



**MINISTRY OF HEALTH**

---

# **Uganda National Health Laboratory Services Policy**

**August 2009**

---

## TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS .....	iii
FOREWORD.....	iv
GLOSSARY OF TERMS.....	vi
1.0 INTRODUCTION .....	1
1.1 Policy Rationale .....	1
1.2 Role and Use of Health Laboratory Services .....	1
1.3 Vision, Mission, Objectives, Principles and Values .....	2
2.0 POLICY CONTEXT .....	2
3.0 SITUATIONAL ANALYSIS .....	4
4.0 POLICY STATEMENTS.....	8
4.1 Organization and Management .....	8
4.2 Laboratory Services .....	8
4.3 Facilities and Safety.....	9
4.4 Equipment and Supplies.....	9
4.5 Human Resources .....	10
4.6 Quality Management System .....	11
4.7 Information Systems.....	11
4.8 Research and Development.....	12
4.9 Community.....	12
4.10 Partnerships .....	13
4.11 Regulatory and Legal Framework .....	13
4.12 Monitoring And Evaluation .....	14
4.13 Financing and Accountability.....	14
5.0 IMPLEMENTATION OF THE POLICY .....	15
6.0 CONCLUSION.....	15

## ACRONYMS AND ABBREVIATIONS

ACP/STD	AIDS Control Programme/Sexually Transmitted Diseases Reference Laboratory
AHPC	Allied Health Professionals' Council
AMREF	African Medical and Research Foundation
CDC	Centers for Disease Control and Prevention
CPHL	Central Public Health Laboratories
FIND	Foundation for Innovative New Diagnostics
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSSP	Health Sector Strategic Plan
IDI	Infectious Diseases Institute
JCRC	Joint Clinical Research Centre
JMS	Joint Medical Stores
MOH	Ministry of Health
NDA	National Drug Authority
NMS	National Medical Stores
NTLP	National Tuberculosis and Leprosy Program
NTRL	National Tuberculosis Reference Laboratory
NUMAT	Northern Uganda Malaria, AIDS and Tuberculosis Program
PPPH	Public Private Partnership for Health
SOPs	Standard Operating Procedures
TB	Tuberculosis
UMDPC	Uganda Medical and Dental Practitioners' Council
UMLTA	Uganda Medical Laboratory Technology Association
UNCST	Uganda National Council for Science and Technology
UNMHCP	Uganda National Minimum Health Care Package
UVRI	Uganda Virus Research Institute
WHO	World Health Organisation

## FOREWORD

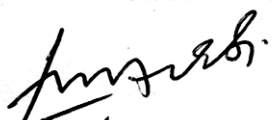
Accurate and reliable diagnosis is the cornerstone of disease management and prevention. Laboratories provide the bulk of available diagnostic techniques and are indispensable in healthcare delivery. A reliable and properly organized laboratory system not only generates information critical to individual case management but also to disease surveillance and control. In addition, operational research which plays a key role in designing diagnostic and treatment schemes cannot do without laboratory data.

Furthermore, maintaining a functional and effective national health laboratory structure and network is a complex undertaking that requires the guidance, support and regulation of well laid down policies. On its part, the Ministry of Health has spared no effort in ensuring availability of the relevant framework for effective laboratory services. In line with this, a process to develop the National Health Laboratories Policy was initiated about 10 years ago; and over the past 2 years, the Ministry has collaborated with partners including the Foundation for Innovative New Diagnostics (FINN), CDC-Uganda and AMREF among others to accelerate the process. This renewed effort has culminated into the first Uganda National Health Laboratory Policy Document.

Developed in the context of the National Health Policy, the Health Sector Strategic Plan I and II and the Public Private Partnerships Policy, this policy is geared to availing reliable laboratory services to all people in Uganda so as to support the delivery of the Uganda Minimum Health Care Package. The policy sets direction in 13 key areas that are fundamental to attaining available and sustainable quality laboratory services in the country; including; organization and management; delivery of the services; laboratory facilities and safety; laboratory equipment and supplies; human resources; quality management systems; information systems; research and development; community involvement; partnerships; regulatory and legal framework; monitoring and evaluation; and financing and accountability.

