

SOUTH AFRICA YEARBOOK 2017/18

Health



Significant progress has been made over the last decade and more towards ensuring a long and healthy life for all South Africans, which is Outcome 2 of Government's 2014 – 2019 Medium Term Strategic Framework (MTSF).

Over the medium term, the Department of Health (DoH) will continue to contribute to increased life expectancy and improved quality of life for South Africans through sustaining the expansion of the HIV and AIDS treatment and prevention programme, revitalising public healthcare facilities, and ensuring the provision of specialised tertiary hospital services.

The year 2016 marked the second year of the first five-year building block towards the achievement of the 2030 vision and goals of The National Development Plan (NDP).

The 2030 vision for health in Chapter 10 of the NDP is to achieve a health system that works for everyone and produces positive health outcomes.

In support of this vision, the strategic thrust of the health sector continue to focus on four outcomes:

- Outcome 1: Increase the life expectancy of all South Africans.
- Outcome 2: Decrease maternal, child and infant mortality.
- Outcome 3: Combating HIV and AIDS, and decreasing the burden of disease from tuberculosis (TB).
- Outcome 4: A strengthened health system.

The NDP 2030 identified a set of nine priorities that highlight the key interventions required to achieve a more effective health system.

The nine priorities aim to:

- address the social determinants that affect health and diseases
- strengthen the health system
- improve health information systems
- prevent and reduce the disease burden and promote health
- finance universal healthcare coverage
- improve human resources in the health sector
- review management positions and appointments, and strengthen accountability mechanisms
- improve quality by using evidence
- establish meaningful public-private partnerships.

The DoH's five-year strategic goals to be achieved by 2022 are as follows:

- prevent disease and reduce its burden, and promote health
- make progress towards universal health coverage through the development of the National Health Insurance (NHI) scheme, and improve the readiness of health facilities for its implementation
- re-engineer primary healthcare by increasing the number of ward-based outreach teams, contracting general practitioners and district specialist teams, and expanding school health services
- improve health facility planning by implementing norms and standards
- improve financial management by improving capacity, contract management, revenue collection and supply chain management reforms
- develop an efficient health management and information system for improved decision-making
- improve the quality of healthcare by setting and monitoring national norms and standards, improving system for user feedback, increasing safety in healthcare, and by improving clinical governance
- improve human resources for health by ensuring adequate training and accountability measures.

Legislation and policies

The legislative mandate of the DoH is derived from the Constitution and several pieces of legislation passed by Parliament.

These include the following:

- The National Health Act, 2003 (Act 61 of 2003): Provides a framework for a structured health system within the Republic, taking into account the obligations imposed by the Constitution and other laws on the national, provincial and local governments regarding health services.
- The Medicines and Related Substances Act, 1965 (Act 101 of 1965): Provides for the registration of medicines and other medicinal products to ensure their safety, quality and efficacy, and also provides for transparency in the pricing of medicines.
- The Hazardous Substances Act, 1973 (Act 15 of 1973): Provides for the control of hazardous substances, in particular

those emitting radiation.

- The Occupational Diseases in Mines and Works Act, 1973 (Act 78 of 1973): Provides for medical examinations on people suspected of having contracted occupational diseases, especially in mines, and for compensation in respect of those diseases.
- The Pharmacy Act, 1974 (Act 53 of 1974): Provides for the regulation of the pharmacy profession, including community service by pharmacists.
- The Health Professions Act, 1974 (Act 56 of 1974): Provides for the regulation of health professions, in particular medical practitioners, dentists, psychologists and other related health professions, including community service by these professionals.
- The Dental Technicians Act, 1979 (Act 19 of 1979): Provides for the regulation of dental technicians and for the establishment of a council to regulate the profession.
- The Allied Health Professions Act, 1982 (Act 63 of 1982): Provides for the regulation of health practitioners such as chiropractors, homeopaths, etc., and for the establishment of a council to regulate these professions.
- The South African Medical Research Council (SAMRC) Act, 1991 (Act 58 of 1991): Provides for the establishment of the MRC and its role in relation to health research.
- The Choice on Termination of Pregnancy Act, 1996 (Act 92 of 1996): Provides a legal framework for the termination of pregnancies based on choice under certain circumstances.
- The Sterilisation Act, 1998 (Act 44 of 1998): Provides a legal framework for sterilisations, including for people with mental health challenges.
- The Medical Schemes Act, 1998 (Act 131 of 1998): Provides for the regulation of the medical schemes industry to ensure consonance with national health objectives.
- The Tobacco Products Control Act, 1993 (Act 83 of 1993): Provides for the control of tobacco products, the prohibition of smoking in public places and of advertisements of tobacco products, as well as the sponsoring of events by the tobacco industry.
- The National Health Laboratory Service (NHLS) Act, 2000 (Act 37 of 2000): Provides for a statutory body that offers

i In 2016, plans were set in place to address the high fatality rate caused by acute malnutrition among children in Gauteng.

The Department of Health's (DoH) annual report revealed that about 3 040 new cases of acute malnutrition were identified in 2015/16. About 1 512 children were admitted at different health facilities and about 113 deaths were recorded as a result of acute malnutrition.

In an effort to fight malnutrition, the DoH's antenatal care will identify women at risk of malnutrition due to low income and provide them with food supplementations. The Department of Social Development will continue to provide food parcels."

The DoH will continue to train doctors and nurses in all healthcare facilities on the correct classification of severe acute malnutrition for early diagnosis and immediate access to appropriate treatment.

Early childhood development centres in Gauteng with children from low-income households are also trained to identify children vulnerable to malnutrition.

laboratory services to the public health sector.

- The Council for Medical Schemes (CMS) Levy Act, 2000 (Act 58 of 2000): Provides a legal framework for the CMS to charge medical schemes certain fees.
- The Mental Health Care Act, 2002 (Act 17 of 2002): Provides a legal framework for mental health in the country and, in particular, the admission and discharge of mental health patients in mental health institutions, with an emphasis on human rights for mentally ill patients.
- The Nursing Act, 2005 (Act 33 of 2005): Provides for the regulation of the nursing profession.
- The Traditional Health Practitioners Act, 2007 (Act 22 of 2007): Provides for the establishment of the Interim Traditional Health Practitioners Council, and registration, training and practices of traditional health practitioners in the country.
- The Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972): Provides for the regulation of foodstuffs, cosmetics and disinfectants, in particular quality standards that must be complied with by manufacturers, as well as the importation and exportation of these items.
- The Criminal Procedure Act, 1977 (Act 51 of 1977), Sections 212 4(a) and 212 8(a): Provides for establishing the cause of non-natural deaths.
- The Children's Act, 2005 (Act 38 of 2005): The Act gives effect

to certain rights of children as contained in the Constitution; to set out principles relating to the care and protection of children, to define parental responsibilities and rights, to make further provision regarding children's court.

