



NATIONAL HEALTH
LABORATORY SERVICE



REVISED STRATEGIC PLAN

2025-2030



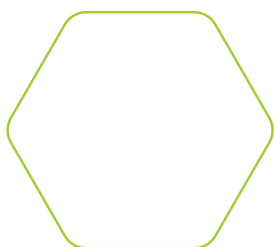
March 2026





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STATEMENT BY THE EXECUTIVE AUTHORITY

Dr Aaron Motsoaledi (MP)



It is my honour to present the National Health Laboratory Service (NHLS) Revised Strategic Plan for the period 2025–2030. This Plan reaffirms the organisation’s critical mandate to strengthen South Africa’s public healthcare system by ensuring equitable access to high-quality diagnostic and laboratory services.

The Plan has been revised to respond to key institutional and governance challenges. These include enhancing cybersecurity resilience and addressing the findings arising from the Auditor-General of South Africa’s disclaimer audit opinion. The NHLS has therefore prioritised improved information systems governance, strengthened internal controls, financial sustainability, and heightened accountability across the organisation. Furthermore, the Plan also underscores the modernisation of laboratory infrastructure, the

expansion of diagnostic and surveillance capacity, the strategic use of technology and innovation, and the development of an ethical, skilled, and fit-for-purpose workforce. Together, these priorities reinforce national health goals and strengthen our shared commitment to achieving universal health coverage.

I express my confidence that, under the stewardship of the NHLS Board Chairperson, Prof Jeffrey Mphahlele, and the Chief Executive Officer, Prof Koleka Mlisana, the NHLS will implement this Strategic Plan with diligence, integrity, and unwavering purpose.

A handwritten signature in black ink, appearing to read 'A. Motsoaledi', written over a horizontal line.

Dr Aaron Motsoaledi (MP)

Minister of Health



STATEMENT BY THE ACCOUNTING AUTHORITY

Prof Jeffrey Mphahlele

It is my honour to present the National Health Laboratory Service (NHLS) Revised Strategic Plan for 2025–2030, an important roadmap that reflects our firm commitment to restoring institutional integrity, strengthening accountability, and securing the long-term sustainability. The NHLS enters this planning cycle aware of the risks highlighted by the Auditor-General of South Africa's Disclaimer audit opinion, which underscored weaknesses in record-keeping, internal controls, financial management, and adherence to governance standards. Addressing these deficiencies is not optional; it is a strategic imperative that shapes every aspect of this Plan.

A central priority is the strengthening of cybersecurity resilience, recognising that the NHLS' diagnostic, surveillance, and data-driven functions depend on secure, stable, and modern information systems. The increasing sophistication of cyber threats demands that we safeguard laboratory operations, patient data, and national surveillance platforms with robust cyberdefence measures, improved incident response capabilities, and strengthened oversight of ICT governance. Cybersecurity is therefore elevated as a core organisational risk and a defining feature of our modernisation agenda.

This Strategic Plan lays the foundation for a transformed NHLS, one characterised by improved financial

sustainability, disciplined internal controls, and transparent governance practices. It accelerates the modernisation of laboratory infrastructure, digitisation of business processes, and enhancement of diagnostic and surveillance capabilities across our extensive national network. It also prioritises workforce excellence, with a deliberate focus on building a skilled, ethical, and accountable team able to operate confidently in a rapidly evolving scientific and technological environment.

As Africa's largest public diagnostic service, the NHLS carries a profound responsibility to advance public health security and to uphold the trust of the South African people. I am confident that, under the leadership of the Chief Executive Officer, Prof Koleka Mlisana, and through the continued dedication of our staff, this Strategic Plan will drive meaningful progress towards universal coverage and better health outcomes for all South Africans.

Prof Jeffrey Mphahlele

NHLS Chairperson of the Board

OFFICIAL SIGN OFF

It is hereby certified that this Revised Strategic Plan 2025-2030:

- Was adopted by the management of the National Health Laboratory Service (hereunder referred to as the NHLS) under the guidance and support of the Board.
- Considers all the relevant policies, legislation, and other mandates for which the NHLS is responsible and accurately reflects the outcomes and outputs for the 2025–2030 Medium Term Development Plan (MTDP).



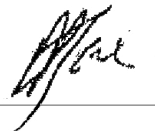
Prof Pieter Mayer
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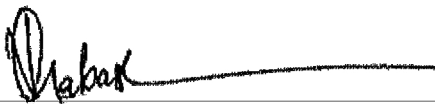


Ms Pumeza Mayekiso
NHLS Chief Financial Officer

OFFICIAL SIGN OFF

It is hereby certified that this Revised Strategic Plan 2025–2030:

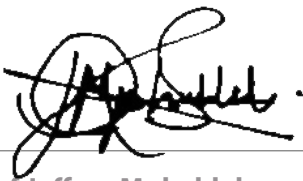
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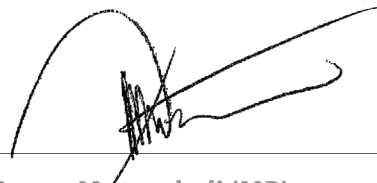
Ms Violet Gabashane
Senior Manager
Monitoring and Evaluation



Prof Koleka Mlisana
NHLS Chief Executive Officer



Prof Jeffrey Mphahlele
NHLS Chairperson of
the Board



Dr Aaron Motsoaledi (MP)
Minister of Health

ACRONYMS AND ABBREVIATIONS

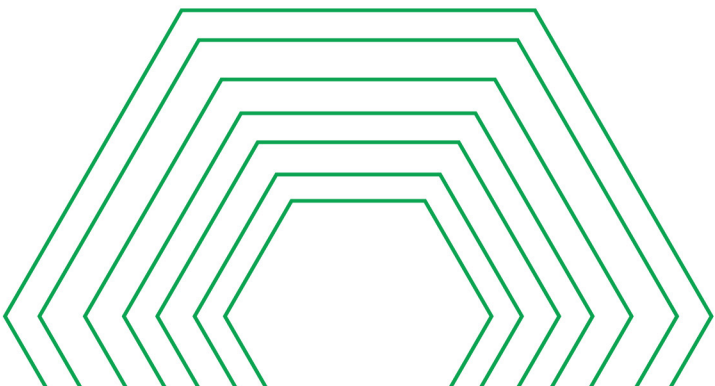
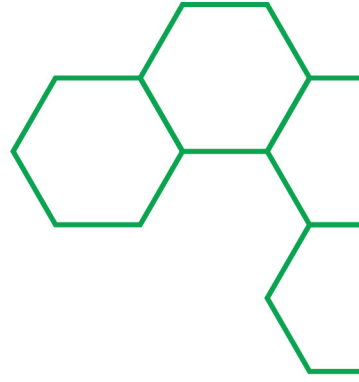
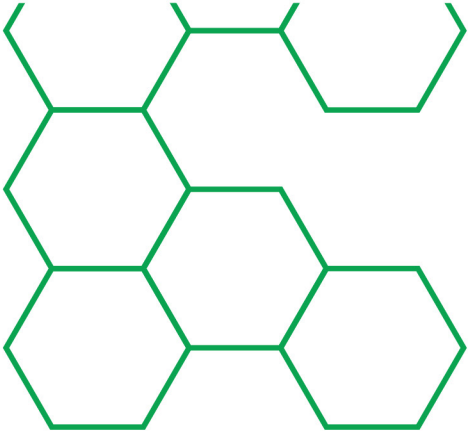
AAR	Academic Affairs and Research
AARQA	Academic Affairs, Research, and Quality Assurance
AMR	Antimicrobial resistance
APP	Annual Performance Plan
ART	Antiretroviral therapy
BSL	Biosafety level
CEO	Chief Executive Officer
CDW	Clinical Data Warehouse
ConCourt	Constitutional Court
CPA	Criminal Procedure Act
CPI	Consumer Price Index
CUPs	Contracting Units for Primary Healthcare
DMP	Diagnostic media product
ECM	Electronic Content Management
FCLs	Forensic Chemistry Laboratories
GMP	Good Manufacturing Practices
GNU	Government of National Unity
GRAP	Generally Recognised Accounting Practice
HIV	Human immunodeficiency virus
HPCSA	Health Professions Council of South Africa
HR	Human resources
ICT	Information and Communication Technology
ISO	International Organization for Standardization

ABBREVIATIONS AND ACRONYMS

ILO	International Labour Organization
ISO	International Organization for Standardization
KPI	Key performance indicator
LIMS	Laboratory Information System
M&E	Monitoring and evaluation
MOU	Memorandum of Understanding
MPLS	Multiprotocol Label Switching
MTDP	Medium-Term Development Plan
MTEF	Medium-Term Expenditure Framework
NAPHISA	National Public Health Institute of South Africa
NCD	non-communicable disease
NDoH	National Department of Health
NDP	National Development Plan
NHA	National Health Act
NHI	National Health Insurance
NICD	National Institute for Communicable Diseases
NIOH	National Institute for Occupational Health
OEHS	Occupational and environmental health and safety
OHASIS	Occupational Health and Safety Information System
OHSA	Occupational Health and Safety Act
PAIA	Promotion of Access to Information Act
PFMA	Public Finance Management Act
PHC	Primary healthcare

ABBREVIATIONS AND ACRONYMS

PHS	Presidential Health Summit
POCT	Point-of-care testing
POPI	Protection of Personal Information
PT	Proficiency Testing Schemes
RfA	Results for Action
SADC	Southern African Development Community
SAHPRA	South African Health Products Regulatory Authority
SANAS	South African National Accreditation System
SAVP	South African Vaccine Producers
SBIME	Strategy, Business Intelligence, and Monitoring and Evaluation
SCM	Supply chain management
SDG	Sustainable Development Goal
SDW	Surveillance Data Warehouse
Stats SA	Statistics South Africa
TAT	Turnaround time
TB	Tuberculosis
UoT	University of Technology
WHO	World Health Organization
WSP	Workplace Skills Plan



PART A
OUR MANDATE



PART A: OUR MANDATE

CONSTITUTIONAL MANDATE

In terms of the provisions of the Constitution of the Republic of South Africa, 1996 (as amended), the NHLS is, among others, guided by the following sections and schedules, and its role is to contribute towards:

The Constitution, which places obligations on the state to progressively realise socio-economic rights, including access to healthcare.

Section 27:

1. Everyone has the right to have access to –
 - a. health care services, including reproductive health care;
2. The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights; and
3. No one may be refused emergency medical treatment.

LEGISLATIVE AND OTHER MANDATES

The NHLS is directly responsible for implementing, managing, and ensuring compliance with the legislation outlined below

National Health Act 61 of 2003

The National Health Act (NHA) provides a framework for a structured, uniform health system that is cognisant of the obligations imposed by the Constitution and other laws of the Republic concerning health services. The objective of the NHA is, *inter alia*, to provide for

a common goal to actively promote and improve the national health system and deliver quality healthcare services in South Africa, premised on a system of cooperative governance and management in all spheres of government.

The National Health Laboratory Service Act 37 of 2000

The National Health Laboratory Service (NHLS) was established in terms of the National Health Laboratory Service Act, 37 of 2000, as amended (the NHLS Act), to provide quality, affordable, and sustainable health laboratory and pathology-related public health services. The NHLS was established to:

- Provide cost-efficient diagnostic health laboratory and pathology services to all public-sector healthcare providers, any government institution inside or outside of the Republic that may require such services, and any private healthcare provider that requests such services.
- Support and conduct health research.
- Provide training for health science education.

Public Finance Management Act 1 of 1999 (as amended)

The Public Finance Management Act 1 of 1999 (PFMA) was promulgated to regulate financial management in the national government and its public entities, ensuring that all revenue, expenditure, assets, and liabilities of the government and its public entities are managed efficiently and effectively. The PFMA also provides for the responsibilities of persons entrusted with financial management in government. Section

27(4) of the PFMA makes provision for the development of measurable objectives that must be included in the annual budgets of national and provincial institutions. Section 55(2)(a) makes provision for the reporting of performance against predetermined objectives in institutions. The PFMA promotes reporting against predetermined measurable objectives outlined in short and medium-term plans.

National Health Insurance Act 20 of 2023

The National Health Insurance (NHI) Act 20 of 2023 establishes the NHI Fund as a legally defined organ of the state. The NHI Fund is a health financing system designed to pool funds to provide access to quality and affordable personal health services for all South Africans based on their health needs, regardless of their socio-economic status. The state becomes a **single payer** and **purchaser** of healthcare services on behalf of the population.

National Public Health Institute of South Africa Act 1 of 2020

The National Public Health Institute of South Africa Act (NAPHISA Act) aims to provide access to healthcare services to all South Africans by conducting integrated and coordinated disease and injury surveillance, research, monitoring, and evaluation of services and interventions concerning communicable diseases, non-communicable diseases, injury and violence prevention, occupational health and safety, and environmental health.

NAPHISA will perform its functions in harmony with the NHLS to avoid duplication and ensure segregation of duties between the two entities.

Criminal Procedure Act 51 of 1977

The Criminal Procedure Act (CPA) applies to the NHLS insofar as criminal proceedings require experts in biochemistry, microscopy, or any branch of pathology or toxicology in terms of section 212(4)(a)(v). The CPA is also applicable where, in criminal proceedings, the collection, receipt, custody, packing, marking, delivery, or despatch of fingerprints or body prints, articles of clothing, specimens, bodily samples, crime scene samples, tissue, or any other object of whatever nature is concerned, as envisaged by section 212(8)(a) of the CPA.

Inquests Act 58 of 1959

The Act provides for the holding of inquests in cases of deaths and alleged deaths and the reporting of the circumstances of deaths believed to be caused by non-natural causes.

National Road Traffic Act 93 of 1996

This Act provides for the regulation of road traffic in South Africa and for the testing and analysis of blood samples taken from drivers suspected of driving under the influence of alcohol or other prohibited substances believed to impair their mental faculties.

Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972

This Act provides for the regulation of foodstuffs, cosmetics, and disinfectants, in particular the safety and quality standards that must be complied with by manufacturers, as well as the importation and exportation of these items.

Medicines and Related Substances Act 101 of 1965

This Act provides for the establishment of the South African Health Products Regulatory Authority (SAHPRA), the licensing of manufacturers and importers of active pharmaceutical ingredients, and the regulation of medicines and other medical products. It also provides for transparency in the pricing of medicine.

Companies Act 71 of 2008

The NHLS is the holding company of its subsidiary, South African Vaccine Producers (Pty) Ltd, which is a registered company listed on the Companies and Intellectual Property Commission.

Occupational Health and Safety Act 85 of 1993

The Occupational Health and Safety Act (OHSA) provides for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery, the protection of persons other than persons at work against hazards to health and safety arising from or in connection with the activities of persons at work. The Act also establishes an advisory council for occupational health and safety.

National Environmental Management: Waste Act 59 of 2008

This Act regulates waste management to protect health and the environment by providing reasonable measures to prevent pollution and ecological degradation, and secure ecologically sustainable development. The Act also provides for institutional arrangements and planning, and norms and standards regulating waste management by all spheres of government, and compliance with these provisions.

Compensation for Occupational Injuries and Diseases Act 130 of 1993

This Act provides a no-fault compensation system for injured employees who contract diseases during their employment. The objective is to compensate for disablement caused by occupational injuries or diseases sustained or contracted by employees, death resulting from injuries or diseases, and any other related matters.

Protection of Personal Information Act 4 of 2013

The Protection of Personal Information (POPI) Act aims to align South Africa with existing data protection laws worldwide. The purpose of this Act is to, among others:

- Promote the POPI processed by public and private bodies.
- Introduce certain conditions to establish minimum requirements for the processing of personal information.
- Provide for the establishment of an Information Regulator to exercise certain powers and perform certain duties and functions in terms of this Act and the Promotion of Access to Information Act.
- Regulate the flow of personal information across the borders of South Africa.

The POPI Act applies to all private and public organisations that process personal information, referring to information processed electronically, recorded manually, and used in both health and public authority records. With specific reference to Sections 19 to 22, the Act differentiates between a Responsible Party and an Operator Party and allocates different responsibilities to these parties. In any agreement, it is essential to clarify these roles upfront and ensure that all parties comply not only with the general provisions of the Act, but also with specified responsibilities.

POPI Act obligations apply throughout the full period that the organisation processes personal data, as do individuals' rights with respect to personal data. The POPI Act also includes data disposal; data must be disposed of securely and in a way that does not prejudice the interests and rights of the individual concerned.

The Act deals extensively with the following issues:

- Data collection
- Data preservation
- Third-party access
- Compromised data
- Compliance

Promotion of Access to Information Act 2 of 2000

The purpose of the Promotion of Access to Information Act (PAIA) is to promote the right to access information and to foster a culture of transparency and accountability in South Africa. PAIA aims to encourage an open democracy in which individuals from all walks of life are empowered to engage with the government and participate in decisions that affect their lives. The introduction of the POPI Act necessitated several changes to this Act but did not fundamentally change its principles or content. Access to health information is covered in section 30 (public) and section 61 (private) of the Act, while sections 34 (public) and section 63 (private) address the mandatory protection of the privacy of a third party who is a natural person. The Act provides for access requests through an Information Officer, who is obligated to comply with the protection clauses in the Act.

Promotion of Administrative Justice Act 3 of 2000

The purpose of the Promotion of Administrative Justice Act is to ensure administrative action that is lawful,

reasonable, and procedurally fair. It also ensures that anyone whose rights or legitimate expectations are materially and adversely affected by administrative action is furnished with written reasons for any such administrative action. The Act, therefore, ensures that the state's decisions (administrative actions) or organs of the state do not unfairly prejudice any person.

POLICIES, PLANNED LEGISLATION, AND GUIDELINES

National Development Plan: Vision 2030

The National Development Plan (NDP) is a long-term vision for the country, which provides a broad strategic framework to guide key government choices and actions and focuses on the critical capabilities needed to transform the economy and society. The plan highlights that accelerated development in South Africa requires three key elements: the active support of all citizens, leadership in all sectors that puts the country's collective interests ahead of narrow short-term goals, and radically improved government performance.

The NDP sets out nine (9) long-term health goals for South Africa. Five of these goals relate to improving the health and wellbeing of the population, while the other four focus on strengthening health systems. NHLS's role is to contribute to and align its services with the NDP: Vision 2030.

By 2030, South Africa should have:

- Raised the life expectancy of South Africans to at least 70 years.
- Progressively improved TB prevention and cure.
- Reduced maternal, infant, and child mortality.
- Significantly reduced the prevalence of non-communicable diseases.
- Implemented comprehensive health system reforms.

- Established primary healthcare teams that provide care to families and communities.
- Achieved universal healthcare coverage.
- Filled posts with skilled, committed, and competent individuals.

Sustainable Development Goals

Building on the progress of the Millennium Development Goals, Sustainable Development Goal 3 (SDG 3) aims to ensure healthy lives and promote wellbeing for all by 2030. It outlines nine key objectives:

- Reducing maternal mortality to below 70 per 100 000 live births
- Reducing neonatal mortality to 12 and under-five mortality to 25 per 1 000 live births
- Ending epidemics of AIDS, TB, malaria, and neglected tropical diseases, while combating hepatitis and waterborne illnesses
- Reducing premature deaths from non-communicable diseases by one-third and promoting mental health
- Preventing substance abuse including narcotics and harmful alcohol use
- Achieving universal health coverage with financial protection and access to essential services and medicines
- Advancing research and development for affordable treatments, especially in developing countries, and upholding the Doha Declaration on TRIPS
- Strengthening health systems through increased financing and a skilled workforce
- Enhancing global health security via improved early warning and risk management

The NHLS plays a vital role in achieving these goals by delivering efficient, high-quality, and cost-effective pathology diagnostic services.

Alignment with the Seventh Administration's Priorities

The general elections on 29 May 2024 resulted in the formation of the Government of National Unity (GNU), which is bound by a Statement of Intent that lays out the foundational principles and a minimum priorities programme. At the Lekgotla on 13–14 July 2024, Cabinet agreed on the Programme of Priorities and approved its translation into the draft MTDP 2024–2029 as a more detailed plan. In his opening address to Parliament Address on 18 July 2024, the President announced the strategic priorities for the Seventh Administration of Government.

The MTDP's priorities are as follows:

- Priority 1 – Inclusive growth and job creation
- Priority 2 – Reduce poverty and address the high cost of living
- Priority 3 – Build a capable, ethical, and developmental state

The NHLS's MTDP 2025–2030 Strategic Plan contributes to Priority 2 and aligns its outcomes with National Department of Health (NDoH) outcomes, as outlined below.

- **Statement of Intent:** Invest in People through education, skills development, and affordable quality healthcare.
- **Strategic Priority 2:** Reduce poverty and tackle the high cost of living.
- **Outcome:** Improved access to affordable and quality health.



