NIGERIA NATIONAL CANCER CONTROL PLAN

2026-2030

Federal Ministry of Health & Social Welfare

NOVEMBER 2025

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This document was developed by the National Cancer Control and Nuclear Medicine Programme
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FOREWORD

Globally, cancer is now considered a disease of serious public health concern. Its impact in low- and middle-income countries (LMICs), including Nigeria, is increasingly becoming catastrophic. Once perceived as a disease of affluence and longevity, cancer has become a leading cause of morbidity and mortality across all age and socioeconomic strata. The global cancer burden is shifting rapidly, with LMICs, including Nigeria accounting for over 70% of cancer deaths worldwide. Nigeria, being the most populous country in Africa, is experiencing an upsurge of cancer incidence, morbidity and mortality, largely as a result of epidemiological transitions, environmental exposures, systemic health system challenges and social determinants of health (SDoH) challenges.

The current Cancer Observatory estimates shows that Nigeria recorded 127,763 new cancer cases and approximately 79,542 cancer-related deaths in 2022, with the most common types being breast (25.3%), cervical (10.7%), prostate (14.1%), with most cases diagnosed at late stages. This late diagnosis is often linked to poor awareness, cultural stigma, limited access to screening services and weak referral systems. Consequently, survival rates remain low compared to high-income countries where early detection and advanced treatment are more accessible. Over a five-year period from 2017 to 2022, Nigeria recorded a total of 209,109 prevalent cancer cases, underscoring the persistent burden of cancer on the population. Cancer mortality ratio stands at an unacceptable figure level 0.62, pointing to a high likelihood of death following a cancer diagnosis.

The Federal Ministry of Health and Social Welfare through the National Cancer Control and Nuclear Medicine Programme has established a robust policy framework to advance cancer control including the National Cancer Control Plans 2007-2013, 2018-2022, the National Strategic Plan for Prevention and Control of Cancer of the Cervix 2017-2021, the National Chemotherapy Safety Policy, the National Policy and Strategic Plan for Hospice and Palliative Care and the National Nuclear Medicine Policy and Strategic Plan. Implementation of these policies has made tremendous impact in our national cancer control and prevention efforts. These have led to the upgrade and establishment of cancer treatment centers across

the country, training and retraining of various oncology specialists in various disciplines and development of collaboration with various development partners and stakeholders for resource mobilization for improved access to cancer care.

The development of this edition of the National Cancer Control Plan is based on the improvements already made with the implementation of the previous plans and policies and the need to upscale our national efforts in line with the current reality.

The National Cancer Control Plan 2026-2030 aligns with the Renewed Hope Agenda of the administration of His Excellency, President Bola Ahmed Tinubu, GCFR and the four Point agenda of the Federal Ministry of Health and Social Welfare under my leadership. The four-point agenda include:

i. Health security
ii. Unlocking the healthcare value chain
iii. Coordination and governance
iv. Improving population Health.

The current leadership of the Federal Ministry of Health and Social welfare shall ensure full implementation of this Plan and adhere strictly to its monitoring, evaluation and learning framework for effective impact in our national health system in general and cancer care in particular.

It is my hope that every stakeholder especially the state governments and the private sector players desirous of improving access to cancer care in Nigeria will find this document very useful.

6th November, 2025

Dr Iziaq Adekunle Salako
Honourable Minister of State for Health and Social Welfare

PREFACE

The Federal Ministry of Health and Social Welfare is committed to addressing the perennial challenges associated with the provision of cancer care services in Nigeria. Although several efforts have been made in the past, some of the challenges confronting cancer care in Nigeria are still complex and systemic. Healthcare infrastructure for cancer prevention, diagnosis, treatment, and palliative care is still below the expected level to make services widely available across the country. Diagnostic and therapeutic facilities such as radiotherapy centers are largely concentrated in a few tertiary hospitals, most of which are located in major urban areas. Rural and peri-urban populations remain underserved. Even where facilities exist, functionality is often characterized by prolonged down time due to several factors associated with power and inadequate number of experts to maintain the equipment as well as shortages of consumables. Inadequate number of trained health professionals in oncology also significantly hamper service delivery. Our national cancer care system is also adversely impacted by the weakness of data management, and poor integration of existing cancer registration activities into the national health information system, which hinders accurate tracking of cancer incidence and outcomes, limiting the ability to formulate evidence-based policies.

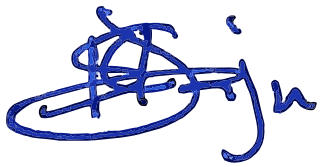
In order to overcome these challenges, the Federal Ministry of Health and Social Welfare, in 2006, set up the National Cancer Control and Nuclear Medicine Programme as a unit under the Department of Hospital Services to drive the development and implementation of policies, programmes and activities for cancer prevention and control in Nigeria. This was strengthened by the National Health Act, 2014 which empowers the Federal Ministry of Health to ensure development and implementation of policies and programmes for the improvement of the health system in Nigeria. Consequently, the Government has established over 80 Federal Tertiary Health Institutions with the mandate to provide health (including cancer) care service delivery, research and training. Other agencies such as the National Institute for Cancer Research and Treatment (NICRAT), Nigeria Institute for Medical Research (NIMR), National Institute for Pharmaceutical Research and Development (NIPRD, all supervised by the Ministry, were also established by the Act of the National Assembly to assist with the implementation of the policies and programmes developed by the Ministry.

The primary objective of this **National Cancer Control Plan 2026-2030** is to guide the Federal and State Governments in collaboration with all the agencies, development partners, civil society and Non-governmental Organizations to improve cancer risk assess-

ment, prevention, screening and early detection, diagnosis, treatment, survivorship and End-of-Life care services across the country. The strategies of the plan are intended to:

- Strengthen cancer prevention through comprehensive risk assessment and vaccination programs;
- Ensure equitable access to effective cancer screening and early detection service;
- Streamline diagnostic pathways to reduce delays and ensure timely initiation of treatment;
- Enhance access to comprehensive, integrated cancer treatment services; Strengthen survivorship and long-term follow-up care;
- Expand palliative care and end-of-life services at all levels of the health system;
- Improve access to technology for more effective and efficient cancer care through precision oncology;
- Leverage safe, equitable and evidence-driven AI (artificial intelligence) to improve prevention, earlier diagnosis, accurate diagnosis, efficient treatment planning, inclusive research and timely surveillance.
- Build national capacity for high-quality cancer research, innovation, and workforce development; and
- Improve governance, coordination, and financing for sustainable cancer control.