- The Occupational Health and Safety Act, 1993 (Act 85 of 1993): Provides for the requirements with which employers must comply to create a safe working environment for employees in the workplace.
- The Compensation for Occupational Injuries and Diseases Act, 1993 (Act 130 of 1993): Provides for compensation for disablement caused by occupational injuries or diseases sustained or contracted by employees in the course of their employment, and for death resulting from such injuries or disease.
- The National Roads Traffic Act, 1996 (Act 93 of 1996): Provides for the testing and analysis of drunk drivers.
- The Constitution of the Republic of South Africa Act, 1996 (Act 108 of 1996): Pertinent sections provide for the rights of access to healthcare services, including reproductive health and emergency medical treatment.
- The Employment Equity Act, 1998 (Act 55 of 1998): Provides for the measures that must be put into operation in the workplace to eliminate discrimination and promote affirmative action.
- The State Information Technology Act, 1998 (Act 88 of 1998): Provides for the creation and administration of an institution responsible for the State's information technology system.
- The Skills Development Act, 1998 (Act 97 of 1998) Provides for the measures that employers are required to take to improve the levels of skills of employees in workplaces.
- The Public Finance Management Act, 1999 (Act 1 of 1999): Provides for the administration of state funds by functionaries, their responsibilities and incidental matters.
- The Promotion of Access to Information Act, 2000 (Act 2 of 2000): Amplifies the constitutional provision pertaining to accessing information under the control of various bodies.
- The Promotion of Administrative Justice Act, 2000 (Act 3 of 2000): Amplifies the constitutional provisions pertaining to administrative law by codifying it.
- The Promotion of Equality and the Prevention of Unfair

Discrimination Act, 2000 (Act 4 of 2000): Provides for the further amplification of the constitutional principles of equality and elimination of unfair discrimination.

- The Division of Revenue Act, 2015 (Act 1 of 2015): Provides for the manner in which revenue generated may be disbursed.
- The Broad-Based Black Economic Empowerment Act, 2003 (Act 53 of 2003): Provides for the promotion of black economic empowerment in the manner that the State awards contracts for services to be rendered, and incidental matters.
- The Labour Relations Act, 1995 (Act 66 of 1995): Establishes a framework to regulate key aspects of relationship between employer and employee at individual and collective level.
- The Basic Conditions of Employment Act, 1997 (Act 75 of 1997): Prescribes the basic or minimum conditions of employment that an employer must provide for employees covered by the Act.

Budget

From a total allocation for the year under review amounting to R42,646 billion, the department spent R42,425 billion, which is 99.5% of the available budget.

Departmental structure of the DoH

The DoH has structured its functions according to related programmes and subprogrammes to ensure optimal service delivery and comprehensive cover of the challenges faced by the department, as well as the implied functions as set out by legislation and the Constitution.

HIV and AIDS, TB and Maternal and Child Health

Subprogrammes include the following:

i Between January 2016 and August 2016, the Gauteng Department of Health recruited 3 256 medical doctors and nurses in an effort to capacitate employees at public health facilities.

An open-ended block advertisement for clinical posts was expected to run throughout 2016/17 for all vacant funded posts for doctors and nurses.

There was a net gain of 2 227 nurses and 1 029 medical practitioners by the end of August 2016.

- HIV and AIDS
- TB
- Maternal and Child Health
- Youth and School Health
- Global Fund.

Primary Healthcare

This programme comprises a variety of related subprogrammes:

- District Health Services
- Environmental Health and Port Health
- Communicable Diseases
- Non-Communicable Diseases (NCDs)
- Health Promotion and Nutrition
- Mental Health
- Malaria
- Immunisation.

Hospitals, Tertiary Health Services and Human Resource Development (HRD)

Subprogrammes under this programme include:

- Tertiary Healthcare Planning and Policy
- Violence, Trauma and Emergency Medical Services
- Forensic Pathology Services
- HRD for Health Planning, Development and Management
- Office of Nursing Services
- Health Facilities Infrastructure Management.

Health Regulations and Compliance Management

The following subprogrammes are run under this programme:

- Food control; as well as Pharmaceutical and Traditional Product Regulations
- Uniform Patient Fee Schedules.

Corporate Services

This involves subprogrammes regarding legal service and parliamentary affairs.

National Health Insurance

This programme has as its focus health information monitoring and evaluation.

HIV, AIDS and TB

South Africa has rolled out the world's largest treatment programme, with over 3,4 million people initiated on anti-retroviral (ARV) treatment.

At the end of March 2016, there were 3 407 336 clients remaining on ARV treatment. The DoH revised the HIV guidelines to align them with the World Health Organisation (WHO) HIV Guidelines.

The 2016 International AIDS Conference was held in Durban, with South Africa hosting it for the second time since 2000. The four-day conference was held at the Inkosi Albert Luthuli International Convention Centre from 18 to 22 June 2016 under the theme: "Access Equity Rights Now".

Held every two years, the conference has become a barometer for government and South Africans to track advances made in controlling HIV infections.

It also provides an opportunity for people working with HIV and AIDS, sexually transmitted infections (STIs) and TB to share experiences and insights.

Key successes in the fight against HIV and AIDS have been the reduction of mother-to-child HIV transmission, which has resulted in lower child mortality rates; increasing ART coverage, which resulted in lower adult mortality rates; increasing the number of medical male circumcisions, and maintaining HIV testing at high levels.

Key challenges included strengthening prevention programmes and decreasing the numbers of new infections, scaling up the numbers of people on ART, and retaining those on treatment over time.

Research into the prevention of HIV is at the centre of government's strategy aimed at ending the pandemic that has held the world hostage for many years.

Research has shown that early treatment of infections in HIV-positive people can reduce the risk of transmission of HIV, and that the use of ARV treatment in HIV-negative people can reduce the risk of infection.

South Africa has made major gains in the fight against HIV and AIDS in the past 10 years, with infections dropping from 681 434 in 2006 to just 150 375 in 2016. Deaths due to TB

dropped from 69 916 in 2009 to 37 878 in 2015.

HIV, one of the most severe diseases globally, claimed the lives of 1,1 million people worldwide in 2015 alone. TB is the main cause of death among HIV-infected people, accounting for around one in three AIDS-related deaths.

South Africa is one of the recipients of Global Fund against AIDS, TB and Malaria, which was established in 2002.

The fund is used for HIV and AIDS, TB and malaria initiatives in developing nations. The report also declared that AIDS-related deaths in children under five years of age had decreased from 25 000 in 2000 to 3 800 in 2014.

March is the annual TB awareness month, and Government used the opportunity to launch the new five-year National Strategic Plan (NSP) for HIV, TB and STIs for the period 2017 to 2022.

South Africa's response to HIV and TB epidemics means that the average South African now lives nearly a decade longer than they did in 2004.

