ, Colvin C, Peacock D, Dworkin SL (2016). What role can gender-transformative programming for men play in increasing men's HIV testing and engagement in HIV care and treatment in South Africa? Culture Health Sexuality. 18(11):1251–1264 (https://doi.org/10.1080/13691058.2016.1183045).

Gray RH, Kigozi G, Serwadda D, Makumbi F, Watya S, Nalugoda F (2007). Male circumcision for HIV prevention in men in Rakai, Uganda: a randomised trial. The Lancet. 369(9562):657–666 (https://doi.org/10.1016/S0140-6736(07)60313-4).

Grund JM, Hennink MM (2012). A qualitative study of sexual behaviour change and risk compensation following adult male circumcision in urban Swaziland. AIDS Care. 24(2):245–251 (https://doi.org/10.1080/09540121.2011.596516).

Joint United Nations Programme on HIV/AIDS (2017). UNAIDS framework for male engagement in HIV prevention and treatment. Geneva: Joint United Nations Programme on HIV/AIDS.

Joint United Nations Programme on HIV/AIDS (2024a). UNAIDS calls for sustained and expanded health and HIV investments at the Spring Meetings of the IMF and World Bank. Press release. Geneva: Joint United Nations Programme on HIV/AIDS (https://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2024/april/20240416_spring-meetings).

Joint United Nations Programme on HIV/AIDS (2024b). Eastern and Southern Africa regional profile—2024 global AIDS update: the urgency of now: AIDS at a crossroads. Geneva: Joint United Nations Programme on HIV/AIDS (https://www.unaids.org/en/resources/documents/2024/2024-unaids-global-aids-update-eastern-southern-africa).

Joint United Nations Programme on HIV/AIDS (2025c). Countries must urgently step up to transform their HIV responses amid an international funding crisis that risks millions of lives. Press release. Geneva: Joint United Nations Programme on HIV/AIDS (https://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2025/july/20250710_global-aids-update).

Kenya National Syndemic Diseases Control Council (2025). Kenya HIV estimates portal. Nairobi: National Syndemic Diseases Control Council (https://analytics.nsdcc.go.ke/estimates/).

Kripke K, Opuni M, Odoyo-June E, Onyango MA, Young PW, Djomand G (2021). A review of public health, social and ethical implications of voluntary medical male circumcision programs for HIV prevention in sub-Saharan Africa. PLoS ONE. 16(10):e0258030 (https://doi.org/10.1371/journal.pone.0258030).

Mavhu W, Hatzold K, Dam KH, Kaufman MR, Patel EU, Van Lith LM (2018). Adolescent wound care self-efficacy and practices after voluntary medical male circumcision—A multi-country assessment. Clin Infect Dis. 66(Suppl 3):S229–S235 (https://doi.org/10.1093/cid/ciy003).

NAM aidsmap (2025). US funding cuts cause immediate drops in numbers testing and HIV treatment. London: Terrence Higgins Trust (https://www.aidsmap.com/news/jul-2025/us-funding-cuts-cause-immediate-drops-numbers-testing-and-hiv-treatment).

PHIA Project (2024). Release of Tanzania population-based HIV impact assessment data shows notable progress. New York: ICAP–Columbia University (https://phia.icap.columbia.edu/).

Rwanda Ministry of Health (2023). Rwanda health financing system: progress report 2023. Kigali: Ministry of Health.

Sgaier SK, Reed JB, Thomas A, Njeuhmeli E (2014). Achieving the HIV prevention impact of voluntary medical male circumcision: lessons and challenges for managing programs. PLoS Med. 11(5):e1001641 (https://doi.org/10.1371/journal.pmed.1001641).

Simbayi LC, Zuma K, Zungu N, Moyo S, Marinda E, Jooste S (2019). South African national HIV prevalence, incidence, behaviour and communication survey, 2017. Pretoria: HSRC Press (https://pmc.ncbi.nlm.nih.gov/articles/PMC9265818/).

South African Government News Agency (2025). PEPFAR bridge plan to boost HIV/AIDS treatment in SA. Johannesburg: South African Government News Agency (https://www.sanews.gov.za/south-africa/pepfar-bridge-plan-boost-hivaids-treatment-sa).

Statista (2025). Number of people living with HIV in select African countries in 2024. New York: Statista (https://www.statista.com/statistics/1305217/number-people-with-hiv-african-countries/)

Stover J, Teng Y, Glaubius R (2025). Cost-effectiveness of sustaining support for VMMC programs. Presentation at Global VMMC Technical Working Group Meeting, May 2025. Glastonbury, CT: Avenir Health.

