



ELIMINATION OF CERVICAL CANCER IN SOUTH AFRICA:

**A STRATEGIC AND
IMPLEMENTATION FRAMEWORK
2026 – 2030**



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



MESSAGE FROM THE HONOURABLE MINISTER OF HEALTH

Cervical cancer is preventable and treatable if diagnosed early and treated in a timely manner. Yet in South Africa, it remains the second leading cause of cancer-related deaths among women. Today, with powerful tools at our disposal, elimination is within reach.

Game-changers such as an expanded supply of Human Papillomavirus (HPV) vaccination, the single-dose recommendation, advances in HPV screening and treatment technologies for precancerous lesions, and stronger health systems have brought us closer to the elimination of cervical cancer. With the right investments, partnerships, and political will, we can make cervical cancer a disease of the past.

This National Strategic and Implementation Framework charts our collective path forward while confronting the structural barriers that continue to hold us back. It sets clear priorities to expand HPV vaccination to reach all eligible girls; transition to HPV DNA testing as the primary screening method; decentralise treatment services for precancerous lesions and strengthen capacity and access to treatment of invasive cancer; and to improve care for survivors. It also emphasizes the importance of working across sectors, levels of government, and with communities to build a stronger, more inclusive, and women/person-centred health system.

Eliminating cervical cancer is not just a health priority, it is a matter of equity and social justice. It is about restoring dignity, protecting lives, and ensuring that no woman is denied care because of where she lives or how much she earns. That is why we are making cervical cancer a national flagship priority—reflecting our shared commitment to women's health, equity, and sustainable development, and recognizing the pivotal role women play in the well-being of the South African economy, societal structure, thriving families, and communities beyond.

Our success will depend on how well we listen, how boldly we act, and how steadfastly we stay the course. We can make cervical cancer elimination not just an aspiration, but a reality for every woman and girl in South Africa and for generations to come. This will demand intentional partnerships, placing women at the centre of the strategy and the collective effort of government, the private sector, and communities working together towards one shared goal—zero cervical cancer in SA.



DR AARON MOTSOALEDI
MINISTER OF HEALTH
REPUBLIC OF SOUTH AFRICA

FOREWORD

South Africa stands at a critical moment in its response to cervical cancer. In 2022 alone, more than 11,000 women were diagnosed with the disease and nearly 6,000 lost their lives a burden that continues to fall disproportionately on women living with HIV (WLHIV), those in rural and underserved areas, and those reliant on the public health system. Meeting this challenge requires a nationally coordinated, equity-driven, and women-centred response that strengthens the health system at all levels and ensures that no woman is left behind by placing women at the centre of community intervention design, planning and implementation, monitoring and, evaluation and, reporting of progress.

This National Strategic and Implementation Framework for Cervical Cancer Elimination defines South Africa's pathway to achieving elimination as a public health problem by 2030. It is aligned with the World Health Organization's Global Strategy, which sets bold but achievable 2030 targets: 90% of girls fully vaccinated against HPV by age 15 years; 70% of women screened with a high- performance test by age 25 and again by age 55; and 90% of people diagnosed with precancer be treated early and 90% of women with invasive cancer to receive appropriate and comprehensive treatment. Anchored in a life-course approach, the framework recognises that prevention and care must begin early through community education and awareness, and continue throughout a woman's life to ensure continuity, improve outcomes, and advance health equity.

The framework outlines clear national priorities: increasing HPV vaccination coverage among eligible girls, implementing catch-up campaigns for those who missed previous rounds, expanding access to learners in private schools, and fully adopting the single-dose vaccination schedule approved by the National Department of Health. It also supports the country's transition from cytology-based screening to HPV DNA testing as the primary screening method, while improving access to high-quality treatment for precancerous lesions and invasive cancers, and ensuring these services are brought closer to where women live. These clinical priorities are underpinned by a renewed focus on social mobilisation, public awareness, decentralisation of services, and integrated, person- or woman-centred follow-up care.

To achieve these objectives, the Framework identifies a set of enabling conditions that are critical to success. These include strong governance and political will to ensure coherent planning, financing, and delivery across all levels of the health system; inclusive community engagement to strengthen demand and trust in services; woman-centred interventions to enhance ownership and demand for care; and robust information systems to guide decision-making and ensure accountability. These enablers are grounded in a broader commitment to health system strengthening where integrated person-centred care must become the norm. A nationally aligned monitoring, research agenda and service delivery model will support the entire continuum of care from prevention and early detection to diagnosis, treatment, survivorship, and palliative or end-of-life care.

This framework reflects the outcome of extensive consultation and collaboration. We acknowledge with appreciation the contributions of colleagues from the National Department of Health and provincial departments, technical teams from the World Health Organization, Clinton Health Access Initiative, Gates Foundation, representatives from academic institutions, professional societies, civil society organizations, business, organised labour, cancer treatment centres across the country, and other key partners. Their insights, field experience, and shared commitment have shaped this strategy and will continue to support its successful implementation.

Eliminating cervical cancer is both a public health imperative and a moral responsibility. With this framework as a guide, and through collective action and sustained investment, South Africa is well-positioned to deliver on its commitment and ensure that no woman dies from preventable cancer.

A handwritten signature in black ink, appearing to read 'Nathi Mthembu', written in a cursive style.

ACTING DIRECTOR-GENERAL: HEALTH
PROF CRISP

DATE: 13/04/2026.

Table of Contents

MESSAGE FROM THE HONOURABLE MINISTER OF HEALTH	2
FOREWORD	3
List of boxes:	6
List of tables:	6
ABBREVIATIONS	8
EXECUTIVE SUMMARY	9
1. BACKGROUND: EPIDEMIOLOGY AND RESPONSE	12
1.1. THE BURDEN OF CERVICAL CANCER AND DRIVERS OF RISK IN SOUTH AFRICA	12
1.2. NATIONAL RESPONSE AND PROGRESS TO DATE	16
2. THE GLOBAL STRATEGY TO ELIMINATE CERVICAL CANCER	20
3. SOUTH AFRICA'S STRATEGY FOR CERVICAL CANCER ELIMINATION	22
3.1. PILLAR 1: PRIMARY PREVENTION – HPV VACCINATION	24
3.2. PILLAR 2A: SECONDARY PREVENTION – SCREENING FOR PRECANCER LESIONS	25
3.3. PILLAR 2B: SECONDARY PREVENTION – TREATMENT OF PRECANCER LESIONS	30
3.4. PILLAR 3A: TREATMENT OF INVASIVE CANCER	31
3.5. PILLAR 3B: SURVIVORSHIP AND PALLIATIVE CARE	32
3.6. CROSS-CUTTING ENABLERS	33
3.7. EMERGING OPPORTUNITIES: NATIONAL RESEARCH AND INNOVATION AGENDA	37
4. THEORY OF CHANGE AND RESULTS FRAMEWORK	38
5. IMPLEMENTATION FRAMEWORK FOR ELIMINATION OF CERVICAL CANCER	41
5.1. IMPLEMENTATION	41
5.2. PILLAR 1: PRIMARY PREVENTION - HPV VACCINATION	43
5.3. PILLAR 2A: SECONDARY PREVENTION – SCREENING FOR PRECANCER LESIONS	54
5.4. PILLAR 2B: SECONDARY PREVENTION – TREATMENT OF PRECANCER LESIONS	64
5.5. PILLAR 3A: TREATMENT OF INVASIVE CANCER	74
5.6. PILLAR 3B: PALLIATIVE CARE AND SURVIVORSHIP	83
5.7. CROSS CUTTING ENABLERS	89
6. STAKEHOLDER MAPPING	91
7. MONITORING AND EVALUATION FRAMEWORK	98
8. RISK MANAGEMENT AND MITIGATION	102

ANNEXURE 4	103
COSTING FRAMEWORK:	103
AUTHORS AND AFFILIATIONS	110
NATIONAL DEPARTMENT OF HEALTH LEADS	111
SUGGESTED READING MATERIALS	112

List of figures:

Figure 1: Global cervical cancer incidence rates (age-standardized per 100,000 women, 2022)	12
Figure 2: Global cervical cancer mortality rates (age-standardized per 100,000 women, 2022)	13
Figure 3: hrHPV classification and group stratification according to the International Agency for Research on Cancer (IARC)	15
Figure 4: Roadmap of South Africa's cervical cancer elimination journey, highlighting achievements since 2014 and future priorities.	19
Figure 5: Life-course approach to cervical cancer prevention and care	21
Figure 6: Screening and diagnosis algorithm.....	29
Figure 7: WHO cervical cancer elimination surveillance and monitoring framework	37
Figure 8: Stakeholder Mapping at different Organizational Unit Levels	91
Figure 9: Roles of Departmental Clusters	92

List of boxes:

Box 1: Vision and strategic objectives for the elimination of cervical cancer.	22
Box 2: HPV screening in special groups.	28

List of tables:

Table 1: Summary of key interventions by outcome	11
Table 2: Key Interventions and Results Framework.....	43
Table 3: Provincial Implementation Targets (2026/27-2029/30): Vaccination coverage for girls in 9yrs to 15 years in Public and special schools	51
Table 4: Provincial Implementation Targets (2026/27-2029/30): Vaccination coverage for girls in 9yrs to 15 years in Private/ Independent schools	51
Table 5: Provincial Implementation Targets (2026/27-2027/28): Vaccination Catch-up campaign (girls 9-15).....	52
Table 6: Provincial Implementation Targets: Second dose HPV vaccination (10 years Immunosuppressed girls).....	53
Table 7: Provincial Implementation Targets (2026/27-2029/30): HPV Screening (women 25-55yrs)	63

Table 8:: Provincial Implementation Targets (2026/27-2029/30): HPV Screening (women HIV + 25-55yrs)	63
Table 9: Key Interventions and Results Framework.....	64
Table 10: Provincial Implementation Targets (2026/27-2029/30): Thermal Ablation Treatment (women 25-55).....	71
Table 11: Provincial Implementation Targets (2026/27-2029/30): LLETZ Treatment (women 25-55)	71
Table 12: Provincial Implementation Targets (2026/27-2029/30): Colposcopy (women 25-55) .	72
Table 13: Provincial Implementation Targets (2026/27-2029/30): VIA (women 25-55)	73
Table 14: Key Interventions and Results Framework.....	83
Table 15: Key intervention and results framework	89
Table 16: Results-Based Monitoring Framework	99
Table 17: Roles and Responsibilities	101
Table 18: Key M&E Milestones (2025–2030)	101
Table 19: Risk Management and Mitigation	102
Table 20: Vaccination costing calculations	105
Table 21: Screening + Diagnostics Costs	107
Table 22: Pre-cancerous Lesions Treatment Costs	108
Table 23: Vaccination Intervention for HPV- Eligible Population and Costs	109

ABBREVIATIONS

ASCUS	Atypical Squamous Cells of unknown significance
ASC-H	Atypical Squamous Cells – cannot exclude High SIL High-Grade Squamous Intraepithelial Lesion.
CBO	Community-Based Organization
CC	Cervical cancer
CHW	Community Health Worker
CIN	Cervical intra-epithelial neoplasia
DoH	Department of Health
EPI	Expanded programme on immunisation.
GACVS	Global Advisory Committee on Vaccine Safety
HIC	High-income countries.
HIV	Human immunodeficiency virus
HPV	Human papillomavirus
hrHPV	high-risk HPV genotypes
HSIL	High-Grade Squamous Intraepithelial Lesion
LLETZ	Large-loop excision of the transformation zone
LBC	Liquid-based cytology
LMIC	Low-and Middle-Income Countries
MDT	Multidisciplinary Team
NAAT	Nucleic Acid Amplification Test
NAGI	National Advisory Group on Immunisation
NDoH	National Department of Health
NHLS	National Health Laboratory Service
PLHIV	People Living with HIV
SIL	Squamous-intra-epithelial neoplasia
SDG	Sustainable Development Goals
SRH	Sexual and Reproductive Health
TA	Thermal ablation.
UHC	Universal Health Coverage
VE	Vaccine Efficacy
VIA	Visual Inspection with acetic acid
WLHIV	Women Living with HIV
WHO	World Health Organization

EXECUTIVE SUMMARY

South Africa has committed to eliminating cervical cancer as a public health problem by 2030 in alignment with the World Health Organization (WHO) Global Strategy. This Strategic and Implementation Framework provides a unified national roadmap to accelerate progress, address persistent inequalities, and sustain gains across the full continuum of prevention, screening, treatment, survivorship and palliative care. This Framework is grounded in the 90–70–90 targets: vaccinating 90% of girls against HPV by age 15 years; screening 70% of women with a high-performance test by ages 25 and 55; and ensuring 90% of women diagnosed with precancer receive early treatment and 90% of those with invasive cancer receive appropriate and comprehensive treatment.

Over the past five years, the country has achieved major policy and programmatic milestones that position it strongly for elimination. These include sustained school-based HPV vaccination reaching over 500 000 girls annually, screening of over 800 000 women per year, a full national transition to HPV-DNA based screening, and expansion of oncology services amongst others. These advances form the foundation upon which this Framework builds. The Framework outlines a five-year implementation roadmap aligned with the three WHO pillars for elimination: primary prevention, secondary prevention, and treatment:

- **Pillar 1:** Primary Prevention – HPV Vaccination: Expand HPV vaccination coverage among eligible girls aged 9–15 years through strengthened school-based delivery, catch-up campaigns, and efforts to reach out-of-school girls. South Africa has adopted WHO's single-dose schedule and will monitor opportunities to transition to next-generation vaccines and to extend vaccination to boys when feasible.
- **Pillar 2A:** Secondary Prevention – Screening for HPV: Complete transition to HPV DNA testing as the primary screening method for all eligible women in the health system (public and private), with a special focus on WLHIV. Strategies include integration with primary care and HIV services, introduction of self-sampling, and exploration of point-of-care testing.
- **Pillar 2B:** Treatment of precancer: The strategy will introduce gamechangers with the decentralization of treatment of precancerous lesions to district hospitals, community health centres and primary care facilities (including mobiles and community level facilities); scale up thermal ablation, and implement task-sharing with trained nurses, clinical associates, and medical doctors. Updated clinical algorithms and national referral pathways will be central to ensuring timely treatment.

- **Pillar 3A:** Treatment of Invasive Cancer: The strategy aims to strengthen access to comprehensive care across all levels of the health system, including surgery, radiation, chemotherapy, palliative care, and survivorship support for the cancerous stage of the disease. Multidisciplinary teams will ensure women receive coordinated, person-centred treatment from diagnosis through follow-up care.
- **Pillar 3B:** Survivorship and Palliative Care: The framework recognizes that elimination is not just about survival but includes quality of life and support for the affected families. The strategies include recognition of palliative care as a core component of cancer care, capacity building and expanded partnerships with CBOs, FBOs and home-based care teams, improved pain control, psychosocial support and dignity of care and support for the family.
- **Cross-cutting enablers:** To drive and sustain progress, five strategic enablers are embedded across all pillars: (1) political commitment and clinical governance; (2) health systems strengthening; (3) advocacy, education, and community engagement; (4) data systems and monitoring; (5) a nationally aligned research and innovation agenda and (6) Multisectoral stakeholder coordination and cooperation. These are essential to ensuring every woman and girl can access high-quality, timely, and equitable cervical cancer services.

The defining feature of framework is its emphasis on equity, integration and decentralization. Priority populations include women living with HIV, women in underserved rural and informal settlements, farmworker communities and key populations. Integration with HIV, TB, SRHR, and maternal and child health and PHC platforms will maximise reach and efficiency, while task-sharing and decentralization will improve access and continuity of care.

The Framework adopts a phased implementation approach – Phase 1 (2026/27 to 2027/28) acceleration; Phase 2 (2028/29) consolidation and mop-up and Phase 3 (2029/30) sustainability – to ensure rapid scale up while strengthening systems resilience and long-term impact.

Table 1: Summary of key interventions by outcome

OUTCOME	TARGET	IMMEDIATE INTERVENTIONS	FUTURE INTERVENTIONS
Primary Prevention of HPV infection through vaccination	90% of girls 10-15 years vaccinated	• Extend vaccination to private and independent schools through Integrated school health • Offer catch-up vaccinations to girls Integration into PHC, esp. SRHR, HIV prevention messaging and campaigns	• Transition to vaccine providing protection against additional HPV serotypes • Vaccination of boys
Early identification of women at high-risk through screening	70% of women routinely screened using high-quality screening test	• Transition to HPV DNA testing in all districts • Integrate cervical screening at all entry points in PHC • Ensure timely result delivery	• Self-sampling • Point-of-care testing • Single-visit Test and Treat
Management and treatment of all women with precancerous lesions	90% of women with precancerous lesions linked to care	• Ensure updated clinical algorithms and guidelines are available • Ensure appropriate care, referral and follow-up pathways • Decentralize treatment to district hospital and CHC levels • Improve access by addressing scope of practice issues	• Further decentralization of treatment services to selected PHC clinics • Single-visit Test and Treat
Linkage to care and treatment of women with invasive cancer	90% of women with invasive cancer treated with comprehensive treatment	• Expand availability and access to comprehensive treatment modalities • Ensure every woman is cared for by a multidisciplinary team • Strengthen palliative, end-of-life and survivorship care	Sustained comprehensive care model
High-Level Commitment and Clinical Governance	Health Systems Strengthening	• National Multisectoral stakeholder forum for Cervical Cancer Elimination • Integrated advocacy, vaccine education and messaging • Community Engagement • Private sector collaboration • Monitoring and evaluation	Surveillance, Monitoring and Evaluation

This Framework was developed through extensive stakeholder collaboration, including national and provincial departments of health, academic institutions, civil society, labour, business/private sector, professional associations, and global technical partners. It reflects a shared vision for a South Africa where no woman dies from a preventable cancer and where cervical cancer elimination is not just a possibility, but a reality within reach.

1. BACKGROUND: EPIDEMIOLOGY AND RESPONSE

1.1. THE BURDEN OF CERVICAL CANCER AND DRIVERS OF RISK IN SOUTH AFRICA

Cervical cancer remains a major global health challenge, affecting more than 660,000 women and causing approximately 350,000 largely preventable deaths each year.¹ The disease is an acute marker of global health inequities: over 85% of new cases and 94% of cervical cancer deaths occur in low- and middle-income countries (LMICs), where access to vaccination, screening, early diagnosis, and treatment remains limited². Women in these settings face a cervical cancer incidence up to 20 times higher and mortality rates more than four times greater than those in high-income countries. While the primary cause of cervical precancer and cancer is known to be persistent infection with high-risk oncogenic HPV, the disproportionately higher incidence and mortality from cancer is not necessarily from higher levels of HPV infections in LMIC. It is attributed the lack of high-quality cervical screening programs and inefficiencies in treating precancer lesions and management of invasive cervical cancer³.

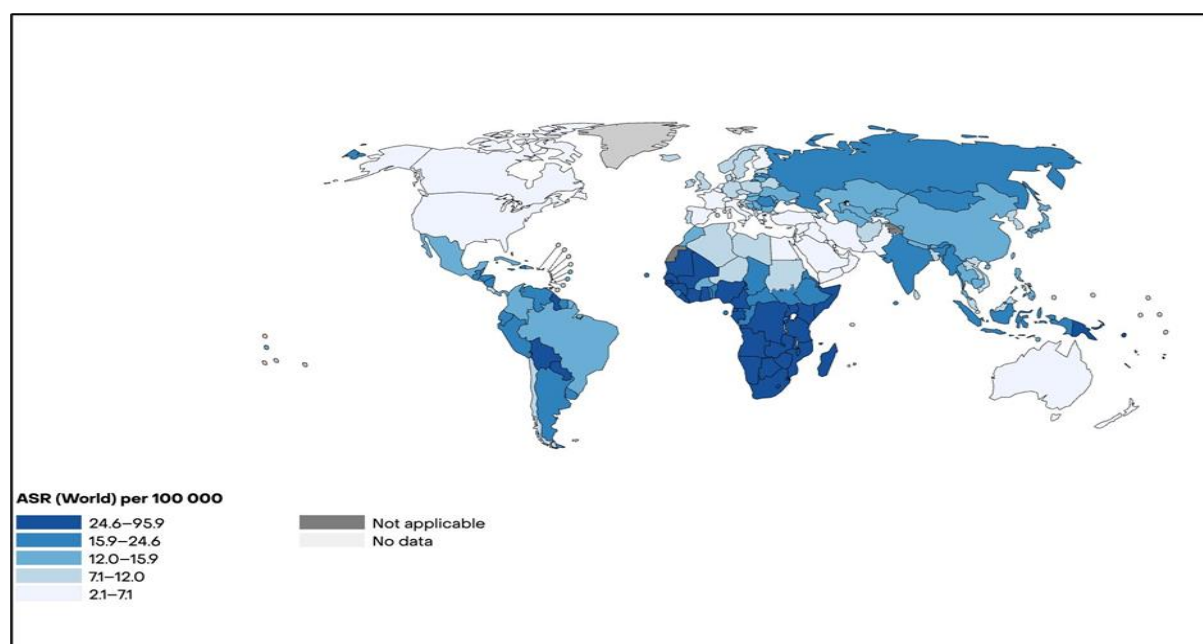


Figure 1: Global cervical cancer incidence rates (age-standardized per 100,000 women, 2022)²

¹ International Agency for Research on Cancer. (2022). *GLOBOCAN 2022: Global Cancer Observatory*. World Health Organization. <https://gco.iarc.fr>

² Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., Soerjomataram, I., Jemal, A., et al. (2021). Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: A Cancer Journal for Clinicians*, 71(3), 209–249.

³ Keetile, M., Ndlovu, K., Letamo, G., Disang, M., Yaya, S., & Navaneetham, K. (2021). Factors associated with and socioeconomic inequalities in breast and cervical cancer screening among women aged 15–64 years in Botswana. *PLOS ONE*, 16(8), e0255581.

Cervical cancer affects women primarily during their most economically and socially productive years, with far-reaching consequences for families and communities. The death of a mother or caregiver contributes to increased child malnutrition, interrupted education, and the perpetuation of intergenerational poverty. In 2020, cervical cancer accounted for nearly 20% of cancer-related maternal orphans worldwide, with sub-Saharan Africa disproportionately affected.⁴

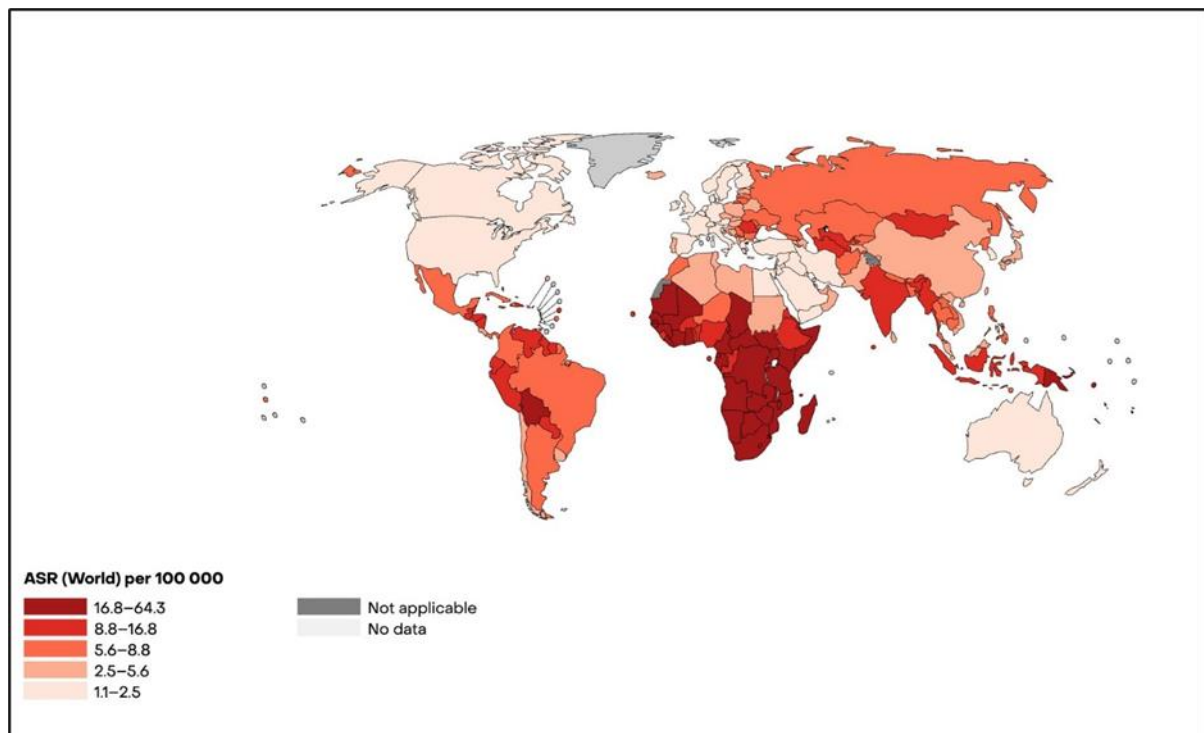


Figure 2: Global cervical cancer mortality rates (age-standardized per 100,000 women, 2022)²

South Africa is among the countries hardest hit by cervical cancer. In 2022 alone, over 11,000 women were diagnosed with the disease and nearly 6,000 died making it the second leading cause of cancer-related deaths among women in the country¹. The national age-standardised incidence and mortality rates 33.2 and 19.0 per 100,000 women, respectively are more than twice the global averages (14.1 and 7.0 per 100, 000) and significantly higher than regional averages in the WHO African Region (17.6 and 11.1 per 100,000)¹. This incidence rate of 33.2 cases per 100,000 women is also more than eight times higher than the WHO elimination threshold of fewer than 4 cases per 100,000 women, underscoring the substantial gap that remains for South Africa to achieve cervical cancer elimination as a public health problem⁵.