World AIDS Day

World AIDS Day is commemorated each year on 1 December and is an opportunity for every community to unite in the fight against HIV, show support for people living with HIV and remember those who have died.

The slogan for World AIDS Day 2016 was "It is in Our Hands to End HIV and TB". World AIDS Day 2016 presented the chance to reflect on the achievements of the NSP on HIV, STIs and TB, 2012 to 2016, which was coming to an end; as well as plan ahead for the next five-year NSP on HIV, STIs and TB.

Population statistics

For 2017, Statistics South Africa (Stats SA) estimates the mid-year population at 56,52 million. Approximately 51% (approximately 28,9 million) of the population is female.

Gauteng comprises the largest share of the South African population. Approximately 14,3 million people (25,3%) live in this province. KwaZulu-Natal is the province with the second largest population, with 11,1 million people (19,6%) living in this province. With a population of approximately 1,21 million people (2,1%), Northern Cape remains the province with the smallest

share of the South African population.

About 29,6% of the population is aged younger than 15 years and approximately 8,1% (4,60 million) is 60 years or older. Similar proportions of those younger than 15 years live in Gauteng (21,1%) and KwaZulu-Natal (21,1%).

Of the elderly aged 60 years and older, the highest percentage 24,0% (1,10 million) reside in Gauteng. The proportion of elderly persons aged 60 and older is increasing over time.

Migration is an important demographic process in shaping the age structure and distribution of the provincial population. For the period 2016–2021, Gauteng and Western Cape are estimated to experience the largest inflow of migrants of approximately, 1 595 106 and 485 560 respectively.

Life expectancy at birth for 2017 is estimated at 61,2 years for males and 66,7 years for females.

The infant mortality rate for 2017 is estimated at 32,8 per 1 000 live births.

The estimated overall HIV prevalence rate is approximately 12,6% among the South African population. The total number of people living with HIV is estimated at approximately 7,06 million in 2017. For adults aged 15–49 years, an estimated 18,0% of the population is HIV positive.

Findings from the South Africa Demographic and Health Survey (SADHS) 2016 Key Indicator Report showed that in the previous three years, on average the number of children ever born per woman was 2,6 compared to an average of 2,9 over a three-year period ending in 1998.

As of 2016, the average for the year is at 2,4 children per woman – 0,2 children lower than the three-year average based on the Community Survey of 2016.

The survey observed a drop in the under-5 mortality and the infant mortality rates to 42 deaths and 35 deaths per 1 000 live births, respectively, for the five years preceding the survey. The neonatal mortality rate has also dropped to 21 deaths per 1 000 live births, accounting for about half of under-5 deaths.

The number of people living with HIV was estimated at approximately 7,03 million in 2016. For adults aged 15 to 49 years, an estimated 18,9% of the population was HIV-positive. Improved access and uptake of ART over time in the public and private sector in South Africa has enabled HIV-positive people

According to Statistics South Africa, the national disability prevalence rate is 7,5%. Disability is more prevalent among females compared to males (8,3% and 6,5% respectively). Persons with disabilities increase with age. More than half (53,2%) of persons aged 85 and above, live with disabilities.

The prevalence of a specific type of disability shows that 11% of persons aged five and above have eyesight difficulties, 4,2% have cognitive difficulties (remembering/concentrating), 3,6% have hearing difficulties, and about 2% have communication, self-care and walking difficulties.

Persons with disabilities experience difficulty in accessing education and employment opportunities.

Households headed by persons with disabilities were found to have less access to basic services compared to those headed by persons without disabilities.

to live longer and healthy lives, resulting in gradual decline in AIDS-related deaths between 2006 (48%) and 2016 (28%).

Budget and funding

In line with the vision of the NDP and the MTEF, the DoH will focus over the medium term on sustainably expanding HIV and AIDS and TB treatment and prevention, revitalising public healthcare facilities, and ensuring the provision of specialised tertiary hospital services. Spending on these three areas would take up 85,1% (R109 billion) of the DoH's total budget over the MTSF period.

The DoH transferred 88,2% (R112,8 billion) of its budget over the medium term to provincial departments of health in the form of conditional grants.

Increased funding of R1,9 billion has been allocated for 2017/18 and 2018/19 to support the implementation of two HIV and AIDS and TB investment cases that has been in development over the last two years and to ensure the sustained expansion of antiretroviral treatment.

Of the R1,9 billion, R240 million in 2017/18 and R500 million in 2018/19 will be dedicated to support the recommendations of the TB investment case, such as intensified screening campaigns to ensure early detection and treatment. The spending is expected to increase the TB treatment success rate from the current 83% to 90% in 2018/19.

The DoH expects ARV treatment to reach five million South

Africans by 2018/19, supported by an increase in the grant of R1 billion in that year as part of the additional R1,9 billion.

This expansion is part of South Africa's progressive scaling up towards 90-90-90 targets for 2020 of the Joint United Nations Programme on HIV and AIDS (UNAIDS), namely: 90% of all people living with HIV will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy, and 90% of all people receiving ARV treatment will have viral suppression.

Quality health infrastructure and health technology are essential for delivering quality health services at all levels of care. Subsequently, the DoH will be investing R19,8 billion in health infrastructure over the MTEF period.

These funds will be managed as two conditional grants. The health facility revitalisation direct grant is transferred to provincial departments of health to fund new facilities and refurbishments. Some R17,1 billion is allocated for this grant over the medium term.

The health facility revitalisation component of the NHI indirect grant is allocated R2,7 billion over the medium term. This grant is exclusively for infrastructure improvements in the 11 health insurance pilot districts. The DoH is working closely with implementing agents to ensure that all 872 primary healthcare facilities in these districts, which are distributed nationally, are refurbished, and that 216 primary healthcare facilities are constructed or revitalised by 2019/20.

Tertiary health services are for inpatients in hospitals that have specialised personnel and facilities for advanced medical investigation and treatment. These services are unevenly distributed across South Africa's nine provinces, causing people to seek specialised care in provinces other than the one in which they reside. To compensate provinces for treating patients coming from other provinces, the DoH will continue to subsidise funding for tertiary health services in 28 hospitals and hospital complexes over the medium term.

The DoH will also continue to modernise tertiary facilities by upgrading medical equipment on an ongoing basis. These activities are funded through the national tertiary services grant to provincial departments of health. R10,8 billion is allocated for 2016/17.

When it comes to the NHI, the DoH aims to achieve universal health coverage through the phased in implementation of the NHI Scheme. A number of health system reforms has been proposed, including:

- re-engineering the primary healthcare approach
- implementing Operation Phakisa's ideal clinic realisation and maintenance programme
- implementing various quality and management improvement initiatives across all health facilities
- transforming emergency medical services
- improving human resources for health
- improving the strategic management and functioning of central hospitals.