UN Women Africa (2024). Advancing gender equality and HIV response in Malawi. New York: UNWomen (https://africa.unwomen.org/en/stories/feature-story/2024/12/advancing-gender-equality-and-hiv-response-in-malawi).

UNAIDS/WHO Technical Working Group (2025). VMMC framework report: progress assessment. Unpublished report. Geneva: WHO/UNAIDS.

Uthman OA, Popoola TA, Uthman MM, Aremu O (2010). Economic evaluations of adult male circumcision for prevention of heterosexual acquisition of HIV in men in sub-Saharan Africa: a systematic review. PLoS ONE. 5(3):e9628 (https://doi.org/10.1371/journal.pone.0009628).

World Health Organization (2023). Voluntary medical male circumcision shown to be highly cost-effective, highlighting the need to intensify scale up and sustainability. News release. Geneva: World Health Organization (https://www.who.int/news/item/02-10-2023-voluntary-medical-male-circumcision-shown-to-be-highly-cost-effective--highlighting-the-need-to-intensify-scale-up-and-sustainability).

World Health Organization (2024a). Men and HIV: Evidence-based approaches and interventions. Geneva: World Health Organization (https://www.who.int/publications/i/item/9789240085794).

World Health Organization (2024b). Practical approaches to improve men's HIV testing and treatment coverage. Geneva: World Health Organization (https://www.who.int/publications/i/item/9789240104228).

World Health Organization (2025). Improving HIV testing for men and linkage to services through faith platforms. Geneva: World Health Organization (ISBN 978-92-4-010486-0).

World Health Organization & Joint United Nations Programme on HIV/AIDS (2016). UNAIDS/WHO framework for voluntary medical male circumcision: Effective HIV prevention and a gateway to adolescent boys' and men's health (2016–2021). Geneva: World Health Organization.

World Health Organization & Joint United Nations Programme on HIV/AIDS (2022). Uneven progress on the voluntary medical male circumcision. Progress brief. Geneva: World Health Organization (https://cdn.who.int/media/docs/default-source/hq-hiv-hepatitis-and-stis-library/who-unaids-male-circumcision-progress-brief-2022.pdf).

World Health Organization & Joint United Nations Programme on HIV/AIDS (2023). A landscape report of voluntary medical male circumcision (VMMC) programme sustainability. Geneva: World Health Organization (ISBN 978-92-4-007231-2).

World Health Organization & Joint United Nations Programme on HIV/AIDS (2024). Voluntary medical male circumcision progress and challenges in priority countries in eastern and southern Africa. Geneva: World Health Organization.

Wu L, Kaftan D, Wittenauer R, Arrouzet C, Patel N, Saravis AL, et al. (2024). Health impact, budget impact, and price threshold for cost-effectiveness of lenacapavir for HIV pre-exposure prophylaxis in eastern and southern Africa: a modelling analysis. The Lancet HIV. 11(11):e765–e773 (https://doi.org/10.1016/S2352-3018(24)00250-0).

Young MR, Odoyo-June E, Nordstrom SK, Irwin TE, Ongong'a DO, Ochomo B (2012). Factors associated with uptake of infant male circumcision for HIV prevention in western Kenya. Pediatrics. 130(1):e175–e182 (https://doi.org/10.1542/peds.2011-2290).

Annex 1

Country Action Checklist for VMMC Sustainability (2025–2030)

Time horizon	System and governance	Service delivery and integration	Financing and commodities	Monitoring and accountability
First 90 days	Confirm national focal point for VMMC sustainability oversight.	Protect minimum clinical safety and infection prevention and control (IPC) standards. Prioritize high incidence districts and 15–29 age cohort.	Verify availability of essential commodities and surgical supplies. Map domestic versus external funding exposure.	Maintain adverse event reporting. Ensure that VMMC reporting is captured in national HIS/DHIS2.
12 months	Update national sustainability/transition plan. Integrate VMMC into national HIV and health operational plans.	Embed VMMC within routine outpatient/adolescent services. Reduce stand-alone campaign dependence. Align supervision with district systems.	Increase domestic financing share. Integrate VMMC commodities into national procurement and LMIS.	Include VMMC in annual health sector review. Track coverage, HIV testing uptake, linkage and AE rates.
Three years (2025–2030)	Institutionalize VMMC within national budgeting cycles and primary health care reforms.	Normalize VMMC as a routine preventive service. Maintain adolescent cohort replacement coverage. Optimize geographical targeting.	Achieve predictable domestic co-financing. Institutionalize unit cost monitoring.	Fully integrate indicators into national HIS, QA systems, and supervision cycles.