Table 1: Alignment of MTDP's and the Seventh Administration's Priorities

MTDP Priorities	NDoH Outcomes	NHLS Outcomes	NHLS Output	
Pursue the achievement of universal health coverage through the implementation of the NHI to address inequity and financial hardship in accessing healthcare	Improved access to affordable and quality healthcare	An efficient and effective organisation	Improved laboratory turnaround times Improved clinic-laboratory interface Digitised business processes Improved equitable access to diagnostic services Improved infrastructure and property management	
		Resilient Information and Communications Technology Infrastructure Systems	Modernised, secure, and scalable Information Technology Infrastructure	
	Financial management strengthened in the health sector	Improved financial sustainability and governance	Improved liquidity position of the NHLS Reduced irregular expenditure Improved supply management systems	
	Governance of public entities strengthened	Strengthened accountability and oversight	Corruption-free organisation Strengthened compliance with regulatory and legal requirements	
	Improve the quality of healthcare at all levels of health establishment, inclusive of private and public facilities	Improved access to affordable and quality healthcare	High-quality diagnostic and clinical services	Strengthened total quality management systems Health research aligned to national priorities A robust and efficient surveillance system and outbreak response
			Employment in line with equity targets	Highly skilled and competent workforce across the NHLS
Improve resource management by optimising HR and healthcare infrastructure and implementing a single electronic record	Employment in line with equity targets	Strengthened workforce capacity	Highly skilled and competent workforce across the NHLS	
		A culture of excellence	Employee-centred organisation Performance-driven organisation	

RELEVANT COURT RULINGS

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The NHLS has no court rulings that will have a significant ongoing impact on operations or service delivery obligations.

PART B
OUR STRATEGIC
FOCUS



PART B: OUR STRATEGIC FOCUS

BACKGROUND

The NHLS is a national public entity (Schedule 3A) established under the National Health Laboratory Service Act No.37 of 2000. The Board governs the NHLS, which has the mandate to provide quality, affordable diagnostic services.

The NHLS is critical in providing pathology services to approximately 80% of South Africans. The laboratory services provided by the NHLS are integral to disease diagnosis and patient management, with approximately 70% of clinical management decisions dependent on pathology and laboratory services. The NHLS also provides disease surveillance, specialised diagnostic services, outbreak response, public health research through the National Institute for Communicable Diseases (NICD), and specialised occupational health services, research, and capacity building via the National Institute for Occupational Health (NIOH). With the implementation of the NHI, the organisation's market size could increase through the expansion of its services to the private sector.

The NHLS service delivery model operates through six regions and is purposefully designed to ensure efficient access to coverage through the entity's presence in public health facilities. This model is aligned with the public health system, which is based on provincial and district health and supports effective planning (including budgeting), joint monitoring, and evaluation of the NHLS plans. Furthermore, the NHLS operates a

centralised supply chain management system, and our policies ensure that opportunities are also allocated to businesses owned by women, youth, and people with disabilities.

Over the past two years, the NHLS has extended its services to include Forensic Chemistry Laboratories (FCLs) testing through four laboratories based in Johannesburg, Pretoria, Durban, and Cape Town. By expanding capacity in each of these laboratories, the NHLS intends to transform the FCLs into an efficient and effective service to meet its mandate.

The NHLS also provides clinical diagnostic media products to all NHLS laboratories, private laboratories, and some African countries. The NHLS intends to strengthen the Diagnostic Media Product (DMP) units to generate revenue by expanding the products and broadening the non-NHLS market. The NHLS, the biggest laboratory network on the African continent, boasts a National Priority Program for TB and HIV, enabling the country to implement the world's most extensive antiretroviral therapy (ART) program. More than 3.4 million HIV-infected individuals access antiretroviral (ARV) drugs. The NICD also hosts a TB Reference Centre, a national Cancer Registry, and a Bio Safety level IV laboratory, with a National Biobank hosted by the NIOH.



Vision

A centre of excellence for innovative laboratory and clinical medicine



Mission

Our mission is to advance excellence in clinical and laboratory medicine by delivering accessible, affordable, and high-quality services. We are an employee-centred organisation that strives to provide patient-centred services while fostering community health and wellbeing through innovation, collaboration, and equity.



Values

The following values form the guiding principles that govern and align the behaviour of all NHLS employees:

Employee centred

We cultivate an environment in which we actively listen, and try to understand and empathise with others' experiences and challenges without judgement or assumptions.

Service excellence

We consistently push boundaries to achieve the highest-quality results, inspiring and motivating employees to continuously improve.

Transformation

We invest in staff professional growth by sharing knowledge and experience, peer networking, education through training, and seeking development opportunities.

Innovation

We are committed to building an environment that supports challenging the status quo with bold and progressive scientific and public health research and business models.

Integrity

We commit to acting ethically and transparently in all business dealings, prioritising what is right over personal gain.

SITUATIONAL ANALYSIS

External Factors

The NHLS, as a public entity in South Africa, is influenced by its surrounding environment and must plan its response to changes affecting its operations. It is essential to understand all levels and how the organisation and its activities are affected by various factors.

Political Factors

As a public entity, the NHLS is inherently sensitive to political factors such as changes in government structures and policy priorities. Although South Africa's transition to the seventh administration has been

relatively stable, ongoing political volatility resulting from multiparty governance could present challenges. Frequent public contestation of the government's policy direction and disagreements among coalition partners could delay decision-making, shift priorities, and potentially compromise the NHLS and the broader health sector.

At the local government level, where primary healthcare (PHC) is managed, political instability raises concerns, particularly regarding the 2026 local government elections. Several municipalities are coalition governments, often characterised by leadership changes and service delivery disruptions. These challenges could potentially (directly or indirectly) affect PHC, which is

critical to NHLS operations. The elections may further increase service delivery protests, posing operational risks for NHLS staff and its logistics. Such disruptions could delay sample collection, affect turnaround times, and threaten staff safety in some areas.

With the implementation of the NHI, PHC services will be included in the Contracting Units for Primary Healthcare (CUPs) as part of PHC re-engineering efforts. These CUPs will operate at the district and subdistrict levels and may contract directly with the NHLS. Consequently, any political instability at the municipal level could have a ripple effect across the entire health value chain, including the NHLS's operational effectiveness and service delivery.

Social Factors

Population Size

South Africa's population in 2025 was estimated at 63.1 million, representing an increase of 772 291 people from 2024 and a growth rate of 1.23% (Stats SA). Women make up approximately 51% of the population (32.2 million), while men account for 49%. Gauteng remains the most populous province with 16.1 million residents (25.5%), followed by KwaZulu-Natal at 12.2 million (19.4%), and Western Cape at 7.6 million (12%).

The population structure reflects a youthful demographic: 26.2% are children under 15 years (16.5 million), 20.8 million are youth aged 15–34, 19.2 million are adults aged 35–59, and 6.6 million (10.5%) are elderly individuals aged 60 and above.

Life expectancy continues to improve, with males averaging 64 years, females 69.6 years, and an overall expectancy of 66.9 years. However, health challenges persist, as approximately 8.15 million people were living with HIV in 2025.

The NHLS provides diagnostics to over 80% of the

South African population – approximately 50.8 million – through a network of over 230 laboratories across the country. The rapid increase in demand for diagnostic services, particularly in urban areas, is driving higher volumes of diagnostic tests, often outpacing the NHLS's testing capacity. For example, the NHLS processed around 114 million tests in 2023/24; this number is projected to rise further with the expansion of the population.

While test revenue has grown, payment from the provinces has not kept pace with demand. The NHI rollout will further increase service obligations without guaranteed proportional funding.

The Strategic Plan must address these challenges by, among others, integrating planning, digital transformation, infrastructure upgrades, and securing extra revenue streams.

High Burden of Disease

South Africa is a middle-income country with a high burden of communicable and non-communicable diseases, which can be diagnosed quickly and are considered both preventable and treatable. Through the National Priority Programmes (NPP), the NHLS has proved itself responsive to many communicable diseases affecting the public sector. The integration of testing for non-communicable diseases within an "ideal" clinic setting remains a key priority, as does the use of additional technical solutions and resources, including point-of-care technology and electronic laboratory tools, to ensure increased efficiency throughout the laboratory value chain and that patient ownership of laboratory results is assured.

Human Immunodeficiency Virus (HIV)

The country has one of the highest burdens of HIV in the world, with the country's overall HIV prevalence estimated at 13.9%, having increased from an estimated

3.68 million in 2022 to approximately 7.8 million in 2025. HIV prevalence among the youth aged 15–24 has remained stable over time. The number of AIDS-related deaths has declined consistently since 2009, from 202 573 to 85 796 in 2022. The country has the most extensive antiretroviral therapy (ART) programme in the world. Currently, 5.7 million people are receiving treatment, and significant progress has been achieved towards the 95–95–95 HIV goals, reaching 94–79–91. Despite the progress made in South Africa, over 1.8 million still lack access to treatment.

Tuberculosis

The TB incidence rate has decreased from 834 per 100 000 in 2015 to 427 per 100 000 in 2023, a 48% reduction in the incidence rate, exceeding the World Health Organization’s (WHO) target of a 20% reduction by 2020. TB notifications have also declined from their peak in 2009, when a total of 406 082 people were reported to have the condition, to 224 621 in 2022. This is largely attributable to the improvement in coverage for ART and treatment for TB infection for people living with HIV. Although the TB mortality rate has declined from 46 per 100 000 in 2015 to 39 per 100 000 in 2021, the mortality rates remain high among people living with HIV, with an estimated 31 000 people dying of TB disease, compared to 23 000 in the HIV-negative population. The number of missing TB cases has declined by 56% since 2019, and treatment coverage has increased by 33% since 2020, although the disease still caused an estimated 54 000 deaths in 2022.

Malaria

South Africa’s malaria cases increased by 14% from 6 486 cases in 2021/22 to 7 381 cases in the 2022/2023 financial year. The number of deaths also increased by 32%, with 61 deaths reported in 2021/22 and 91 deaths reported in the 2022/2023 financial year. South Africa has demonstrated strong political will

and achieved notable progress in the fight against malaria. The country has adopted the National Malaria Elimination Strategic Plan, targeting elimination by 2028, and received a prestigious WHO award in 2023 for its malaria elimination efforts. However, challenges persist, as the country recorded increases in malaria cases in 2023, with 9 795 cases and 106 deaths reported.

Neglected Tropical Diseases

Schistosomiasis (bilharzia) is one of the neglected tropical diseases endemic to South Africa. It is estimated that 25 million people are at risk of urogenital schistosomiasis in South Africa, and around 4 million are infected with the disease. South Africa is one of only two African countries yet to implement WHO’s recommended preventive Mass Drug Administration strategy. Doing so could significantly reduce the prevalence of bilharzia infection in South Africa.

Non-Communicable Diseases

According to Statistics SA, non-communicable diseases account for 59.3% of all deaths. Various national and global agencies are researching the prevention and control of NCDs to strengthen the country’s response to the prevention, management, and control of NCDs. Diabetes is increasing as a proportion of non-communicable disease deaths. The deaths rose from 5.5% in 2016 to 5.9% in 2018. Diabetes type 2 prevalence increases with age, with people over 45 at increased risk – a major public health concern given the significant growth in South Africa’s projected aging population. Mental disorders are currently the leading cause of disability-adjusted life years in South Africa, accounting for 13.8% of the disease burden, higher than HIV (11.8%) and musculoskeletal disorders (10.4%).

Economic Factors

The country’s economic growth is projected to reach



0.5–1.3% in 2025, far below the NDP target of 5.4%. The government’s debt-to-GDP ratio is expected to stabilise at 75.3% in 2025-2026. All these reflect uncertainties and challenges facing the economy.

Other external factors constraining the economy include diplomatic tensions that have characterised relations with the Trump administration, evidenced by the earlier imposition of a 31% tariff on South African imports. This followed the US’s decision in January 2025 to withdraw U.S. Agency for International Development (USAID) funding for key health initiatives, including HIV, TB, and malaria programmes, further adding strain on the economy. These developments will likely force provinces to reprioritise budgets to cover shortfalls, and may impact payment for pathology services, notwithstanding the R7.7 billion long-standing debt from provinces.

The rise in geopolitical tensions, including conflicts in the Middle East and between Russia and Ukraine, has also created volatility in commodity prices, affecting prices of consumables, reagents, and equipment.

Historically, such economic downturns have forced the National Treasury to tighten fiscal spending, often limiting tariff adjustments to below CPI increases, which affects NHLS revenue collection efforts. However, the NHLS continues to demonstrate resilience, which is a testament to its robust service model and strong governance.

Figure 1 illustrates the declining trend in government conditional grants allocated to the NHLS between 2018 and 2025, reflecting the broader fiscal constraints affecting public entities.

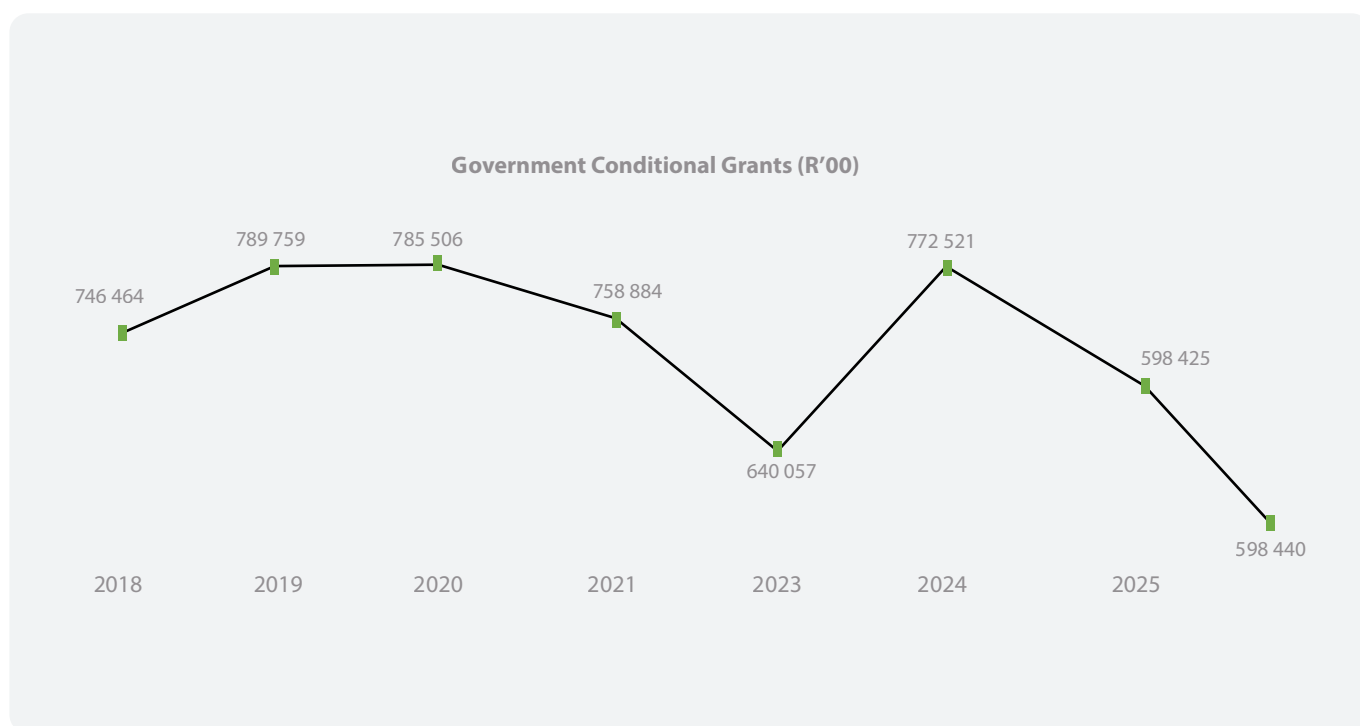


Figure 1: Trends in government conditional grants, 2018–2025

The impact of these budget constraints is further evident in the projected grants shortfall for FY 2024-2025, as detailed in Table 2.

Table 2: Projected grants shortfall for FY 2023/24

Institution	NDoH Transfer R'000	Actual Expense R'000	Variance R'000
National Institute for Communicable Diseases	296 854	417 457	-120 603
National Institute for Occupational Health	82 024	149 145	-67 121
Forensic Chemistry Laboratories	122 920	184 101	-61 181
Teaching, Training, and Research	97 044	102 730	-5 686
TOTAL	598 842	853 433	-254 591

**Conditional grants covered only 70% of the costs for the institutions.*

Current Risks to the Financial Sustainability of the NHLS

The NHLS Board and management team have instituted financial practices that require sufficient cash reserves to cover, at a minimum, six (6) months' total expenses. Given that the NHLS generates its revenue through its operations, the necessary working capital must be available to operate effectively and continuously.

Debt collection is a critical performance target for the NHLS and is essential to ensuring the organisation can

fulfil its mandate daily. Achieving this objective requires all NHLS customers to make timely, full payments for the services provided. However, budgetary constraints hinder provinces from settling their debts. As of 31 December 2025, the provincial payment situation reflected significant outstanding balances, as shown in Table 3.



Table 3: Payment made by the provinces as of 31 December 2024

Financial Year	Billed	Paid	Current FY Paid	Current FY Paid
2017/18 FY	6 853 179 391	6 460 692 554	5 073 794 418	74%
2018/19 FY	7 443 862 217	7 467 825 794	5 938 154 677	80%
2019/20 FY	8 512 189 840	8 710 862 652	6 925 180 890	81%
2020/21 FY	9 588 389 515	9 250 544 995	7 494 017 060	78%
2021/22 FY	11 114 327 234	10 054 114 821	8 105 674 757	73%
2022/23FY	10 787 745 876	10 302 218 255	8 090 447 211	75%
2023/24FY	10 931 514 700	9 247 762 189	6 875 073 792	63%
2024/25 YTD	7 692 562 429	6 756 095 894	3 797 027 139	49%
December 2025/26 YTD	8 866 301 642	6 513 943 664	3 768 979 271	58%

Technological Factors

Technology is a cornerstone of the NHLS’s business operations, enabling the organisation to deliver high-quality diagnostic testing solutions. The digitisation of all NHLS functions remains a top priority to enhance business processes and operational efficiency. However, several challenges impede the organisation’s progress toward full digital transformation. These challenges include ageing information technology (IT) infrastructure, a shortage of IT skills, electricity availability issues, and delays in the supply chain management (SCM) processes, which delay the timely replacement of critical systems and tools.

The 2024 cyber-attack exposed vulnerabilities and underscored the need for resilient cybersecurity systems and strong IT governance. In response, the NHLS will develop an Information and Communication Technology (ICT) strategy to ensure resilient IT and infrastructure systems, digitise business processes and improving cybersecurity maturity levels.

The NHLS will leverage new technologies to enhance its service model. These include capabilities such as remote identification of instrument malfunctions,

remote laboratory management, the adoption of innovations such as digital pathology, and real-time surveillance. Key IT platforms, such as Laboratory Information Management Systems (LIMS), Oracle E-Business Suite, Corporate Data Warehouse (CDW), and Enterprise Content Management (ECM), also play an integral role in the NHLS’s daily operations and research initiatives.

Environmental Factors

Ongoing global warming is expected to drive significant climate changes in South Africa, posing numerous challenges to infrastructure and operations. Currently, parts of South Africa are experiencing severe floods, leading to infrastructure failures that pose substantial risks to the NHLS. These risks include power outages, water scarcity (due to drought or infrastructure collapse), and inadequate road, transportation, and port services. Additionally, rising temperatures are likely to escalate cooling costs.

The NHLS frequently operates from buildings over which it has limited control, many of which are in disrepair and pose significant threats to service delivery and quality. Continuous mitigation efforts are essential to address

these infrastructure challenges. Furthermore, as both a net energy consumer and waste producer, the NHLS must adopt innovative approaches to laboratory design and function to achieve environmental sustainability. To address these challenges, the NHLS has developed a Business Continuity Plan to ensure resilience in service delivery. The Medium-Term Development Plan (MTDP) 2025–2030 will outline specific strategies for various departments to address or circumvent these obstacles, ensuring sustainable operations and the continued delivery of high-quality services.

Legal Factors

Protection of Personal Information Act (Act No 4 of 2013)

The POPI Act ensures the confidentiality of all private individuals, a right that underpins the delivery of a quality laboratory service. The Act can affect key functions of the NHLS, including surveillance, especially in a public health emergency, and research conducted through the NHLS network.

Promotion of Access to Information Act (PAIA) 2 of 2000

PAIA ensures transparent access to public information while balancing privacy and confidentiality mandates. It governs the NHLS response to information requests from stakeholders, researchers, and the public. It supports the NHLS’s accountability and governance framework.



Figure 2: PESTLE analysis of the environment in which NHLS must operate

INTERNAL FACTORS

Performance Overview over the MTSF 2025-2030

The National Health Laboratory Service (NHLS) faced unprecedented challenges in 2024/25, most notably a major ransomware cyberattack on 22 June 2024. This incident severely disrupted the NHLS's IT infrastructure, rendering critical systems temporarily inaccessible. However, essential platforms such as Oracle ERP, TrakCare LIS, and the Central Data Warehouse (CDW) remained uncompromised. Laboratories continued to function manually during this period, and no patient data was lost.

Despite rapid response and system recovery efforts, including restoring Oracle by July and TrakCare by August, the attack significantly impacted operational performance. Overall, NHLS achieved **only 45%** of its predetermined objectives at the end of the financial year, primarily due to delayed sample processing and reporting. This was a significant drop compared to 2023-2024 (70% achieved).

A cyberattack was among the factors that resulted in the NHLS receiving a Disclaimer audit opinion from the Auditor-General of South Africa. The organisation acknowledges this outcome and is committed to strengthening information systems governance, enhancing internal controls, ensuring financial sustainability, and reinforcing accountability to achieve a clean audit by the end of the MTDP. The NHLS has developed an audit action plan that is reviewed quarterly by the Audit and Risk Committee, the NHLS Board, and the National Department of Health, ensuring continuous oversight and progress toward strengthening governance and accountability.