Strict implementation of the specific activities outlined for each of the strategies of all the pillars enumerated in this National Cancer Control Plan over a period of 5 years will put Nigeria on a path towards significant reduction in cancer morbidity and mortality in the country. Therefore, I hereby strongly urge all the stakeholders in the Nigeria Oncology ecosystem to assist with the implementation of this Plan.



Daju, Kachollom S. *mni*
Permanent Secretary, Health

ACKNOWLEDGEMENT

This National Cancer Control Plan 2026-2030 was developed through a highly participatory and interactive process involving various stakeholders including members of the academia, research institutes, State Ministries of Health, public and private cancer treatment centers, civil society groups, development partners, international collaborators and cancer advocates. Reports of various Technical Working Groups and imPACT Mission conducted in 2024 by the IAEA, WHO and IARC were also considered and their recommendations included in the strategies and activities of this plan for implementation. The need for this updated National Plan stems from the visionary leadership of the current administration of the Federal Ministry of Health and Social Welfare under the leadership of the Coordinating Minister of Health and Social Welfare, Prof Mohammed Ali Pate, CON, the Honourable Minister of State for Health and the Permanent Secretary who have demonstrated an uncommon commitment in the provision of cancer care services throughout the entire cancer continuum across the country.

The unwavering quality leadership roles of the Honourable Ministers and the Permanent Secretary paved the way for a speedy and successful review and development of the National Cancer Control Plan 2026-2030. I am optimistic that implementation of this Plan will be seamless across all the three tiers of government. Therefore, it is with great joy that I wish to thank the Honourable Minister of State for Health and Social welfare, Dr Iziaq Adekunle Salako for his pragmatic leadership style and support to the National Cancer Control and Nuclear Medicine Programme of the Ministry as well as supervising the development of this Plan. The uncommon pragmatic leadership style of the Permanent Secretary, Daju Kachollom S. mni which has also made a significant difference in the improvement of the Nigeria health sector especially in improving access to cancer care services is deeply appreciated. Her direct involvement and oversight of the entire process of review and development of this Plan was monumental.

I want to thank in a special way, all the members of the National Technical Working Group on Cancer Control and the National Nuclear Medicine Technical Working Group (NM-TWG) for their commitment and contribution towards the development of this Plan. The selfless contributions of all the

Chief Executive Officers of various government and non-governmental agencies and organizations, various stakeholders including members of the academia, research institutes, State Ministries of Health, public and private cancer treatment centers, civil society groups, development partners and cancer advocates who made various contributions towards the development of this Plan are also appreciated. May I also acknowledge the support and commitment of my colleagues and staff of the Department of Hospital Services Federal Ministry of Health and Social Welfare for their commitment and support. The specific roles of Prof. Juliet Iwelunmor of Washington University in St Louis, USA, Prof. Folakemi Odedina of Prostate Cancer Transatlantic Consortium and Mayo Clinic, USA, Dr Nwamaka Lasebikan of UNTH Enugu and Pharm. Rafiu Akanbi of the American Cancer Society in the development and review of this Plan were amazing and deeply appreciated. I want to, in a special way, acknowledge the fantastic and brilliant role of the National Coordinator, National Cancer Control and Nuclear Medicine Programme, Dr Uchechukwu Emmanuel Nwokwu, and his team for painstakingly leading the development of this Plan. The input of various organizations such as the American Cancer Society, the Nigerian Cancer Society, the City Cancer Challenge Foundation, iCCARE, CaPTC, Durotimi AI Technologies Limited, Medicaid Cancer Foundation and IVAN Research Institute are acknowledged and appreciated. Lastly but definitely not the least, I want to thank all the contributors to this Plan, both those listed at the end of this document and those not mentioned. Thank you all for your support.

Dr Jimoh Olawale Salaudeen *mni*
Director Hospital Services

EXECUTIVE SUMMARY

The Nigeria cancer care landscape comprises a mix of public (Federal and State Tertiary Institutions) and private facilities working to address the country's growing cancer burden. These institutions vary in capacity and service delivery, ranging from comprehensive cancer centers to facilities offering limited treatment options. Currently there are over 80 Federal Tertiary Health Institutions (FTHIs) and selected private cancer care providers contributing to diagnosis, treatment, and support services across the country.

The National Health Act 2014 assigned the responsibility for healthcare delivery and its management across the three tiers of government: Federal, State, and Local Government Areas (LGAs). The National Health Act provides that the Federal Ministry of Health shall ensure the development and implementation of Policies and programmes for the Nigeria health system. In line with the Act, the federal government provides a regulatory and advisory function alongside the centralized provision of some services, including tertiary health facilities, and finances infrastructural improvements. The state governments manage secondary healthcare while the primary level, including primary health care (PHC) centers, is managed by LGAs.

The previous editions of National Cancer Control Plans focused on 8 priority Areas of action including: prevention and early detection, diagnosis and treatment, survivorship and palliative care, research and innovation, governance, finance and Social/resource mobilization. However, implementation was not optimal due to, inadequate funding, and low political prioritization. Cancer care is also not well integrated into Nigeria's primary health care system, which limits community-level reach and referral

This edition of the National Cancer Control Plan took cognizance of some of the limitations of the previous editions and seek to address the non-integration of Cancer Control programmes into other health programmes. This Plan is also well aligned with the National Health Act 2014, National Health policy 2017, World Health Organization Global strategy for the elimination of cancer of the cervix, Global Breast Cancer Initiative (GBCI), Global Initiative for Childhood Cancer (GICC) as well as the Cure-All strategy for childhood cancer care. The Plan is also well aligned with the Renewed Hope Agenda of His Excellency, President Bola Ahmed Tinubu and the Four point Agenda of the current leadership of the Federal Ministry of Health and Social welfare.

The Nigeria National Cancer Control Plan 2026-2030 is divided into eight chapters. Chapter one provides background information about current statistics of the incidence and prevalence of cancer in Nigeria, the policy focus and the policy alignment of the Plan. Chapter two provides the current landscape of Cancer control, prevention and care in Nigeria. This includes the number of Institutions providing cancer care services ranging from prevention and early detection, diagnosis (pathology and Laboratory services) and treatment, palliative care and survivorship as well as patient navigation and cancer care quality assurance and quality improvement. The chapter also provides the current status of the Radiation safety, paediatric oncology and cancer care financing in the country.

