



2014/15 Highlights

 **NATIONAL HEALTH
LABORATORY SERVICE**

About the NHLS

The NHLS is a public health laboratory service with over 300 laboratories across the nine provinces of South Africa and serves approximately 80% of the South African population.

Vision

Our vision is to partner with the Department of Health (DoH) to build a healthy nation through early detection, diagnosis and monitoring to prevent, manage and treat diseases to reduce the disease burden and promote health and wellness, thereby ensuring a 'long and healthy life for all South Africans'.

Mission

To partner with the Department of Health in:

- Delivering a responsive, quality, accessible, affordable and sustainable pathology service to enable clinical decisions in a seamless, integrated clinical platform
- Appropriately training competent pathology professionals to deliver this service
- Delivering innovative translational research to ensure fulfilment of government's vision of a 'long and healthy life for all South Africans'.

Our values

Following a review and the modification of the NHLS 2010–2015 Strategic Plan, and in order to facilitate an organisational culture that reflects our small but fundamental shift in focus, we are committed to the following values:

- **We value caring**

Caring about the environment and society

This involves consideration for our impact on the environment and local communities, acting with concern and sensitivity. We are committed to behaving ethically and contributing to the economic development of the workforce, community and society at large. We give back to society and the environment and build capacity for a sustainable future.

- **We value our employees united**

Working together towards a common goal

Our employees are united by a common vision and support each other in contributing to a beneficial and safe working environment. Teamwork and cohesion are key and collaboration includes pooling resources and communicating about each other's roles. We foster trust and honesty in interactions with colleagues and behave professionally.

We value all contributions, treat everyone consistently and fairly, and capitalise on diverse viewpoints. We address and resolve conflicts effectively. We listen to others to fully understand and give clear, concise information when communicating feedback, expectations and accountabilities, and during coaching. We make NHLS goals a priority, use NHLS resources wisely and effectively and take responsibility for our work.

- **We value service above self**

Valuing a good work ethic and striving towards service excellence for customers

We are committed to working with customers and building good relationships with them by understanding their needs, responding quickly and providing appropriate solutions. We treat them with respect at all times; we are helpful, courteous, accessible, responsible and knowledgeable in our interactions. We understand that we have internal and external customers to whom we provide services and information. This information should be presented in a clear and concise manner, where the message is adapted to the audience.

- **We value transformation**

Looking forward to the future and growing together

This encompasses investing in the professional growth of staff by sharing knowledge and experience, peer networking, education through training and seeking opportunities to develop. It covers creative problem solving, informed risk-taking, learning from our mistakes and experiences and behaving professionally. We should adapt to change timeously and positively, address setbacks and ambiguity and adapt our thinking/approach as the situation changes. Ideas should be shared and implemented effectively. Leaders should develop innovative approaches and drive continuous improvement as well as effective and smooth change initiatives.

- **We value who we are**

Working with integrity and responsibility

We set and achieve goals, consistently delivering business results while complying with standards and meeting deadlines. We display commitment to organisational success; proactively identify ways to contribute; and take the initiative to address problems/opportunities.

1. Introduction

It gives me great pleasure, as the Chairperson of the Board of the National Health Laboratory Service (NHLS), to present highlights of the NHLS for the financial year 2014/15. This report covers the operational highlights and financial situation of the organisation as presented in the 2014/15 Annual Report.



2. Operational highlights for the reporting period

The NHLS is a national asset which forms the bedrock of the country's healthcare system. As a world-class institution, driven by many talented and committed people, it is a national treasure which operated efficiently and professionally, despite severe austerity measures during 2014/15.

Highlights for the year are as follows:

- The year under review was characterised by a number of transitional events – from the appointment of an interim CEO in November 2014, to the appointment of a new Board and Board Chairperson. With leadership being key to ensuring that the strategic goals of the organisation are met, it was also pleasing to welcome three new staff members: the Chief Financial Officer, Head of the Learning Academy and Company Secretary.
- Dr Sophia Kisting was welcomed as the new Executive Director of the National Institute for Occupational Health (NIOH). She has a great deal of experience in Occupational Health and Safety (OHS) locally and globally as she has worked for many years for the International Labour Organization in Geneva – a role in which she gained valuable insight into the different OHS systems of many countries around the globe.
- The NHLS continued to support world-class research and was the custodian of teaching and training in laboratory medicine in order to produce the next generation of well-trained and competent pathologists, laboratory medical scientists, technologists and technicians. It also continued to be one of the world's foremost participants in addressing formidable disease outbreaks on the African continent.
- The National Institute for Communicable Diseases (NICD) received a special message of congratulation and appreciation from the Speaker of Parliament for its role in sending eight teams of specialists to Sierra Leone during the Ebola outbreak in West Africa.