Operational challenges extended beyond the cyberattack, including:

- Delays in implementing large-scale tenders (e.g., HIV VL, CD4, TB, Chemistry Automation)
- Delays in analyser placements
- Increased demand due to a national food poisoning outbreak
- Power outages disrupted the ICT network, affecting operational efficiency and laboratory processes.

Improvement strategies initiated and planned during the year included:

- Developing a new service delivery model that will enhance efficiencies.
- Upgrading IT and laboratory infrastructure
- Developing a clear laboratory equipment replacement plan.
- Improving the clinic-laboratory interface by implementing a specimen tracking system and improving the courier services.
- Strengthening supply chain, contract management, and M&E systems
- Enhancing cybersecurity and staff accountability
- Engaging provinces on financial issues
- Create a culture of high performance and accountability.
- Develop and implement the workforce plan.

Organisational Structure

The NHLS Board of Directors (the Board) serves as the accounting authority of the NHLS in terms of the NHLS Act No.37 of 2000. Members of the Board are appointed by the Minister of Health following nominations from different constituencies, in accordance with the provisions of the NHLS Act.

The Board appoints the Chief Executive Officer (CEO) as well as Executive Managers, who are accountable to the CEO. The Company Secretary has dual reporting lines and is functionally accountable to the Board while being administratively accountable to the CEO. Similarly, the Head of Internal Audit and Risk is functionally accountable to the Audit and Risk Committee, a sub-committee of the Board, and administratively accountable to the CEO.

The CEO appoints managers within the CEO's office to ensure the effective functioning of the office. The following managers are operationally accountable to the CEO:

- Senior Manager: Monitoring and Evaluation
- Senior Manager: Communications, Marketing, and Public Relations



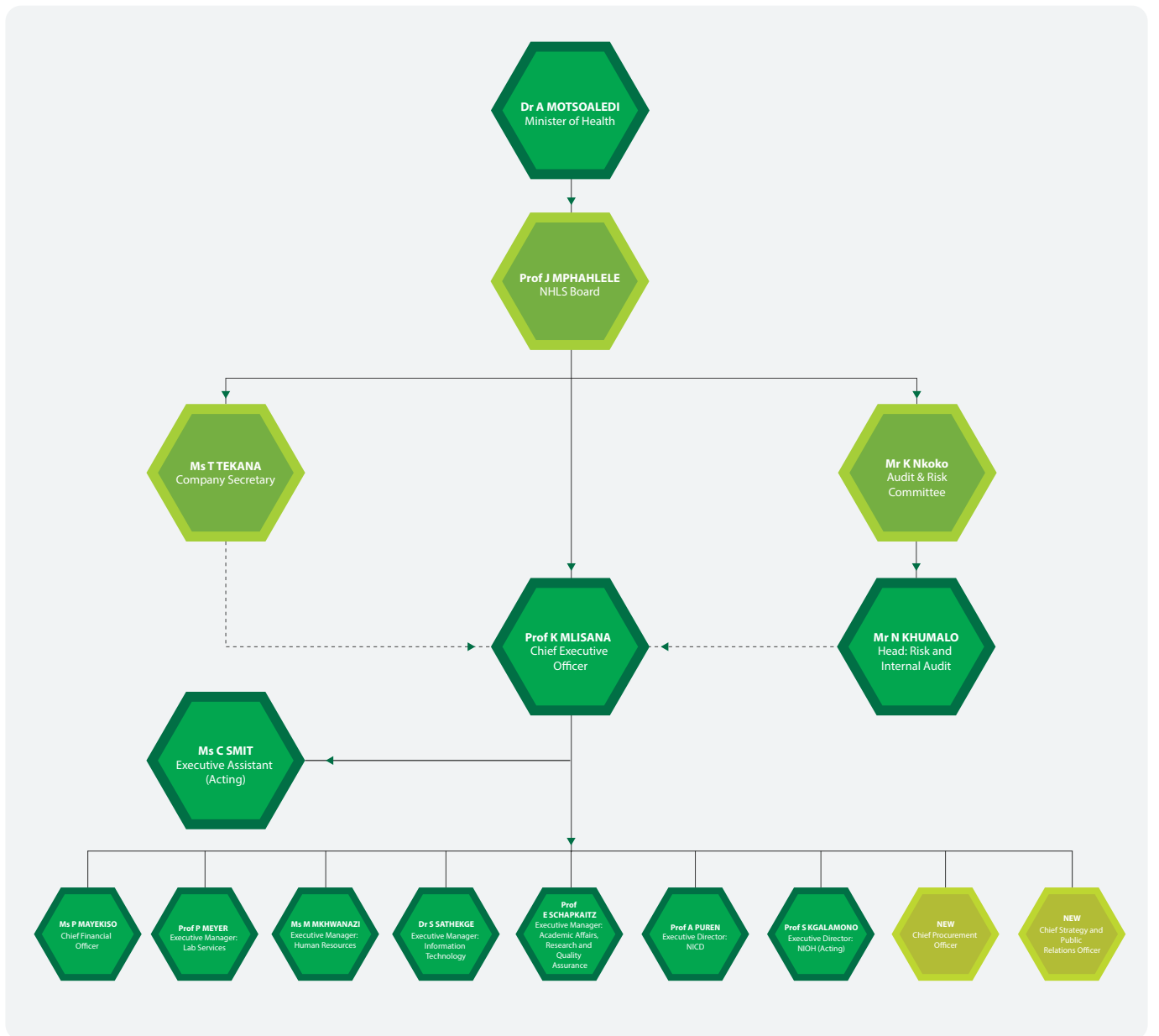


Figure 3: NHLS Organisational Structure

Employment and vacancies

Programme/activity /Objective	2024/2025 Actual No. of Employees	2025/2026 Total Staff establish-ment	2024/2025 Actual No. of Employees as of January 2026	2024/2025 Vacancies As of Janu-ary 2026,	% of Vacancies As of January 2026
Top Management	8	12	8	4	33%
Senior Management	42	39	37	2	5%
Professional qualified	976	1063	971	92	9%
Skilled	3271	3469	3326	143	4%
Semi-skilled	2820	3006	2835	171	6%
Unskilled	893	922	896	26	3%
Students	390	426	426	-	0%
TOTAL	8398*	8937	8513	438	5%

Laboratory Services

The NHLS operates an extensive and integrated network of laboratories designed to support South Africa's healthcare system across all levels of care. It operates in six regions, encompassing a national network of over 230 laboratories across South Africa's nine provinces. These laboratories include national laboratories, provincial tertiary laboratories, regional laboratories, and district laboratories. Service depots complement the laboratory network to ensure accessibility and efficiency.

Laboratories are strategically situated within healthcare facilities across the provinces. This proximity ensures that diagnostic services are readily available and customised to the specific needs of patients and healthcare providers at each facility.

The NHLS adopts a tiered approach, providing diagnostic services tailored to the facility's level of care. The tiered model integrates services to ensure seamless patient care as individuals transition from primary healthcare facilities to higher levels of care. Close collaboration with healthcare providers ensures diagnostic capabilities match the clinical requirements at each care level.

Implementing the NHI Act No.20 of 2023 allows the NHLS to re-engineer laboratory structures to match NHI needs. The NHLS is required to prepare a service delivery model aligning with the fund's requirements. For the NHLS to achieve this, the following areas need to be strengthened:

- Service delivery model
- Equitable access to diagnostic pathology services
- Expansion of pathologists' support to non-academic sites
- Modernisation of laboratories and digitisation of business processes

Service Delivery Model

The current model for delivering laboratory diagnostics is complex and subject to many drivers of change. Although laboratory services in the NHLS have developed and improved significantly over the past decade, additional refinements and cost controls are essential to keep pace with the significant development of clinical health services envisaged by the NHI.

The NHLS faces a critical juncture in reimagining its



service delivery model to address inconsistencies, embrace technological advancements, and align with a future-oriented vision of healthcare in South Africa. A structured response outlining the key considerations and recommendations for designing and delivering an optimised service improvement plan is presented below:

- Develop a laboratory automation plan/policy that outlines the roadmap for total Laboratory Automation (TLA) across key disciplines such as medical microbiology. TLA benefits include:
 - » Increased standardisation and accuracy.
 - » Reduced operational costs and turnaround times.
 - » Enhanced throughput for high-volume tests.
- Centralise non-urgent testing: The NHLS must consider creating provincial super laboratories equipped with high-throughput TLA systems to centralise non-urgent tests and National Priority Programmes. Centralisation offers the benefits of improved efficiency in handling high-volume tests and streamlined workflows.
- Develop a logistics plan to ensure timely specimen transport from healthcare facilities to super laboratories.
- Implement point-of-care testing (POCT) to complement the centralised model. POCT enhances diagnosis and treatment decisions with rapid and reliable results. It improves turnaround time and integrates testing into clinical workflow and optimises efficiency. The added benefit of POCT is that it may reduce overall costs associated with hospitalisation.

The NHLS's hybrid and organic service delivery model must evolve into a deliberate, optimised, and

technology-driven framework to address regional inconsistencies and enhance service efficiency. By leveraging automation, centralisation, and POCT, the NHLS can build a cohesive and future-ready service model. Success hinges on robust governance, stakeholder collaboration, and a commitment to cultural and operational change.

The NHLS faces the challenge of attracting skilled pathologists, especially in anatomical and chemical pathology. To mitigate this challenge, the NHLS has put plans in place to implement digital pathology in all anatomical pathology laboratories to support those laboratories that do not have anatomical pathologists. The NHLS has already submitted a tender to procure scanners to implement a digital pathology solution in laboratories with histology capacity but without pathologists.

The NHLS developed a pathologist coverage plan to strengthen pathologists' support for all laboratories without resident pathologists. The national pathology coverage plan aims to improve clinicians' access to pathologists and enhance the clinical interface, which seeks to improve patient management. Approximately 50% of the plan has been implemented in the Medium-Term Expenditure Framework 2020–2025.

Service delivery pathologists add value to the NHLS through their active involvement in training and clinical consultations with clinicians. They are not restricted or limited by joint or honorary lecturer appointment requirements. They can directly impact research and development on the service delivery platform. However, these positions remain unattractive owing to the lack of career progression opportunities. To add value to regional and district laboratories, the NHLS must develop a plan to employ service-only pathologists, including career progression.

The training of clinical pathologists must become a

strategic focus for this cycle. These multidisciplinary laboratory specialists can ideally serve non-academic hospitals efficiently, ensuring access to pathologists and enhancing the clinical interface. Therefore, building a larger pool of clinical pathologists in the next five years is imperative.

Forensic Chemistry Laboratories

The FCLs were fully integrated with the NHLS on 1 April 2022. The four FCLs – located in Cape Town, Durban, Pretoria, and Johannesburg – serve the total population of South Africa. Their clients include the South African Police Service (SAPS), Forensic Pathology Services, Department of Health provincial mortuaries, the National Prosecuting Authority, and local authorities (municipalities).

The core business of the FCLs includes forensic testing of antemortem and post-mortem blood samples for alcohol content, testing of biological tissues and fluids for the presence of poisons and/or drugs in instances of unnatural deaths (toxicology analysis), and analysis of foodstuffs and cosmetics to assess compliance with safety and quality standards in terms of the Foodstuffs, Cosmetics, and Disinfectants Act No.54 of 1972.

At the time of integration, the FCLs experienced challenges regarding the turnaround time of results in their blood alcohol and toxicology sections, resulting in significant backlogs. Samples in these sections are classified as a backlog when more than 90 days have passed since sample registration without the sample being processed and authorised. Baseline assessments and quality audits highlighted areas requiring strategic intervention to support the FCLs' core functions.

Challenges affecting the FCLs' ability to address service demand effectively include insufficient laboratory processing capacity (limited number and capacity of laboratories), lack of standardisation across laboratories,

insufficient technical expertise and support, and outdated laboratory information management systems.

During their first years of full integration, the initial three FCLs focused on establishing robust management structures and functional systems to ensure effective and efficient service delivery. A new management structure was established, all vacant laboratory positions were filled, and existing infrastructure and equipment were repaired or replaced. An additional laboratory was established in Pretoria, expanding the service offering for blood alcohol and toxicology analysis.

The FCLs aim to achieve an effective and efficient service offering through improved turnaround times, eliminating historical backlogs, and implementing high-quality laboratory management practices across all laboratories. Their strategic focus areas are:

Increase analytical capacity and technical expertise

- Acquire additional laboratory space and relevant analytical instruments to meet service demands.
- Ensure functional laboratory instruments and implement automated systems and the modernisation of equipment, as indicated.
- Appoint additional staff where expansion of services is planned and implement shift systems and overtime.

Strengthen management systems

- Standardise laboratory processes, optimise workflow, and improve monitoring systems and controls.
- Strengthen monitoring and supervision of laboratory processes, turnaround times, and outputs.

Strengthen support systems

- Establish an effective quality management system integrated with the NHLS's QA Division.
- Establish modernised information management and reporting systems.

Academic Affairs, Research, and Quality Assurance

Academic Affairs, Research, and Quality Assurance (AARQA) incorporates the Academic Affairs and Research and the QA departments, and shares responsibility for teaching and training with the Learning Academy. It is responsible for the NHLS's research mandate and oversees the organisation's QA support and management programme. AARQA strives to consistently adhere to accreditation and compliance measures across all laboratories by benchmarking QA standards for the NHLS. The in-house Health Technology Assessment programme focuses on the pre-evaluation of new in vitro diagnostic devices to facilitate the practical and reliable introduction of technological advancement in the service platform and provide an opportunity for competitive and open selection of innovative approaches to diagnostic technology.

AARQA aims to become a high-performing academic, research development, grant support, and quality management team that is instrumental in augmenting opportunities for developing pathology experts in innovative scientific research and enabling QA across all disciplines.

Strategic focus areas for AARQA are:

Enhancing research and development

Advance the development of the NHLS scientific community by providing training in research skills

such as grant writing, preparation of manuscripts, early career development, and mentorship.

- Improve grant administrative and management service experience to NHLS customers and stakeholders through vigilant attention to their requirements (i.e., identify innovations and support commercialisation).
- Facilitate NHLS funding specifically to support early career development.

Enhancing quality assurance across the NHLS

- Obtain ISO 15189 accreditation for NHLS district and regional laboratories (100%).
- Obtain ISO 17043 accreditation for Forensic Chemistry Pathology Laboratories.
- Obtain ISO 13485 accreditation for manufacturing units.
- Obtain ISO 9001 certification for support departments.
- Implement new external QA programmes.
- Strengthen the NHLS as a Health Technology Assessment (HTA) reference site for diagnostic pathology within the NHI framework and/or automate QA Division systems to enhance efficiencies and real-time reporting.

Enhancing the pathology platform within the NHLS

- Maintain and increase the capacity of Health Professions Council of South Africa (HPCSA)-approved training sites and develop and implement

“non-academic” pathologists to support non-academic laboratories and a career development plan.

- Develop a strategy for the retention of pathology professionals within the NHLS.

Surveillance of Communicable and Non-Communicable Diseases

The NICD provides reference microbiology, virology, epidemiology, surveillance, and public health research and training in communicable diseases. The NICD incorporates the National Cancer Institute, serving as a publicly trusted source of information during outbreaks and through routine surveillance of priority infectious diseases and cancer statistics.

The NICD works in close collaboration with the National and Provincial Departments of Health in planning policies and programmes to support communicable disease control and elimination efforts and provides specialised laboratory testing. A key role is to detect, respond to, and report promptly during communicable disease outbreaks by providing technical support and critical laboratory diagnostic services.

Several NICD laboratories are WHO collaborating partners, providing reference diagnostic services and surveillance for communicable diseases such as influenza, poliomyelitis, TB, and measles, among others. The NICD is a premier research, surveillance, and diagnostics institution for communicable diseases. The NICD houses biosafety level 3 (BSL 3) laboratories and the only purpose-built high containment BSL 4 laboratory in Africa. The Sequencing Core Facility at the NICD conducts next-generation sequencing for diagnosis and outbreak support. Surveillance for malaria and arbovirus vectors is a key function of the NICD, which also houses five insectaries for culturing a wide range of mosquito species that are of public health importance.

The NICD monitors disease trends using a variety of methods and data repositories. Data sources include the NICD Surveillance Data Warehouse (SDW), a repository of NHLS laboratory pathology test results and private sector laboratory data, and the recently established Notifiable Medical Conditions mobile application that collects real-time data on certain communicable diseases of public health importance. This enables the collation and interpretation of up-to-date intelligence on communicable disease incidence in South Africa. This information can be used to calculate outbreak response thresholds, predict future disease trends, and inform control policies and regulatory practices.

South Africa’s public health needs and priorities guide the NICD’s research agenda. Specifically, the **NDoH Programme 3** (Communicable and Noncommunicable Diseases) develops policies and supports provinces in ensuring the control of infectious diseases with the support of the NICD. It improves surveillance for disease detection, strengthens preparedness and core response capacity for public health emergencies in line with international health regulations, and facilitates the implementation of influenza prevention and control programmes, tropical disease prevention and control programmes, and malaria elimination.

The NICD’s strategic plans are based on the Sustainable Development Goals (SDGs) and the Presidential Health Summit (PHS)/Compact 2023, Pillars 9 and 10. The SDG goals and PHS Pillar 10 inform the NDoH’s 2019–2024 APP Programme 3. Key SDGs and pillars include:

- **SDG 3.3:** By 2030, end the epidemics of AIDS, TB, malaria, and neglected tropical diseases, and combat hepatitis, water-borne diseases, and other communicable diseases.
- **SDG 3.d:** Strengthen the capacity of all countries, particularly developing countries, for early warning, risk reduction, and management of national and global health risks.



- **SDG 3.B:** Support the research and development of vaccines and medicines.
- **PHS Pillar 10** – Emergency preparedness and disaster prevention: In addition to the 9 pillars from the first Presidential Health Compact convened in 2018, emergency preparedness and disaster prevention were identified as critical areas for intervention and were adopted as the 10th pillar in 2023.
- **PHC Pillar 9:** Develop an information system that will guide health system policies, strategies, and investments.

The NICD intends to consolidate and expand current activities to address the strategic imperatives of the NDoH regarding (1) diseases intended for elimination or control by 2030; (2) emergency and pandemic preparedness; (3) advances in technology for communicable and non-communicable diseases; (4) responses to climate change/emergencies; and (5) business continuity planning for the NICD. New elements in the NICD plan include prediction and modelling, integrated data analysis of disease surveillance for both communicable and NCDs, technology advances for communicable and NCDs, and responses to climate change.

Strategic Objectives

DETECT, PREDICT, AND MODEL FOR THE CONTROL OF INFECTIOUS DISEASES

The World Health Organization (WHO) has called the final decade of the SDGs a decade for disease elimination. Meeting the 2030 targets of ending long-term epidemics of infectious diseases such as HIV, TB, viral hepatitis, and neglected tropical diseases (schistosomiasis) requires an integrated response. The NICD intends to develop the

necessary data modelling and forecasting tools as part of its pandemic preparedness approaches and disease control. In addition, it intends to integrate fragmented disease surveillance across different centres and incorporate data related to cancers, non-communicable diseases, community-based surveillance, event-based surveillance, and environmental surveillance.

To achieve these aims, the NICD has identified the following strategic objectives:

- **Predict:** Model and forecast, integrate the required data sources, support research and innovation in outbreak analytics and science for real-time action, and establish appropriate forecasting horizons.
- **Inform:** Translate and communicate forecasts with key decision-makers across sectors.
- **Innovate:** Build capability for data sharing and integration; maximise interoperability with data standards and utilise open-source software and application programming interface capabilities with existing and new data streams.
- **Build and reorganise** institutional capacity for surveillance.
- **Implement an Integrated Data Analytics and Surveillance Reporting Unit** across the NICD to improve healthcare.
- **Implement electronic case surveillance** for priority diseases, including communicable and NCDs.
- **Build collaboration mechanisms and** public and private sector agreements for data sharing.

Emergency and Pandemic Preparedness

Post-After-Action Reviews

The after-action review aims to identify best practices and challenges encountered during the response to the COVID-19 pandemic, identify and evaluate preparedness and response mechanisms in response to emerging public health threats, and provide opportunities to validate existing tools and identify areas for enhancement.

The after-action review objectives are:

- To provide an opportunity to share experiences and collectively analyse the NICD response to COVID-19 by identifying best practices and challenges.
- To document and apply lessons learnt from the response efforts to strengthen health systems and capacities for emergency preparedness and response.
- To develop a plan for sustained vigilance, strengthening emergency preparedness and response, and building health system resilience as part of recovery, resetting, and recalibration.
- To implement facility management operational plans for high-security containment facilities (Biosafety Security Level (BSL)3 and 4 laboratories).

Pathogen Genomics, Surveillance, and Technology Development

Whole Genome Sequencing (WGS) is a powerful technology that can determine the transmission of infectious agents in populations, detect and support the control of outbreaks, and provide improved information for diagnosing and treating infectious diseases. The NICD's focus areas on this domain include:

- Country-specific pathogen genomics policy

- Implementation of advanced technologies for infectious disease detection for surveillance and outbreak responses
- Exosome sequencing for improved non-communicable disease diagnostics

Climate Change and Communicable Diseases

Climate change poses significant global challenges to public health systems, affecting vulnerable populations and exacerbating health disparities in South Africa. With its diverse ecosystems and socio-economic vulnerabilities, South Africa faces unique, multifaceted risks from climate change. Climate change affects public health, intensifying the spread and severity of infectious disease outcomes nationwide.