For each of the subject areas, a number of feasible and cost-effective strategies have been outlined. The policy will thus form the basis for development of a 5 year strategic plan for the delivery of robust and coordinated laboratory services for the country.

This policy is a comprehensive document that addresses all the critical issues for reliable laboratory services in the country. It marks a major milestone to support the development and delivery of the Uganda's healthcare system. All stakeholders will find the document to be an invaluable resource material.



Dr. Sam Zaramba

**Director General Health Services**

## **ACKNOWLEDGEMENTS**

Development and finalization of this policy is a result of commitment and effort from the Ministry of Health, several stakeholders and development partners who have been engaged in a series of policy reviews, meetings, workshops, and individual as well as institutional consultations over a period of time.

The Ministry of Health extends special thanks to Dr. Alex Opio (the Assistant Commissioner of health services, Department of National Disease Control) and Dr. Jackson Amone (Assistant Commissioner, Department of Integrated Curative Services) who committed time and effort in steering the process of developing and finalizing this policy. Special thanks go to the Foundation for Innovative New Diagnostics (FIND) which over the past 2 years has joined others, facilitated, and participated in this process; and CDC- Uganda and AMREF who have been key facilitators of this process over the last 10 years.

Much appreciation also goes to the following organizations/institutions/stakeholders that were duly represented and contributed towards the development of this policy: WHO Country Office; CPHL; NTLP and NTRL;UVRI; NDA; NMS; JCRC; IDI; NUMAT; AHPC; UMLTA; Makerere and Mbarara University Medical schools; the following hospitals: Lira, Gulu, Mbale, Masaka, Soroti, Mbarara, Hoima, Jinja, Arua, Kabale, Lacor, Mbarara, Mulago, Nsambya, Kadic; as well as Kotido HC IV and Ebenezer Laboratory.

Last, but not least, the Ministry of Health is grateful to all those institutions and individuals who have not been specifically mentioned above, but who directly or indirectly contributed to the successful development and finalization of this policy document.

## **GLOSSARY OF TERMS**

**Health/Medical Laboratory:** The International Standards Organization (ISO) 15189:2003 defines the health/medical laboratory as a laboratory for biological, microbiological, immunological, chemical, immuno-hematological, biophysical, cytological, pathological or for examination of other materials derived from the human body for the purposes of diagnosis, prevention and treatment of disease in , or assessment of the health of human beings, and which may provide a consultant advisory service covering all aspects of laboratory investigations including the interpretation of results and advice on further appropriate action. In this policy, the term ‘health laboratory is used instead of ‘medical laboratory’; this is to reserve consistency with policy language used in other health sector policies.

**Laboratory client:** These are such persons that seek laboratory services and these may be patients and/or, researchers, clinicians, and others who may be seeking testing/clinical/preventive services.

**Laboratory practitioner:** These are such persons that are trained, qualified and employed to provide laboratory services.

**UNMHCP:** The Uganda National Minimum Health Care Package comprises of interventions that address the major causes of the burden of disease in the country. This package is the cardinal reference in determining the allocation of funds and other essential inputs for health. It has the following four clusters:

- a) Communicable Disease Control (CDC)
- b) Non-communicable Disease Control (NCD)
- c) Maternal and Child Health (MCH)
- d) Health Education and Promotion (HEP)

## **1.0 INTRODUCTION**

### **1.1 Policy Rationale**

The underlying philosophy and rationale of this policy is that health laboratory services are essential for the delivery of quality health care and should be made available to all the people of Uganda. Poor health laboratory services subject patients to inappropriate treatments, chronic ill-health, high out-of-pocket expenditures on health care, loss of incomes and ultimately loss of confidence in health services. Moreover, poor laboratory services are also costly in terms of high wastage of scarce public resources on ineffective treatments, loss of economic productivity of the population due to chronic illness and loss of life.

The policy aims to provide a framework for ensuring that the health laboratory services in Uganda are strengthened so as to adequately support the effective and efficient delivery of the Uganda National Minimum Health Care Package (UNMHCP) to all people in Uganda, as advocated by the National Health Policy.

The idea to develop this policy was first conceived in 1994. Several efforts have gone into producing the policy, with one draft written in 2004, and another in 2006. This policy builds on these efforts.