- The NHLS is responsible for most HIV and TB tests, and plays a critical role in screening for cervical cancer in the public health system. HIV/AIDS and TB treatment depend on accurate and timely tests. Without the NHLS, TB, HIV and cancer patients would not have access to diagnostic testing, which means they would not be properly treated.
- In the year under review, the interim CEO and regional area managers devoted a great deal of energy to engaging with stakeholders to ensure uncompromised service delivery. The team conducted quarterly and monthly meetings with provincial Departments of Health, hospital CEOs and other strategic partners to promote service delivery and client service.
- The Council for Scientific and Industrial Research (CSIR) is a powerhouse for research, technology and engineering knowledge and expertise, whose mandate is to improve the lives of the people of the Republic. The NHLS, on the other hand, seeks to embrace advances in technology platforms, and improve quality and access to diagnostic services by building and implementing technologies that support healthcare delivery, such as diagnostic pathology services.

Collaboration between the two organisations allows for the leveraging of strengths in order to deliver quality and accessible pathology services and has thus far delivered the following result:

- A National Pathology Database was initiated in 2014, aimed at teaching, training and outreach within the NHLS, in order to improve the accuracy and throughput of diagnoses related to diagnostic morphology. The database and associated technology infrastructure was permanently implemented throughout the NHLS's national centres as of February 2015 and was used for the 2014 and 2015 annual morphology training courses.

This partnership is of extreme significance, as the NHLS is uniquely positioned as South Africa's and Africa's largest generator of expert pathology knowledge and the CSIR has designed technologies and workflows to structure and redistribute this information.

- The number of HIV viral load tests performed across the country increased from 2.4 million in 2013/14 to 2.9 million in 2014/15.
- The NHLS entered into collaboration with Roche Diagnostics and Abbott Molecular in a landmark programme to decrease the price of HIV viral load testing. The new pricing structure will benefit the 2.5 million South Africans on anti-retroviral treatment.
- To rebuild and maintain its reputation, a concerted effort was made to strengthen relationships with the National and Provincial DoH, and by March 2015 Gauteng and KwaZulu-Natal had begun to settle their outstanding fees.
- Minister Nhlanhla Nene announced in his budget vote speech on 25 February 2015 that R1.5 billion would be shifted from provincial budgets to the DoH to enable the NICD to be directly funded. This will be offset by lower tariffs for services provided by the NHLS.

- All accredited laboratories maintained their accreditation, and two new academic and five new regional laboratories were recommended for accreditation.
- The Early Infant Diagnosis Polymerase Chain Reaction Proficiency Testing System was fully transferred from Centres for Disease Control (CDC) Atlanta to the NHLS.
- In playing its part in the international fight against the Ebola virus disease, the NHLS opened a diagnostic laboratory in Sierra Leone in August 2014. The laboratory was staffed by the NICD, with teams being rotated every five weeks.
- To attract prospective employees from rural areas into a sector that faces scarce and critical skills shortages, and to promote the NHLS as an employer of choice, 91 biomedical technology students from universities of technology were awarded study bursaries.
- The implementation of TrakCare was completed, among others, at Nelson Mandela Academic Hospital in the Eastern Cape, Charlotte Maxeke Johannesburg Academic Hospital in Gauteng and Universitas Hospital in the Free State. This brings the number of laboratories successfully operating on TrakCare to 242 across the country.
- The DoH, together with the NHLS, have been global leaders in rolling out Xpert MTB/RIF from March 2011, therein addressing the country's high TB incidence rate, the frequency of TB/HIV co-infection, and the burden of multidrug-resistant TB. Since then, 309 GeneXpert instruments of varying sizes (GX4: 110; GX16: 190; GX48:1; GX80: 8) have been installed at 216 sites – both urban and rural. This included seven high-throughput 'Infinity' analysers that were installed in high volume laboratories to increase test capacity.