The objectives relating to climate change and communicable disease are:

- To identify and analyse the current and projected impacts of climate change on public health in South Africa.
- To assess the economic costs associated with these impacts, including healthcare expenditures, loss of productivity, and infrastructure damage.
- Evaluate existing policies, strategies, and interventions to address climate change-related health risks.
- To propose evidence-based recommendations for enhancing resilience and reducing vulnerabilities to climate change in the public health sector.

Business Continuity Plan for the NICD

Continuous budget cuts limit the NICD's capacity to fulfil



its mandates effectively, including filling critical vacant posts, surveillance and monitoring, and evaluating declining infrastructure. The NICD has experienced a 21% reduction in its budget allocation for the current financial year and a 41% reduction overall over the past five years. The key objective is to sustain the NICD's core functions, deliver on its strategic priorities, and have the most significant impact on the nation's health. Achieving this objective requires strengthening the organisation's capabilities and taking advantage of the opportunities that new surveillance systems and technologies provide.

To develop plans for sustainable income and finances through board-approved and dedicated allocation, the CEO, Executive Manager: Information and Communication Officer, and Executive Manager: HR, have consulted with the NICD Executive Director to address the current deficit, fill key posts, and invest in core technologies and facilities.

OCCUPATIONAL AND ENVIRONMENTAL HEALTH AND SAFETY

The National Institute for Occupational Health (NIOH), a division of the NHLS, has a rich history dating back to its establishment in 1946 as the Pneumoconiosis Research Unit. Initially dedicated to supporting miners' health, particularly in relation to pneumoconiosis, the NIOH has since evolved to provide leadership, support, and guidance on all aspects of occupational and environmental health and safety (OEHS) across all sectors of the economy, including the informal economy.

In 2002, with its strong laboratory and analytical service capabilities, the NIOH became a part of the NHLS, further enhancing its capacity to deliver high-quality OEHS services and research. The NIOH is recognised as a WHO Collaborating Centre for Occupational Health, a national centre of excellence, and a regional hub of expertise in OEHS.

The NIOH provides a broad range of OEHS services, including developing, providing, monitoring, and evaluating OEHS policies, systems, services, and programmes. The NIOH offers tertiary-level clinical occupational health services, investigates occupational disease outbreaks, and supports workers' compensation processes. Through its diverse services, the NIOH functions as a vital source of knowledge and expertise for the South African government, industry, organised labour, healthcare professionals, and the Southern African Development Community (SADC) and the broader sub-Saharan region.

Internally, within the NHLS, the NIOH is mandated to deliver OEHS services to NHLS employees nationwide. This includes focusing on prevention practices, managing workplace incidents, and supporting worker health through the Occupational Health and Safety Information System. The NIOH also provides specialised occupational hygiene, medicine, and ergonomics services.

As part of its commitment to workers' health, the NIOH offers a unique statutory service under the Occupational Diseases in Mines and Works Act 78 of 1973, conducting autopsies for miners in South Africa and neighbouring labour-sending countries (Eswatini, Lesotho, Mozambique, etc.). The NIOH maintains the PATHAUT database, a critical surveillance tool for cardiorespiratory diseases, which has been instrumental in shaping mining practices and generating knowledge that has supported the prevention of occupational diseases since 1975.

The NIOH's global standing is further strengthened through collaborations with the International Labour Organization (ILO) and WHO. Its expertise in developing and strengthening occupational health policies, systems, programmes, and services has had a significant impact not only in South Africa and the SADC region but also globally, particularly in low- and middle-income

countries.

The NIOH has made notable contributions to national and international occupational health research and has played a pivotal role in legislative and policy reforms. With its SANAS-accredited laboratories, the NIOH is the only public-sector institute in South Africa accredited to five ISO standards. The Institute’s laboratories offer specialised, non-routine occupational health tests, many of which are exclusive to the NIOH.

The NIOH is also home to the National Biobank, South Africa’s first biobank dedicated to supporting high-quality human biological materials for research. The Biobank adheres to international best practices and regulatory processes, ensuring ethical standards are upheld in collecting, processing, and storing samples. It serves a range of national and international entities, including government bodies, universities, and private

institutions, including one in the United Kingdom.

The NIOH has made significant strides in achieving its mandate, particularly in quality assurance and training. It continues to offer specialised services and research support to various stakeholders, including provincial and central governments, the informal economy, and the private sector. Through its work, the NIOH contributes to improving worker health and safety standards in South Africa and across the globe.

Despite these successes, the NIOH faces several challenges, particularly in relation to declining conditional grant funding (Figure 4). This financial shortfall has had unintended consequences, including an inability to attract or replace skilled staff due to limited resources. Consequently, the NIOH faces difficulties in fully meeting its mandate and objectives, affecting the sustainability and delivery of its critical services.

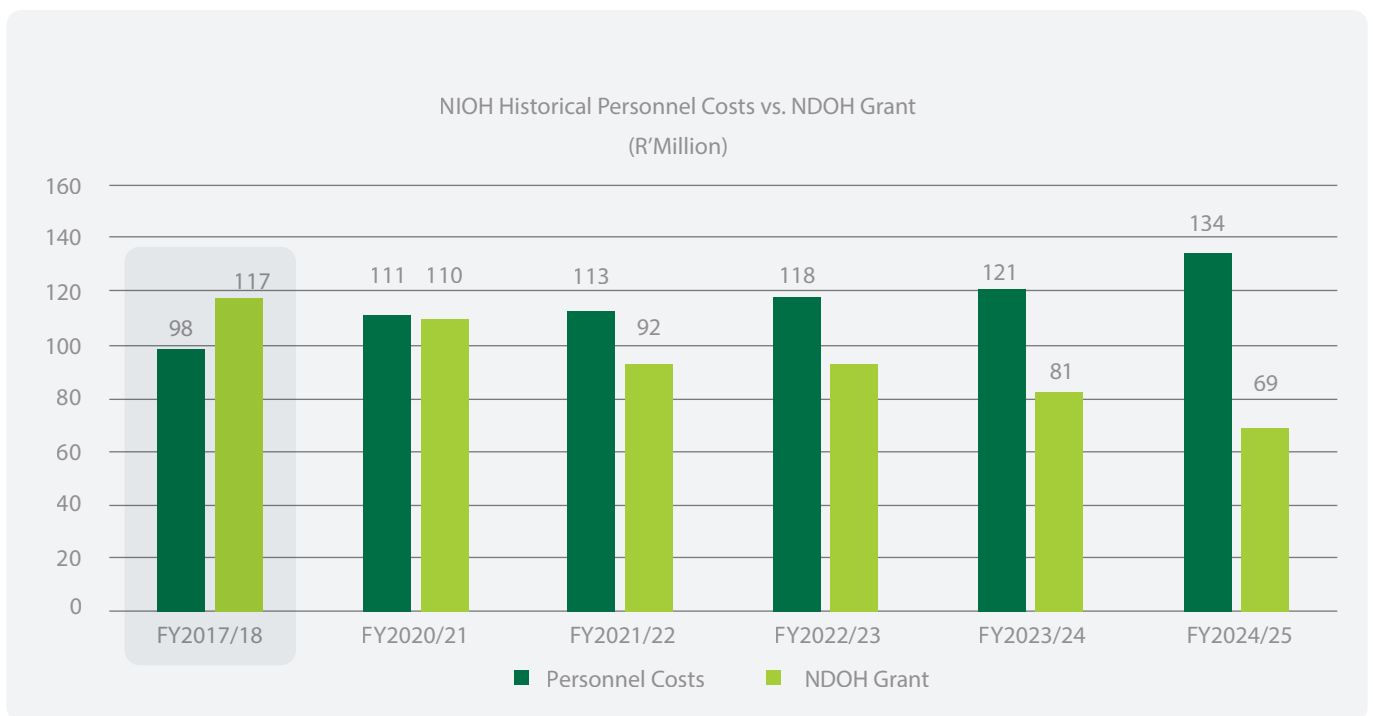


Figure 4: NIOH 1: Grant Reduction Trend



The NIOH's performance in the 2024–2025 financial year did not meet all key performance indicators (KPIs). This was partly the result of the austerity measures, which affected the availability of infrastructure and key HR expertise. In line with the strategic focus below, the NIOH has put measures in place to address the challenges. It has identified and added two more KPIs to its programme to align with the NDP, the NDoH's Medium Term Development Plan Priority, and the NHLS Strategic Plan 2025–2030. The NIOH remains the only entity in South Africa that has achieved and maintained four South African National Accreditation System (SANAS) International Organization for Standardization (ISO) accreditation standards.

Strategic Imperatives

The NIOH is a critical national resource that plays a key role in improving workers' health and preventing occupational illness and injury. The organisation has operated in a challenging financial environment with budget constraints that have resulted in capacity gaps human capital, and infrastructure maintenance. Operationally, the organisation cannot fulfil parts of its mandate. The organisation has made positive strides in cementing stakeholder relationships with industry bodies and institutes of higher learning. The lack of a national occupational health and safety policy has allowed occupational health to remain fragmented, with limited coordination among government departments responsible for aspects of occupational health and safety. These challenges provide opportunities for change and growth. The five pillars mentioned below seek to address some of these challenges. The strategic plan will, therefore, focus on the following:

Financial Resources (Revenue Generation)

- Mobilise financial, infrastructural, and technological resources required to maintain the NIOH as a centre of excellence.

- » Identify funding opportunities and diversify revenue streams.
- Take advantage of training as an avenue for revenue generation.
 - » Consolidate training and accreditation of courses.
 - » Develop a marketing strategy for the various training courses to generate income.
 - » Contribute to occupational hygienists' training by offering Occupational Hygiene Training Association (OHTA) courses.

Human Resource Capacitation

- Build appropriate technical capacity within all categories of staff, including management level, to address the brain drain.
- Conduct organisational development reviews of certain positions and develop a new organisational structure that responds to the environment's needs, focusing on specific departments.
 - » Fill the role of either an operations director or a deputy director to enable the executive director to do more strategic work.
- Provide training and development to upskill individuals towards being fit for purpose.
- Implement talent management to ensure succession planning and business continuity.
- Capacitate NIOH to accredit occupational health services.

Technological Advancements

- Develop national surveillance systems backed by dynamic ICT platforms and explore AI to improve efficiency.

- » Establish MOUs with strategic partners, e.g., Compensation Fund, Department of Employment and Labour, Department of Mineral Resources and Energy, to gain access to data.

Collaborative Partnerships

- Establish and strengthen collaboration with a wide range of stakeholders to maintain an excellent reputation and foster new, fruitful relationships.
- Focus NIOH management on key stakeholder engagements.

Universal Health Coverage

- Support efforts to increase equitable access to quality occupational health services in line with the NHI Act.

STRATEGIC INITIATIVES

NHI and NAPHISA Impact on the NHLS

NHI Strategy

The NHI Act establishes and maintains the NHI Fund, which will serve as the single purchaser and single payer of public healthcare services and aims to achieve universal access to quality healthcare services.

The NHLS is committed to providing universal access to quality diagnostic laboratory services for all South Africans. The key objective is to strategically position the NHLS to meet the demands and opportunities presented by the NHI. To prepare the organisation for the NHI, several factors that will ensure equitable access to quality diagnostic services are imperative for the NHLS to consider. These factors include:

- Ensuring alignment with mandatory accreditation requirements to facilitate contracting with the NHI Fund.

- Developing a benefits package for diagnostic services in conjunction with the National Department of Health, aligned with the NHI Act and Regulations.
- Developing a financing mechanism for pathology services and a reimbursement model for pathology services, in conjunction with the National Department of Health, aligned with the NHI Act and Regulations.
- Organising pathology services and facilitating strategic expansion of the service delivery footprint to ensure service accessibility across levels of care.
- Enhancing efficiency and optimising resources through expansion of digital pathology services, automation of services, and electronic gatekeeping.
- Aligning NHLS support and IT systems with planned patient record systems, procurement processes, and other electronic systems in the NHI Fund.

One key focus area in NHI implementation is for the NHLS to establish robust engagement mechanisms with the NDoH –NHI office to ensure active participation in the planning of accessible pathology services.

Additionally, a steering committee with clear terms of reference must be established to coordinate the NHLS's preparations for the NHI. The committee will oversee the implementation of strategic focus areas in preparation for the NHI, including:

- Developing an NHLS–NHI service model to position the organisation as the provider of choice under the NHI.
- Developing a funding and revenue model for the NHLS under the NHI.
- Supporting the work of QA to ensure the full



accreditation of laboratories.

- Coordinating strategic projects to accelerate the accreditation of laboratories to ensure compliance with NHI standards.
- Preparing the internal environment for the NHI (i.e. policy review, change management activities, etc).
- Recommending individuals to be part of the various NHI committees.

It is important for the NHLS to have direct involvement in the NHI implementation process and to maintain communication with NDoH on all areas affecting pathology services.

NAPHISA Strategy

NAPHISA aims to provide integrated and coordinated disease and injury surveillance, research, monitoring, and evaluation of services and interventions directed towards the major public health problems affecting persons in South Africa. NAPHISA's core functions will be to:

- Coordinate surveillance systems that monitor diseases and injuries.
- Provide specialised reference laboratory and referral services.
- Provide training and workforce development.
- Conduct research and support public health interventions aimed at reducing the burden of diseases and injuries, thus improving the health of the population.

The organisations mandated by NAPHISA are the NICD, NIOH, and Cancer Registry. The NDoH does not coordinate the establishment of NAPHISA, which will instead be coordinated by the CEO of the NHLS and selected representatives from the NHLS, NICD, NIOH, and Cancer Registry. The following mechanisms will initiate and guide the process;

- A steering committee with clear terms of reference needs to be established.
- Stakeholder engagement with the NDoH is required to create a roadmap for the establishment and operationalisation of NAPHISA.
- A funding vehicle for NAPHISA needs to be identified.

Diagnostic Media Products

The NHLS has three Diagnostic Media Products (DMP) units in the Eastern Cape, Western Cape, and Gauteng. The company produces microbiological culture media and reagents for clinical diagnostic laboratories. The products are sold internally to NHLS laboratories, private laboratories, and laboratories in other African countries.

Operational efficiency and effectiveness

- Short-term: Implement a business continuity plan to return to production.
- Optimise media production capability across three DMP units.
- Ensure optimal turnaround times for production and delivery of products to laboratories.
- Explore opportunities to expand the product offering.

- Ensure market-related pricing of products.

High-Quality Service

- Maintain quality management systems to reduce, for example, contamination and wastage in production processes.
- Strengthen quality management systems to achieve ISO 9001:2015 certification.

Commercial

- A business plan needs to be prepared that will:
 - » Assess the status of the DMP Unit.
 - » Benchmark products and prices against the private sector.
 - » Conduct a market analysis.
 - » Define the resources required for the DMP to become a completely independent, sustainable, and functioning unit.
- A purely commercial strategy of sales and marketing needs to be undertaken.
- Products need to be marketed and promoted to the laboratories that could use the products. Sales calls, whether in person or via a telesales route, need to be followed up. Monthly budgets need to be assigned to each salesperson.
- Marketing could be done by:
 - » Developing a product brochure in electronic form that could be sent to the relevant laboratories that may use the product.
 - » Attending relevant science and medical conferences.

STRATEGY OFFICE – STRATEGY, BUSINESS INTELLIGENCE, AND MONITORING AND EVALUATION (M&E) DEPARTMENT

The Strategy Office, situated within the CEO’s Office, functions as a centralised strategic enabler and shared service provider. It is mandated to lead the formulation, implementation, and continuous refinement of the NHLS organisational strategy. By supporting departments and regional units, the office ensures alignment with national health priorities and institutional goals.

Through robust M&E mechanisms, including root cause analysis and the integration of data-driven insights, the Strategy Office enhances organisational agility and responsiveness. This enables proactive course correction and informed decision-making across all levels of the NHLS.

However, the current structure, in which the Strategy Office is managed by a single individual, represents a significant risk to organisational effectiveness. To mitigate this risk, the NHLS must prioritise capacitation of the Strategy, Business Intelligence, and M&E (SBIME) unit to ensure sustainable strategic planning, robust monitoring, and comprehensive evaluation across all levels of the organisation.

Business Intelligence is a cornerstone of the NHLS’s transformation agenda. It facilitates a shift from intuition-led to analytics-driven decision-making. It empowers the organisation to:



- Detect emerging trends and behavioural patterns.
- Monitor KPIs.
- Optimise resource allocation and operational efficiency.

A mature business intelligence ecosystem will enable the automation of departmental dashboards, quarterly reporting, and situational analyses. This will support evidence-based planning and foster a culture of continuous improvement.

Strategic Imperative: To institutionalise SBIME as a fully capacitated, data-driven, and agile strategic function that drives performance excellence, accountability, and innovation across the NHLS.

ADMINISTRATION STRATEGIC FOCUS

FINANCIAL MANAGEMENT

The NHLS Finance Department plays a pivotal role in safeguarding the organisation’s financial health, focusing on stability, growth, and integrity. Despite steady revenue growth, driven by provincial integration, tariff adjustments, expanded testing, and stakeholder collaboration, the NHLS continues to face challenges in achieving a clean audit opinion. The NHLS received a disclaimer audit opinion from the Auditor-General of South Africa in the 2024-2025 financial year. Key areas of concern included inventories, receivables, property, and cash flow statements. The following were the basis of the disclaimer:

- Inadequate record-keeping that hindered confirmation of inventories and receivables
- Incorrect calculation of the allowance for conditional impairment on trade debtors
- Insufficient evidence for unspent conditional grants receipts and employee benefit obligations
- Irregular expenditure
- Internal control deficiencies
- Non-compliance with legislation

The above challenges stemmed largely from delays in implementing audit action items. The organisation is committed to resolving these issues and aims to secure a clean audit by 2030.

Revenue has grown consistently, with R11.5 billion billed in test revenue for the year ending March 2024, representing 114 million tests. However, debt collection from provincial health departments remains a persistent issue, with R7.7 billion owed as of March 2024. Tariff increases, which are crucial for financial sustainability, have not kept pace with inflation. For instance, the proposed 1% increase for 2024/25 falls significantly below the Consumer Price Index (CPI), posing operational and financial risks. To mitigate this, the NHLS plans to reduce costs and improve efficiency; however, continued below-CPI increases could jeopardise long-term sustainability.

The NHLS is actively working to diversify its revenue streams by exploring private and local government markets, reducing loss-making tests, expanding niche services such as DMP and Forensic Chemistry Laboratories, and increasing donor funding. Strategic objectives include achieving a clean audit, increasing revenue by 2% annually, reducing debtor days, maintaining a six-month cash reserve, and ensuring suppliers are paid within 30 days.

Supply chain management (SCM) is undergoing modernisation to improve procurement efficiency and compliance. Challenges such as irregular expenditure, manual processes, and ineffective supplier management are being addressed through automation, strategic sourcing, and enhanced contract oversight. SCM also aims to promote inclusive procurement practices aligned with the Preferential Procurement Regulations, supporting historically disadvantaged individuals and regional enterprises.

Logistics faces challenges in meeting client needs, particularly with courier delays affecting blood sample

collections and service levels. The department is focused on digitisation, aiming to implement real-time tracking, automated warehousing, and business intelligence systems by 2030 to enhance agility and traceability.

Facilities management is tasked with ensuring safe, efficient, and sustainable laboratory and office environments. The NHLS infrastructure is affected by aging assets, energy and water constraints, and uneven resource distribution. A five-year infrastructure plan is being developed to address these issues, including alternative energy solutions, facility upgrades, and prioritisation of high-impact projects. Together, these strategic efforts across finance, SCM, logistics, and facilities aim to strengthen the NHLS's operational resilience, financial sustainability, and service delivery.

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

In June 2024, the NHLS faced a significant cybersecurity incident that disrupted its operations. On the 22nd of that month, a ransomware virus infiltrated the NHLS's ICT systems, compromising virtual servers and data storage, and rendering them inaccessible. Although the core systems – such as the Enterprise Resource Planning (Oracle), Laboratory Information System (TrakCare), and Corporate Data Warehouse (CDW) – remained unaffected, the breach forced laboratories to revert to manual processing of diagnostic samples. This disruption had a direct impact on service delivery and contributed to the disclaimer audit outcome for the 2024–2025 financial year.

In response, the NHLS activated its Incident Response Team, comprising internal experts and external cybersecurity professionals, to investigate and contain the breach. Preliminary findings confirmed that no patient data was lost or compromised.

Root cause analysis was conducted, and several issues were identified within the NHLS ICT environment, which

included poor ICT hygiene, outdated software, and weak password policies.

Recognising the critical role of ICT in delivering efficient, patient-centred care, the NHLS has outlined a comprehensive strategy to fortify its IT infrastructure and cybersecurity posture. This strategy is built on six strategic focus areas aimed at enhancing infrastructure, securing sensitive data, and building internal capacity.

