UGANDA CANCER INSTITUTE
STRATEGIC PLAN
2015/16 – 2019/20

REPUBLIC OF UGANDA
MINISTRY OF HEALTH

Uganda Cancer Institute

Foreword

The recent World Cancer Report (2014) paints a grim picture of cancer in the developing countries, especially in the East African region, due to the high burden of cancer. The majority of the new cancer cases in this region, which includes Uganda, are a consequence of an ageing population, various risk factors including lifestyle (tobacco and alcohol consumption and physical inactivity), and infections like hepatitis, human papilloma virus, Epstein Barr Virus (EBV), HIV and others.

Cancer patients in Uganda are at higher risk of premature deaths mainly due to the lack of early detection programmes and access to essential, holistic and adequate cancer treatment. These adverse outcomes mainly affect the poor and underprivileged groups such as children with otherwise treatable cancers. For the nation, the impact of cancer goes beyond the death of individuals to the economy, a situation aggravated by an already overburdened and underfunded health-care system. The irony of this situation is that about half of all cancers prevalent in Uganda can be avoided if current available knowledge on best practices is implemented.

The development of this first ever Strategic Plan of the Uganda Cancer Institute is, therefore, both timely and appropriate, being the first objective step taken by Uganda to evolve a comprehensive National Cancer Control Strategy. This is the beginning of the realignment of all elements of the current programmes for cancer prevention, early detection, treatment and rehabilitation.

The Strategic Plan reinforces the current approaches being initiated within primary, secondary and quaternary cancer prevention approaches in the country. It will streamline the cancer care system including pathways, clinical trials, research and training programmes, while creating a basis for resource mobilisation and motivation of health workers engaged in cancer control activities.

The Strategic Plan also critically underscores the importance of a clear policy framework for cancer control. In short, this Strategic Plan provides the direction and the means for an objective implementation and realisation of the intended purposes for these activities, which will improve the outcome and outlook of cancer in the country and the region. It will provide the Government with clear steps for policy direction on exposure and risky behaviors as well as encouraging healthier behavior within the population, with overreaching benefits with regards to public wellbeing.

This Strategic Plan is also a testament to the resourcefulness of the Uganda Cancer Institute in providing leadership in cancer prevention and control to Uganda and the East African region. I would, therefore, like to call upon all the actors to take advantage of the Plan to support the UCI as a national resource for the implementation of a comprehensive National Cancer Control Policy and Programme.

Hon. Sarah Achieng Opendi (MP)
Hon. State Minister for Health - General Duties
Holding Portfolio for Minister for Health


RED HUTCH CANCER CENTRE

Acknowledgement

The Uganda Cancer Institute is grateful to the Government of Uganda, whose support, through the National Planning Authority and the Ministry of Health, made the development of this five-year Strategic Plan possible.

The Institute is equally grateful for the tremendous work, support, cooperation and collaboration rendered by its Board of Directors, officials from the Ministry of Health, especially the Honorable Minister, the Permanent Secretary, the Director General of Health Services, the Director of Planning, the Commissioner of Clinical Services, the Desk Officer of the Non-Communicable Diseases, directors of regional referral hospitals and faith-based hospitals, the Ministry of Energy and Mineral Development, the Ministry of Public Service, the Uganda National Health Research Organisation, International Hospital Kampala, Mulago National Referral Hospital, the Uganda Virus Research Institute, the Infectious Diseases Institute, Intra-Health International, the Uganda Bureau of Statistics, Makerere University College of Health Sciences, the Atomic Energy Council, the National Drug Authority and the Uganda National Council of Science and Technology. Additionally, the UCI is grateful to its international collaborators, particularly The Fred Hutchinson Cancer Research Centre and the Texas Children's Hospital/Baylor College of Medicine for their contributions to this work.

The Uganda Cancer Institute also acknowledges the invaluable contribution of its management team and staff for working with commendable dedication towards this Strategic Plan.

The Institute specifically acknowledges the technical input provided by JOADAH Consult Ltd and Ms. Nahalamba Sarah, the Senior Planner for Health and Nutrition at the National Planning Authority, for her technical guidance during the process of developing the plan.

Last but not least, the institute is grateful to Dr. Charles Wycliffe Matsiko of Intra-Health International for his technical input as our Internal Consultant, and everyone who participated in one way or another in ensuring the success of this process.

Dr. Jackson Orem,
Director
Uganda Cancer Institute

Table of Contents

List of Tables

List of Figures

Acronyms and Abbreviations

ART	Anti-retroviral Therapy
CCCP	Comprehensive Community Cancer Programme
CT	Computerised Tomography
EBV	Epstein-Barr Virus
GoU	Government of Uganda
HHV	Human Herpes Virus
HIV	Human Immune Virus
HMIS	Hospital Management Information Systems
HPV	Human Papilloma Virus
HRM	Human Resource Management
HSC	Health Service Commission
HSD	Health Sub-Districts
HSSIP	Health Sector Strategic & Investment Plan
HSSP III	Health Sector Strategic Plan III
IAEA	International Atomic Energy Agency
ICT	Information Communication Technology
IEC	Information Education and Communication
JCRC	Joint Clinical Research Centre
KII	Key Informant Interviews
KS	Kaposi Sarcoma
KSHV	Kaposi Sarcoma – associated Herpes Virus
LAN	Local Area Network
LTC	Lymphoma Treatment Centre
M & E	Monitoring and Evaluation
MDG	Millennium Development Goals
MDT	Multi-Disciplinary Team
MNRH	Mulago National Referral Hospital
MOES	Ministry of Education and Sports
MOFPED	Ministry of Finance Planning and Economic Development
MoH	Ministry of Health
MoLG	Ministry of Local Government
MoPS	Ministry of Public Service

MRI	Magnetic Resonance Imaging
MTEF	Medium Term Expenditure Framework
NCCP	National Cancer Control Programme
NCD	Non Communicable Disease
NCI	National Cancer Institute
NDP	National Development Plan
NFP	Not for Profit
NGO	Non-Governmental Organisation
NHS	National Health System
NRH	National Referral Hospital
O & M	Operation and Maintenance
OPD	Outpatient Department
PET	Positron Emission Tomography
PHP	Private Health Practitioners
PNFP	Private Not-for-Profit
PPDA	Public Procurement and Disposal of Public Assets Authority
PPP	Public Private Partnership
PPPH	Public Private Partnership for Health
Q&A	Question and Answer
RRH	Regional Referral Hospital
STC	Solid Tumor Centre
SWOT	Strengths, Weaknesses, Opportunities and Threats
TCMPs	Traditional and Complimentary Medicine Practitioners
ToR	Terms of Reference
UCI	Uganda Cancer Institute
UHI	Uganda Heart Institute
UNHRO	Uganda National Health Research Organisation
UNMHCP	Uganda National Minimum Health Care Package
UPCID	Uganda Programme on Cancer and Infectious Diseases
UVRI	Uganda Virus Research Institute
WHO	World Health Organisation

Executive Summary

The burden of cancer in Uganda is enormous, accounting for about 5% of the country's total deaths (353,000) annually. Based on the Kampala Cancer Registry (KCR), Uganda has one of the highest cervical cancer incidence rates in the world with an age standardised rate of 47.5 per 100,000, three times higher than the global average estimate of 15.8 per 100,000. Prostate cancer, the most common among men, with an annual incidence rate of 20.2% (2,288 cases) and a mortality rate of 20.5% (2,275 deaths), has a low survival rate among patients in Uganda. On another note, there is a growing number of childhood cancer cases being received at the Uganda Cancer Institute each year, with about 450 (9%) of the estimated 4,800 new cases of cancer among children under 15 years old in Uganda annually.

There are more than 250,000 cases of cancer per year in the country; 80,000 of these are incident cases. The risk of cancer before the age of 75 years is 17.8% and in the next 5 years, there will be about 80,000 cancer cases in the country at any one time. This alarming trend is confirmed by data from the Kampala Cancer Registry and the Uganda Cancer Institute.

This five-year Strategic Plan for the Uganda Cancer Institute (UCI) covers the period 2015/16 to 2019/20. It articulates the transformation and development roadmap for the institute towards becoming a centre of excellence in cancer research and care in the region. The Plan is informed by the service delivery needs for cancer care in the country and the region and aligns with the aspirations and objectives of the health sector and the national and international development framework. These include the Health Sector Development Plan (HSDP 2015/16-2019/20), the Second National Development Plan (NDPII) 2015/16-2019/20, the Uganda Vision 2040 and Agenda 2030 on Sustainable Development.

Mandated by the Uganda Cancer Institute Act of 2016, the UCI is an autonomous body, with the mandate to, among others, undertake and coordinate the management of cancer and cancer-related diseases in Uganda. It is critical to the evolution of a National Centre of Excellence, providing specialised treatment and care for all types of cancer using all the available subspecialty expertise possible, through oncology-centred research and training. The Institute is affiliated to Makerere University School of Medicine and Mulago Hospital Complex, the teaching hospital for the medical school. The Institute also partners with a wide array of investigators from Uganda and across the globe. Some of the partnerships include the Hutchinson Cancer Research Centre and the Texas Children's Hospital/ Baylor College of Medicine.

This plan will address the growing needs of the people of Uganda and the region in relation to prevention, care and treatment of cancer as well as other cancer-related diseases. The central pillars of intervention over the plan period are:

a) Cancer prevention through awareness and early detection.

b) Effective treatment and control of cancer.

c) Increasing human resource capacity through recruitment, education and training.

d) Research and training.

e) Resource mobilisation.

f) Influencing policy on cancer.

The goal of this Strategic Plan is to reduce the incidence of cancer and improve survival through excelling in prevention, care, research and training. The following strategic objectives will be pursued over the five-year period:

- Reduce cancer risk by increasing access and utilisation of cancer prevention services
- Improve access to quality, inclusive, affordable and comprehensive cancer care
- Enhance research and development capacity to effectively contribute to scientific knowledge and best clinical practices in cancer
- Develop and nurture a competent and specialised human resource for improved cancer care and control
- Build the institutional capacity of the Uganda Cancer Institute to effectively deliver on its mandate.

The key expected outcomes/results are:

- Reduced cancer incidence through primary prevention;
- Effective and affordable diagnosis and treatment of cancer;
- Improved survival and quality of life of cancer patients;
- Enhanced application of modern scientific knowledge, technology and best practices in cancer surveillance, control and treatment;
- Improved delivery of cancer care and control services; and
- Efficiency and effectiveness in delivery of UCI services.

The overall estimated budget for the Strategic Plan is UGX, 1,145 billion. Out of this about 47% will be sourced from external funding by development partners through on-and-off budget support. The sources of financing will include the Government of Uganda, private funds (mainly household out-of-pocket expenditure), development partners and voluntary health organisations.

THE OVERALL ESTIMATED BUDGET FOR THE STRATEGIC PLAN IS UGX, 1,145 BILLION. OUT OF THIS ABOUT 47% WILL BE SOURCED FROM EXTERNAL FUNDING BY DEVELOPMENT PARTNERS THROUGH ON-AND-OFF BUDGET SUPPORT. THE SOURCES OF FINANCING WILL INCLUDE THE GOVERNMENT OF UGANDA, PRIVATE FUNDS (MAINLY HOUSEHOLD OUT-OF-POCKET EXPENDITURE), DEVELOPMENT PARTNERS AND VOLUNTARY HEALTH ORGANISATIONS.

SECTION ONE

Introduction

1.1 BACKGROUND

This Strategic Plan for the Uganda Cancer Institute covers the period from Financial Year 2015/16 to 2019/20. The plan articulates the transformation and development roadmap for the Institute towards becoming a center of excellence for cancer research and care over the specified period.

The plan is informed by the service delivery and growth needs of the UCI, and aligns with the aspirations and objectives of the health sector and the national and international development framework, articulated in the Health Sector Development Plan (HSDP 2015/16-2019/20); the Second National Development Plan (NDPII) 2015/16-2019/20, the Uganda Vision 2040 and Agenda 2030 on sustainable development. The plan recognises the need for all the Government Ministries, Departments and Agencies (MDAs) to align their priorities and development planning with the national and international development framework and priorities.

1.2 HISTORICAL EVOLUTION OF THE UGANDA CANCER INSTITUTE

The Uganda Cancer Institute was established in 1967 to treat childhood lymphomas, predominantly Burkitt's lymphoma, which was the most common childhood lymphoma in Uganda at the time, and endemic in tropical Africa. Formerly known as the Lymphoma Treatment Centre (LTC), the establishment was initiated as a result of cooperation and hard work of individuals from Makerere University Medical School, the Ministry of Health (MoH) and the National Cancer Institute (NCI) of the USA. In a meeting held in Kampala regarding the treatment of Burkitt's lymphoma in 1965, the idea to open up a lymphoma treatment centre was conceptualised. Consequently, Makerere University and the NCI (Bethesda, USA) agreed to open the lymphoma clinic in one of the few vacant buildings that once housed Old Mulago Hospital. This location would allow the patients to stay longer for treatment and observation. The centre was dedicated to Denis Burkitt, the Irish surgeon who described Burkitt lymphoma in the 1950s.

The Lymphoma Treatment Centre opened its doors in August 1967 with the creation of an 18-bed ward in the Old Mulago Hospital. The success of the unit led to the foundation of a sister unit—the Solid Tumor Centre (STC)—in 1969 to enable management of adult cancers, especially Hepatocellullar carcinoma, Kaposi's sarcoma and Malignant melanoma to be carried out. Functioning jointly, the LTC and STC together with the associated laboratories formed the UCI.

UCI attained a semi-autonomous status in the FY 2009/10, having been separated from Mulago National Referral Hospital in order to enable a focused and concerted effort on cancer control in Uganda. UCI's standing has further been buttressed by the recently enacted enabling law the Uganda Cancer Institute Act of 2016. The Act confers onto the institute a body corporate, with fully fledged mandate to undertake and coordinate the management of cancer and cancer-related diseases in Uganda.

UCI is a cancer treatment, research and training centre, affiliated with the Makerere University School of Medicine and with the Mulago Hospital Complex, the teaching hospital for the medical school. The institute also partners with a wide array of investigators from Uganda and across the globe. Some of the partnerships include the Hutchinson Cancer Research Centre and Texas Children's Hospital/Baylor College of Medicine.

1.3 MANDATE OF UCI

Mandated by the Uganda Cancer Institute Act of 2016, the UCI is an autonomous body, with the mandate to, among others, undertake and coordinate the management of cancer and cancer-related diseases in Uganda. The UCI is critical to the evolution of a National Centre of Excellence, providing specialised treatment and care for all types of cancer using all the available subspecialty expertise possible through oncology-centered research and training. A strong scientific basis is a prerequisite for developing a strong modern institute, with the requisite research, training and cancer care capacity capabilities for which the institute is internationally acclaimed. A system for higher referrals for the regional centres is emerging, and the institute is poised to significantly reduce the referral of cancer patients abroad as visualised by the enabling law.

The UCI is the lead agency in the initiation and implementation of a comprehensive National Cancer Control Programme (NCCP), a key requirement for holistic cancer care.

The Executive Director of UCI, Dr. Jackson Orem receiving a donation of chemotherapy chairs from ACCA

A laboratory specialist testing samples

A laboratory specialist

1.4 THE FUNCTIONS OF THE UGANDA CANCER INSTITUTE

In an effort to revamp the institute, the Government of Uganda established an autonomous status for the UCI, with an enabling law, the Uganda Cancer Institute Act, Act No. 19 of 2016. The Act gives UCI a body corporate status, and purposes to optimize the institute's capacity to fulfill its mandate. Section 5 of the Act provides for the functions of the UCI as:

a. To develop policy on the prevention, diagnosis and treatment for cancers and on the care for patients with cancer and cancer-related diseases, and to coordinate the implementation of the policy;
b. To undertake and coordinate the prevention and treatment of cancers in Uganda;
c. To provide comprehensive medical care services to patients affected with cancer and cancer related diseases;
d. To provide palliative care and rehabilitation services to patients with cancer;
e. To oversee the management of cancer and cancer related services in public and private health centres;
f. To establish and manage regional cancer units;
g. To conduct or coordinate cancer related research activities in Uganda and outside Uganda;
h. To conduct or cause to be conducted training in oncology and related fields;
i. To promote and provide public education on cancer and cancer related matters;
j. To procure highly specialised medicines, medical supplies, and equipment for the institute;
k. To provide consultancy services; and
l. To do any other act that is necessary for the functions of the institute

1.5 INSTITUTIONAL STRUCTURE OF UCI

The institute is governed by an Interim Board of nine members with a chairman, superintending over a transitional phase for the fully-fledged Board stipulated by the obtaining law. The board reports directly to the Minister of Health, and has three board committees:- the Finance Committee, the Clinical Governance and Research Committee, as well as the management and Relationship Committee. Administratively, the UCI is headed by an Executive Director, assisted by a Deputy Director. The institute is structured into an array of clinical and support departments which include Clinical Services, Nursing Division, Research and Education, Community Services and Administration and Support Services. Each of these departments cascades into detailed divisions, sections and units reflective of the current service range of UCI.

1.6 THE LEGAL AND POLICY FRAMEWORK FOR UCI

The recently enacted UCI Act is the principal law that governs and guides its standing and operations. In the broader spectrum, the UCI is guided by the National Health Policy (NHP) whose goal is "to attain a good standard of health for all people in Uganda in order to promote healthy and productive lives". The NHP prioritises strengthening health systems in line with decentralisation; reconfiguring and organising supervision and monitoring of health systems at all levels; establishing a functional integration within the public and private sector; and addressing the human resource crisis. These are critical standpoints for the UCI, as it seeks to modernise its services and to fully align them with national development aspirations.