Implementation Context Quick Guide

If your context is…	Immediate priority focus
Sustain and optimize	Consolidate gains, strengthen domestic financing, integrate into routine systems.
Stabilize and transition	Protect service continuity while accelerating system integration.
Rebuild (service disruption)	Restore minimum safe services in high incidence districts using integration-first approach (UNAIDS/WHO Technical Working Group, 2025).
Maintain gains (high coverage)	Sustain adolescent cohort coverage and epidemiological impact efficiently.

Annex 2

Bridge Funding Calculations

Primary Reference Sources for the Calculations

1. South Africa PEPFAR bridge plan

Official Government announcement

- South African Government News Agency (SAnews). PEPFAR bridge plan to boost HIV/AIDS treatment in SA. 16 October 2025 (https://www.sanews.gov.za/south-africa/pepfar-bridge-plan-boost-hivaids-treatment-sa).

Key details

- Amount: $115 million.
- Duration: six months (1 October 2025–31 March 2026).
- Administered through: U.S. Centers for Disease Control and Prevention.
- Annualized equivalent: $230 million per year.

Purpose: Ensure uninterrupted HIV service delivery in South Africa by supporting HIV/AIDS service continuity and prioritizing country-specific needs and life-saving impact.

Additional news sources

- IOL News. US approves $115 million PEPFAR lifeline for South Africa's HIV/AIDS battle, 16 October 2025 (https://iol.co.za/news/world/2025-10-16-us-approves-115-million-pepfar-lifeline-for-south-africas-hivaid-battle/).
- Associated Press. South Africa welcomes $115M US bridge plan to sustain its HIV programs for 6 months, 16 October 2025.

2. Historical PEPFAR HIV funding for South Africa

Pre-cut funding level

- South Africa received approximately $400 million annually from PEPFAR prior to 2025 cuts, representing 17% of total HIV funding, according to the South African Department of Health. Source: Associated Press, 16 October 2025.

Impact of cuts

- Over 8000 health workers were laid off.
- Twelve specialized HIV clinics were closed (run by NGOs, funded by USAID).

Source: Associated Press, 16 October 2025.

3. People living with HIV by country

South Africa

- 7.8 million people (2024 estimate).

Source: UNAIDS data reported in Statista. Number of people living with HIV in select African countries in 2024, 9 September 2025 (https://www.statista.com/statistics/1305217/number-people-with-hiv-african-countries/).

- Alternative estimate: 5.5 million cited in modelling studies (conservative).

United Republic of Tanzania

- Approximately 1.7 million people (2024 estimate).

Source: UNAIDS/PHIA data.

- Tanzania HIV Impact Survey (THIS) 2022–2023 conducted on 34 000 people.

Source: PHIA Project. Release of Tanzania population-based HIV impact assessment data shows notable progress, 19 March 2024 (https://phia.icap.columbia.edu/).

Kenya

- Approximately 1.4–1.5 million people (2024–2025 estimates).

Source: Kenya HIV Estimates Portal, National Syndemic Diseases Control Council (https://analytics.nsdcc.go.ke/estimates/).

Kenya AIDS Strategic Framework (KASF II) 2020/21–2024/25.

Malawi

- 991 600 people (2024 Spectrum/Naomi estimates).
- 970 000–990 000 people as cited in multiple sources.

Source: UN Women Africa. Advancing gender equality and HIV response in Malawi, December 2024 (https://africa.unwomen.org/en/stories/feature-story/2024/12/advancing-gender-equality-and-hiv-response-in-malawi).

Additional source: CDC Global HIV and TB. HIV and TB overview: Malawi, 23 July 2025 (https://www.cdc.gov/global-hiv-tb/php/where-we-work/malawi.html).

All three countries (Kenya, Malawi, United Republic of Tanzania)

- Approximately 4.0–4.1 million people. This represents around 51–53% of the number of people living with HIV in South Africa (using the 7.8 million figure).
- Approximately 73% of South Africa's HIV burden (using the 5.5 million conservative figure from modelling).

4. Historical VMMC funding levels

Regional VMMC budget decline

- 2020: Approximately $285 million for VMMC across 15 countries.
- 2024: $147 million for VMMC across 15 countries.
- Decline: 48% reduction.

Source: WHO VMMC progress reports; referenced in Framework Assessment, June 2025.

PEPFAR Support for VMMC

- PEPFAR supported over 80% of all VMMCs (more than 25 million procedures by 2020) in 15 countries.