Key initiatives include:

- **Restructuring the ICT department:** A review of the current organisational design is un-derway to ensure it is fit for both routine operations and crisis response. This includes benchmarking against high-performing ICT structures and rethinking the help desk model.
- **Upgrading ICT infrastructure:** Plans are in place to replace aging infrastructure, strengthen network capabilities through MPLS and SANREN migration, and implement a robust disaster recovery plan. A new backup strategy will identify critical data, establish regular backup schedules, and explore on-site and off-site solutions.
- **Evaluating systems and applications:** The NHLS will assess whether Oracle and TrakCare remain suitable for future needs, particularly in the context of the NHI. This in-cludes digitising key processes and rolling out strategic projects such as order entry and specimen tracking.
- **Enhancing cybersecurity:** A proactive cybersecurity framework will be developed, supported by awareness campaigns and training. Measures include device management protocols, VPN use for remote work, multi-factor authentication, encrypted databases, network



segmentation, and email filtering. The NHLS is also exploring immutable backups and cloud-based operations.

- **Improving licence management:** Standard operating procedures and monitoring systems will be introduced to manage software licences across the organisation.
- **Building HR capacity:** Staff training will be prioritised to improve service delivery and promote cross-functional collaboration.

Through these strategic actions, the NHLS aims not only to recover from the June 2024 cyberattack but also to build a resilient, secure, and future-ready ICT environment.

HUMAN RESOURCES

The HR Department reviewed the five-year strategy to align with the new organisational strategy for 2025–2030. The organisational strategy emphasises the development of a people-centred culture in driving organisational performance, while also developing a highly trained and skilled workforce to strengthen teaching and training.

In 2023, the organisation conducted an employee engagement survey to solicit the perceptions of employees across several organisational dimensions. The NHLS scored 60.6% on this survey; although this

is a good rating, the industry benchmark for highly engaged employees is 70%, which is now targeted as an outcome for the current five-year strategy. HR aims to place people-centricity at the heart of the organisation's policies, processes, and practices. People-centricity must drive customer centricity for the NHLS's service beneficiaries. This phase of the strategy will focus on employee wellbeing, development, and engagement because trusted and valued employees feel empowered to deliver on the organisation's objectives.

Figure 5 depicts the NHLS's HR strategic positioning over time, with the previous period focusing on operational day-to-day tasks and setting policies and processes to align with business goals. The next four years will be spent forging a strategic partnership with the business to create a performance-driven organisation.

In designing a people-centred culture, the following objectives have been identified:

- Promote above-average employee engagement.
- Create a supportive and healthy environment that encourages total wellness.
- Enhance employee skills for improved organisational performance.



Figure 5: Human Resources Strategic Positioning

The NHLS believes that certain behaviours will help shape the culture it aspires to develop. These behaviours should be practiced and lived by everyone within the organization, starting with leadership:

- **Committed leadership:** Always demonstrating transparency and integrity, committed leaders are consistent in their support of their teams. They are accountable for the organisation’s outcomes and hold people accountable for their behaviours and performance.
- **Open Communication:** The leadership at NHLS will create clear communication channels where regular feedback is provided, while actively listening to employees for their input and challenges.
- **Caring environment:** Employees at NHLS will feel supported, valued, and psychologically safe in an environment where empathy, mutual respect, and open communication are prioritised.
- **Cultural intelligence:** NHLS employees will work together effectively while embracing their different cultural backgrounds, fostering collaboration and understanding of their differences.
- **Celebrate success:** The organisation will create a positive environment that continuously improves and celebrates individual success aligned to organisational goals.



Strategic Objectives and Initiatives

The NHLS HR strategy is built on three interconnected pillars that support a people-centred culture: employee wellness, employee development, and employee engagement. Figure 4 illustrates the key initiatives under each pillar.



Figure 6: Three Pillars of the NHLS's Human Resources Strategy

Employee Wellness

The focus for employee wellness will be on reviewing policies to ensure that they prioritise employee wellbeing, development, and career growth, while aligning with South African labour legislation. Mental health has taken the spotlight in the corporate world and the country at large. The NHLS aims to create a culture that promotes open communication and destigmatises mental health. Provision of access to employee assistance programmes remains critical in providing mental health support within the organisation. The Employment Equity and Skills Development and Transformation and Training Unit continue to drive initiatives that emphasise a culturally intelligent

organisation. The issue of pay parity remains a critical driver of the perception of equity, fairness, and inclusion. Keeping up with behaviours that celebrate success, the NHLS aims to develop programmes that recognise and reward employees both formally and informally.

Employee Development

Performance management goes beyond compliance through contracting and reviews for a numerical score; it plays an integral part in employee development to ensure that employees deliver excellent results in their roles and pave a path towards growth within their chosen careers. Career pathing for both core and support roles guides the competencies needed to advance to the

next level. Succession management provides sufficient capability within the organisation, ensuring retention of business intelligence and continuity.

The NHLS's Workplace Skills Plan (WSP) remains the key vehicle for the provision of formal and informal training, which feeds from performance management and development. The development of a leadership programme that will empower managers with a common understanding of "Leading the NHLS Way" will ensure consistency of practice and management within the organisation.

Employee Engagement

The NHLS aims to demonstrate leadership commitment and alignment by establishing a shared vision through platforms such as the CEO's Town Hall. It also seeks to foster strategic thinking and problem-solving skills by introducing junior boards and ad hoc employee task teams, which are tasked with developing solutions to strategic challenges within the organisation. Employee engagement surveys will continue to serve as a measure to gauge employee perceptions on key organisational climate issues.

Communication is recognised as a powerful tool for driving team performance and focus. Through HR newsletters, surveys, and suggestion platforms, the organisation will share information, capture perceptions, and encourage the exchange of ideas.

Governance and Compliance

In creating a culture of compliance and accountability, HR will continue to drive adherence to policies and applicable legislation. Constant review of policies and potential risks is embedded in the day-to-day management of the function. In collaboration with internal risk and audit and the quality assurance unit,

HR aims to uphold the prescribed ethical standards and constantly mitigate the identified risks to prevent them from negatively impacting the organisation's overall governance and compliance outcomes.

COMMUNICATIONS, MARKETING, AND PUBLIC RELATIONS

The communication strategy defines the NHLS's approach for engaging with various stakeholders, outlining the overall communication objectives and establishing core principles to guide all interactions. It identifies key stakeholder groups and their specific communication needs, articulates the NHLS's primary messages, and details deliverables and communication channels. The department must be sufficiently capacitated to fully execute the NHLS Communication Strategy. Its strategic focus includes:

Improved Media Relations

- Issuing media releases on topical issues
- Organising media briefings/interviews/roundtables with the CEO and key NHLS people
- Profiling of key NHLS professionals/managers in selected media
- Media training of key personnel
- Media monitoring to ensure effective issues management and the generation of reports
- Opinion/thought leadership articles in selected print media on strategic issues relevant to health and NHLS business

Improved Internal Communication and Employee Engagement

- CEO Brown Bag Sessions/Town Hall meetings with selected employee groups
- CEO/Executive regional roadshows
- Educational and internal awareness campaigns

on NHLS's vision, mission, values, ethics, policies, and procedures

- General staff engagement sessions – to inform employees about new organisational developments (such as performance feedback)
- Production of a quarterly internal newsletter

Strong and Meaningful Relations with all Stakeholders

- CEO/EXCO sessions with key industry stakeholders
- Participation in relevant industry events and forums
- PR and events management support of key NHLS industry events
- Strategic partnerships with key stakeholders
- Continuous updating of stakeholder database

Well-managed and optimised NHLS brand

- Implementation of corporate/NHLS-branded uniforms for selected employees
- Development of NHLS promotional material
- Revamping and updating of NHLS intranet and external website
- Development of social media policy
- Updating and review of the corporate identity manual
- Exposure of learners to the NHLS environment and operations
- Production of information and marketing material

To test the effectiveness of the integrated communication and marketing strategy, several monitoring and evaluation mechanisms will be used:

- Media monitoring services, to which the NHLS can subscribe to measure the value of publicity generated (print, radio, television), will provide evidence of the NHLS's success or failure to improve its media profile.
- Social media monitoring through service providers will indicate improved visibility via social media through increased followership and reveal discussion trends and overall brand sentiment.
- The monitoring of electronic newsletter subscriber numbers and the number, origin, and preference of web visitors will serve as success indicators.

Internally, a baseline survey about individuals' preferences and experience regarding communication channels is essential to measuring progress over time. Ultimately, to determine success against targets holistically, feedback mechanisms must be tailored and implemented for the different components/projects/stages that all contribute to the overall strategic aim. The department is making steady progress, with media engagement initiatives underway to raise the NHLS's public profile and internal activities such as CEO Town Halls and roadshows effectively increasing employee participation. Stakeholder engagement and initiatives, including industry events, brand management, and brand alignment, are ongoing.



SWOT ANALYSIS

Despite the challenges experienced by the NHLS, it has survived and thrived over the years. The organisation has provided good-quality pathology results to the DoH and its patients.

Table 3: SWOT Analysis – Internal Factors

EMPLOYEE WELLNESS	WEAKNESSES
<ul style="list-style-type: none"> • National Pathology Laboratory footprint • Internationally renowned intellectual capital • Sustainable partnership through relevant research and development • Gold standard for establishing public healthcare • Sole mandate to train pathologists • Exclusive national central data warehouse 	<ul style="list-style-type: none"> • Aging infrastructure • Limited ownership of the value chain • Limited developmental opportunities • Inadequate distribution of critical and scarce skills • Inability to retain a skilled workforce
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • SANAS accreditation • Digital transformation • Other sources of income to enhance revenue streams • Adoption and implementation of new technologies • Operationalisation of business intelligence to improve data-driven decisions 	<ul style="list-style-type: none"> • Competition with the implementation of NHI • Budget reduction for provinces • Reduced conditional grant • Cyber security threats and outdated IT infrastructure • High attrition of skilled and competent staff • Disease outbreaks



THEORY OF CHANGE

The Theory of Change (ToC) provides a clear framework for understanding how desired outcomes will be achieved. It maps the pathway from inputs and activities to outputs, outcomes, and ultimate impact, while identifying key assumptions and risks.

For the NHLS, the ToC aligns strategic planning with national priorities such as those of the NDoH, NDP, and SDGs. It demonstrates how the NHLS's diagnostic services drive improved health outcomes and public

trust through enhanced governance, infrastructure, and stakeholder engagement.

The NHLS applies the ToC to guide strategic planning and performance monitoring. This approach clarifies how initiatives – such as infrastructure upgrades, workforce development, and stakeholder engagement – lead to improved diagnostic services, stronger governance, and better clinical outcomes. It ensures strategies remain evidence-based and responsive to risk.

STATEMENT OF CHANGE:

Improve universal access to quality, reliable, and timely diagnostic services supporting National Health System and NHI implementation





Inputs	<ul style="list-style-type: none"> • Skilled HR (finance, ICT, supply chain, laboratory science) • Funding for infrastructure upgrades and HR capacity building • Technical support from National Treasury, AGSA, the NDoH, and the Department of Employment and Labour • Governance oversight from the NHLS Board • Strong leadership commitment to transformation and accountability
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Assumptions	<ul style="list-style-type: none"> • Political and executive support for reforms will be sustained • Adequate funding will be allocated to strengthen systems • Staff will comply with new accountability, governance, and performance frameworks • Oversight structures (NHLS Board, AGSA, National Treasury, NDoH, and Department of Employment and Labour) will continue to enforce compliance. 	Risks	<ul style="list-style-type: none"> • Resistance to change from staff or leadership. • Inadequate funding for system upgrades. • Cybersecurity vulnerabilities persist if ICT reforms lag. • Failure to enforce consequence management to address perpetuating irregular, fruitless, and wasteful expenditure. • SCM processes hindering service delivery.
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STRATEGIC PRIORITIES FOR THE MEDIUM-TERM DEVELOPMENT PLAN

Over the next five years, the NHLS will strategically prioritise the development of its service platform, strengthen its training infrastructure, and establish itself as a premier centre of excellence across Africa by:

- Strengthening teaching and training
- Expanding funding sources for research
- Improving and strengthening SCM
- Building a secure and resilient IT infrastructure
- Digitising all processes
- Strengthening the current business intelligence unit to inform the business decision-making process internally and for the country
- Prioritising patient and people-centric care
- Ensuring financial sustainability
- Implementing water and energy supply strategies
- Achieving NHI readiness

STRATEGIC APPROACH

The NHLS is driven by a clear purpose: to deliver an affordable, high-quality, cost-effective, and efficient service that is responsive to the needs of its patients and clients.

The introduction of NHI will fundamentally change the health system over the next few years. The NHLS will operate in an increasingly competitive and demanding environment and must have a strong, sustainable, and efficient service offering meet NHI requirements and future demands.

Rapid technological advances require the NHLS to adapt through agile structures and responsive service delivery. For the next five years, the NHLS will focus on the following strategic areas.

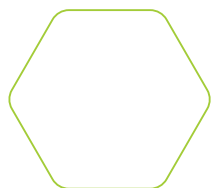
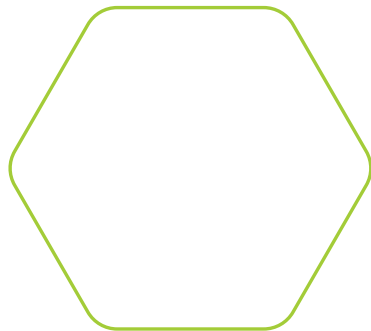
- **Patient-centred approach to service delivery:**
 - » Hybrid service delivery model by centralising and decentralising in certain areas
 - » Integrated technology across disciplines
 - » Automation of technology
 - » Improved logistics and specimen tracking systems
- **Employee-centred approach to building a fit-for-purpose, future-focused organisation to gain a competitive advantage over private sector pathology laboratories:**
 - » Increasing training of pathologists
 - » Fostering collaboration across disciplines
 - » Establishing partnerships with the private sector to improve and enhance the training of pathologists
 - » Instituting a staff retention strategy and improved working conditions (flexible working policy)
 - » Providing clear career progression
 - » Delivering capacity building programmes for all staff categories
- **Digitisation of all key corporate departments**
 - » Digitising business processes
 - » Becoming a paperless organisation in the next five years
 - » Implementing business intelligence for data-driven decision making

- **Introduction of new technologies in laboratories**

- » Digital pathology
- » AI in pathology
- » Next generation sequencing
- » Rapid diagnostic tests
- » Point-of-care testing
- » Automation in laboratories
- » Service-appropriate diagnostic platforms (open vs closed molecular platforms; placement vs outright purchase of diagnostic systems)

- **Increase in revenue generation*****

- » Increasing test volumes by improving logistics and reducing blood sample rejection due to transportation challenges
- » Reducing the number of outsourced tests by identifying the top 10 outsourced tests and developing plans to reduce such outsourcing
- » Diversifying of revenue streams



PART C
MEASURING
PERFORMANCE



PART C: MEASURING PERFORMANCE

INSTITUTIONAL PERFORMANCE INFORMATION

Measuring the Impact

IMPACT: “BETTER CLINICAL OUTCOMES FOR PATIENTS”
 “SAFE AND SUSTAINABLE WORKING ENVIRONMENT”
 “REDUCED BURDEN OF DISEASE INCLUDING COMMUNICABLE AND NON-COMMUNICABLE DISEASE”

Impact Statement

The NHLS will create and maintain a safe, resilient, and sustainable working environment that protects staff, strengthens operational continuity, and contributes to the reduction of communicable and non-communicable diseases through robust diagnostic systems, timely surveillance, and high-quality laboratory services.”

Aligned with its mandate, strategic focus areas, and impact statement, the NHLS has identified eight strategic outcomes to deliver medium-term results. These outcomes are structured according to the Theory of Change and aligned with the MDTP priorities.

Table 4: Outcomes and Outputs

Outcome	Outputs
An efficient and effective organisation	Improved laboratory turnaround times
	Improved clinic-laboratory interface
	Digitised business processes
	Improved equitable access to diagnostic services
	A robust surveillance and outbreak response system
	Improved infrastructure and property management
High-quality diagnostic and clinical services	Strengthened Total Quality Management systems
	Health research aligned to national priorities
Improved financial sustainability and governance	Improved liquidity position of the NHLS
Strengthened accountability and oversight	Strengthened compliance with regulatory and legal requirements
	Corruption-free organisation
	Reduced irregular expenditure
	Improved supply management systems



Table 4: Outcomes and Outputs (Continued)

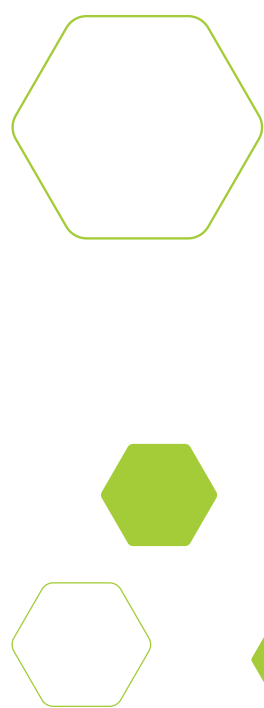
Outcome	Outputs
Strengthened workforce capacity	Highly skilled and competent workforce across the NHLS
A culture of Excellence	Performance-driven organisation
	Employee-centred organisation
Resilient Information and Communication Technology infrastructure and systems	Modernised, secure, and scalable IT infrastructure
Improved public awareness and confidence	Improved stakeholder engagement

Table 5: Outcome Indicators

MTDP PRIORITY		Pursue the achievement of Universal Health Coverage through the implementation of the National Health Insurance to address inequity and financial hardship in accessing healthcare	
Outcome	Outcome Indicator	Baseline	Five-Year Target (2025–2030)
AN EFFICIENT AND EFFECTIVE ORGANISATION	Percentage of laboratory tests conducted within predefined turnaround times	85%	90%
	Number of facilities where POCT is implemented	6	130
	Number of laboratories where digital pathology is implemented	0	14
	Develop and implement a specimen tracking system	Development in progress	100% implementation
	Number of occupational health surveillance reports produced	5	5
	Percentage of identified prioritised diseases under surveillance	95%	95%
	Percentage of Category 1 notifiable medical conditions notified within 24 hours	New	100%
	Percentage of outbreaks of Category 1 notifiable medical conditions responded to within 24 hours after notification	100%	100%
	National Antimicrobial Resistance Surveillance reporting status	100%	100%

Table 5: Outcome Indicators (Continued)

MTDP PRIORITY	Pursue the achievement of Universal Health Coverage through the implementation of the National Health Insurance to address inequity and financial hardship in accessing healthcare		
Outcome	Outcome Indicator	Baseline	Five-Year Target (2025–2030)
AN EFFICIENT AND EFFECTIVE ORGANISATION	Percentage of National HIV Results for Action Reports distributed	New	90%
	Number of National Cancer Surveillance reports distributed, and annual cancer incidence reports published	New	4
	Technical reports for the Malaria Control and Elimination Committee and its thematic subcommittees	New	100%
	Develop and implement the NHLS infrastructure plan	Board approved plan.	35% implementation of the plan
	Develop and implement a sustainable energy supply for the NHLS	New	50% implementation of the plan
	Develop and implement a sustainable water supply for the NHLS	New	100%



MTDP PRIORITY

Improved the quality of health care at all levels of health establishment, inclusive of private and public facilities

Outcome	Outcome Indicator	Baseline	Five-Year Target (2025–2030)
High-quality diagnostic and clinical services	Percentage compliance achieved by non-accredited laboratories during annual quality compliance audits	100%	100%
	Percentage of laboratories achieving proficiency testing scheme performance at 80%	94%	98%
	Number of NHLS laboratories with SANAS:15189 accreditation	198	261
	Number of NHLS public laboratories with SANAS:17025	5	9
	Number of NHLS support departments with ISO 9001 certification	6	11
	Number of articles published in peer-reviewed journals	597	700
	Number of occupational, environmental health, and safety assessments completed	22	20

MTDP PRIORITY

Pursue the achievement of Universal Health Coverage through the implementation of the National Health Insurance to address inequity and financial hardship in accessing healthcare

Improved financial sustainability and governance	Ratio of current assets to current liabilities	4,4:1	2:1
	Cash flow coverage ratio	3,5:1	2:1
	Number of creditors' days	25 days	30 days
	Number of debtors' days	192 days	140
Strengthened accountability and oversight	Improved audit opinion of the Auditor-General	Disclaimer	Clean
	Percentage of allegations reported through the NHLS's tipoff platform that are investigated and completed within 180 days	76%	95%
	Percentage reduction in irregular expenditure	New	80%
	Percentage of tenders awarded within predefined turnaround times	95%	80%

MTDP PRIORITY		Improve resource management by optimising human resources and healthcare infrastructure, and implementing a single electronic record	
Strengthened workforce capacity	Percentage of employees trained as per the approved WSP	64%	70%
	Number of health professionals admitted and trained by the NHLS	360	550 annually

Outcome	Outcome Indicator	Baseline	Five-Year Target (2025–2030)
A culture of excellence.	Percentage of employees with approved performance contracts	98%	98%
	Percentage of employees with reviewed performance contracts	98%	98%
	Employee engagement	New	70%
	Implement the HR strategy	New	Implement 100% of the HR Strategic Plan

MTDP PRIORITY		Pursue the achievement of universal health coverage through the implementation of the National Health Insurance to address inequity and financial hardship in accessing healthcare	
Outcome	Outcome Indicator	Baseline	Five-Year Target (2025–2030)
Resilient information and communication infrastructure systems	Percentage of system uptime	75%	99%
	Develop and Implement an Information and Communication Technology Strategy	Strategy approved by the Board	100% implementation
	Percentage of business processes digitised	New	100%
	Cybersecurity maturity level improvement	New	Tier 3
Improved public awareness and confidence	Develop and implement the communication strategy	Approved Communication Strategy	100% implementation
	Customer satisfaction index	72%	80%
	Number of OEHS information, education, and communication materials developed and disseminated through various communications platforms	New	30



Explanation of planned performance over the five-year planning period

The section explains how each outcome contributes to the MTDP priorities, NHLS mandate, and the desired impact of achieving better clinical outcomes for patients.