The process has involved extensive consultations with representatives from several stakeholder institutions, development partners, and laboratory staff drawn from health facilities at different levels, through workshops and meetings, and the review and analysis of several policy documents dealing with health issues in Uganda.

### **1.2 Role and Use of Health Laboratory Services**

Several commendable efforts have been invested in the improvement of health for the people of Uganda through the development of several policies and establishment of structures to facilitate implementation. The National Health Policy advocates “the attainment of a good standard of health by all people in Uganda, in order to promote a healthy and productive life”. To achieve this, points of patient-provider contact for care, which are the health facilities, need to function effectively. These health facilities need strong support systems. The health laboratory service is one such support system, and it is a critical one.

A well-functioning health laboratory service provides vital information needed for proper planning and utilization of health resources, more so in resource-limited settings. It creates a link between the clinicians, laboratory practitioners, and the patients. These links ensure that patients are treated on the basis of a correct diagnosis, rather than only on clinical symptoms, which promotes better management of diseases, faster recovery and less visits to the health facility. This will enhance the trust between clinicians and laboratory practitioners and build

confidence in the health system. This reduces the practice of self-medication by patients, one of the major contributors to drug-resistance by many diseases, and also promotes better functioning of the referral system.

This ultimately reduces costs both on the patients' side and that of the health system, which makes the system more sustainable in the long run.

Apart from the routine diagnosis and management of disease conditions, laboratories contribute immensely towards health research, disease surveillance programmes, the management of disease outbreaks, and forensic investigations. All this enables adequate and timely planning for effective health interventions.

### **1.3 Vision, Mission, Objectives, Principles and Values**

#### **1.3.1 Vision**

Quality health laboratory services available to all people in Uganda.

#### **1.3.2 Mission**

Provide quality, cost-effective and sustainable health laboratory services to support the delivery of the Uganda National Minimum Health Care Package at all levels.

#### **1.3.3 Objectives**

- To put in place an appropriate organizational and management structure for coordinating laboratory services.
- To develop, recruit, deploy, motivate, and retain adequate numbers of human resources for laboratory services.
- To mobilize financial and logistical resources required to support the delivery of quality laboratory services.
- To establish a system for monitoring and evaluation of laboratory services.

#### **1.3.4 Principles and Values**

The following principles will guide the implementation of this policy:

- High quality laboratory services which are dependable, credible, accurate and timely.
- Value-for-money services; which services are efficient in time, reliable, easily accessible, and affordable.
- Integrity, honesty and respect for everybody.

## **2.0 POLICY CONTEXT**

This policy was formulated within the context of the following national, regional and global policies:



## **2.1 National Policy Context**

The overall goal of the National Health Policy is “the attainment of a good standard of health by all the people in Uganda, in order to promote a healthy and productive life”. The main focus of the policy is the delivery of the UNMHCP delivered under the principles of primary health care, equity, good quality services, and strengthening of collaboration and partnerships with all stakeholders both public and private.

The Health Sector Strategic Plans I and II do recognize the contribution of the laboratory systems and their impact on the quality of health services and health outcomes. One of the strategies highlighted in those plans is the strengthening of the laboratory systems in order for them to adequately support the implementation of the UNMHCP. The development of the National Health Laboratory Services Policy, the National Laboratory Strategic Plan, Laboratory Standards and Guidelines; as well as their implementation; are some of the mechanisms to facilitate the attainment of the above strategy.

The National Hospital Policy aims to provide equitable access to cost-effective hospital services on a sustainable basis for all people in Uganda, through improvement of the organization, capacity and management of the hospital and health facility network.

The Human Resources for Health Policy emphasizes the need to develop and maintain a health workforce that will equitably, effectively and efficiently support the delivery of the UNMHCP.

Other policies that guide the prevention and management of diseases such as malaria, TB, and HIV/AIDS all aim to support and promote the health development agenda, and thus the overall development of the nation.