1.7 PURPOSE AND FOCUS OF THE UCI STRATEGIC PLAN (SP) 2015/16 – 2019/20

The purpose of this SP2015/16-2019/20 is to guide the institute's development and service delivery framework over the five-year period. The plan is harmonised with the NDP II and the Health Sector Development Plan (HSDP) 2015/16-2019/20. The UCI strategic plan will address the growing needs of the people of Uganda in relation to prevention, care and treatment of cancer as well as other cancer-related diseases. In the period, the institute focuses on optimising its mandate centered on comprehensive cancer management. The central pillars of intervention over the period are:

a) Cancer Prevention through awareness and early detection.
b) Effective treatment and control of cancer.
c) Increasing human resource capacity through recruitment, education and training.
d) Research and training.
e) Resource mobilisation.
f) Influencing policy on cancer.

1.8 LINKAGES WITH THE NATIONAL AND INTERNATIONAL FRAMEWORKS

The services of the institute and the journey to build it into an acclaimed Centre of Excellence directly contribute to Uganda's Vision 2040. This is clearly in line with the national development focus that prioritises human resource development with competitive skills for a healthy and productive population through health and education service delivery. In an attempt to increase

UCI 6 level ward building

country coverage of Community Cancer Outreach services across Uganda, the institute contributes to the achievement of one of the targets of the East African Community Vision 2050 that stipulates 100% access to health services.

This plan also aligns with the Sustainable Development Goals (SDGs), particularly Goal No. 3, target 4; which seeks to reduce, by one third, premature mortality from non-communicable diseases through prevention and treatment, and promote mental health and wellbeing.

1.9 STRATEGIC PLANNING PROCESS

The process of formulating this plan was consultative and participatory, involving the institute staff at various levels, Mulago Hospital senior staff, officials of the Ministry of Health, and health development partners. Consultations were undertaken right from the inception stage up to completion. While the institute engaged the services of a consultant to facilitate the process, it owned the process. We also adopted a deliberate approach that would ensure relevant staff of the institute leverage the strategic planning process so as to acquire critical knowledge and skills on strategic planning. Other consultations were done through key informant interviews with respondents who were deemed to provide critical information on the operating context of, and planning implications for, the institute.

An extensive review of relevant documents and literature—such as performance reports of the institute, policy documents, relevant laws, health sector reports, Ministerial Policy Statements (MPS), Budget Framework Papers (BFPs)—was done. This was necessary to enable the understanding of the institute's operating context and reinforce its vision, benchmark good and best practices and inform the plan on the direction, priorities and strategies.

1.10 IMPLEMENTATION AND REVIEW OF THE PLAN

The implementation of the plan will be guided and supervised by the institute. The plan will be monitored and reviewed annually using the institute's internal assessment mechanisms and reporting. Quarterly and annual plans will be developed referring to this plan during the standard planning cycle of the Government, to ensure that the plan is informing priority setting of the institute. Equally, the plan will guide and inform the project proposals that the institute will develop to solicit external funding so as to bridge the funding gap.

1.11 STRUCTURE OF THE STRATEGIC PLAN

This plan is structured into six sections and follows the general guiding framework of the National Planning Authority (NPA) for developing MDA strategic plans.

Section One presents the introduction and background information that provides a foundation to the Strategic Plan. Section Two provides a situation analysis, depicting the operating environment and issues of influence, as well as the past performance of the institute. Section Three focuses on the strategic direction of the institute, assimilating the aspirations and priority areas for the planning period. The section further gives detail of the strategic objectives focusing on the strategic interventions, outcomes and outputs, as well as activities necessary for the attainment of the envisaged outcomes. Section Four outlines the institutional arrangements for implementing the plan. Section Five covers the Strategic Plan's cost and financing plan. The last Section Six presents the monitoring and evaluation framework that will be used to track the performance of the plan. The detailed cost of the Strategic Plan, the implementation plan and monitoring and evaluation plan are also herein annexed.

SECTION TWO

Situation Analysis

2.1 INTRODUCTION

This section presents the situation analysis of the internal and external factors and issues that have a bearing on the institute's mandate, operations and performance. It also focuses on the past performance of the institute, highlighting the achievements, operational priorities, and gaps and binding constraints.

2.2 COUNTRY PROFILE

2.2.1 ADMINISTRATION

Uganda has an area of 241,000 km2. Administratively, the country is divided into 122 districts and one city (the Capital City of Kampala) as of 1st July 2017. Going by the resolution of Parliament for the creation of new districts approved in 2015, Uganda will have 134 districts and one Capital City by 1st July 2019. The districts are spread across four administrative regions of Northern, Eastern, Central and Western, and are subdivided into lower administrative units at county, municipal, town council, sub-counties/divisions, parishes/wards and villages/cells. As of 2014, there were 181 counties, 22 municipalities, and 174 town councils. These were further sub-divided into 1,382 sub-counties (including urban divisions), 7,138 parishes (including urban wards) and 66,036 villages (including urban cells/zones) (Census Report 2014). Parallel with the administration are traditional kingdoms that enjoy some degree of mainly cultural autonomy.

2.2.2 POPULATION

The institute executes its mandate in respect to about 34.6 million people (UBOS, NHPC Final Results Report 2016). Uganda's population growth rate has remained high and was estimated at 3.0 percent in 2014, indicating an estimated increase to 40.4 million by 2020 and 46.7 million by 2025.

A total of 49 percent of the population is male, while 51 percent is female, according to the 2014 Population and Household Census results. Uganda has a young population with children (under18 years) and youth (18-30 years) constituting 55 percent and 23 percent respectively. The older persons (60 years and above) are only about 3.7 percent of the total population. About 78.6 percent of the people live in rural areas compared to 21.4 percent living in the urban areas. The literacy rate by 2014 was 72.2 percent (of the population aged 10 years and above); 8 percent of the children were orphaned while 12.5 percent of primary school age children (6-12 years) were not attending school. In addition, 12.5 percent of persons in Uganda had at least one form of disability (UBOS Final Census Report 2016). These characteristics of Uganda's population indicate a high level of vulnerability and dependency (age dependency ratio being 103%), and therefore pose a number of challenges in the pursuit of effective and efficient service delivery. The high population growth rate has a direct bearing on UCI's spectrum of service delivery, as indeed it does on the incidence and risk of cancer.

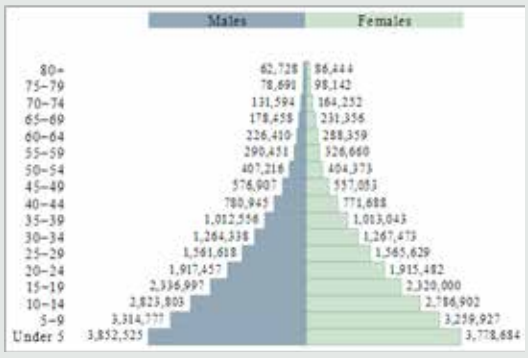

Figure 1: Population pyramid for Uganda 2014: Source: UBOS Statistical Abstract (2016)

TABLE 1: SOCIO-DEMOGRAPHIC INDICATORS OF UGANDA

Indicator	Male	Female	Total
Population in millions	17,060,832	17,573,818	34,634,650
Population growth rate (%)	—	—	3.03
Median age of the population (in years)	—	—	15.9
Population living in urban areas in millions	—	—	7,425,864
Crude birth rate (births per 1,000)	—	—	43.7
Crude death rate (deaths per 1,000)	—	—	10.2
Life expectancy at birth (in years)	62.2	64.2	63.3
Adult mortality rate (probability of dying between 15 and 60 years old per 1,000)	325	256	291
Maternal mortality ratio (per 100,000 live births)	—	—	118
Infant mortality rate (per 1,000 live births)	—	—	53
Under age five mortality rate (per 1,000 live births)	—	—	80
Density of physicians (per 1,000 population)	—	—	0.12
Gross national income per capita (PPP current international $)	—	—	1820
Adult literacy rate (%) (aged 15 and older)	81	66.8	73.8
Youth literacy rate (%) (aged 15-24 years)	87.4	85.7	84.4
Net primary enrollment ratio	83.1	85.7	84.4
Net secondary enrollment ratio	24.5	22.7	23.6

Source: *UBOS Statistical Abstract (2016)*

2.3 HEALTH SERVICE DELIVERY IN UGANDA

In any health system, good health services deliver effective accessible, safe, good-quality personal and non-personal—care to those that need it, when they need it, with minimum waste. Services be they prevention, treatment or rehabilitation may be delivered in the home, the community, the workplace or in health facilities.

In Uganda, health services are delivered through the public and private sectors. Public health services are delivered through Village Health Teams/HC Is, HC IIs, HC IIIs, HC IVs, General Hospitals (GHs), Regional Referral Hospitals (RRHs) and National Referral Hospitals. In all public health facilities, curative, preventive, rehabilitative and palliative health services are free. The Government abolished user fees in 2001. However, user fees in public facilities remain in the private wings of public hospitals. The range of health services delivered varies with the level of health care facility. In general, health care facilities are more prepared to diagnose infectious diseases than a subset of non-communicable diseases including cancer. The provision gaps across platforms widen with decreasing levels of care: referral and district hospitals stock a relatively higher percentage of the necessary medical supplies for NCDs than Health Centre IVs and lower health facilities. Most of the gaps in NCD care arise due to poor infrastructure, lack of medicines and other health supplies, shortage of human resource in the public sector, poorly motivated HRH due to low salaries and poor benefits and lack of accommodation at health facilities among other factors.

The private sector plays an important role in the delivery of health services in Uganda. The private health system comprises the Private Not-for-Profit Organisations (PNFPs), Private Health Practitioners (PHPs) and the Traditional and Complementary Medicine Practitioners (TCMPs). The contribution of each sub-sector to the overall health output varies widely.

The PNFP sector is more structured and dominant in rural areas. The Government of Uganda recognises the importance of the private sector by subsidising the PNFPs, a few private hospitals, and PNFP training institutions. The PNFP sub-sector is divided into two categories: Facility-Based (FB-PNFPs) and the Non-Facility Based PNFPs (NFB-PNFPs). The FB-PNFPs provide both curative and preventive services while the NFB-PNFPs mainly provide preventive, palliative and rehabilitative services for both infectious and non-communicable diseases including

cancer. The FB-PNFPs account for 41% of the hospitals and 22% of the lower level facilities complementing government facilities especially in rural areas.

The number of PHPs health facilities in Uganda accounts for 46% of the overall total and employs about 12.8% of the health workers. The PHPs have a large urban and peri-urban presence and provide a wide range of services, mainly in primary and secondary cancer care, with few tertiary services.

Traditional and complementary medicine practitioners (herbalists, traditional bone setters, traditional birth attendants, hydro-therapists, spiritualists and traditional dentists) are available in both urban and rural areas. Most TCMPs have no functional relationship with public and private health providers and are not equipped to manage cancer-related cases. Non-indigenous traditional, or complimentary, practitioners such as the practitioners of Chinese and Ayurvedic medicine, have emerged in recent years but their contribution to cancer care is not documented.

2.4 EPIDEMIOLOGY OF CANCER IN UGANDA

The burden of cancer in Uganda is enormous. Cancer accounts for 5% (17,600) of the country's total deaths (353,000) annually. Based on the Kampala Cancer Registry (KCR), Uganda has one of the highest cervical cancer incidence rates in the world, with an age standardised rate of 47.5 per 100,000, three times higher than the global average estimate of 15.8 per 100,000. Prostate cancer, the most common cancer among men, with an annual incidence rate of 20.2% (2,288 cases) and a mortality rate of 20.5% (2,275 deaths), has a low survival rate among patients in Uganda. On another note, a growing number of childhood cancer cases is being received at the Uganda Cancer Institute each year, with about 450 (9%) of the estimated 4,800 new cases of cancer among children under 15 years old in Uganda annually.

There are more than 250,000 cases of cancer per year in the country; 80,000 of which are incident cases. The risk of cancer before the age of 75 years is 17.8% and in the next 5 years, there will be about 80,000 cancer cases in the country at any one time. This alarming trend is confirmed by data from the Kampala Cancer Registry and the Uganda Cancer Institute.

Currently, 4,800 newly diagnosed cases of cancer are seen at the institute per year and this is only 4% of new cases in the whole country. Also, the number of revisits by patients at the institute is more than 10,000 patients per year. Sixty percent of the cancer burden in the country is directly attributed to HIV. This situation is made worse given the minimal access to funding for these cancers from HIV control organisations. It has been over three decades since the emergence of HIV, a disease with one of the most profound effects on the practice of medicine globally. Cancers seen in the context of HIV are very common in Uganda.

2.4.1 CANCER RISK FACTORS

Cancer results from internal and external risk factors working together and/or in sequence to trigger the process. The exact causes of cancer are unknown. However, the development of cancer is often associated with life styles, diet and environmental conditions. Cancers of the lung, throat and mouth and the oesophagus have been directly linked to tobacco smoking. Cancer of the cervix has been linked to sexual transmission and certain Human Papilloma Virus sub-types. Diet has also been linked to causation of cancer of the bowel, stomach and breast. High consumption of alcoholic beverages increases the risk of cancers of the oral cavity, pharynx, larynx, oesophagus, liver and breast. Infection with Hepatitis B and C viruses is associated with liver cancer.

2.4.2 CANCER SURVEILLANCE AND REPORTING

Cancer surveillance and reporting provide quantitative data on cancer and its determinants in a defined population by providing cancer incidence, morbidity, survival and mortality for persons with cancer. In terms of cancer intelligence and registration, there has been one population based cancer registry, the Kampala Cancer Registry (KCR). Established in 1954, the registry provides the longest time series of cancer incidence in Africa. It is one of the oldest cancer registries in sub-Saharan Africa and was accredited by the International Agency for Research in Cancer (IARC) for providing quality data. The registry documents incidences and monitors trends in cancer rates and mortality in the population of Kyadondo County which includes Kampala Capital City.

Regional cancer registries were recently introduced and operationalised including at UCI.

TABLE2: ESTIMATED CANCER INCIDENCE AND PREVALENCE IN UGANDA

Cancer	Incidence per 100,000 per year	Prevalence		
		1-year (prop.)	3-year (prop.)	5-year (prop.)
All cancers excl. non-melanoma skin cancer	27357	17057 (92.5)	40537 (219.9)	56707 (307.6)
Cervix uteri	3915	3132 (33.8)	7437 (80.2)	10224 (110.2)
Kaposi sarcoma	3635	2259 (12.3)	5084 (27.6)	6904 (37.5)
Prostate	2843	2569 (28.1)	6431 (70.3)	8730 (95.4)
Breast	2420	1836 (19.8)	4545 (49.0)	6537 (70.5)
Oesophagus	2377	1128 (6.1)	2150 (11.7)	2634 (14.3)
Liver	1344	362 (2.0)	713 (3.9)	921 (5.0)
Colorectum	1055	667 (3.6)	1489 (8.1)	2012 (10.9)
Non-Hodgkin lymphoma	1028	379 (2.1)	919 (5.0)	1336 (7.2)
Stomach	720	284 (1.5)	651 (3.5)	922 (5.0)
Leukaemia	641	216 (1.2)	477 (2.6)	652 (3.5)
Ovary	541	315 (3.4)	779 (8.4)	1143 (12.3)
Lip, oral cavity	510	314 (1.7)	782 (4.2)	1153 (6.3)
Lung	379	118 (0.6)	248 (1.3)	328 (1.8)
Pancreas	320	70 (0.4)	157 (0.9)	219 (1.2)
Brain, nervous system	301	97 (0.5)	230 (1.2)	342 (1.9)
Nasopharynx	298	193 (1.0)	482 (2.6)	702 (3.8)
Corpus uteri	290	273 (2.9)	749 (8.1)	1163 (12.5)
Multiple myeloma	261	133 (0.7)	295 (1.6)	401 (2.2)
Melanoma of skin	253	185 (1.0)	482 (2.6)	723 (3.9)
Hodgkin lymphoma	249	193 (1.0)	513 (2.8)	784 (4.3)
Thyroid	244	180 (1.0)	481 (2.6)	752 (4.1)
Kidney	162	54 (0.3)	155 (0.8)	252 (1.4)
Larynx	152	69 (0.4)	173 (0.9)	258 (1.4)
Bladder	140	97 (0.5)	249 (1.4)	372 (2.0)
Other pharynx	114	69 (0.4)	175 (0.9)	260 (1.4)
Testis	33	11 (0.1)	34 (0.4)	59 (0.6)
Gallbladder	23	10 (0.1)	21 (0.1)	28 (0.2)

Source: *GLOBOCAN 2012, IARC - 4.9.2015*

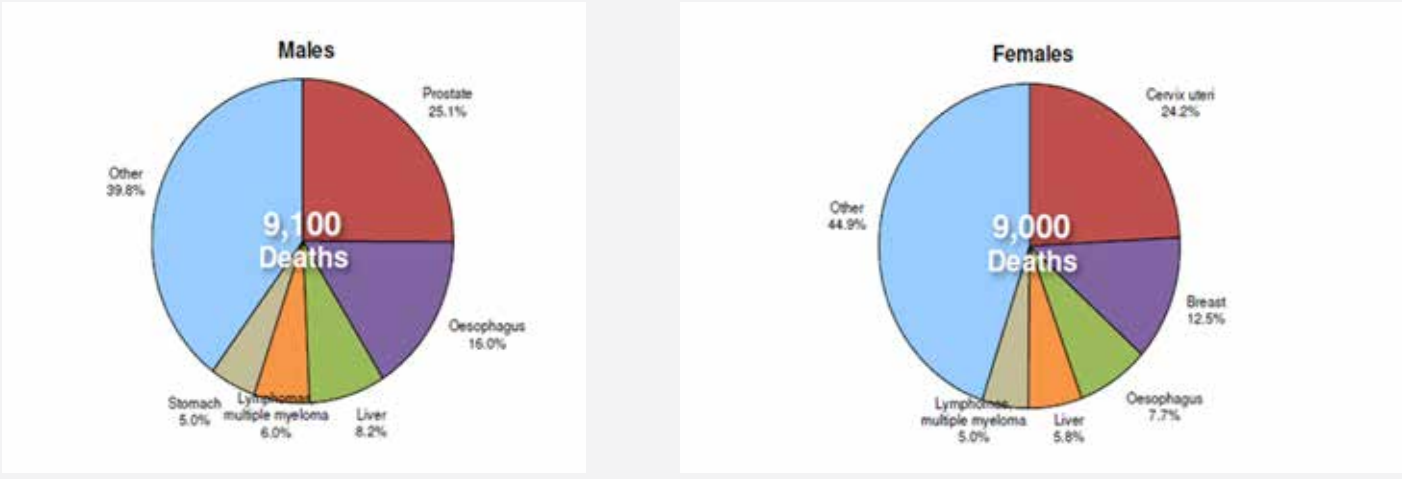

Figure 2: Cancer mortality profile for Uganda; Source: World Health Organisation - Cancer Country Profiles (2014)