Over the medium term, a key strategic intervention is the creation of the NHI Fund, which will strategically purchase health services from selected public and private healthcare providers on behalf of the population.

The NHI indirect grant (previously named the national health grant) aims to contract private health professionals to provide primary healthcare services in public facilities, and to continue piloting a central chronic medicines dispensing and distribution model, which already gives 380 000 patients access to their chronic medications at alternative pick-up points, such as private sector pharmacies, without having to visit a public health facility.

The DoH is currently piloting an integrated patient-based information system for primary healthcare facilities in the NHI pilot districts.

In addition, the department will establish an electronic stock management system, including an early warning system for stock-outs of medicine in primary healthcare clinics and hospitals.

Provinces will continue to pilot health system reforms and innovation at the district level through funds from the direct NHI conditional grant. However, this grant will end after 2016/17.

The department is also developing a new diagnosis-related groups model, which will be used to reimburse central hospitals based on patient volumes and case mix. Some R80 million over the MTEF period is earmarked for this. The model is expected to be completed by 2018/19.

A new component has been added to the NHI indirect grant for the rollout of the Ideal Clinic programme. This programme aims to improve all 3 500 primary healthcare facilities nationally to reach the determined ideal status by addressing infrastructure backlogs, reducing queues, improving information systems, integrating services, and implementing uniform protocols, guidelines and staffing norms. Some R90 million over the medium term is allocated to this component.

Role players

South African National AIDS Council (SANAC) Trust

SANAC is a voluntary association of institutions established by Cabinet to build consensus across Government, civil society and all other stakeholders to drive an enhanced country response to the scourges of HIV, TB and STIs.

Under the direction of SANAC, Government created the SANAC Trust as the legal entity that is charged with achieving its aims.

The UNAIDS has welcomed the roll-out of South Africa's National Sex Worker HIV Plan 2016 – 2019, which will ensure equitable access to health and legal services for sex workers in South Africa.

Sex workers experience a disproportionate burden of HIV, STIs, TB, violence, and stigma and discrimination. This progressive plan outlines a comprehensive and nationally coordinated response that is tailored to their specific needs and includes a core package of services for sex workers, their partners, their clients and their families.

As well as delivering access to health services to prevent and treat HIV, STIs and TB, the plan also aims to provide sex workers with access to justice and legal protection services.

Medicines Control Council

The Medicines Control Council (MCC) was a statutory body tasked with regulating the performance of clinical trials and registration of medicines and medical devices for use in specific diseases. In June 2017, the MCC was replaced by the South African Health Products Regulatory Authority (SAHPRA).

South African Health Products Regulatory Authority

SAHPRA officially replaced the MCC in June 2017 after government signed the Medicines and Related Substances Amendment Act, 2008 (Act 72 of 2008).

South Africa has the largest medical device market and manufactures a range of devices, although it is primarily reliant on imports from Germany and the USA.

Until now, medical devices and complementary medicines have gone unregulated as the MCC could only deal with medicines.

SAHPRA is intended to be the solution to the extensive delays that beset the MCC, which took much longer compared to US or European regulators to approve new medicines and clinical trials. SAHPRA will also be responsible for regulating foodstuffs, cosmetics, disinfectants and diagnostics.

The new structure will be able to generate its own income, allowing SAHPRA to use modern systems and retain staff that were often overwhelmed with volumes of work. Based on industry figures, registering new products with the MCC took an average of three to five years, but could exceed seven. Among the new regulator's first tasks will be clearing a backlog of more than 2 000 applications awaiting registration by the MCC.

SAHPRA's new structure will follow a similar model to the US Food and Drug Administration in that it will be more independent than the MCC. It will only be partly funded by the government, with approximately 70% of funds coming from industry bodies.

Compensation Commission for Occupational Diseases (CCOD)

The CCOD was established to compensate ex-miners and miners for the impairment of lungs or respiratory organs and to reimburse them for loss of earnings incurred during TB treatment.

If the ex-miner is deceased, the CCOD compensates the beneficiaries of the ex-miner.

i By mid-2017, plans were underway to build the Limpopo Central Hospital and Medical School at the University of Limpopo. The medical school will be the first one to be built since the advent of democracy.

The CCOD also administrates the Government's grant for pensioners from the collective mining sector.

Council for Medical Schemes

The CMS provides regulatory supervision of private health financing through medical schemes. Its objectives include:

- protecting the interests of medical schemes and their members
- monitoring the solvency and financial soundness of medical schemes
- controlling and coordinating the functioning of medical schemes
- investigating complaints and settling disputes in the affairs of medical schemes
- collecting and disseminating information about private healthcare in South Africa
- making rules regarding its own functions and powers
- making recommendations to the Minister of Health on criteria for the measurement of the quality and outcomes of the health services provided by medical schemes.

The CMS regulates the medical schemes industry in a fair and transparent manner and achieves this by:

- Protecting members of the public and informing them about their rights, obligations and other matters in respect of medical schemes
- Ensuring that complaints raised by members of the public are handled appropriately and speedily.
- Ensuring that all entities conducting the business of medical schemes and other regulated entities comply with the Medical Schemes Act of 2008.
- Ensuring the improved management and governance of medical schemes.
- Advising the Minister of Health on appropriate regulatory and policy interventions that will assist in attaining national health policy objectives.

South African Medical Research Council

The SAMRC funds and conducts medical research to respond to the health priority areas of South Africa, with a specific focus on the 10 highest causes of mortality in the country. The short

The global struggle to end HIV and AIDS received a huge boost with the start of ground-breaking HIV vaccine trials in South Africa in November 2016.

The vaccine trial is regarded as the most scientific study on HIV in the world. Significantly, it is led by South African scientists in almost all aspects of the research being done.

The research and the trial of the HIV vaccine will enrol 4 500 HIV-negative South Africans between the ages of 18 years and 35 years in 18 sites across the country. It will take place over 20 months.

Half the participants will receive five doses of the vaccine, while the other remaining 2 250 will receive a placebo. The participants will be followed up for three years to ensure the efficacy of the vaccine.

The estimated costs of the trial is around R135 million, through a partnership of the private and public sectors.

and medium term research agenda of the organisation is informed by the following four strategic goals:

- Administer health research effectively and efficiently in South Africa;
- Lead the generation of new knowledge and facilitate its translation into policies and practices to improve health;
- Support innovation and technology development to improve health; and
- Build capacity for the long-term sustainability of the country's health research.

Intra- and extra-mural research units, centres and offices of the SAMRC, funding of self-initiated projects, Request for Applications (RFAs) and capacity development initiatives are the mechanisms through which the research agenda is being realised. Research units are founded on scientific excellence and leadership.

These units are led by internationally recognised researchers and team mandated to develop the next generation of research leaders.