## **2.2 Regional policy context**

Uganda is committed to all regional efforts aimed at improving health and development in East Africa and Africa as a whole. More specifically, the *2008 Maputo Declaration on Strengthening of Laboratory Systems in Africa* recognizes the challenges limiting the scale-up of services for TB, malaria and HIV. It calls on national governments, donors, and partners to join their efforts in integrating support and improving laboratory systems.

## **2.3 Global policy context**

The Millennium Development Goals aim at eradicating poverty and improving health. Three of the goals are specifically aimed at health improvement through reduction of child mortality; improvement of maternal health; and the fight against HIV/AIDS, malaria and other diseases.

This policy is therefore in line with national, regional and global health goals and priorities. The laboratory system is an important support system whose contribution is critical towards achieving all the above health goals. It must therefore be an integral part of the whole health systems development process. This policy is to guide the strengthening of laboratory services to support the wider over-arching health policies.

### **3.0 SITUATIONAL ANALYSIS**

#### **3.1 National Laboratory structure**

The national health laboratory services within Uganda are diverse and they mirror the health services levels. The range of services rendered varies from the most basic at Health Centre Levels III and IV, through general hospital and regional referral hospital laboratories to national reference laboratories.

At the national level are the specialized laboratories serving as national referral centers of excellence including the Central Public Health Laboratories (CPHL), the National Tuberculosis Reference Laboratory (NTRL), the Infectious Diseases Institute (IDI), the National STI/STD Reference Laboratory, the Uganda Virus Research Institute (UVRI), the Joint Clinical Research Centre (JCRC), and the Uganda Blood Transfusion Services (UBTS). The national referral hospitals at Mulago and Butabika have extended laboratory facilities. Additional reference facilities are planned at Mbarara University and Gulu hospitals

At the next level there are laboratory services at Regional Referral Hospitals. Most districts have a general hospital; in districts where there is no general hospital a Health Centre IV takes on this responsibility. Some districts also have a further 1-2 hospitals, 4-5 Health Centre IVs and 5-10 Health Centre III's. Of the 991 Health Centre IIIs, only 600 have laboratories.

In addition to the laboratories under the public system there are private laboratories at hospitals and health centres run by the non-profit sector such as Nsambya and Mengo hospitals, Kibuli hospital, Rubaga hospital, Lacor hospital; and at private-for-profit hospitals such as Kampala International, Mayanja Memorial, Mbarara Community, Gulu Independent and others. There are many laboratories in private clinics as well as private stand-alone laboratories.

In addition to all the above there are also laboratories associated with medical and laboratory training institutions, such as the Department of Medical Microbiology in the School of Biomedical Sciences at Makerere University.

A comprehensive national health laboratory policy would encompass all of these laboratories.

#### **3.2 Organisation and Management**

The health laboratories do not fall under a specific unit at the Ministry of Health. Management, coordination and supervisory roles and responsibilities of the different levels are not clearly defined, and there is no single coordinating body for laboratory services.

Activities related to disease surveillance and investigation of outbreaks fall under the department of National Disease Control, while all clinical laboratories within facilities fall under the department for Clinical services. CPHL falls under the National Disease Control department, but by virtue of its activities carries out work related to both departments in the Ministry. Although its mandate is to act as a national reference laboratory, CPHL also carries out coordination and supervision for lower level laboratories. The latter role usually compromises effective delivery of its reference services. There is thus a need to clearly define and separate these roles.

The other reference labs and the national referral hospitals are autonomous.

### **3.3 Infrastructure**

Many of the facilities that were built some decades ago are dilapidated and in need of renovation or upgrading to meet current recommended infrastructural standards. Many lower level facilities have been upgraded to HC-III and IV level in terms of services delivered, but for some, their infrastructural capacity has not been improved. There is widespread lack of reliable sources of utilities such as water and power, and many laboratories lack effective mechanisms for safe waste disposal and infection control.

### **3.4 Human Resources**

There are a number of training institutions, both public and private, that produce laboratory professionals, but there are constraints in deploying, recruiting, and retaining them in public sector health laboratories, especially in rural and remote areas. Thus, many laboratories do not meet the recommended staffing norms and instead resort to employing unqualified personnel referred to as laboratory attendants and microscopists. These cadres have no formal technical training and are not recognised or registered by the Allied Health Professionals' Council (AHPC).