Chapter three describes the strategic framework of the National Cancer Control Plan 2026-2030. The framework has a clear vison which is *'To see a Nigeria with reduction of the burden of cancer morbidity and mortality in Nigeria by 50% in 2030 through a multi sectorial sustainable approach'*. The mission of this Plan is *'To improve our public health care system that is equipped, staffed with trained, and competent personnel to provide a full range of comprehensive cancer risk assessment, prevention, screening and early detection, diagnosis, treatment, survivorship and End-of-Life care options across the country'*. This chapter also describes the General Objectives and the guiding principles of this Plan.

Unlike the previous editions of the Nigeria National Cancer Control Plans that have priority Areas of Action, this edition has seven Strategic Pillars with strategic objectives, unambiguous strategies and activities to achieve the goal of the plan which is "to reduce the overall incidence and mortality of cancer in Nigeria by 50% by the year 2030". The strategic Pillars include:

Pillar 1: Risk Assessment, Prevention and Early Detection
Pillar 2: Timely and Accurate Cancer Diagnosis
Pillar 3: Cancer Treatment, Survivorship and End-of-Life care
Pillar 4: Advocacy, Partnerships, Coordination, and Financing
Pillar 5: Strategic Information, Registration, Surveillance and Research
Pillar 6: Patient Navigation and Care Coordination.
Pillar 7: Artificial Intelligence and Digital Innovation in Cancer Control

Chapter four of this plan describes the governance framework work, roles and responsibilities of all the relevant agencies and players. While the National Cancer Control and Nuclear Medicine Programme at the Federal Ministry of Health and Social Welfare in line with National Health Act 2014 will lead the implementation of this Plan, other agencies of government including all the Federal Tertiary Health Institutions, the Nigeria Institute for Medical Research, National Institute for Pharmaceutical Research and Development, National Health Insurance Authority, National Primary Health Development Agency and the National Institute for Cancer Research and Treatment shall assist with the implementation in line with their respective mandates as contained in their Establishment Acts. This section also prescribes roles and responsibilities for State governments through the State Ministries of Health, professional Associations, Regulatory and Statutory government agencies, development Partners, Civil society and Non-governmental Organizations as well as patient groups and survivors.

Chapter five of the National Cancer Control Plan deals with Monitoring, Evaluation and Learning. This section provides strategic activities with timelines and output indicators for all the seven Pillars of the Plan. This will guide with tracking of level of implementation of the plan.

Chapter six provides the framework for quality assurance and quality improvement of cancer control and care across the entire cancer care continuum in the country. This is the first of its kind in our national cancer control Plan in Nigeria. Chapter seven describes Strategic Oncology Workforce Planning and Pipeline Development in Nigeria. Nigeria's oncology workforce challenge is systemic but solvable. Medical education expansion increases both the risks and rewards of HRH policy choices. Therefore, embedding coordinated pipeline reforms within the National Cancer Control Plan will pave the way for Nigeria to translate workforce expansion into sustainable cancer control capacity.

Chapter eight of this Plan contains the cost estimate for the implementation of each of the Pillars of the Plan. This took into consideration the current financial challenges that characterized the poor implementation of the previous National Cancer Control Plans. It is assumed that adequate provision of fund in line with the estimated budget in this section will make it easier to achieve the objectives of this National Cancer Control Plan 2026-2030.

Dr Uchechukwu Emmanuel Nwokwu *MBBS, MHM, FWACP*
National Coordinator, National Cancer Control & Nuclear Medicine Programme

CONTENTS

LIST OF ACRONYMS

ACS	American Cancer Society
AORTIC	African Organization for Research & Training in Cancer
CBE	Clinical Breast Exam
CBO	Community Based Organization
CHAI	Clinton Health Access Initiative
CHEW	Community Health Extension Worker
CSO	Civil Society Organization
DRF	Drug Revolving Fund
DNA	Deoxyribonucleic acid
EU	European Union
FCT	Federal Capital Territory
FEPMAL	Federal Pharmaceutical Laboratory
FMOH&SW	Federal Ministry of Health and Social Welfare
HCW	Health care workers
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPCAN	Hospice and Palliative Care Association of Nigeria
HPC	Hospice and Palliative Care
HPV	Human Papilloma Virus
IEC	Information, Education and Communication
IARC	International Agency for Research on Cancer
LGA	Local Government Area
MDA	Ministry, Department and Agencies
M&E	Monitoring and Evaluation
NACA	National Agency for the Control of AIDS
NAFDAC	National Agency for Food and Drug Administration and Control
NCC&NMP	National Cancer Control and Nuclear Medicine Programme

NCCP	National Cancer Control Plan
NNCCP	Nigeria National Cancer Control Plan
NCD	Non-communicable disease
NGO	Non-governmental Organization
NHIA	National Health Insurance Authority
NICRAT	National Institute for Cancer Research and Treatment
NIMR	National Institute of Medical Research
NIPRID	National Institute for Pharmaceutical Research and Development
NPHCDA	National Primary Healthcare Development Agency
NUC	National University Commission
PHC	Primary Health Care
PPFN	Planned Parenthood Federation of Nigeria
PPP	Public Private Partnership
PSA	Prostate Specific Antigen
PWA	People With Albinism
SBCC	Social Behavioral Change Communication
SDoH	Social Determinants of Health
SFH	Society for Family Health
SMoH	State Ministry of Health
SON	Standards Organization of Nigeria
SOP	Standard Operating Procedure
TBD	To Be Decided
TETFUND	Tertiary Education Trust Fund
UNODC	United Nations Office on Drugs and Crime
VIA	Visual inspection with Acetic Acid
WDC	Ward Development Committee
WHO	World Health Organization

CHAPTER ONE: **INTRODUCTION**

1.0 Background

Cancer has become a disease of public health concern globally, and its impact in low- and middle-income countries (LMICs), including Nigeria, is increasingly becoming catastrophic. Once perceived as a disease of affluence and longevity, cancer is now a leading cause of morbidity and mortality across all age and socioeconomic strata. The global cancer burden is shifting rapidly, with LMICs currently accounting for more than 70% of cancer deaths worldwide.[1] Nigeria, being the most populous country in Africa, is experiencing a rising tide of cancer incidence, morbidity and mortality, largely driven by epidemiological transitions, environmental exposures, and systemic health system challenges.