The scope of the organisation's research projects includes tuberculosis, HIV/AIDS, cardiovascular and NCDs, gender and health, and alcohol and other drug abuse. With a strategic objective to help strengthen the health systems of the country – in line with that of the DoH, the SAMRC constantly identifies the main causes of death in South Africa. By analysing the

causes and categories of death, data would become available to formulate suitable interventions to either prevent diseases in a certain population group or improve the standard of living of people living with existing medical conditions. [contributor]

Health Professions Council of South Africa (HPCSA)

The HPCSA is committed to promoting the health of the population, determining standards of professional education and training, and setting and maintaining excellent standards of ethical and professional practice.

To safeguard the public and indirectly the professions, registration in terms of the Act is a prerequisite for practising any of the health professions with which the Council is concerned.

The council guides and regulates the health professions in the country in aspects pertaining to registration, education and training, professional conduct and ethical behaviour, ensuring continuing professional development, and fostering compliance with healthcare standards.

All individuals who practise any of the healthcare professions incorporated in the scope of the HPCSA are obliged by the Health Professions Act of 1974 to register with the council. Failure to do so constitutes a criminal offence.

Its mandate includes:

- coordinating the activities of the professional boards
- promoting and regulating interprofessional liaison
- determining strategic policy
- consulting and liaising with relevant authorities
- controlling and exercising authority over the training and practices pursued in connection with the diagnosis, treatment or prevention of physical or mental defects, illnesses or deficiencies in people
- promoting liaison in the field of training
- communicating to the Minister information that is of public importance.

Allied Health Professions Council of South Africa (AHPSCA)

The AHPSCA is a statutory health body established in terms of the Allied Health Professions Act of 1982 to control all allied

health professions, which includes ayurveda, Chinese medicine and acupuncture, chiropractic treatment, therapeutic reflexology, therapeutic massage therapy, homeopathy, naturopathy, therapeutic aromatherapy, osteopathy, phytotherapy and Unani-Tibb:

The AHPCSA is mandated in terms of Allied Health Professions Act of 1982 to:

- promote and protect the health of the public
- manage, administer and set policies relating to the professions registered with the AHPCSA
- investigate complaints relating to the professional conduct of practitioners, interns and students
- administer the registration of people governed by the AHPCSA
- set standards for the education and training of intending practitioners.

South African Dental Technicians Council (SADTC)

The SADTC controls all matters relating to the education and training of dental technicians or dental technologists and practices in the supply, making, altering or repairing of artificial dentures or other dental appliances.

Its mandate includes:

- promoting dentistry in South Africa
- controlling all matters relating to the education and training of dental technicians, dental technologists and practitioners who supply, make, alter or repair artificial dentures or other dental appliances
- promoting good relationships between dentists, clinical dental technologists, dental technicians and dental technologists.

South African Pharmacy Council (SAPC)

The SAPC is the regulator established in terms of the Pharmacy Act of 1974 to regulate pharmacists, pharmacy support personnel and pharmacy premises in South Africa. Its mandate is to protect, promote and maintain the health, safety and well-being of patients and the public by ensuring quality pharmaceutical service for all South Africans.

The council is tasked with:

- assisting in promoting the health of South Africans

- promoting the provision of pharmaceutical care with universal norms and values
- upholding and safeguarding the rights of the general public to universally acceptable standards of pharmacy practice
- establishing, developing, maintaining and controlling universally acceptable standards
- maintaining and enhancing the dignity of the pharmacy profession.

South African Nursing Council (SANC)

The SANC is the body entrusted to set and maintain standards of nursing education and practice in South Africa. It is an autonomous, financially independent, statutory body, initially established by the Nursing Act, 1944 (Act 45 of 1944), and operating under the Nursing Act of 2005.

The SANC controls and exercises authority, in respect of the education, training and manner of practices pursued by registered nurses, midwives, enrolled nurses and enrolled nursing auxiliaries.

The council's mandate includes:

- inspecting and approving nursing schools and nursing education programmes
- conducting examinations and issuing qualifications
- registering and enrolling nurses, midwives and nursing auxiliaries and keeping registers
- removing or restoring any name in a register
- issuing licences to nursing agencies
- requiring employers to submit annual returns of registered and enrolled nurses in their employ.

National Health Laboratory Service

The NHLS is the largest diagnostic pathology service in South Africa, with the responsibility of supporting the national and provincial health departments in the delivery of healthcare. The NHLS provides laboratory and related public health services to over 80% of the population through a national network of laboratories.

The NHLS trains pathologists, medical scientists, occupational health practitioners, technologists and technicians in pathology disciplines, including anatomical pathology, haematology,

microbiology, infectious diseases, immunology, human genetics, chemical pathology, epidemiology, occupational and environmental health, occupational medicine, tropical diseases, medical entomology, molecular biology and human nutrition.

The NHLS has laboratories in all nine provinces, with approximately 7 000 employees. Its activities comprise diagnostic laboratory services, research, teaching and training, and production of sera for anti-snake venom, reagents and media.

Its specialised divisions comprise the:

- National Institute for Communicable Diseases, whose research expertise and sophisticated laboratories make it a testing centre and resource for Africa, particularly in relation to several of the rare communicable diseases. Also forming part of the NICD is the National Cancer Registry, which provides epidemiological information for cancer surveillance [CONTRIBUTOR]
- National Institute for Occupational Health, which investigates occupational diseases and has laboratories for occupational environment analyses
- South African Vaccine Producers, which is the only South African manufacturer of antivenom for the treatment of snake, scorpion and spider bites.

Non-governmental organisations

Many NGOs at various levels play a crucial role in healthcare, and cooperate with government's priority programmes.

They make an essential contribution, in relation to HIV and AIDS and TB, and also participate significantly in the fields of mental health, cancer, disability and the development of primary healthcare systems.

The involvement of NGOs extends from national level, through provincial structures, to small local organisations rooted in individual communities. All are important and bring different qualities to the healthcare network.

Resources

Medical practitioners

By mid-2017, a total of 44 949 medical practitioners were registered with the HPCSA. These include doctors working for

the State, those in private practice and specialists. The majority of doctors practise in the private sector.

In selected communities, medical students supervised by medical practitioners provide health services at clinics.

In terms of the continuing professional development system, all doctors, irrespective of earlier qualifications, must obtain a specified number of points to retain their registration.

The system requires that doctors attend workshops, conferences, refresher courses, seminars, departmental meetings and journal clubs. Non-compliance with the requirements of the system could result in a doctor being deregistered.

Applications by foreign health professionals are subject to assessment by the Examinations Committee of the Medical and Dental Professions Board. Those admitted have to write an examination, after which they can be registered in the particular category for which they applied and were assessed.

Oral health professionals

By mid-2017, there were 6 333 dentists, 3 550 dental assistants, 1 226 oral hygienists and 708 dental therapists registered with the HPCSA.