There is widespread dissatisfaction amongst laboratory practitioners with complaints of low pay; lack of respect and recognition by other health care practitioners; poor working conditions; and lack of a clear program on career progression and professional development. All this causes demoralization which further compromises the quality of services delivered.

The number of highly specialised practitioners such as pathologists is still very low. Even so, there are limited positions at an appropriate level to absorb highly qualified practitioners.

With all the above challenges, many laboratory professionals are leaving the country for better opportunities, further worsening the human resources crisis in the country's health sector.

### **3.5 Equipment and Supplies**

Laboratory supplies and reagents are procured through Joint Medical Stores (JMS), National Medical Stores (NMS), and other sources. Generally higher level facilities are relatively better equipped than lower level facilities. The non-government sector facilities are usually better equipped and better stocked with reagents and supplies, probably due to multiple supply

channels. But generally there are weak and poorly coordinated inventory and procurement systems to ensure a non-interrupted supply. Many experience regular stock-out of essential reagents, limiting their ability to carry out basic tests.

Many laboratories lack basic equipment such as microscopes and sterilizers. Some equipment, including some that come through donations do not meet required standards. This is due to lack of an effective system that would ensure compliance to standards before procurement.

Equipment in some facilities either lacks skilled users or are not adequately maintained, thus leading to wastage of resources. This is usually due to lack of inclusion of maintenance agreements in the purchase contracts, and the lack of training programs for users in the use and basic maintenance for the equipment.

### **3.6 Quality of services**

Inadequacies in the infrastructure, human resources, equipment, supplies and other aspects compromise the quality of services delivered at many facilities. The decline in quality has caused loss of trust in the services by both clinicians and patients.

Guidelines and standard operating procedures (SOPs) are not fully disseminated and implemented in many facilities especially in the private sector, and very few laboratories get quarterly technical support supervision due to limited capacity of the supervisory bodies. Only facilities involved in vertical programs such as those related to TB and HIV/AIDS do get some regular in-service training and supervision.

There is no clearly developed and well-coordinated system for internal and external quality assessment. There is also no national laboratory accreditation body to set and promote improvement of quality and standards of laboratory services, although some measures are being undertaken in this area. The AHPC, CPHL and National Drug Authority (NDA) all carry out some quality assurance functions for the laboratory sector, but they lack adequate capacity to do this effectively and their responsibilities need to be clearly defined.

The institution of a total quality management system for every laboratory is essential to ensure quality testing services. The quality management system covers every phase of diagnostic testing from pre-analytic to analytic to post-analytic. In addition to the provision of standard operating procedures (SOPs), support supervision, the quality management system includes internal quality control (including internal audit), external quality assurance (including site assessment and proficiency testing and/or rechecking) and continual quality improvement (gap analysis, corrective actions and retraining where necessary). An adequate laboratory commodities supplies system to ensure good quality reagents and maintenance and servicing of instruments is required.

In addition there is an urgent need for national laboratory safety guidelines to protect laboratory workers, the community and the environment.

Laboratory based research only takes place in few reference and research laboratories, such as UVRI and these will become part of the Uganda National Health Research Organisation.

However, operational research should be encouraged throughout the health laboratory system, as this will lead to improvements in quality of services, provided the research activities do not take priority over service to patients.

### **3.7 Information systems**

Currently information is managed manually, and is not effectively used at many levels. Transmission between different levels and sectors is also not very effective. The use of modern computerized systems is limited, possibly due to insufficient funding to enable acquisition as well as limited skills among the staff that would have to use it.

The system of keeping laboratory records and collating data from testing laboratories also needs to be standardized and initiated where it is not presently taking place. A data collection system was established by CPHL with a data base implemented at CPHL in 2006, and MOH now records monthly figures of testing and results at facilities.

### **3.8 Regulatory framework**

The existing regulatory system is weak and not effectively carrying out its duties. The AHPC is mandated with registering all laboratory practitioners and laboratories. This council is understaffed and underfunded. In addition, there are few independent stand-alone laboratories, with most in the private sector being associated with private clinics and therefore being registered with the UMDPC. This limits the financial resources available to the AHPC in form of licensing and registration fees. All this limits the council's capacity to do its work, thus many laboratories operate without proper registration of staff or the facilities themselves.