Recent data from the Global Cancer Observatory estimates that Nigeria recorded 127,763 new cancer cases and approximately 79,542 cancer-related deaths in 2022, with the most common types being breast (25.3%), cervical (10.7%), prostate (14.1%), with most cases diagnosed at late stages.[2] This late diagnosis is often linked to poor awareness, cultural stigma, limited access to screening services and weak referral systems.[3] Consequently, survival rates remain low compared to high-income countries where early detection and advanced treatment are more accessible. Over a five-year period from 2017 to 2022, Nigeria recorded a total of 209,109 prevalent cancer cases, underscoring the persistent burden of cancer on the population. Cancer mortality ratio stands at an unacceptable figure level 0.62, pointing to a high likelihood of death following a cancer diagnosis.

[1] Shah, S. C., Kayamba, V., Peek Jr, R. M., & Heimburger, D. (2019). Cancer control in low-and middle-income countries: is it time to consider screening. *Journal of global oncology, 5*, 1-8.

[2] https://gco.iarc.who.int/media/globocan/factsheets/populations/566-nigeria-fact-sheet.pdf

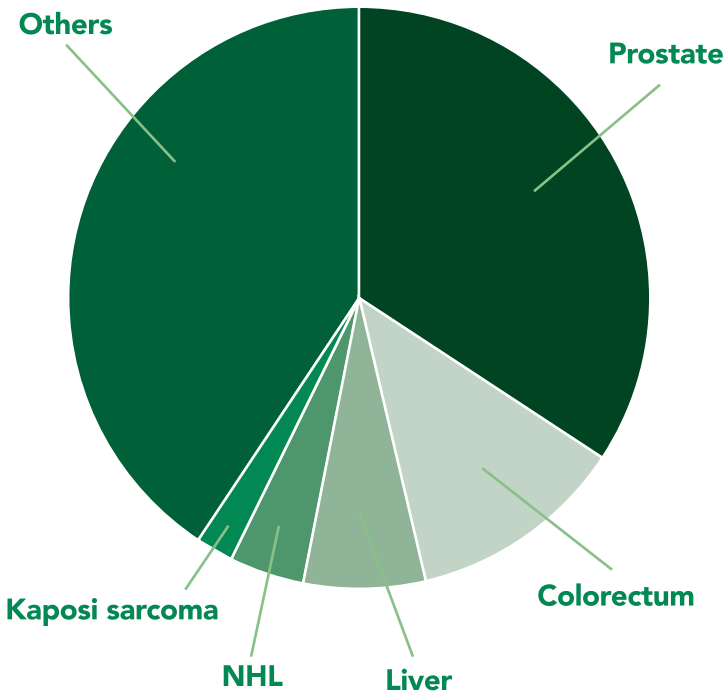
[3] Nonzee, N. J., Ragas, D. M., Ha Luu, T., Phisuthikul, A. M., Tom, L., Dong, X., & Simon, M. A. (2015). Delays in cancer care among low-income minorities despite access. *Journal of women's health, 24*(6), 506-514.

Statistics at a Glance, 2022

	Males	Females	Both sexes
Population	109,872,878	106,874,055	216,746,933
Incidence*			
Number of new cancer cases	48,096	79,667	127,763
Age-standardized incidence rate	93.9	133.3	113.6
Risk of developing cancer before the age of 75 years (cum. risk %)	10.4	13.8	12.1
Top 3 leading cancers (ranked by cases)**	Prostate Colorectum Liver	Breast Cervix uteri Colorectum	Breast Prostate Cervix uteri
Mortality*			
Number of cancer deaths	32,905	46,637	79,542
Age-standardized mortality rate	68.4	81.4	74.6
Risk of dying from cancer before the age of 75 years (cum. risk%)	7.4	8.7	8.0
Top 3 leading cancers (ranked by deaths)**	Prostate Colorectum Liver	Breast Cervix uteri Colorectum	Breast Prostate Cervix uteri
Prevalence*			
5-year prevalent	94,487	174,622	269,109

Globocan, 2022

Top 5 Most Frequent Cancers



Rank	Cancer site	Number of cases	Percent
1st	Prostate	18,019	37.5%
2nd	Colorectum	4,507	9.4%
3rd	Liver	2,519	5.2%
4th	NHL	1,942	4.0%
5th	Kaposi sarcoma	1,160	2.4%
-	Others	19,949	41.5%

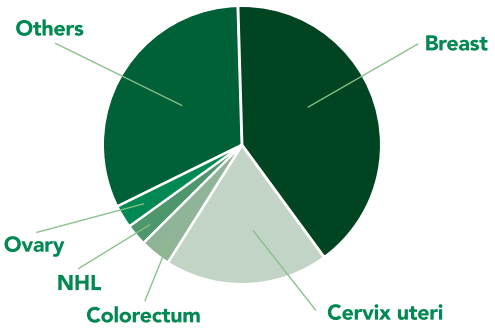
Number of new cases in 2022, males, all ages

Males

The challenges confronting cancer care in Nigeria are complex and systemic. Healthcare infrastructure for cancer prevention, diagnosis, treatment, and palliation is grossly inadequate. Diagnostic and therapeutic facilities such as radiotherapy centers are largely concentrated in a few tertiary hospitals, most of which are located in major urban areas. Rural and peri-urban populations remain severely underserved. Even where facilities exist, functionality is often compromised by outdated equipment, lack of maintenance, shortages of consumables, and frequent power outages.[4] Moreover, the shortage of trained health professionals in oncology significantly hampers service delivery. Nigeria has fewer than 100 clinical oncologists for over 200 million people,[5] resulting in overwhelming caseloads and long waiting times. Another major limitation is the weakness of Nigeria's cancer data systems; comprehensive, population-based cancer registries are lacking, and

[4] Aruah SC, Asogwa OC, Ubah FI, Maurice NN, Oyesegun R, Ige TA, Coleman CN, Dosanjh M, Pistenmaa D. Overcoming Challenges in Providing Radiation Therapy to Patients With Cancer in Nigeria and Experience in the National Hospital Abuja, Nigeria. JCO Glob Oncol. 2020 Aug;6:1232-1236. doi: 10.1200/JGO.19.00177. PMID: 32755480; PMCID: PMC7456314.

[5] Adejumo, P. O., Oluwasanu, M. M., Ntekim, A., Awolude, O. A., Kotila, O. A., Aniagwu, T., ... & Olopade, O. I. (2022). Oncology training needs assessment among health care professionals in Nigeria. JCO Global Oncology, 8, e2200017.