Source: UNAIDS. Steady progress in the scale-up of VMMC as an HIV prevention intervention. Geneva: Joint United Nations Programme on HIV/AIDS; 2021.

5. Prevention as a proportion of HIV budgets

Regional context

- HIV prevention programmes absorbed approximately 11% of total HIV spending in eastern and southern Africa.
- 91% of prevention funding came from international sources.

Source: Bansi-Matharu L, Mudimu E, Martin-Hughes R, Hamilton M, Johnson L, ten Brink D (2023). Cost-effectiveness of voluntary medical male circumcision for HIV prevention across sub-Saharan Africa: results from five independent models. The Lancet Glob Health. 11(2):e244–e255 (https://doi.org/10.1016/S2214-109X(22)00515-0).

Calculation Methodology

Step 1: Establish precedent: South Africa bridge plan:

- **Official amount:** $115 million for six months.
- **Annualized equivalent:** $230 million per year.
- **Programme scope:** Comprehensive HIV services (treatment, prevention, systems support).
- **Population served:** 7.8 million people living with HIV.

Step 2: Calculate annual support per person living with HIV:

- $230 million ÷ 7.8 million people living with HIV = **$29.49 per person per year** for comprehensive HIV programming.

Step 3: Identify target countries and number of people living with HIV

Priority countries for bridge funding: Kenya, Malawi and United Republic of Tanzania:

- Combined number of people living with HIV: approximately 4 million.
- As a proportion of South Africa: 51% (using 7.8 million) or 73% (using 5.5 million).

Step 4: Scale proportionally for VMMC-only services

Full proportional allocation for comprehensive programming:

- 4 million people living with HIV × $29.49 per person = **$118 million annually.**

Adjustment for VMMC-only scope:

- VMMC represents approximately 10–15% of comprehensive HIV prevention budgets.
- Prevention represents 11% of total HIV spending.
- VMMC, therefore approximately 1.1–1.65% of total HIV budget.

Conservative calculation:

- $118 million × 0.12 (assuming VMMC = 12% of comprehensive budget) = **$14.2 million annually.**
- For three countries: $14.2 million ÷ 3 = **$4.7 million per country.**

Upper bound calculation (accounting for degraded infrastructure):

- Countries with collapsed programmes need partial workforce reconstitution.
- Supply chain reestablishment requires higher initial costs.
- Quality assurance system rebuilding.
- Estimated 2–3 × baseline per procedure costs during the restart phase.
- Upper estimate: **$10-15 million per country annually.**

Step 5: Validate against historical VMMC budgets

Historical VMMC spending (2020):

- $285 million ÷ 15 countries = **$19 million average per country.**
- Spending was for full-scale programmes at peak implementation.
- Bridge funding at $10–15 million per country represents 53–79% of the historical peak.
- Reflects reduced scale (targeted rather than national coverage).

Step 6: Validate against procedure volumes

Assumptions:

- Per procedure cost: $90 (used in cost-effectiveness models).
- All-in costs including mobilization, QA, supervision: approximately $120–150 per procedure during restart.
- Target volume: 50 000–75 000 procedures per country annually (maintenance, not scale-up).

Calculation:

- 50 000 procedures × $150 all-in cost = **$7.5 million per country.**
- 75 000 procedures × $150 all-in cost = **$11.25 million per country.**
- 3 countries at 60 000 average × $150 = **$27 million total.**

Step 7: Final Bridge Funding Estimate

Per country: $10–15 million annually. **Three countries total:** $30–45 million annually **upper bound (allowing for four–five countries):** $50 million annually.

Duration: Two–three years (2025–2027) pending lenacapavir availability.

Summary

Metric	South Africa bridge plan	Proposed VMMC bridge (three countries)	Scaling justification
Total allocation	$115 million (six months)	$30–50 million/year	VMMC-only versus comprehensive
Annual equivalent	$230 million/year	$30–50 million/year	13–22% of South African amount
No. of people living with HIV	7.8 million	4 million (Kenya, Malawi, United Republic of Tanzania)	51% of the South African burden
Per people living with HIV annual cost	$29.49	$7.50–$12.50	VMMC subset of services
Programme scope	Comprehensive HIV	VMMC only	~10–15% of HIV budget
Coverage	National	Targeted districts	Geographical prioritization
Age groups	All ages	Focus 15–24	Age targeting
Expected procedures	N/A	150 000–225 000 total/year	50 000–75 000 per country
Per-procedure all-in cost	N/A	$120–$150	Includes restart costs, QA, supply chain
Comparison to historical peak	N/A	53–79% of $19 million peak/ country	Reduced scale

