

POLICY BRIEF

Accessible Diagnostics: Integrating Self-Sampling into Women's Health Strategies in South Africa and Sub-Saharan Africa

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Centre for Development and
Implementation of Point-of-Care
Diagnostics

Sentrum vir die Ontwikkeling en Implementering van
Punt-van-Sorg Diagnostiek
Senthara ya Tšweletšopele le Phethagatšo ya Diphekolo
tša Lefelo la Tihokomelo



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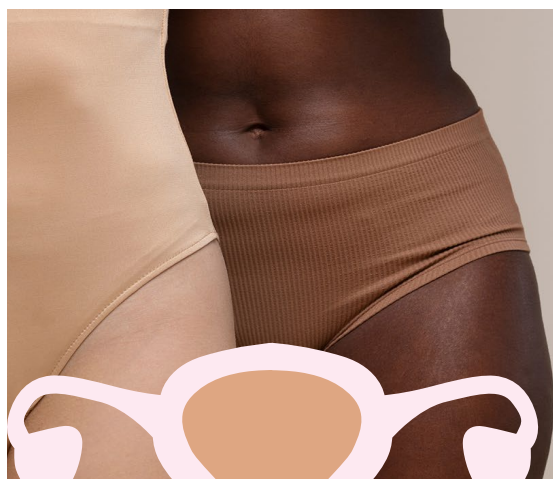


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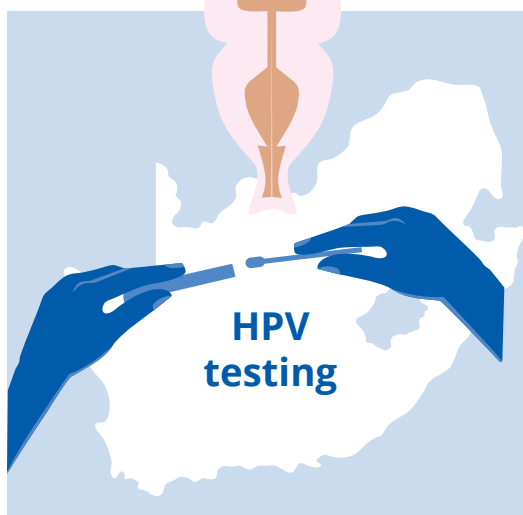


EXECUTIVE SUMMARY

Despite significant public health investment in sexual and reproductive health (SRH), women across South Africa and sub-Saharan Africa continue to die from preventable conditions such as cervical cancer and sexually transmitted infections (STIs). These burdens are most pronounced in rural, peri-urban, and informal settings, where stigma, gender norms, and weak health infrastructure hamper access to timely care and treatment.



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Cervical cancer remains the second leading cause of cancer-related death among women in the region, despite being highly preventable through early detection. Recent research led by academic and clinical centres across South Africa highlights self-sampling for HPV and STIs as a highly accurate, acceptable, and empowering diagnostic strategy, especially for young and marginalised women.