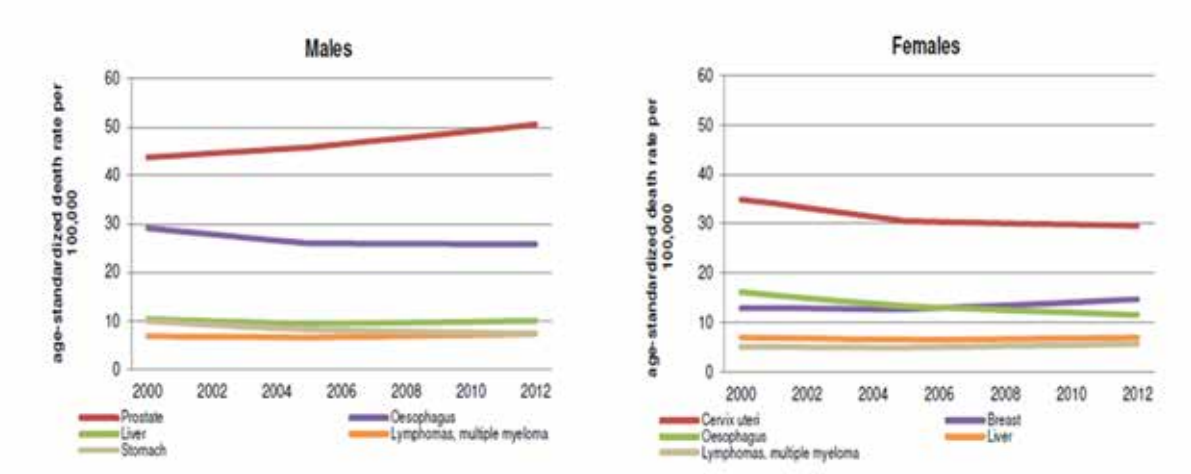

Figure 3: Age-Standardised Cancer Mortality Trends in Uganda; Source: the World Health Organisation - Cancer Country Profiles (2014)

2.5 PERFORMANCE ANALYSIS OF UCI

The performance analysis of UCI has been presented along three parameters: service delivery; human resources and financial capacity.

2.5.1 SERVICE DELIVERY PERFORMANCE 2012/13 – 2014/15

a) Legal and Policy Framework

- UCI enabling law formulated and passed in 2016
- The National Cancer Control law is under parliamentary consideration
- National Indicators for NCD's are being drafted

b) Quality Management Systems (QMS) (Service Delivery Standards)

- UCI REC Standard operating procedure (SOP) have been developed and operationalised
- Standard Operating Procedures (SOPs) for laboratories developed
- Accreditation: Uganda Cancer Institute Research and Ethics Committee (UCI REC) was accredited by the UNCST
- Quality Manuals: Operational manual developed and operationalised
- Client Charter: the Draft Client Charter is in place

c) Compliance with Regional and International Obligations

- Obligations and Standards: UCI strives to harmonise service delivery and quality standards with the international standards.

d) Partnerships and Collaborations:

- External collaborative projects and research studies have been undertaken with government and non-government institutions, national, regional and international agencies, including Makerere University College of Health Sciences, UCI/Hutchinson Centre Cancer Alliance, Texas Children's Hospital/Baylor College of Medicine, and International Atomic Energy Agency (IAEA).

e) Institutional Growth and Development

- Institutional status: UCI is an autonomous agency mandated to undertake and coordinate the prevention and treatment of cancer and cancer-related diseases as well as to conduct cancer research. It is established and empowered by the UCI Act 2016. It operates under an own vote the Uganda Cancer Institute - Vote – 114.
- Governance: An Interim Board of Directors was appointed.
- Staff structure: Staffing has continuously grown from 78 to 278 approved positions.
- Staff recruitment & retention: Over time, staff have been recruited and retained within the limits of approved staff establishment and terms and conditions of service. Some 47% of approved staff positions were filled as of July 2017.
- Staff development: The institute continues to support staff capacity development.
- Internal policies, systems and procedures (manuals): The institute operated within the GoU framework. It implemented some QMS and procured and installed the Cancer Information Management System (CIMS).

f) Research and Innovations

- Held 18 consultative meetings to support UCI collaborative research projects
- Nine new student-research projects at the UCI supervised
- Three new independent research projects at the UCI conducted

Some of the recent researches undertaken include:

- Evaluation of the effect of HHV-8 and HIV co-infection on the efficacy of antiretroviral therapy.
- Exploration of host and HHV-8 viral biomarkers to predict response and treatment outcomes among Ugandan adults with KS who are initiating cancer therapy.
- Randomised control trial of bleomycin/vincristine vs. paclitaxel in the treatment of HIV-associated KS

g) Physical Infrastructure

- Remodeling: Finalised remodeling of the radiotherapy unit to house high dose radiation equipment; completed remodeling of outpatient clinic and storage facility; completed remodeling of x-ray and pharmacy.
- Fittings & furnishing: Completed furnishing of the UCI REC office. The new cancer ward has also been furnished with infusion couches, patient beds, service trolleys and linen
- New construction: Completed construction of a six-level cancer ward; started construction of a waiting shade for outpatients; completed construction of UCI/Fred Hutchinson building; and Mayuge, Ishaka and Arua satellite centres
- Vehicle purchase: Procured 2 station wagon vehicles and 4 motor cycles

h) Purchase of Scientific Equipment

- Purchased assorted medical equipment including chemical analyzer, diagnostic equipment and pathology equipment

i) ICT Equipment and Software

- Installed LAN, intercom and electronic medical record system (ClinicMaster software); established high-speed fibre optic broadband internet with campus-wide WIFI network that is sponsored by the Texas Children's Hospital/Baylor College of Medicine.

j) Rationalised Physical Presence

- Regional cancer centres: Mayuge and Arua cancer centres are now operational; Mbarara, Gulu, Mbale cancer centres have been identified but are yet to be constructed, equipped, staffed and operationalised.

k) Non-tax Revenue

- NTR annual targets: Continued to generate NTR, with cases of under-collection attributed to the inadequate manual system of revenue collection and irregular bank reconciliations.

l) Accountability and Observance of Human Rights

- Health & Safety Team is in place
- Personal Protective Equipment (PPE) has been provided
- First Aid boxes are in place
- Staff immunisation against Hepatitis B has been conducted;
- General house-keeping;
- Waste disposal procedures exist;
- Fire-fighting equipment is available and staff members were taken through firefighting drills.
- Quarterly annual planning, budgeting, monitoring and reporting: Quarterly progress reports; annual performance reports; Ministerial Policy Statements (MPS); Budget Framework Papers (BFPs), plans, budgets and reports were integrated in the Ministerial Policy Statements for the MoH.

2.5.2 HUMAN RESOURCE DEVELOPMENT

The human resource capacity of the Uganda Cancer Institute has steadily improved, but staffing remains inadequate. The welfare and motivation of staff is still low, limiting the institute's capacity to retain some of its specialised staff. As such, institute has progressively lost some of its critical specialised staff to other institutions locally and abroad.

2.5.3 FINANCIAL PERFORMANCE

Despite the consistent Government funding, the institute's financial support remains inadequate to meet its operations and service demands.

2.6 KEY ACHIEVEMENTS OF THE UGANDA CANCER INSTITUTE

A number of achievements are notable over the period under review.

a) Completion of the Enabling Law

The finalisation of the enabling law for UCI in 2016 was remarkable. The institute's mandate is henceforth stronger and operations and relationships are better clarified.

b) National HPV Vaccination Programme

Played a big role in the launch and implementation of the national HPV vaccination programme for adolescent girls aged 10-13 is key in reducing the high incidence and mortality from cervical cancer among women in Uganda. It also goes a long way in achieving the World Cancer Declaration (WCD) target 4.

c) Domestication of the WHO Framework Convention on Tobacco (FCTC)

Played a role in the passing of WHO Framework Convention on Tobacco Control (FCTC) compliant Tobacco Control law in 2015 was a major government commitment towards curbing tobacco use as a major cancer risk factor and in the attainment of WCD target 3 in the country.

d) Strategic Partnerships and Collaborations

- The collaboration between the institute and Fred-Hutchinson Cancer Research Centre (FHCRC), Seattle-Washington, will go a long way in improving cancer treatment and management in Uganda through collaborative and plausible research.
- The establishment of the collaboration between the institute and the Texas Children's Hospital/Baylor College of Medicine, Houston-Texas, has focused on developing world class paediatric oncology clinical services, education, and research in Uganda.
- Case Western Reserve University, Cleveland – Ohio in the subspecialty of head and neck cancers.
- The National Cancer Centre of the Republic of South Korea for skills development.
- The National Cancer Institute of Egypt for surgical oncology, nursing and psychosocial programmes in cancer.
- Stellenbosch University Cape Town, South Africa,for training in radiation oncology.

e) Relationship and Collaboration with Non-State Actors

UCI has enjoyed a steady growth of a civil society movement for cancer patient support, awareness raising and policy advocacy for a supportive legal environment for cancer prevention and control. The Uganda Cancer Institute has maintained close partnership with the non-state actors during its work.

f) Institutional Building

The institute has consistently and successfully focused on building institutional structures, systems, frameworks and service delivery standards to support her service delivery. These frameworks have prepared the institute to deliver services more effectively and efficiently.

In addition, the institute has progressively recruited staff at both technical and support levels, continuously filling most of the staff positions, thereby increasing its capacity to carry out its mandate sustainably.

g) Public Awareness and Sensitisation

The Uganda Cancer Institute has increasingly undertaken robust public sensitisation and awareness raising about cancer. The sensitisation and awareness raising has been done through radio programmes, meetings and workshops in local governments and a range of information, education and communication materials.

h) Attainment of a Separate Vote Status

In 2009, the institute attained its own vote status, retaining some level of operational autonomy in terms of direct appropriation of its funding and some discretionary power for financial management and accountability, planning and budgeting.

2.7 CHALLENGES

A number of challenges still inhibit the performance of the institute.

A) LOW PRIORITISATION OF CANCER

The lack of a National Strategic Cancer Control and Management Framework has resulted in a situation where, until recently, cancer as a disease has not been given the prominence it deserves. With an increased incidence of cancer in the country and a high mortality rate from the disease, particularly when compared to the situation in developed countries, the need for the prioritisation of this framework cannot be over-emphasised.

B) POLICY, REGULATORY AND PRACTICAL BOTTLENECKS TO INFRASTRUCTURAL DEVELOPMENT FOR CANCER MANAGEMENT AND CONTROL

The Uganda Cancer Institute (UCI) has traditionally been situated on a stretch of land within Old Mulago hill, managed by Mulago Hospital complex. Because this property is under the management of Mulago National Referral Hospital, the institute cannot freely implement its development plans, and struggles with the red-tape involved in decision-making at the hospital. As a result, the implementation process of key infrastructural developments at the institute is slow and cumbersome. For effective and long-term development planning, the institute requires a designated piece of land, along with a land title.

The current infrastructure at the institute is not child-friendly. There is need for infrastructure that enables child-friendly activities such as play, learning and interaction with family members.

C) INADEQUATE RESEARCH CAPACITY FOR CANCER PREVENTION AND CONTROL

A number of structural and systemic limitations constrain the research capacity of the institute. These include an inadequate operational framework for research, inadequate funding, shortage of human resources and logistical support.

D) INADEQUATE FUNDING FOR CANCER MANAGEMENT, PREVENTION AND CONTROL

Another strategic challenge is the financing of cancer prevention, management and control. The per capita cost for providing the Uganda Minimum Health Care Package was estimated at USD 47.9 in FY 2011/12. While the Government of Uganda has provided continued support to fund the activities of the Uganda Cancer Institute, pressures resulting from inadequate funding persist. The increasing population coupled with the increase in the burden of cancer means that the Institute requires additional funds to adequately address the scope of its service delivery. There is need for strengthening the financial capacity of the institute to address the emerging challenges.

E) WEAKNESS IN SUPPLY CHAIN MANAGEMENT DUE TO INAPPROPRIATE STRUCTURES

Weaknesses in supply chain management lead to periodic shortages in medicines and medical supplies for cancer prevention, management and control. In some cases, this requires inter-sectoral collaboration. Health outcomes call for an interface between various factors outside the health sector.

F) INADEQUATE HEALTH INFRASTRUCTURE AND EQUIPMENT

Country-wide, there is a shortage of equipment in the health sector. Only one third of facilities offering delivery services have basic equipment and supplies for conducting them. Less than one quarter of health facilities have all essential equipment and supplies for basic antenatal care. Likewise, there is inadequate health infrastructure and equipment for cancer management and control. The Uganda Cancer Institute also faces challenges resulting from unplanned construction (some of the services being carried out at New Mulago), overcrowding (especially in the wards), obsolete equipment, inadequate parking space for the staff and patients, difficulties in service accessibility, and weak structures. In addition to this, the cancer institute's buildings are old and dilapidated. Some of the buildings were constructed in the 1960s and have repeatedly been renovated. Given the population growth and the resultant overcrowding, most of the existing facilities will become even more inadequate, hence the need for expansion.

G) INSUFFICIENT HUMAN RESOURCE CAPACITIES

The Uganda Cancer Institute statistical data indicates nurse-to-patient ratios of 1:15 on average, and the pharmacist-to-patient ratio on average is 1:25, the doctor-to-patient ratio on average is 1:50. While these ratios appear good, the UCI none the less struggles directly with inadequate levels of human resources.

H) NON-COMMUNICABLE DISEASES

There is increasing prevalence of Non-Communicable Diseases (NCDs) such as hypertension, diabetes, and diseases of that nature, as well as their risk factors. The lack of an elaborate framework to coordinate the health sector response to the new paradigms presented by the increased incidence of NCDs further constricts the capacity of the institute to handle the burden of cancer effectively.

2.8 SWOT ANALYSIS

To better position the Uganda Cancer Institute to execute its mandate, it was necessary to undertake a SWOT analysis of the institute to identify its strengths, weaknesses, opportunities and threats. This analysis would help to understand the internal and external factors that facilitate, influence, constrain or threaten the performance of the institute.

TABLE 3 : SWOT ANALYSIS OF UCI

STRENGTHS

- An enabling law in place
- Existence of a Governing Board with a mandate to drive UCI towards an autonomous status
- UCI has trained and skilled staff including specialists
- Existence of partners to bolster Government funding especially for infrastructure development.
- Existence of specialised analytical laboratory and equipment
- Recognition with a vote-holding status since FY2009/10
- Existence of a community outreach programme
- Proactive management team
- Collaborations with leading US academic centres and federal agencies
- Longevity – History of 46 years
- Strategically located to serve as a regional institute of excellence

WEAKNESSES

- Human resource deficit gaps in terms of responding to the sudden increased incidence of cancer
- Limited space and infrastructure for cancer management and control
- Lack of an IEC strategy to sensitise and inform the masses about the available cancer epidemic, prevention, treatment and care services
- Undeveloped data and information management systems
- Focus on cancer care and treatment with less emphasis on cancer research and training
- Low remission and survival rates of patients
- Limited cancer research agenda/programmes
- Underdeveloped links with the health care system
- Poorly organised and aging facility
- Underdeveloped marketing/branding
- Low multidisciplinary culture
- Lack of developed curriculum that can be applied in health training institutions for training and developing specialised cadres for cancer care and treatment
- Dependency on the Uganda National Medical Stores (NMS) for medical supplies leading to delayed deliveries and sometimes stockout.

OPPORTUNITIES

- National mandate offers the UCI a unique platform to respond strategically to the increased incidence of cancer
- UCI's autonomous status opens frontiers nationally and internationally
- Existence of regional referral hospitals that UCI can partner with to extend its services
- The presence of NFP hospital (e.g. Nsambya Hospital), collaborating with UCI for training of technical staff
- International recognition of the impact of cancer at the international stage along the lines of HIV/ AIDS
- Identification of UCI as the regional centre for cancer regional initiatives and responses
- Potential for national and international partnerships in cancer research and infrastructure development
- Presence of sister institutions (UVRI, JCRC, UHI, IDI, Mulago Hospital e.t.c offers opportunities for collaborative research

THREATS

- Global climate change is increasing the risk of environmentally caused cancers
- Increasing burden of diseases of unknown origin e.g. multiple myeloma
- Competition with other policy funding areas both within and outside the health sector
- Inadequate funding to execute programmes
- Lack of a legal and policy framework to support development and operations of the UCI

2.9 STAKEHOLDER ANALYSIS FOR UCI

As part of the process to understand the environment in which the institute operates, and to understand and plot strategies for relationship enhancement, it was necessary to map and analyse stakeholder relationships, roles and complementarities.