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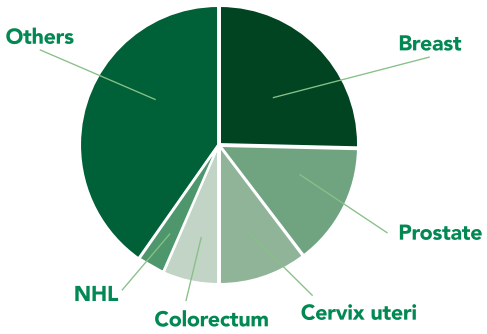
-	Others	19,949	41.5%

Number of new cases in 2022, females, all ages

Females



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Number of new cases in 2022, both sexes, all ages

Both sexes

existing ones are poorly integrated into the national health information system, which hinders accurate tracking of cancer incidence and outcomes, limiting the ability to formulate evidence-based policies.[6]

Financial barriers further complicate cancer care access. Most Nigerians rely on out-of-pocket payments for medical services, and cancer treatment is notoriously expensive. National and private health insurance schemes offer minimal coverage for oncology services, leading to catastrophic health spending for many households.[7] In some cases, this financial strain forces patients to abandon treatment or seek care from unregulated traditional healers. Social and cultural factors also play a significant role in the cancer burden. Deep-rooted beliefs, myths, and stigma surrounding cancer, such as viewing it

[6] Jedy-Agba, E., Curado, M. P., Ogunbiyi, O., Oga, E., Fabowale, T., Igbinoba, F., ... & Adebamowo, C. A. (2012). Cancer incidence in Nigeria: a report from population-based cancer registries. *Cancer epidemiology, 36*(5), e271-e278.

[7] Wuraola, F. O., Blackman, C., Olasehinde, O., Aderounmu, A. A., Adeleye, A., Omoyiola, O. Z., ... & Knapp, G. (2024). The out -of-pocket cost of breast cancer care in Nigeria: A prospective analysis. *Journal of Cancer Policy, 42*, 100518.

as a spiritual curse or a death sentence, discourage timely medical consultation and open communication.[8] Public awareness campaigns are often insufficient and not adapted to local languages or cultural contexts. As a result, preventive behaviors, such as regular screenings and vaccinations (e.g., the HPV vaccine for cervical cancer), are not widely adopted. Policy-wise, Nigeria has made attempts to respond to the cancer crisis.

The previous editions of National Cancer Control Plans focused on 8 priority Areas of action including: prevention and early detection, diagnosis and treatment, survivorship and palliative care, and research and innovation, governance, finance and Social/resource mobilization. However, implementation has been inconsistent due to, inadequate funding, and low political prioritization.[9] Cancer care is also not well integrated into Nigeria's primary health care system, which limits community-level reach and referral.

1.1 Policy Focus

The primary objective of this National Cancer Control Plan is to guide the Federal and State Governments in collaboration with all the agencies, development partners, civil society and Non-governmental Organizations to improve access to cancer risk assessment, prevention, screening and early detection, diagnosis, treatment, survivorship and End-of-Life care services across the country.

The strategies of the plan are intended to:

- **i.** Improve coverage of HBV and HPV vaccination for vaccine preventable cancers including liver and cervical cancers.;
- **ii.** Provide accessible early detection mechanisms and services that are proven to save lives across the lifespan;
- **iii.** Reduce the time interval between cancer diagnosis and initiation of definitive treatment by streamlining the diagnosis and referral systems;
- **iv.** Inclusion of all anticancer medicines into health insurance;
- **v.** Harmonize and coordinate cancer registration, sharing of resources and information among health facilities;
- **vi.** Expand and integrate cancer patient navigation to include all cancer types

[8] John-Akinola, Y. O., Ndikom, C. M., Oluwasanu, M. M., Adebisi, T., & Odukoya, O. (2022). Cervical cancer and human papillomavirus vaccine knowledge, utilisation, prevention educational interventions and policy response in Nigeria: a scoping review. *Cancer Control, 29*, 10732748221130180.

[9] Omolara, K. A. (2011). Feasible cancer control strategies for Nigeria: mini-review. *American Journal of Tropical Medicine & Public Health, 1*(1), 1-10.

across all Tertiary Health Institutions managing cancer to ease patient burden and improve service uptake as well as treatmen outcomes and survivorship

vii. Ensure integration of cancer care including palliative care services at the secondary and primary healthcare levels;

viii. Improve access to technology for more effective and efficient cancer care through precision oncology; and

ix. Improve the country capacity for cutting edge research and training to advance a culture of evidence-based and resource appropriate practice.

1.2 Policy Alignment

1.2.1 National Alignment

The National Cancer Control Plan 2026-2030 aligns with the National Health Act 2014, National Health Policy 2014, the Renewed Hope Agenda of the current administration and the Four Point Agenda of the leadership of the Federal Ministry of Health and Social Welfare which include:

i. Health security
ii. Unlocking the value of the value chain
iii. Coordination and governance
iv. Improving population Health

1.2.2 Global Alignment

This Plan aligns with the UICC global cancer declaration and cancer control initiatives developed by the World Health Organization which include:

a. The Global Strategy to Accelerate the Elimination of Cervical Cancer:

This strategy was launched by WHO in 2020, which is targeted at the attainment of at least 90% of eligible girls fully vaccinated against HPV by age 15 years, 70 percent eligible women screened using a high precision test at least twice by age 45 years, and 90% of women with precancerous lesions or cervical disease receiving treatment by the year 2030. The Federal ministry of Health and Social welfare inaugurated a National Task Force to ensure the actualization of this initiative.

b. The Global Breast Cancer Initiative (GBCI):

The WHO launched this in 2021 to stimulate collective global effort to halt the increasing

breast cancer burden through strengthening health systems. The Initiative seeks to stem the over 2.5 million deaths by 2040, through achieving specific targets under each of the 3 strategic pillars of: health promotion for diagnosis of 60% of breast cancers in early stages; timely diagnosis within 60 days of the first encounter with the health system, and 80% completion of comprehensive treatment.

c. The Global Initiative for Childhood Cancer (GICC):

This initiative was launched in 2018 while Nigeria was included by WHO in 2024. It is aimed at achieving at least 60% survival for childhood cancer globally by 2030 through increased capacity of countries to provide quality services for children. The country will leverage on the CURE ALL framework to increase access to quality childhood cancer care in Nigeria.