### **3.9 Monitoring and Evaluation**

Currently there is no effective system or measurable indicators to assess the laboratory system's performance on whether it is effectively supporting the delivery of the UNMHCP. This system needs to be put in place.

### **3.10 Financing**

The health laboratory services are grossly under-funded. There is no dedicated budget line for laboratory services. This urgently needs to be addressed. However, without a central unifying and coordinating body for laboratory services, there cannot be a clear voice for funding. A laboratory policy and clear organisational structure and leadership at the right level within the Ministry could address this.

### **3.11 Key challenges**

The key challenges to be addressed by this policy are: establishment of a clear organisational structure and management that encompasses all the health laboratories, with clear roles and responsibilities, and with leadership at the appropriate level within the Ministry of Health; infrastructural improvement for public sector laboratories; the issues affecting training, recruitment, deployment, and retention of laboratory staff in the public sector; adequate,

quality assured equipment and supplies to the laboratories; laboratory and services accreditation; a regulatory framework for laboratories; and adequate financing of health laboratory services.

## **4.0 POLICY STATEMENTS**

### **4.1 Organization and Management**

#### **Policy Objective:**

A clear organizational structure with appropriate authority to coordinate and manage the provision of comprehensive health laboratory services in the country shall be in place.

#### **Strategies:**

- 4.1.1 Raise the profile of laboratory services within the Ministry of Health (MOH) in order to provide stewardship, coordination and management of laboratory services
- 4.1.2 Streamline the laboratory organizational structure under one clear leadership
- 4.1.3 Establish appropriate and effective linkages among public and between public and private health sector laboratories
- 4.1.4 Define roles and responsibilities of key actors
- 4.1.5 A Laboratory services structure to provide stewardship and technical support shall be established at district level.

### **4.2 Laboratory Services**

#### **Policy Objective:**

Quality Laboratory Services at the specified health system levels shall be provided to support effective patient management, disease surveillance, epidemic investigation, research and other specialized services in line with Uganda National Minimum Health Care Package (UNMHCP).

#### **Strategies:**

- 4.2.1 Laboratories at each level of health care and specialized centers shall have a list of recommended tests to meet the needs of their clients
- 4.2.2 There shall be clear guidelines for safe and effective referral of specimens and/or patients for laboratory testing
- 4.2.3 Specialized laboratory services shall be provided by CPHL, Uganda Blood Transfusion Services, UVRI, TB Reference Laboratory, JCRC, IDI, STI/STD, university laboratories and other qualified laboratories

4.2.4 Laboratory services shall provide necessary support for disease surveillance and investigations and management of outbreaks

4.2.5 Access and equity shall be the guiding principles for the delivery of laboratory services

4.2.6 The importance of laboratory services for quality health care shall be promoted in clinical pre-service and in-service training

4.2.7 Effective communication and working relationships between laboratory professionals and other health providers shall be promoted

### **4.3 Facilities and Safety**

#### **Policy objective:**

All laboratory facilities shall have appropriate space and safe environment for health personnel, clients and the community.

#### **Strategies:**

4.3.1 Review, update and disseminate the national laboratory safety guidelines for all levels of laboratory services, as appropriate.

4.3.2 Construction and renovation of laboratories shall be in conformity with national standards and guidelines.

4.3.3 All laboratories shall have procedures and required resources for laboratory safety.

4.3.4 All laboratories shall put in place measures to safeguard against malicious use of chemicals, infectious agents and other harmful materials.

### **4.4 Equipment and Supplies**

#### **Policy objective:**

All laboratories shall have appropriate functional equipment and adequate supplies to support uninterrupted delivery of the UNMHCP.

#### **Strategies:**

4.4.1 Ensure that an effective supply chain management system is in place to select, quantify, procure, transport, store, distribute and keep records of all equipment and supplies

4.4.2 All equipment and supplies shall conform to national specifications and standards and shall be registered by the appropriate regulatory authority.