Former BOD discussing the UCI Bill in 2015

TABLE 4: STAKEHOLDER ANALYSIS

No.	Stakeholder	Stakeholder Contribution/Roles with Respect to Cancer
1.	Ministry of Health	Policy analysis, formulation and dialogue Strategic planning Setting standards and quality assurance Resource mobilisation Advising other ministries, departments and agencies on health-related matters Capacity development and technical support supervision Provision of nationally coordinated services including health emergency preparedness and response and epidemic prevention and control Coordination of health research; and Monitoring and evaluation of the overall health sector performance
2.	The Uganda National Health Research Organization (UNHRO)	Promote research Fund research Commission and conduct health research
3.	Mulago Hospital	Collaboration in patient care, training and research Provision of land space
4.	Health Services Committee of Parliament of Uganda	Budgeting and advocacy Resource allocation
5.	Ministry of Justice	Legal advice
6.	Ministry of Lands	Provision of land space
7.	Makerere University	Provision of training opportunities Collaboration in patient care, training and research
8.	Kampala Capital City Authority (KCCA)	Provision of land space Approval of infrastructure development plans at the current UCI
9.	Media Houses	Dissemination of information Advocacy
10.	Community	Collaboration in awareness activities Advocacy

11.	Hutchinson Cancer Research Centre Seattle	Training and patient care Collaboration in research
12.	Texas Children's Hospital/Baylor College of Medicine	Paediatric oncology skills capacity building including fellowship training, nurse training and mentorship, and training of affiliated super-specialists relevant to paediatric cancer care Programmatic paediatric cancer research Collaborative infrastructure development including design, building, equipping, and operation of a dedicated paediatric cancer facilities Networking with worldwide paediatric cancer professional bodies Linking paediatric oncology and paediatric haematology disciplines
13.	Health Professional Councils	Regulation
14.	Service Commissions	Recruit, motivate, and restructure the health workforce
15.	Ministry of Public Service (MoPS)	Human resource policy and standards
16.	Mbarara University	Training and research
17.	Uganda Virus Research Institute (UVRI)	Collaboration in research
18.	Joint Clinical Research Centre (JCRC)	Collaboration in research and patient care
19.	Gulu University	Training and research
20.	Ministry of Finance Planning and Economic Development (MOFPED)	Funding and policy guidance on finance
21.	Ministry of Education and Sports (MOES)	Training and research
22.	Hospice Uganda	Palliative care and training
23.	World Health Organization (WHO)	Policy guidance and standards Development of IEC materials
24.	Arua RRH, Gulu RRH, Mbarara RRH, Mbale RRH	Hosting regional cancer centres Training and research
25.	National Medical Stores (NMS)	Supply chain management of medicines and sundries
26.	National Drug Authority (NDA)	Regulation of cancer drugs availability and quality
27.	Ministry of Energy and Minerals Development	Provides oversight on policies and procedures including radiation guidelines
28.	International Atomic Energy Agency (IAEA)	Supports framework for technical cooperation Collaboration in training and research
29.	Uganda Blood Bank Transfusion Services	Collaboration in treatment and patient care
30.	Uganda Heart Institute (UHI)	Collaborating in treatment and care
31.	Uganda National Health Consumers Association	Overseeing the concerns of the community and coordinating civil society input Promoting full integration and implementation of the rights based approach

SECTION THREE

The Strategic Direction

3.1 INTRODUCTION

The institute's strategic direction is hinged on the issues identified from the forgoing analysis and the emerging issues in cancer care and research. This section focuses on the identity, strategic goal and objectives of the plan and priority interventions that the institute will pursue to ensure implementation of its agenda for the next five years 2015/16-2019/20.

3.2 THE OVERALL STRATEGIC AGENDA

The overall focus of this plan is to contribute to the Health Sector Vision and Mission. The vision is to have a healthy and productive population that contributes to economic growth and national development. The mission, on the other hand, is to facilitate the attainment of a good standard of health by all people of Uganda in order to promote a healthy and productive life; as embedded in the National Health Policy. The plan directly feeds into the health sector goal and priorities which aspire to accelerate movement towards universal health coverage with essential health and related services needed for promotion of a healthy and productive life.

The focus of the Uganda Cancer Institute during the plan period is to strengthen the framework for the transformation of its services and interventions towards the effective and efficient prevention, control and treatment of cancer in Uganda. To do this, the institute will enhance the existing interventions, as well as develop and maintain new and integrated programmes and actions in patient care, education and prevention, and research and training.

Vision, Mission & Core Values

3.3 VISION, MISSION AND VALUE STATEMENT

3.2.1 VISION

To be an internationally recognised centre of excellence advancing comprehensive cancer management in Africa

3.2.3. MISSION

Provision of state-of-the-art cancer prevention and care by advancing knowledge through research and training

3.2.4 CORE VALUES

P - Professionalism

I - Integrity

E - Excellence

C - Care

E - Equity

R - Respect

3.2.5 MANDATE

To undertake and coordinate the management of cancer and cancer-related diseases in Uganda

Prof. Charles M.C Olweny, Chairman Board of Directors UCI discussing the UCI Bill 2015

33.2.7 GUIDING PRINCIPLES

a) **Political commitment:** To support actions that contribute to cancer prevention management and control

b) **System linkage:** Cancer control strategies should be harmonised with the relevant components of the health system and primary health care principles

c) **Equity, accessibility and accountability:** This Strategic Plan is based on the principle of fairness in distribution of resources and rationalised demographic and geographical service delivery

d) **Multi-sectoral engagement:** This Strategic Plan is based on the principle that all sectors and stakeholders in the economy, including the communities, will be involved in prevention and early detection of cancer

e) **Donor alignment:** Donor support should be coordinated and aligned with institutional plans and policies

f) **Inclusivity:** The services of UCI indiscriminately and fairly target and benefit all, irrespective of any structural biases

g) **Human rights based approach:** In her service delivery, the UCI will promote full integration and implementation of the rights-based approach

h) **Gender equity and rights:** UCI recognises the historically prevalent structural and systemic marginalisation of women and girls, and will strive to promote gender equity, with special emphasis on the needs and rights of women and girls in our service delivery

Newly acquired Cobalt 60 radiotherapy equipment funded by Government of Uganda and International Atomic Energy Agency (IAEA)

STRATEGIC GOALS, OBJECTIVES AND STRATEGIES

3.4.1 GOAL

To reduce the incidence of cancer and improve survival through excelling in prevention, care, research and training.

3.4.2 STRATEGIC OBJECTIVES

To deliver its plans, the focus will be on five integrated strategic objectives:

1. To reduce cancer risk by increasing access and utilisation of cancer prevention services.
2. To improve access to quality, inclusive, affordable and comprehensive cancer care.
3. To enhance research and development capacity to effectively contribute to scientific knowledge and best clinical practices in cancer medicine.
4. To develop and nurture a complementary and specialised human resource for improved cancer care and control.
5. Build the institutional capacity of Uganda Cancer Institute to effectively deliver on its mandate.

UCI Fred Hutch Cancer Building

Video conferencing room

3.4.3 STRATEGIC INTERVENTIONS

To undertake and coordinate the management of cancer and cancer-related diseases in Uganda

STRATEGIC OBJECTIVE 1:

To reduce cancer risk by increasing access and utilisation of cancer prevention services

OUTCOMES

- Reduced cancer incidence through primary prevention.

STRATEGIC ACTIONS

1.1 National health promotion programme for prevention of cancer

1.2 Community and institutional outreach programmes on cancer prevention

1.3 Integrate cancer care and control in the essential health package

1.4 Support community structures for improved cancer education, prevention and care

1.5 Develop a road map for cancer prevention and control in the context of broader multi-sectoral strategies

1.6 Organise cancer control programmes through strengthened leadership, governance, management, and accountability in all cancer groups and at all levels of the health sector

1.7 National cancer surveillance, risk assessment and management programme across all ages

1.8 Increase health literacy to better the outcome of cancer patients

CT Simulator, one of the medical equipment available at UCI

STRATEGIC OBJECTIVE 2:

To improve access to quality, inclusive, affordable and comprehensive cancer care

OUTCOMES

- Effective and affordable diagnosis and treatment of cancer
- Improved survival and quality of life of cancer patients

STRATEGIC ACTIONS

2.1 Establish and strengthen diagnostic capacity for screening, diagnosis, staging and monitoring of cancer at regional cancer centers

2.2 Enhance provision of curative services

2.3 Strengthen provision of rehabilitative services

2.4 Enhance provision of palliative care services


Pediatrics ward at UCI


New Radiotherapy bunkers underconstruction

Digital x-ray machine at UCI

STRATEGIC OBJECTIVE 3:

To enhance research and development capacity to effectively contribute to scientific knowledge and best clinical practices in cancer care

OUTCOMES

- Enhanced application of modern scientific knowledge, technology and best practices in cancer surveillance, control and treatment.

STRATEGIC ACTIONS

3.1 Strengthen the institutionalisation of the research and development function at UCI to enhance the R&D capacity

3.2 Expand research by adopting modern medical technology innovations for cancer control

3.3 Research into the causation, treatment and prevention of common cancers in Uganda and the region and trigger epidemiological research

3.4 Develop and continuously update a research agenda for the health sector in oncology

3.5 Establish and strengthen collaborations with research organisations and institutes for enhanced innovations, inventions and applications (UHNRO, UVRI, chemotherapy, JCRC etc)

3.6 Promote shared learning and knowledge management of locally produced medical products, expertise and initiatives for enhanced regional impact

3.7 Enhance cancer information, research and evidence generation to inform national cancer care and control policy development and implementation

3.8 Establish and coordinate a national cancer registry system to support the prevention and control of cancer

3.9 Foster the use of research as a resource in professional development and provision of care

3.10 Advance knowledge of cancer risk factors, prevention, diagnosis and treatment

3.11 Comprehensively upgrade the National Cancer Registry in terms of data collection and storage processes as well as the aggregation process involving data from the different feed-registries

STRATEGIC OBJECTIVE 4:

To develop and nurture a competent and specialized human resource for improved cancer care and control

OUTCOMES

- Improved delivery of cancer care and control services

STRATEGIC ACTIONS

4.1 Provide training to a broad category of health care professionals using cancers available in our setting as models in understanding cancer medicine

4.2 Train specialists in oncology and relevant medical disciplines e.g. critical care, radiology, pathology

4.3 Provide accredited medical education in oncology for the region

4.4 Promote shared learning and knowledge management of locally produced medical products, expertise and initiatives for enhanced regional impact

4.5 Scale up pre-service cancer education and in-service training in collaboration with relevant training institutions to increase access to cancer services nationwide

Laboratory staff processing samples

STRATEGIC OBJECTIVE 5

Build institutional capacity of the Uganda Cancer Institute to effectively deliver on its mandate

OUTCOMES

- Efficiency and effectiveness in delivery of UCI services

STRATEGIC ACTIONS

5.1 Design and implement attractive compensation and motivation plan for the institute's human resources

5.2 Strengthen the legal and regulatory framework to facilitate a comprehensive national cancer control programme

5.3 Develop a national cancer control plan in collaboration with the Ministry of Health

5.4 Establish/acquire/obtain and ensure maintenance of state-of-the art infrastructure, and equipment, including the modernisation of the existing infrastructure for cancer care, education, and research

5.5 Strengthen Public-Private Partnerships in the development, use and management of cancer services

5.6 Medical, non-medical and ICT infrastructure and equipment

5.7 Establish and operationalise Regional Cancer Centres (RCCs) Arua, Mbale, Gulu and Mbarara

5.8 Strengthen partnerships, networking and collaboration for cancer control, care, research and education

5.9 Strengthen Management Information Systems

5.10 Strengthen resource mobilisation to increase funding base and effectiveness of the institute

3.5 Delivery of an Integrated Cancer Management Programme

In the pursuit of this plan, the institute will be guided by an integrated cancer management approach, comprised of promotive, preventative, curative, rehabilitative and palliative care interventions which are identical to the Uganda National Minimum Health Care Package (UNMHCP) and are critical for a holistic cancer management plan.

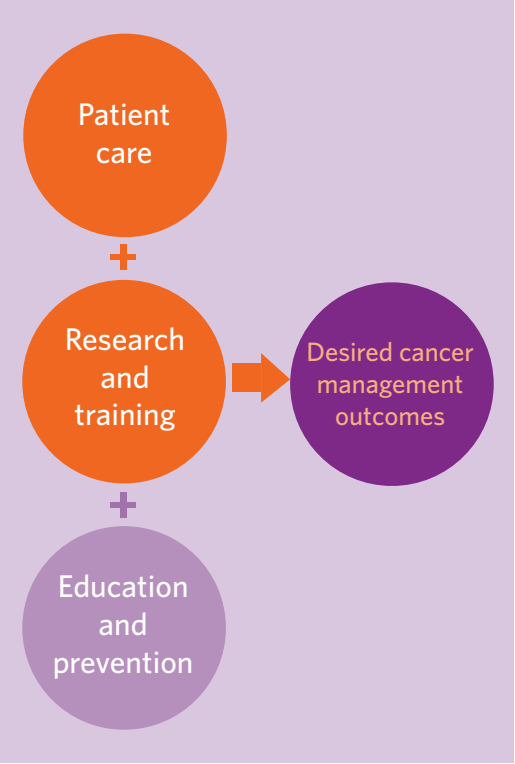

Figure 4: An integrated interventional approach for cancer management

The Uganda Cancer Institute is committed to developing and implementing a multidisciplinary approach in cancer management, in which multi-focus interventions complement each other to deliver defined cancer management outcomes both the in the medium and long-term.

SECTION FOUR

Implementation Framework For The Strategic Plan

3.1 INTRODUCTION

The successful implementation of this strategic plan will depend on integrated factors including: the adequacy and proper alignment of the UCI institutional framework with clear role definition and allocation; adequate, coherent and properly coordinated planning and budgeting and resource rationalisation and management. The efficiency of technical coordination and understanding of this plan favourable and consistent national planning and budgeting cycles, as well as stable government priority setting and implementation are also very key in the successful implementation of the Plan.

3.2 INSTITUTIONAL ARRANGEMENT AND ROLE CLARITY

The suitability of the institutional structure is crucial for enhancing an efficient and effective realisation of organisational goals. Even with all the enabling resources and favourable external environment, it is possible that a deficient institutional alignment and unclear description of roles may undermine performance.

(I) FILLING VACANT STAFF POSITIONS IN THE ESTABLISHED STRUCTURE

By the end of FY 2014/15, out of the 272 approved posts only 153 were filled, leaving a staffing gap of 119 (67%). Understaffing of the institute, especially in the key areas of nursing, physician oncologists, laboratory diagnostics, diagnostic imaging, pharmacy and cancer research has negatively affected the institute's service delivery. The low staffing level was attributed to the institute's lack of direct control over recruitment which was being done based on availability of funds provided by MoFPED and on selective recruitment basis in accordance with the needs of the affected departments.

Dr. Okuku Fred, one of the medical Oncologists, preparing equipment for screening patients

However, with the finalisation and passing of the UCI Act, the institute is enabled, in the course of the Plan, to adequately plan and recruit key staff to fill the vacant positions in order to meet the increasing demand for services.

(II) ORGANISATION OF SERVICES AT THE UGANDA CANCER INSTITUTE

With the gradual growth of the institute over the years, from a Lymphoma Treatment Centre into a comprehensive cancer centre, super-specialised divisions of cancer expertise have developed as well, thus enabling the delivery of higher quality clinical services and enabling focused cancer research and education. In line with the National Development Plan (NDPII) 2015/16 – 2019/20 priority to "establish super-specialised health care", one of UCI's strategic actions is to "establish sustainable programmes for super-specialised cancer control and treatment interventions including stem cell and solid organ transplants services".

As such, the services at the institute are organised into departments of recognised cancer sub-specialties, each leading a specific holistic area of clinical services, research, and medical education for specific patient/cancer groups.

Whereas the departments are patient-centered to ensure that the key functions of clinical services, research, and education are centered on the needs of specific patient groups and on expert teams in those specific cancers, the departments share cross-cutting resources, facilities and services that are organised into directorates. This will ensure mainstreaming of core services, efficient utilisation of resources across departments, and effective teamwork. The current UCI directorates include:

- **Directorate of Cancer Policy and Control:**

This directorate is charged with leading the institute's cancer strategic actions aimed at preventing cancer and expanding access to cancer care throughout the country through public health programmes. This includes planning, coordinating and/or delivering generic and cancer-specific educational, screening, and clinical services at regional referral hospitals through the national health referral network down to the community level.

- **Directorate of Clinical Care Services:**

This directorate will oversee and ensure timely delivery of comprehensive medical care services to Ugandans. Departments under this directorate include; paediatric oncology department, haematology department, gynaecology department, surgical oncology, radiation oncology department, pathology and laboratory medicine department, pharmacy department, imaging/radiology services department, medical oncology department, nursing department, and the medical records department. The departments create discrete generic or disease-specific or disease-group operational programmes to focus on specific functions within their area of expertise. The Lymphoma Programme under the Medical Oncology Department is as an example of a possible disease-group programme. The Clinical Programme of the Paediatric Oncology Department is as an example of a generic programme.

- **Directorate of Research:**

The Directorate of Research will oversee the establishment of core, shared research resources for cancer at the institute, including research laboratories, grants management, registry management and surveillance, and nationwide coordination of cancer research by local and international researchers.

The Research and Ethics Committee (REC) is administratively a division of the Directorate of Research that is functionally autonomous in order to ensure independent review and guidance with regards to ethical conduct of cancer research at the institute.