1.3 Development Process for the National Cancer Control Plan 2026-2030

The Federal Ministry of Health through the National Cancer Control Programme conducted a final evaluation of the previous National Cancer Control Plan 2018-2022 and all the status of its implementation was considered. This National Cancer Control Plan was developed through a highly participatory and interactive process involving various stakeholders including members of the academia, research institutes, state Ministries of Health, public and private cancer treatment centers, civil society groups, development partners and cancer advocates. Reports of various Technical Working Groups and imPACT Mission conducted in 2024 by the IAEA, WHO and IARC were also considered. The impact mission report was practically a product of the assessment of the level of implementation of the National Cancer Control Plan 2018-2022 and the national strategic Plan 2023-2027. A draft document was developed and presented to the Honourable Minister for Health for approval. The approved National Plan was then presented at the 66th National Council on Health for approval adoption for implementation across the country.

CHAPTER TWO: **NIGERIA CANCER LANDSCAPE**

2.0 Situational Analysis of Nigeria Health System

The National Health Act 2014 assigned the responsibility for healthcare delivery and its management across the three tiers of government: Federal, State, and Local Government Areas (LGAs). The National Health Act provides that the Federal Ministry of Health shall ensure the development and implementation of Policies and programmes for the Nigeria health system. In line with the Act, the federal government provides a regulatory and advisory function alongside the centralized provision of some services, including tertiary health facilities, and finances infrastructural improvements. The state governments manage secondary healthcare while the primary level, including primary health care (PHC) centers, is managed by LGAs.

2.1 Cancer Care Facilities

Nigeria's cancer care landscape comprises a mix of federal tertiary institutions and private facilities working to address the country's growing cancer burden. These institutions vary in capacity and service delivery, ranging from comprehensive cancer centers to facilities offering limited treatment options. Below is an overview of the Federal Tertiary Health Institutions (FTHIs) and selected private cancer care providers contributing to diagnosis, treatment, and support services across the country.

Federal Tertiary Health Institutions (FTHIs): There are 83 FTHIs comprising 35 Federal Teaching Hospitals (FTHs), 25 Federal Medical Centers (FMCs) and 23 Specialty Hospitals (SHs) strategically located across the country. The 35 FTHs and 25 FMCs are established to provide tertiary health care to patients including comprehensive cancer diagnosis, treatment and associated support services. However, only 13 of the combined FTHs and FMCs (60) currently offer full range of chemotherapy, surgery and radiotherapy, while the rest provide only chemotherapy and surgical interventions to cancer patients.

In recognition of the need to expand cancer care capacity in the country, the FMOH is currently supporting the upgrade of 6 out of the 13 FTHIs to serve as centers of excellence for cancer diagnosis and treatment. These centers when upgraded are expected to be focal referral points for other cancer treatment facilities. The upgrades include equipping them with cutting-edge medical infrastructure like linear accelerators, brachytherapy machines, and CT simulators. These efforts are aimed at improving diagnosis and treatment for all cancers, with emphasis on the commonest cancers which include breast, cervical, prostate, head and neck and childhood cancers. The hospitals include Federal Teaching Hospital, Katsina, University of Benin Teaching, Benin, Jos University Teaching

Hospital, Jos, Ahmadu Bello University Teaching Hospital, Zaria, Lagos University Teaching Hospital, Lagos and University of Nigeria Teaching Hospital, Enugu.

2.2 Cancer Control Planning and Governance

In 2006, The Federal Ministry of Health and Social Welfare set up the National Cancer Control and Nuclear Medicine Programme as a unit under the Department of Hospital Services to drive the development and implementation of policies, programmes and activities for cancer prevention and control in Nigeria, which is in line with the National Health Act, 2014. The Government has established over 80 Federal Tertiary Health Institutions with the mandate to provide health (including cancer) care service delivery, research and training. Other agencies such as the National Institute for Cancer Research and Treatment (NICRAT), Nigeria Institute for Medical Research (NIMR), National Institute for Pharmaceutical Research and Development (NIPRD) are all supervised by the Ministry were also established by the Act of the National Assembly. All the Tertiary Hospitals and the Research Institutes are supervised and regulated by the Federal Ministry of Health and Social Welfare.

The Federal Ministry of Health and Social Welfare through the National Cancer Control and Nuclear Medicine Programme has established a robust policy framework to advance cancer control including the National Cancer Control Plan 2007-2013, 2018-2022, the National Strategic Plan for Prevention and Control of Cancer of the Cervix 2017-2021, the National Chemotherapy Safety Policy, the National Policy and Strategic Plan for Hospice and Palliative Care Policy and the National Nuclear Policy and Strategic Plan. The development of the current edition of the National Cancer Control Plan is based on the improvements already made with the implementation of the above-mentioned policies and the need to upscale our national efforts in line with the current reality.