- 4.4.3 A system shall be in place to ensure that all products and equipment comply with specified standards before their procurement and/or release into use.
- 4.4.4 An effective and sustainable mechanism for equipment maintenance and servicing shall be in place at procurement and utilization levels.
- 4.4.5 All donations of equipment and supplies shall comply with the agreed national standards and guidelines
- 4.4.6 An effective system shall be in place for safe disposal of obsolete equipment and expired supplies for both public and private sector health laboratories.

## **4.5 Human Resources**

### **Policy objective:**

The laboratory services shall have an adequate number of skilled staff with the necessary competency and motivation to deliver quality laboratory services at all designated levels.

### **Strategies:**

- 4.5.1 Establish an effective laboratory human resources management program to plan for, train, recruit, deploy and retain the required personnel at all levels of laboratory service delivery
- 4.5.2 Laboratory professionals shall be equipped with skills in management and leadership
- 4.5.3 Develop an innovative strategy to meet old and new human resources demands to provide quality services at all levels
- 4.5.4 An occupational health and safety program for laboratory professionals shall be established
- 4.5.5 Promote cooperation between MOH and other sectors to harmonize training of laboratory personnel
- 4.5.6 Provide in-service training to laboratory staff to ensure quality services
- 4.5.7 Provide opportunities for continuous professional development and career advancement for laboratory staff
- 4.5.8 All laboratory staff shall work in accordance with public service, ethical, safety and professional codes of conduct
- 4.5.9 Provide opportunities for training in quality management systems for all staff



## **4.6 Quality Management System**

### **Policy objective:**

There shall be a national laboratory quality management system in place to ensure quality service delivery

### **Strategies:**

- 4.6.1 Ensure quality laboratory services through the setting and implementation of standards and technical guidelines
- 4.6.2 All laboratories shall have and use SOPs for all procedures and activities; from sample collection to reporting of results
- 4.6.3 Ensure designated staff responsible for implementation of quality management at each facility
- 4.6.4 Maintain an effective countrywide technical support supervision system.
- 4.6.5 Develop an effective mechanism for internal and External Quality Assessment (EQA) at national level, and establish links with internationally recognized EQA bodies.
- 4.6.6 Establish an accreditation system for laboratories for different levels of services
- 4.6.7 All laboratories shall comply with the set quality standards

## **4.7 Information Systems**

### **Policy objective:**

Laboratory information systems shall be established and strengthened to promote laboratory performance, quality patient care, surveillance, evidence-based planning, policy formulation and research

### **Strategies:**

- 4.7.1 The laboratory information system shall be strengthened and mainstreamed into other HMIS and disease control information systems
- 4.7.2 Laboratory staff shall be trained to accurately record, collate, analyze, interpret and communicate laboratory data in a timely manner

4.7.3 Use and dissemination of laboratory information shall be in accordance with standard guidelines to ensure confidentiality and proper archiving

4.7.4 The use of contemporary information technology for the management of information shall be harnessed and promoted

## **4.8 Research and Development**

### **Policy objective:**

Laboratories shall be encouraged to participate in relevant health research to improve patient management, laboratory performance and disease control.

### **Strategies:**

4.8.1 A mechanism shall be established to strengthen the conduct of research in health laboratories

4.8.2 Mechanisms shall be developed to ensure that research does not divert staff and other resources nor take priority over routine diagnostic laboratory services required for direct patient care

4.8.3 Research shall be conducted within the approved guidelines as set by the Uganda National Council for Science and Technology.

## **4.9 Community**

### **Policy objective:**

Laboratory services shall be an integral part of the health services responsiveness to the community needs and shall adhere to ethical standards.

### **Strategies:**

4.9.1 Health promotion shall be used to inform the communities about the role and use of laboratory services.

4.9.2 Communities shall be informed about their right to appropriate laboratory diagnostic testing.

4.9.3 Laboratory staff shall treat clients with respect and shall safeguard confidentiality and privacy

## **4.10 Partnerships**

### **Policy objective:**

Networking between public and private laboratories shall be promoted to improve access and equity of laboratory services.

