South Africa

Population: 59.8 million (2022)
GDP per capita: USD 6,766 (2022)
Life expectancy: 62 years (2021)
Total health expenditure: 8.3% of GDP (2021)
Source: World Bank

Breast cancer

- Breast cancer is the most common cancer type in women (**27%** of all new cancer cases) and responsible for **16%** of all cancer deaths among women in South Africa.
- Breast cancer tends to be diagnosed at an earlier age in the Middle East and Africa (MEA) region than in Western countries, approximately 10 years earlier. In 2022, 68% of cases in South Africa were in women below the age of 65.

7 out of 10 women diagnosed with breast cancer in South Africa are under 65 years.

Health system and governance of breast care

Description

- The public sector, serving about **84%** of the population, is defined by standard treatment guidelines and an essential medicines list but faces major challenges including **service fragmentation, staffing shortages, financial limitations, and service quality.**
- Conversely, the private sector caters to approximately **17%** of the population, offering higher quality services at a greater cost, mainly funded through private health insurance (medical aid scheme) that does not always cover the full costs of medical services.

Health for all

The National Health Insurance (NHI) scheme, initiated in 2012 and originally aimed to be fully implemented by 2026, seeks to ensure all citizens and permanent residents have access to quality health services across sectors by pooling funds from private insurers and the public sector. The NHI bill was passed in the parliament in 2023 but remains to be implemented.

- Women with breast cancer symptoms typically begin the patient journey at the primary care level. The recommended pathway stated for the diagnosis of breast cancer in the Prescribed Minimum Benefits (PMBs) is to have a medical visit with a registered nurse and a general practitioner. Nevertheless, **traditional healers often serve as the initial point of entry into the health care system**.
- Breast cancer care services such as clinical breast examinations (CBE), medical consultations, surgery, radiology and diagnostic imaging, chemotherapy, radiation therapy, and breast reconstruction are included in the PMBs for early and locally advanced breast cancer. Hormone therapy, chemotherapy, and some level of palliative care is included in the PMBs for metastatic patients.
- In 2017, the National Department of Health (NDoH) introduced **the Breast Cancer Prevention and Control Policy, aimed at enhancing breast cancer awareness, prevention, and ensuring timely and effective treatments.**
- **Around half of the economic burden associated with breast cancer comes from indirect costs,** which include productivity losses due to working-age patients' inability to work, either temporarily or permanently, or premature death. This burden is especially acute in the MEA region, where breast cancer presents about a decade earlier than in Western countries.
- The direct medical costs for breast cancer treatment escalate with the stage at diagnosis. For example**, treating late-stage breast cancer** in other countries like Jordan and Saudi Arabia **can be more than two to five times as expensive as treating cancer detected at an early stage**. This highlights the crucial importance of early detection in reducing the economic impact.

Main recommendations

Continue efforts towards ensuring equitable health care provision across the entire country and population.

Emphasize and strengthen the participation of patient organizations in the decision-making processes.

Prioritize downstaging of breast cancer at diagnosis to reduce the economic burden of breast cancer.

Early detection

Main challenges

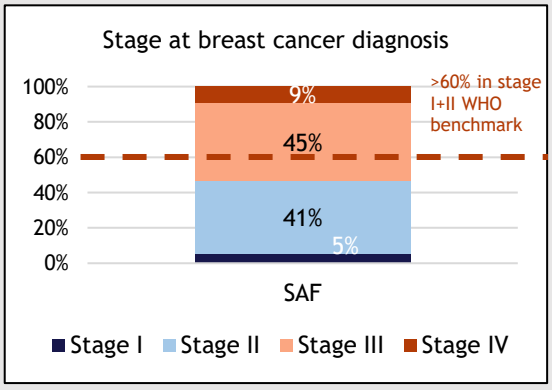
- Women over 40 visiting primary health clinics should receive a Provider-Initiated Screening Clinical Breast Examination (PISCBE). If abnormalities are detected, they are referred to a regional breast unit. Primary health care facilities should prioritize breast health education, informing women about breast cancer and emphasizing the importance of regular screenings.

Main recommendations

Invest in educating traditional healers about breast cancer to improve early referrals.

- Traditional healers are often the first point of care for many patients. Reliance on traditional medicine and a rising preference for complementary medicine before seeking conventional care are notable trends.
- Geographic and transportation barriers significantly impact breast cancer staging at diagnosis, with individuals living more than 20 kilometers from tertiary health centers more likely to be diagnosed at later stages. Other major challenges are:
  - ❖ low health care service utilization,
  - ❖ unclear patient navigation pathways,
  - ❖ low health literacy in some communities,
  - ❖ insufficient early detection education in some health care facilities,
  - ❖ in rural areas, lack of training among health care workers to detect breast-related issues, unless symptoms are pronounced.
  - ❖ economic constraints, including the cost of patients for taking time off work for health care appointments,
  - ❖ and fear of social stigma associated with breast cancer diagnosis, particularly concerning marital prospects for daughters.
- Provinces have different access points, and the evaluation also varies between the private and public sectors. The lack of standardized access and evaluation is a significant problem as **women frequently struggle to identify where they should seek care, resulting in delays**. This challenge extends beyond the public sector, even women with private insurance face difficulties in pinpointing their access points for screening in the private sector.

The graph indicates that a significant number of breast cancer diagnoses at the Chris Hani Baragwanath Academic Hospital (CHBAH) in 2006-2012 were made at advanced stages. Not reaching the current WHO GBCI goal of more than 60% of breast cancer diagnosis at earlier stages (I and II).