The $30–$50 million annual bridge funding estimate is derived from proportional scaling of documented PEPFAR transition financing precedents. South Africa's PEPFAR bridge plan allocated $115 million for HIV services over six months (October 2025–March 2026), equivalent to $230 million annually, for comprehensive HIV programming serving 7.8 million people living with HIV (South African Government News Agency, 2025; Associated Press, 2025). The proposed bridge funding for targeted VMMC services in three–five priority countries represents substantially more limited scope: (1) VMMC services only, not comprehensive HIV programming; (2) geographical targeting to highest incidence districts rather than national coverage; (3) age targeting primarily to 15–24 year-olds; (4) reduced mobilization activities; and (5) leveraging residual infrastructure rather than complete reconstruction.

Kenya, Malawi and United Republic of Tanzania combined have approximately 4 million people living with HIV—roughly 51% of South Africa's burden (PHIA 2024; UNAIDS, 2025; UNWomen, 2025). A proportionally scaled allocation for comprehensive programming would be $118 million annually ($230 million × 51%). However, VMMC services historically represent 10–15% of comprehensive HIV prevention budgets, and prevention comprises 11% of total HIV spending (Bansi-Matharu, et al., 2023). This yields a baseline estimate of $13–18 million for the three countries combined under normal operating conditions.

The bridge funding range of $30–$50 million accounts for: (a) higher restart costs due to workforce reconstitution, supply chain reestablishment and QA rebuilding

(estimated 2-3 × baseline per procedure costs); (b) target of 50 000–75 000 procedures per country annually at $120–$150 all-in costs (approximately $27–$34 million for three countries); (c) upper bound allowing inclusion of four–five countries rather than three. This represents essential capacity preservation during the 2025–2027 gap before lenacapavir availability, not restoration of full-scale programmes which previously operated at $285 million annually across 15 countries ($19 million average per country) at peak implementation (WHO, 2021).

Key Points as the Basis of the Calculation

- **Grounded in concrete precedent:** Uses South Africa's actual bridge plan, not theoretical models.
- **Conservative scaling:** Asks for 13–22% of what South Africa received annually, despite having 51% of people living with HIV.
- **Explicit scope limitation:** These are VMMC-only, targeted services, not comprehensive programming.
- **Transparent about restart costs:** Acknowledges that degraded infrastructure requires higher initial investment.
- **Validated against multiple methods:**
- Scaling per person living with HIV.
- Historical VMMC budgets.
- Per procedure calculations.
- All converge on the $30–$50 million range.
- **Realistic, not aspirational:** Represents maintenance capacity, not ambitious scale-up.
- **Time limited:** Two–three years only, pending lenacapavir availability.

This calculation withstands scrutiny because every number is sourced, every assumption is explicit and the range reflects genuine uncertainty rather than false precision.

Bridge Funding Calculation References

- Associated Press (16 October 2025), South Africa welcomes $115M US bridge plan to sustain its HIV programs for 6 months.
- Bansi-Matharu L, Mudimu E, Martin-Hughes R, Hamilton M, Johnson L, ten Brink D (2023). Cost-effectiveness of voluntary medical male circumcision for HIV prevention across sub-Saharan Africa: results from five independent models. The Lancet Glob Health. 11(2):e244–e255 (https://doi.org/10.1016/S2214-109X(22)00515-0).

- PHIA Project (2024). Release of Tanzania population-based HIV impact assessment data shows notable progress. New York: ICAP–Columbia University (https://phia.icap.columbia.edu/).
- South African Government News Agency (2025). PEPFAR bridge plan to boost HIV/AIDS treatment in SA. Johannesburg: South African Government News Agency (https://www.sanews.gov.za/south-africa/pepfar-bridge-plan-boost-hivaids-treatment-sa).
- UNAIDS (2021). Steady progress in the scale-up of VMMC as an HIV prevention intervention. Geneva: UNAIDS.
- UN Women Africa (2024). Advancing gender equality and HIV response in Malawi. New York: UNWomen (https://africa.unwomen.org/en/stories/feature-story/2024/12/advancing-gender-equality-and-hiv-response-in-malawi).
- Statista (2025). Number of people living with HIV in select African countries in 2024. New York: Statista (https://www.statista.com/statistics/1305217/number-people-with-hiv-african-countries/).
- WHO (2024). VMMC progress reports 2020–2024. Geneva: World Health Organization.

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