⁴ Guida, F., Kidman, R., Ferlay, J., Schüz, J., Soerjomataram, I., Kithaka, B., et al. (2022). Global and regional estimates of orphans attributed to maternal cancer mortality in 2020. *Nature Medicine*, 28(12), 2563–2572.

⁵ Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2021;71(3):209–249

The vast majority of cervical cancer cases in South Africa occur among underinsured women who rely on the public healthcare system. Socioeconomic factors that drive the HIV epidemic including poverty, gender-based violence, and intergenerational sex also heighten the risk of HPV infection and cervical cancer.

Women living with HIV (WLHIV) are at greater risk of persistent and recurrence of HPV infection and cervical cancer⁶. They are twice as likely to acquire high-risk HPV (hr-HPV), half are less likely to clear it, and six times more likely to develop cervical cancer compared to HIV-negative women. In 2018, 63% of women diagnosed with cervical cancer in South Africa were also living with HIV. Even with access to antiretroviral therapy, WLHIV experience faster disease progression, lower survival rates, and reduced treatment efficacy underscoring the urgent need for integrated, HIV-sensitive services for active rigorous screening across the continuum of care⁷. WLHIV often present with cervical cancer approximately a decade earlier than HIV-negative women, highlighting the strong epidemiological overlap between the HIV and cervical cancer epidemics⁸.

Persistent infection with hr-HPV genotypes is the necessary cause of virtually all cervical cancers⁹. HPV-driven carcinogenesis is largely attributable to a limited number of oncogenic types, with HPV16 being the most oncogenic and responsible for approximately 60% of cervical cancers worldwide¹⁰. Data from the national cervical cancer screening programme provide important insights into the epidemiology of HPV infection in South Africa. High-risk HPV positivity rates are high across reproductive and middle-aged groups, with approximately one in three women (35%) testing positive for high-risk HPV overall, and even higher prevalence among younger women. HPV16 accounts for approximately 16.27% of detected infections, HPV18 for 12.0%, while the majority of infections are attributable to other oncogenic HPV types¹¹.

⁶ Lissouba P, Van de Perre P, Mayaud P. (2018). HIV-positive women have higher risk of HPV infection, precancerous lesions, and cervical cancer: A systematic review and meta-analysis. *PLOS Medicine*. <https://doi.org/10.1371/journal.pmed.1002482>

⁷ Clifford GM, Franceschi S, Keiser O, Schöni-Affolter F, Lise M, Dehler S, et al. Immunodeficiency and the risk of cervical intraepithelial neoplasia 2/3 and cervical cancer: a nested case-control study in the Swiss HIV cohort study. *Int J Cancer*. 2016;138(7):1732–1740. doi:10.1002/ijc.29913

⁸ Goeieman B, Michelow P, Omar T, Firnhaber C, Levin S. Cervical cancer in women living in South Africa: a record linkage study of the National Health Laboratory Service and the National Cancer Registry. *Eccancermedicallscience*. 2022; 16:1348. doi:10.3332/ecancer.2022.1348

⁹ Walboomers JMM, Jacobs MV, Manos MM, Bosch FX, Kummer JA, Shah KV, et al. Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. *J Pathol*. 1999;189(1):12–19. doi:10.1002/(SICI)1096-9896(199909)189:1<12::AID-PATH431>3.0.CO;2-F

¹⁰ de Sanjosé S, Quint WGV, Alemany L, Geraets DT, Klaustermeier JE, Lloveras B, et al. Human papillomavirus genotype attribution in invasive cervical cancer: a retrospective cross-sectional worldwide study. *Lancet Oncol*. 2010;11(11):1048–1056. doi:10.1016/S1470-2045(10)70230-8

¹¹ National Health Laboratory Service. NHLS HPV Dashboard. 2025 [cited 2025 Apr]. Available from: <https://www.nhls.ac.za>

To reflect their differential oncogenic potential, the World Health Organization (WHO) 2024 Target Product Profiles stratify the 12 IARC Group 1 carcinogenic HPV types into four subgroups: Group 1a (HPV16), Group 1b (HPV18 and HPV45), Group 1c (HPV31, 33, 35, 52, and 58), and Group 1d (HPV39, 51, 56, and 59)¹². Collectively, these 12 types account for more than 98% of cervical cancers globally, with HPV16 alone causing around 60% of cervical squamous cell carcinomas, HPV18 and HPV45 contributing about 20%, the five Group 1c types about 15%, and the four Group 1d types less than 5%¹³.

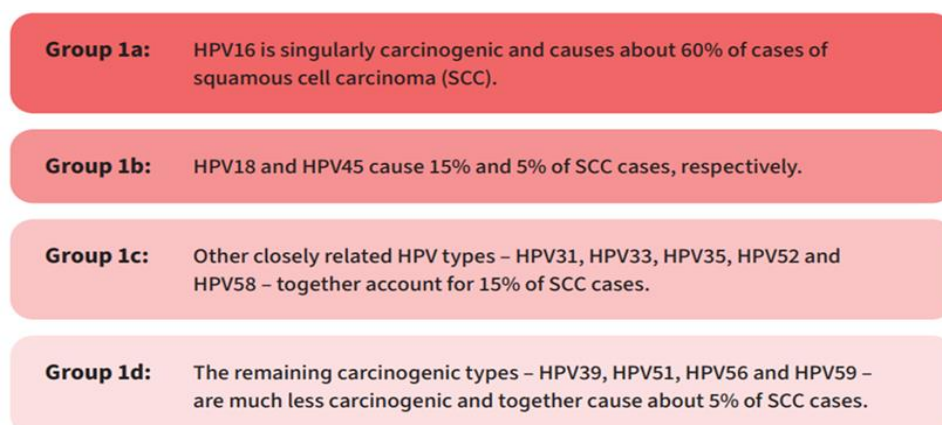


Figure 3: hrHPV classification and group stratification according to the International Agency for Research on Cancer (IARC)¹³

Other established cofactors, such as early sexual debut, multiple sexual partners, tobacco use, and exposure to other sexually transmitted infections, further increase risk by facilitating acquisition or persistence of hr-HPV infection¹⁴. These biological risks are often compounded by social determinants of health, including poverty, gender-based violence, low health literacy, and stigma, which contribute to delayed diagnosis, under-screening, and poor treatment outcomes¹⁵.

South Africa's current cervical cancer burden therefore remains far above the elimination target and highlights the urgent need to accelerate prevention and control efforts. Achieving the WHO cervical cancer elimination targets of 90% HPV vaccination coverage, 70% screening coverage,

¹² World Health Organization. Target product profiles for human papillomavirus screening tests to detect cervical pre-cancer and cancer [Internet]. Geneva: WHO; 2024 [cited 2026 May 2]. ISBN: 978-92-4-010027-5. Available from: <https://www.who.int/publications/i/item/9789240100275>

¹³ International Agency for Research on Cancer. Global attribution of HPV genotypes to invasive cervical cancer [Internet]. Lyon: IARC; 2024 [cited 2026 May 2]. IARC Press Release No. 353. Available from: https://www.iarc.who.int/wp-content/uploads/2024/07/pr353_E.pdf

¹⁴ Muñoz N, Castellsagué X, de González AB, Gissmann L. Chapter 1: HPV in the etiology of human cancer. Vaccine. 2006;24(Suppl 3): S3/1–10. doi: 10.1016/j.vaccine.2006.05.115

¹⁵ Mantula F, Toefy Y, Sewram V. Barriers to cervical cancer screening in Africa: a systematic review. BMC Public Health. 2024;24(1):516. doi:10.1186/s12889-024-17842-1

and 90% treatment of precancer will be essential to reduce incidence toward the elimination threshold and prevent thousands of avoidable deaths among South African women. Addressing this burden requires a comprehensive national response that strengthens HPV vaccination, expands high-performance cervical screening, ensures timely treatment of precancer and cancer, integrates services with HIV programmes, and addresses the structural determinants that limit women's access to prevention and care³².

1.2. NATIONAL RESPONSE AND PROGRESS TO DATE

Despite challenges, South Africa has made steady progress in key cervical cancer elimination strategic areas:

HPV Vaccination: The South African Department of Health in collaboration with the Department of Basic Education introduced the HPV vaccination programme in 2014, using the platform of the Integrated School Health Programme (ISHP). The school-based initiative initially targeted all Grade 4 girls in public and special schools and was later adjusted to include Grade 5 learners, covering approximately over 80% of eligible learners¹⁶. The bivalent HPV vaccine has been administered through 15,980 public and special schools, representing 96% of all schools identified for vaccination¹⁷.

Between 2014 and 2024, the programme delivered over seven million doses to more than four million girls nationwide. In the 2024/2025 school year, South Africa achieved 88% coverage of eligible girls^{18 19}.

Screening: Opportunistic cervical cancer screening using cytology (Pap smears) has been available to South African women for more than five decades. The National Cervical Cancer Screening Programme, introduced to improve access and equity, provides at least three free Pap smears to women in the general population, beginning at age 30, at ten-year intervals.

¹⁶ South Africa. National Department of Health. Cervical Cancer Prevention and Control Policy. Pretoria: NDoH; 2017. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>

¹⁷ Delany-Moretlwe S, Kelley KF, James S, Scorgie F, Chikandiwa A, Igumbor E, et al. Human papillomavirus vaccine introduction in South Africa: implementation lessons from an evaluation of the national school-based vaccination campaign. *Glob Health Sci Pract*. 2018;6(3):425–438. doi:10.9745/GHSP-D-18-00090

¹⁸ National Department of Health, South Africa. Annual Report 2024/2025 [Internet]. Pretoria: NDoH; 2025 [cited 2026 May 2]. RP350/2025. ISBN: 978-1-83491-311-7. Available from: https://www.health.gov.za/wp-content/uploads/2025/11/NDoH-2024-25-Annual-Report_-_19-September-2025.pdf

¹⁹ South African Government News Agency (SANews). SA Makes Progress with HPV Vaccination to Prevent Cervical Cancer. Pretoria: Government Communication and Information System; 17 November 2024. Available from: <https://www.sanews.gov.za/south-africa/sa-makes-progress-hpv-vaccination-prevent-cervical-cancer>

For women living with HIV (WLHIV), the policy mandates immediate cervical screening upon HIV diagnosis, with follow-up screening every three years if initial cytology is normal²⁰.

By 2024, national screening coverage stood at 38.7% (provinces ranging from 26% to 68.8%)²¹. Although there has been a gradual expansion in screening, it has remained below the WHO target of 70%. The cytology-based programme has faced several longstanding challenges that have limited its effectiveness, including:

- Insufficient human resources to perform and interpret Pap smears.
- Systemic delays in returning and communicating results between laboratories, clinics, and patients.
- Shortages of trained cytotechnologists and pathologists, leading to backlogs and diagnostic delays.

Recognising these limitations, South Africa initiated a major transition to HPV DNA testing to align with global best practice. In 2023, the National Health Laboratory Service (NHLS) introduced HPV DNA testing in a limited number of facilities to assess feasibility and strengthen laboratory capacity. Building on this foundation, by 2025, approximately 2,000 primary health care facilities across all nine provinces had transitioned to primary HPV testing as the national standard for cervical screening²². All HPV-positive samples are now referred for reflex cytology within the NHLS system, enabling faster triage and improved diagnostic accuracy. This shift marks a significant step towards a universal, quality-assured, and data-driven screening programme, supporting South Africa's commitment to the WHO 70% screening target and national cervical cancer elimination by 2030²³.

Treatment for precancer: Historically, treatment of precancerous cervical lesions in South Africa has been provided by gynaecologists at tertiary and central hospitals. Current treatment modalities include large loop excision of the transformation zone (LLETZ), and thermal ablation (TA)²⁴.

Large Loop Excision of the Transformation Zone (LLETZ)

²⁰ National Department of Health, South Africa. Cervical Cancer Prevention and Control Policy [Internet]. Pretoria: NDoH; 2017 [cited 2026 May 2]. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>

²¹ District Health Information Data. National Department of Health. Extracted 1st September 2025.

²² National Department of Health, South Africa. Annual Report 2024/2025 [Internet]. Pretoria: NDoH; 2025 [cited 2026 May 2]. RP350/2025. ISBN: 978-1-83491-311-7. Available from: https://www.health.gov.za/wp-content/uploads/2025/11/NDoH-2024-25-Annual-Report_-_19-September-2025.pdf

²³ World Health Organization. WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention, second edition [Internet]. Geneva: WHO; 2021 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789240030824>

²⁴ Kawonga M, Fonn S. Leveraging implementation science for secondary prevention of cervical cancer in South Africa. S Afr Health Rev. 2023;2023(1). Available from: <https://sahr.hst.org.za/article/120636-leveraging-implementation-science-for-secondary-prevention-of-cervical-cancer-in-south-africa>

LLETZ, also known as loop electrosurgical excision procedure, has been the preferred treatment for premalignant cervical lesions in South Africa. This procedure removes abnormal tissue while allowing for histopathological assessment, providing essential information for further management²⁵. However, LLETZ requires specialized equipment, trained personnel, and access to histopathology laboratories, which may limit its availability in resource-constrained settings. Potential risks include bleeding, infection, injury to surrounding structures, and adverse pregnancy outcomes, particularly preterm birth, which is correlated with the depth of tissue excised. Despite these limitations, LLETZ remains a key option for lesions not eligible for ablative treatment or when histopathological confirmation is required²⁶.

Thermal Ablation (TA)

Thermal ablation uses heat to destroy abnormal cervical tissue and has been endorsed by the World Health Organization as an effective and feasible treatment option in low-resource settings²⁷. TA devices can be battery-operated or solar-powered, require minimal electricity, and are relatively simple to administer²⁸. Evidence indicates cure rates of 87–95% for CIN2+ lesions²⁹. Unlike procedures that require gynaecologists, TA can be safely performed by trained nurses and midwives, enabling treatment to be decentralized to primary care and community health settings. Its simplicity, safety, and effectiveness make TA a preferred ablative treatment across South Africa and other low- and middle-income countries, allowing more women to access timely care closer to home.

Implementation considerations

The choice of treatment modality depends on lesion characteristics, available resources, and patient factors. In South Africa, expanding access to TA in primary care and community settings can reduce the need for tertiary-level care, while LLETZ remains available for lesions requiring excision or histopathological confirmation. Strengthening training, infrastructure, and referral systems is essential to ensure equitable access to all treatment modalities.

²⁵ Moodley J, Constant D, Hoffman M, Salimo A, Allan B, Rybicki E, et al. Cervical precancer thermal ablation versus LLETZ excision comparative efficacy study in WLWH (TALL Study): protocol for a randomised clinical trial in South Africa. *BMJ Open*. 2025;15(6): e094584. doi:10.1136/bmjopen-2024-094584

²⁶ Kyrgiou M, Athanasiou A, Paraskevaïdi M, Mitra A, Kalliala I, Martin-Hirsch P, et al. Comparative effectiveness and risk of preterm birth of local treatments for cervical intraepithelial neoplasia and stage IA1 cervical cancer: a systematic review and network meta-analysis. *Lancet Oncol*. 2022;23(7):896–906. doi:10.1016/S1473-2045(22)00334-5

²⁷ World Health Organization. WHO guidelines for the use of thermal ablation for cervical pre-cancer lesions [Internet]. Geneva: WHO; 2019 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789241550598>

²⁸ Boles T, Pontremoli Salcedo M, Lorenzoni C, Osman N, Baker E, Schmeler K, et al. Overview of thermal ablation devices for treating precancerous cervical lesions in low-resource settings. *J Glob Health*. 2022; 12:03089. doi:10.7189/jogh.12.03089

²⁹ Huchko MJ, Smith-McCune K, Sawaya GF, Scibilia J, Weinstein J, Green B, et al. Worthy of further consideration: an updated meta-analysis to address the feasibility, acceptability, safety and efficacy of thermal ablation in the treatment of cervical cancer precursor lesions. *Prev Med*. 2018;117: S28–S37. doi: 10.1016/j.ypmed.2018.10.008

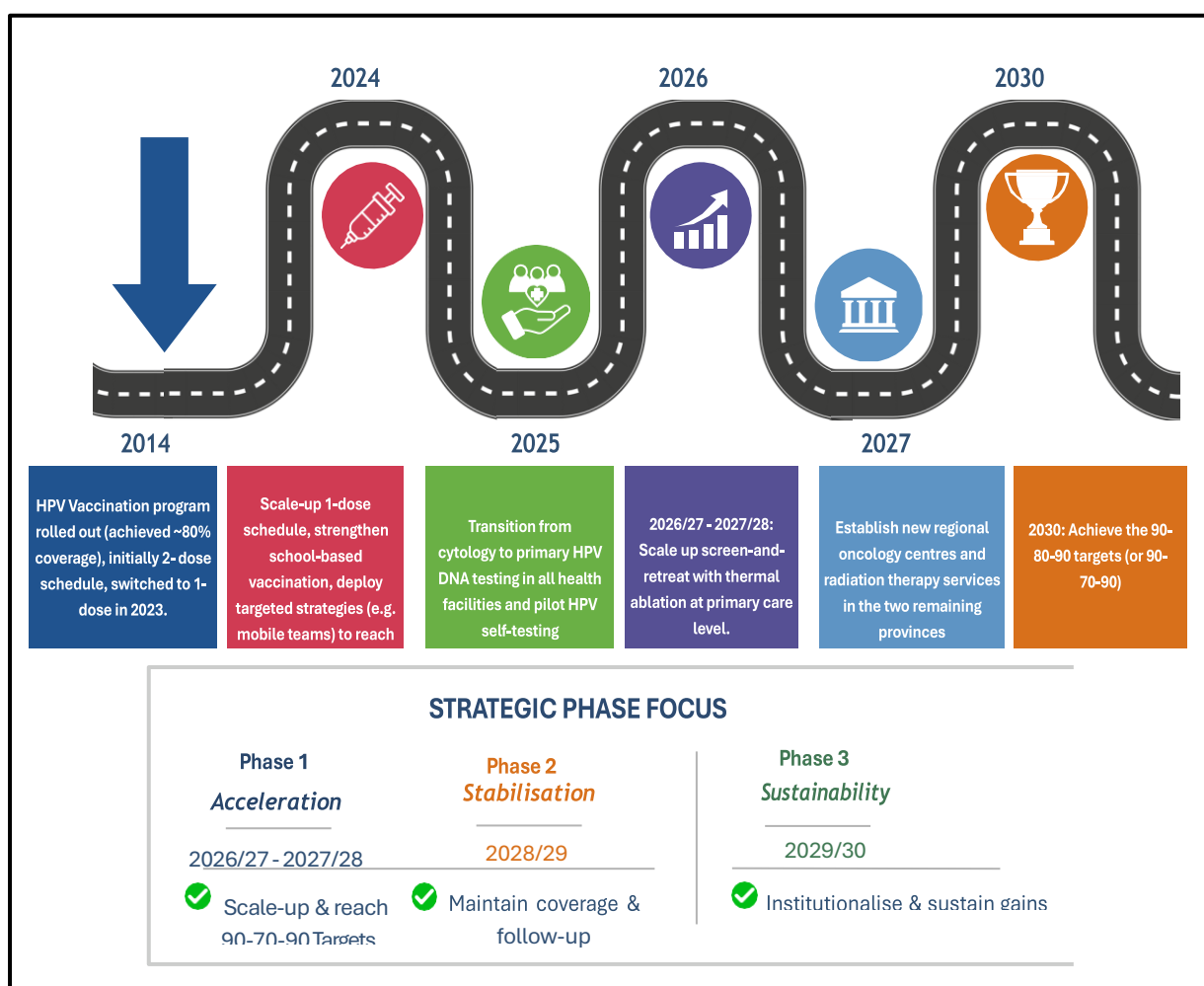


Figure 4: Roadmap of South Africa's cervical cancer elimination journey, highlighting achievements since 2014 and future priorities.

Treatment of invasive cervical cancer

There is access to facilities for surgery and chemotherapy in all nine provinces at tertiary hospitals and some regional hospitals, radiation therapy is available in seven provinces (excluding Mpumalanga and Northern Cape)³⁰. Patients from Mpumalanga and Northern Cape are referred across provinces to access radiation therapy services.

³⁰ National Department of Health, South Africa. Cervical Cancer Prevention and Control Policy [Internet]. Pretoria: NDoH; 2017 [cited 2026 May 2]. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>

Substantial delays in initiating treatment frequently occur - ranging from 3 to 9 months or longer. These delays significantly impact outcomes, as they often lead to treatment of advanced-stage disease with higher morbidity and reduced survival³¹. Adherence to treatment protocols is also poor due to multiple factors, including systemic inefficiencies and patient-related barriers.

These include poor system to ensure that women access their results to demand for services, lack of services and capacity to treat precancerous lesions at primary care level and weaknesses in the current system to actively track women that have positive screening to link them to care immediately²⁴.

Table 2: cervical cancer elimination targets - South Africa in relation to WHO benchmarks – extracted from DHIS.

SA 2024/25		WHO Target³²
New case per 100 000	33.2 per 100 000	<4 per 100 000
Girls under 15 vaccinated	88%	90%
Eligible women screened	38%	70%
Precancer lesions treated	55%	90%
Cervical cancer treated	68%	90%

2. THE GLOBAL STRATEGY TO ELIMINATE CERVICAL CANCER

In 2018 WHO issued a global call to action to eliminate cervical cancer, and in 2020 Ministers of Health across countries adopted the Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem³².

To achieve elimination, countries must reduce cervical cancer incidence to fewer than 4 cases per 100,000 women. This goal is anchored in three strategic pillars with specific 2030 targets:

³¹ Zungu L, Mahlalela N, Thusi G. Treatment delays for cancer patients in Sub-Saharan Africa: South Africa as a microcosm. *Ecanermedicalscience*. 2024; 18:1747. doi:10.3332/ecancer.2024.1747

³² World Health Organization. (2020). *Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem*. <https://iris.who.int/handle/10665/336583>

- **Pillar 1:** 90% of girls fully vaccinated with HPV vaccine by age 15 years
- **Pillar 2A:** 70% of women are screened with a high-performance test by 25 years of age and again by 55 years of age
- **Pillar 2B:** 90% of women with precancer treated, and
- **Pillar 3A:** 90% of women with invasive cancer managed

Achieving the 90-70-90 targets by 2030 sets countries on a path to eliminate cervical cancer within the next century.

A life-course approach to cervical cancer prevention and control (Figure 3) underpins the global strategy. It spans the continuum of a woman's life from childhood to adulthood and integrates a comprehensive set of interventions: HPV vaccination, routine screening, timely treatment of precancerous and cancerous lesions, and palliative care.