- The NDoH is moving towards a patient-centered approach, promoting cost-effective screening by recommending that women receive both breast (CBE) and cervical examinations during ordinary health care visits. The '**High-5 Method**' risk assessment is used to encourage self-breast examination and guide further actions based on the level of cancer suspicion.
- Population-based mammography screening is not feasible in the public health sector due to limited resources and infrastructure, with mammography recommended only for symptomatic or high-risk individuals.
- Within the private sector, among clients of a major medical aid provider, mammography screening uptake is low.
- There is a disparity in access to genetic counselors across regions, with a concentration in **Gauteng** and **Western Cape** and a shortage in other provinces. In addition, there is a trend of genetic counselors trained in South Africa **moving overseas for work**, attributed to the lack of new positions in the public sector.
- Waiting times for genetic testing results vary significantly between the public (up to **9** months) and private sectors (**2** to **4** weeks).

Establish integrative health clinics that combine complementary and conventional medicine.

Highlight testimonials from women who benefited from early detection to emphasize the impact of screening and supportive care.

Establish a national training curriculum for CBE to standardize knowledge.

Formally recognize patient navigators within the health care system, allocating budget for their recruitment, training, and payment.

Train health care providers in basic genetic counseling and advocate for more genetic counselor positions in the public sector to retain talent.

Diagnostic services

Main challenges

- **Limited availability of breast MRI and mammography machines in the public sector**. Even centers serving vast regions, like the one in Cape Town, are not sufficiently equipped. This **shortage leads to a heavy reliance on ultrasounds and CBE**.
- Bottlenecks in the health system led to long waiting times for diagnostic tests, causing anxiety among patients and potential progression of the disease. In the Eastern Cape, the patient's journey through the system can take up to **6-9** months from the first time a lump is felt to getting a biopsy and imaging.

Main recommendations

Prioritize investments in mammography machines for regions with high demand, and mobile units in non-urban areas.

- The public sector faces a significant shortage of pathologists, exacerbated by migration to the private sector due to poor working conditions and inadequate compensation.
- A study showed only **75%** completeness in core biopsies and surgical samples within the public sector. The main issues were the omission of tumor grade, and the absence of FISH testing for inconclusive HER2 status, crucial for the selection of appropriate treatments.
- The expense associated with core needle biopsies is often not covered by medical insurance until after a formal diagnosis.
- Local experts indicate that the National Health Laboratory Service (NHLS) faces shortages of certain laboratory reagents, leading to delays of over **6 months** in receiving genomic test results. In the Western Cape, one solution explored was to outsource tests, achieving a similar cost but reducing the result wait time to just **6 weeks**.

Test	Access to biomarker testing in the public sector
Essential biomarkers (ER, PR, HER2, Ki-67)	Available for all
Gene expression profiles (Oncotype DX, Mamma Print, etc.)	Not publicly available
Newer biomarkers (PIK3CA, BRCA1/2, PD-L1, NTRK, dMMR/MSI-H, TMB-H)	Only BRCA1/2 tests are publicly available while the rest are not.

- Continue investing in ultrasound technology and provide dedicated training.
- Implement digital pathology solutions.
- Reimburse costs for essential diagnostic tests, like the core needle biopsy.
- Implement periodic quality audits for histopathology reports.
- Develop financing and reimbursement strategies for gene expression profile panels.

Treatment

Main challenges

- **Transportation expenses significantly impact breast cancer patients, often becoming a major reason for discontinuing treatment regimens.** In some areas of Cape Town, for instance, it is estimated that households allocate as much as **43%** **of their monthly income solely to transportation costs.** Although the state provides hospital transportation from secondary hospitals to breast cancer centers, **patients living in inner-city regions must depend on public transportation.**
- Major hospitals in the Western Cape face a significant challenge in meeting the demand for breast surgery due to the limited availability of surgical slots, with only one surgical list scheduled per week. This constraint also affects the ability to perform reconstructions. Consequently, patients may experience extended waiting periods for critical surgeries, with delays for a mastectomy reaching up to **4 months**.
- Experts have observed that when breast cancer treatment is classified under the PMB, its funding is drawn from the general risk pool of the medical scheme, rather than from dedicated oncology benefits. This distinction has implications for patients requiring treatments that extend beyond the basic PMB coverage.
- There is a **limited number of radiation therapy machines and a notable shortage of radiation oncologists and therapists** leading to extended waiting times for patients and placing excessive workloads on current staff.
- Chemotherapy and hormone therapy are readily available for breast cancer patients, while targeted treatment is mostly available in the private sector and immunotherapy is not yet available.
- There is **restricted access to newer medicines in the public sector.** Even medicines listed in the public sector list (EML) may not actually be accessible, especially in metastatic cases where options are more limited.
- Comprehensive health technology assessment (HTA) to evaluate the cost-effectiveness or budget impact of medicines to be added to the public EML is not done.
- Difficulties in accessing treatment protocols and formularies make it hard for patients and insurers to understand coverage, although efforts are being made to improve transparency.
- For patients with private insurances, **there are high co-payments for cancer medicines, sometimes up to 50% of the price.** In certain instances, there should be no co-payment, but patients often find themselves needing to engage in legal proceedings to contest these additional costs.

Main recommendations

- Introduce a transportation subsidy or voucher program for cancer patients.
- Collaborate with the private sector to increase breast surgery capacity.
- Increase radiation therapy access by extending hours and focusing on hypofractionation.
- Implement a transparent, standardized HTA process for new medicines.
- Ensure all cancer medicines listed in the EML are readily available in public hospitals.
- Consider fixed-fee co-payments instead of proportional co-payments for cancer care services in the private sector.