- **Directorate of Education & Training (East African Centre of Excellency for Oncology):**

The institute has a mandate to lead medical and overall health education in oncology in Uganda and the entire East African Community. The institute exercises this mandate independently or collaboratively with established universities and/or medical schools, depending on the nature of a specific training programme. The training programmes conducted by the institute include clinical fellowships for subspecialty physicians in various fields of oncology, research post-doctoral fellowships, research PhD programmes, certification programmes, continuing medical education sessions, and clinical skills drills (e.g. life support courses). The Directorate of Education & Training ensures that programmes align with the workforce needs of the institute, that programmes are conducted at the highest standards, and that they are accredited and recognised by the relevant regulatory and professional bodies.

- **Directorate of Management and Administrative Services:**

This directorate is the engine and driver of the institute's strategic plan. The directorate will guide and manage the framework on which all the institute's functions operate, including financial management, information technology, procurement, public relations, engineering and facility management and maintenance, security, and others.

Figure 5 demonstrates the organisational structure and, therefore, reporting lines in the institute as dictated by the interaction of various departments and directorates.

The structure and organogram enables super-specialised decision-making and operational management when it comes to the core mission areas of clinical services, specific research and training/education programs by teams that are super-specialized in those areas.

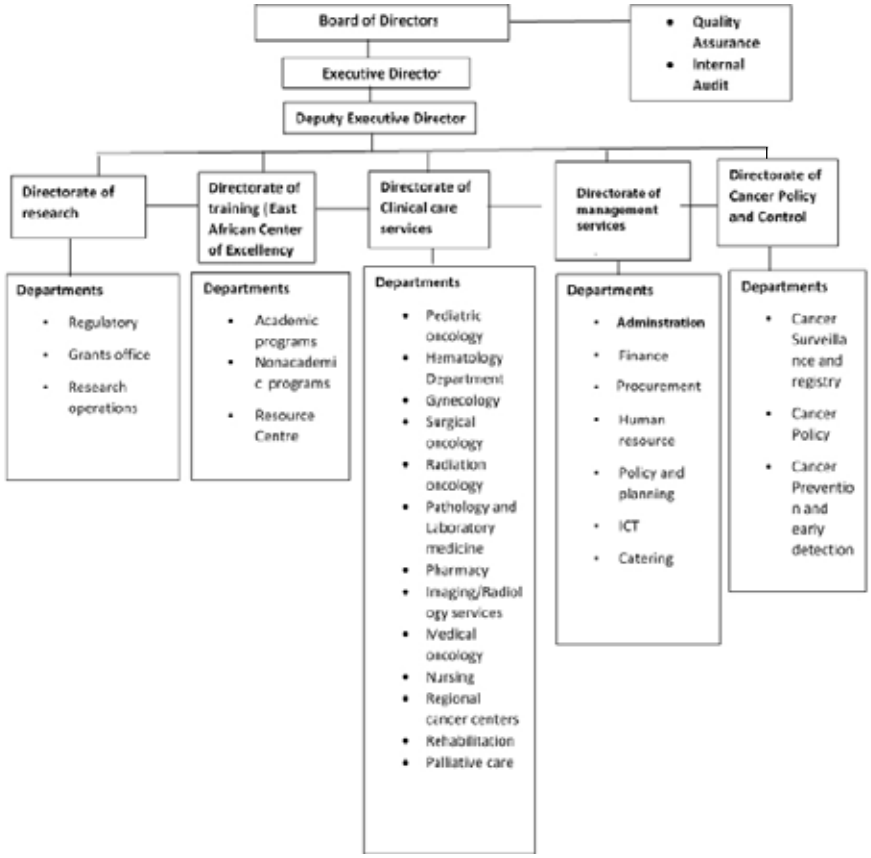

Figure 5: Organisation of departments and directorates at the Uganda Cancer Institute

(III) ESTABLISHMENT, OPERATIONALISATION AND STRENGTHENING OF REGIONAL CANCER CENTRES

In a bid to increase accessibility to cancer care and to facilitate epidemiological research, the institute established and operationalised two cancer satellite centres at Mayuge and Arua districts. Over the planning period, the institute has prioritised the establishment and full operationalisation of more regional cancer centres including in Mbarara and Gulu districts, whose funds have already been identified by the Government. At their full operation, the regional centres are expected to mirror the functions and services of the main Cancer Institute at Mulago and are intended to ease access to cancer care services for the respective regions.

(IV) ROLE CLARITY

The institute has made a deliberate effort to synchronise the staff roles in the various departments and directorates into the priorities and activities of the Strategic Plan to ensure effective implementation. This role allocation will continue during planning and budgeting sessions.

(V)STRENGTHENING THE INSTITUTIONAL CAPACITY OF UCI TO IMPLEMENT THE STRATEGIC PLAN

Focus will be placed on appropriately building the capacity of the staff to implement the strategic plan and providing the necessary equipment, facilities and tools for its implementation.

The Board of Directors and top management of the institute will be responsible for policy and strategy implementation, driving the necessary inter-institutional and inter-sectoral linkages, resource mobilisation, and ensuring internal and external accountability and coordination during the implementation of the Strategic Plan.

The understanding, support and ownership of this plan by the institute staff across the board is very pertinent. The institute will ensure that the plan is widely disseminated among staff and to the external stakeholders for increased awareness and ownership and thus enhance their support and ability to implement it. It will also ensure adequate involvement of all staff during the plan's implementation and reviews.

(VI) STRATEGIC RELATIONSHIPS AND OPERATIONAL LINKAGES WITH LOCAL AND INTERNATIONAL PARTNERS

The Uganda Cancer Institute fully recognises that cancer control is a multi-partner role, and cannot assume an isolated role. In this respect, the institute will strengthen the existing, as well as forge new strategic, collaborations and partnerships with partners at various levels, including relevant government agencies, non-state actors, local governments and partners overseas for the cause of cancer management. More pertinently, the institute will leverage the current health service and referral infrastructure to roll out the various interventions.

In order to ensure clarity of roles in external partnerships and to avoid duplication, or even conflict, as well as ensure that partners realise tangible and demonstrable outcomes of their contributions, the institute will strategically allocate partnerships to contribute to discrete departments, directorates, programmes or such organisational units within the institute.

The institute seeks to leverage opportunities and honour obligations, standards and commitments presented by emerging developments at various national, regional and global levels to ensure better health care specifically for NCDs, particularly cancer. These levels include the East African Community (EAC), the Common African Position of the African Union and the Post 2015 Development Agenda. This Plan, therefore, provides the overall strategic direction for the stakeholders in cancer management, together with outlining their expected roles and responsibilities in attaining this strategic agenda. It, in addition, lays down the implementation and collaboration frameworks within which the stakeholders contribute towards the control of cancer in the country.

(VII) ANNUAL AND QUARTERLY PLANS AND BUDGETS

The implementation of this Strategic Plan will follow the standard Government and sector planning and budgeting cycles. Annual and quarterly plans, budgets and reports will be developed and implemented using the relevant government tools. This will also apply to monitoring and reviews of the activities implemented. The priorities set in this plan and implementation milestones will be integrated into the annual Budget Framework Papers and Ministerial Policy Statements for coherent and coordinated resource appropriation and the approval of Parliament.

3.3 Risks

Risk analysis is key to identifying and assessing critical success and inhibiting factors that may influence the achievement of the goals of this Strategic Plan. An outline of the risks that the Uganda Cancer Institute faces in carrying out its mandate includes the following:

- Fraudulent transactions and activities that constitute corruption often plague well intended interventions and efforts in the country. This risk in this area is heightened by the comparatively lower remuneration (when compared to the private sector) of UCI and within the overall health sector staff. To mitigate this, the Uganda Cancer Institute will follow strict rules of accountability, and, as necessary, enforce the anti-corruption laws. Internal integrity principles will be developed and all staff will be oriented and urged to adhere to these principles.

- Because of the limited access to IT processes within Uganda's health sector, especially with regards to data management and filing processes, the institute also runs the risk of losing important data and struggling with data and information gaps in terms of the nationwide implications of cancer. This can impact the efficacy and relevance of any intervention plans with regards to cancer. The institute will take robust efforts to enroll and optimise the ICT capabilities to overcome this potential risk.

- As a government agency, the Uganda Cancer Institute's planning and activities are often at risk of being impeded by government bureaucracy. The institute will, therefore, strive to improve coordination and ensure timely communication with relevant institutions of government and other partners to enhance management efficiency.

- As an autonomous government agency, the Uganda Cancer Institute can be sued in courts of law. This implies that the institute's operations must be prudently and legally managed to avert possible legal risks.
- Strategic planning of Government MDAs is contingent on the capacity of the Ministry of Finance and Economic Development's approval of the financial implications. The capacity of its implementation is also dependent on the current economic situation, as well as any broader economic planning processes and their impact on statutory allocations. Positive lobbying will be explored with responsible agencies, including beyond the MOFPED, to ensure support and mobilization of the required resources.
- Bottlenecks within the governance framework of the institute, as well as limited sectoral interaction within the health sector which ultimately affect service delivery, can impact the implementation of the Strategic Plan. It is, therefore, pertinent to prioritise timely coordination and communication to overcome most of such adversarial effects.

The Rt. Hon. Prime Minister, Dr. Ruhakana Rugunda, The Director General IAEA, Amb. Amano, WHO Country representative in Uganda, Minister of Health,Jane Ruth Aceng Minister of state for Energy and Mineral development, Eng Simon Dujang and the Executive Director UCI with other guests at the commissioning and restoration of Radiotherapy services at UCI

SECTION FIVE

Financing arrangements for the Strategic Plan

5.1 INTRODUCTION

This section presents the framework for financing the Strategic Plan so as to ensure the implementation of the set plans and achievement of targeted outcomes. The section indicates the overall and disaggregated costs of the plan, and the implications for resourcing strategies.

5.2 KEY CONSIDERATIONS FOR FINANCING THE STRATEGIC PLAN

Uganda's health sector financing has historically been inadequate to meet the estimated financing needs. This has been attributed to limited tax revenues, constraints to effectively align the various funding sources with providing the essential health care, as well the inefficient use of mobilised financial resources in some cases experienced in the past.

According to the current fiscal space projections, the health sector financing will continue to grow at a modest rate, with the Government bigger focus for public financing still directed towards energy and infrastructure development.

Uganda's health sector still heavily relies on external aid and development partner financing which presents prioritisation and sustainability challenges.

The sources of health financing are public, private funds (mainly household out-of-pocket expenditure), development partners and voluntary health insurance. Funding for health care comes from a range of sources including: general tax revenues; development partner contributions; health insurance (private and social health insurance); out-of-pocket direct payment by patients; community financing and global health financing initiatives. A combination of all these mechanisms is used by the Government— and presents the opportunity for the UCI to leverage them.

5.3 THE STRATEGIC PLAN BUDGET— 2015/16-2019/20

Overall, a total of UGX1,145 billion is required to implement the strategic priorities of the Uganda Cancer Institute for the five years. The detailed breakdown is given in Table 5.

Table 5: Summary of UCI Strategic Plan Budget 2015/16 – 2019/20

CANCER INSTITUTE DEVELOPMENT PLAN BUDGET FY2015/16 -2019/20					
CLASSIFICATION	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
WAGE	5,000,000,000	5,600,000,000	11,600,000,000	14,600,000,000	17,600,000,000
Non-Wage Recurrent	9,735,000,000	22,687,000,000	77,552,400,000	223,880,900,000	220,659,900,000
Total Recurrent	14,735,000,000	28,287,000,000	89,152,400,000	238,480,900,000	238,259,900,000
Total Development	11,639,000,000	36,845,000,000	40,545,047,634	230,209,960,000	217,407,924,950
Total Budget	**26,374,000,000**	**65,132,000,000**	**129,697,447,634**	**468,690,860,000**	**455,667,824,950**

Over the planning period, the institute will need UGX 1,145,562,132,584 to implement the interventions envisaged in the Strategic Plan. This amount comprises, in varying degrees, the recurrent wage (4.75%), non-wage recurrent (48.41%) and development (46.85%). It is notable that during the plan period, the greatest investment focus has

been placed on the development needs. There is a compelling justification to apply most resources in a more durable and sustainable prioritisation of medical and support infrastructure. The institute has targeted that once this is achieved, there will equally be need to undertake very robust measures towards cancer prevention, through public education and other interventions, assured that the infrastructural requirements to meet the anticipated client demand are existent.

The major cost drivers over the planning period are:

(i) Ensuring uninterrupted supply of specialised medicines and medical supplies;

(ii) Establishment and operationalisation of Regional Cancer Centres (RCC);

(iii) Training in specialised and super-specialised cancer care;

(iv) Investments in specialised and super-specialised medical and diagnostic equipment; and

(v) Establishment of modern support infrastructure.

5.4 PAST FINANCIAL PERFORMANCE, MTEF PROJECTIONS AND IMPLICATIONS FOR SP FINANCING

While there was an increase in the amount of funding the institute received from the Government over the last two preceding financial years, the increase remained marginal. In FY 2013/14, the institute received a total of UGX 6.843 billion against a budget of UGX 11.297 billion. However, the indicative Medium Term Expenditure Framework (MTEF) projections for the institute paint an optimistic picture for near-ripple financing levels, moreover with a progressive increase across the years as shown in Table 6.

Table 6: UCI MTEF Projections for 2015/16 – 2019/20

CURRENT MTEF PROJECTIONS

Budget Item	2015/16	2016/17	2017/18	2018/19	2019/20
Wage	2,349,000,000	2,349,000,000	2,349,000,000	2,467,000,000	2,467,000,000
Non-Wage	2,055,000,000	1,991,000,000	1,991,000,000	2,190,000,000	2,190,000,000
Development	11,639,000,000	36,845,000,000	39,636,000,000	35,342,000,000	35,342,000,000
TOTAL	**16,043,000,000**	**41,185,000,000**	**43,976,000,000**	**39,999,000,000**	**39,999,000,000**

Table 7: Funding Gaps

CANCER INSTITUTE DEVELOPMENT PLAN FUNDING GAPS					
CLASSIFICATION	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
Wage Gap	2,651,000,000	3,251,000,000	9,251,000,000	12,133,000,000	15,133,000,000
Non-Wage Recurrent Gap	7,680,000,000	20,696,000,000	75,561,400,000	221,690,900,000	218,469,900,000
Total Recurrent Gap	10,331,000,000	23,947,000,000	84,812,400,000	233,823,900,000	233,602,900,000
Total Development Gap	-	10,000,000,000	909,047,634	194,867,960,000	182,065,924,950
Total Funding Gap	**10,331,000,000**	**23,947,000,000**	**85,721,447,634**	**428,691,860,000**	**415,668,824,950**

5.5 STRATEGIES FOR FINANCING THE STRATEGIC PLAN

From Table 7, it can be noted that the funding gap across the years— but especially from FY 2017/18 to 2019/20—is huge. It is notable that the needs of the institute especially those of a development nature, such as the medical and diagnostics equipment and support infrastructure investments, are expensive and capital intensive.

Over the planning period, the institute will run an ambitious and robust resource mobilisation plan, leveraging all possible options and sources for funding, guided by the sector and/or in collaboration with other relevant institutions of Government, non-government and development partners.

The GoU will remain the biggest source of funding for the Strategic Plan, through the standard MTEF and development partner on budget contributions. The UCI will continuously engage the relevant institutions of government for increased funding.

As presented in Table 8, about 47% of the Strategic Plan's budget will be sourced from external funding by development partners through on-and-off budget support. The institute will, through the Ministry of Health, engage the Government, particularly MoFPED and Parliament, to support our external funding initiatives. Equally, the institute will engage development partners through project-focused funding proposals, majorly for off-budget support. Efforts will especially be focused on enabling the institute to meet the growing need for specialised and super-specialised cancer care. It is understood that the development partner is mostly directed towards development expenditure, and in this line, the institute will focus on acquiring the requisite medical and diagnostics equipment, paving way for the modernisation progression to a centre of excellence for cancer care.

The institute will explore and take advantage of the opportunities for Public-Private Partnerships for in investments in medical equipment and support infrastructure as a more sustainable financing mechanism for specific considerations.

About 40% of the total health expenditure paid by health care clients is direct out-of-pocket expenditure. Experience has also shown that it is not sustainable for the Government to offer health care services totally free of charge. The quality of health care is a strong compulsion for directly paid-for health care services. The Uganda Cancer Institute will ensure the sustained improvement in the quality of services as well as the establishment of attractive paid-for services. The institute desires to reduce the number of cancer patients referred abroad by making such services sought after available in the country.

The funding gap has been determined against the indicative projections of the Government earmarked funding for the institute over the same years. The gap will be covered by lobbying for increased MTEF funding and on-and-off budget development partner support.