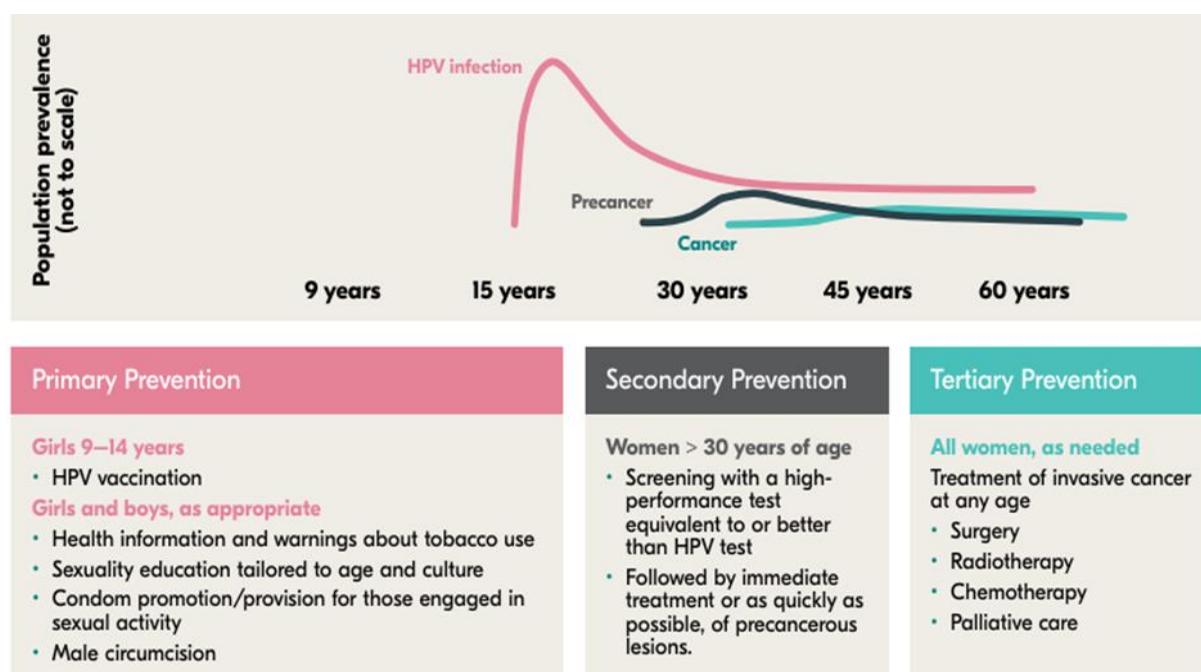


Figure 5: Life-course approach to cervical cancer prevention and care³³

Achieving the 90-70-90 targets will require community mobilisation, political leadership, and health system investments that address the root causes of inequity beyond clinical service delivery. Equally critical are community education, social mobilization, multi- and inter-sectoral collaboration, and ensuring equitable access to high-quality services. South Africa's burden of

³³ World Health Organization. Comprehensive cervical cancer control: a guide to essential practice, 2nd edition [Internet]. Geneva: WHO; 2014 [cited 2026 May 3]. ISBN: 978-92-4-154895-3. Available from: <https://www.who.int/publications/i/item/9789241548953>

disease, high HIV prevalence, and ongoing disparities demand a comprehensive and nationally coordinated response.

3. SOUTH AFRICA'S STRATEGY FOR CERVICAL CANCER ELIMINATION

Cervical cancer is the **second most common cancer among women** in South Africa³⁴ and remains a major driver of maternal morbidity and mortality³⁵. With an age-standardised incidence of **33.2 per 100 000 women**, far above the WHO elimination threshold of **<4/100 000**, urgent and coordinated action is required³².

Box 1: Vision and strategic objectives for the elimination of cervical cancer.

Vision: A South Africa where women are free from cervical cancer

Goal: Elimination of cervical cancer as a public health problem by 2030

Strategic Objectives

Pillar 1: Primary Prevention - To scale-up of HPV vaccination to reach 90% of all eligible girls (9-15 years) by 2030.

Pillar 2A: Secondary Prevention - Achieve ≥70% precancer screening coverage with a high-performance test

Pillar 2B: Treatment of Precancerous lesions: Ensure ≥90% of women with precancer receive timely treatment

Pillar 3A: Treatment of invasive cancer - Ensure ≥90% of women with invasive cancer receive appropriate and comprehensive treatment

Pillar 3B: Survivorship and Palliative Care: Improve quality of life and reduce suffering for women with advanced disease

Cross cutting enablers – Political Commitment and Governance, Health System Strengthening embedded in Primary Health Care, Financing, Multisectoral Coordination and Monitoring, evaluation & research through strong data systems are enablers needed to accelerate progress across all pillars and achieve South Africa's 90–70–90 cervical cancer elimination targets by 2030.

³⁴ Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.* 2024;74(3):229–263. doi:10.3322/caac.21834

³⁵ Olorunfemi G, Ndlovu N, Masukume G, Chikandiwa A, Pisa PT, Singh E. Temporal trends in the epidemiology of cervical cancer in South Africa (1994–2012). *Int J Cancer.* 2018;143(9):2238–2249. doi:10.1002/ijc.31610

Key contextual policy drivers include:

- High HIV burden: WLHIV are up to six times more likely to develop cervical cancer and to progress more rapidly from HPV infection to disease.
- Early onset disease: A significant proportion of invasive cancers occur before age 35, especially among WLHIV.
- Health system inequalities: Rural and low-income districts experience lower screening coverage, longer treatment delays, and limited access to oncology services.
- Societal and economic impacts: Cervical cancer is a major contributor to maternal orphans, intergenerational poverty, loss of workforce productivity, and catastrophic household costs.

Policy Justification

Given South Africa's epidemiological profile, the country will adopt a more intensive screening strategy than WHO minimum targets.

This enhances early detection, mitigates HIV-related risk, and supports national equity goals. The National Strategic and Implementation Framework seeks to:

- Eliminate cervical cancer as a public health problem by 2030 using the WHO 90–70–90 framework.
- Achieve universal, equitable access to HPV vaccination, primary HPV screening, early treatment, and oncology care.
- Ensure that survivors receive integrated psychosocial, rehabilitative, and palliative care services.
- Strengthen governance, health system, financing, digital systems, and community engagement.
- Develop a national research and innovation agenda to support evidence-based decision-making.

This National Strategic Framework outlines South Africa's approach to eliminating cervical cancer as a public health problem. Developed through collaboration with key stakeholders, it charts a 5-year pathway focused on scaling up high-impact interventions, addressing structural barriers, and ensuring no woman is left behind. The framework builds on existing progress and is anchored in principles of equity, integration with HIV and primary health care services, and coordinated multisectoral action anchored on four strategic pillars. Each pillar defines a critical area of intervention, supported by targeted actions to strengthen prevention, early detection, timely treatment, efficient and effective health system performance.

3.1. PILLAR 1: PRIMARY PREVENTION – HPV VACCINATION

Target: Scale-up of HPV vaccination to reach 90% of all eligible girls (9-15 years) by 2030.

The immunisation program is essential in reducing the burden of vaccine-preventable diseases. The human papillomavirus (HPV) vaccine is a highly effective tool for preventing cervical cancer when administered to girls aged 9 -15 years³⁶, ideally before sexual debut³⁷. Vaccinating adolescent girls remains the most effective long-term strategy for cervical cancer prevention, with evidence also supporting herd immunity in unvaccinated individuals when coverage is high³⁸.

POLICY ACTIONS AND STRATEGIES TO IMPROVE COVERAGE.

- Adopt and sustain the WHO-recommended single-dose vaccine schedule.
- Strengthen school-based vaccination platforms, including public and private schools through Integrated School Health Programme.
- Implement catch-up vaccinations to girls 9 – 15 years who have missed their dose in previous years and the out of schoolgirls.
- Integrate vaccination messaging with SRHR, HIV prevention, and adolescent health education.
- Improving vaccine confidence and uptake through social mobilisation, advocacy communication, and demand generation.
- Expand partnerships with all relevant stakeholders and partners parents, school governing bodies, faith-based organisations, NGOs, and private general practitioners, Department of Education (basic and higher education) and Social Development.
- Strengthen cold chain management and adverse event monitoring.
- Implement innovative programmes that allow expansion to other target groups

HPV vaccination campaigns must go hand in hand with Sexual and Reproductive Health (SRH), HIV prevention messaging, and tools for safer sex within the Integrated School Health Programme. Communication strategies should also address the importance of delaying early

³⁶ World Health Organization. Human papillomavirus vaccines: WHO position paper (2022 update). Wkly Epidemiol Rec. 2022;97(50):645–672. Available from: <https://www.who.int/publications/i/item/who-wer9750-645-672>

³⁷ Falcaro M, Castañón A, Ndlela B, Checchi M, Soldan K, Lopez-Bernal J, et al. The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study. Lancet. 2021;398(10316):2084–2092. doi:10.1016/S0140-6736(21)02178-4

³⁸ Drolet M, Bénard É, Pérez N, Brisson M; HPV Vaccination Impact Study Group. Population-level impact and herd effects following the introduction of human papillomavirus vaccination programmes: updated systematic review and meta-analysis. Lancet. 2019;394(10197):497–509. doi:10.1016/S0140-6736(19)30298-3

sexual debut and limiting the number sexual partners, the increased risk of HPV infection for women living with HIV, and other risk behaviours such as smoking. These messages should be tailored to adolescents, caregivers, and educators to promote informed decision-making and healthy behaviours.

The country will monitor ongoing developments of new vaccines that provide protection against additional HPV genotypes. Decisions to transition to newer vaccines and to extend vaccination to boys will be based on affordability.

3.2. PILLAR 2A: SECONDARY PREVENTION – SCREENING FOR PRECANCER LESIONS

Target: To screen 70% of women using the HPV DNA test for all women, including WLHIV from 25 years; repeat every 5 years for WLHIV for life and every 10 years in HIV negative women through to 55.

South Africa is transitioning from cytology-based screening to high-performance HPV DNA testing as the primary screening modality for all eligible women. Primary HPV DNA testing is the most sensitive method with a sensitivity of approximately 91,6% for detecting high-grade lesions (CIN2+), outperforming cytology and Visual inspection with acetic Acid (VIA). It allows for earlier detection and reduces missed precancerous diseases. Evidence shows that primary HPV screening every 3 years in WLHIV after a negative result with 70% coverage could reduce cervical cancer mortality by over 70% in HIV-endemic countries, but intervals not longer than 5 years, where resource constraints prevail, still provide significant benefit (*E. McClymont et al*). Reflex cytology of HPV-positive results improves the specificity of the test and reduces overtreatment, particularly in Group 1C and 1D (non-HPV 16/18 or 45) HPV-positive cases.

Screening in WLHIV should start at age 25, regardless of sexual debut or ART initiation, and continue beyond 55 years for life due to persistent risk. Given South Africa's high HIV prevalence and the associated risk of undiagnosed infections, alongside a cervical cancer incidence rate of 33.2 per 100 000 women well above the WHO elimination target of 4 per 100 000 and the observation that many cases occur in women under 35 years, the national policy has opted to initiate cervical screening at age 25 for all women, regardless of HIV status. This earlier start aims to enhance early detection and prevention of precancerous lesions in a high-burden setting. However, the screening follow-up intervals and age to exit screening will differ based on HIV status, with more frequent testing recommended for women living with HIV to address their elevated risk.

Integrating HPV testing into HIV and SRH services will ensure a cost-effective delivery and facilitate timely linkage to care. Combined messaging on HPV vaccination, sexual health, HIV prevention, and tools for safer sex is critical to the success of the strategy. Communication strategies should also address the importance of delaying early sexual debut and limiting the number of sexual partners, the increased risk of HPV infection for women living with HIV, and

other risk behaviours such as smoking. These messages should be tailored to adolescents, caregivers, and educators to promote informed decision-making and healthy behaviours.

Strategies for scaling screening include:

- Transitioning to HPV DNA testing across all districts by 2026, supported by capacity building for health workers and community-based screening teams through training, mentorship, and supervision.
- Strengthening the capacity of the National Health Laboratory Service (NHLS) to meet increased demand for HPV testing and ensure timely processing and delivery of high-quality results to both the healthcare providers and the women to demand for early linkage to care.
- Integrating cervical cancer screening into primary health care for women's health and other relevant services, ensuring every health system contact is leveraged to offer screening as part of a comprehensive sexual and reproductive health (SRH) package.
- Prioritising women living with HIV across all service delivery points, ensuring they are routinely offered screening during facility visits and follow-up care.
- Introducing self-sampling, where feasible especially for hard-to-reach populations such as sex workers, and farmworkers, based on laboratory capacity, validated test kit availability, quality assurance mechanisms, training for self-collection, and strengthened systems for sample transport, results communication, and linkage to care.

All eligible women should be offered screening in line with the following guidelines:

Screening:

General population: Primary HPV DNA testing for all asymptomatic women to start at age 25 regardless of their HIV status. Repeat screening every 10 years at age 35, 45 and 55 if HIV negative. Women who test HPV positive should be managed according to standardised algorithms. Information on screening and management of special groups is shown in Box 1.

Women living with HIV: Women living with HIV are 6 times more likely to develop cervical cancer than HIV-negative women due to persistent HPV infection and accelerated disease progression³⁹. Primary HPV DNA testing for asymptomatic WLHIV to start at age 25, regardless of ART initiation, repeat screening every 5 years for HPV negative results⁴⁰.

³⁹ Stelzle D, Tanaka LF, Lee KK, Ibrahim Khalil A, Baussano I, Shah ASV, et al. Estimates of the global burden of cervical cancer associated with HIV. *Lancet Glob Health*. 2021;9(2): e161–e169. doi:10.1016/S2214-109X (20)30459-9

⁴⁰ Canfell K, Sharma M, Bénard É, Saville M, Kelly H, Keane A, et al. Benefits and harms of cervical screening, triage and treatment strategies in women living with HIV. *Nat Med*. 2023;29(12):3059–3069. doi:10.1038/s41591-023-026013

HPV-positive results be managed according to standardised algorithms⁴¹. Screening will continue beyond age 55 as long as women remain in HIV care⁴². Offer self-collection options to improve access and participation, particularly in rural and underserved areas. Incorporate screening into routine HIV and ART services to ensure continuity and follow-up⁴³.

Follow-up:

Follow up for all HPV positive women is similar irrespective of their HIV status (Box 2). The choice of treatment modality depends on the visibility and accessibility of the transformation zone, patient factors, and available resources⁴⁴. Offer immediate treatment for HPV 16/18 or 45 with thermal ablation where the lesion is not visualized during gynaecological examination⁴⁵. Cases not eligible for ablative treatment, or those with visible lesion requiring histopathological confirmation on gynaecological examination, should be managed with colposcopy and LLETZ. Perform reflex cytology for all other non-HPV 16/18 or 45 positive results and offer immediate treatment for those with abnormal cytology results with either thermal ablation or colposcopy and LLETZ⁴⁶. (Box 1)

⁴¹ World Health Organization. WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention, second edition [Internet]. Geneva: WHO; 2021 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789240030824>

⁴² Denny L, Swart AM, Wilkins D, Kehinde A, Franceschi S, Almonte M. Cervical cancer prevention in HIV-positive women: same efficacy but at what cost? BJOG. 2018;125(9):1169–1177. doi:10.1111/1471-0528.15050

⁴³ Maree JE, Wright SC, Makua TP. Self-collection for human papillomavirus testing: a way to increase cervical cancer screening in rural South Africa. Eur J Cancer Care. 2014;23(3):357–364. doi:10.1111/ecc.12146

⁴⁴ World Health Organization. WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention, second edition [Internet]. Geneva: WHO; 2021 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789240030824>

⁴⁵ Dreyer G, van der Merwe FH, Botha MH, Snyman LC, Mouton A, Constant D, et al. Enhancing cervical cancer prevention in South African women: primary HPV mRNA screening with different genotype combinations. Cancers (Basel). 2023;15(22):5432. doi:10.3390/cancers15225432

⁴⁶ Lorenzoni C, Tergas AI, Almonte M, Lloveras B, Socolovsky M, Edelzstein ME, et al. Cervical cancer screening and treatment algorithms using human papillomavirus testing — lessons learnt from a South African pilot randomised controlled trial. S Afr Med J. 2024;114(3): e1316. doi:10.7196/SAMJ. 2024.v114i3.1316

Box 2: HPV screening in special groups.

HPV Testing in special groups

Pregnant women

Women attending antenatal clinics present an opportunity to be screened for cervical cancer. Screening pregnant women in the targeted age group of 25 – 49 years is best performed before 20 weeks. HPV testing performed during pregnancy will follow standard national cervical cancer screening guidelines; however, HPV positive tests requiring treatment as prescribed by the algorithm will have treatment deferred to 6 weeks postpartum if there is no suspicion of an invasive cancer⁴⁷. If there is any suggestion of invasive cancer, women should be referred urgently to a regional hospital for further management.

Screening of sex workers

Sex workers are at increased risk of acquiring all sexually transmitted diseases, including high risk HPV and should be offered screening early and at least yearly. For those who test positive for oncogenic types, early referral to colposcopy is recommended. Self-sampling may be particularly suitable for women sex workers, to avoid having to present to clinics and the possible associated stigmatisation and is recommended for this group⁴⁸.

Screening women who were previously treated for precancerous lesions (follow-up)

Women who were previously treated with Large Loop Excision of the Transformation Zone (LLETZ), conization, thermal ablation or any other procedure require annual follow up⁴⁴. If the screening tests remain positive, they must be referred to a higher level of care⁴⁹.

Assessment and management of women with symptoms or signs of invasive cancer

All treatment facilities should have punch biopsy forceps. In a screening programme 1-5% of women are expected to already have cancer. Ulceration, irregularity, and large lesions are the most reliable signs of invasion; therefore, cervical samples are contraindicated – instead a punch biopsy should be performed to acquire a histological diagnosis. If there is no punch biopsy forceps, refer the patient to a higher level of care³⁰.

All women with lesions covering more than 2/3 of the circumference of the cervix and where there is a suspicion of invasion should have histology to exclude invasive cancer. This can be taken with a punch biopsy or LLETZ wire. Histology registries should be kept at each facility so that results can be traced, and for monitoring and surveillance. Reporting of histological confirmation is mandatory.

All biopsy specimens as well as tissues removed with the LLETZ procedure, should be placed in formalin, and sent for histology³⁰.

⁴⁷ National Department of Health, South Africa. Cervical Cancer Prevention and Control Policy [Internet]. Pretoria: NDoH; 2017 [cited 2026 May 3]. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>

⁴⁸ Bonvoisin C, Tebache L, Labrosse J, Klein C, Munaut C, Goffin F. Cervical cancer screening programs for female sex workers: a scoping review. *Front Public Health*. 2023; 11:1226779. doi:10.3389/fpubh.2023.1226779

⁴⁹ Rositch AF, Richter KL, Phoolcharoen N, Wheeler CM, Silver MI. Patterns of persistent HPV infection after treatment for cervical intraepithelial neoplasia (CIN): a systematic review. *Cancer Epidemiol Biomarkers Prev*. 2017;26(12):1832–1840. doi: 10.1158/1055-9965.EPI-17-0233

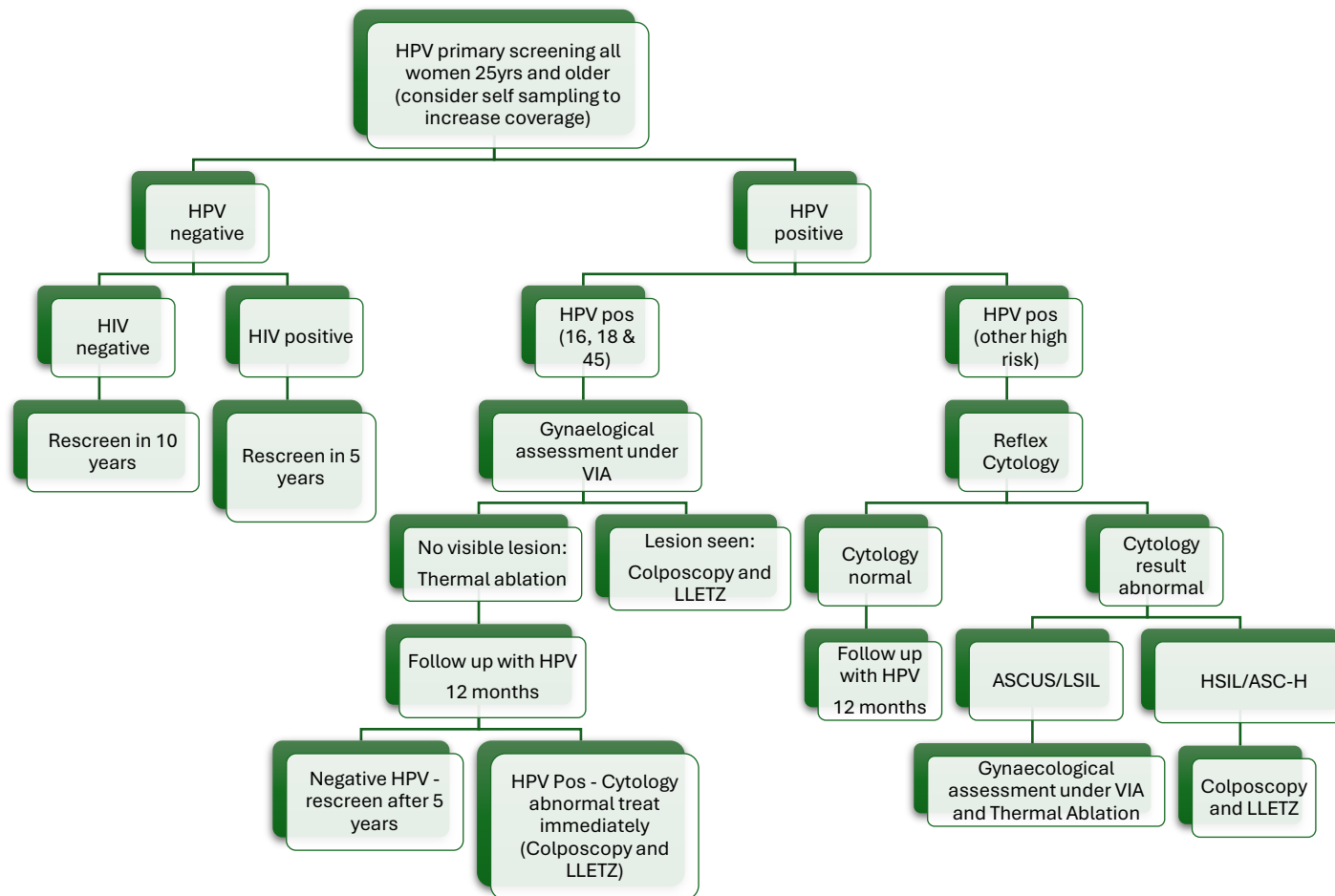


Figure 6: Screening and diagnosis algorithm

Box 2: HPV DNA CERVICAL CANCER SCREENING ALGORITHM

Standard national cervical cancer screening algorithm

Abbreviations: ASC-H, atypical squamous cells - cannot exclude high-grade squamous intraepithelial lesion; HPV, human papillomavirus; HSIL, high-grade squamous intraepithelial lesion; NEG, negative; POS, positive; WLHIV, women living with human immunodeficiency virus (HIV)

3.3. PILLAR 2B: SECONDARY PREVENTION – TREATMENT OF PRECANCER LESIONS

Target (Precancer): Link 90% of women diagnosed with precancerous cervical lesions to appropriate treatment.

Timely and effective treatment of precancerous lesions is essential to prevent progression to invasive cervical cancer⁴⁴. Expanding access to treatment through decentralised, simplified approaches is essential to prevent cervical cancer, particularly in high-burden settings like South Africa²⁴. While treatment of precancerous lesions has traditionally been provided by gynaecologists, newer methods now allow safe task-sharing with trained nurses, clinical associates, and medical doctors at lower levels of care²⁴. Two key treatment modalities suitable for primary care settings are thermal ablation (TA) and large loop excision of the transformation zone (LLETZ)²⁵ (see Box 2).

Achieving this target will require deliberate action to decentralise services, enable task-sharing, and strengthen clinical systems for timely treatment.

