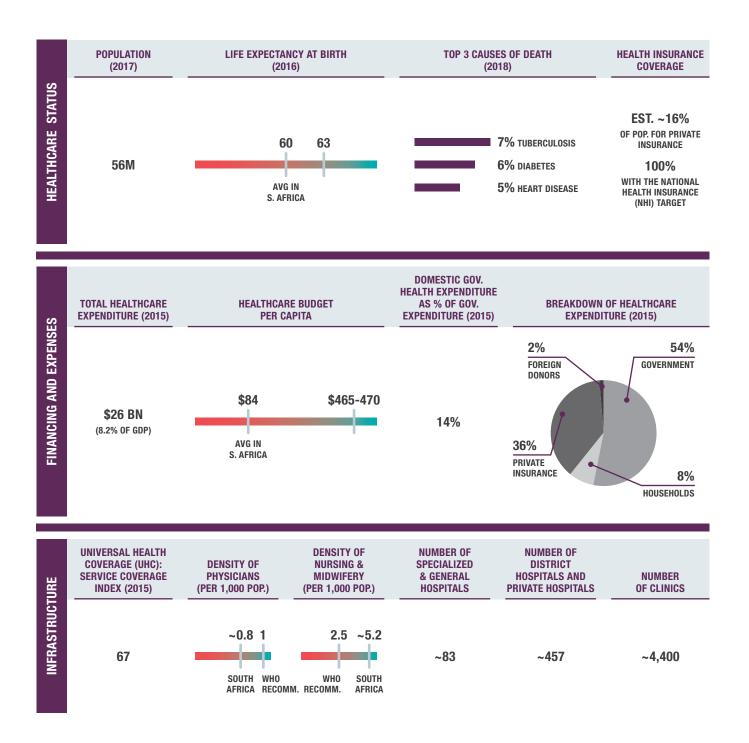




HEALTHCARE PROFILE



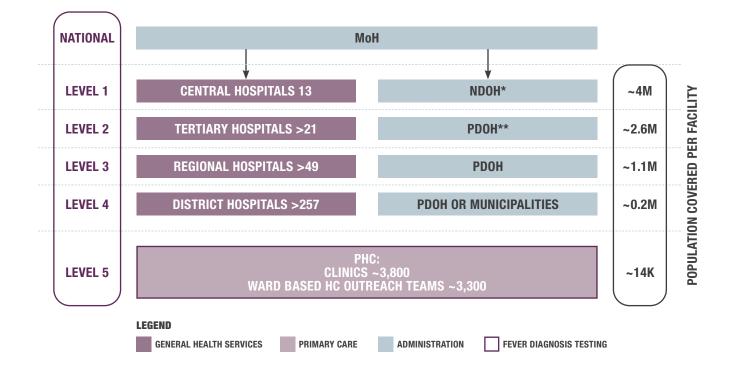
The health status of South Africa is stronger than that of neighboring countries but relies heavily on private financing

Sources: SAMJ, WHO, World Bank, Advention





PUBLIC HEALTHCARE INFRASTRUCTURE



COMMENTS

General Healthcare infrastructure:

- The South African healthcare system is based on a referral system. Primary healthcare (PHC), which includes clinics and municipal-ward based healthcare outreach teams, are the first point of contact for patients
- Community outreach interventions include community health workers (CHWs) who serve as contacts between PHC facilities and surrounding communities
- Clinics are the first point of access to care. 1,000 clinics were to be qualified as "Ideal Clinics" by 2017/18 and 2,823 by 2019/20 in order to be accredited by the NHI
- **District hospitals:** they have GPs and clinical nurse practitioners. Small district hospitals (DH) have between 50-150 beds and larger ones have between 300-600 beds
- Regional hospitals: serve patients based on referrals from district hospitals and usually have 200-800 beds.

- Tertiary hospitals: receive referrals from regional hospitals. They provide supervised specialist and intensive care services. They usually have 400-800 beds
- **Central hospitals:** provide tertiary and central referral services, and may provide national referral services

Malaria specifics:

- Within endemic provinces of KwaZulu-Natal, Limpopo and Mpumalanga, the vertical National Malaria Program has field teams for vector control and surveillance with provincial management
- In non-malaria endemic provinces, malaria is a horizontal programme, that is, integrated into the Communicable Diseases Control unit response

South African healthcare system is structured around a strict referral mechanism Malaria is either a horizontal or vertical programme depending of the province's endemicity

Notes: (*) National Department of Health; (**) Provincial Departments of Health. Sources: SAMJ, KPMG, MoH, Advention