5.6 PRINCIPLES FOR FINANCIAL SUSTAINABILITY

The institute recognises that financial sustainability during the implementation of the Strategic Plan and beyond to ensure sustained service delivery and institutional growth is dependent on a number of principles. These include:

a) Strong and focused leadership for resource mobilisation

b) Advocating for increased MTEF allocations to the institute

c) Strong accountable management for effective and efficient resource management

d) Effective controls and quality checks to ensure transparency and proper accountability

e) Effective coordination and utilisation of aid and all resources mobilised

f) Mobilising additional resources from the private sector under the PPP arrangement

g) Leveraging grant opportunities by writing feasible and bankable funding proposals

The launch of East Africa's Centre of Excellency for Oncology Project at Hotel Africana

TABLE 8: SUMMARY BUDGET BY SOURCE OF FUNDING

UCI STRATEGIC PLAN BUDGET BY SOURCE OF FUNDING - PROJECTIONS FOR FY 2015/16 – 2019/20										
	2015/16		2016/17		2017/18		2018/19		2019/20	
CLASSIFICATION	GOU	DONOR	GOU	DONOR	GOU	DONOR	GOU	DONOR	GOU	DONOR
WAGE	5,000,000,000	-	5,600,000,000	-	11,600,000,000	-	14,600,000,000	-	17,600,000,000	
Non-Wage Recurrent	2,055,000,000	7,680,000,000	1,991,000,000	20,696,000,000	17,103,280,000	60,449,120,000	46,528,180,000	177,352,720,000	45,883,980,000	174,775,920,000
Total Recurrent	7,055,000,000	7,680,000,000	7,591,000,000	20,696,000,000	28,703,280,000	60,449,120,000	61,128,180,000	177,352,720,000	63,483,980,000	174,775,920,000
Total Development	11,639,000,000	-	36,845,000,000	-	39,817,809,527	727,238,107	74,315,592,000	155,894,368,000	71,755,184,990	145,652,739,960
Total Budget	18,694,000,000	7,680,000,000	44,436,000,000	20,696,000,000	68,521,089,527	61,176,358,107	135,443,772,000	333,247,088,000	135,239,164,990	320,428,659,960
%ge share	70.9%	11.8%	68.2%	31.8%	52.8%	47.2%	28.9%	71.1%	29.7%	70.3%

SECTION SIX

Monitoring & Evaluation Framework

6.1 INTRODUCTION

Monitoring and evaluation functions are important in tracking the achievements of target outputs and the set objectives. This is one of the functions that institute will institutionalise and operationalise.

The purpose of the monitoring and evaluation plan is to provide a mechanism for measuring and tracking the objectives and outcomes to determine if they are achieved as planned. It will also help track and measure relevance, and generate lessons for operational and policy revisions, and to provide in-built mechanisms for tracking deviation from targets, ensure improvement and review of targets in case of premature realisation, track progress on implementation as well as continuous assessment of the performance environment and generate lessons for policy and programmatic improvement.

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6.2 MONITORING AND EVALUATION PLAN

Monitoring will be done on a quarterly basis while evaluation will be done mid-term and at the end of the Strategic Plan period. A detailed M&E plan is annexed to this Strategic Plan. The M&E plan shall guide monitoring and evaluation of the Strategic Plan implementation and drive the process of tracking progress along the different key performance indicators and results against planned targets. The M&E plan relies on the outcomes, outputs and key performance indicators included in the results framework which also forms part of this Strategic Plan.5.3 The Strategic P

6.3 REVIEW OF THE STRATEGIC PLAN

The institute shall review this Strategic Plan annually. The key issues in the review will be to assess the extent to which planned activities have been executed. The mid-term review shall be expected to assess the achievements against the strategic objectives of the Plan, and make recommendations. At the end of the Strategic Plan period, evaluation shall be done to measure the achievements realised. The M&E framework is attached to this Strategic Plan.

6.4 CAPACITY BUILDING FOR M&E

The capacity building in M&E will be a priority at the beginning of the Strategic Plan period in order to deliver the required support for its implementation. All staff of UCI will be trained on this Strategic Plan and the M&E framework.

Annex 1: UGANDA CANCER INSTITUTE STRATEGIC PLAN: ANNUALISED RESULTS MATRIX

	Indicator	Baseline	Annualised Targets				
			Year 1	Year 2	Year 3	Year 4	Year5
Goal and objective level/outcome indicators and targets							
Goal: Reduce the incidence of cancer and improve survival through excelling in prevention, care, research and training	1. Incidence of cancer for indicator cancers: • Cervical cancer	44/100,000					
	• Liver cancer	7.9 /100,000					
	• Kaposi sarcoma	16/100,000					
	2. Overall survival (1-year survival endemic)	Survival rate at one year					
	Childhood cancer	50%	50%	55%	60%	65%	70%
	Lymphomas (adults)	32%	32%	37%	42%	45%	50%
	Kaposi sarcoma	52%	52%	57%	60%	63%	65%
	Breast cancer	49%	49%	51%	55%	58%	63%
	Cervical cancer	21%	24%	27%	30%	33%	35%
	Prostate cancer	35% (at 10 years)	35%	41%	44%	47%	50%
Objective 1: Reduce cancer risk by increasing access and utilisation of cancer prevention services.	Percentage of population accessing cancer information		40% level of awareness in the population	50% level of awareness in the population	60% level of awareness in the population	70% level of awareness in the population	80% level of awareness in the population
	Percentage of population utilising cancer prevention services	>1% of the population accessing and utilising cancer prevention services	2% of the population accessing and utilising cancer prevention services	5% of the population accessing and utilising cancer prevention services	10% of the population accessing and utilising cancer prevention services	15% of the population utilising and accessing cancer prevention services	20% of the population utilising and accessing cancer prevention services
	Percentage of cancer cases presenting at early stage for Cervical, Breast cancer, cancers and prostate cancer (Early stage 1 to 2A)	Less than 10% reporting at early stage	10% reporting at early stage	15% reporting at early stage	20% reporting at early stage	25% reporting at early stage	30% reporting at early stage
Objective 2: Improve access to quality, inclusive, affordable, efficient and comprehensive cancer care that is well integrated in the health care system of Uganda.	Percentage of cancer patients accessing timely comprehensive care (disaggregated by gender, age, region, rural, urban)	Less than 4% (Source and year to be obtained)	5%	10%	20%	30%	40%
	Percentage survival rate for the most common cancers (Breast, Cervical, Kaposi Sarcoma, Childhood and Prostate cancers)	Survival rate at 15% at one year	15% at one year	20% at one year	25% at one year	30% at one year	35% at one year
	%age of cancer case referrals (in-country)		10%	20%	30%	40%	50%
	Percentage of cancer referrals abroad	30%	25%	20%	15%	10%	5%
Objective 3: Enhance research and development capacity to effectively contribute to scientific knowledge and best clinical practices in cancer.	Number of research grants won and implemented	0	1	1	3	3	3
	Number of new research projects undertaken	0	0	0	3	5	7
	Number of student research projects undertaken	18	17	18	20	22	24
	Number of abstracts	7	8	20	10	12	15

	Number of research manuscripts published	2	4	5	7	12	15
	Number of collaborative research projects	5	14	23	25	27	29
	Number of cumulative cohorts for major cancers	1	1	1	3	5	7
Objective 4: Develop and nurture a competent and specialised human resource for improved cancer care and control.	Percentage increase in specialists trained at UCI		10%	20%	30%	40%	40%
	Percentage increase in specialists trained at RRH, district hospitals & private hospitals		10%	15%	15%	20%	25%
	Percentage of medical students and interns trained		20%	40%	50%	60%	70%
Objective 5: Build the institutional capacity of the Uganda Cancer Institute to effectively deliver on its mandate.	Percentage improvement in state of the art infrastructure and equipment at national & regional levels		10%	20%	30%	30%	40%
	Number of local and international partnerships and collaborations established	7	9	11	15	18	18
	Number of skilled personnel recruited and retained	67% of current structure filled	• 67% of staff structure filled • 70% of staff acquire professional development training	• 60% of approved (reviewed) structure is filled • 50% of staff receive professional development training	• 75% of approved structure filled • 75 % of staff receive professional development training	• 90 % of approved structure filled • 100% of staff receive professional development training	• 100% of approved structure filled
	Amount of funding received and generated		• 80% of budget met	• 85% of budget met	• 90% of budget	• 95% of budget met	• 100% of budget met
	Number of policies and frameworks established to support the institution		2	3	4	4	5
Strategic Actions/Output Level Indicators and Targets							
1.1National health promotion programme for prevention of cancer	1.1.1 Number of public awareness campaigns conducted	24	24	24	24	24	24
	1.1.2 Approximate number of people reached by public awareness campaigns		3,000,000	5,000,000	8,000,000	11,000,000	15,000,000
	1.1.3 Number of cancer screening programmes conducted		36	45	50	60	75
	1.1.4 Number of people screened in outreaches		6,000	8,000	12,000	16,000	18,000
	1.1.5 Number of static cancer clinics conducted		36	45	50	60	75
	1.1.6 Number of mobile cancer care and continuity clinics conducted		12	24	36	48	60
	1.1.7 Number and nature of media programmes conducted		12	24	36	48	60
	1.1.8 Number and category of IEC materials produced and disseminated		35,000	50,000	65,000	80,000	95,000
1.2 Community and institutional outreach programmes on cancer prevention	1.2.1 Number and nature of media programmes conducted		40	80	120	140	150
	1.2.2 Number and category of IEC materials produced and disseminated		30,000	40,000	50,000	60,000	70,000
	1.2.3 Number of community outreach sessions conducted		24	48	72	96	120
	1.2.4 Number of corporate programmes attended		5	10	15	20	25
1.3 Integrate cancer care and control in the essential health package	1.3.1 Number of districts with integrated cancer services as part of their district health plans		10%	15%	20%	30%	40%

	1.3.2 Number of districts with designated cancer prevention and control focal persons		40	80	134	140	146
	1.3.3 Number of districts reporting on cancer prevention and control activities		40	80	134	140	146
1.4 Support community structures for improved cancer education, prevention and care	1.4.1 Number of community based health workers trained		800	1,200	1,600	2,000	2,400
	1.4.2 Number of community based health education sessions conducted		80	80	120	160	200
1.5 Develop a road map for cancer prevention and control in the context of broader multi-sectoral strategies	1.5.1 Number of multi-sectoral workshops held		20	20	40	40	20
	1.5.3 Level of operationalization of a National Cancer Communication Strategy		0	20%	50%	70%	100%
	1.5.4 Level of integration of cancer education materials into primary and secondary syllabus		0	0	100%	100%	100%
1.6 Organize cancer control programs so as to strengthen leadership, governance, management, and accountability in all cancer groups and at all levels of the health sector	1.6.1 Existence and functionality of a multi-sectoral cancer prevention and control committee		0	0	30%	70%	100%
1.7 National cancer surveillance, risk assessment and management program across all ages	1.7.1 Number of Cancer risk assessments done	0	0	0	1	0	0
	1.7.2 Number of districts with functional cancer coordination desks		0	40	80	134	146
	1.7.3 Level of operationalization of cancer referral mechanisms		10%	20%	30%	40%	60%
	1.7.4 Number of districts with cancer survivorship programmes		0	0	80	120	146
1.8 Increase health literacy to better the outcome of cancer patients	1.8.1 Number of cancer literacy assessments done		0	0	1	0	0
	1.8.2 Level of completion of Health literacy communication plan		0	0	100%	0	0
	1.8.3 Number of awareness programmes conducted about health literacy and its dangers		0	0	8	16	16
	1.8.4 Number of health workers trained and supported to promote health literacy		80	120	250	300	400
	1.8.5 Number of expert cancer patients/ survivors trained and supported to promote health literacy		15	25	35	45	55
	1.8.6 Level of operationalization of health literacy library established		0	0	0	0	75
	1.8.7 Assorted IEC materials that promotes health literacy produced and disseminated		15,000	20,000	25,000	30,000	0
	1.8.8 Percentage of units in UCI and regional cancer treatment centres displaying cancer information for cancer patients and caregivers daily		25%	50%	75%	100%	100%
	1.8.9 Nature and number of media programmes (Radio, TV and print media) that promotes health literacy conducted		24	32	36	48	48

	1.8.10 Level of application Mobile Phone application that promotes health literacy among cancer patients developed		0	0	50	75	100
	1.8.11 Number of patients' and caregivers' education sessions conducted		32	60	80	120	160
2.1 Establish and strengthen diagnostic capacity for screening, diagnosis, staging and monitoring of cancer at regional cancer centres	2.1.1 Level of operationalisation of a pathology reference lab		0	0	0	40	100
	2.1.2 Level of operationalisation of pathology labs at regional centres		0	0	0	40	100
	2.1.3 Availability of best laboratory practices and standard procedures to have CAP certification		0	0	50	75	100
	2.1.4 Availability of operational immunology lab		0	0	0	35%	100%
	2.1.5 Availability of operational microbiology lab		0	0	0	35%	100%
2.2 Enhance provision of curative services	2.2.1 Level of availability medicines and medical supplies	65%	65%	75%	80%	85%	85%
	2.2.2 Level of availability of specialised medicines and medical supplies procured	50%	50%	65%	75%	85%	90%
	2.2.3 Availability of linen, beddings and uniforms	80%	80%	100%	100%	100%	100%
	2.2.4 Number of mobile cancer care and continuity clinics conducted	0	16	16	24	32	40
	2.2.5 Availability of imported specialized skills not available in the country to build capacity for oncology	0	0	40%	70%	80%	80%
	2.2.6 Level of Clinical Support supervision for both public & private health facilities		0	0	30%	45%	70%
2.3 Strengthen provision of Rehabilitative services	2.3.1 Number of beneficiaries of counselling and other ancillary services		4,000	5,000	6,000	7,000	8,000
	2.3.2 Level of satisfaction of client service		50%	60%	70%	80%	90%
2.4 Enhance provision of Palliative care services	2.4.1 Availability of operational cancer palliative care units at UCI and regional centres		0	0	60%	80%	100%
	2.4.2 Availability of National palliative care guidelines		0	0	75%	100%	100%
	2.4.3 Level of enforcement of National palliative care guidelines for cancer		0	0	30%	50%	100%
	2.4.4 Number of trainings on palliative cancer care conducted		0	0	2	2	2
	2.4.5 Number of cancer caregivers trained in palliative care		0	0	100	150	200
2.5 Procurement of quality medicines and medical supplies	2.5.1 Availability & functionality of the drug therapeutics committee		0	0	40%	70%	100%
	2.5.2 Availability and quality of specialised medicines and medical supplies		65%	65%	75%	85%	90%
2.6 Enhance quality and patient safety in cancer care	2.6.1 Availability & functionality of Quality assurance committee		0	0	40%	70%	100%

	2.6.2 Availability and enforcement of standard quality procedures and guidelines		0	40%	60%	80%	100%
	2.6.3 Availability and enforcement of Clinical Client charter		0	0	30%	60%	100%
	2.6.4 Availability and functionality of a Clinical Standards Committee		0	0	60%	80%	100%
3.1 Strengthen the institutionalization of the research and development function at UCI to enhance the R&D capacity	3.1.1 Number of Institutional Cancer Research Committees established (REC, SRC, & CAB)		0	1	2	3	3
	3.1.2 Level of functionality of institutional Cancer Research Committees		0	30%	60%	80%	100%
	3.1.3 Nature and number of staff capacity development programmes supported in research and development		0				
	3.1.4 Number of staff supported in research and development initiatives		10	20	25	30	60
	3.1.5 Level of funding for Research		30%	40%	60%	70%	80%
3.2 Expand research to adopt modern medical technology innovations for cancer control	3.2.1 Number of research grants won and implemented	0	1	1	3	3	3
	3.2.2 Number of new research projects undertaken	0	0	0	3	5	7
3.3 Research into the causation, treatment and prevention of common cancers in Uganda and the region and trigger epidemiological research	3.3.1 Number of researches done		0	1	1	1	1
3.4 Develop and continuously update a research agenda for the health sector in oncology	3.4.1 Availability and application of Research tools		0	0	40%	70%	100%
3.5 Establish and strengthen collaborations with research organizations and institutes for enhanced innovations, inventions and applications (UHNRO, UVRI, Chemotherapy, JCRC etc)	3.5.1 Number of student research projects undertaken	18	17	18	20	22	24
	3.5.2 Number of collaborative research projects	5	14	23	25	27	29
	3.5.3 Number of joint stakeholder seminars and workshops held		0	0	1	2	3
	3.5.3 Number of joint stakeholder seminars and workshops held		0	0	1	2	3
3.6 Promote shared learning and knowledge management of locally produced medical products, expertise and initiatives for enhanced regional impact	3.6.1 Number of abstracts	7	8	20	10	12	15
	3.6.2 Number of research manuscripts published	2	4	5	7	12	15
3.7 Enhance cancer information, research and evidence generation to inform national cancer care and control policy development and implementation	3.7.1 Number of policy documents developed	0	0	1	2	2	3
	3.7.2 Number of reports	1	2	4	6	8	10
3.8 Establish and coordinate a national cancer registry system to support the prevention and control of cancer	3.8.1 Level of operationalization of the Cancer Registry at all levels		0	20%	40%	70%	100%
	3.8.2 Cancer registry continuously updated		0	20%	40%	70%	100%

3.9 Foster the use of research as a resource in professional development and provision of care	3.9.1 Number of research activities supported		0	1	2	3	4
	3.9.2 Level of support extended to research activities		0	40%	60%	80%	100%
3.10 Advance knowledge of cancer risk factors, prevention, diagnosis and treatment	3.10.1 Number and nature of research done and reports produced and disseminated		0	1	2	2	4
	3.10.2 Number of staff trainings held		0	2	3	4	5
	3.10.3 Number of staff trained		0	10	20	25	30
	3.10.4 Inventory and profile of assorted specialised medical equipment procured		0	0	40%	60%	70%
	3.10.5 Level of operationalisation of Cancer information management systems		0	0	40%	70%	100%
3.11 Comprehensively upgrade the National Cancer Registry in terms of data collection and storage, processes as well as the aggregation process involving data from the different feed-registries	3.11.1 Nature of cancer information management software procured		Assorted	Assorted	Assorted	Assorted	Assorted
	3.11.2 Inventory of assorted ICT equipment and software procured		Assorted	Assorted	Assorted	Assorted	Assorted
	3.11.3 Number of trainings held and staff trained in operation and maintenance		0	1	2	2	2
	3.11.4 Number of staff trained in ICT & MIS operation & maintenance		0	5	10	15	25
4.1 Provide training to a broad category of health care professionals using cancers available in our setting as models in understanding cancer medicine	4.1.1 Number of staff induction and orientation trainings conducted		0	2	2	3	5
	4.1.2 Number of staff inducted and oriented		0	20	30	40	50
	4.1.3 Number of staff refresher and reorientation trainings conducted		0	2	2	3	5
	4.1.4 Number of staff reoriented		0	40	50	60	70
	4.1.5 Number of team building retreats conducted		0	1	2	2	2
	4.1.6 Number of trainings in specialized cancer disciplines conducted		0	0	1	2	2
	4.1.7 Number of staff trained in specialised cancer disciplines		0	0	5	5	10
4.2 Train specialists in oncology and relevant medical disciplines e.g. critical care, radiology, pathology	4.2.1 Number of staff capacity assessments conducted		0	0	1	0	0
	4.2.2 Number of benchmarking excursions for staff supported		2	3	3	4	5
	4.2.3 Number of staff benefited from benchmarking excursions		12	18	18	24	30
	4.2.4 Number of trainings in specialised medical disciplines conducted		2	2	3	3	4
	4.2.5 Number of staff benefited by specialised trainings		10	15	20	25	30
4.3 Provide accredited medical education in oncology for the region	4.3.1 Number of stakeholder meetings held with the Ministry of Education		0	2	2	2	2