Pharmacists

All pharmacists are obliged to perform one year of remunerated pharmaceutical community service in a public health facility. By mid-2017, there were 14 484 pharmacists registered with the SAPC.

Nurses

Nurses are required to complete a mandatory 12-month community service programme, whereafter they may be registered as nurses (general, psychiatric or community) and midwives. There are 287 458 registered nurses in 2016. This figure included registered, enrolled and auxiliary nurses, but excludes students and pupils.

Health facilities

There are 4 200 public health facilities in South Africa. The number of people per clinic is 13 718, exceeding WHO

guidelines of 10 000 per clinic.

Provincial hospitals

Provincial hospitals offer treatment to patients with or without medical aid cover. Patients are classified as hospital patients, if they can't afford to pay for treatment. Their treatment is then partly or entirely financed by the particular provincial government or the health authorities of the administration concerned.

Provincial hospital patients pay for examinations and treatment on a sliding scale in accordance with their income and number of dependants.

Patients with medical aid are charged a private rate that is generally lower than the rate charged by private hospitals.

Medical schemes

By September 2017, there were 87 medical schemes in South Africa, with around 8,8 million beneficiaries. These schemes have a total annual contribution flow of about R129.8 billion.

Tariffs for admission to private and provincial hospitals differ. Cost differences also exist between various provincial hospitals, depending on the facilities offered.

Programmes and projects

Anti-Substance National Plan of Action

Government and its partners are implementing the Anti-Substance National Plan of Action.

The plan focuses on enabling policy and legislation, reducing the supply and demand of drugs, as well as treatment and rehabilitation of addicts.

The SAPS plays a key role in the fight against drug, substance and alcohol abuse.

Operation Phakisa

Operation Phakisa was launched in 2014 to boost delivery initially in the oceans economy, education and health. The programme has since been expanded to mining and agriculture, in particular aquaculture.

Operation Phakisa 2 is a government programme aimed at prioritising 3 500 primary healthcare facilities.

By the end of 2016, 65 clinics and community health centres

i By March 2017, the Department of Health had made great progress in eradicating backlogs at health facilities.

This included progress in the maintenance of about 70 clinics and community health centres.

Maintenance also took place at at least 18 hospitals and 67 health facilities in districts where the National Health Insurance Scheme was being piloted. This included the construction of three primary healthcare centres and three community care centres, while the construction of four community healthcare centres was in progress.

A total of 3 022 988 people were tested for HIV, against the target of 2 500 000. In addition, 221 201 467 male condoms and 6 403 730 female condoms were distributed against the targets of 150 000 000 and 4 500 000, respectively. About 155 188 medical male circumcisions were performed against the target of 250 000.

The tuberculosis new-client treatment success rate was 84,2%, which exceeded the target of 84%.

In late 2016, about 66,3% of pregnant women visited health facilities before 20 weeks, exceeding the target of 63.

were under construction across the country, which also contributed to job creation.

Overall life expectancy had steadily been increasing from 60 years in 2012 to 62,9 years in 2014 due to improved healthcare provision.

The health sector has recorded good progress in managing communicable diseases, inclusive of HIV and AIDS and TB. During the second quarter of 2016/17, 2 416 020 clients were tested for HIV. Some 3 520 305 patients remained on ARV treatment. The number of male clients who underwent medical male circumcision improved from 124 762 in Quarter 1 to 245 599 in Quarter 2.

Some 12,9 million people were screened for high blood pressure, which exceeded the set target of eight million. Some 10 million people were screened for raised blood glucose levels, which exceeded the set target of eight million.

Related operations in other sectors of Operation Phakisa during 2016/17 included the following:

- To improve the health of learners in schools, the departments of basic education, health and social development jointly ran the Integrated School Health Programme in schools and reached 949 138 learners.

- The Department of Basic Education also ran a successful National School Deworming Programme. A total of 3 523 794 (57%) learners were dewormed. Government has put through a request to the WHO for deworming tablets for the 2017 roll-out.
- To date, almost 15 000 military veterans are being provided with free healthcare support. The Department of Military Veterans is working to sort out its database so that more deserving veterans would be able to receive much needed care and support.

National Strategic Plan (NSP) for HIV, TB and STIs 2017 – 2022

The new five-year NSP for HIV, TB and STIs for the period 2017 to 2022 was launched in March 2017. The purpose of the NSP is to enable the many thousands of organisations and individuals who drive the response to HIV, TB and STIs to work as a concerted force and moving towards the same direction. It is the third NSP to be unveiled following the first one 10 years ago.

The document sets out intensified prevention programmes that combine biomedical prevention methods such as medical male circumcision and the preventative use of antiretroviral drugs and TB medication, with communication designed to educate and encourage safer sexual behaviour in the case of HIV and STIs.

The goals of the NSP 2017 – 2022, among others, include:

- accelerating prevention to reduce new HIV and TB infections and new STIs
- reducing illness and deaths by providing treatment, care and adherence support for all infected
- addressing social and structural drivers of HIV and TB infections
- grounding the response to HIV, TB and STIs in human rights principles and approaches
- mobilising resources to support the achieving of NSP goals and ensure sustainable responses
- strengthening strategic information to drive progress towards achieving the NSP goals.

The plan will draw on the vision of the UN programme of zero

new HIV infections, zero preventable deaths associated with HIV and zero discrimination associated with HIV. It is also in line with the WHO's goals for reducing TB incidents and mortality.

The NSP serves as the strategic guide for the national response to HIV, TB and STIs in South Africa. One of the objectives of the plan is to intensify focus on geographic areas and populations most severely affected by the epidemics.

The slogan of this new NSP is: "Let Our Actions Count".

National Health Insurance

In 2015, the Ministry of Health published the Cabinet-approved White Paper on the NHI for public comment. The NHI Scheme is a health-financing system that is designed to pool funds to provide access to quality, affordable personal health services for all South Africans based on their health needs, irrespective of their socio-economic status.

The year 2016/17 marked the end of a five-year preparatory phase for the NHI, guided by the NHI White Paper.

Phase 2 will be carried out from 2017/18 to 2020/21.

The initial activities will focus on ensuring that the population is registered and issued with an NHI card at designated public facilities using a unique Patient Identifier linked to the National Population Register of the Department of Home Affairs.

Registration will start with children, orphans, the aged, adolescents, persons with disabilities, women and rural communities. Phase 2 will also prioritise the establishment of a transitional fund that will purchase health services from certified and accredited providers.

Phase 3 is scheduled to be implemented between 2021/22 and 2024/25 and will focus on ensuring that the NHI Fund is fully functional. It is envisaged that eligible health services would be certified by the OHSC and accredited by the NHI Fund.

The proposed NHI Fund will be prospectively financed by the roughly R50 million in tax credits given annually to tax payers who are part of and contribute to a private medical aid.