Strategies to expand access to treatment for precancerous lesions include:

- Empower women to demand for results, and appropriate care. Advocate for a system where NHLS results are sent to both the facility and the woman
- Develop and or strengthen information and tracking systems for active track and trace of women with positive HPV and cytology tests
- Disseminate updated clinical algorithms and guidelines, including the standardised treatment algorithm. A clinical advisory team will be constituted to develop these.
- Ensure referral and follow-up pathways are in place, with treatment provided within four weeks of referral.
- Decentralise precancer treatment to district hospitals, community health centres and primary care clinics including mobile services by 2030 to improve access to screen and treat services and ensure on-site and timely treatment.
- Expand thermal ablation to the primary health care level, as availability and provider capacity increase.
- Engage the South African Nursing Council to advocate for expanding nurses' scope of

practice to treatment of precancerous lesions within advance primary health care training to include thermal ablation, with attention to ensuring appropriate training, mentorship, and support for the delivery of quality and timely care at primary care level.

- Establish clear referral pathways to ensure timely diagnosis and treatment at higher levels of care, alongside systems that support structured down-referral for follow-up, ongoing management, and survivorship support at primary and district levels

3.4. PILLAR 3A: TREATMENT OF INVASIVE CANCER

Target: To ensure that 90% of women diagnosed with invasive cervical cancer are promptly linked to comprehensive treatment, palliative, and survivorship care.

Invasive cervical cancer requires early diagnosis and access to a full range of treatment services, including surgery, radiation, chemotherapy, and palliative care⁵⁰. Multidisciplinary care teams play a central role in ensuring that each woman receives timely, appropriate, evidence-based, and person- centred treatment aligned with her clinical and social needs⁵¹.

South Africa is working to strengthen service delivery across all levels of care to ensure timely access to treatment and comprehensive support for women with invasive cervical cancer⁵². These efforts also respond to broader health system challenges that affect access and quality of cancer care more widely—not only for cervical cancer but across the cancer continuum.

Strategies to strengthen invasive cervical cancer treatment include:

- Ensuring all women with invasive cancer are managed by a multidisciplinary team, with clinical decisions recorded and reviewed regularly.
- Surgical radiation and chemotherapy services should be accessed timeously for clinically indicated referrals.

⁵⁰ Chibwesha CJ, Lopatkin NA, Driscoll SD, Bhatt S, Nakaganda A, Bowa K, et al. Management and care of women with invasive cervical cancer: American Society of Clinical Oncology resource-stratified clinical practice guideline. *J Glob Oncol.* 2016;2(5):311–340. doi:10.1200/JGO.2016.003954

⁵¹ Concin N, Matias-Guiu X, Vergote I, Cibula D, Mirza MR, Mäenpää J, et al. ESGO/ESTRO/ESP guidelines for the management of patients with cervical cancer — update 2023. *Int J Gynecol Cancer.* 2023;33(5):649–728. doi:10.1136/ijgc-2022-004062

⁵² Sartorius B, Sartorius K, Aldous C, Govender PS. Harnessing the law to advance equitable cancer care in South Africa: exploring the feasibility, desirability, and added value of a dedicated national cancer act. *Ecancermedicalscience.* 2024; 18:1658. doi:10.3332/ecancer.2024.1658

- Expanding access to surgical, radiation, and chemotherapy services, leveraging the health grants to improve infrastructure on existing health conditional grants to strengthen the integrated health package for all cancer patients.
- Engagement with the private sector and public-private partnerships to expand access to diagnostic and treatment services, where appropriate, and in alignment with national clinical standards and referral pathways.
- Treatment package is aligned to the National Policy Framework and Strategy on Palliative Care: pain management, control of other symptom, psychosocial support and mobility support.

3.5. PILLAR 3B: SURVIVORSHIP AND PALLIATIVE CARE.

Target: To ensure that 90% of women diagnosed with invasive cervical cancer are promptly linked to comprehensive treatment, palliative, and survivorship care.

Survivorship, palliative, and end-of-life care are essential components of the cancer care continuum and must be integrated from the point of diagnosis to support quality of life and well-being. As cervical cancer treatment capacity expands and screening improves, increasing numbers of women in South Africa will survive cervical cancer or live longer with advanced disease. Survivorship care addresses the physical, psychological, reproductive, social, and economic needs of women during and after treatment. Palliative care ensures dignity, comfort, and holistic support for women with advanced cancer and their families.

Strategies to strengthen invasive cervical cancer treatment include:

- Strengthen palliative, end-of-life, and survivorship care through community-based delivery, aligned with the National Policy Framework and Strategy on Palliative Care.
- Decentralising the palliative symptomatic treatment and pain management package with clear downward referral pathways so that women can access it from their nearest health facility.
- Improve quality of life and psychosocial wellbeing for survivors, caregivers, and families.
- Strengthen coordination between oncology centres, PHC, WBOTs, and community organisations to ensure continuity of care.
- Enhance data collection for survivorship outcomes and palliative care utilisation.

3.6. CROSS-CUTTING ENABLERS

To strengthen the foundational health system, governance, coordination, monitoring and research enablers required to accelerate progress across all pillars and achieve South Africa's 90–70–90 cervical cancer elimination targets by 2030.

South Africa's Strategic Enablers for Cervical Cancer Elimination

Achieving the 90–70–90 targets and eliminating cervical cancer as a public health problem in South Africa will require more than clinical interventions. A set of game-changing enablers—rooted in health systems resilience, social mobilisation, governance, and research—must be in place to drive and sustain progress across all pillars of the strategy. These enablers are not stand-alone components but essential levers for scaling up coverage, reducing inequalities, and ensuring accountability at every level.

The South African health system is underpinned by the primary healthcare and district health system aligned with the WHO health systems blocks which include service delivery, health workforce, health information, medical products, vaccines, and technology, health financing, and good leadership and governance⁵³.

Political Commitment and Clinical Governance

Strong political will and structured clinical governance are foundational to cervical cancer elimination. This commitment translates into prioritising cervical cancer prevention and control within national health agendas by allocating resources and implementing comprehensive programmes including vaccination, screening, and treatment.

Leadership is required not only at the national level, but across provinces, districts, and primary health care facilities. Clear accountability structures must be established to ensure quality of care, define standards, and support implementation of clinical guidelines. Coordination across key government departments such as Health, Basic Education, Higher Education and Training, Social Development, Women Youth and Persons with Disability and National Treasury and is vital to support integrated service delivery and sustainable financing.

⁵³ World Health Organization. Everybody's business: strengthening health systems to improve health outcomes — WHO's framework for action [Internet]. Geneva: WHO; 2007 [cited 2026 May 3]. Available from: <https://www.who.int/publications/i/item/9789241596077>

To enhance coordination and oversight of the national response, South Africa will establish a National Steering Committee for Cervical Cancer Elimination. The committee will provide oversight to guide implementation, promote accountability, mobilize resources, and support alignment with national targets and international commitments.

South Africa's governance approach should include decentralisation of authority and resources to frontline facilities, supported by skilled and competent managers at every level of the system. Planning efforts must follow a life-course approach and include service delivery planning for all target cohorts. Targeted interventions should also address the needs of women presenting with advanced disease.

Health Systems Strengthening

South Africa's elimination efforts are built on the foundation of a robust primary health care and district health system. To enable effective prevention, screening, diagnosis, treatment, and palliative care, the following system priorities are essential:

- Strengthening and integration of the strategy into Primary Healthcare is an anchor for this strategy.
- Human resources for health: Ensure adequately trained, mentored health workers (pre-service and in-service) and an equitable distribution of skilled providers with appropriate skill mixes across all levels of care.
- Supply chain and technologies: Ensure an uninterrupted supply of quality-assured vaccines, screening tests, diagnostics, and treatment technologies through effective procurement and logistics systems at the point of service.
- Digital health information system: Ensure efficient delivery of results to women and facilities through innovative use of mHealth technologies; develop a track and trace digital system to enable tracking of positive cases to link them to care and trace throughout the continuum of care that they receive appropriate care.
- Financial protection: Reduce out-of-pocket costs for patients, aligned with the National Health Insurance (NHI) vision, and mobilise resources through conditional grants, government budgets, and public-private partnerships.
- Service across the continuum of care: Explore patient-centred models for planned patient transport systems, navigation systems, and social protection mechanisms for women with advanced disease.
- Linkages of private and public health care systems would be important

Financing

The sustainability of the Programme lies in Primary and Secondary Prevention Investment to eliminate cervical cancer which is costly to treat. The upfront investment towards the health of

women is important. The department has to leverage on all relevant conditional grants, but an additional investment is required to achieve all the targets envisaged by Global and country strategy

Advocacy, Health Education, and Community Engagement

Demand creation and social mobilisation are game-changing elements that ensure women and girls access and complete the full continuum of care. South Africa will implement comprehensive communication strategies to shift knowledge, attitudes, and behaviours related to cervical cancer prevention and treatment. Key actions include:

- Developing and implementing integrated age-appropriate, pre-tested messaging through print, radio, television, and digital platforms.
- Engaging community leaders both political and traditional, civil society organisations, faith-based institutions, business, labour school governing bodies, and other relevant government departments.
- Amplifying the experiences and voices of cervical cancer patients, survivors, and their families.
- Leveraging social media influencers and champions, and monitoring platforms to rapidly address misinformation and vaccine hesitancy.
- Providing health education through trusted and skilled providers to improve service uptake and reduce stigma.
- Driving health promotion and disease prevention through community health care workers at household level.

These efforts must extend beyond government communication channels and be co-developed with community structures to ensure relevance and reach.

Multisectoral Co-ordination

The elimination of cervical cancer in South Africa requires a comprehensive multisectoral response that extends well beyond the health system. Achieving the WHO's global and South African targets of 90% - 70%, - 90% demands a coordinated action across government departments, civil society, labour, traditional leadership structures, and the private sector within the available frameworks for co-ordination. The role of media cannot be over emphasized. Given that South Africa bears one of the highest burdens of cervical cancer on the African continent, largely driven by the intersection of HIV prevalence and HPV infection, a truly integrated and multisectoral response is not optional it is an urgent national imperative to protect the lives and dignity of South African women and girls.

Monitoring, Evaluation, Research and Innovation through strong data systems

Local data (national and sub-national) is essential to shape health policy direction, inform health financing needs, decision making, and guide prioritisation and improve quality of care. A robust and aligned health information system is critical to assess short and long-term initiatives toward the elimination of cervical cancer.

South Africa will integrate cervical cancer indicators into existing health information systems and use both population-based and programme-level data to guide implementation. Key priorities include:

- Establishing clinical governance accountability structures at the facility, sub-district, district, and provincial levels.
- Assigning focal points at provincial and district levels to oversee monitoring and evaluation of cervical cancer activities.
- Developing data collection tools to track key indicators: HPV vaccination coverage, HPV screening testing rates, treatment uptake, and treatment outcomes.
- Ensuring that patient-level data systems are in place to support longitudinal follow-up, from screening through treatment and survivorship.
- Institutionalization of Continuous Quality Improvement (CQI) processes through nerve centres and Continuous quality improvement framework
- Establishing an integrated data management system that leverages existing systems such DHIS2, NHLS, EMRs, and NCR
- Empowering patients through data access

South Africa will align its surveillance systems with the WHO Cervical Cancer Elimination Monitoring Framework and report annually on progress toward elimination targets (90:70:90) which is shown in Figure 7.

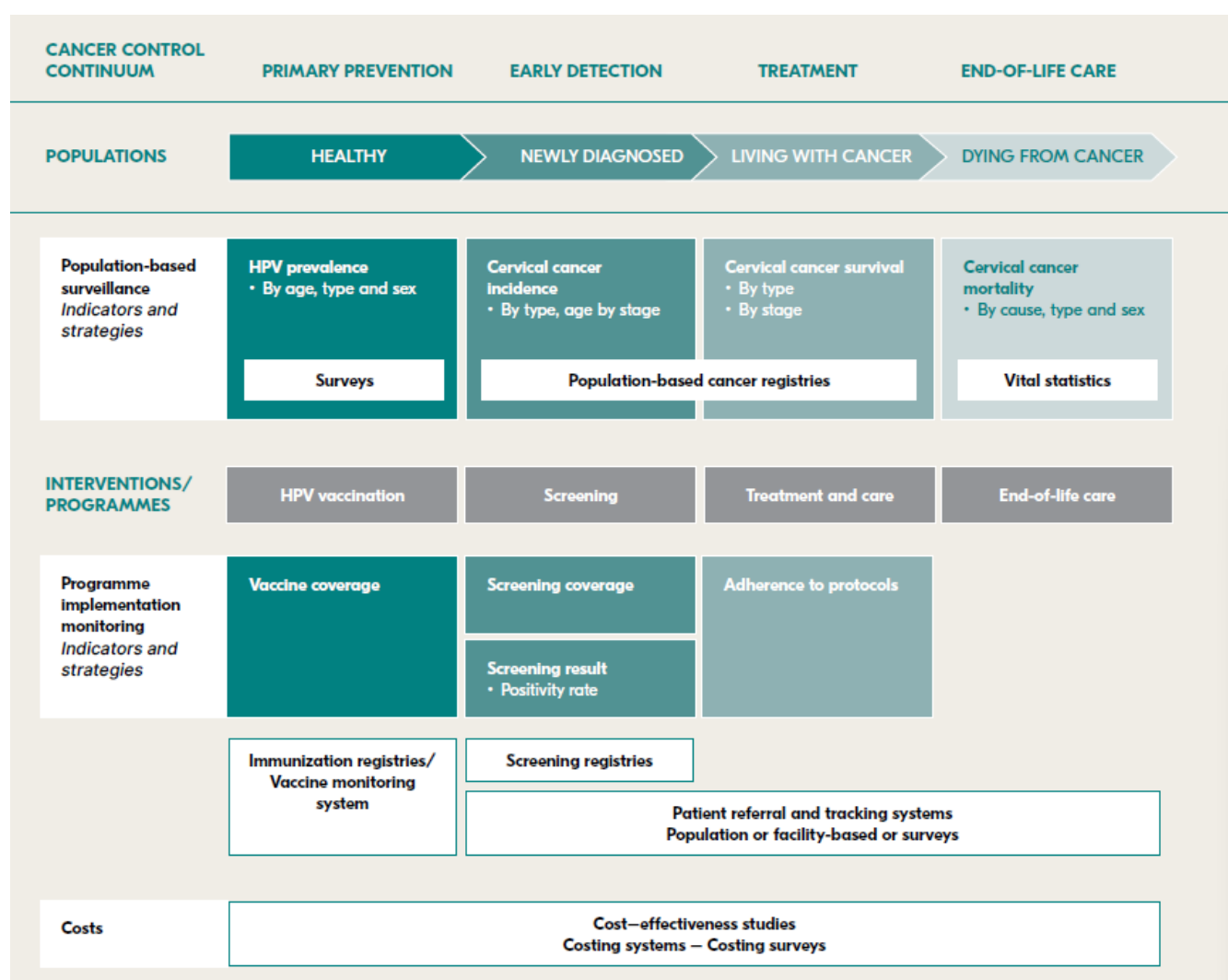


Figure 7: WHO cervical cancer elimination surveillance and monitoring framework⁵⁴

3.7. EMERGING OPPORTUNITIES: NATIONAL RESEARCH AND INNOVATION AGENDA

An aligned, South African focused research agenda will support continuous learning and innovation across the cervical cancer continuum of care. South Africa will conduct implementation research to understand and address barriers to uptake and scale-up evidence-based prevention and control services. Research priorities include:

- Identifying risk factors, disparities, and implementation challenges in settings where the need is high

⁵⁴ Piñeros M, Saraiya M, Baussano I, Bonjour M, Chao A, Bray F. The role and utility of population-based cancer registries in cervical cancer surveillance and control. *Prev Med.* 2021; 144:106237. doi: 10.1016/j.ypmed.2020.106237

- Assessing new screening and treatment technologies, including HPV mRNA testing, methylation assays, p16/Ki-67 dual staining, and artificial intelligence–assisted visual inspection (e.g. Automated Visual Evaluation).
- Supporting implementation science to inform scale-up of integrated services. This should include community-focused research on the knowledge, understanding, and perception of cervical cancer services.
- Strengthening partnerships with academia, institutions, and other relevant stakeholders to streamline research approval and reporting processes in collaboration with the Department of Health

The Department of Health will also explore the integration of emerging technologies that may enhance screening precision, triage accuracy, and treatment decision-making. As new tools are validated and deemed cost-effective, they may be incorporated into the cervical cancer programme to strengthen each stage of the care pathway. Technologies under consideration include:

- Molecular testing platforms such as HPV mRNA and DNA methylation assays
- Enhanced cytology techniques, including p16/Ki-67 dual staining
- Artificial intelligence assisted visual inspection, particularly Automated Visual Evaluation (AVE) of digital cervical images

These innovations may improve accuracy, expand accessibility, and increase population coverage supporting South Africa’s broader goal of eliminating cervical cancer as a public health problem.

4. THEORY OF CHANGE AND RESULTS FRAMEWORK

a. Theory of Change

The Theory of Change for eliminating cervical cancer in South Africa by 2030 articulates the logical pathway from inputs to impact, outlining how strategic investments, multisectoral partnerships, and coordinated interventions across all pillars will lead to measurable progress toward the WHO elimination targets of 90 % HPV vaccination, 70 % screening coverage, and 90 % treatment of identified cases.

The model assumes that adequate human and financial resources, strong governance, digital health systems, and effective community partnerships will drive the scale-up of HPV vaccination, expansion of HPV DNA screening, decentralisation of treatment, and provision of palliative and survivorship care. These efforts will produce measurable outputs, such as wider service coverage, strengthened referral networks, and improved data integration, that will, in turn, lead to the attainment of the 90-70-90 milestones.

Achieving these outcomes will result in the elimination of cervical cancer as a public-health problem in South Africa by 2030, with reduced morbidity and mortality, improved quality of life for women and their families, and meaningful progress toward Universal Health Coverage and SDG 3 (Health and Well-being).

b. Results framework overview

The Results Framework operationalises the Theory of Change by defining the logical and measurable pathway through which South Africa will eliminate cervical cancer as a public-health problem by 2030. It outlines the key inputs, outputs, outcomes, and impact indicators across the four strategic pillars, primary prevention, secondary prevention and early intervention, treatment and care, and cross-cutting enablers, that together contribute to achieving the WHO 90–70–90 elimination targets.

The framework provides a structured mechanism for linking interventions to results, ensuring that programme implementation remains focused on outcomes that matter most for reducing incidence, improving survival, and strengthening health systems. It integrates with the National Department of Health's Monitoring and Evaluation (M&E) Framework, the District Health Information System (DHIS2), the National Health Laboratory Service (NHLS), and the National Cancer Registry (NCR) to ensure data-driven decision-making and accountability. The private sector is to be engaged to ensure collaboration and partnership in this strategy including on data.

By clearly mapping the relationship between investments, actions, and outcomes, the Results Framework enables stakeholders, including government, civil society, and development partners, to align resources, track progress, and assess performance in the journey toward eliminating cervical cancer as a public-health problem by 2030.

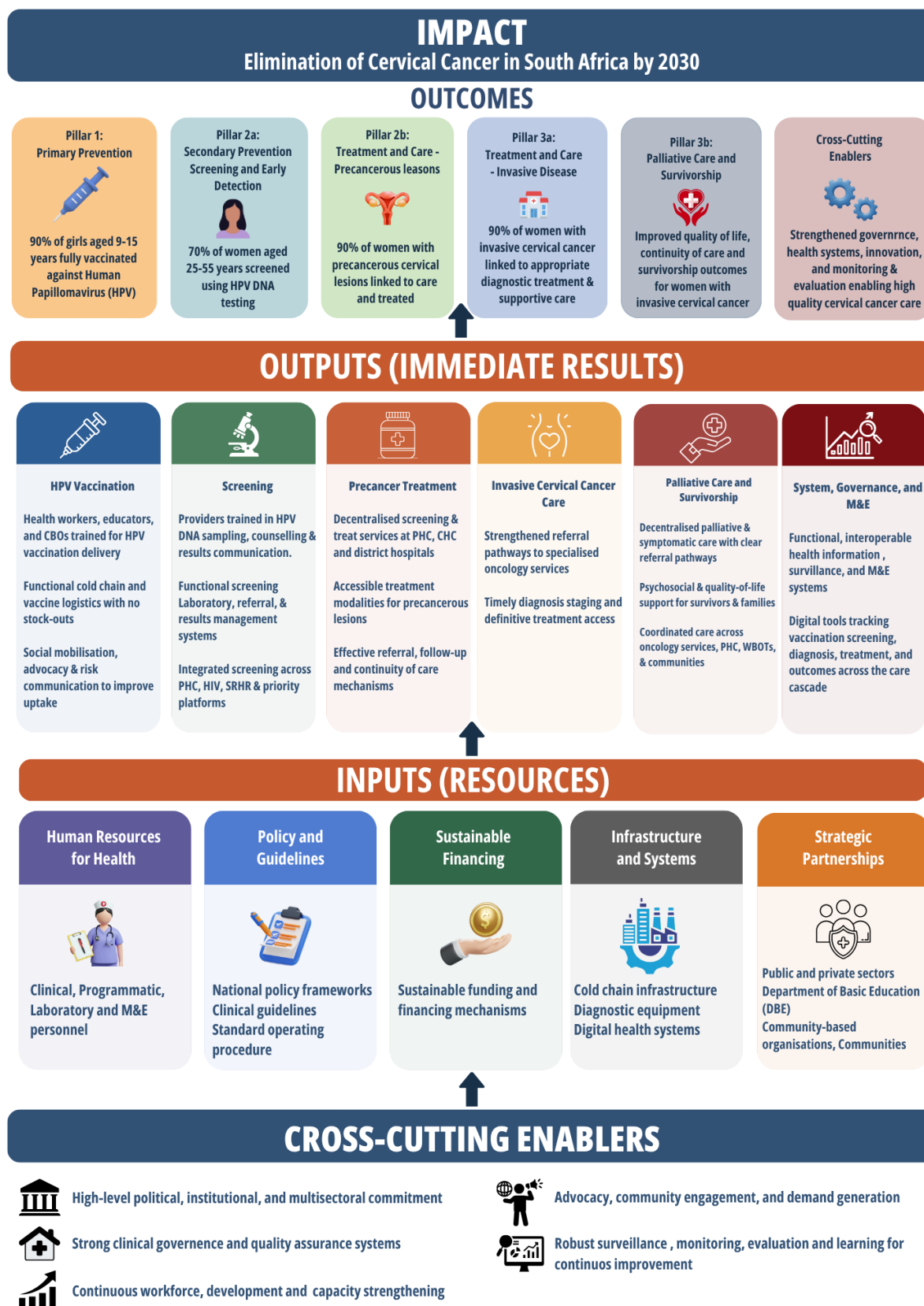


Figure 7: Theory of Change

5. IMPLEMENTATION FRAMEWORK FOR ELIMINATION OF CERVICAL CANCER

5.1. IMPLEMENTATION

The implementation model presents a phased and time-bound approach to achieving and sustaining the elimination of cervical cancer as a public health threat in South Africa. It translates the elimination strategic framework into a sequenced delivery framework that aligns inputs, interventions, outputs and long-term outcomes over five years. The model recognizes that elimination by 2030 will require initial high intensity of interventions with massive resource investment. The implementation will be rolled out in three phases: intensive early acceleration, followed by targeted mopping up and stabilization and ultimately on the fourth year and beyond institutionalized sustainability.

Phase 1: Acceleration (2026/27 to 2027/28)

The acceleration phase focuses on rapid expansion of high impact interventions to close the critical coverage gap, such as extension of HPV screening beyond school environment, inclusion of screening for women from the age of 25 years, rapid expansion of HPV DNA screening and rapid expansion of precancer treatment capacity with ablation treatment and colposcopy and LLETZ to reduce backlogs. During this phase resources will be front-loaded to maximize reach. Various governance structures will be activated including National Multisectoral Stakeholder Forum, and clinical advisory committee to ensure monitoring and accountability.

The expected outcome of this phase is a rapid increase in vaccination and screening coverage to reach 90% and 70% respectively by the end of year two and significant reduction of treatment backlogs with fully operational real-time integrated information system that can guide implementation scale up.

Phase 2: Stabilization and mop-up (2028/29)

The stabilization phase builds on the gains of the acceleration phase with focus on equity, quality and continuity of care. Activities will include intensified outreach in rural and informal settlements to ensure that no one is left behind, strengthening of tracking and recalling and follow up, to ensure completion of full screening to treatment pathways. Quality improvement approaches will be integrated into day-to-day management of the programme to ensure rapid course correction.