Cobas 8800 Analyser – The high throughput platform consists of a sample handling unit, extraction compartment and a separate isolated amplification compartment. Reagents are ready to use and can be stored on-board in a refrigerated unit for up to 30 days

- A total of 671 laboratory staff and 2 808 healthcare workers were trained between 1 April 2014 and 31 March 2015 by technical trainers, Programme Manager, and two clinical trainers from the National Priority Programme (NPP) Unit.
- In fulfilling its mandate of teaching and training, the NHLS recruits students to form part of its core staff, such as registrars, medical technicians, medical technologists and intern medical scientists.

- The Learning Academy prioritised skills development through an analysis of employees' most critical skills needs, as identified in their Workplace Skills Programmes. Multiple learning programmes were then offered in the form of short learning programmes, in-service conferences and congresses, as well as Continuing Professional Development programmes in compliance with legislation, to improve the quality of services and assist in the mitigation of risks.
- The Learning Academy was able to partner with the American Association of Public Health Laboratories to provide a course in Foundation of Laboratory Leadership Management (FLLM). Funding was provided by the CDC for 110 junior managers and supervisors within the NHLS to attend the course. This course equips junior managers with the management and leadership skills necessary for the day-to-day management of laboratories.
- During 2014/15, the Learning Academy had an intake of 557 undergraduate students who were placed in Health Professions Council of South Africa (HPCSA) accredited training laboratories, located across all six regions, with the Gauteng and KwaZulu-Natal regions carrying the bulk of the students.
- The organisation of the inaugural Pathology Research and Development (PathReD) Congress, planned for 14–16 April 2015, was completed in the review period. This is the first NHLS PathReD Congress, themed 'Enriching Health through Research: Paving the way for the Future' and will serve as a national platform to showcase ongoing research within the NHLS and partnering institutions. Academic leads will be provided by national and international speakers.
- All the compliance targets according to occupational levels were met. Of note is the fact that the professional level target was met for the first time, increasing from 74% to 76%. This was due to a slight increase in African male and female employees.
- In the reporting period, the NHLS took the necessary steps to ensure good governance. Among other measures, it subscribed to the confidential Scam Stop Reporting System. The Audit and Compliance Office investigated cases reported via Scam Stop, which were related to alleged unfair labour practice and fraud. The response from NHLS staff was positive.
- The NHLS' 13th birthday campaign successfully celebrated the 13 years of the organisation's existence. Not only did it build organisational pride, but it created awareness for new staff to appreciate the remarkable achievements since its founding years.



- The 20 Years of Democracy Campaign saw the NHLS join with other organisations to commemorate South Africa's 20 years of democracy. The campaign reflected on the organisation's contribution to the health sector, and included marketing activations (banners, online banners, email signature, posters, plenty twenty quiz competition, a video clip of the CEO's message, which was broadcast on the NHLS intranet, a 20 year article and advert that were published in the NHLS internal newsletters, and decals for bathrooms). The '20 years' brand, a shield with the South African flag and the NHLS logo and the campaign theme 'Making a difference 13 years on...' was developed.



- A close collaboration with academic partners, and a strong research foundation in the NIOH, NICD and National Cancer Register, ensured constructive contributions and better co-ordination of the NHLS research agenda. Research activities were conducted within the institutions and in NHLS laboratories.
- A total of 676 grant projects were administered in 2014/15. Of these, 171 were new projects awarded, to the approximate value of R238 101 924. The value of each award varies according to the scope of the project undertaken and the funding opportunity the grantor has made available.
- A bilateral agreement was signed between the NHLS and Walter Sisulu University in November 2014, and the Nelson Mandela Laboratory is now officially an academic centre. The NHLS takes pride in this achievement as this is the only Academic Laboratory in the Eastern Cape. The Nelson Mandela Academic Laboratory is accredited for MMed in Anatomical Pathology and two posts have been advertised for registrar training. This training will be the first of its kind in the region and the organisation is looking forward to the first intake in the new financial year.
- The Eastern Cape worked determinedly to implement electronic gate-keeping, so as to reduce repeat testing and rationalise laboratory testing. Frere Hospital was the first and only tertiary hospital to achieve implementation in the period under review. Rules were drafted and tested on TrakCare, with full implementation in February 2015. Collaboration between the laboratory and the hospital proved critical in making this work.