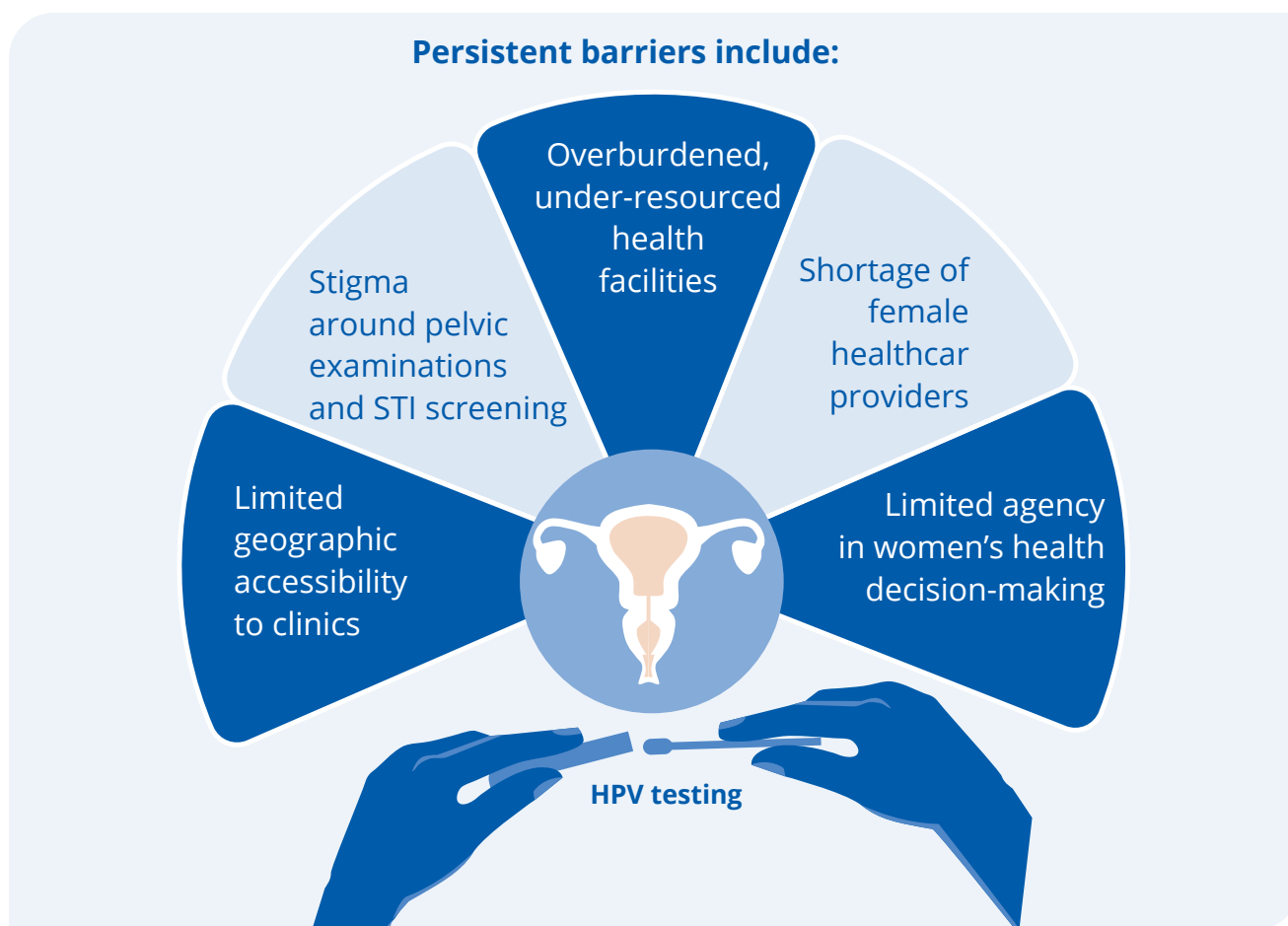


This brief synthesises findings from 16 peer-reviewed studies (2021–2025) to outline policy recommendations for embedding self-sampling into South Africa's broader cancer prevention and SRH frameworks. The proposed reforms offer a gender-transformative path toward reducing avoidable mortality, advancing health equity, and achieving Sustainable Development Goals (SDGs) 3 and 5.

CONTEXT AND RATIONALE: A WOMEN'S HEALTH CRISIS

Women in South Africa continue to face high rates of cervical cancer, largely due to delayed or missed diagnoses. In 2023, South Africa reported one of the world's highest cervical cancer burdens, primarily attributed to low screening uptake and care delays (WHO, 2023; National Cancer Registry, 2022).

A national pilot randomised control trial (Sebitloane et al., 2024) showed that integrating HPV testing and self-sampling at the primary care level significantly improved detection of high-risk cases. However, follow-up, referral, and care continuity remain major barriers. These findings underscore the need for decentralised models such as self-sampling to address structural gaps.



Community-engaged, gender-transformative approaches, including involving men in cancer education and co-designing community strategies, have demonstrated improved screening uptake and trust (Dzobo & Dzinamarira, 2025; Dzobo et al., 2023a).



EVIDENCE SUMMARY: 2023–2025

1. Youth and community preferences

More than 85% of young women in KwaZulu-Natal preferred self-sampling over clinic-based STI testing due to greater privacy, convenience, and autonomy (Jaya et al., 2025). Health providers support its integration into youth-friendly services.

2. Clinical performance and system feasibility

Studies confirm that self-collected vaginal samples for HPV yield high sensitivity and specificity. Saidu et al. (2021) demonstrated strong diagnostic accuracy using Xpert HPV testing. Meta-analyses (Jaya et al., 2024; Otieno et al., 2024) report over 90% diagnostic concordance with clinician-collected specimens, supporting task-shifting and decentralisation. However, implementation barriers, including delayed results and referral fragmentation, persist (Sebitloane et al., 2024).