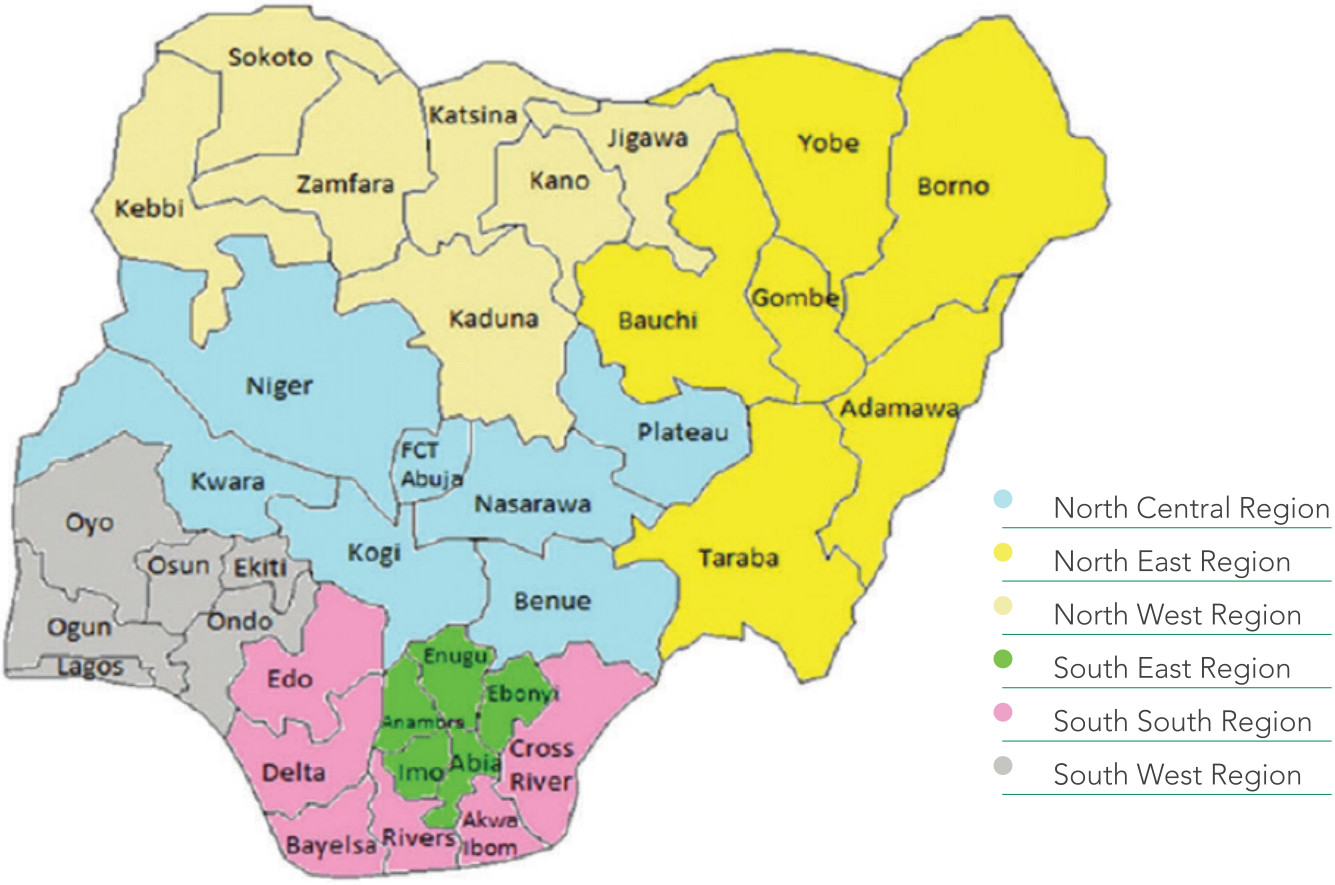
2.3 Cancer Prevention and Early Detection

The FMOHSW has developed and implemented notable policies and initiatives for cancer prevention including the National Multisectoral Action Plan for the Prevention and Control of Non-Communicable Diseases (2019-2025), the National Tobacco Control Strategic Plan of Action (2024-2028) and the National Strategic Framework for the Elimination of Viral Hepatitis (2022 2026) as well as the earlier listed Cancer Control Plans and Policies. Significant efforts to advance cancer prevention include the introduction of the Human papilloma virus (HPV) vaccine into routine immunization in October 2023 through a single dose approach, establishment of the National Taskforce on Cervical Cancer Elimination (NTF-CCE) in August 2024 and enactment of Tobacco Control Regulations with provisions on tobacco packaging and advertising especially among minors. The country through

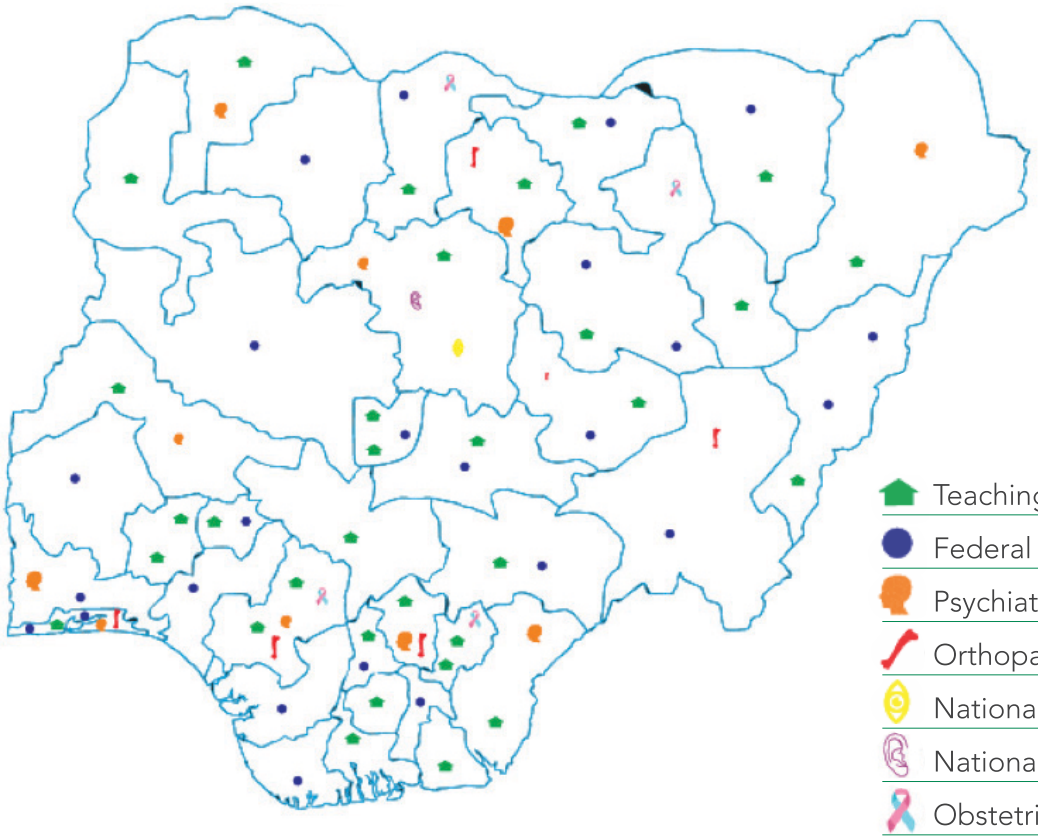
the National Primary Health Care Development Agency (NPHCDA) routinized the human Papilloma virus vaccination and the Hepatitis B and C virus vaccination for the prevention of Cancer of the uterine cervix, liver, oral cancers.

2.4 Diagnosis and Treatment

The availability of cancer diagnostic and treatment capacities vary across the country's geo-political zones. Currently there are over 80 Federal Tertiary Health Institutions across the 6 geopolitical zones with some level of capacity for cancer diagnosis and treatment. However, only about 11 of them have capacity for comprehensive cancer care including Radiotherapy. The map below shows the location of different Federal Tertiary Hospital in the country.