### **Strategies:**

- 4.10.1 Promote sharing of information, testing capacity, and resources between the public and private sector
- 4.10.2 Strengthen collaboration with other Ministries to improve the organization, financing, management, and delivery of quality laboratory services
- 4.10.3 Establish mechanisms for out-sourcing specific laboratory services in order to increase efficiency
- 4.10.4 Mechanisms shall be developed to promote the establishment of laboratories in underserved areas by providers outside the public system

## **4.11 Regulatory and Legal Framework**

### **Policy objective:**

National legal and regulatory framework components shall be streamlined and strengthened to enforce licensing, registration and control of all health laboratory services.

### **Strategies:**

- 4.11.1 All laboratories, including those in clinics and hospitals, shall meet the required standards for registration in terms of infrastructure, equipment and personnel
- 4.11.2 Ensure all practicing laboratory professionals are licensed and registered with the Allied Health Professionals Council, or other relevant councils
- 4.11.3 Mechanisms shall be in place to ensure compliance to requirements of facilities, equipment, supplies and personnel
- 4.11.4 All laboratory training schools/ institutions shall be registered and accredited by the relevant bodies.
- 4.11.5 All research conducted in health service laboratories shall comply with the approved regulatory frame work.

- 4.11.6 All laboratory staff shall adhere to professional ethical codes of conduct to protect patients against exploitation and physical harm.
- 4.11.7. Capacity of the Allied Health Professional Council (AHPC) to regulate laboratory services shall be strengthened
- 4.11.8 Roles and responsibilities of Allied Health Professional Council and the Uganda Medical and Dental Practitioner Council (UMDPC) shall be harmonized.

## **4.12 Monitoring And Evaluation**

### **Policy objective:**

Mechanisms shall be in place to monitor and evaluate the implementation of this laboratory policy.

### **Strategies:**

- 4.12.1 Develop key measurable performance indicators to monitor laboratory services
- 4.12.2 Ensure regular assessment of the overall performance of the laboratory services in line with the Health Sector Strategic Plan

## **4.13 Financing and Accountability**

### **Policy objective:**

Effective financing mechanisms shall be put in place centrally and at local government levels to ensure availability and accessibility of adequate resources for laboratory services.

### **Strategies:**

- 4.13.1 Establish a dedicated budget line for laboratory services in the Ministry of Health and district health budgets
- 4.13.2 Donor input for laboratory services shall be harmonized with the National Health Policy
- 4.13.3 A mechanism shall be put in place for cost recovery for private service delivery in public hospitals
- 4.13.4 A transparent system shall be in place to ensure programmatic and financial accountability of the laboratory services

4.13.5 Appropriate financial support shall be extended to private health facilities for laboratory services in accordance with Public Private Partnership for Health (PPPH) Policy.

## **5.0 IMPLEMENTATION OF THE POLICY**

It is the Ministry's intention to fully translate this policy into practice within the health system. The policy has been developed within the context of the National Health Policy, the Health Sector Strategic Plan, and regional and international health development goals. Therefore, its implementation will be in the same line within the existing government, NGO, and private sector structures.

To effectively guide this process, the Ministry of Health has already embarked on developing a National Laboratory Strategic Plan. This will give clear guidance on strategic actions needed to improve the laboratory systems, as well as insight into policy, implementation and budgetary implications for translating the policy into practice. All this will guide the mobilization of the needed resources, as well as help the Ministry of Health, all stakeholders and partners on identifying their areas of strength so as to target their input effectively and efficiently.

The Ministry therefore calls upon all stakeholders in both the public and private sector to continue working with it and increase efforts in promoting the improvement of laboratory services in the country. It is anticipated that the same spirit of collaboration shown during the development of this policy will also prevail during its implementation.

## **6.0 CONCLUSION**

Laboratory services in Uganda have suffered for a long time and this has adversely affected the effective and efficient delivery of health services. In the absence of a guiding framework, several efforts invested have not yielded the expected impact. The adoption of this policy will be the beginning of a new era of laboratory and general health systems strengthening. The clear framework will guide appropriate allocation and utilization of the available resources, as well as direct the mobilization of needed resources to fill the badly affected areas in the system. Harmonization of services and processes will reduce duplication and resource wastage which in turn will make the health system more efficient. To achieve sustainable improvements, a concerted effort, co-operation and collaboration between MOH and all stakeholders are needed. All the partners are called upon to bring this vision to reality.