SOUTH AFRICAN NATIONAL HEALTH INSURANCE 2017 REFORM

CONTEXT	 In 2007, the African National Congress (ANC) committed itself to the establishment of a national health insurance (NHI) system, largely due to concerns about the challenges of the South African health system (within both the public and private sectors) It reflects growing concerns for the poor, who sometimes cannot use health services due to high costs (health services and transport to services), employees complaining about the escalating contributions to medical schemes, and failed attempts in the past to establish such similar schemes
POLICY	In 2017, the National Health Insurance (NHI) policy was gazetted It aimed to provide essential quality healthcare to all citizens and long-term residents in the country regardless of their financial status Currently rolled out in 10 pilot districts, it should be financed through general taxation
IMPACT ON PUBLIC SECTOR	NHI would also establish a transitional fund to abolish user fees in public hospitals Primary Healthcare (PHC) clinics will have to meet the minimum quality standards to be accredited for NHI • These standards are outlined in the Ideal Clinic framework, which was launched in July 2013 in order to systematically improve the quality of primary healthcare provided
IMPACT ON Private Sector	Private sector operators should receive payments from the NHI fund to provide publicly funded healthcare Population's ability to afford private medical schemes might decrease as mandatory NHI contributions through payroll tax are introduced and can potentially result in a decrease in demand for private healthcare provision once NHI is fully implemented Private sector will probably have to reduce its emphasis on inpatient treatment in favor of PHC provision through NHI. It is anticipated that the focus will be on low cost PHC facilities as NHI rates are anticipated to be much lower than those currently paid by medical schemes

The National Health Insurance reform, launched in 2017, should lead to a profound reorganization within the public and private health sectors, and increase the level of care while decreasing cost

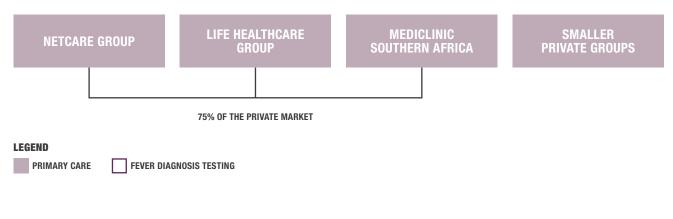
Sources: KPMG, MoH, interviews, Advention





PRIVATE HEALTHCARE INFRASTRUCTURE

Total: ~600 clinics and 200 hospitals



COMMENTS

General healthcare infrastructure:

- The private sector serves ~20% of the South African population
- The National Household Survey 2016 highlights that users of private healthcare tend to be more satisfied with healthcare services. The private healthcare industry in South Africa is highly regarded for the quality of care provided
- The sector is concentrated around three large publicly listed companies which control most of the market: Netcare Group ('Netcare'), Life Healthcare Group ('Life Healthcare') and Mediclinic Southern Africa ('Mediclinic')
- The remainder of the market comprises a number of smaller, upcoming groups, with the result that competition is relatively low
- The most recent data shows that there is more than ~200 private hospitals offering around 30,000 beds and more than ~600 private clinics



The South Africa private sector is highly concentrated and offers high-quality care to ${\sim}20\%$ of the population





MALARIA DIAGNOSIS PROVIDERS' BUSINESS MODEL

PUBLIC HEALTHCARE FACILITIES

82.6% of the population relies on public healthcare provision and 17.4% on private medical schemes, while expenditure in both spheres is almost at parity, resulting in a great discrepancy in the quality of healthcare services.

The public health sector remains underfunded and has to be strengthened. Currently, health services are financed in SA through allocations from general tax revenue \sim 50%, direct out-of-pocket payments (that have been decreasing over the years), and contributions to the medical scheme.

Medical schemes vary by occupation and the capacity of people to afford them. Public clinics charge user fees, differentiated according to income level. Various medical schemes require members to pay copayments to providers for services that are not part of the benefits package.

Tax-funded services consist of a comprehensive health package. South Africans have access to a wide range of services, from primary to highly specialized care.

The proposed NHI will decrease out-of-pocket (OOP) expenses and the state is committed to offering as wide a range of services as possible.

Malaria treatment and diagnosis is free in public facilities.

PRIVATE HEALTHCARE FACILITIES

The private sector is small and tends to cater to people with medium to high incomes. South Africa has a two-tiered health system divided along socioeconomic lines.

The cost of private healthcare is estimated to be one of the highest in the world and has been the subject of the Competition Commission inquiry that started in 2014 and is still ongoing.

In 2015, OOP expenditures and medical scheme contributions accounted for the majority of private health expenditures of 13.0% and 83.5%, respectively.

Private schemes cover core services from the prescribed Minimum Benefit Package (MBP). Each scheme covers different services but all are mandated to cover the services in MBP.

The proposed NHI benefits package has yet to be defined, but private medical aids would likely cover additional services not included in the NHI package.