- In November 2014 the Eastern Cape Department of Health appointed eight district laboratory co-ordinators and three gate-keepers to manage and improve laboratory services for all the eight districts. Bilateral meetings were held quarterly to discuss strategic issues and compliance with the service level agreement. The district laboratory co-ordinators and the business managers met on a monthly basis to discuss operational issues, resulting in the streamlining of communication between the parties.
- Notwithstanding the financial predicament experienced by the organisation, NHLS laboratories in Gauteng conducted over 19 million pathology tests in the 2014/15 financial year, denoting an increase of 7% over the previous year's volumes of 17.8 million tests. This was achieved because of the dedication and commitment of staff.
- In order to assist smaller laboratories in preparing for their South African National Accreditation System accreditation, the NHLS implemented the Strengthening Laboratory Management towards Accreditation Programme. This provides an alternative training approach to laboratory management, based on international clinical laboratory standards, to prepare laboratories for accreditation. Proof of the success of this initiative is Natalspruit Laboratory, which participated in the Stepwise Laboratory Improvement Process towards Accreditation component of the programme and improved from a one-star to a four-star rating in one year.
- The Charlotte Maxeke Academic Laboratories completed the migration to the TrakCare Laboratory Information System by the end of March 2015. All laboratories in Gauteng are now working on the same laboratory information platform, which will significantly speed up referrals to Charlotte Maxeke Academic Laboratories and a reciprocal improvement in turn-around times.
- The 'new' Natalspruit Hospital was opened in August 2014, affording the NHLS team the opportunity to move into a new laboratory.
- The KwaZulu-Natal Region remained the largest NHLS region/area by test volumes. Despite challenges faced by the organisation, the region managed to perform 26 019 527 tests, an increase from 25 222 803 in 2013/14, reflecting an increase of 796 674 test codes, and an increase of just over 3.1% in test volumes year-on-year. This increase was mainly attributed to priority tests. GeneXpert tests increased by 206 928 or 49% from 420 550 tests to 627 478 and HIV tests increased by 133 387 tests or 6% from 2 196 878 tests to 2 330 265.

- The NHLS, in collaboration with the Global Fund, joined the fight against TB and HIV alongside government by implementing mobile laboratories attached to the Rustenburg and Potchefstroom Laboratories. Through these mobile laboratories, NHLS National Priority Programmes and the Global Fund are intensifying the fight to combat the disease burden in peri-mining communities, and supporting HIV/AIDS, sexually transmitted diseases and TB campaigns. The mobile laboratories were successfully used during the build-up campaign leading to the World TB Day event that was held in Orkney on 24 March 2015. The joint efforts of the Global Fund, NHLS National Priority Programmes and the North West Laboratories were brilliantly showcased at the occasion.



Sebaka Molapo (NHLS NPP) with Health Minister, Aaron Motsoaledi (centre), and Deputy President, Cyril Ramaphosa (right), at the NHLS mobile laboratory launch of TB testing on World TB Day in Orkney, North West

- In a bid to strengthen NHLS support to the TB programme in KwaZulu-Natal Province, a new high capacity GeneXpert Analyser (the Infinity 80) was installed at the Nelspruit Laboratory. This is the eighth analyser of its type to be installed at the NHLS country-wide, and the first in the province.
- Mpumalanga Province requested a total of 5 128 179 tests in 2014/15. This is an increase of 6% compared to 2013/14. The NHLS continued to support the primary healthcare service in the province by ensuring maintenance of 100% coverage of daily specimen collection from the clinics. In essence, the NHLS collects specimens daily from 311 clinics in the province, 25 of which receive two collections per day. This year the Provincial DoH opened two new clinics, which were immediately incorporated into the specimen collection network of the NHLS.