	4.3.2 Number of cancer education programmes accredited		0	2	3	4	5
4.4 Promote shared learning and knowledge management of locally produced medical products, expertise and initiatives for enhanced regional impact	4.4.1 Number of support grants extended to local research		0	0	1	2	2
	4.4.2 Existence and number of knowledge sharing platforms		0	0	1	1	1
	4.4.3 Number of innovative initiatives in place		0	0	2	3	3
4.5 Scale up pre-service cancer education and in-service training in collaboration with relevant training institutions to increase access to cancer services nationwide	4.5.1 Number of partnerships and collaborations in place for cancer research and management		5	8	12	16	18
`	4.5.2 Number of short and long term cancer courses and on-job training/ refresher courses developed and supported		0	2	3	4	5
5.1 Design and implement attractive compensation and motivation plan for the Institute's human resources	5.1.1 Payment of salaries and allowances to medical staff		100%	100%	100%	100%	100%
	5.1.2 Payment of salaries and allowances to highly specialised medical specialists		100%	100%	100%	100%	100%
	5.1.3 Payment of salaries and allowances to non-medical staff		100%	100%	100%	100%	100%
	5.1.4 Number of staff welfare enhancement programmes implemented		3	5	5	6	6
5.2 Strengthen the legal and regulatory framework to facilitate a comprehensive national cancer control programs	5.2.1 Availability of Regulations to operationalize the Uganda Cancer Act		0	0	40%	100%	0
	5.2.2 Availability of a national regulatory framework for cancer care (Standards, protocols)		0	0	0	40%	100%
	5.2.3 Number of private cancer care providers supported, mentored and trained in cancer care and management		0	0	30	50	80
	5.2.4 Availability and functionality of referral systems (guidelines, procedures) to ensure continuity of cancer care in collaboration with the Ministry of Health		0	0	0 40%	100%	100%
	5.2.5 Number of monitoring and evaluation tools for cancer policy developed and applied		0	0	1	3	5
5.3 Develop a national cancer control plan in collaboration with the Ministry of Health	5.3.1 Availability of a National Cancer Control plan		0	0	50%	100%	0
5.4 Establish/acquire and ensure maintenance of state of the art infrastructure, and equipment, including the modernization of the existing infrastructure for cancer care, education, and research	5.4.1 Level of completion of paediatric oncology centre of excellence		0	0	30%	60%	100%
	5.4.2 Level of completion of cancer screening and diagnostics centre		0	0	0	100%	0
	5.4.3 Level of completion of East Africa Centre of excellence for oncology multipurpose building		0	0	30%	80%	100%
	5.4.4 Level of maintenance of existing UCI structures		60%	70%	80%	90%	100%
	5.4.5 Level of completion of radiotherapy bunkers		0	40%	100%	0	0

	5.4.6 Level of completion of UCI administrative block		0	0	0	50%	100%
	5.4.7 Level of completion of Patient Hostel		0	0	0	50%	100%
	5.4.8 Level of completion of Patients care block		0	0	40%	80%	20%
	5.4.9 Level of completion of Nuclear Medicine Facility		0	0	40%	100%	0
5.5 Strengthen Public-Private Partnerships in the development, use and management of cancer services	5.5.1 Number and nature of PPP collaborations established		0	0	0	3	5
5.6 Medical, non-medical and ICT infrastructure and equipment	5.6.1 Availability of equipment needs assessment report		0	0	1	0	0
	5.6.2 Medical equipment procured (General Endoscopy)		0	40%	70%		100%
	5.6.3 Medical equipment procured (Paediatrics Endoscopy)		0	100%	0	0	0
	5.6.4 Medical equipment radiotherapy		0	0	30%	70%	100%
	5.6.5 Medical equipment nuclear medicine		0	0	40%	40%	100%
	5.6.6 Medical Equipment Imaging		0	0	40%	70%	100%
	5.6.7 Medical Equipment Radio Nuclide		0	0	30%	70%	100%
	5.6.8 Medical Equipment Laboratory		0	0	40%	80%	100%
	5.6.9 Medical Equipment Pathology		0	0	40%	80%	100%
	5.6.10 Medical Equipment Haematology		0	0	40%	80%	100%
	5.6.11 Medical Equipment Bio-Chemistry		0	0	30%	75%	100%
	5.6.12 Medical Equipment Immunology		0	0			
	5.6.13 Medical Equipment Blood bank		0	0	50%	75%	100%
	5.6.14 Medical Equipment Microbiology/ Parasitology		0	0	50%	80%	100%
	5.6.15 ICT equipment		0	0	30%	70%	100%
	5.6.16 General equipment (vehicles, computers, etc)		10%	20%	40%	70%	80%
5.7 Establish and operationalise Regional Cancer Centres (RCCs)—— Arua, Mbale, Gulu and Mbarara	5.7.1 Level of completion of regional cancer centres		0	0	0	50%	100%
5.8 Strengthen partnerships, networking and collaboration for cancer control, care, research and education	5.8.1 Number and nature of partnerships in place		0	2	3	4	5
5.9 Strengthen Management Information Systems	5.9.1 Level of operationalisation of Management Information System		0	20%	40%	70%	100%
5.10 Strengthen resource mobilisation to increase funding base and effectiveness of the UCI	5.10.1 % increase in the MTEF funding allocations to the UCI		20%	20%	30%	50%	120%
	(i) Number of diversified funding sources		3	3	5	6	8

ANNEX 2: ANNUALISED COSTED MATRIX

Current MTEF PROJECTIONS					
Budget Item	2015/16	2016/17	2017/18	2018/19	2019/20
Wage	2,349,000,000	2,349,000,000	2,349,000,000	2,467,000,000	2,467,000,000
Non-Wage	2,055,000,000	1,991,000,000	1,991,000,000	2,190,000,000	2,190,000,000
Development	11,639,000,000	36,845,000,000	39,636,000,000	35,342,000,000	35,342,000,000
TOTAL	16,043,000,000	41,185,000,000	43,976,000,000	39,999,000,000	39,999,000,000

INTERVENTIONS	OUTPUTS	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
Strategic Objective 1: To reduce cancer risk by increasing access and utilization of cancer prevention services.							
1.1 National health promotion program for prevention of cancer	i) Public awareness campaigns conducted	200,000,000	300,000,000	1,200,000,000	1,200,000,000	1,200,000,000	4,100,000,000
	ii) National cancer screening program	100,000,000	200,000,000	3,000,000,000	3,000,000,000	3,000,000,000	9,300,000,000
	iv) Media programmes (radio, TV, and print media) on cancer conducted	20,000,000	40,000,000	2,100,000,000	2,100,000,000	2,100,000,000	6,360,000,000
	v) IEC materials produced and disseminated	10,000,000	15,000,000	1,600,000,000	1,600,000,000	1,600,000,000	4,825,000,000
1.2 Community and institutional outreach programs on cancer prevention	i) Media programmes (Radio, TV and print media) on cancer conducted	20,000,000	50,000,000	2,100,000,000	2,100,000,000	2,100,000,000	6,370,000,000
	ii) Assorted IEC materials produced and disseminated	10,000,000	15,000,000	1,600,000,000	1,600,000,000	1,600,000,000	4,825,000,000
	iii) Community outreach programmes conducted	25,000,000	50,000,000	1,500,000,000	1,500,000,000	1,500,000,000	4,575,000,000
1.3 Integrate cancer care and control in the essential health package	i) Number of districts with cancer services as part of their district health plan	10,000,000	15,000,000	155,400,000	155,400,000	155,400,000	491,200,000
	ii) Number of districts with cancer prevention and control focal person	5,000,000	10,000,000	92,000,000	92,000,000	92,000,000	291,000,000
	iii) Number of districts reporting on cancer prevention and control activities	5,000,000	15,000,000	65,000,000	65,000,000	65,000,000	215,000,000
1.4 Support community structures for improved cancer education, prevention and care	i) Number of community based health workers trained and equipped	15,000,000	25,000,000	1,800,000,000	1,800,000,000	1,800,000,000	5,440,000,000
	ii) Number of community based health education sessions conducted (as reported by the district)	15,000,000	25,000,000	10,000,000	10,000,000	10,000,000	70,000,000
1.5 Develop a road map for cancer prevention and control in the context of broader multi-sectoral strategies	i) Workshops conducted	0	0	2,250,000,000	0	0	2,250,000,000
	ii) A comprehensive National Cancer control Plan produced	0	0	1,200,000,000	0	0	1,200,000,000
	iii) National cancer communication strategy operationalized	0	0	900,000,000	0	0	900,000,000
	iv) Cancer education materials incorporated into primary and secondary syllabus	0	0	300,000,000	0	0	300,000,000
1.6 Organize cancer control programs so as to strengthen leadership, governance, management, and accountability in all cancer groups and at all levels of the health sector	i) A multi-sectoral cancer prevention and control committee established and operational	0	0	1,500,000,000	1,500,000,000	1,500,000,000	4,500,000,000
1.7 National cancer surveillance, risk assessment and management program across all ages	i) National cancer risk assessment done	0	0	1,150,000,000	0	0	1,150,000,000
	ii) District cancer coordination desks established	0	0	150,000,000	150,000,000	150,000,000	450,000,000
	iii) Referral mechanisms strengthened	10,000,000	15,000,000	75,000,000	75,000,000	75,000,000	250,000,000
	iv) Number of districts with cancer survivorship programs	5,000,000	7,000,000	1,350,000,000	1,350,000,000	1,350,000,000	4,062,000,000
1.9.Increase health literacy to better the outcome of cancer patients	i) Health literacy assessment done			500,000,000	0	0	500,000,000
	ii) Health literacy communication plan developed			30,000,000	0	0	30,000,000
	iii) Awareness about health literacy and its dangers conducted			400,000,000	400,000,000	400,000,000	1,200,000,000
	iv) Number of health workers trained and supported to promote health literacy	10,000,000	20,000,000	800,000,000	800,000,000	800,000,000	2,430,000,000
	v) Number of expart cancer patients/survivors trained and supported to promote health literacy	10,000,000	20,000,000	600,000,000	600,000,000	600,000,000	1,830,000,000
	vi) Health literacy library established			0	0	750,000,000	750,000,000
	vii) Assorted IEC materials that promotes health literacy produced and disseminated	20,000,000	25,000,000	1,300,000,000	1,300,000,000	0	2,645,000,000
	viii) Number of units in UCI and regional cancer treatment centres playing cancer information for cancer patients and caregivers daily	10,000,000	20,000,000	1,600,000,000	1,600,000,000	1,600,000,000	4,830,000,000
	ix) Media programmes (Radio, TV and print media) that promotes health literacy conducted	5,000,000	10,000,000	2,100,000,000	2,100,000,000	2,100,000,000	6,315,000,000
	x) Mobile Phone application that promotes health literacy among cancer patients developed			850,000,000	850,000,000	850,000,000	2,550,000,000
	xi) Number of patients' and caregivers' education sessions conducted	15,000,000	20,000,000	50,000,000	50,000,000	50,000,000	185,000,000
	Sub-total	520,000,000	897,000,000	32,327,400,000	25,997,400,000	25,447,400,000	85,189,200,000

Strategic Objective 2: To improve access to quality, inclusive, affordable and comprehensive cancer care.							
2.1 Establish and strengthen diagnostic capacity for screening, diagnosis, staging and monitoring of cancer at regional cancer centers	establish and operationalize a pathology reference lab				1,000,000,000	3,000,000,000	4,000,000,000
	establish and operationalize pathology labs at regional centres				2,000,000,000	4,000,000,000	6,000,000,000
	develop best laboratory practices and standard procdures to have CAP certification			50,000,000	80,000,000	100,000,000	230,000,000
	establish and operationalize an immunology lab						0
	establish and operationalize a micro biology lab						0
2.3 Curative services	i) Medicines and medical supplies procured	700,000,000	700,000,000	700,000,000	1,000,000,000	1,500,000,000	4,600,000,000
	i) specialised Medicines and medical supplies procured	6,300,000,000	6,300,000,000	6,300,000,000	10,000,000,000	12,000,000,000	40,900,000,000
	ii) Linene, beddings and uniforms	60,000,000	60,000,000	200,000,000	300,000,000	350,000,000	970,000,000
	iii) Mobile cancer care and continuity clinics conducted		300,000,000	400,000,000	500,000,000	600,000,000	1,800,000,000
	iv) Attract or import specialized skills not available in the country to build capacity for oncology	0	0	500,000,000	1,000,000,000	1,000,000,000	2,500,000,000
	v) Clinical Support supervion provided to both public & private health facilities	0	0	400,000,000	500,000,000	600,000,000	1,500,000,000
2.4 Strengthen provision of Rehabilitative services	i) Counseling and other ancilary services provided	0	40,000,000	200,000,000	300,000,000	400,000,000	940,000,000
2.5 Enhance provision of Palliative care services	i) Establish and operatonalise cancer palliative care units at UCI and regional centres	0	0	200,000,000	300,000,000	400,000,000	900,000,000
	ii) National palliative care guidelines for cancer developed and enforced in collaboration with partners	0	0	50,000,000	30,000,000	30,000,000	110,000,000
	iii) Trainings on palliative cancer care conducted in collaboration with palliative care agencies	0	0	50,000,000	50,000,000	50,000,000	150,000,000
2.6 Procurement of quality medicines and medical supplies	Operationalise the drug therapuetics committee	0	0	15,000,000	17,000,000	20,000,000	52,000,000
	ii) Quality medicines and medical supplies stocked						0
2.7 Enhance quality and patient safety in cancer care	i) Quality assurance committee esablished and operationalised	0	0	15,000,000	17,000,000	20,000,000	52,000,000
	ii) standard quality procedures and guidelines developed and enforced	0	60000000	100,000,000	80,000,000	60,000,000	300,000,000
	iii) Clinical Client charter developed and enforced	0	0	200,000,000	20,000,000	20,000,000	240,000,000
	iv) Establish and operationalise a clinical standards committee	0	0	15,000,000	17,000,000	20,000,000	52,000,000
	Sub-total	7,060,000,000	7,460,000,000	9,395,000,000	17,211,000,000	24,170,000,000	65,296,000,000
Strategic Objective 3: To enhance research and development capacity to effectively contribute to scientific knowledge and best clinical practices in cancer.							
3.1 Strengthen the institutionalization of the research and development function at UCI to enhance the R&D capacity	i) Institutional Cancer Research Committees establishes and operationalized		40,000,000	50,000,000	150,000,000	170,000,000	410,000,000
	ii) Staff capacity development supported		5,000,000	20,000,000	40,000,000	75,000,000	140,000,000
	iii) Research funded		10,000,000	350,000,000	700,000,000	700,000,000	1,760,000,000
3.2 Expand research to adopt modern medical technology innovations for cancer control	i) Research in modern medical technology innovations carried out and reports disseminated			100,000,000	200,000,000	250,000,000	550,000,000
3.3 Research into the causation, treatment and prevention of common cancers in Uganda and the region and trigger epidemiological research	i) Research into causation, treatment and prevention of common cancers carried out and reports disseminated			100,000,000	200,000,000	250,000,000	550,000,000
3.4 Develop and continuously update a research agenda for the health sector in oncology	i) Research tools developed		0	15,000,000	50,000,000	100,000,000	165,000,000
	ii) Research carried out and reports disseminated	10,000,000	20,000,000	40,000,000	100,000,000	150,000,000	320,000,000