By the end of phase 2, the programme is expected to achieve high pathway completion rates, with reduced geographic and socio-economic disparities and consistent quality of clinical care across all the provinces.

Phase 3: Sustainability (2029/30 onwards)

This phase focuses on institutionalizing cervical cancer elimination within routine health care ensuring that the gains are maintained. The core activities will include re-enforcement of integration into routine PHC and hospital services, fully functional surveillance system including cancer registry and sustaining psychosocial and palliative care services and periodic review of clinical guidelines in line with new knowledge. Periodic policy review and learning will ensure that the programme remains responsive to emerging evidence and innovation. The long-term result of this phase is the country will maintain high levels of elimination thresholds and reduce morbidity and mortality.

Multi-level systems approach to implementation

The approach to implementation will be done through a layered, integrated systems delivery model that operates across community, facility, district, provincial and national levels. This approach ensures that interventions are people centred at the point of service, and well-coordinated with accountability at higher levels. Each level has distinct but complimentary role, collectively enabling scale, equity, quality and sustainable.

Community level – demand, access and support focus on awareness, demand creation, tracing and tracking, psychosocial support and palliative care.

Facility level – service delivery and quality of care: these are primary delivery points for screening, diagnosis and treatment and ongoing care. The emphasis is on quality of clinical care, timeous access to treatment and patient navigation.

District level – integration, coordination and management: District management team will align cervical cancer with HIV services, SRHR services, and PHC streams ensuring efficient use of the resources. The district management will monitor performance, identify service gaps and support facilities through supervision and quality improvement.

Provincial level – planning, resourcing and monitoring: The provincial departments are responsible for planning and budgeting for the programme in line with the national policy. The team will oversee service delivery platforms, oncology capacity, and coordination with stakeholders such as Provincial AIDS Councils, private hospitals and other government departments. The provinces are critical in operationalizing the elimination plan and managing the performance across all the districts

National level – policy, and accountability: At national level the focus is on strategic leadership, policy direction, resource mobilization and accountability.

5.2. PILLAR 1: PRIMARY PREVENTION - HPV VACCINATION

Goal: Reduce cervical cancer incidence and mortality in South Africa by achieving high HPV-vaccination coverage among adolescent girls aged 9 years to 15 years.

Table 2: Key Interventions and Results Framework

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Community Level							
School based vaccination	Coordinate with Department of Basic Education (DBE) to expand in-school vaccination for girls 9 yrs to 15 yrs in public including special, independent, and private schools through Integrated School Health Programme	Proportion of public and special schools reached and participating in the HPV vaccination	95%	100%	100%	100%	Outcome: Increased HPV vaccination coverage Impact: Elimination of cervical cancer
		Proportion of private and independent schools reached and participating in the HPV vaccination	0%	90%	95%	95%	
	Organize catch-up sessions for high schools and tertiary education girls who missed the first dose.	Proportion of eligible girls (grade 5) vaccinated in public and special schools	83%	90%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
		Proportion of eligible girls (grade 5) vaccinated in independent/private schools	No data	90%	90%	90%	
	Increase the coverage of school health teams to ensure adequate coverage of all the schools within the ISHP	Number of school health teams	475	595 (25%)	715 (25%)	765 (10%)	
Catch up for missed opportunities	Conduct catch-up for girls who were missed between 2024-2025 (in school, institutions of higher learning and community)	Proportion of girls reached through the vaccination catch up coverage.	0%	90%	90%	90%	
	HPV catch-up vaccination for girls that are immunosuppressed girls to get an additional (dose) of the HPV vaccine	Proportion of immunosuppressed girls (9-15 yrs) receiving second dose HPV vaccination	No data	90%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Social mobilization and demand creation	Capacitate CBOs and community leaders to provide (at least one per ward) on HPV vaccination communication, minimum one per municipal ward	Number of CBOs FBOs/THP per ward trained on cervical cancer	No data	3 000 CBOs FBOs/ THP	4 000 CBOs FBOs/ THP	4 488 CBOs FBOs/ THP	
	Public awareness campaigns on various platforms to address misinformation & vaccine hesitancy Promote safe sexual behaviour amongst youth including delaying sexual debut and monogamy	% of parents aware of HPV vaccine (survey)	55% (2024)	70%	80 %	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Facility Level							
Capacity building	Integrate HPV vaccination into Expanded Program of Immunization (EPI), PHC services including AYFS and ART services	% of facilities integrating HPV into PHC services (SRHR, HIV, EPI)	0%	90%	100%	100%	Outcome: Increased HPV vaccination coverage Impact: Elimination of cervical cancer
	Capacitate all lay counsellors and Community Health Workers on cervical cancer elimination strategy, and education and counselling	Proportion of Lay counsellors and Community Health Care Workers trained on elimination of cervical cancer education, counselling and support	0%	70%	90%	90%	
	Capacitate all PHC staff on elimination of cervical cancer strategy and guidelines	Proportion of PHC Nurses trained on elimination of cervical cancer strategy and clinical guidelines	0%	70%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
District Level							
Coordination and management	Map all the schools both private and public to identify areas with low coverage and support targeted planning and vaccination	% of districts with mapping of district schools (private and public) with underserved communities identified	0%	100%	100%	100%	Outcome: Increased HPV vaccination coverage Impact: Elimination of cervical cancer
	Ensure vaccine & cold chain availability	% of facilities reporting zero stockouts of HPV vaccine	0%	100%	100%	100%	
	Strengthen supervision and monitoring	% of Districts with functional nerve centre (including HPV vaccination monitoring)	0%	100%	100%	100%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Provincial Level							
Coordination and management	Ensure that robust budget planning that including robust monitoring of implementation	Number of provinces submitting timeous business plans	9	9	9	9	Outcome: Increased HPV vaccination coverage Impact: Elimination of cervical cancer
	Integrate HPV monitoring in the provincial nerve centre with HPV dashboards and includes HPV vaccination in continuous quality improvement framework	Number of Provinces monitoring HPV vaccine coverage through Nerve centres	0	9	9	9	
	Establish SLA with DBE on vaccine access and educator training	Number of provinces with SLA with DBE	0	9	9	9	
	Establish SLA with private or independent schools on vaccine access and educator training	Number of provinces with SLAs with various Independent/private schools governing body associations	0	9	9	9	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Establish or update existing SLA with private health providers - GPs, pharmacists etc. for vaccine access	Number of provinces with SLA with private health providers - GPs, pharmacists etc. for vaccine access	0	9	9	9	
	Design and roll out a multi-channel campaign that combines mass media spots (radio, TV, social media), community mobilization (road shows, faith group talks, peer educator networks) and school-based vaccine talk sessions with aim to raise awareness, shift attitudes and motivate caregivers and adolescents for HIV, TB, Cervical cancer, other cancers and mental health	Number of provinces with funded integrated social mobilization and communication plan	9	9	9	9	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
National Level							
Policy and monitoring	Develop policy frameworks to govern public-private partnerships for vaccine delivery to private health care practitioners	National Vaccine PPP policy in place	None	Completed			Outcome: Increased HPV vaccination coverage
	Develop joint policy and framework with DBE on vaccine access and educator and SGB training	Joint National policy and training framework in place	None	Completed			Impact: Elimination of cervical cancer

Table 3: Provincial Implementation Targets (2026/27-2029/30): Vaccination coverage for girls in 9yrs to 15 years in Public and special schools

Vaccination Targets (90%) – Public, special and independent schools							
Province	Vaccination Population Proportions (%)	Baseline 2024/25	2026/27	2027/28	2028/29	2029/30	2026/27-2029/30
EC	13%	56 256	68 126	67 853	67 204	67 388	270 570
FS	6%	24 169	29 269	29 151	28 872	28 952	116 244
GP	15%	62 793	76 042	75 737	75 013	75 219	302 011
KZN	23%	94 970	115 009	114 547	113 452	113 763	456 770
LP	15%	61 675	74 689	74 389	73 677	73 879	296 634
MP	9%	38 387	46 487	46 300	45 857	45 983	184 627
NC	2%	8 959	10 849	10 806	10 702	10 732	43 089
NW	7%	29 569	35 808	35 664	35 323	35 420	142 216
WC	10%	40 791	49 398	49 200	48 729	48 863	196 190
National	100%	417 569	505 677	503 646	498 831	500 198	2 008 352

Table 4: Provincial Implementation Targets (2026/27-2029/30): Vaccination coverage for girls in 9yrs to 15 years in Private/ Independent schools

Vaccination Targets (10%) – Private schools							
Province	Vaccination Population Proportions (%)	Baseline 2024/25	2026/27	2027/28	2028/29	2029/30	2026/27-2029/30
EC	13%	19 787	7 304	7 275	7 205	7 225	29 010
FS	6%	9 133	3 371	3 358	3 326	3 335	13 389
GP	15%	22 831	8 428	8 394	8 314	8 337	33 473
KZN	23%	35 008	12 923	12 871	12 748	12 783	51 325
LP	15%	22 831	8 428	8 394	8 314	8 337	33 473
MP	9%	13 699	5 057	5 036	4 988	5 002	20 084
NC	2%	3 044	1 124	1 119	1 109	1 112	4 463
NW	7%	10 655	3 933	3 917	3 880	3 890	15 621
WC	10%	15 221	5 619	5 596	5 543	5 558	22 315
National	100%	152 209	56 186	55 961	55 426	55 577	223 150

The 2024/25 baseline reflects estimated vaccination volumes achieved to date, while targets for 2026/27 to 2029/30 are based on a planned scale-up trajectory aligned with national policy commitments and the Strategic and Implementation Framework 2026/27 - 2029/30. Annual provincial targets were adjusted to reflect gradual programme expansion, operational capacity, and anticipated stabilisation of coverage over the medium term. The cumulative target for 2026/27–2029/30 represents the total number of girls expected to be vaccinated over the five-year period and is derived as the sum of annual provincial targets. National totals are the aggregation of provincial targets and sum to 2 008 352 vaccinations over the Medium-Term Expenditure Framework period, maintaining proportional alignment with provincial population distributions.

Table 5: Provincial Implementation Targets (2026/27-2027/28): Vaccination Catch-up campaign (girls 9-15)

Catch-up Campaign	
Province	2026/27-2027/28
EC	142 318
FS	65 685
GP	164 213
KZN	251 793
LP	164 213
MP	98 528
NC	21 895
NW	76 633
WC	109 475
National	1 094 751

Catch-up vaccination targets were calculated to address girls who were not reached during the routine HPV vaccination programme between 2014 and 2025. The eligible catch-up population was estimated as 17% of the cumulative cohort not reached over this period. Provincial catch-up targets were derived by applying provincial population proportions to the national catch-up estimate, ensuring consistency with demographic distribution and alignment with routine vaccination planning assumptions. The catch-up campaign is phased over four financial years (2026/27–2029/30), with higher volumes targeted in the first two years to rapidly close historical gaps, followed by lower volumes in later years as coverage stabilises. Nationally, the catch-up campaign is expected to reach 1 094 751 girls over the implementation period. Annual and cumulative provincial targets sum exactly to the national total, supporting coherent planning, costing, and monitoring across all levels of the programme.

Table 6: Provincial Implementation Targets: Second dose HPV vaccination (10 years Immunosuppressed girls)

Girls and adolescents immunocompromised - Targets (90%)					
10 Year Olds (HIV+ Females)	FY (24/25)	FY (26/27)	FY (27/28)	FY (28/29)	FY (29/30)
EC	784	626	549	518	500
FS	346	267	228	211	196
GP	1122	797	697	667	650
KZN	1618	1133	924	820	755
LP	612	486	425	399	388
MP	619	483	420	395	358
NC	79	66	60	58	56
NW	384	308	271	253	243
WC	282	216	189	183	178
National	5586	4239	3662	3335	3126

It is important to vaccinate all immunocompromised young girls due to various diseases. The calculations though were done using readily available data which are those living with HIV, the Thembisa model projections, applying an HIV prevalence of 1.2% among 10-year-old females. Provincial targets reflect the distribution of the HIV-positive female population across provinces, with annual figures representing 90% coverage of the estimated eligible cohort in each financial year. The declining annual targets over time reflect demographic cohort effects and projected reductions in the size of the eligible population. National targets are derived as the aggregation of provincial estimates and decline from 5,586 in FY 2024/25 to 3,126 in FY 2029/30, representing the number of HIV-positive girls expected to receive an additional HPV dose each year. These targets are integrated into routine vaccination planning and costing to ensure equitable protection for girls at higher risk of persistent HPV infection and cervical cancer.

5.3. PILLAR 2A: SECONDARY PREVENTION – SCREENING FOR PRECANCER LESIONS

Goal: To increase early detection of cervical precancer by scaling up equitable, high-quality HPV DNA screening for all eligible 25-55 years old women.

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Community Level							
social mobilization and demand creation	Conduct community-based dialogues about healthy lifestyle (integrated to include cervical cancer, breast cancer, HIV, TB, Hypertension, Diabetes and mental health etc.)	Proportion of PHC/ CHC with at least one dialogues completed per year	0%	90%	90%	90%	Outcome (Equity): Increase in screening coverage among rural/underserved women
		Proportion of districts with at least one dialogue for traditional/ religious/ community leaders completed per year	0%	90%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
		Proportion of women aware of cervical and breast cancer screening (survey)	No data	70%	80%	90%	
Hard-to-reach communities	Map communities and population with most unmet need including sex workers, farmworkers, rural communities etc.	Proportion of districts with mapped areas of unmet need	0	90%	100%	100%	
	Scale-up community screening for hard-to-reach communities including sex workers, farmworkers, rural communities etc. Explore self-sampling through implementation science	Number of self-sampling tests conducted per year	0	200,000	100,000	100,000	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Facility Level							
Integration	Optimize transition to HPV DNA Testing in all service points utilizing LBC technique to obtain pap smear to mitigate smear inadequacy	Proportion of PHC facilities including mobiles offering HPV screening	No data	90%	95%	95%	Increase in HPV screening coverage
		Proportion of women aged 25–55 screened for HPV using HPV DNA	38%	70%	70%	80%	
	Integrate Screening into HIV/AIDS, TB, and PHC Services	Proportion of facilities integrating HPV screening integrated in all PHC streams	No data	90%	95%	100%	
		Proportion of WLHIV TROA screened for HPV DNA	No data	70%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Integrate counselling for cervical cancer screening into HTS and	% of PHC facilities integrating cervical screening counselling into HTS	No data	90%	95%	95%	
Capacity Building	Train all the lay counsellors and community health care workers on cervical cancer counselling and ensure linkage to care	Proportion of Lay counsellors and Community Health Care Workers trained on elimination of cervical cancer education, counselling and support	0%	70%	95%	95%	Outcome: Increase in facilities adhering to national guidelines and protocols
	Capacitate all PHC staff on elimination of cervical cancer strategy and guidelines	Proportion of PNs trained HPV screening	0%	70%	90%	90%	
		Smear adequacy rate increased to more than 80%	No data	80%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Quality of care	Strengthen Referral Pathways	Proportion of HPV DNA positive women with documented referral	60%	90%	90%	90%	
	Standardize protocols						
	Implement revised referral pathways and SOPs patient tracking						
	Implement “Screen–Triage–Treat” Algorithm Establish WLHIV-specific pathways	Median time from screening to treatment		≤1 month	≤1 month	≤1 month	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
District Level							
Coordination, supervision, and mobilization	Include cervical cancer as part of Continuous quality improvement framework	Number of Districts monitoring HPV vaccine coverage through nerve centres and continuous quality improvement framework	0	52	52	52	Outcome: Strengthened districts HPV screening monitoring
	Implement results for action reporting and dashboards for HPV (integrate with HIV).	Number of districts implementing results for action reporting and dashboards for HPV (integrated with HIV and TB).	0	52	52	52	
	Map communities and population with most unmet need including sex workers, farmworkers, rural communities and others	Number of districts with mapped areas of unmet need	0	52	52	52	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Rollout Mother daughter advocacy campaign integrating HPV screening, cervical cancer, PreP and SRHR empowering women to make own choices	Number of districts implementing targeted mother-daughter campaigns	0	52	52	52	
	Engage industries and employers to include HPV screening into occupational health	Number of districts implementing work-place HPV screening	0	52	52	52	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Provincial Level							
Laboratory services	Improve turnaround time (TAT) for lab results	Proportion of results delivered within 21 days	60%	90%	95%	95%	Impact: Reduced

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Implement an SMS/ WhatsApp system to notify patients about the results	Number of provinces implementing SMS/ WhatsApp for patient results	0	9	9	9	diagnostic delays and improved treatment completion rates
	Ensure implementation of the results for action dashboards	Number of provinces implementing results for action dashboard	0	9	9	9	
	Establish SLA with private health providers - GPs, specialists etc. for HPV screening and data sharing agreements	Number of provinces with SLAs with private health providers - for HPV screening access and data sharing	0	9	9	9	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
National Level							
Policy and guidelines	Integrate cervical cancer screening into PHC and HIV clinical guidelines	Integrated clinical guidelines developed and distributed	None	Completed			Impact: Reduced proportion of cervical cancer diagnosed women progressing to invasive cancer
	Policy, funding and rollout of digital client communication (SMS results), CHW tracing systems, and referral feedback loops	Digital patient community communication system in place.	None	Completed			
	Ensure that NHLS specimen request form is updated to align with the framework	Lab request forms are duly updated and distributed	None	Completed			
	Increase NHLS capacity to process HPV DNA sample, improve turnaround time of sample processing and reporting	Number of NHLS labs equipped for HPV testing	8	15	15	15	

Table 7: Provincial Implementation Targets (2026/27-2029/30): HPV Screening (women 25-55yrs)

Women 25-55 years screening targets							
Province	Eligible Population Proportions (%)	Baseline 2024/25	2026/27	2027/28	2028/29	2029/30	2026/27-2029/30
EC	12%	117 892	417 735	449 868	174 270	177 360	1 219 233
FS	5%	50 863	180 226	194 090	75 187	76 520	526 023
GP	17%	169 019	598 897	644 966	249 847	254 276	1 747 986
KZN	30%	298 638	1 058 185	1 139 584	441 452	449 278	3 088 499
LP	5%	52 701	186 739	201 104	77 904	79 285	545 031
MP	9%	85 715	303 720	327 083	126 705	128 952	886 460
NC	2%	19 745	69 964	75 346	29 187	29 705	204 202
NW	9%	85 003	301 197	324 366	125 653	127 881	879 097
WC	11%	109 791	389 030	418 956	162 295	165 172	1 135 453
National	100%	989 363	3 505 680	3 775 347	1 462 494	1 488 422	10 231 943

Table 8:: Provincial Implementation Targets (2026/27-2029/30): HPV Screening (women HIV + 25-55yrs)

HIV + Women 25 - 55 years screening targets						
Province	Proportion of HIV + females (25-55) years	2026/27	2027/28	2028/29	2029/30	2026/27-2029/30
EC	12%	115,943	118,128	120,179	122,139	476,388
FS	5%	49,432	50,364	51,238	52,074	203,109
GP	24%	231,886	236,255	240,357	244,278	952,776
KZN	26%	251,210	255,943	260,387	264,635	1,032,175
LP	8%	81,079	82,607	84,041	85,412	333,140
MP	10%	92,237	93,975	95,607	97,166	378,985
NC	2%	19,324	19,688	20,030	20,357	79,398
NW	6%	60,156	61,290	62,354	63,371	247,171
WC	7%	66,346	67,596	68,770	69,892	272,604
National	100%	966,192	984,396	1,001,488	1,017,826	3,975,746

Screening targets were developed using routine HPV screening data from the NHLS HPV Dashboard, reflecting HPV-positive smears conducted among women aged 25–55 years, combined with eligible population estimates from the Thembisa model to contextualise baseline performance and coverage gaps. The 2024/25 baseline represents estimated screening performance against the eligible population. Provincial population proportions were applied to distribute national screening volumes across provinces, ensuring demographic alignment and consistency between provincial and national targets.

5.4. PILLAR 2B: SECONDARY PREVENTION – TREATMENT OF PRECANCER LESIONS

Goal: To ensure timely, accessible, and effective treatment of precancerous cervical lesions through decentralized, and technology-supported “screen-and-treat” services that prevent progression to invasive cancer.

Table 9: Key Interventions and Results Framework

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Community Level							
Linkage to care	Include tracking and tracing of diagnosed clients into WBOCOT and IPs activities and reporting	Proportion of diagnosed clients linked to care	No data	80%	90%	90%	Outcome: Increase in proportion of clients supported and accessing treatment timeously
Psychosocial support	Strengthen peer support systems through leveraging existing ward-based outreach teams and donor-funded implementing partners to create “women’s health	Proportion of Lay counsellors and Community Health Care Workers trained on elimination of cervical cancer, education, counselling and support	0	70%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	champions” (minimum one per PHC)	Proportion of donor-funded implementing partner with social workers and lay counsellors or CHWs providing psychosocial support for WLHIV and their families	0	90%	90%	95%	
	Capacitate and update services provided by CBOs/ FBOs, THPs and donor funded and DSD CHWs to provide psychosocial support to affected clients and their families	Proportion of DSD employed CHW trained and providing psychosocial support for diagnosed women	0%	70%	90%	90%	
		Number of CBOs/ FBOs/THP trained on cervical cancer – minimum one per municipal ward	No data	3 000 CBOs FBOs/ THP	4000 CBOs FBOs/ THP	4 480 CBOs FBOs/ THP	
		Number of CBOs providing psychosocial support for women and their families	No data	3 000 CBOs FBOs/ THP	4 000 CBOs FBOs/ THP	4 480 CBOs FBOs/ THP	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Facility Level							
Decentralized treatment	Improve access to thermal ablation for treatment	Proportion of eligible women treated with thermal ablation	0%	50%	90%	90%	Outcome: Improved access to precancerous treatment.
	Improve access colposcopy and LLETZ for treatment of precancerous lesions	Proportion of eligible women treated with LLETZ	No data	50%	90%	90%	
	Decentralize treatment of Precancerous to district hospitals, CHC and PHC	Proportion of district/ regional hospitals and CHC with colposcopy and LLETZ services	19%	50%	90%	90%	
		Proportion of hospitals, CHCs and selected PHCs facilities providing ablation therapy	2%	50%	90%	90%	
	Provide training, mentorship and support for PNs and medical officers in thermal ablation	Number of PNs and medical officers trained and providing thermal ablation	1,000	6,000	8 000	10,000	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Deploy mobile screen-and-treat vans equipped with portable ablation devices, and teleconsultation support from district specialists	Number of mobile screen-and-treat deployed	0	60	90	180	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
District Level							
Coordination, supervision, and capacity building:	Strengthen referral pathways and standardize protocols	Number of districts with revised referral pathways and protocols	0	52	52	52	Outcome: Improved access to quality treatment
	Implement results for action reporting and dashboards for cervical cancer (integrate with HIV).	Number of districts utilizing RFA dashboard to monitor backlogs	0	52	52	52	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Include cervical cancer as part of Continuous quality improvement framework key indicators for improvement linkage to treatment and quality of care	Proportion of facilities with cervical cancer in Continuous quality improvement framework	0	52	52	52	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Provincial Level							
Management and coordination	Implement results for action reporting and dashboards for cervical cancer (integrate with HIV) to monitor.	Number of provinces implementing results for action dashboards	0	9	9	9	Outcome: Improved service continuity across the prevention

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Conduct monthly backlog monitoring and support the linkage women to necessary care, even across districts depending on resource availability	Number of provinces with monthly backlog reports and action plans	0	9	9	9	and treatment cascade Outcome: Availability of real-time dashboards for monitoring
	Standardize treatment protocols in coordination with the medical specialists and support the district implementation aligned with the treatment algorithm	Number of provinces with revised standardized treatment protocols developed and implemented	0	9	9	9	
	Include precancer treatment decentralization targets in District and Provincial Health Plans.	Number of provinces with updated plans to include cervical cancer cascade	0	9	9	9	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
National Level							
Policy and monitoring	Integrate pre-cancer treatment into PHC and HIV clinical guidelines	Integrated clinical guidelines developed and distributed	none	completed			Outcome: Improved and integration policy environment
	Develop updated clinical guidelines and algorithms	Updated clinical guidelines and algorithms distributed and implemented	none	completed			
	Integrate a national digital tracking system linking screening data to the National Health Laboratory Service (NHLS) and District Health Information System (DHIS2).	Integrated monitoring system with AI capabilities developed	none	completed			
	Advocate for nursing scope of practice to include treatment of pre-cancerous lesions	Nursing scope of practice updated to include thermal ablation	none	completed			

Table 10: Provincial Implementation Targets (2026/27-2029/30): Thermal Ablation Treatment (women 25-55)

Thermal Ablation						
Province	Baseline 2024/25	2026/27	2027/28	2028/29	2029/30	2026/27- 2029/30
EC	14,680	52,018	56,019	21,701	22,085	151,824
FS	6,334	22,443	24,169	9,363	9,529	65,502
GP	21,047	74,577	80,314	31,112	31,663	217,666
KZN	37,187	131,769	141,905	54,971	55,946	384,592
LP	6,563	23,253	25,042	9,701	9,873	67,869
MP	10,674	37,820	40,730	15,778	16,058	110,386
NC	2,459	8,712	9,382	3,635	3,699	25,428
NW	10,585	37,506	40,391	15,647	15,924	109,469
WC	13,672	48,444	52,170	20,210	20,568	141,391
National	123,199	436,541	470,121	182,116	185,344	1,274,122

Thermal ablation treatment targets were developed using routine service and laboratory data from the NHLS, reflecting women identified with HPV-related precancerous lesions eligible for ablative treatment. The 2024/25 baseline represents current levels of thermal ablation treatment delivery, as reported through NHLS-linked service data. Targets for 2026/27–2029/30 reflect a phased scale-up of thermal ablation services in line with the national to decentralise precancer treatment from tertiary and regional hospitals to include district hospitals, community health centres, and primary health care facilities, including mobile services. The sharp increase in volumes in 2026/27 and 2027/28 corresponds to the planned expansion of HPV DNA screening, increased detection of eligible lesions, and the roll-out of additional thermal ablation equipment and trained providers.