- The Western Cape Region achieved a 4% increase year-on-year from 11 914 967 tests performed in 2013/14 to 12 392 971 tests in the year under review. Diagnostic services continued at Groote Schuur Hospital, with minor interruptions, mostly due to difficulties in filling staff vacancies and obtaining reagents timeously. The staffing crisis was mostly experienced in, but not confined to, Chemical Pathology, Laboratory Support and Histology. The Groote Schuur Hospital Chemical Pathology and Haematology volumes increased slightly, despite ongoing electronic gate-keeping.
- The NICD's Centre for Emerging and Zoonotic Diseases was among the first groups to deploy laboratory teams and laboratory equipment to assist in the control of the Ebola epidemic in Sierra Leone. This was achievable, largely because of the investment made in South Africa, despite it being at low risk for large outbreaks of viral haemorrhagic fever, in establishing adequate laboratory infrastructure, including the only fixed structure Biosafety Level 4 laboratory facility in Africa. Notably, the funding of the expensive laboratory capabilities in South Africa is independent of donor funding, hence ensuring its sustainability. The mission to Sierra Leone included capacity development and training of local staff, which eventually culminated in the hand-over of the laboratory facility established there to the people of Sierra Leone for their ongoing benefit.

3. Financial performance for the 2014/15 financial year

The following provides highlights of the financial performance of the NHLS for the 2014/15 fiscal year:

- The company generated profit/surplus for the year amounting to R180 million compared to a loss or deficit of R152 million in the previous financial year.
- Revenue grew by 10% from R5.2 billion to R5.7 billion. Revenue from provincial hospitals amounted to 96% of the total revenue generated.
- Production costs, including direct labour and material, grew by 6% from R3.9 billion to R4.2 billion. The lower increase in production cost compared to revenue increase indicates higher productivity and efficiency.
- General or support expenses decreased by 5% from R1.8 billion to R1.7 billion in the financial year under review. This is mainly due to controlled expenditure in this area.
- Assets increased by 20%, mainly as a result of a 17% increase in accounts receivable and an 87% increase in the bank.
- The closing bank account balance at 31 March 2015 was R651 million compared to R348 million in the previous financial year.
- The accounts receivable balance at year end constituted 68% of total assets compared to 71% in the previous financial year. This indicates an improvement in collection by year end.
- The current liabilities increased by 32% compared to the previous financial year. The balance at year end was R1.5 billion compared to R1.2 billion in 2013/14. The increase is mainly attributed to a 51% increase in trade and other payables. The trade and other payables grew from R714 million in 2013/14 to R1 billion in 2014/15. Other major liabilities included R126 million in leave liability and an employee benefits obligation of R854 million.

The variance analysis is summarised as follows:

- The total test revenue was 10.6% higher than budget, with a rand value of R532 million. This positive revenue variance is mainly attributable to Viral Load and GeneXpert volumes being higher by 33% and 39% respectively against budgeted volumes. Viral Load revenue constituted 18% and GeneXpert constituted 7% of total revenue. Upward volumes drove the increase in turnover.
- Teaching income variances arose due to the use of an Educational Services Fee formula which uses actual data received from universities at the end of their academic year to calculate the amount of revenue generated for teaching services.

- Personnel costs were lower than budgeted due to delays in the filling of vacant posts brought on by cash flow constraints.
- A bad debt provision for KwaZulu-Natal of R738 million was the main contributor to the R734 million net variance between actual and budget, due to the continued payment of a monthly flat rate.
- General expenses relate to direct materials and other overheads. Materials spend for the year was R1.8 billion (2014: R1.6 billion). The overall total material percentage to total turnover was realised at 33% which exceeds the budget benchmark of 28.1% by 49% which is R262.2 million. This difference is attributable to a significant increase in the GeneXpert test which has a material cost-to-selling-price ratio of 95%. An unbudgeted utilities provision of R22 million was raised during the financial year in anticipation of various provinces charging the NHLS for use of laboratory space at their health facilities around the country.

4. Conclusion

The NHLS remains a significant player in realising government's aim of ensuring that all South Africans have equitable access to healthcare. The NHLS is known in many circles to be a leader in its field. As an organisation, it remained resilient through difficult challenges and did not deviate from placing patient care first. The NHLS wishes to express its gratitude to the Minister of Health, the honourable Dr Aaron Motsoaledi, for his outstanding help and support in assisting the organisation through the financial challenges it faced in the year under review. We are similarly indebted to the Director-General of Health, Ms Precious Matsoso, for her valued assistance. As the management team of the NHLS, we are most appreciative of the confidence that they have shown in the organisation. The Board, Executive Management and staff of the NHLS are dedicated to creating an NHLS that will be a flagship in the coming National Health Insurance dispensation by supplying life-saving laboratory support to the maintenance of a healthy South Africa.



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



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