3. Structural and sociocultural barriers

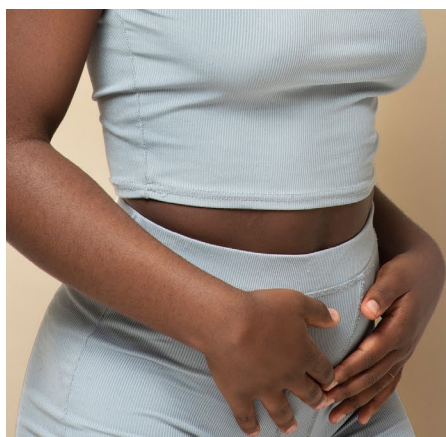
Systematic reviews (Kutz et al., 2023; Mantula et al., 2024; Atnafu et al., 2024) identify intersecting barriers: misinformation, stigma, weak infrastructure, and gender norms limiting women's autonomy. These require multi-sectoral, culturally responsive interventions.

4. Advances in breast cancer diagnostics

Oosthuizen et al. (2024) review South Africa's breast cancer genetic landscape, highlighting potential for expanded molecular diagnostics. Novel imaging biomarkers such as CXCR4 offer promise for personalized interventions, even in resource-limited settings (Hadebe et al., 2025; Chonco et al., 2023).

5. Women, power, and cancer

The Lancet Commission on Women, Power, and Cancer (Ginsburg et al., 2023) calls for embedding gender equity in cancer control strategies. Frameworks to monitor intersectional progress are emerging (Garton et al., 2025).



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POLICY RECOMMENDATIONS

1. Institutionalize self-sampling in policy frameworks

- Incorporate HPV/STI self-sampling in the Essential Diagnostics List and National Health Insurance (NHI) benefit package.
- Update national SRH and cancer strategies to reflect community-centred diagnostic models.
- Promote gender-inclusive programming that actively involves men.

2. Decentralised screening through community-based platforms

- Distribute free self-sampling kits through ward-based outreach, mobile clinics, community health workers (CHWs), schools, and non-governmental organisations (NGOs).
- Train CHWs and nurses in gender-sensitive sample collection guidance, post-test counselling, and follow-up care.

3. Empower through communication and destigmatisation

- Launch national multimedia campaigns in multiple languages to address stigma, misinformation, and fear around cancer and STIs.
- Collaborate with women's groups, youth leaders, traditional authorities, and men to co-create messages.
- Leverage digital platforms (WhatsApp, SMS, YouTube) for education and result notification.

4. Strengthen digital health integration

- Develop interoperable, anonymised digital systems for result tracking, referrals, and surveillance.
- Integrate with the National Health Laboratory Service (NHLS) and District Health Information Software 2 (DHIS2) systems to support real-time monitoring and public health responses.

5. Ensure equity and reach

- Provide free or subsidised kits for underserved groups: women in informal settlements, adolescents, LGBTQIA+ individuals, sex workers, and women with disabilities.
- Remove ID and documentation barriers; expand mobile health registration systems.

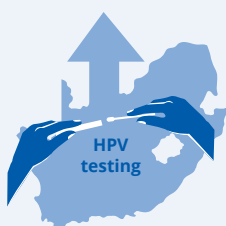
6. Promote innovation, research, and co-design

- Fund implementation science and cost-effectiveness research.
- Involve women and men as co-designers of diagnostic tools, services, and care models to ensure contextual relevance and sustainability.

IMPLEMENTATION ROADMAP: 2026–2029

Action Area	Year 1 (2026–2027)	Years 2–3 (2027–2029)
Policy inclusion	Update SRH and cancer strategies	Integrate into NHI & PHC frameworks
Community pilots	Launch in high-burden, underserved provinces	Scale nationally
Community health worker training	CPD-accredited modules	Expand mentorship programs
Public awareness	Mass campaigns	Embed in schools, churches, communities, and media platforms
Procurement of diagnostics and medicines	Partner with local manufacturers	Secure national supply chains
Digital health tools	Build real-time referral and tracking systems	Integrate with national health infrastructure

ANTICIPATED IMPACT



- Increased early detection of HPV and STIs
- Reduced cervical cancer mortality in underserved communities
- Greater integration of diagnostic tools into PHC settings
- Empowered women, who lead their health journeys
- Increased community trust in health services
- Accelerated progress on SDGs 3 (health) and 5 (gender equality)
- Long-term cost savings through early intervention and prevention

CALL TO ACTION

Self-sampling and point-of-care diagnostics represent a transformative opportunity to eliminate cervical cancer as a public health threat in South Africa and across the region. Evidence generated by South African research institutions, including the CPOC-Dx, NuMERI, CIDERU, and SAMRC, provides a scalable and equitable pathway forward.

We call on the Department of Health, provincial governments, and global development partners to institutionalise self-sampling and HPV testing into national screening strategies. Diagnostic equity must be recognised as a health priority and as a moral and gender justice imperative. Women cannot wait.

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