Table 11: Provincial Implementation Targets (2026/27-2029/30): LLETZ Treatment (women 25-55)

LLETZ						
Province	Baseline 2024/25	2026/27	2027/28	2028/29	2029/30	2026/27- 2029/30
EC	10 699	39 246	46 287	21 695	18 374	125 602
FS	4 616	16 932	19 970	9 360	7 927	54 189
GP	15 340	56 266	66 361	31 103	26 342	180 072
KZN	27 103	99 415	117 253	54 956	46 544	318 168
LP	4 783	17 544	20 692	9 698	8 214	56 147
MP	7 779	28 534	33 654	15 774	13 359	91 320
NC	1 792	6 573	7 752	3 634	3 077	21 036
NW	7 715	28 297	33 374	15 643	13 248	90 562
WC	9 964	36 549	43 107	20 204	17 111	116 971
National	89 791	329 354	388 448	182 066	154 195	1 054 063

LLETZ treatment targets were developed using routine service and laboratory data from the NHLS, reflecting women diagnosed with high-grade precancerous cervical lesions requiring excisional treatment. The 2024/25 baseline represents current levels of LLETZ procedures performed within the public sector. Targets for 2026/27–2029/30 reflect a phased increase in LLETZ capacity aligned with expanded HPV DNA screening, improved referral pathways, and decentralisation of precancer treatment services from tertiary to regional and selected district facilities. Higher volumes in 2026/27 and 2027/28 correspond to increased case detection as screening coverage scales up, while declining volumes in later years reflect stabilisation as earlier treatment reduces backlog.

Table 12: Provincial Implementation Targets (2026/27–2029/30): Colposcopy (women 25–55)

Colposcope						
Province	Baseline 2024/25	2026/27	2027/28	2028/29	2029/30	2026/27–2029/30
EC	10 699	39 246	46 287	21 695	18 374	125 602
FS	4 616	16 932	19 970	9 360	7 927	54 189
GP	15 340	56 266	66 361	31 103	26 342	180 072
KZN	27 103	99 415	117 253	54 956	46 544	318 168
LP	4 783	17 544	20 692	9 698	8 214	56 147
MP	7 779	28 534	33 654	15 774	13 359	91 320
NC	1 792	6 573	7 752	3 634	3 077	21 036
NW	7 715	28 297	33 374	15 643	13 248	90 562
WC	9 964	36 549	43 107	20 204	17 111	116 971
National	89 791	329 354	388 448	182 066	154 195	1 054 063

Colposcopy service volume estimates were developed using routine service and laboratory data from the NHLS, reflecting women referred for diagnostic assessment following abnormal HPV and/or cytology results. The 2024/25 baseline represents current levels of colposcopy services delivered within the public sector. Projected volumes for 2026/27–2029/30 reflect increased demand driven by the scale-up of HPV DNA screening and strengthened referral pathways. Higher volumes in 2026/27 and 2027/28 correspond to peak diagnostic demand as screening coverage expands, while lower volumes in later years reflect stabilisation as screen-and-treat approaches reduce the need for diagnostic colposcopy.

Table 13: Provincial Implementation Targets (2026/27-2029/30): VIA (women 25-55)

VIA/Gynaecological examination						
Province	Baseline 2024/25	2026/27	2027/28	2028/29	2029/30	2026/27- 2029/30
EC	21 683	76 832	82 742	32 052	32 621	224 246
FS	9 355	33 148	35 698	13 829	14 074	96 748
GP	31 087	110 152	118 625	45 953	46 768	321 497
KZN	54 927	194 626	209 597	81 194	82 633	568 049
LP	9 693	34 346	36 988	14 328	14 582	100 244
MP	15 765	55 861	60 158	23 304	23 717	163 041
NC	3 632	12 868	13 858	5 368	5 463	37 558
NW	15 634	55 397	59 659	23 111	23 520	161 687
WC	20 193	71 552	77 056	29 850	30 379	208 837
National	181 968	644 779	694 377	268 988	273 757	1 881 901

VIA and gynaecological examination volume estimates were developed using routine service and laboratory data from the NHLS, reflecting women requiring clinical assessment following abnormal screening results or as part of screen-and-treat pathways. The 2024/25 baseline represents current levels of VIA and gynaecological examinations delivered within public sector services. Projected volumes for 2026/27–2029/30 reflect increased demand driven by the expansion of HPV DNA screening and the decentralization of assessment and treatment services to primary health care and district levels. Higher volumes in 2026/27 and 2027/28 correspond to peak assessment needs as screening coverage scales up, while volumes stabilize in later years as routine services mature and loss to follow-up is reduced.

5.5. PILLAR 3A: TREATMENT OF INVASIVE CANCER

Goal: To strengthen equitable access to comprehensive, high-quality treatment and care for women with invasive cervical cancer through coordinated, multidisciplinary, and patient-centred services across all levels of the health system.

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Community Level							
Psychosocial support	Assign or employ district social worker specifically to provide psychosocial support for the affected women and their families, to coordinate with the donor-funded social workers and social axillary workers in PHCs and CHCs to provide support for WLHIV	Number of districts with social workers assigned to cervical cancer	0	52	52	52	Outcome indicator (quality) Improved quality of life and survival for women affected by

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Strengthen support systems for women undergoing treatment and their families through leveraging existing ward-based outreach teams, CBOs, FBOs and THP organizations - minimum one per municipal ward	Number of FBO, CBO, THPs trained to support clients undergoing treatment and their families trained	No data	3 000 CBOs FBOs/ THP	4 000 CBOs FBOs/ THP	4 480 CBOs FBOs/ THP	Cervical Cancer
	Sub-contract CBO/ FBO to provide psychosocial support for women diagnosed with cervical cancer and their families – at least one per sub-district/ local municipality	Number of sub-contracted CBOs	0	150	205	205	
		Proportion of women and their families being supported through the treatment journey by CBOs		70%	80%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Health-Facility Level							
Access to multi-disciplinary treatment	Ensure that women with invasive cancer are managed by a multidisciplinary team	Proportion of Central and tertiary hospitals with staff providing cancer treatment services for women	33%	40%	50%	50%	Outcome (access): Increased treatment initiation rate for women with invasive cervical cancer
	Expand medical oncology capacity in regional hospitals.	Proportion of regional hospitals providing medical oncology for cervical cancer	No data	< 3 months	< 2 months	< 2 months	
	Expand access to surgical, radiation, and chemotherapy services, leveraging the health grants to improve infrastructure and adding oncology units in underserved provinces.	Proportion of women with invasive cancer treated	No data	50%	70%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long- Term Changes) Indicators
	Strengthen outreach service through skills transfer to lower-level facilities	Proportion of district and regional hospitals receiving outreach for cervical cancer management	No data	50%	70%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long- Term Changes) Indicators
District Level							
Coordination and monitoring	Establish District Cancer Care Coordination Teams (DCCCTs) integrating oncology, HIV, and palliative care focal persons to monitor backlogs, linkage to care and support.	Number of districts with DCCCTs meeting quarterly	0	52	52	52	Outcome (quality): Increased proportion of facilities meeting minimum quality of care

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	DCCCTs conducting quarterly multidisciplinary review meetings (oncologists, surgeons, radiotherapists, palliative specialists, HIV clinicians).						standards
	Strengthen data monitoring on time from diagnosis to treatment, treatment completion, and palliative enrolment.	Reduced waiting times for access to timeous access to oncology services	More than three months	Less than three months	Less than two months	Less than one month	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Provincial Level							
Management, planning and coordination	Strengthen training partnerships with universities for oncology, pathology, and palliative care specialists.	Number of provinces with Provincial cancer care coordination teams including training institutions	0	9	9	9	Outcome (quality): Reduced median time from diagnosis to treatment
	Establish PPPs private hospitals, medical schemes and tele-oncology services for overflow treatment capacity.	Number of provinces with PPPs inclusive of treatment of ca cervix	1	9	9	9	
		Proportion of clients treated through PPPs	No data	20%	15%	10%	
	Conduct monthly backlog monitoring and support the linkage women to necessary care, even across districts depending on resource availability	Number of Provinces with backlog management mechanisms	0	9	9	9	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Establish a Provincial tracking and reporting mechanism for cervical cancer clients from the time of diagnosis and treatment and managing backlogs to treatment	Number of provinces with monthly backlog reports and action plans	0	9	9	9	
	Develop a standardized provincial cervical cancer referral and down-referral guidelines aligned with the revised treatment algorithm	Number of provinces with revised referral pathways aligned with the revised treatment algorithm	0	9	9	9	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long- Term Changes) Indicators
National Level							
Policy and monitoring	Develop and operationalize Intelligence, quality improvement and advisory support to include the elimination of cervical cancer	National Intelligence, quality improvement and advisory support functional	None None	Completed Completed			Impact: Reduced incidence and mortality from Cervical Cancer
	Integrate a national digital tracking system linking screening data to the National Health Laboratory Service (NHLS) and District Health Information System (DHIS2).	Results for action dashboard functional					
	Strengthen cancer registry for cervical cancer	Fully functional cancer registry	Work in progress	Completed			

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Capacity Building	Develop national SOPs and governance structures to enable coordinated clinical pathways across provinces	SOPs developed and rolled out	None	Completed			
	Establish a National Virtual Multidisciplinary Team (MDT) platform to standardize care and provide real-time specialist input	Functional quarterly virtual multi-disciplinary platform meetings	none	Quarterly sessions	Quarterly sessions	Quarterly sessions	
	Implement structured upskilling programmes for medical officers and strengthen district-level clinical capacity	Training streamlined	none	completed			
Infrastructure and funding	Provide financial and technical assistances for the completion of oncology services in all the provinces	Oncology infrastructure completed in NC, GP and MP	3 outstanding	3 completed			

5.6. PILLAR 3B: PALLIATIVE CARE AND SURVIVORSHIP

Goal: To ensure that all women with advanced cervical cancer have access to compassionate, integrated, and comprehensive palliative care that relieves suffering, preserves dignity, and improves quality of life for patients and their families.

Table 14: Key Interventions and Results Framework

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Community Level							
Early linkage and community support	Train CBOs/ FBOs and DSD CHW on psychosocial support, stigma reduction, and navigating dual HIV–cancer care – minimum one per municipal ward	Number of FBOs/ CBOs/THPs trained on ICC referral, palliative care and survivorship	No data	3 000 CBOs FBOs/ THP	4 000 CBOs FBOs/ THP	4 480 CBOs FBOs/ THP	Outcome (coverage): % of women with advanced cancer linked to palliative care support
	Provide peer support groups systems through woman-woman chains to create community of survivors and provide home-based care through sub-contracted CBO/FBO/THPs	Number of households of ICC patients receiving psychosocial or home-based care visits.	No data	3 000	4 000	5 000	Outcome (quality): Proportion of eligible women linked to social protection services

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Facility Level							
Early diagnosis, referral, and continuity of care:	Offer support to survivors and families through cancer navigation desks/ champions at PHC and district hospitals	Proportion of facilities offering integrated palliative care services	No data	70%	90%	90%	Outcome (quality): Proportion of eligible women linked to social protection services
	Assign social auxiliary workers as case managers to “Cancer Care Navigation Desks” at PHC and district hospitals to track referrals and coordinate appointments.						
	Strengthen the capacity of PHC nurses and clinicians to provide palliative care, manage side effects, and refer to pain management.	Proportion of clients receiving palliative care	No data	70%	90%	90%	Availability of bereavement support for the affected families
	Train PHC clinicians trained in palliative and survivorship care	Proportion of PHC clinicians trained in palliative and survivorship care	No data	70%	90%	90%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	Use digital referral systems to track patient journeys and minimize loss to follow-up.	Proportion of facilities implementing digital referral system	0	90%	95%	95%	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
District Level							
Coordination, supervision, and capacity building:	Subcontract CBO/ FBO/ THP organizations to establish support groups and provide psychosocial support for survivors including sexuality health and education, re-	Number of sub-contracted CBOs	0	150	205	205	Outcome (coverage): % of districts with functional palliative care services (facility to community based)

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
	integration into the workforce	Proportion of clients and their families receiving psychosocial support	0	50%	70%	90%	
	Assign social workers to manage the CBOs/ FBOs/ THP organizations	Number of districts with social workers assigned to management of CBOs dealing with cancers including cervical cancer		52	52	52	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
Provincial Level							
Service delivery expansion and quality improvement:	Establish and strengthen provincial palliative care forums	Number of Provinces with functioning palliative care forum	1	9	9	9	Outcome (equity and dignity): Reduced inequities in access to palliative care across urban and rural communities
	Include standardized indicators for survivorship and palliative care services in district health plans and reporting	Number of provinces monitoring palliative care services	0	9	9	9	
	Develop structured NGO coordination mechanisms and community-based referral networks	Coordination mechanism in place	0	9	9	9	

Thematic Area	Interventions	Output Indicators (Immediate Deliverables)	baseline 2024/25	Phase 1 (2026/27 to 2027/28)	Phase 2 (2028/29)	Phase 3 (2029/30)	Outcome (Medium-Term Changes) and Impact (Long-Term Changes) Indicators
National Level							
	Integrate cervical cancer into national survivorship framework focusing on long-term quality of life, rehabilitation, and psychosocial support for women and their families.	National survivorship framework updated	0	complete			Outcome (equity and dignity): Reduced inequities in access to palliative care across urban and rural communities Palliative care funded adequately
	Mobilize international partners (WHO, PEPFAR, GAVI, Global Fund etc.) to fund infrastructure and workforce expansion.	Coordination forum for the funding for cervical cancer	None	coordination mechanism/ framework in place	-	-	
	Develop and distribute community referral directories of palliative services.	Directory distributed to provinces	0	9	9	9	

5.7. CROSS CUTTING ENABLERS

Goal: Ensure robust cross-cutting enablers that support and sustain implementation at scale.

Table 15: Key intervention and results framework

Building Block	Key Intervention
Governance	Establish the clinical advisory committee to provide technical and clinical guidance
	Establish a national quality assurance (QA) framework for pathology, screening, and oncology services.
	Leverage public–private partnerships (e.g., with Life, Netcare, Mediclinic) and developmental partners (WHO, PEPFAR, Global Fund) to expand radiation and chemotherapy capacity.
Financing	Secure adequate and sustained funding to implement all pillars.
	Align national and provincial health budgets to the plan’s needs and coordinate donor contributions.
	Integrate the various health conditional grants to include all the pillars for cervical cancer
	Establish blended financing approaches and strengthen public–private partnerships
Health Systems	Integrate cervical cancer into primary health care re-engineering
	Update the Essential Medicines List (EML) to include key chemotherapy, palliative care drugs (opioids), and antiemetics; ensure uninterrupted supply.
	Strengthen HPV vaccine logistics for expanded coverage, including catch-up campaigns for older adolescents.
	Ensure task – sharing for CHWs, LC and PNs to include cervical cancer elimination
	Implement national training frameworks, mentorship models and centres of excellence
	Scale electronic patient records, HPV dashboards, telemedicine and digital referral tracking
Monitoring and Evaluation	Incorporate cervical cancer indicators into DHIS, NIDS and performance management
	Modernize the NCR to ensure real-time reporting from public and private sectors, with standardized ICD-O coding and linkage to pathology data.
	Fast-track the development and implementation of the Intelligence, Quality Improvement and Advisory support

Building Block	Key Intervention
	Implement mHealth interventions (SMS, WhatsApp) for appointment reminders, side-effect reporting, and survivorship follow-up.
	Develop and evaluate digital patient navigation tools to track women across the care continuum (screening → diagnosis → treatment → palliative care).
Research and Innovation	Establish research forum with relevant stakeholders to streamline research approval and reporting processes in collaboration with the Department of Health.
	Explore the integration of emerging technologies in prevention, testing, treatment and survivorship
	Support implementation science to inform scale-up of integrated services.
	Establish national clinical and survivorship registries for ICC to inform real-world evidence.
Social Mobilization and Advocacy	Integrate community awareness and demand generation into existing communication for TB and HIV
	Support formation of cancer survivor groups to provide peer counselling, advocacy, and stigma reduction.
	Integrate male partner education in community mobilization to support women's treatment adherence and reduce stigma.
	Embed equity-focused service delivery models, inclusive communication strategies and decentralized services
	Develop district-level referral maps showing service availability: (a) screening sites (clinics, CHCs, mobiles), (b) colposcopy/treatment centres and (c) Oncology and palliative care centres
	Provincial Public–Private Collaboration Forum - Formalize PPPs for radiation, chemotherapy, diagnostics, and palliative care services. - Negotiate service-level agreements (SLAs) and shared infrastructure.
	Provincial Cancer Data and M&E Team - Ensure complete, accurate, and timely cancer data reporting. - Provide feedback to districts on performance indicators.
Stakeholder management	Multi-sectorial stakeholder forum: - Establish national multi-sectorial stakeholder forum to provide oversight, and strategic guidance - Integrate cervical cancer (civil society task team) as part of the agenda of women's sectors within SANAC, Provincial and District AIDS councils

ANNEXURE 1

6. STAKEHOLDER MAPPING

The elimination of cervical cancer in South Africa requires a coordinated, multisectoral, and people centred response that extends beyond the health sector alone. Given the strong intersection between cervical cancer, HIV, gender inequality, and social determinants of health, effective implementation depends on the clear definition of stakeholder roles, responsibilities, and participation mechanisms across national, provincial, district, and community levels.

This stakeholder matrix outlines the respective mandates and contributions of government departments, coordination bodies, clinical and technical structures, civil society, communities, development partners, and the private sector, ensuring shared ownership, accountability, and alignment across the prevention, screening, treatment, psychosocial support, and palliative care continuum. Clear role delineation is essential to reduce duplication, strengthen coordination, and ensure that women and girls—particularly those most vulnerable, WLHIV, women in rural communities are equitably reached and supported throughout the cervical cancer elimination pathway.

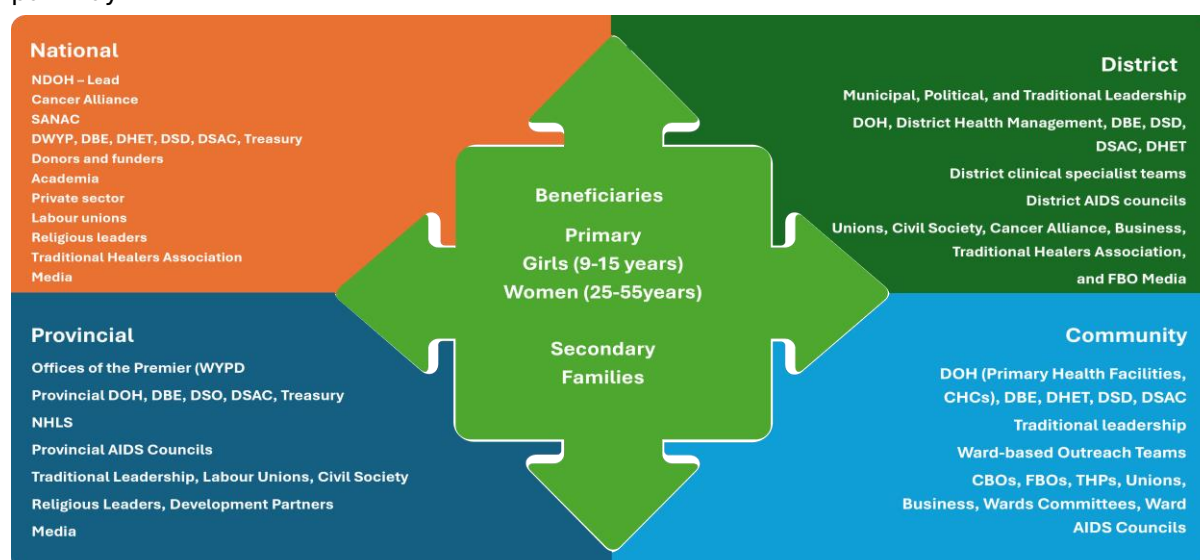


Figure 8: Stakeholder Mapping at different Organizational Unit Levels

Department of Health

Role: Continue strengthening screening services through campaigns. Ensuring that a (Chronic) medical electronic register is made available for proper data collection at all levels. Promote multisectoral coordinating mechanism between government departments, other sectors & civil society to address the challenges. Expansion of the District Specialist teams to include the management of NCDs including cervical cancer. The key strategic implementation focuses for the department of health as explained in the NSP (2025-2030) includes responding to insufficient planning and funding for infrastructure maintenance, new equipment; slow HR processes of filling of crucial posts including training staff. Figure 9 below summarised the role of each department cluster.

NSP (2025-2030) includes responding to insufficient planning and funding for infrastructure maintenance, new equipment; slow HR processes of filling of crucial posts including training staff. Figure 9 below summarised the role of each department cluster.