Until complete roll out of NHI, the public sector is financed by the government for ${\sim}50\%$ and the remainder is paid through OOP and contributions to medical schemes

The private sector is mostly financed through medical scheme contributions (~84%)





HEALTHCARE STAFF AND TRAINING

	PHYSICIANS	NURSES	CHWs
GENERAL JOB DESCRIPTION	Examine in and out patients in line with standard medical procedures using various types of diagnostic mechanisms Administer and prescribe drugs based on examination, test reports and findings and counselling services	Provide nursing care, preventive and curative care Triage patients for physician consultation and perform basic patient assessment have the ability to prescribe antibiotics	Proactively initiate visits to households to perform a variety of basic healthcare services Perform basic diagnosis of patients for referral (HIV, Malaria,) Distribute basic palliative medicine for referred patients
MALARIA SPECIFIC TASKS	Use IMCA and IMAI approaches to diagnose through clinical diagnostic and microscopy confirmation for severe cases	Triage patients for suspected malaria fevers and take blood sample	Refer potential malaria fevers
MEDICAL TRAINING	6 years + specialty	Registered nurses - 4 years Enrolled nurses - 2 years	Weeks
RDT USE KNOWLEDGE		•	
BLOOD SAMPLING KNOWLEDGE			
LEGEND COMPLETE KNOWLEDGE INCOMPLETE / PARTIAL KNOWLEDGE NO / VERY LIMITED KNOWLEDGE			

Most clinics are only staffed with nurses (including at least one registered nurse). Physicians are only present at health centers and hospitals. Outreach teams are usually made of one referent nurse and several CHWs that will refer patients that are tested positive.

 "Typically, PHCs do not have GPs; nurses can test and treat with antimalarials and antibiotics and are the key person for rural care." CHAI, Southern Africa, Malaria Regional Manager The expansion of access to healthcare envisioned by NHI will require a significant increase in the number of healthcare professionals in the country. Currently, $\sim 10\%$ of medical staff are qualified in other countries, and even though medical training takes place in the public sector most doctors go into the private sector to work.

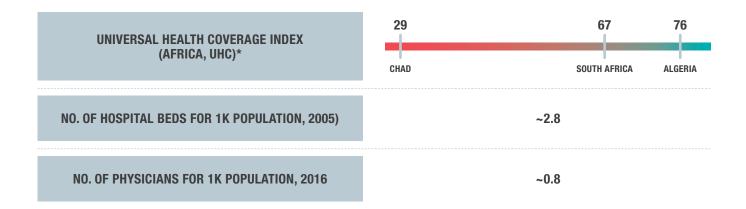
- Central hospitals, which are currently run by provincial Departments of Health, are the key platforms for the training of healthcare professionals. The government is considering allowing private hospitals to train physicians
- Starting January, a new 3-year diploma producing generalist nurses able to manage low-risk health problems will be offered

Outreach teams and nurses have a central role in malaria fighting in South Africa NHI will require more healthcare professionals and South Africa is restructuring its training strategy to fill the gaps





ACCESS TO CARE



Many of the challenges faced by the South African public healthcare sector are deeply rooted in its past. Today, the country continues to struggle with a shortage of resources including qualified medical staff and adequate infrastructure and equipment, while servicing a growing and ageing population and a high burden of disease.

State clinics and hospitals tend to be concentrated in urban areas, which requires rural populations to travel long distances to access care.

There remains a great need for appropriate infrastructure capacity to address the existing supply shortage.

Currently, great emphasis is being placed on improving PHC facilities to meet the required minimum standards for the NHI accreditation.

Furthermore, NHI dictates that PHCs be located within a specific radius of human settlements. This requires that additional facilities be built, especially in rural areas.

ADDITIONAL COMMENTS ON ACCESS TO CARE DYNAMICS, SPECIALLY IN RELATION TO FEBRILE ILLNESSES

The three provinces that are malaria endemic are also the provinces that have the least number of hospitals beds (both private and public) per thousand population:

- KwaZulu-Natal (KZN) has 0.79, Limpopo (LP) and Mpumalanga (MP) have 0.8; in comparison, Northern Cape (NC) has 1.79 and Free State (FS) has 1.65
- "There is a huge split between urban and rural areas. Furthermore, the private sector is not well implanted where malaria is endemic." CHAI, Southern Africa, Malaria Regional Manager

These regions also have the lowest Medical Aid coverage

KZN has 12.5%, LP has 8.7% and MP has 13.3%, while NC has 15.4% and Gauteng Province 25.5%

South Africa is a heavily polarized country regarding access to care

Note: (*) UHC index is made of 16 indicators such as child treatment, malaria prevention, hospital access, health worker density. Sources: SAMJ, KPMG, World Bank, Advention