The following beneficiaries have been identified to benefit from the NHI Fund once it is established:

- The 500 000 school children who were screened and found to have physical challenges that might negatively affect learning.
- The DoH aims to provide free ante-natal care in the form of

eight visits to a doctor to each of the 1,2 million women who fall pregnant annually. They will also be provided with family planning, breast and cervical cancer screening as well as treatment, where appropriate.

- Better services will be provided for people with mental health issues, including screenings and subsequent treatment.
- The DoH will help the elderly with assistive devices like spectacles, hearing aids and wheelchairs.
- The NHI Fund will also contribute towards clearing the backlog of blindness caused by cataracts. The backlog currently stands at 270 000 elderly people who are presently blind and are awaiting cataract removal. The DoH can perform 90 000 operations a year for the next three years to clear the backlog.
- The DoH will be able to provide assistive devices to people living with disabilities.

Infrastructure development

Within 10 pilot districts, the DoH completed the building of 34 new and replacement clinics, and was in the process of completing 48 others. This would be a total of 82 new and replacement clinics.

Outside the 10 pilot districts, the DoH completed 96 clinics and were busy with an additional 132, giving a total of 228 new and replacement clinics. Once all are completed, there will be a total of 310 new and replacement clinics.

In the same period within the pilot districts, the department completed the refurbishment of 154 clinics and are busy with refurbishing 192 others. This will give a total of 346 refurbished clinics in the 10 pilot districts.

Outside the pilot districts, 135 clinics had been refurbished and 220 others were still in the process. This would give a total of 355 refurbished clinics.

All in all, some 701 clinics would be open for service, whether new or refurbished.

The DoH has also separately put up consulting rooms for doctors who visit clinics on a contract basis. Some 142 have been completed with 21 others still in progress, giving a total of 163 doctor consulting rooms.

Within this preparatory period, government spent R40 342 973 108 on infrastructure as well as R1 706 562 156

on equipment.

Access to medicine

To ensure that the necessary medicine is always in stock, the department has undertaken three initiatives:

- SVS or stock visibility system
- Rx Solution and other electronic stock management systems (ESMS)
- Central Chronic Medicines and Dispensing and Distribution Programme.

Record management and Unique Patient Identifier

A system whereby patients are registered on a central database, which enables quick and effective dispense of the right medication to the right client, as well as serving as a deterrent to people visiting multiple clinics and medical centres on one day and collecting absurd and often illegal amounts of medication, has been developed and implemented.

Working with CSIR as well as the departments of science and technology and home affairs, the DoH has rolled out this system as part of the NHI.

As of May 2017, the system had reached 1 859 clinics, 705 of which are in the NHI pilots. Some 6 355 759 South Africans had already registered in this system in preparation for NHI. The DoH was registering people in these 1 859 facilities at the rate of 80 000 to 100 000 people per day.

The Unique Patient Identifier is linked to a person's ID number at the Department of Home Affairs and is valid for life: as soon as you register, you will keep it until you die.

It takes five minutes to register, but after that it will take only 45 seconds to retrieve a patient's file in subsequent visits.

School health: Integrated School Health Programme

The departments of basic education and health jointly implemented the ISHP that will extend, over time, the coverage of school health services to all learners in primary and secondary schools. The programme offers a comprehensive and integrated package of services, including sexual and reproductive health

services for older learners.

The Health Services Package for the ISHP includes a large component of health education for each of the four school phases (such as how to lead a healthy lifestyle and drug and substance abuse awareness), health screening (such as screening for vision, hearing, oral health and TB) and onsite services such as deworming and immunisation).

The ISHP services contribute to the health and well-being of learners by screening them for health barriers to learning.

The DoH undertook a reorganisation in School Health during 2016. Some 3,2 million learners were given complete screens for physical barriers to learning, such as eyesight, hearing, speech and oral health. The findings were as follows:

- 8 891 learners have speech problems that will need a speech therapist
- 34 094 learners have hearing problems that will need an audiologist and possibly hearing aids
- 119 340 learners have eyesight problems that will need an optometrist, ophthalmologist and possibly spectacles
- 337 679 learners have oral health problems that may need a dentist, dental therapist or oral hygienist.

During 2016/17, the ISHP exceeded its targets for screening of 25% of Grade 1 learners and 10% of Grade 8 learners during 2015/16 by reaching 29,2% of the Grade 1s, and 12,8% of the Grade 8s. A total number of 2 283 245 learners were screened through this programme since its inception and 352 766 learners were identified with health problems and referred for intervention.

The HPV vaccine targeting girls in Grade 4 was introduced to protect them from acquiring cervical cancer (cancer of the womb) – a major cause of death especially among African women.

The programme was largely successful, reaching 85,3% (427 400) targeted girls for the first dose HPV immunisation, and 63,6% (318 422) for the second dose HPV immunisation coverage.

The purpose of this intervention is to implement one of the four basic components of cervical cancer control, namely primary prevention. The vaccination protects girls before they are sexually active from being infected by HPV and reduces the

risk of developing HPV-related cervical cancer later in life.

According to International Agency for Research on Cancer, cancer of the cervix is among the common cancers affecting women in sub-Saharan Africa. Compared to Europeans, women in sub-Saharan Africa are five times more at risk. In South Africa, cervical cancer is ranked as number 13 on the list of causes of deaths among females; resulting in 67 000 cases and 3 498 annual deaths. In the North West, for the women above the age of 45 years, it is among the top 10 causes of death.

PASOP Campaign

The PASOP Campaign – P (prevent new infections and transmissions), A (avoid re-infections, Deaths, Mother to child), S (stop risky behaviour and practices), O (overcome living with HIV and the stigma) and P (protect yourself, loved ones and others) – was launched in an effort to call on all communities to join hands with Government in the fight against HIV and AIDS and TB.

PASOP targets all but with a distinct focus on LGBTI, men-sleeping-with-men, the youth, commercial sex workers, migrant workers, informal settlements, women and drug users.

The campaign places high emphasis on the responsibility of self and non-stigmatisation.

The highest rates of new HIV infections are still found among young single women who have older boyfriends and/or multiple sex partners.

The department is set to intensify the PASOP campaign by reaching men who are partners to young women, especially the “3Ms” or Mobile Men with Money and men that have sex with men, but do not identify as gay or bisexual.

Managing communicable and NCDs

The main NCDs in the country include diabetes, cancer, chronic respiratory diseases, mental disorders and cardiovascular diseases.

Africa remains the only WHO region where communicable diseases still account for more deaths than NCDs, according to a 2010 global status report.

The main risk factors associated with NCDs are tobacco use, alcohol abuse, an unhealthy diet and physical inactivity.

Hepatitis B is widespread in sub-Saharan Africa and South Africa. Past studies have found that about 8% of children under the age of one and almost 16% of children under the age of six are infected with Hepatitis B.