OUTCOME 1. AN EFFICIENT AND EFFECTIVE ORGANISATION

The outcome contributes to MTDP priorities by strengthening NHLS's capacity to support Universal Health Coverage (UHC) and the National Health Insurance (NHI) through improved turnaround times that enable timely patient treatment, investment in point-of-care diagnostics, and enhanced equity in diagnostic access for laboratories in non-academic settings through digital pathology. This aligns with NHLS's mandate to provide quality, affordable diagnostic services and will improve the responsiveness of our services to provinces and districts.

OUTCOME 2. HIGH-QUALITY DIAGNOSTIC AND CLINICAL SERVICES

The outcome directly supports the MTDP aims of improving the quality of health at all levels of care by ensuring NHLS facilities are accredited and can deliver accurate diagnostic services within desired turnaround times. It also ensures NHLS research influences policy and practice by publishing its research in peer-reviewed journals. The NHLS further improves the quality of health for public and private facilities through occupational, environmental health, and safety assessments conducted.

OUTCOME 3. IMPROVED FINANCIAL SUSTAINABILITY AND GOVERNANCE

The outcome advances the MTDP priorities of pursuing UHC objectives of access and equity without financial

hardship by ensuring stable funding and safeguarding resources for diagnostic services. It supports the NHLS mandate of maintaining affordable and accessible diagnostic services through strong fiscal oversight. Enablers include maintaining strong internal controls, transparent procurement, and financial risk management. These contribute to the desired impact of better clinical outcomes by ensuring the smooth provision of accessible diagnostic services in support of UHC goals.

OUTCOME 4. STRENGTHENED ACCOUNTABILITY AND OVERSIGHT

The outcome aligns with MTDP priorities of improving access and advancing UHC through maintaining good governance systems, transparency, and a zero-tolerance approach to corruption. Developing an infrastructure plan and sustainable energy supply ensures continuity of access to health and diagnostic services as envisioned in the NHI framework.

OUTCOMES 5 AND 6. STRENGTHENED WORKFORCE CAPACITY/ A CULTURE OF EXCELLENCE

These outcomes contribute to MTDP priorities of optimised human resources, infrastructure, and achieving a single electronic record by ensuring the organisation has the skills and capacity required to deliver quality services and modernise its service model through digital and next-generation technologies. The NHLS, through its world-class expertise, runs an advanced Laboratory Information System (TrakCare) and a results repository through its Corporate Data Warehouse, enabling interoperability with other health patient management systems as required by the NHI framework.

OUTCOME 7. RESILIENT INFORMATION AND COMMUNICATION INFRASTRUCTURE SYSTEMS

The outcome advances the UHC goals embedded in the MTDP by ensuring data-driven planning and responsive diagnostic services through resilient and reliable ICT and communications systems. It aligns with NHLS's mandate for quality and affordable diagnostic services by investing in operational efficiencies through digitised business processes and improving its cybersecurity capabilities.

OUTCOME 8. IMPROVED PUBLIC AWARENESS AND CONFIDENCE

NHLS will improve its stakeholder management and communications to strengthen public trust and confidence in its capacity as a public pathology provider to deliver accessible, affordable, and quality diagnostics envisioned in the MTDP priority of pursuing the attainment of UHC



KEY STRATEGIC RISKS

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R1	Ineffective procurement processes	<ul style="list-style-type: none"> Unclear bid specifications resulting in tenders being cancelled Unfilled vacancies Failure to resolve audit findings Inadequate procurement procedures Lack of automated procurement processes Delays in approval of tenders Ineffective implementation of demand planning Inadequate contract management Fragmented procurement systems (non-alignment) 	<ul style="list-style-type: none"> Inability to render required services promptly Perpetuating irregular expenditure Financial losses due to awarding of bids at higher prices than competitive bids (uneconomical prices) Non-compliance with PFMA and National Treasury Regulations 	High	<ul style="list-style-type: none"> (SCM) policy and standard operating procedures Participation in existing contracts (transversal contracts) and other organs of state contracts Continuous training of end-users on procurement requirements Tender turnaround times set in the Annual Performance Plan (APP) Monitoring of procurement plans, deviations, and irregular expenditure register Pre-award auditing of all tenders above R10 million Contract management system updates Participation in existing contracts (transversal contracts) Review of SCM organogram Ongoing information sessions with end-users concerning different procurement requirements (training) Greater application of consequence management 	<ul style="list-style-type: none"> Update the contract management report/system though: <ul style="list-style-type: none"> » Advance notification of contract expiry date » Implementation of long-term contracts » Establishment of panels of service providers Review SCM organogram Fill vacant positions Review SCM policy and processes to identify and minimise bottlenecks (efficiency) Resolve audit findings

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R2	Ageng infrastructure and equipment	<ul style="list-style-type: none"> Poor monitoring and maintenance of infrastructure and equipment Procurement delays in acquiring new instruments Insufficient resources and capacity to manage SCM workload 	<ul style="list-style-type: none"> Interruption of service delivery Loss of accreditation Increased expenditure on maintenance costs, emergency repairs, and insurance claims Inability to scale or adapt to new business demands Accidents resulting in injuries or fatalities Non-compliance with the Occupational Health and Safety Act (OHSA) Litigation 	High	<ul style="list-style-type: none"> Continuous replacement of laboratory equipment with modern technology (equipment modernisation) Ongoing maintenance and replacement of existing infrastructure and buildings Building insurance cover for major failures 	<ul style="list-style-type: none"> Develop infrastructure and maintenance plan Improve infrastructure through renovations and negotiating additional space within hospitals Invest in new technology & equipment to improve efficiency in laboratories
R3	Poor collection of billed services	<ul style="list-style-type: none"> Shrinking provincial budget (budget cuts) Disputed invoices 	<ul style="list-style-type: none"> Inability to render all required service Insufficient cash flow 	High	<ul style="list-style-type: none"> Continuous engagements with the DoH and other stakeholders 	<ul style="list-style-type: none"> NHLS CFO to arrange meetings with provincial DoH finance management teams
R4	Failure to reduce backlog and outsourcing of tests to private laboratories	<ul style="list-style-type: none"> Historical backlog of Forensic Chemistry Laboratory services Insufficient resources available to meet demand Unavailability of equipment and systems Delays in the implementation of digitalisation of pathology services Insufficient resources and capacity to manage SCM workload Delays in payment/non-payment to suppliers 	<ul style="list-style-type: none"> Delays in rendering required service Medico litigations Reputational damage Compromised patient care Failure to meet the demand for tests 	High	<ul style="list-style-type: none"> Tender turnaround times for priority tests set in APP Continuous engagements with DoHs, academia, and other stakeholders Stock management processes are in place Review and plan routes for transportation of samples from collection to testing laboratories Laboratory send-away and referral processes implemented Implement laboratory QA (internal and External) in compliance with SANAS standards/guidelines 	<ul style="list-style-type: none"> Recruit additional forensic analysts for the toxicology section Procure analytical instruments for all FCL laboratories Acquire additional space for the Pretoria and KZN FCL Update software for the Labware System Migrate Labware system to Trakcare



NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
						<ul style="list-style-type: none"> • Develop order entry tracking on Trakcare • Acquire a panel of pathology service providers through the tender process • Review and plan routes for transportation of samples from collection to testing labs • Replace old analysers
R5	Rising cost of employee compensation	<ul style="list-style-type: none"> • Compensation costs rising above inflation • Poor monitoring of agreed adjustments • Changing economic pressure and climate • Recruitment of additional personnel in response to a cyberattack incident 	<ul style="list-style-type: none"> • Increased cost of employment • Reduced return on labour investment 	High	<p>For D1 and below:</p> <ul style="list-style-type: none"> • Negotiation of wages in line with Treasury Medium Term Expenditure Framework (MTEF) guidelines with senior management at Bargaining and Labour Relation Forum engagement platforms • Conclusion of wage negotiations in line with the Board mandate/resolution <p>For D2 and above:</p> <ul style="list-style-type: none"> • Alignment with Treasury guidelines and recommendations to the Board for approval • Implementation of Board-approved wage increases within the relevant financial year • Monitoring of labour costs through the budget process • Review of remuneration philosophy and policy to drive flexible remuneration over fixed remuneration 	<ul style="list-style-type: none"> • Monitor wage agreements and Board resolutions • Implement Grade Discrepancy Project

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R6	Skills shortages in key disciplines (pathologists)	<ul style="list-style-type: none"> • Skill poaching in scarce disciplines • Non-conducive working environment • Delayed registrar/student progress 	<ul style="list-style-type: none"> • Failure to meet set national targets • Failure to reduce outsourcing tests to private labs • Loss of accredited training provider status 	High	<ul style="list-style-type: none"> • Implementation of umbrella and bilateral agreement with universities • Completion of research project towards degree requirements enabled • Head of Department (HOD) development programme implemented in place in KZN (extended to other places on a needs basis) • Performance agreements aligned to NHLS mandates 	<ul style="list-style-type: none"> • Review umbrella agreement • Design an enabling strategy to balance NHLS mandates effectively: <ul style="list-style-type: none"> » Develop and implement a skills retention plan » Review promotion system and change to Ad Hominem Promotion system » Develop a clear career progression path » Motivate for adequate grants to fund sufficient training needs of the NHLS • Establish public/private partnerships for funding pathologist training • Allocate funding for unfunded HPCSA posts • Implement the minimum staffing requirement for Pathologists in each academic laboratory and fill vacant posts



NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R7	Laboratories' failure to obtain/maintain SANAS Accreditation	<ul style="list-style-type: none"> Inadequate and insufficient laboratory staff Laboratory failure to implement recommendations from QA auditors SANAS delays in performing requested accreditation assessment Application for SANAS Accreditation not submitted timeously by laboratories 	<ul style="list-style-type: none"> Loss of quality accreditations, which will have a negative reputational impact Failure to meet APP targets 	Moderate	<ul style="list-style-type: none"> SANAS accreditation targets for laboratories set in the APP Strategy listing target dates for laboratory accreditation in place Annual quality compliance audits conducted for laboratories not accredited by SANAS Corrective action and preventive action monitoring Document control management (Q-Pulse) 	<ul style="list-style-type: none"> Obtain ISO 9001:2015 certification for administration departments Transition DMP facilities from existing ISO 9001:2015 to ISO 13485:2016 Apply for SAHPRA manufacturing licence Communication was sent to SANAS to increase the number of SANAS audits to be conducted during the 2025/26 financial year Retrieve data (policies and SOP) lost during the cyberattack <ul style="list-style-type: none"> » Retrieval from shared drives » retrieval from documents and emails » End-user will re-write policies and procedures that will be filed (stored and archived) on Q-Pulse Monitor supplier's ISO compliance certificates

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R8	Failure to provide IT services that meet business requirements	<ul style="list-style-type: none"> Shortage of skilled IT personnel Limited cybersecurity and technical training Insufficient specialist capacity in networking, systems, cloud, and cybersecurity Slow turnaround time for resolving IT incidents and requests Inadequate processes for patching, system maintenance, and change management Failure to resolve audit findings timeously Absence of mature IT service management processes Weak contract management and vendor oversight Aged IT infrastructure (servers, storage, switches, firewalls) Insufficient broadband capacity and network resilience Legacy systems with technical debt Fragmented monitoring tools with limited visibility Inadequate cybersecurity controls (endpoint, identity, network) Unapproved or outdated ICT strategy and enterprise architecture Insufficient lifecycle plans for asset refresh Underdeveloped BCM and DR alignment with IT Lack of an IT continuity plan 	<p>Confidentiality:</p> <ul style="list-style-type: none"> Increased risk of security breaches due to weak controls Unauthorised access to organisational data <p>Integrity:</p> <ul style="list-style-type: none"> Inaccurate or corrupted system data Failed system transactions or partial updates <p>Availability:</p> <ul style="list-style-type: none"> Critical system and network outages Slow systems impacting laboratory operations Inability to access LIMS, finance, HR, or email services <p>Financial and Legal:</p> <ul style="list-style-type: none"> Financial losses due to downtime and inefficiencies Contractual penalties Potential litigation due to loss of potential data <p>Reputational:</p> <ul style="list-style-type: none"> Loss of trust from internal stakeholders and clients Negative public perception if disruptions affect service delivery 	Extreme	<p>Preventive Controls:</p> <ul style="list-style-type: none"> MPLS network service provider appointed Hardware upgraded (CDW replacements) Security operations centre (SOC) capability established <p>Detective Controls:</p> <ul style="list-style-type: none"> Network and security monitored through SOC Incident logging and event correlation in place Incident turnaround times tracked manually <p>Corrective Controls:</p> <ul style="list-style-type: none"> Restoration and system reboot procedures performed ad hoc Escalation processes for major incidents handled manually 	<p>Resourcing and Capacity:</p> <ul style="list-style-type: none"> Recruit critical IT personnel Capacitate cybersecurity roles Develop specialist technical capability <p>Service Management:</p> <ul style="list-style-type: none"> Improve incident turnaround time Resolve active directory workflow issues Implement ITSM tool and service catalogue <p>Strategic Governance:</p> <ul style="list-style-type: none"> Develop NHLS ICT strategy Implement enterprise architecture <ul style="list-style-type: none"> Establish IT steering committee



NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R8		<ul style="list-style-type: none"> • Insufficient lifecycle plans for asset refresh • Underdeveloped BCM and DR alignment with IT • Lack of an IT continuity plan 		Extreme		<p>Infrastructure Modernisation:</p> <ul style="list-style-type: none"> • Upgrade network switches, servers • Migrate data centre to Teraco • Refresh Oracle infrastructure • Improve monitoring capabilities <p>Licensing:</p> <ul style="list-style-type: none"> • Renew Microsoft (MS), Citrix, ECM, and SigniFlow licences <p>Compliance:</p> <ul style="list-style-type: none"> • Resolving audit findings • Review and update IT policies and procedures • Source Multiprotocol Label Switching (MPLS) Network Provider
R9	Inability to operate during a disaster (business continuity risk)	<ul style="list-style-type: none"> • Outdated disaster recovery plans • Lack of proper planning and preparation to continue during a disruption • Vulnerability of IT security • Business continuity plan not approved, tested, or communicated • Climate change (adverse weather conditions) • Absence of an isolated or immutable storage container for VMware Site Recovery Manager replication 	<ul style="list-style-type: none"> • Delays in resuming provision of services during a disruption • Reputational damage • Financial Loss 	Extreme	<ul style="list-style-type: none"> • Establishment of Braamfontein disaster recovery site • Development of disaster recovery sites (hot, warm, and cold) • Scheduling of regular data back-up • Scheduling of regular disaster recovery testing • Implementation of Disaster Management Plan • Implementation of Disaster Recovery Policy implementation 	<ul style="list-style-type: none"> • Review and update Business Continuity Plan • Instal solar power panels and inverters • Develop and establish disaster recovery sites (hot, warm, and cold)

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R9				Extreme	<ul style="list-style-type: none"> • Establishment of Business Continuity Steering Committee • Installation of generator at critical sites • Filling of water tank before consumption • Implementation of Laboratory Contingency Plan, including test referral process • Activation of laboratory downtime procedures 	<p>Integrate applications for seamless failover support, including:</p> <ul style="list-style-type: none"> » ECM: Hosted on VMware infrastructure with Oracle Supercluster for high-performance computing and storage » LIMS: Deployed on VMware with a cache database for optimised data handling and transaction processing » CDW: Runs on VMware integrated with IBM Netezza appliances utilising DB2 Database for advanced analytics and large-scale data processing » Oracle Applications: Leveraging Oracle Supercluster replication to maintain data integrity and enable rapid recovery in case of system disruption » Microsoft Services: Cloud-based architecture supporting Active Directory and Exchange for identity management and communication services <p>Insurance:</p> <ul style="list-style-type: none"> • Address cyber insurance gaps

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R10	Shortage of water and electricity	<ul style="list-style-type: none"> Extended load shedding Extended water shedding Insufficient electricity and water backup supply 	<ul style="list-style-type: none"> Diminished ability to render service delivery Increased cost to run operations 	Moderate	<ul style="list-style-type: none"> Procurement of additional generators to power the entire campus Water tanks 	<ul style="list-style-type: none"> Instal two (2) megawatt solar plant/farm to support data centre Conduct feasibility study for solar plant / farm Develop specifications for the 2-megawatt solar plant / farm Advertise tender for solar plant/ farm Appoint contractor for solar plant/farm Apply to the City of Johannesburg for exemption from load-shedding Implement borehole bulk water solution

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R11	Failure to obtain pathology services (loss of revenue)	<ul style="list-style-type: none"> • Implementation of phase 2 of the NHI Act • Failure to implement and manage POCT due to: <ul style="list-style-type: none"> » SLAs not including POCT as part of the agreement » Costing not yet finalised » Inadequate infrastructure, i.e., network connectivity, LIMS integration » Fragmented/silo approach to managing POCT sites » Lack of standardised quality assurance and oversight » Poor data management and traceability • Negative media coverage (reputational damage) • Failure to digitise pathology services due to: <ul style="list-style-type: none"> » Legacy systems (manual) that cannot integrate with digital pathology platforms » High cost of digital infrastructure » Lack of digital transformation strategy 	<ul style="list-style-type: none"> • Loss of business to competitors • Threat to going concern • Risk of business closure • Delays in diagnostic due to reliance on legacy systems • Loss of competitive advantage • Loss of confidence from stakeholders (clinicians, funders etc.) 	High	<ul style="list-style-type: none"> • Appointment of NHI Manager to support NHLS initiatives that will respond to NHI requirements • Piloting POCT in the Gauteng and KZN region • Applied for more funding to roll out POCT across the country 	<ul style="list-style-type: none"> • Appoint POCT service providers • Establish a Technical Working Group including Expert Chairs, Area Managers, QA, NHI, expert at NIOH • Pilot POCT in 30 sites (emergency wards (ICU& labour wards) and PHC centres (community healthcare centres)) • Implement POCT at 50% of the 30 sites • Implement POCT at 100% of the 30 sites



NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R12	Cyberattacks	<ul style="list-style-type: none"> • Low cybersecurity awareness • Weak password hygiene • Insider threats and compromised accounts • Inadequate user account lifecycle management • Insufficient patch management • Unrestricted physical access • Weak privileged access management • Outdated and vulnerable systems • Weak endpoint security • Lack of data encryption and segmentation • Advanced cybercrime (AI-driven phishing, ransomware) • Third-party and supply chain attacks 	<p>Confidentiality:</p> <ul style="list-style-type: none"> • Leakage of confidential information • Patient and staff data breach <p>Integrity:</p> <ul style="list-style-type: none"> • Data corruption from malware <p>Availability:</p> <ul style="list-style-type: none"> • Downtime due to ransomware or Distributed Denial of Service • Loss of access to critical platforms <p>Financial and Legal:</p> <ul style="list-style-type: none"> • Non-compliance • Litigation and POPIA penalties • High cost of recovery and forensics <p>Reputational:</p> <ul style="list-style-type: none"> • Compromised patient care • Loss of trust from government and partners • Negative media exposure 	Extreme	<p>Preventive Controls:</p> <ul style="list-style-type: none"> • Regular patch updates • MFA enforcement • Network security and VPN • Microsoft E5 licences <p>Detective Controls:</p> <ul style="list-style-type: none"> • SOC monitoring • Email filtering • Detection of phishing threats <p>Corrective Controls:</p> <ul style="list-style-type: none"> • Incident response activities • Password resets • Disaster recovery testing 	<p>Threat and Vulnerability Management:</p> <ul style="list-style-type: none"> • Conduct vulnerability assessments • Perform annual penetration testing • Implement continuous vulnerability scanning <p>Strategic and Governance:</p> <ul style="list-style-type: none"> • Develop ICT Security Strategy • Improve cyber governance maturity <p>Awareness and Human Factor:</p> <ul style="list-style-type: none"> • Perform monthly phishing simulations • Provide continuous cyber awareness training <ul style="list-style-type: none"> • Test Disaster Recovery Plans in place to ensure recovery time objectives are met <ul style="list-style-type: none"> • Address cyber insurance gaps • Facilitate the purchasing of the insurance cover for cybersecurity liability <ul style="list-style-type: none"> • Procure information security solutions (managed endpoint solution and Cisco Network Solutions) • Upgrade endpoint security

NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R12				High		<p>Implement anti-impersonation protection Microsoft Defender for Office for high-risk employees, i.e., Executives, SCM, Accounts Payable</p> <p>External attack surface management (brand management)</p> <ul style="list-style-type: none"> • Implement the following technology: <ul style="list-style-type: none"> » Privilege Access Management solution » Cloud Access Security Broker » Data Leakage Protection » Microsoft Purview » Network access control (NAC) » Network traverse risk solution (firewall segmentation)



NO.	RISK NAME	ROOT CAUSE	CONSEQUENCES	INHERENT RISK	CURRENT BUSINESS PROCESSES AND INTERNAL CONTROLS	FURTHER MITIGATION PLANS
R13	Negative audit opinion	<ul style="list-style-type: none"> • Failure to produce credible financial statements • Failure to provide supporting evidence/information • Failure to resolve previously reported audit findings • Ineffective monthly management of accounts • Incorrect disclosure of information in the financial statements • Poor internal control environment • Inadequate staff capacity in the Finance Department • Inadequate training on GRAP standards and financial discipline controls • Upgrade IT systems and infrastructure • Management audit action plans not in place • Failure to enforce consequence management 	<ul style="list-style-type: none"> • Reduced funding from donors • Failure to retain surpluses • Reputational damage • Loss of stakeholder confidence 	Extreme	<ul style="list-style-type: none"> • Monthly management of accounts • General ledger reconciliation • Interim audits • Internal audit follow-up reviews 	<ul style="list-style-type: none"> • Appoint Task Team to address AG's findings <p>Task Team to perform the following duties:</p> <ul style="list-style-type: none"> • Categorisation of AG's findings into themes • Performing a root cause analysis for the identified themes • Establishing the terms of reference for the loss control function that reviews irregular, fruitless, and wasteful expenditure • Implementing corrective action plans and controls that address both findings and the internal control environment • Internal audit function will conduct follow-up reviews to establish whether management appropriately resolved AG findings

PART D
TECHNICAL INDICATOR
DESCRIPTORS



PART D: TECHNICAL INDICATOR DESCRIPTOR

1. AN EFFICIENT AND EFFECTIVE ORGANISATION

1.1 INDICATOR: PERCENTAGE OF LABORATORY TESTS CONDUCTED WITHIN THE PREDEFINED TURNAROUND TIMES

Definition

This Key Performance Indicator measures the turnaround time from specimen registration to result review, expressed as a percentage of registered specimens.