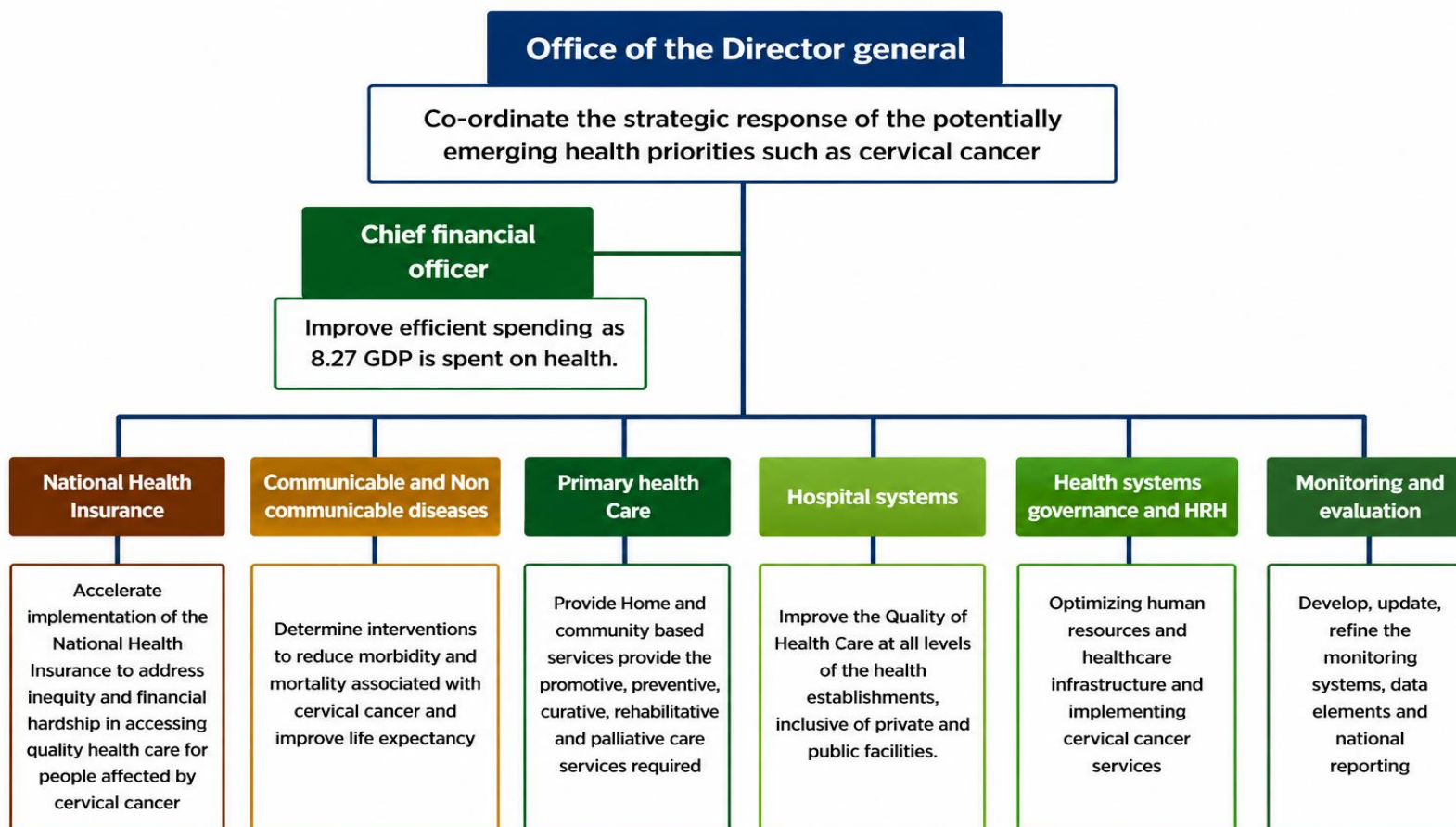


Figure 9: Roles of Departmental Cluster

Clinical Advisory Committee (CAC)

The role of the CAC will be to provide independent, evidence-based clinical and technical guidance across the cervical cancer care continuum to ensure quality, safety, equity, and alignment with global best practice. CAC members will be appointed through the office of the DDG. The chairperson of the CAC will serve in the National Ministerial Advisory Committee on oncology. CAC will interface with provincial clinical platforms, academic institutions, and professional councils.

Core Functions

- **Clinical Standards and Guidelines:** Advise on the development and periodic update of various guidelines such as HPV vaccination schedules (including single-dose transition), Screening algorithms (HPV DNA testing, self-sampling, triage), Diagnostic and treatment protocols and palliative and survivorship care standards.
- **Quality Assurance and Clinical Governance:** CAC will define national quality standards for screening accuracy and follow-up, referral timelines and treatment initiation, oncology service delivery and radiotherapy continuity and advise on management of clinical risks, adverse events, and service disruptions.
- **Technology and Innovation Review:** CAC will assess new and emerging technologies, including but not limited to HPV self-sampling approaches, AI-supported screening and triage tools, Digital referral and patient navigation systems and provide evidence-based recommendations for phased national or provincial adoption.
- **Workforce Development and Capacity Building:** CAC will advise on clinical training curricula and task-shifting models, competency standards for nurses, doctors, and specialists and supportive supervision and mentorship approaches

Department of Social Development (DSD)

Role: DSD plays a critical enabling role in the elimination of cervical cancer by addressing the non-clinical barriers that prevent women and girls from accessing, completing and benefiting from prevention, treatment and palliative care services.

Psychosocial support services for diagnosed women and their families through:

- Provision of psychosocial counselling for individuals and families to address fear, stigma, depression, treatment anxiety and gender-based barriers to care.
- Mental health and emotional support through linkage to social workers for women facing advanced disease, infertility and social isolation.
- Facilitation of survivor led and community support groups that promote adherence, coping and reintegration into family and community life.

Home-based care and community support

Through partnerships and sub-contracting of CBOs, FBOs, THP organizations, DSD can enable home-based and community care level through:

- Home-based care services to support women undergoing treatment or living with advanced disease, including assistance with daily activities, symptom management and treatment adherence.
- Palliative and end of life care support including pain management support, psychosocial care, dignity preservation and bereavement support for families.
- Coordination with community health workers and health facilities to ensure continuity of care, follow-up appointments and referral compliance.

Social protection and economic support

- Facilitation of access to disability grants, child support grant and social relief of distress for women unable to work during treatment
- Protection of vulnerable populations with targeted support for women experiencing poverty, gender-based violence and caregiving burdens that affect health-seeking behaviour.

Community mobilization and stigma reduction

- Engaging community leaders, women's forums and faith-based organizations to reduce stigma and misinformation about cervical cancer and HPV vaccination and by addressing harmful gender norms and power dynamics that limit women's autonomy to seek screening and treatment.

Department of Basic Education

Role: The Department of Education is to enable the primary prevention through school-based HPV vaccination, health education and adolescent health promotion. The DBE provide primary platform for national HPV vaccination programme through the integrated school health programme by:

- Facilitating access to eligible girls between 9 years and 15 years
- Supporting vaccination coordination between schools and health teams
- Ensure school readiness for vaccination campaign days by availing space, learner list and time.
- Supporting school-based awareness activities in collaboration with health department and civil society

National Multisectoral Stakeholder Forum (NMSF)

The role of NMSF will be to provide a structured platform for whole-of-society coordination, consultation, and accountability across government, civil society, private sector, development partners, and communities. NMFS will be co-convened by SANAC and NDOH. It will feed into national policy, strategy refinement, and accountability processes.

It will compliment CAC and other technical bodies by focusing on social, structural, and implementation dimensions.

Core Functions

- **Multisectoral Alignment and Coordination:** NMSF will align roles and commitments across various government departments such as Health, Education, Social Development, and Treasury, civil society and community structures, donors and public–private partnerships.
- **Community Voice and Social Accountability:** NMSF will provide a formal mechanism for women, survivors, and community representatives to influence policy and for civil society to raise implementation bottlenecks.
- **Advocacy and Resource Mobilisation:** NMSF will advocate for sustainable domestic and donor financing, inclusion of cervical cancer elimination in national development priorities and promote innovative partnerships and co-investment models.

The Cancer Alliance

The Cancer Alliance, as the civil society coalition representing cancer patient organisations, advocacy groups, and non-governmental partners in South Africa, plays an integral role in the implementation of this Framework. The Alliance serves as a critical bridge between the health system and the communities it must reach, translating policy into public awareness, surfacing the lived experiences of women navigating screening and treatment pathways, and holding all sectors accountable to the commitments made in this strategy.

Core Functions

- **Champion community mobilisation and demand creation** for HPV vaccination and screening, particularly among underserved and marginalised populations
- **Amplify survivor voices** as advocates and peer supporters within health facilities and community settings
- **Monitor service delivery gaps** and report them through established accountability mechanisms
- **Facilitate multisectoral engagement** between government, the private sector, and civil society
- **Participate in the national accountability forum** and joint review of progress against the 90–70–90 targets
- **Support provincial and district outreach** by leveraging the Alliance's network across communities where health system reach is limited

Government commits to meaningful and ongoing engagement with the Cancer Alliance throughout the life of this Framework, recognising it as an indispensable implementation partner.

South African National AIDS Council (SANAC)

Role: National multisectoral coordination, policy alignment, and accountability especially at the HIV–cervical cancer intersection. SANAC is uniquely positioned to accelerate cervical cancer elimination because of the strong epidemiological and programmatic link between HIV and

cervical cancer, particularly among women and adolescent girls and young women (AGYW). SANAC coordination and strategic leadership and policy alignment role includes:

- Integrating cervical cancer prevention and control into the National Strategic Plan (NSP) on HIV, TB and STIs, ensuring alignment with elimination goals.
- Advocating for priority screening and treatment of women living with HIV (WLHIV), who have a higher risk of HPV infection and cervical cancer.
- Providing a national platform by convening government departments (Health, Social Development, Basic Education, Women, Youth and Persons with Disabilities) and engaging civil society sectors (women's organisations, faith-based groups, youth, traditional leaders).
- Strengthening accountability mechanisms through sector reporting and community-led monitoring.
- Driving community awareness and demand creation for HPV vaccination and screening and addressing stigma, misinformation, and gender norms that hinder service uptake.

Provincial AIDS Councils (PACs) and District Aids Councils (DAC):

Role: Provincial and district-level coordination, implementation oversight, and community mobilisation.

Provincial AIDS Councils contribute through:

- Integration of cervical cancer prevention and screening into Provincial Implementation Plans (PIPs) for HIV, TB, and STIs.
- Coordinating Departments of Health, Social Development, and Education and civil society organizations at both district and provincial level.
- Leading provincial and district-level awareness campaigns targeting women living with HIV, AGYW, and key populations.
- Facilitating engagement with traditional leaders, faith-based organisations, and ward structures.
- Advocating for survivor advocacy and peer-led education.
- Through community-led monitoring and inclusion of cervical cancer in their agenda, identify bottlenecks and escalate systemic issues for resolution.

Research and Academic Institutions

Role:

- Evidence generation and innovation
- Conduct operational and implementation research.
- Evaluate screening technologies and service models.
- Train health professionals and specialists
- Support policy refinement and guideline updates.

Private Sector and Public–Private Partnerships

Role:

- Supplementary service delivery and innovation

- Establish partnership to provide screening, diagnostics, and treatment services.
- Support the development and implementation of digital health tools and AI-enabled screening, diagnosis, information management.
- Participate in PPPs to expand access to chemo and radiotherapy care.
- Access to cervical cancer services for employee inclusion in the occupational health package

Labour organizations

Role:

- Drive awareness and demand creation to promote HPV vaccination for worker's daughters and increase cervical cancer screening uptake in the workplace.
- Advocate for time off, workplace/ mobile screening services and integration of cervical cancer into workplace and occupational health services.
- Protect women during treatment by negotiating job security, sick leave and medical aid coverage to prevent treatment interruptions and financial hardship.
- Support survivorship and dignity by promoting non-discrimination and access to psycho-social support for women undergoing treatment.
- Participate in multi-sectoral platforms to strengthen accountability and equity.

Civil Society and Community-Based Organizations (CBOs)

Role players:

- Faith-based organizations.
- Community-based organizations
- Women sector.
- Survivor networks

Role:

- Demand creation, advocacy, and patient support.
- Conduct community awareness and education.
- Address myths, stigma, and cultural barriers.
- Support navigation, adherence, and follow-up.
- Advocate for women's rights and access to services

Traditional, Religious, and Community Leadership

Role:

- Lead social norm change and trust-building.
- Endorse HPV vaccination and screening.
- Mobilize communities and households.
- Facilitate access to hard-to-reach populations.

Development Partners and Donors

Role:

- Financing, technical assistance, and innovation
- Support health systems strengthening and digital solutions.
- Support implementation research and learning.

Key partners: WHO, UNICEF, UNFPA, Gates Foundation, Global Fund, PEPFAR

ANNEXURE 2

7. MONITORING AND EVALUATION FRAMEWORK

Purpose:

The Monitoring and Evaluation (M&E) Framework provides a structured mechanism for tracking implementation progress, measuring performance, and assessing the overall impact of South Africa's National Plan for the Elimination of Cervical Cancer by 2030. It ensures accountability, promotes learning, and strengthens health systems through data-driven decision-making at all levels of the health system.

The framework aligns with:

- The WHO Global Strategy to Accelerate the Elimination of Cervical Cancer (90–70–90 targets).
- The National Health M&E and Digital Health Frameworks of the Department of Health.
- The District Health Information System (DHIS2), National Cancer Registry (NCR), and National Health Laboratory Service (NHLS) for data collection and reporting.
- Existing provincial and district review mechanisms and performance monitoring structures.

Strategic Approach:

The M&E Framework adopts a results-based approach, linking inputs, outputs, outcomes, and impact across all four pillars of the national implementation plan. It emphasizes:

- Integration into existing national systems rather than creation of parallel reporting structures.
- Standardization of indicators, tools, and data flows across all provinces.
- Use of digital platforms (DHIS2, HPRS, NHLS, and EMRs) for interoperability and real-time visibility.
- Capacity building for national, provincial, and district M&E personnel.
- Continuous quality improvement (CQI) and evidence-based programme adaptation.

Objectives of the Framework:

1. Monitor progress toward achieving the WHO 90-70-90 elimination targets.
2. Strengthen data systems and data quality to produce accurate, timely, and disaggregated data.
3. Enhance accountability and transparency through standardized performance reporting.

4. Institutionalize evidence use for strategic decision-making and policy refinement.
5. Promote learning and adaptation through routine performance reviews and evaluations.
6. Ensure sustainability by embedding M&E practices within existing DoH structures and partner systems.

Table 16: Results-Based Monitoring Framework

Pillar / Strategic Focus	Key Performance Areas	High-level Dashboard Indicators	Primary Data Sources	Reporting Frequency / Responsibility
Pillar 1: Primary Prevention – HPV Vaccination	Scale-up of HPV vaccination coverage in schools and communities	1. Vaccination coverage in girls 9-15years (single dose) 2. HPV supplementary coverage in girls 9-15years (HIV/ immunosuppressed HPV)	DHIS2	Frequency: Monthly Responsible: Communicable and non-communicable branch – Child health
Pillar 2a: Secondary Prevention – Screening and Early Detection	Expansion of HPV DNA testing and linkage to care	1. Cervical cancer screening coverage 2. Cervical cancer screening coverage in WLHIV	DHIS2 (PHC, Hospital services) NHLS	Frequency: Monthly Responsible: Communicable and non-communicable branch - Women's health
Pillar 2b: Treatment and Care – Precancerous		Precancer treatment coverage (cervical cancer)	DHIS2 (PHC, Hospital services)	Frequency: Quarterly Responsible: Communicable and non-communicable branch - Women's health
Pillar 3A Treatment of Invasive cervical cancer	Access to multi-disciplinary treatment for invasive cancer	Invasive treatment coverage (cervical cancer)	DHIS2 (hospital services)	Frequency: Monthly Responsible: Hospital systems branch
Pillar 3B Palliative Care and Survivorship	Access to treatment and palliative care	Palliative care coverage	DHIS2 (hospital services)	Frequency: Monthly Responsible: Communicable and non-communicable diseases Branch – Palliative care cluster

Pillar / Strategic Focus	Key Performance Areas	High-level Dashboard Indicators	Primary Data Sources	Reporting Frequency / Responsibility
Cross-Cutting Enablers	Governance, innovation, research, and M&E system functionality	1. Functional national clinical advisory committee 2. Integrated digital dashboard operational 3. Half-yearly national multi-sectoral stakeholder forum meetings with resolutions	Programme reports, TWG minutes, DHIS2	Frequency: Annual Responsible: Communicable and non-communicable diseases cluster (National and provincial)

Data Collection and Flow:

- **Facility Level:** Data will be collected using standard DoH registers, digital health platforms, and routine reporting tools.
- **District Level:** District information teams will aggregate and validate data before submission to the province through WebDHIS.
- **Provincial Level:** Provincial M&E units will conduct quarterly verification and produce performance summaries for review.
- **National Level:** The NDoH will compile consolidated quarterly and annual reports, supported by dashboards that visualize trends across provinces.
- **Laboratory Data:** The NHLS Corporate Data Warehouse will provide laboratory-based HPV testing, cytology, and histology data linked to facility codes.
- **Community Data:** CBOs and civil-society partners will submit quarterly reports through district M&E units.

Data Quality Assurance:

Data quality will be maintained through:

- Routine Data Verification (RDV) and quarterly Data Quality Assessments (DQAs).
- Cross-system triangulation (DHIS2, NHLS, EMRs, NCR) to ensure consistency.
- Quarterly feedback and review sessions to correct anomalies.
- Development of Quality Improvement Plans (QIPs) to address data gaps and reporting weaknesses.
- Institutionalization of Continuous Quality Improvement (CQI) processes within routine reviews.

Performance Monitoring and Review:

- **Weekly:** Facility-level Continuous quality improvement framework meetings for quality improvement and address key gaps that impact on the performance of the programme
- **Monthly:** Facility-level information meetings to review indicator performance and service coverage. National nerve centre meetings to review progress and unblock any policy and systems related challenges

- **Quarterly:** Provincial and national performance review meetings to assess progress, identify gaps, and agree on corrective actions.
- **Annual:** Comprehensive review and reporting through the National Health Review and WHO Joint Monitoring Framework.
- **Mid-Term (2027):** Evaluation of implementation effectiveness, system readiness, and progress toward 2030 targets.
- **End-Term (2030):** Final evaluation assessing national elimination progress and sustainability.

Table 17: Roles and Responsibilities

Level	Responsible Entities	Core Functions
National	National Department of Health: All clusters	Oversight, policy coordination, reporting to Cabinet and WHO, management of national dashboard and evaluations.
Provincial	Provincial Departments of Health	Supervision, data validation, quarterly review coordination, capacity building, and DQA implementation.
District	District Health Information and Programme Units	Data entry, verification, and facility feedback; support CQI initiatives and reporting compliance.
Facility / Community	Facility Managers, Nurses, CBOs, and Community Health Workers	Routine data collection, patient tracking, and submission of monthly reports to the district.
Partners	Civil society, academic, NGO, FBOs, THPs, and donor partners	Technical support, system strengthening, and research collaboration aligned with the national framework.

Table 18: Key M&E Milestones (2025–2030)

Year	Milestone
2026/27	Finalize and disseminate national M&E framework, initiate training for provincial and district M&E focal points. Launch integrated national cervical cancer dashboard; complete first national DQA and baseline analysis.
2028/29	Conduct mid-term evaluation and national learning review; refine indicators and systems based on lessons learned.
2028/29	Institutionalize annual DQA and performance reviews; scale up research and innovation integration.

Year	Milestone
2029/30	Conduct final impact evaluation to assess elimination achievement and develop a post-2030 sustainability strategy.

Expected Outcomes:

- A coordinated and interoperable national M&E system supporting cervical cancer elimination.
- Reliable, disaggregated, and timely data available for decision-making and reporting.
- Accountability and transparency across all implementation levels.
- Sustained use of data for planning, resource allocation, and performance improvement.
- Documented progress towards achieving the WHO 90–70–90 targets by 2030.

ANNEXURE 3

8. RISK MANAGEMENT AND MITIGATION

Table 19: Risk Management and Mitigation

Domain	Key Risk	Mitigation Focus
Governance	Fragmented coordination	National Multidisciplinary Committee and clear terms of reference (ToR) and Clinical Governance
Human Resources	Oncology workforce shortage	Task-sharing, tele-oncology, joint training
Infrastructure	Limited radiotherapy capacity	Public-Private-Partnerships (PPPs), National Health Insurance (NHI) investment prioritization
Financing	Insufficient or delayed funding	Integrated management of conditional grants and partner alignment, Fiscal Investment
Data Systems	Weak data quality and integration	Integrated cancer data platform
Service Quality	Poor linkage to care	Digital navigation and Community Healthcare Worker follow-up, Primary Health Care
Social Context	Stigma and low awareness	Community mobilization, survivor advocacy
Technology	Digital readiness gaps	mHealth, Information and Communication (ICT) partnerships
External Shocks	Epidemics or economic crises	Service resilience planning

ANNEXURE 4

COSTING FRAMEWORK:

Overview of the Costing Methodology

The costing framework outlines a high-level financial model to support the implementation of South Africa's Cervical Cancer Elimination Strategic Framework across all pillars. It brings together population projections, programme targets, service delivery realities, and existing public-sector spending patterns to estimate the resources required to reach elimination goals by 2030. Rather than presenting costs in isolation, the approach reflects how services are delivered within the health system and what it will take to scale them up.

The model takes a health-system perspective, capturing costs across prevention, screening, treatment of precancerous lesions, diagnostic services, and key strategic interventions. Population estimates were largely drawn from the Tembisa Model, while service volumes were informed by national programme data such as NHLS HPV dashboards and National Department of Health vaccination and screening performance. Inflation adjustments, Medium-Term Expenditure Framework (MTEF) allocations, and locally published costing studies were included to ensure that projections remain grounded in South Africa's fiscal and operational context.

The costing period covers 2024/25 to 2029/30 and reflects an accelerated implementation pathway aligned with the WHO 90-70-90 targets. This forward-looking approach allows decision-makers to understand some elements of both the scale of investment required and the financial implications of moving quickly toward cervical cancer elimination. But the full investment case is still to be undertaken within nine months of the implementation of this strategy. This would then serve as a strategic tool to convert the real clinical capabilities into fundable plan, ensuring efficiencies and the return on investment.

Pillar 1 – Primary Prevention (HPV Vaccination)

The vaccination costing builds on South Africa's existing national HPV programme and assumes continued expansion of single-dose vaccination for adolescent girls. Baseline costs were drawn from the 2024/25 and 2025/26 MTEF allocations, with unit costs calculated using actual programme expenditure and adjusted annually for inflation.

Population projections are based on ten-year-old girls from the Tembisa Model, with national coverage increasing to 90% by 2026/27 and sustained through 2030. The costing separates vaccine procurement from delivery costs, making it possible to understand the resources required for logistics, human resources, outreach, and cold-chain systems already embedded within provincial services.

A catch-up campaign was included to reach girls who missed vaccination between 2014 and 2024. While this accelerated approach increases costs in the early years, it reflects the investment needed to achieve elimination targets more quickly. Overall, the costing shows that high coverage is operationally achievable, while also highlighting the funding gap between current allocations and the level of investment required for elimination.

Table 20: Vaccination costing calculations

VACCINATION COSTING CALCULATIONS								
Inputs	Baseline 2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2025/26- 2029/30	Assumptions
Eligible population	557,508	560,921	561,863	559,607	554,257	555,775	2,792,423	Tembisa, 10-year-old girls
Target 90% by 2026/27	405,299	444,006	505,677	503,646	498,831	500,198	2,452,358	Baseline 24/25 and 25/26 actuals. 26/27 onwards Tembisa forecasts multiplied by target
Target %	73%	79%	90%	90%	90%	90%		New Yearly targets 90% from 26/27
Catch-up eligible population estimate	1,763,060							9-year-olds from 2014-2024, assume 30% every year missed.
Catch-up campaign			617,071	617,071	264,459	264,459	1,763,060	Catch up 35% in 26/27 and 27/28, 15% catchup 28/29 and 29/30
Total cost per dose (R)	615	587	611	635	660	687		25/26 baseline (MTEF/target) to get unit cost, adjusted for inflation and then applied to target for 26/27 onwards
Vaccine cost per single dose (R)	198	205	213	222	231	240		NDoH price per single dose
Supplementary vaccine delivery costs (R)	417	382	397	413	430	447		Key cost drivers beyond vaccines include human resources, transport, logistics, and cold-chain equipment
Total cost for in-school vaccination (R)	249,165,000	260,432,000	308,765,793	319,827,073	329,440,214	343,556,185	1,562,021,265	24/25 and 25/26 MTEF Allocation as baseline- Cervical Cancer Ministerial Brief DDG PPT Jan 13 2026
Total cost for catch-up (R)			376,783,085	391,854,409	174,655,108	181,641,312	1,124,933,914	
MTEF Allocation (R)	249,165,000	260,432,000	272,428,000	284,850,717	297,839,909	311,421,409	1,426,972,036	Used average increase per year 4.56% to estimate MTEF 27/28 onwards
Shortfall (R)	-	-	-413,120,878	-426,830,765	-206,255,413	-213,776,088	-1,259,983,143	MTEF Allocation minus total cost for vaccination and catch-up

Pillar 2A – Secondary Prevention (Screening and Diagnostics)

Screening and diagnostic costing reflects national guidelines that differentiate screening intervals for women living with HIV and HIV-negative women. Eligible populations were calculated using Tembisa projections combined with policy-aligned screening intervals.

Baseline screening volumes were informed by NHLS HPV dashboard data, while future targets model a rapid increase in primary HPV screening coverage from 38% to 70% within two years. This accelerated pathway supports faster progress toward elimination goals.

The costing includes the full clinical pathway following screening — from triage and repeat testing to colposcopy, histology, and treatment referrals. Unit costs were based on NHLS tariffs and South African costing studies, with inflation applied annually. Importantly, the model assumes that infrastructure and staffing are largely covered within existing public-sector systems, focusing the analysis on service-delivery costs rather than large-scale system restructuring.