Between 10% and 18% of South African adults are Hepatitis B virus carriers. Infection has been more common in the Eastern Cape and KwaZulu-Natal.

Since 1995, all children have been vaccinated against hepatitis B. Blood safety in South Africa has effectively reduced hepatitis B and hepatitis C transmission.

Improving human resources planning, development and management

Albertina Sisulu Executive Leadership Programme in Health (ASELPH)

The ASELPH aims to:

- strengthen health policy transformation and service excellence in South Africa
- strengthen human-resource capacity in the health system, which is needed to deliver high-quality, cost-efficient services through strengthened, executive-level training of health leaders and managers
- organise and host university forums, policy seminars and round tables to address key policy debates, as identified by the DoH and focus on issues that will present the greatest challenges to implementation
- use new teaching and learning strategies.

The programme is responsive to emerging initiatives in the South African health sector through a combination of strategies that include:

- targeted training of executive, district and hospital managers who are responsible for services related to the NHI
- strengthened management capability of current and emerging district, health-related leaders who are responsible for the implementation of the NHI and the re-engineering of the primary healthcare system
- advancement of sustainable, relevant, educational and training capacity for health executives responsible for the management of large public health programmes such as HIV

and AIDS, STIs and TB.

The programme is a partnership between the universities of Pretoria, Fort Hare and Harvard, represented by Harvard School of Public Health and South Africa Partners in collaboration with the South African national and provincial departments of health.

The ASELPH is seen as a local flagship programme capable of setting the standard for executive-level health leadership and management training in South Africa.

Treatment and cure of TB

South Africa intensified the fight against TB as part of the World TB Day 2016.

The World TB Day commemoration took place on 24 March 2016. A mass TB screening campaign dominated this year's World TB Day activities.

South Africa is one of 14 African countries to have received recognition for its fight against malaria during the 2016 African Leaders Malaria Alliance (Alma) meeting on 30 January 2016 as part of the 26th African Union Summit in Ethiopia.

The 2016 Alma Awards for Excellence were given to:

- Botswana, Cape Verde, Eritrea, Namibia, Rwanda, São Tomé and Príncipe, South Africa, and Swaziland for achieving the Millennium Development Goal target for malaria
- Rwanda, Senegal and Liberia for Performance in Malaria Control between 2011 and 2015
- Mali, Guinea and Comoros for being the Most Improved in Malaria Control between 2011 and 2015.

In South Africa, cases of malaria have decreased by 82%; and the malaria-related death rate has dropped by 71% since the year 2000.

The decrease is attributed to a sound malaria vector control programme, in which the country has used dichlorodiphenyltrichloroethane or DDT odourless insecticide for indoor residual spraying, coupled with other WHO recommended interventions.

Since 2000, malaria mortality rates in Africa had fallen by 66% overall and 71% among children under the age of five.

Innovative health solutions

By mid-2016, the DoH was piloting a self-service dispensing

machine for medicines at the Thembaletu Clinic in Johannesburg.

The Pharmacy Dispensing Unit (PDU) is a self-service machine where patients can obtain their medication in the same way people withdraw money at an ATM. To use the machine, a patient needs to register for the service and receive a PIN-protected card similar to a bank card.

To “withdraw” their medication, users simply insert their card into the PDU machine, enter their PIN and select the medication they require from their prescription list.

The machine immediately dispenses the selected medication, thus eliminating the need for the patient to wait in queues. The PDU also allows patients to communicate directly with a trained pharmacist directly from the machine using a built-in video conferencing function.

Other technologies include the Stock Visibility System, a mobile application that enables medicine availability information at primary healthcare clinics to be uploaded to a central online data repository.

The camera on the phone can be used to scan the medicine barcode and update stock levels, thus enabling healthcare workers to easily monitor the quantity of medication they have in stock and timeously order medication that might be running low. This will help to reduce the number of stock-outs at clinics.

The DoH has also launched MomConnect, a free SMS service that provides pregnant mothers with regular foetal development updates throughout their term of pregnancy. By mid-2016, the service had more than 800 000 registered users.

The Mother2Mothers is a service that connects new mothers to experienced mentors to help them through their pregnancy.

The Medication Adherence app reminds users of their clinic or hospital visits and to take their scheduled medication.

The B-Wise is a youth focused online service that provides young people with health information and allows them to have their health-related questions answered by an expert adviser within 48 hours.

Demographic and Health Survey (SADHS)

The DoH commenced the SADHS in 2015/16, to track progress in the health status of the people of South Africa against the

NDP. This critical survey was to provide essential data to inform policy and management of strategic programmes.

It covers demographic indicators, maternal, newborn and child health programme indicators, reproductive health and contraception, management of noncommunicable diseases and risk factors, as well as women's status in the society.

The SADHS covered 15 000 households, selected to be nationally representative, which will be visited by teams of trained interviewers who will collect information in a face-to-face interview and take certain measurements such as blood pressure, heights and weights.

The following highlights emerged from the survey:

- South Africa is approaching a demographic winter, wherein women are giving birth to fewer and fewer children. In the last three years, on average the number of children ever born per woman was 2,6 compared to an average of 2,9 over a three year period ending in 1998. As of 2016, the average for the year is at 2,4 children per woman – 0,2 children lower than the previous three year average.
- South Africans are aware of HIV and AIDS testing and in this regard 93% of them are aware of this medical condition. Although 81% have ever tested for HIV and AIDS, in the age group 15 – 24, 31% have never tested for HIV and AIDS.
- South Africans engage in multiple sexual partnerships. Overall, 5% of women reported that they had two or more partners in the past 12 months, and 45% had intercourse in the past 12 months with a person who was neither their spouse nor lived with them. On the other hand, three times the proportion of female experience, that is 17% of men age 15 – 49, reported that they had two or more partners in the past 12 months, and 55% had intercourse in the past 12 months with a person who was neither their spouse nor lived with them.
- By 2016, 96% of delivery of children was in a clinic compared to 83% in 1998. Of these, 97% were with a skilled health provider compared to 84% in 1998. However, stunting remains real as children under five fail to grow at the corresponding pace to their age. Among boys, almost one in three is stunted and among girls, one in four is. On the other end of the scale, South Africans remain obese, especially among the black

population (20%) and by race and sex, it is highest among women in the coloured population at 26%.

- Among the white population, smoking and alcohol practices among women is five times more than the 3% among black and Indian/Asian women. Coloured women are an outlier, however. Some 38% of them enjoy a puff. On the other hand, their male counterparts show no major racial differences.
- In relation to alcohol consumption, the differences between men and women and across races is not as pronounced compared to racial and sex-based differences in smoking. However, the differences still remain significant. Drinking starts at a level where 25% of youths among girls have at least taken alcohol by the age of 15 – 19 and the percentage rises sharply to more than one in three by the age of 20 – 35 before it drops to one in five by age 65.