3.5 Establish and strengthen collaborations with research organizations and institutes for enhanced innovations, inventions and applications (UHNRO, UVRI, Chemotherapy, JCRC etc)	i) Research committees established			10,000,000	50,000,000	50,000,000	110,000,000
	ii) Collaborative research conducted	25000000	30000000	100000000	200000000	300000000	655,000,000
	iii) Joint stakeholder seminars and workshops conducted	0	0	25,000,000	27,500,000	27,500,000	80,000,000
3.6 Promote shared learning and knowledge management of locally produced medical products, expertise and initiatives for enhanced regional impact	i) Platforms for capacity development and knowledge sharing created	0	0	10,000,000	30,000,000	70,000,000	110,000,000
3.7 Enhance cancer information, research and evidence generation to inform national cancer care and control policy development and implementation	i) Research carried out	0	0	15000000	20000000	30000000	65,000,000
	ii) Policy documents reviewed	0	10,000,000	20,000,000	20,000,000	20,000,000	70,000,000
3.8 Establish and coordinate a national cancer registry system to support the prevention and control of cancer	i) Cancer registry operationalized at all levels	0	40,000,000	40,000,000	150,000,000	200,000,000	430,000,000
	ii) Cancer registry continuously updated	0	20,000,000	50,000,000	70,000,000	100,000,000	240,000,000
3.9 Foster the use of research as a resource in professional development and provision of care	i) Research activities supported	0	10,000,000	15,000,000	20,000,000	25,000,000	70,000,000
3.10Advance knowledge of cancer risk factors, prevention, diagnosis and treatment	i) Research in cancer management carried out	0	10,000,000	20,000,000	25,000,000	30,000,000	85,000,000
	ii) Staff capacity development supported	0	15,000,000	20,000,000	35,000,000	45,000,000	115,000,000
	iii) Specialised research medical equipment and medical supplies procured	0	0	50,000,000	100,000,000	50,000,000	200,000,000
	iv) Cancer information management systems operationalized	0	0	100,000,000	40,000,000	40,000,000	180,000,000
3.11Comprehensively upgrade the National Cancer Registry in terms of data collection and storage, processes as well as the aggregation process involving data from the different feed-registries	i) Health information management systems established						0
	ii) Cancer information management software procure						0
	iii) Assorted ICT equipment procured						0
	iv) Staff trained in operation and maintenance			15,000,000	20,000,000		35,000,000
Sub-Total		**35,000,000**	**210,000,000**	**1,165,000,000**	**2,247,500,000**	**2,682,500,000**	**6,340,000,000**
Strategic Objective 4: To develop and nurture a competent and specialized human resource for improved cancer care and control.							
4.1 Provide training to a broad category of health care professionals using cancers available in our setting as models in understanding cancer medicine	i) Staff induction and orientation activities carried out	0	10,000,000	30,000,000	40,000,000	20,000,000	100,000,000
	iii) Staff carrier development supported	0	50,000,000	100,000,000	150,000,000	100,000,000	400,000,000
	iv) Team building retreats conducted	0	15,000,000	20,000,000	30,000,000	40,000,000	105,000,000
	v) Training in specialised medical disciplines supported	40,000,000	800,000,000	3,500,000,000	5,000,000,000	5,000,000,000	14,340,000,000
4.2 Train specialists in oncology and relevant medical disciplines e.g. critical care, radiology, pathology	i) Staff capacity assessments carried out			50,000,000			50,000,000
	ii) Benchmarking excursions supported			50,000,000	50,000,000	50,000,000	150,000,000
	i) Health care professionals trained in rehabilitation services			20,000,000	30,000,000	40,000,000	90,000,000
	iii) Staff trained in specialised medical disciplines	40,000,000	800,000,000	3,500,000,000	5,000,000,000	5,000,000,000	14,340,000,000
4.3 Provide accredited medical education in oncology for the region	i) Stakeholder meetings held		55,000,000	55,000,000	55,000,000	55,000,000	220,000,000
	ii) Accreditation for cancer education programs secured		20,000,000	20,000,000	20,000,000	20,000,000	80,000,000
4.4 Promote shared learning and knowledge management of locally produced medical products, expertise and initiatives for enhanced regional impact	i) Local research on cancer supported			30,000,000	50,000,000	100,000,000	180,000,000
	ii) Information sharing platform created			15,000,000	20,000,000	20,000,000	55,000,000
	iii) Innovative platforms initiated				25,000,000	25,000,000	50,000,000

4.5 Scale up pre-service cancer education and in-service training in collaboration with relevant training institutions to increase access to cancer services nationwide	i) Partnerships and collaborations for training and research nurtured and exploited			20,000,000	25,000,000	30,000,000	75,000,000
Sub-total		**80,000,000**	**1,750,000,000**	**7,410,000,000**	**10,495,000,000**	**10,500,000,000**	**30,235,000,000**
Strategic Objective 5: Build institutional capacity of the Uganda Cancer Institute to effectively deliver on its mandate.							
5.1 Design and implement attractive compensation and motivation plan for the Institute's human resources	i) Payment of salaries and allowances to medical staff						0
	ii) Payment of salaries and allowances to highly specialised mediacl specialists						0
	iii) Payment of salaries and allowances to non-medical staff						0
	Sub-total						0
5.2 Strengthen the legal and regulatory framework to facilitate a comprehensive national cancer control programs	i) Regulations to operationalize the Approved Uganda Cancer Act in place				250,000,000		250,000,000
	ii) Develop and implement a national regulatory framework for cancer care(Standards, protocols)				150,000,000	150,000,000	300,000,000
	(iii) Support mentor and train private providers in cancer care and management			50,000,000	70,000,000	100,000,000	220,000,000
	iv) Strengthen the referral system (guidelines, procedures) to ensure continuity of cancer care in collaboration with the Ministry of Health			40,000,000	20,000,000		60,000,000
	iv) Number of Monitoring and Evaluation tools for the Cancer policy developed and applied			70,000,000	30,000,000		100,000,000
5.3 Develop a national cancer control plan in collaboration with the Ministry of Health	i) National cancer control plan developed and implemented			150,000,000	150,000,000		300,000,000
5.4 Establish/acquire and ensure maintenance of state of the art infrastructure, and equipment, including the modernization of the existing infrastructure for cancer care, education, and research	i) Paediatric oncology centre of excellence constructed						0
	ii) Cancer screening and Diagnostics centre constructed						0
	East Africa Centre of excellence for oncology multipurpose building constructed						0
	Maintance of existing structures	30000000	30000000	115000000	150000000	200000000	525,000,000
	Radiotherapy bunkers		10000000000	15000000000			25,000,000,000
	Administrative block				1500000000	1500000000	3,000,000,000
	Patient Hostel				3000000000	3000000000	6,000,000,000
	Patients care block construted			2,000,000,000	2,000,000,000	1,000,000,000	5,000,000,000
	Nuclear Medicine Facility constructed			5,000,000,000	10,000,000,000		15,000,000,000
5.5 Strengthen Public-Private Partnerships in the development, use and management of cancer services	i) Public privte partnerships inititated and developed				100,000,000	150,000,000	250,000,000

5.6 Medical, non-medical and ICT infra-structure and equipments	i) Equipment needs assessment conducted			30000000			30,000,000
	ii) Medical equipments procured general (Endoscopy)						0
	iii) Medical equipment procured paediatricts (Endoscopy)						0
	iv) Medical equipment Radiotherapy						0
	v) Medical equipment Nuclear medicine						0
	vi) Medical Equipment Imaging						0
	vii) Medical Equipment Radio Nuclide						0
	viii) Medical Equipment Laboratory						0
	x) Medical Equipment Pathology						0
	x i) Medical Equipment Hematology						0
	xii) Medical Equipment Bio Chemistry						0
	xiii) Medical Equipment Immunology						0
	xiiii) Medical Equipment Blood bank						0
	xiii) Medical Equipment Microbiology/Parasitology						0
	xiii) ICT equipments						0
	xiii) General equipments (vehicles, computers, etc)						0
5.7 Establish and operationalise Regional Cancer Centres (RCCs)—— Arua, Mbale, Gulu and Mbarara	i) Regional cancer centre established and operational				144,400,000,000	144,400,000,000	288,800,000,000
5.8 Strengthen partnerships, networking and collaboration for cancer control, care, research and education	i) Multi-stakeholder partnerships and collaborations developed	0	50,000,000	70,000,000	100,000,000	150,000,000	370,000,000
5.9 Strengthen Management Information Systems	i) Management information system established and updated	0	30,000,000	40,000,000	100,000,000	70,000,000	240,000,000
5.10Strengthen resource mobilization to increase funding base and effectiveness of UCI	i) Financial base for UCI strengthened	10,000,000	20,000,000	50,000,000	70,000,000	100,000,000	250,000,000
Sub-Total		**40,000,000**	**10,130,000,000**	**22,615,000,000**	**162,090,000,000**	**150,820,000,000**	**345,695,000,000**
Grand Total		**7,735,000,000**	**20,447,000,000**	**72,912,400,000**	**218,040,900,000**	**213,619,900,000**	**532,755,200,000**

OUTPUTS	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
establish and operationalize a pathology reference lab				5,000,000,000	15,000,000,000	20,000,000,000
establish and operationalize pathology labs at regional centres				2,000,000,000	4,000,000,000	6,000,000,000
establish and operationalize an immunology lab				5,000,000,000	15,000,000,000	20,000,000,000
establish and operationalize a micro biology lab				5,000,000,000	15,000,000,000	20,000,000,000
Health information management systems established	-	-	50,000,000	50,000,000	50,000,000	150,000,000
Cancer information management software procure	-	20,000,000	200,000,000	100,000,000	50,000,000	370,000,000
Assorted ICT equipment procured	-	10,000,000	50,000,000	30,000,000	20,000,000	110,000,000
Paediatric oncology centre of excellence constructed				129,960,000	86,640,000	216,600,000
Cancer screening and Diagnostics centre constructed				10,000,000,000		10,000,000,000
East Africa Centre of excellence for oncology multipurpose building constructed			15,000,000,000	25,000,000,000	5,000,000,000	45,000,000,000
Patient Hostel				3000000000	3000000000	6,000,000,000
Patients care block construted			2,000,000,000	2,000,000,000	1,000,000,000	5,000,000,000
Nuclear Medicine Facility constructed			5,000,000,000	10,000,000,000		15,000,000,000
Medical equipments procured general (Endoscopy)		1,355,220,355	745047634		660503240	2,760,771,229
Medical equipment procured paediatricts (Endoscopy)		552,892,059				552,892,059
Medical equipment Radiotherapy			2,000,000,000	2,400,000,000	1,500,000,000	5,900,000,000
Medical equipment Nuclear medicine			4,000,000,000	4,000,000,000	3,705,781,710	11,705,781,710
Medical Equipment Imaging			4,000,000,000	5,000,000,000	3,135,000,000	12,135,000,000
Medical Equipment Radio Nuclide			1,000,000,000	1,500,000,000	1,000,000,000	3,500,000,000
Medical Equipment Laboratory			1,000,000,000	500,000,000	500,000,000	2,000,000,000
Medical Equipment Pathology			1,000,000,000	500,000,000	500,000,000	2,000,000,000
Medical Equipment Hematology			500,000,000	500,000,000	300,000,000	1,300,000,000
Medical Equipment Bio Chemistry			500,000,000	1,000,000,000	300,000,000	1,800,000,000
Medical Equipment Immunology			500,000,000	500,000,000	500,000,000	1,500,000,000
Medical Equipment Blood bank			1,000,000,000	500,000,000	300,000,000	1,800,000,000
Medical Equipment Microbiology/Parasitology			500,000,000	300,000,000	200,000,000	1,000,000,000
ICT equipments			1,000,000,000	1,000,000,000	1,000,000,000	3,000,000,000
General equipments (vehicles, computers, etc)			500,000,000	800,000,000	1,200,000,000	2,500,000,000
Regional cancer centre established and operational				144,400,000,000	144,400,000,000	288,800,000,000
Balancing figure for FY 2015/16 and 16/17	11639000000	34906887586				
Total	**11,639,000,000**	**36,845,000,000**	**40,545,047,634**	**230,209,960,000**	**217,407,924,950**	**490,101,044,998**

WAGE BREAKDOWN	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
Payment of salaries and allowances to medical staff	3,000,000,000	3,200,000,000	6,200,000,000	7,200,000,000	8,200,000,000	27,800,000,000
Payment of salaries and allowances to highly specialised mediacl specialists	1,000,000,000	1,200,000,000	3,200,000,000	4,200,000,000	5,200,000,000	14,800,000,000
Payment of salaries and allowances to non-medical staff	1,000,000,000	1,200,000,000	2,200,000,000	3,200,000,000	4,200,000,000	11,800,000,000
Total	**5,000,000,000**	**5,600,000,000**	**11,600,000,000**	**14,600,000,000**	**17,600,000,000**	**54,400,000,000**
NSSF AND GRATUITY	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
Nssf	500,000,000	560,000,000	1,160,000,000	1,460,000,000	1,760,000,000	5,440,000,000
Gratuity	1,500,000,000	1,680,000,000	3,480,000,000	4,380,000,000	5,280,000,000	16,320,000,000

Administative Overheads	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
Funeral Expenses	24,000,000	26,400,000	29,040,000	31,944,000	35,138,400	64,178,400
Advertising and publications	24,000,000	26,400,000	29,040,000	31,944,000	35,138,400	64,178,400
News papers and periodicals	17,080,000	18,788,000	20,666,800	22,733,480	25,006,828	45,673,628
Welfare and Entertaiment	72,000,000	79,200,000	87,120,000	95,832,000	105,415,200	192,535,200
Break tea and office water	31,200,000	34,320,000	37,752,000	41,527,200	45,679,920	83,431,920
management meetings	14,400,000	15,840,000	17,424,000	19,166,400	21,083,040	38,507,040
Printing and stationery	128,000,000	140,800,000	154,880,000	170,368,000	187,404,800	342,284,800
Subscriptions	16,400,000	18,040,000	19,844,000	21,828,400	24,011,240	830,789,388
Office equipment repairs	36,000,000	39,600,000	43,560,000	47,916,000	52,707,600	96,267,600
Office maintenance and repairs	38,400,000	42,240,000	46,464,000	51,110,400	56,221,440	102,685,440
Office telephone	15,600,000	17,160,000	18,876,000	20,763,600	22,839,960	41,715,960
IFMS and IPPS recurrent costs	60,000,000	66,000,000	72,600,000	79,860,000	87,846,000	240,669,000
Postage and courrier	2,400,000	2,640,000	2,904,000	3,194,400	3,513,840	6,417,840
Guard and security services	86,400,000	95,040,000	104,544,000	114,998,400	126,498,240	231,042,240
Electicity and generator costs	84,000,000	92,400,000	101,640,000	111,804,000	122,984,400	224,624,400
Water	18,000,000	19,800,000	21,780,000	23,958,000	26,353,800	48,133,800
Insurance- third party	5,700,000	6,270,000	6,897,000	7,586,700	8,345,370	15,242,370
Travel abroad	408,000,000	448,800,000	493,680,000	543,048,000	597,352,800	1,091,032,800
Travel inland	168,000,000	184,800,000	203,280,000	223,608,000	245,968,800	449,248,800
Cleaning services	84,000,000	92,400,000	101,640,000	111,804,000	122,984,400	224,624,400
Maintenance - civil	60,000,000	66,000,000	72,600,000	79,860,000	87,846,000	2,290,366,650
Motor vehicle service and repairs	392,000,000	431,200,000	474,320,000	521,752,000	573,927,200	1,048,247,200
Total	1,785,580,000	1,964,138,000	2,160,551,800	2,376,606,980	2,614,267,678	10,901,144,458

CANCER INSTITUTE DEVELOPMENT PLAN BUDGET FY2015/16 -2019/20

CLASSIFICATION	2015/16	2016/17	2017/18	2018/19	2019/20
WAGE	5,000,000,000	5,600,000,000	11,600,000,000	14,600,000,000	17,600,000,000
Non-Wage Recurrent	9,735,000,000	22,687,000,000	77,552,400,000	223,880,900,000	220,659,900,000
Total Recurrent	14,735,000,000	28,287,000,000	89,152,400,000	238,480,900,000	238,259,900,000
Total Development	11,639,000,000	36,845,000,000	40,545,047,634	230,209,960,000	217,407,924,950
Total Budget	26,374,000,000	65,132,000,000	129,697,447,634	468,690,860,000	455,667,824,950
		5 Year Sum	1,145,562,132,584		
		Wage	54,400,000,000	4.75%	
		Non-wage	**554,515,200,000**	**48.41%**	
		Devt	536,646,932,584	46.85%	

CANCER INSTITUTE DEVELOPMENT PLAN FUNDING GAPS

CLASSIFICATION	2015/16	2016/17	2017/18	2018/19	2019/20
Wage Gap	2,651,000,000	3,251,000,000	9,251,000,000	12,133,000,000	15,133,000,000
Non-Wage Recurrent Gap	7,680,000,000	20,696,000,000	75,561,400,000	221,690,900,000	218,469,900,000
Total Recurrent Gap	10,331,000,000	23,947,000,000	84,812,400,000	233,823,900,000	233,602,900,000
Total Development Gap	-	-	909,047,634	194,867,960,000	182,065,924,950
Total Funding Gap	**10,331,000,000**	**23,947,000,000**	**85,721,447,634**	**428,691,860,000**	**415,668,824,950**

UCI STRATEGIC PLAN BUDGET BY SOURCE OF FUNDING - PROJECTIONS FOR FY 2015/16 – 2019/20										
	2015/16		2016/17		2017/18		2018/19		2019/20	
CLASSIFICATION	GOU	DONOR	GOU	DONOR	GOU	DONOR	GOU	DONOR	GOU	DONOR
WAGE	5,000,000,000	-	5,600,000,000	-	11,600,000,000	-	14,600,000,000	-	17,600,000,000	
Non-Wage Recurrent	2,055,000,000	7,680,000,000	1,991,000,000	20,696,000,000	17,103,280,000	60,449,120,000	46,528,180,000	177,352,720,000	45,883,980,000	174,775,920,000
Total Recurrent	7,055,000,000	7,680,000,000	7,591,000,000	20,696,000,000	28,703,280,000	60,449,120,000	61,128,180,000	177,352,720,000	63,483,980,000	174,775,920,000
Total Development	11,639,000,000	0	36,845,000,000	-	39,817,809,527	727,238,107	74,315,592,000	155,894,368,000	71,755,184,990	145,652,739,960
Total Budget	**18,694,000,000**	**7,680,000,000**	**44,436,000,000**	**20,696,000,000**	**68,521,089,527**	**61,176,358,107**	**135,443,772,000**	**333,247,088,000**	**135,239,164,990**	**320,428,659,960**
%ge share	70.9%	11.8%	68.2%	31.8%	52.8%	47.2%	28.9%	71.1%	29.7%	70.3%

UCI STRATEGIC PLAN 2015/16 - 2019/20

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