TRIAGE POPULATION NUMBERS							
	Baseline 2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2025/26-2029/30
Target 70% by 2026/27 HPV	989,363	856,452	3,505,680	3,775,347	1,462,494	1,488,422	11,088,395
HPV+ 16, 18, 45	117,536	101,747	416,475	448,511	173,744	176,825	1,317,301
No lesion, get TA	58,768	50,873	208,237	224,256	86,872	88,412	658,651
Repeat HPV in 1 year	-	58,768	50,873	208,237	224,256	86,872	629,007
If repeat HPV+, LBC Abnormal LLETZ Colpo	-	9,309	11,192	45,812	49,336	19,112	134,761
Lesion, get Colpo and LLETZ	58,768	50,873	208,237	224,256	86,872	88,412	658,651
HPV Other HR+	-	-	-	-	-	-	-
Triage to LBC on Other HR HPV+	238,634	206,576	845,570	910,614	352,753	359,007	2,674,521
HPV Other HR + LBC Normal- HPV in 1 year	-	133,635	115,683	473,519	509,944	197,542	1,430,323
LBC AGUS, ASCUS, LSIL TA Eligibility	64,431	55,776	228,304	245,866	95,243	96,932	722,121
LBC ASC-H, HSIL, ATYPIC, AIS LLETZ + Histology	31,022	26,855	109,924	118,380	45,858	46,671	347,688
Malignant	859	744	3,044	3,278	1,270	1,292	9,628

Table 21: Screening + Diagnostics Costs

SCREENING + DIAGNOSTIC COSTS							
	Baseline 2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2025/26-2029/30
Target 70% by 2026/27 HPV (R)	349,891,510	383,913,884	1,399,263,027	1,766,261,126	905,325,731	759,866,745	5,214,630,513
Triage to LBC on Other HR HPV+ (R)	56,343,958	50,481,842	215,107,222	240,920,088	97,060,703	102,732,744	706,302,600
LBC referred for LLETZ + histology (R)	19,290,381	17,283,379	73,645,877	82,483,382	33,230,501	35,172,427	241,815,566
LBC Malignant Histology (R)	534,195	478,617	2,039,424	2,284,155	920,229	974,006	6,696,431
Repeat LBC for Unsuitable (immediate sample collection) (R)	777,256	696,389	2,967,368	3,323,453	1,338,936	1,417,181	9,743,327
Total cost (R)	426,837,299	452,854,111	1,693,022,919	2,095,272,204	1,037,876,100	900,163,103	6,179,188,437

Pillar 2B – Secondary Prevention (Pre-Cancer Treatment)

Pre-cancer treatment costs were estimated using projected treatment volumes generated from the screening cascade. The model includes thermal ablation, VIA, colposcopy, and LLETZ procedures, with histology costs incorporated to reflect the full cost of care.

Unit costs were drawn from South African peer-reviewed studies and updated to current price levels using CPI adjustments. Future projections apply Treasury-aligned inflation assumptions to maintain consistency with national planning frameworks.

The costing assumes continued decentralisation of treatment services, in line with the national strategy. Thermal ablation was modelled as a cost-efficient alternative to historical cryotherapy approaches, supporting the shift toward scalable outpatient treatment models.

Table 22: Pre-cancerous Lesions Treatment Costs

PRE CANCEROUS LESION TREATMENT COSTS							
	Baseline 2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2025/26-2029/30
Thermal Ablation	8,026,357	7,191,282	30,642,636	34,319,752	13,826,573	14,634,572	100,614,816
LLETZ	103,108,015	103,444,159	407,488,056	499,825,402	243,640,102	214,596,727	1,468,994,446
Colpo	97,740,403	98,059,048	386,274,984	473,805,419	230,956,650	203,425,220	1,392,521,321
VIA	11,662,947	10,449,515	44,269,596	49,343,573	19,783,723	20,839,174	144,685,582
Total eligible population	220,537,723	219,144,004	868,675,273	1,057,294,147	508,207,048	453,495,692	3,106,816,165

Strategic Intervention – Vaccination of HPV-Negative Women Identified Through Screening

Beyond routine adolescent vaccination, the framework explores a strategic intervention to vaccinate HPV-negative women identified through screening. The goal is to prevent future infections and reduce long-term demand for screening and treatment services.

Two scenarios were analysed:

- Vaccination of HPV-negative women living with HIV using a two-dose schedule.
- Vaccination of all HPV-negative women, women living with HIV two-doses, and HIV negative women a single dose.

Although this intervention requires substantial upfront investment, it is expected to generate long-term savings through reduced screening, diagnostic, and treatment costs. Because the costing focuses on a five-year budget horizon, these downstream savings were not included in the financial totals, but available evidence suggests a favourable return on investment over time.

Table 23: Vaccination Intervention for HPV- Eligible Population and Costs

VACCINATION INTERVENTION FOR HPV- ELIGIBLE POPULATION AND COSTS					
Inputs	2026/27	2027/28	2028/29	2029/30	2026/27- 2029/30
Population HPV- HIV+ 2 Doses	707,171	761,972	295,048	299,731	2,063,922
Population HPV- HIV- 1 Dose	1,536,464	1,654,250	640,948	652,859	4,484,522
Cost to Vaccinate HPV- HIV+ 2 DOSES (R)	863,595,525	967,739,841	389,714,195	411,734,651	2,632,784,212
Cost to Vaccinate HPV- HIV- ONE DOSE (R)	938,163,975	1,050,487,226	423,297,183	448,410,704	2,860,359,088
Total cost to vaccinate all HPV- (R)	1,801,759,500	2,018,227,067	813,011,379	860,145,354	5,493,143,300

Cross-Cutting Financial Assumptions

- Across all pillars, the costing framework applies a consistent set of assumptions:
- Population projections aligned to Tembisa modelling and national epidemiology.
- Inflation adjustments based on Treasury and BER forecasts.
- Unit costs derived from public-sector tariffs and locally published evidence.
- Programme scale-up aligned with national elimination timelines.
- System costs largely embedded within existing provincial service platforms unless otherwise stated.
- These assumptions ensure that the costing remains grounded in South Africa's operational and fiscal realities.

Strategic Implications for Resource Planning

The analysis shows that accelerating progress toward elimination will require increased investment in the early years particularly for vaccination scale-up and expanded screening. Over time, however, costs are expected to stabilise as coverage targets are achieved and screening intervals extend.

Three key financial considerations emerge:

- Short-term funding gaps: Current MTEF allocations alone are not sufficient to support accelerated elimination without catalytic external investment.
- System efficiency gains: Shifting toward HPV-based screening and decentralised treatment moves resources toward prevention and early management, helping reduce future oncology costs.
- Long-term value for money: Strong investment in vaccination and early detection is expected to lower future disease burden and ease long-term fiscal pressure on the health system.
- The full investment case is to be finalised within nine months of this Strategy.

AUTHORS AND AFFILIATIONS

Elche Abt	Labs Team, Clinton Health Access Initiative (CHAI)
Yasmin Adams	Head, Department of Obstetrics and Gynaecology, University of Witwatersrand
Robyn Adams	Department of Obstetrics, Stellenbosch University
Namhla Bhenxa	Labs Team, CHAI
Hennie Botha	Head of Department of Obstetrics and Gynaecology and Unit for Gynaecology Oncology, Stellenbosch University
Bianca da Costa Dias	Centre for HIV & STI, National Institute of Communicable Diseases
Maggie de Swardt	Palliative Care, University of Cape Town
Lynette Denny	Department Head: Obstetrics and Gynaecology, Cancer Research Centre
Wendy Dhlomo	Department of Obstetrics and Gynaecology, University of KwaZulu Natal
Sithembile Dlamini-Nqeketo	World Health Organization (WHO), public health specialist
Greta Dreyer	Head, Gynaecology Oncology, Steve Biko Hospital
Lucia Hans	Virology, National Health Laboratory Services (NHLS)
Suzette Jordaan	Cervical Cancer Screening Coordinator, NHLS
Bridget Maclou	Director: National Tertiary Services Grants manager, National Department of Health
Sizeka Mashele	National Cancer Registry, National Institute of Communicable Diseases
Langanani Mbodi	Gynae Oncology, University of the Witwatersrand
Salome Meyer	Cancer Alliance of South Africa
Gertrude Mngola	Pharmacist, South African National AIDS Council
Azraa Mohamed	Technical Advisor, Health Technology Assessments, CHAI
Vimla Moodley	Health promotion and prevention
Ziyanda Mossie	Labs Team, CHAI
Simangele Mthethwa	Public health specialist, WHO Country Office
Mazvita Muchengeti	National Cancer Registry, National Institute of Communicable Diseases
Gugulethu Ngubane	Clinton Health Access Initiative, Country Director South Africa.
Othelia Ngwenya	RMNCAH programme assistant, WHO Country Office
Nondumiso Ngxola	Gynaecological Oncologist, Frere Hospital

Elche Abt	Labs Team, Clinton Health Access Initiative (CHAI)
Selina Ntamela	WHO, SRHR Programme assistance
Nompumelelo Ntshangase	Health Systems Trust, Gynaecologist, KwaZulu-Natal Department of Health
Lavinia Petersen	Project manager, Gynaecology Cancer Research Centre, University of Cape Town
Amanda Rozani	Health Promotion Directorate, Department of Basic Education
Bilqees Sayed	Non-Communicable Diseases Directorate, National Department of Health
Motshedisi Sebitloane	Head, Department of Obstetrics and Gynaecology, University of KwaZulu-Natal
Manala Makua	Independent Consultant, Clinton Health Access Initiative
Cari van Schalkwyk	SACEMA, Stellenbosch University
Victoria Mubaiwa	Independent Consultant, Clinton Health Access Initiative
Neo Masike	Program Manager: Cervical Cancer, Clinton Health Access Initiative
Mandla Tshabalala	Associate: Cervical Cancer, Clinton Health Access Initiative
Muthuphei Netshinombelo	Director MCWH KZN Department of Health
Naomi Lince-Deroche	HE2RO Senior Researcher
Coceka Nogoduka	Senior Technical Adviser: Integrated Programmes

NATIONAL DEPARTMENT OF HEALTH LEADS

Nonhlanhla Ndlovu	Deputy Director General: HIV, STI, TB and MNCWH
Matsobane Molomo	Programme Manager for Cervical Cancer Elimination
Lesley Bamford	Child Health Specialist
Vuyiswa Lebeso	Assistant Director: Human Genetics
Thembi Zulu	Deputy Director: Women's and Reproductive Health
Dimpho Chweneyagae	Assistant Director: Reproductive Cancers
Joyce Mahuntsi	Deputy Director: Maternal and Neonatal Health
Feni Motshwane	Deputy Director: Child, Youth and School Health

SUGGESTED READING MATERIALS

1. International Agency for Research on Cancer. (2022). GLOBOCAN 2022: Global Cancer Observatory. World Health Organization. <https://gco.iarc.fr>
2. Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., Soerjomataram, I., Jemal, A., et al. (2021). Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: A Cancer Journal for Clinicians*, 71(3), 209–249.
3. Keetile, M., Ndlovu, K., Letamo, G., Disang, M., Yaya, S., & Navaneetham, K. (2021). Factors associated with and socioeconomic inequalities in breast and cervical cancer screening among women aged 15–64 years in Botswana. *PLOS ONE*, 16(8), e0255581.
4. Guida, F., Kidman, R., Ferlay, J., Schüz, J., Soerjomataram, I., Kithaka, B., et al. (2022). Global and regional estimates of orphans attributed to maternal cancer mortality in 2020. *Nature Medicine*, 28(12), 2563–2572.
5. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2021;71(3):209–249
6. Lissouba P, Van de Perre P, Mayaud P. (2018). HIV-positive women have higher risk of HPV infection, precancerous lesions, and cervical cancer: A systematic review and meta-analysis. *PLOS Medicine*. <https://doi.org/10.1371/journal.pmed.1002482>
7. Clifford GM, Franceschi S, Keiser O, Schöni-Affolter F, Lise M, Dehler S, et al. Immunodeficiency and the risk of cervical intraepithelial neoplasia 2/3 and cervical cancer: a nested case-control study in the Swiss HIV cohort study. *Int J Cancer*. 2016;138(7):1732–1740. doi:10.1002/ijc.29913
8. Goeieman B, Michelow P, Omar T, Firnhaber C, Levin S. Cervical cancer in women living in South Africa: a record linkage study of the National Health Laboratory Service and the National Cancer Registry. *Eccancermedicalscience*. 2022; 16:1348. doi:10.3332/ecancer.2022.1348
9. Walboomers JMM, Jacobs MV, Manos MM, Bosch FX, Kummer JA, Shah KV, et al. Human papillomavirus is a necessary cause of invasive cervical cancer worldwide. *J Pathol*. 1999;189(1):12–19. doi:10.1002/(SICI)1096-9896(199909)189:1<12::AID-PATH431>3.0.CO;2-F
10. de Sanjosé S, Quint WGV, Alemany L, Geraets DT, Klaustermeier JE, Lloveras B, et al. Human papillomavirus genotype attribution in invasive cervical cancer: a retrospective cross-sectional worldwide study. *Lancet Oncol*. 2010;11(11):1048–1056. doi:10.1016/S1470-2045(10)70230-8
11. National Health Laboratory Service. NHLS HPV Dashboard. 2025 [cited 2025 Apr]. Available from: <https://www.nhls.ac.za>
12. World Health Organization. Target product profiles for human papillomavirus screening tests to detect cervical pre-cancer and cancer [Internet]. Geneva: WHO; 2024 [cited 2026 May 2]. ISBN: 978-92-4-010027-5. Available from: <https://www.who.int/publications/i/item/9789240100275>
13. International Agency for Research on Cancer. Global attribution of HPV genotypes to invasive cervical cancer [Internet]. Lyon: IARC; 2024 [cited 2026 May 2]. IARC Press Release No. 353. Available from: https://www.iarc.who.int/wp-content/uploads/2024/07/pr353_E.pdf
14. Muñoz N, Castellsagué X, de González AB, Gissmann L. Chapter 1: HPV in the etiology of human cancer. *Vaccine*. 2006;24(Suppl 3): S3/1–10. doi: 10.1016/j.vaccine.2006.05.115
15. Mantula F, Toefy Y, Sewram V. Barriers to cervical cancer screening in Africa: a systematic review. *BMC Public Health*. 2024;24(1):516. doi:10.1186/s12889-024-17842-1
16. South Africa. National Department of Health. Cervical Cancer Prevention and Control Policy. Pretoria: NDoH; 2017. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>

17. Delany-Moretlwe S, Kelley KF, James S, Scorgie F, Chikandiwa A, Igumbor E, et al. Human papillomavirus vaccine introduction in South Africa: implementation lessons from an evaluation of the national school-based vaccination campaign. *Glob Health Sci Pract*. 2018;6(3):425–438. doi:10.9745/GHSP-D-18-00090
18. National Department of Health, South Africa. Annual Report 2024/2025 [Internet]. Pretoria: NDoH; 2025 [cited 2026 May 2]. RP350/2025. ISBN: 978-1-83491-311-7. Available from: https://www.health.gov.za/wp-content/uploads/2025/11/NDoH-2024-25-Annual-Report-_19-September-2025.pdf
19. South African Government News Agency (SANews). SA Makes Progress with HPV Vaccination to Prevent Cervical Cancer. Pretoria: Government Communication and Information System; 17 November 2024. Available from: <https://www.sanews.gov.za/south-africa/sa-makes-progress-hpv-vaccination-prevent-cervical-cancer>
20. National Department of Health, South Africa. Cervical Cancer Prevention and Control Policy [Internet]. Pretoria: NDoH; 2017 [cited 2026 May 2]. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>
21. District Health Information Data. National Department of Health. Extracted 1st September 2025.
22. National Department of Health, South Africa. Annual Report 2024/2025 [Internet]. Pretoria: NDoH; 2025 [cited 2026 May 2]. RP350/2025. ISBN: 978-1-83491-311-7. Available from: https://www.health.gov.za/wp-content/uploads/2025/11/NDoH-2024-25-Annual-Report-_19-September-2025.pdf
23. World Health Organization. WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention, second edition [Internet]. Geneva: WHO; 2021 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789240030824>
24. Kawonga M, Fonn S. Leveraging implementation science for secondary prevention of cervical cancer in South Africa. *S Afr Health Rev*. 2023;2023(1). Available from: <https://sahr.hst.org.za/article/120636-leveraging-implementation-science-for-secondary-prevention-of-cervical-cancer-in-south-africa>
25. Moodley J, Constant D, Hoffman M, Salimo A, Allan B, Rybicki E, et al. Cervical precancer thermal ablation versus LLETZ excision comparative efficacy study in WLHIV (TALL Study): protocol for a randomised clinical trial in South Africa. *BMJ Open*. 2025;15(6): e094584. doi:10.1136/bmjopen-2024-094584
26. Kyrgiou M, Athanasiou A, Paraskevaïdi M, Mitra A, Kalliala I, Martin-Hirsch P, et al. Comparative effectiveness and risk of preterm birth of local treatments for cervical intraepithelial neoplasia and stage IA1 cervical cancer: a systematic review and network meta-analysis. *Lancet Oncol*. 2022;23(7):896–906. doi:10.1016/S1470-2045(22)00334-5
27. World Health Organization. WHO guidelines for the use of thermal ablation for cervical pre-cancer lesions [Internet]. Geneva: WHO; 2019 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789241550598>
28. Boles T, Pontremoli Salcedo M, Lorenzoni C, Osman N, Baker E, Schmeler K, et al. Overview of thermal ablation devices for treating precancerous cervical lesions in low-resource settings. *J Glob Health*. 2022; 12:03089. doi:10.7189/jogh.12.03089
29. Huchko MJ, Smith-McCune K, Sawaya GF, Scibilia J, Weinstein J, Green B, et al. Worthy of further consideration: an updated meta-analysis to address the feasibility, acceptability, safety and efficacy of thermal ablation in the treatment of cervical cancer precursor lesions. *Prev Med*. 2018;117: S28–S37. doi: 10.1016/j.ypmed.2018.10.008

30. National Department of Health, South Africa. Cervical Cancer Prevention and Control Policy [Internet]. Pretoria: NDoH; 2017 [cited 2026 May 2]. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>
31. Zungu L, Mahlalela N, Thusi G. Treatment delays for cancer patients in Sub-Saharan Africa: South Africa as a microcosm. *Ecancermedicalscience*. 2024; 18:1747. doi:10.3332/ecancer.2024.1747
32. World Health Organization. (2020). Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem. <https://iris.who.int/handle/10665/336583>
33. World Health Organization. Comprehensive cervical cancer control: a guide to essential practice, 2nd edition [Internet]. Geneva: WHO; 2014 [cited 2026 May 3]. ISBN: 978-92-4-154895-3. Available from: <https://www.who.int/publications/i/item/9789241548953>
34. Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2024;74(3):229–263. doi:10.3322/caac.21834
35. Olorunfemi G, Ndlovu N, Masukume G, Chikandiwa A, Pisa PT, Singh E. Temporal trends in the epidemiology of cervical cancer in South Africa (1994–2012). *Int J Cancer*. 2018;143(9):2238–2249. doi:10.1002/ijc.31610
36. World Health Organization. Human papillomavirus vaccines: WHO position paper (2022 update). *Wkly Epidemiol Rec*. 2022;97(50):645–672. Available from: <https://www.who.int/publications/i/item/who-wer9750-645-672>
37. Falcaro M, Castañón A, Ndelela B, Checchi M, Soldan K, Lopez-Bernal J, et al. The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study. *Lancet*. 2021;398(10316):2084–2092. doi:10.1016/S0140-6736(21)02178-4
38. Drolet M, Bénard É, Pérez N, Brisson M; HPV Vaccination Impact Study Group. Population-level impact and herd effects following the introduction of human papillomavirus vaccination programmes: updated systematic review and meta-analysis. *Lancet*. 2019;394(10197):497–509. doi:10.1016/S0140-6736(19)30298-3
39. Stelzle D, Tanaka LF, Lee KK, Ibrahim Khalil A, Baussano I, Shah ASV, et al. Estimates of the global burden of cervical cancer associated with HIV. *Lancet Glob Health*. 2021;9(2): e161–e169. doi:10.1016/S2214-109X (20)30459-9
40. Canfell K, Sharma M, Bénard É, Saville M, Kelly H, Keane A, et al. Benefits and harms of cervical screening, triage and treatment strategies in women living with HIV. *Nat Med*. 2023;29(12):3059–3069. doi:10.1038/s41591-023-026013
41. World Health Organization. WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention, second edition [Internet]. Geneva: WHO; 2021 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789240030824>
42. Denny L, Swart AM, Wilkins D, Kehinde A, Franceschi S, Almonte M. Cervical cancer prevention in HIV-positive women: same efficacy but at what cost? *BJOG*. 2018;125(9):1169–1177. doi:10.1111/1471-0528.15050
43. Maree JE, Wright SC, Makua TP. Self-collection for human papillomavirus testing: a way to increase cervical cancer screening in rural South Africa. *Eur J Cancer Care*. 2014;23(3):357–364. doi:10.1111/ecc.12146
44. World Health Organization. WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention, second edition [Internet]. Geneva: WHO; 2021 [cited 2026 May 2]. Available from: <https://www.who.int/publications/i/item/9789240030824>

45. Dreyer G, van der Merwe FH, Botha MH, Snyman LC, Mouton A, Constant D, et al. Enhancing cervical cancer prevention in South African women: primary HPV mRNA screening with different genotype combinations. *Cancers (Basel)*. 2023;15(22):5432. doi:10.3390/cancers15225432
46. Lorenzoni C, Tergas AI, Almonte M, Lloveras B, Socolovsky M, Edelzstein ME, et al. Cervical cancer screening and treatment algorithms using human papillomavirus testing — lessons learnt from a South African pilot randomised controlled trial. *S Afr Med J*. 2024;114(3): e1316. doi:10.7196/SAMJ.2024.v114i3.1316
47. National Department of Health, South Africa. Cervical Cancer Prevention and Control Policy [Internet]. Pretoria: NDoH; 2017 [cited 2026 May 3]. Available from: <https://www.health.gov.za/wp-content/uploads/2021/07/cervical-cancer-policy.pdf>
48. Bonvoisin C, Tebache L, Labrosse J, Klein C, Munaut C, Goffin F. Cervical cancer screening programs for female sex workers: a scoping review. *Front Public Health*. 2023; 11:1226779. doi:10.3389/fpubh.2023.1226779
49. Rositch AF, Richter KL, Phoolcharoen N, Wheeler CM, Silver MI. Patterns of persistent HPV infection after treatment for cervical intraepithelial neoplasia (CIN): a systematic review. *Cancer Epidemiol Biomarkers Prev*. 2017;26(12):1832–1840. doi: 10.1158/1055-9965.EPI-17-0233
50. Chibwesha CJ, Lopatkin NA, Driscoll SD, Bhatt S, Nakaganda A, Bowa K, et al. Management and care of women with invasive cervical cancer: American Society of Clinical Oncology resource-stratified clinical practice guideline. *J Glob Oncol*. 2016;2(5):311–340. doi:10.1200/JGO.2016.003954
51. Concin N, Matias-Guiu X, Vergote I, Cibula D, Mirza MR, Mäenpää J, et al. ESGO/ESTRO/ESP guidelines for the management of patients with cervical cancer — update 2023. *Int J Gynecol Cancer*. 2023;33(5):649–728. doi:10.1136/ijgc-2022-004062
52. Sartorius B, Sartorius K, Aldous C, Govender PS. Harnessing the law to advance equitable cancer care in South Africa: exploring the feasibility, desirability, and added value of a dedicated national cancer act. *Ecancermedicalscience*. 2024; 18:1658. doi:10.3332/ecancer.2024.1658
53. World Health Organization. Everybody's business: strengthening health systems to improve health outcomes — WHO's framework for action [Internet]. Geneva: WHO; 2007 [cited 2026 May 3]. Available from: <https://www.who.int/publications/i/item/9789241596077>
54. Piñeros M, Saraiya M, Baussano I, Bonjour M, Chao A, Bray F. The role and utility of population-based cancer registries in cervical cancer surveillance and control. *Prev Med*. 2021; 144:106237. doi: 10.1016/j.ypmed.2020.106237