NB: For purposes of this indicator, the term “reviewed” means “authorised”, as they represent the same action on the LIS.”

Source/collection of data

Data from TrakCare and the NIOH database

Method of calculation

Numerator = The total number of critical tests (**as defined in Annexure A and B**) that were reviewed within pre-defined turnaround times.

Denominator = The total number of tests (as defined in **Annexure A and B**) registered.

Turnaround time is calculated from the time the specimen is registered to the time it is reviewed.

Exclusion:

The calculation excludes all the tests rejected for any reason.

The NHLS is currently finalising the development and piloting of the specimen tracking system to measure the entire value chain (from collecting specimens from health facilities to delivering results to health facilities). The system will be implemented in the 2026-2027 financial year. For the 2025-2026 financial year, the NHLS will measure the turnaround time from registration to review. This excluded NIOH tests.

NB: For purposes of this indicator, the term “reviewed” means “authorised”, as they represent the same action on the LIS.

NB: The length of the turnaround time (TAT) may result in samples received and registered late in a reporting quarter being processed and finalised in the following quarter, which may lead to overlap between quarterly performance results. This is applicable for FCL and NIOH tests.

Assumptions

All specimens received are registered on the Laboratory Information System

1.1 INDICATOR: PERCENTAGE OF LABORATORY TESTS CONDUCTED WITHIN THE PREDEFINED TURNAROUND TIMES

Desired performance	90%
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Indicator responsibility	Executive Manager: Laboratory Service and Executive Director: NIOH

1.2 INDICATOR: NUMBER OF FACILITIES WHERE POCT WILL BE IMPLEMENTED

Definition	Point of Care Testing (POCT) is performed at or near the site of patient care to effect immediate clinical decision-making and optimise patient management. In the absence of an accessible laboratory service, POCT enhances access and equity. “Implemented” means POCT has been deployed and is included as part of the laboratory’s routine tests.
Source/collection of data	The plan sets the placement of the instruments and monitors key performance indicators. The results will be provided as a portfolio of evidence.
Method of calculation	Number
Assumptions	Provinces may change the facility as and when the need arises. The NHLS will need to adjust to the province’s requirements at that time.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	130 laboratories
Indicator responsibility	Executive Manager: Laboratory Service

1.3 INDICATOR: NUMBER OF LABORATORIES WHERE DIGITAL PATHOLOGY WILL BE IMPLEMENTED

Definition

Currently, the pathologists in the anatomical pathology laboratories examine glass slides under the microscope. The NHLS has a shortage of anatomical pathologists. As a result, the slides are referred to laboratories with pathologists. This impacts the turnaround time of results. With digital pathology, the slides can be scanned and sent to any anatomical laboratory with pathologists. The pathologists will then be able to view those slides wherever they are. This means there is no need to refer glass slides to other laboratories, thereby improving turnaround times for results.

“Implemented” means digital pathology has been deployed and is included as part of the laboratory’s routine methods.

Source/collection of data

Implementation requires instrument placement and functionality at laboratories. Results signed by off-site pathologists will serve as the portfolio of evidence.

Method of calculation

Number

Assumptions

Uninterrupted internet connections and server storage space are critical for successfully implementing digital pathology.

Disaggregation of beneficiaries

Not applicable

Spatial transformation

Not applicable

Desired performance

14

Indicator responsibility

Executive Manager: Laboratory Services



1.4 INDICATOR: DEVELOP AND IMPLEMENT A SPECIMEN-TRACKING SYSTEM

Definition

The specimen-tracking system tracks samples from the time they are collected from a health facility to when they are completed, and the results are returned to the health facility. This measures the entire value chain to ensure value added to patient care by delivering timely results.
A functional and validated tracking system will be installed and placed in routine laboratory use.

Source/collection of data

Reports that show the pre- and post-analytical movement of samples and reports.

Method of calculation

Numerator = Total number of facilities where specimen tracking has been implemented
Denominator = Total number of facilities where specimen tracking must be implemented.
(Specimen tracking can only be implemented in facilities that have access to the internet).

Assumptions

The tracking of specimens depends on the availability of an internet connection in health facilities.

Disaggregation of beneficiaries

Not applicable

Spatial transformation

Not applicable

Desired performance

100%

Indicator responsibility

Executive Manager: Laboratory Service



1.5 INDICATOR: NUMBER OF OCCUPATIONAL HEALTH SURVEILLANCE REPORTS PRODUCED

Definition	This is based on the count of completed and approved occupational health surveillance reports that were disseminated. The term “surveillance” refers to the systematic monitoring and collation of occupational diseases over time.
Source/collection of data	PATHAUT database
Method of calculation	Number
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	5
Indicator responsibility	Executive Director: NIOH



1.6 INDICATOR TITLE: PERCENTAGE OF IDENTIFIED PRIORITISED DISEASES UNDER SURVEILLANCE

Definition	<p>This indicator shows the percentage of cases followed up at enhanced surveillance sites for the organisms prioritised under the GERMS-SA protocol.</p> <p>Technical terms:</p> <ul style="list-style-type: none">• Prioritised diseases: Infectious organisms of public health concern prioritised by GERMS-SA• Enhanced surveillance sites: Sentinel locations (i.e., selected hospitals) where staff follow up on patients meeting a defined criteria to collect specific information that is sent to the NICD for further analysis
Source/collection of data	The GERMS-SA REDCap surveillance databases are used to derive these data.
Method of calculation	The total number of cases followed up by the NHLS's surveillance officers (numerator), at the enhanced surveillance sites, for the organisms prioritised under the GERMS protocol is divided by the total number of cases matching the GERMS-SA case definitions (denominator) and expressed as a percentage.
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	95%
Indicator responsibility	Executive Director: NICD

1.7 INDICATOR: PERCENTAGE OF CATEGORY 1 NOTIFIABLE MEDICAL CONDITIONS NOTIFIED WITHIN 24 HOURS

Definition	<p>Early action review through 7-1-7. Measures the time to notification from outbreak suspicion or confirmation on NMC.</p> <p>Technical terms:</p> <ul style="list-style-type: none"> • “Category 1”: Conditions designated for immediate notification due to their public health importance
Source/collection of data	Notifiable medical conditions are measured from the date the patient presented to the facility to the date of notification.
Method of calculation	Average number of days it took to notify or percentage notified within 24 hours
Assumptions	Laboratory-based data for confirmation of the case
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100%
Indicator responsibility	Executive Director: NICD



1.8 INDICATOR: PERCENTAGE OF OUTBREAKS OF CATEGORY 1 NOTIFIABLE MEDICAL CONDITIONS RESPONDED TO WITHIN 24 HOURS AFTER NOTIFICATION

Definition	<p>Measure the speed with which we can respond to outbreaks. All outbreaks notified to the NICD are documented and stored in the database.</p> <p>Technical terms:</p> <ul style="list-style-type: none"> • Outbreak: Cluster of cases meeting a predefined criterion • Category 1 conditions: Conditions designated for immediate notification due to their public health importance • Public health response: Initiation of public health action (i.e., case investigation, alerting authorities, etc.)
Source/collection of data	All the organisms responsible for the outbreaks are documented and kept in the database. The date of notification of the outbreak and the time it took for NICD to respond are also documented.
Method of calculation	The total number of notified outbreaks responded to within 24 hours is divided by the total number of outbreaks notified, expressed as a percentage.
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100%
Indicator responsibility	Executive Director: NICD



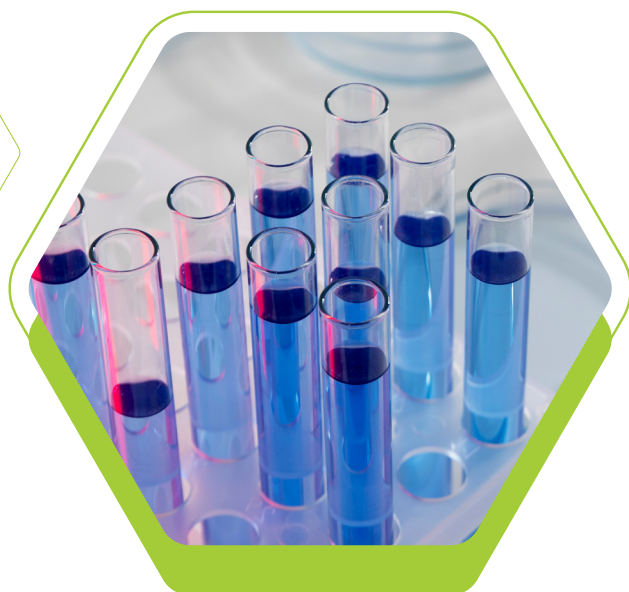
1.9 INDICATOR: NATIONAL ANTIMICROBIAL RESISTANCE SURVEILLANCE REPORTING

Definition	Antimicrobial resistance (AMR) monitoring is critical for several reasons. It plays a pivotal role in safeguarding public health by allowing for early detection of resistance trends, guiding treatment decisions, supporting antimicrobial stewardship programmes nationally, triggering public health interventions when needed in outbreak situations, and supporting policy development and evaluation.
Source/collection of data	Data will be collected from the SDW. The accuracy of the data reported on the AMR dashboard will be manually verified every quarter for national data and per province
Method of calculation	Proportion resistant = number of resistant bloodstream infection isolates of a given pathogen to a specific antibiotic ÷ total number of bloodstream infection isolates of that pathogen tested for susceptibility to that antibiotic. Reporting will be for four critical bacterial pathogens and one critical fungal pathogen.
Assumptions	Not applicable
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100%
Indicator responsibility	Executive Director: NICD



1.10 INDICATOR: PERCENTAGE OF NATIONAL HIV RESULTS FOR ACTION EPORTS DISTRIBUTED

Definition	Proportion of weeks (per calendar quarter) where complete Results for Action (RfA) reports were accessible for download on Monday morning
Source/collection of data	NICD Surveillance Data Warehouse
Method of calculation	Numerator = number of weeks whereby complete weekly RfA reports can be accessed/downloaded on a Monday morning; denominator = number of weeks in the period reported
Assumptions	IT infrastructure and SDW environment stability
Disaggregation of beneficiaries	HIV RfA include: a. Maternity marker (for HIV viral load) to benefit women's health outcomes and prevent vertical transmission b. Age to support child and adolescent health outcomes
Spatial transformation	Data available for all 52 health districts (all facilities)
Desired performance	90%
Indicator responsibility	Executive Director: NICD



1.11. INDICATOR: NUMBER OF NATIONAL CANCER SURVEILLANCE REPORTS DISTRIBUTED, AND ANNUAL CANCER INCIDENCE REPORTS PUBLISHED.

Definition	This indicator presents annual Cancer Incidence Reports for the pathology-based Cancer Registry, and the three Population-Based Cancer Registries (PBCRs): Ekurhuleni, KwaZulu-Natal, and National Childhood PBCR.
Source/collection of data	NHLS Laboratories and private sector laboratories. For sentinel PBCRs, surveillance officers will conduct active surveillance in hospitals.
Method of calculation	Number
Assumptions	Sustainable funding and staff for PBCRs, Regulation 380 compliance of cancer reporting (within three months of diagnosis) by the private sector.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	All population groups included, cancer data reported stratified by population groups
Desired performance	4
Indicator responsibility	Executive Director: NICD



1.12 INDICATOR: TECHNICAL SUPPORT FOR THE MALARIA CONTROL AND ELIMINATION COMMITTEE AND ITS THEMATIC SUBCOMMITTEES

Definition	<p>The NICD provides technical support to the National and Provincial Departments of Health and other stakeholders by reporting on mosquito vectors and clinical specimens/samples referred to the NICD, or collected by NICD personnel during surveillance operations and case management, and provides QA for malaria microscopy</p> <p>15 malaria vector diagnostic reports 1 annual malaria vector surveillance report 3 anti-malarial resistance marker reports 40 malaria case management reports 1 annual report for malaria microscopy</p>
Source/collection of data	Technical surveillance and diagnostic reports
Method of calculation	<p>Numerator: Total number of reports provided by NICD</p> <p>Denominator = Total number of reports that must be provided by NICD</p>
Assumptions	Sufficient demand/need/referrals from primary and secondary stakeholders, parasite and vector surveillance activities, and outbreak investigations
Disaggregation of beneficiaries	National and Provincial Departments of Health malaria control and elimination programmes, healthcare practitioners, and healthcare facilities
Spatial transformation	<p>Malaria endemic provinces: KwaZulu-Natal, Mpumalanga, Limpopo</p> <p>Non-endemic provinces: Gauteng, North-West, Free State</p>
Desired performance	<p>15 malaria vector diagnostic reports</p> <p>1 annual malaria vector surveillance report</p> <p>3 anti-malarial resistance marker reports</p> <p>40 malaria case management reports</p> <p>1 annual report for malaria microscopy QA</p>
Indicator responsibility	Executive Director: NICD

1.13. INDICATOR: DEVELOP AND IMPLEMENT THE NHLS INFRASTRUCTURE PLAN

Definition	The NHLS infrastructure is old and outdated, impacting service delivery and employee safety. The NHLS needs to develop a plan to improve the working environment, thus increasing productivity.
Source/collection of data	Project completion verification forms
Method of calculation	Numerator = Total number of projects completed Denominator = Total number of projects outlined in the approved infrastructure plan
Assumptions	Budget availability The SCM processes are completed in time to allow for the renovations in the same financial year.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not Applicable
Desired performance	35% implementation of the plan
Indicator responsibility	Chief Finance Officer



1.14. INDICATOR: DEVELOP AND IMPLEMENT A SUSTAINABLE ENERGY SUPPLY FOR THE NHL

Definition	NHL must transition to a diverse alternative energy Sources to secure a sustainable future, reduce reliance on traditional, finite resources, and mitigate environmental impact.
Source/collection of data	Project completion verification forms
Method of calculation	Numerator = Total number of installation projects Denominator = Total number of projects as per the plan
Assumptions	The SCM processes are completed in time to allow for the renovations in the same financial year. Budget availability
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not Applicable
Desired performance	50% implementation of the plan
Indicator responsibility	Chief Financial Officer



1.15. INDICATOR: DEVELOP AND IMPLEMENT A SUSTAINABLE WATER SUPPLY FOR THE NHLS

Definition	NHLS must transition to a diverse alternative water sources to secure a sustainable future, reduce reliance on traditional, finite resources, and mitigate environmental impact.
Source/collection of data	Project completion verification forms
Method of calculation	Numerator = Total number of projects completed Denominator = Total number of projects outlined in the plan.
Assumptions	The SCM processes are completed in time to allow for the renovations in the same financial year. Budget availability
Disaggregation of beneficiaries	Not Applicable
Spatial transformation	Not Applicable
Desired performance	35% implementation
Indicator responsibility	Head of Facilities



2. HIGH-QUALITY DIAGNOSTIC AND CLINICAL SERVICES

2.1 INDICATOR: PERCENTAGE COMPLIANCE ACHIEVED BY NON-ACCREDITED LABORATORIES DURING ANNUAL QUALITY COMPLIANCE AUDITS

Definition	This indicator measures the percentage of laboratories that achieve 80% compliance using internal quality compliance audits. The target laboratories include those that were not SANAS-accredited at the time of the audit.
Source/collection of data	Spreadsheet with percentage scores obtained by laboratories audited. Manual collection of data by QA.
Method of calculation	The total number of laboratories achieving a minimum score of 80% with the quality compliance audits divided by the total number of laboratories audited. (audited laboratories refer only to the laboratories that are not SANAS-accredited).
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100%
Indicator responsibility	Executive Manager: AARQA



2.2 INDICATOR: THE PERCENTAGE OF LABORATORIES ACHIEVING PROFICIENCY TESTING SCHEME PERFORMANCE AT 80%

Definition	The indicator measures the percentage of laboratories achieving a minimum average score of 80% in all NHLS proficiency testing schemes in which they are enrolled in the financial year. This does not include external proficiency testing schemes (PTS).
Method of calculation	The total number of laboratories achieving 80% and above, divided by the total number of laboratories participating in the PTS, is expressed as a percentage.
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	98%
Indicator responsibility	Executive Manager: AARQA



2.3 . INDICATOR: NUMBER OF LABORATORIES WITH SANAS:15189 ACCREDITATION

Definition

This indicator measures the number of laboratories accredited by SANAS assessors during an accreditation visit per laboratory. The total number of laboratories excludes the depots.

Technical terms:

Accreditation: Recognition of a laboratory by SANAS of having met international quality standards for ISO 15189

Source/collection of data

SANAS accreditation certificates or SANAS assessment outcome letters. The SANAS accreditation certificate is active for a four-year cycle; however, SANAS assesses the accredited laboratories annually and issues a letter of recommendation to indicate that the laboratory remains accredited. The laboratory is considered accredited for the duration of the accreditation cycle. Assessments are conducted annually in some laboratories and every other year in others to maintain accreditation status.

Assumptions

None

Method of calculation

Number

Disaggregation of beneficiaries

Not applicable

Spatial transformation

Not applicable

Desired performance

261

Indicator responsibility

Executive Manager: AARQA

2.4 INDICATOR: NUMBER OF NHLS PUBLIC LABORATORIES WITH SANAS:17025

<p>Definition</p>	<p>This indicator measures the number of NHLS public laboratories that have SANAS: 17025 certifications.</p> <p>Technical terms:</p> <p>SANAS certifications: Recognition of a laboratory by SANAS of having met quality standards for ISO 17025</p>
<p>Source/collection of data</p>	<p>SANAS accreditation certificates or SANAS assessment outcome letters. The SANAS accreditation certificate is active for a four-year cycle; however, SANAS assesses the accredited laboratories annually and issues a letter of recommendation to indicate that the laboratory remains accredited. The laboratory is considered accredited for the duration of the accreditation cycle. Assessments are conducted annually in some laboratories and every other year in others to maintain accreditation status.</p>
<p>Method of calculation</p>	<p>Number</p>
<p>Assumptions</p>	<p>None</p>
<p>Disaggregation of beneficiaries</p>	<p>Not applicable</p>
<p>Spatial transformation</p>	<p>Not applicable</p>
<p>Desired performance</p>	<p>9</p>
<p>Indicator responsibility</p>	<p>Executive Manager: AARQA</p>

2.4 INDICATOR: NUMBER OF NHLS SUPPORT DEPARTMENTS WITH ISO 9001 CERTIFICATION

Definition	This indicator measures the number of support departments that have ISO 9001 certification.
Source/collection of data	The ISO 9001 certificates or the assessment outcome letter
Method of calculation	Number
Assumptions	None
Disaggregation of beneficiaries	Not Applicable
Spatial transformation	Not Applicable
Desired performance	11
Indicator responsibility	Executive Manager: AARQA



2.5 INDICATOR: NUMBER OF ARTICLES PUBLISHED IN PEER-REVIEWED JOURNALS

Definition	The indicator measures the number of peer-reviewed articles published by, and in collaboration with, NHLS researchers. Technical terms: Peer review and publishing: The process of scientific research being evaluated by colleagues working in the field and accepted in a relevant journal for circulation
Source/collection of data	NHLS research database. The database captures all peer-reviewed research articles published by NHLS staff, including those from the NICD and NIOH.
Method of calculation	Number
Assumptions	All publications by NHLS staff are comprehensively captured in the NHLS Research database. NHLS is correctly attributed by all authors (NHLS staff).
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	650
Indicator responsibility	Executive Manager: AARQA



2.6 INDICATOR: NUMBER OF OCCUPATIONAL, ENVIRONMENTAL HEALTH, AND SAFETY ASSESSMENTS COMPLETED

Definition	An occupational, environmental health, and safety assessment typically results in technical or patient results containing recommendations to address identified issues.
Source/collection of data	Records of reports or letters concerning risks in the workplace are sent to clients
Method of calculation	Number
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	20
Indicator responsibility	Executive Director: NIOH



3. IMPROVED FINANCIAL SUSTAINABILITY AND GOVERNANCE

3.1 INDICATOR: RATIO OF CURRENT ASSETS TO CURRENT LIABILITIES

Definition	The KPI measures the NHLS's ability to pay short-term obligations with its current assets. It determines how well the NHLS can meet its financial obligations within a year
Source/collection of data	The current assets and current liabilities figures are obtained from the quarterly statement of financial position.
Method of calculation	Current assets/current liabilities
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	2:1
Indicator responsibility	Chief Financial Officer



3.2 INDICATOR: CASH FLOW COVERAGE RATIO

Definition	The KPI measures the ability of the NHLS to pay its obligations.
Source/collection of data	Cash and cash equivalents and total current liabilities are obtained from the statement of financial position contained in the quarterly financial statements.
Method of calculation	Cash and cash equivalents divided by total current liabilities.
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	2:1
Indicator responsibility	Chief Financial Officer



3.3 INDICATOR: NUMBER OF CREDITOR DAYS

Definition	The creditor days' ratio measures the turnaround times for supplier payments.
Source/collection of data	Quarterly financial statements
Method of calculation	Trade payables plus accruals divided by cost of sales X 365 days
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	30 days
Indicator responsibility	Chief Financial Officer



3.4. INDICATOR: NUMBER OF DEBTORS' DAYS

Definition	The debtor days ratio measures how quickly cash is collected from debtors. The longer it takes the NHLS to collect payments for services rendered, the greater the number of debtor days.
Source/collection of data	<ul style="list-style-type: none">• The debtors figure is obtained from the monthly Excel Age Analysis report generated by the Accounts Receivable Department.• The net debtors' figure is used, excluding the SAVP (an NHLS subsidiary).• The net debtor figure refers to total debt, which includes both government and private sector debt.• Revenue figures are determined via an account query in Oracle, selecting the higher-level revenue account (5000 range) and other income (grants, income from teaching, miscellaneous sales).
Method of calculation	$(\text{Total month-end trade debtors} / \text{YTD test revenue and other income annualised}) \times 365 \text{ days}$.
Assumptions	The provinces' ability to pay their debt
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	140 days
Indicator responsibility	Chief Financial Officer

4. STRENGTHENED ACCOUNTABILITY AND OVERSIGHT

4.1 INDICATOR: IMPROVED AUDIT OPINION OF THE AGSA

Definition	<p>This indicator measures improvement in SAVP’s audit opinion issued by the Auditor-General of South Africa (AGSA) for the financial year, compared to the previous audit cycle, based on the official audit outcome.</p> <p>An improved audit opinion is defined as a movement to a better audit category, for example:</p> <p>Disclaimer > Adverse / Qualified</p> <p>Adverse > Qualified</p> <p>Qualified > Unqualified with findings</p> <p>Unqualified with findings > Unqualified (clean audit)</p> <p>This indicator assesses the effectiveness of financial management, governance, internal controls, and compliance with applicable legislation. An improved audit opinion demonstrates strengthened accountability and improved organisational maturity</p>
Source/collection of data	<p>Final AGSA Audit Report for the relevant financial year</p> <p>Management Report issued by AGSA</p> <p>Audit Action Plan and status reports</p> <p>Audit Committee minutes</p> <p>Internal audit reports</p>
Method of calculation	<p>AGSA-issued audit opinion for the reporting year</p>
Assumptions	<p>The audit opinion is issued by AGSA within the reporting period.</p> <p>Audit categories and definitions remain consistent across audit cycles.</p> <p>The comparison is made against the immediately preceding financial year</p>
Disaggregation of beneficiaries	<p>Not applicable</p>
Spatial transformation	<p>Not applicable</p>

4.1 INDICATOR: IMPROVED AUDIT OPINION OF THE AGSA (CONTINUED)

Desired performance

Clean

Indicator responsibility

Chief Financial Officer

4.2. INDICATOR: PERCENTAGE OF ALLEGATIONS REPORTED THROUGH THE NHLS' TIPOFF PLATFORM THAT ARE INVESTIGATED AND COMPLETED WITHIN 180 DAYS

Definition

This indicator measures the time taken to investigate allegations reported through the NHLS's tipoff platforms, expressed as a percentage. Allegations are suspicions of unethical behaviour reported by whistleblowers via an independently managed anonymous tip-off hotline, SMS, email, or verbal report to Risk Management and Internal Audit by the whistle-blower/s that must be investigated and completed within 180 days.

Source/collection of data

Spreadsheet provided by the Internal Risk Management and Audit Department

Method of calculation

The total number of allegations reported through the NHLS tipoff platform investigated and completed within 180 days is divided by the total number of allegations reported through the NHLS tipoff platform, expressed as a percentage.

Assumptions

All tip-offs are logged with the correct dates of receipt and completion

Disaggregation of beneficiaries

Not applicable

Spatial transformation

Not applicable

Desired performance

95%

Indicator responsibility

Indicator responsibility Head of Internal Risk Management and Audit.

4.3 . INDICATOR: PERCENTAGE REDUCTION IN IRREGULAR EXPENDITURE

Definition	The percentage by which irregular expenditure for the financial year is reduced. Note to finance: explain what is meant by irregular expenditure, whether the reduction considers cumulative irregular expenditure or newly incurred irregular expenditure
Source/collection of data	Irregular expenditure register
Method of calculation	(Last financial year – current financial year) divided by the last financial year, expressed as a percentage.
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100%
Indicator responsibility	Chief Financial Officer



4.4. INDICATOR: PERCENTAGE OF TENDERS AWARDED WITHIN PREDEFINED TURNAROUND TIMES

Definition	<p>Tenders must be awarded within predefined turnaround times after the end-user has submitted their request.</p> <p>Tenders above R10 million must be awarded within 9 months.</p> <p>Tenders below R10 million must be awarded within 6 months.</p> <p>Note to finance: explain the technical terms, such as the predefined turnaround time, what counts as awarded, and what constitutes the start date</p>
Source/collection of data	The supply chain management unit should provide data on a spreadsheet.
Method of calculation	<p>Numerator = The total number of tenders awarded within predefined turnaround times for requisitions received by the demand unit from 01 April of each financial year.</p> <p>Denominator = The total number of requisitions received by the demand unit from 01 April of each year.</p>
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	95%
Indicator responsibility	Head: SCM/Chief Financial Officer

5. STRENGTHENED WORKFORCE CAPACITY

5.1 INDICATOR: PERCENTAGE OF EMPLOYEES TRAINED AS PER THE APPROVED WSP

Definition	This indicator measures training plans completed by staff within the reporting period. This includes all WSP training courses, workshops, and other approved learning interventions
Source/collection of data	Spreadsheet from HR
Method of calculation	The total number of employees trained in the financial year, as per the WSP, is divided by the total number of employees registered on the WSP in the same financial year
Assumptions	The training depends on the institution's admission of the applicants. Not all applicants will complete training due to not applying, not attending training, or not meeting the requirements.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	70%
Indicator responsibility	Executive Manager: Human Resources



5.2 INDICATOR: NUMBER OF HEALTH PROFESSIONALS ADMITTED AND TRAINED BY THE NHLS

Definition	The number of health professionals appointed in the NHLS to be trained.
Source/collection of data	Human Resource Information System, which will confirm the appointment of the health professionals admitted and trained in the NHLS. This includes NICD and NIOH
Method of calculation	Number
Assumptions	Demand in the laboratories determines the intake of intern medical scientists.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	550 annually
Indicator responsibility	Executive Manager: AARQA/ Executive Director: NICD / Executive Director: NIOH



6. A CULTURE OF EXCELLENCE

6.1 INDICATOR: PERCENTAGE OF EMPLOYEES WITH PERFORMANCE CONTRACTS APPROVED

Definition	Alignment of individual, team, and organisational performance is required to ensure delivery of strategy and appreciation of employees' contribution.
Source/collection of data	Performance Management System – HRIS
Method of calculation	Numerator = The number of employees with approved performance agreements. Denominator = The total number of employees, expressed as a percentage.
Assumptions	All employees are at work during the contracting.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	98%
Indicator responsibility	Executive Manager: Human Resources



6.2 INDICATOR: PERCENTAGE OF EMPLOYEES WITH PERFORMANCE CONTRACTS REVIEWED

Definition	Alignment of individual, team, and organisational performance to ensure delivery of strategy and appreciation of contribution
Source/collection of data	Performance Management Systems -HRIS
Method of calculation	Numerator = The total number of employees with reviewed performance agreements. Denominator = The total number of employees, expressed as a percentage.
Assumptions	All the employees are at work during the evaluations.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	98%
Indicator responsibility	Executive Manager: Human Resources



6.3 INDICATOR: EMPLOYEE ENGAGEMENT

Definition	This KPI measures how motivated and engaged employees are with their workplace.
Source/collection of data	Employee engagement survey results.
Method of calculation	The service provider manages the survey implementation process. Generally, they have a system that calculates in line with the weighting allocated to the individual questions and dimensions.
Assumptions	Bias response from stakeholders
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	70%
Indicator responsibility	Executive Manager: Human Resources



6.4 INDICATOR: IMPLEMENT THE HR STRATEGIC PLAN

Definition

The Human Resources department is critical to the efficient functioning of NHLS. It must have an approved strategy that guides activities leading to organisational improvements.

The strategy is a formally approved document put into use across the organisation. Development means the strategy has been created, with clear objectives and timelines. Implementation means the strategy is resourced, has an implementation plan, and is being operationalised.

Source/collection of data

Approved strategy and the achievement of the KPIs outlined in the strategy.

Method of calculation

Milestones will be measured as outlined in the Strategic Plan.

Assumptions

Availability of resources, systems, and budget

Disaggregation of beneficiaries

Not applicable

Spatial transformation

Not applicable

Desired performance

Implement 100% of the HR Strategic Plan

Indicator responsibility

Executive Manager: Human Resources

7. RESILIENT INFORMATION AND COMMUNICATION TECHNOLOGY INFRASTRUCTURE SYSTEMS

7.1 INDICATOR: PERCENTAGE OF SYSTEM UPTIME

Definition	This indicator measures the percentage of time the system is functional and available during the reporting period.
Source/collection of data	IT uptime/downtime logs for the network and server
Method of calculation	Total time the system was available divided by total time during the reporting period, expressed as a percentage
Assumptions	Planned maintenance is accounted for during the reporting period.
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	99%
Indicator responsibility	Executive Manager: Information and Communication Technology



7.2 INDICATOR: DEVELOP AND IMPLEMENT AN INFORMATION AND COMMUNICATION TECHNOLOGY STRATEGY

Definition	<p>The IT department is critical to the NHLS's efficient functioning. It must have an approved strategy that guides activities leading to organisational improvements.</p> <p>The strategy will be a formally approved document put into use across the organisation. Development means the strategy has been created, with clear objectives and timelines. Implementation means the strategy is resourced, has an implementation plan, and is being operationalised.</p>
Source/collection of data	ICT Strategy approved by EXCO with a signature and date. Records of strategy dissemination to IT and other relevant stakeholders, and KPI monitoring
Method of calculation	Assessment based on the NIST template
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100% implementation
Indicator responsibility	Executive Manager: Information and Communication Technology



7.3 . INDICATOR: PERCENTAGE OF BUSINESS PROCESSES DIGITISED

Definition	The NHLS aims to convert all business processes from manual to digital to improve efficiencies in the organisation.
Source/collection of data	The old SOP and the revised SOP. An inventory of identified workflows, digitised, and utilisation logs.
Method of calculation	Workflows are fully digitised, divided by the total workflows targeted, expressed as a percentage
Assumptions	Availability of sufficiently skilled and competent staff to carry out the necessary duties
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100%
Indicator responsibility	Executive Manager: Information and Communication Technology



7.4. INDICATOR: IMPROVED CYBERSECURITY MATURITY LEVEL

<p>Definition</p>	<p>To ensure the NHLS digital infrastructure is resilient and compliant with international best practices, we will adopt the NIST Cybersecurity Framework (CSF). We will utilize the four NIST Implementation Tiers to measure the maturity of our risk management processes and set strategic targets.</p> <p>The NIST Implementation Tiers</p> <p>The Tiers represent the progression from informal, reactive responses to agile, risk-informed cybersecurity operations.</p> <p>Tier 1: Partial (Reactive)</p> <p>Characteristics: Cybersecurity risk management is ad-hoc; limited awareness of risks; organizational “firefighting” mode.</p> <p>Tier 2: Risk-Informed (Emerging)</p> <p>Characteristics: Management-approved policies are in place, but implementation is inconsistent across the organization. Awareness exists but lacks integration into the broader culture.</p> <p>Tier 3: Repeatable (Standardised)</p> <p>Characteristics: Formal policies are documented and consistently applied. The organization regularly updates its defences based on the evolving threat landscape.</p> <p>Tier 4: Adaptive (Proactive)</p> <p>Characteristics: Cybersecurity is a core part of the organizational culture. The NHLS uses advanced analytics to predict and thwart attacks before they occur.</p>
<p>Source/collection of data</p>	<p>Assessment template</p>
<p>Method of calculation</p>	<p>Assessment score</p>
<p>Assumptions</p>	<p>The ISM Project will create a template adapted from NIST</p>
<p>Disaggregation of beneficiaries</p>	<p>Not applicable</p>
<p>Spatial transformation</p>	<p>Not applicable</p>
<p>Desired performance</p>	<p>Tier 3</p>
<p>Indicator responsibility</p>	<p>Executive Manager: Information and Communication Technology</p>



8. IMPROVED PUBLIC AWARENESS AND CONFIDENCE

8.1 INDICATOR: DEVELOP AND IMPLEMENT THE COMMUNICATION STRATEGY

Definition	The Communication Strategy articulates the approach for engaging with various stakeholders, outlining the overall communication objectives and establishing core principles to guide all interactions.
Source/collection of data	Communication Strategy approved by Board; evidence of implementation plans, stakeholder engagement plans, and communication reports sent to governance structures
Method of calculation	Milestones will be measured as outlined in the Strategic Plan.
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	100%
Indicator responsibility	Manager: Communications, Marketing and Public Relations



8.2 INDICATOR: IMPROVED CUSTOMER SATISFACTION

Definition	Enhancing customer perception and the post-engagement experience with NHLS.
Source/collection of data	Stakeholder feedback surveys
Method of calculation	The service provider manages the survey implementation process. Generally, they have a system that calculates in line with the weighting allocated to the individual questions and dimensions.
Assumptions	Unbiased opinion from the customer
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	80%
Indicator responsibility	Senior Manager: Communications, Marketing, and Public Relations



8.3 INDICATOR: NUMBER OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH AND SAFETY IEC MATERIALS DEVELOPED AND DISSEMINATED THROUGH VARIOUS DIGITAL PLATFORMS

Definition	This indicator measures the number of occupational and environmental health and safety information, education, and communication (IEC) materials developed and disseminated across various communication platforms to raise awareness, educate, and inform stakeholders about the institution's mandate, priorities, and activities.
Source/collection of data	Press release, newsletters, fact sheets, brochures, infographics, and traditional and social media posts produced and disseminated to stakeholders.
Method of calculation	Total number of occupational and environmental health and safety information IEC materials developed and disseminated through various communications platforms to raise awareness, educate, and inform stakeholders about the institution's mandate, priorities, and activities
Assumptions	None
Disaggregation of beneficiaries	Not applicable
Spatial transformation	Not applicable
Desired performance	16 annually
Indicator responsibility	Executive Director: NIOH



ANNEXURES



DISCIPLINE	CRITICAL TEST	DEFINED TURNAROUND TIME
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LABORATORY SERVICE TESTS

Microbiology	CSF microscopy only	24 hours
	TB NAAT	48 hours

LABORATORY SERVICE TESTS

Haematology	FBC	8 hours
	INR	3 hours
	APTT	3 hours
	Fibrinogen	3 hours
	D-Dimer	3 hours
	Bone marrow aspirate	12 hours

LABORATORY SERVICE TESTS

Chemical Pathology	Urea and Electrolytes (U&E)	8 hours
	Creatinine	8 hours
	CRP	8 hours
	Lipase	8 hours

ANNEXURE A: LIST OF CRITICAL AND FORENSIC CHEMISTRY LABORATORY TESTS AND THE DEFINED TURNAROUND TIMES.

Chemical Pathology	BNP	1 hour
	Troponin	2 hours

LABORATORY SERVICE TESTS

Anatomical Pathology	Non-gynae fluids and FNA for Cytology	5 days
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LABORATORY SERVICE TESTS

Virology	HIV VL	96 hours
	HIV PCR	96 hours

DISCIPLINE	CRITICAL TEST	DEFINED TURNAROUND TIME
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FORENSIC CHEMISTRY LABORATORY TESTS

	Blood Alcohol	90 days
	Toxicology	90 days
	Perishable Foods	30 days
	Non-Perishable Foods	60 days

ANNEXURE B: LIST OF NIOH TESTS AND DEFINED TURNAROUND TIMES

ANALYTICAL SERVICES

NAME OF TEST	TURN-AROUND TIME (TAT)
1. Blood lead	10 working days
2. Blood mercury	10 working days
3. Serum aluminium	10 working days
4. Water aluminium	10 working days
5. Water mercury	10 working days
6. Phenol in urine	15 working days
7. o-Cresol in urine	15 working days
8. Mandelic acid in urine	15 working days
9. Methylhippuric acid in urine	15 working days
10. 2,5-Hexanedione in urine	15 working days
11. Methanol in blood	15 working days
12. Acetone, MEK and MIBK in urine	15 working days
13. Ethanol in Blood	15 working days
14. Trichloroacetic acid in urine	15 working days



NIOH Occupational Hygiene Section analytical tests

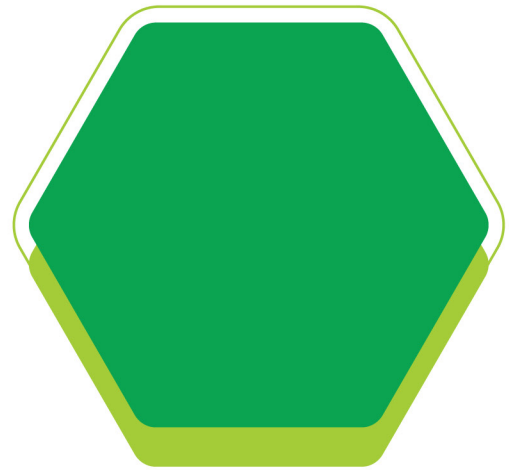
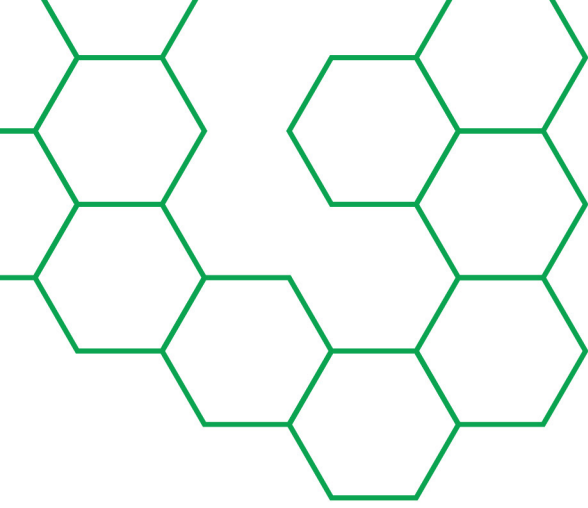
NO.	TEST NAME & METHOD	COLLECTION REQUIREMENTS	TAT
1	Gravimetric weighing analysis - MDHS 14/4 (include a pre-weighed filter in a cassette and a one-way courier service to the client)	Air samples to be collected on a 25mm PVC or a silver filter	10 working days (up to 30 samples)
2	Analysis of respirable crystalline silica using XRD - MDHS 101/2	Air sample taken on 25mm PVC or Silver filter	10 working days (up to 30 samples)
3	Analysis of respirable crystalline silica using FTIR - MDHS 101/2	Air sample taken on a 25mm PVC filter	
4	Asbestos fibre counting using PCM – HSG248 (Include a pre-loaded filter in a cowl and one-way courier service to the client)	Air sample taken on 25mm MCE filter (gridded)	14 working days (up to 20 samples)
5		Air sample taken on 25mm MCE filter (gridded)	14 working days (up to 20 samples)

IMMUNOLOGY & MICROBIOLOGY

TEST	TAT (WORKING DAYS)
Skin prick test (NIOH0037)	7
Patch test (NIOH0039)	14
Specific IgE (NIOH0040)	7
Potability (NIOH0487)	7

ANNEXURE C: SOUTH AFRICAN VACCINE PRODUCERS STRATEGIC PLAN

The South African Vaccine Producers (SAVP) Strategic Plan is in a separate document.



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RP246/2024
ISBN: 978-1-77997-202-6

Title of Publications

National Health Laboratory Service Strategic Plan 2025-2030



NATIONAL HEALTH
LABORATORY SERVICE



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Department:
Health
REPUBLIC OF SOUTH AFRICA