List of Federal Tertiary Health Institutions



Teaching Hospitals	33
Federal Medical Centers	23
Psychiatric Hospitals	10
Orthopaedic Hospitals	6
National Eye Care	1
National Ear Care	1
Obstetrics Fistula Center	4
Total	**78**

2.5 Pathology and Laboratory Services

Pathology services are provided in secondary and tertiary healthcare centers across the country. The majority provide essential cancer diagnosis services such as histopathology and immunology; molecular biology and genetic marker testing are not readily available, requiring specimens to be sent abroad or to specialized local private facilities. Out-of-pocket payment is the primary method for accessing laboratory and pathology services, with limited coverage by health insurance and funding from NGOs or philanthropists. Human resources for clinical pathology are mainly concentrated in urban areas. There are well-established training programs for pathologists, oral pathologist, medical laboratory scientists, and technicians. Continuing professional development (CPD) is a requirement for licensure and is managed by various councils, such as the Medical and Dental Council of Nigeria (MDCN) and the Medical Laboratory Scientists Council of Nigeria (MLSCN). However, challenges such as low salaries, weak infrastructure, and migration of health workers hinder the availability of specialized workforce to provide cancer diagnostic services.

Efforts to enhance access to pathology and laboratory services should focus on establishment of regional centers of excellence equipped with appropriate diagnostic equipment, including molecular and genetic testing, in line with WHO guidelines. There is also need to develop and implement a comprehensive national plan to enhance recruitment and retention of skilled pathology and laboratory health professionals.

Approximately 30 out of 36 states provide some form of systemic cancer therapy; mainly through major teaching hospitals and some private institutions in urban settings. Whereas medical oncology services are largely provided by clinical oncologists with dual specialization in radiation and systemic therapy management, surgeons also prescribe chemotherapy. Dedicated oncology beds and chemotherapy chairs are available in over 80% of institutions providing medical oncology services in the country.

A ChemoSafe framework has been introduced in partnership with the American Cancer Society with an accompanying policy document and piloted in six institutions in Abuja, Enugu, Ife, Lagos, Zaria and Gombe. Use of personal safety equipment is limited to pharmacists in the majority of the hospitals. The government has instituted several programs to enhance access to cancer drugs including the Nigeria Cancer Access Partnership (NCAP) in collaboration with the Clinton Health Access Initiative. The program provides specific originator drugs direct from pharmaceutical manufactures at drastically reduced rates of 50-60% to the patient.

Disparities exist among regional hospitals, due to variable staffing levels with limited oncology services outside of urban centers. Availability of skilled oncology staff (medical oncologists, oncology nurses and pharmacists) remains a key challenge to the provision of quality medical oncology services. Though majority of the hospitals have established multi-disciplinary tumour (MDT) boards, meetings are yet to cover for all the patients in the facilities.

There is limited access to diagnostic tests, including hormone receptor status for breast cancer, leading to delays in treatment initiation. The NCAP would also benefit from expanded disease coverage (inclusion of additional paediatric and haematological cancers), an expanded scope to cover more facilities, and establishment of clear guidelines on eligibility.

Most hospitals have no dedicated surgical time for oncology cases often leading to delays in treatment initiation. Ongoing efforts to decentralize cancer care through establishment of comprehensive centers across all geo political zones provide an opportunity to strengthen surgical oncology services through additional infrastructure and deployment of relevant staff. Surgical oncology care is often not performed in a multidisciplinary setting (MDT).

The country has commenced Residency/Fellowship programme for surgical oncology training with accreditation of some institutions by the West African College of Surgeons.

2.6 Paediatric Oncology

According to Globocan estimates, approximately 6000 new cases of childhood cancer were diagnosed in 2022. Access to specialized childhood cancer care remains a challenge with approximately 95% of cases presenting in late stages. Nigeria is however advancing efforts to strengthen childhood cancer care including inclusion of Nigeria in the WHO's Global Initiative for Childhood Cancer (GICC). Other notable partnerships include a collaboration with St. Jude Global to assess capacities to provide paediatric oncology care across 13 institutions. There are ongoing awareness creation initiatives in partnership with civil society groups.

A total of 38 institutions spread across 24 states offer some form of paediatric oncology services, out of whom 4 have dedicated paediatric oncology wards. There are 8 paediatric oncologists who have received specialized training in oncology; general Paediatricians are responsible for treating children with cancer in majority of the centers. There are four centers equipped with radiotherapy facilities that treat childhood cancer cases.

Over 50% of the hospitals providing paediatric oncology services currently have functional multidisciplinary tumour boards with participation of paediatric oncologists. Treatment protocols are in existence adapted from international bodies such as the International Society of Paediatric Oncology, Children's Oncology Group, Berlin-Frankfurt Münster, the United Kingdom UKALL, and the French protocol for Burkitt Lymphoma and 11 aligned to the Essential Medicines List. The Nigerian Society of Paediatric Oncology (NISPO) provides a platform for paediatric oncologists to meet annually to discuss and review protocols and practice guidelines.

2.7 Palliative Care

Palliative care services in Nigeria are challenged by limited availability of hospital-based services, absence of paediatric palliative care, significant shortage of trained professionals, lack of appropriate infrastructure and absence of community and home-based palliative care services. Despite the development and adoption of the National Policy and Strategic Plan for Hospice and Palliative Care by the National Council on Health in November, 2024, Palliative care coverage still remains low, estimated at less than 1% under the National Health Insurance Authority (NHIA) with reimbursement rates falling short of actual care costs. Nigeria needs approximately 1,026 kilograms of morphine per year to meet its population palliative care needs.

2.8 Radiology Services

There are an estimated 300 radiologists within the country translating to less than 0.1 per million population (against the sub-Saharan Africa average of 2 radiologists per million). The cost of essential radiology services is partly covered (estimated at 30-40%) by the National Health Insurance Authority. The country has a long-standing collaboration with IAEA that has facilitated establishment of nuclear medicine services within the public sector at the National Hospital Abuja and University College Hospital, Ibadan. Additionally, two private centers in Lagos provide nuclear imaging services. The country's infrastructure for nuclear medicine includes one cyclotron (9.4 Mev located in a private facility), one PET CT scanner and four SPECT CT machines with an Equipment per 1 million population vs expected for sub-Saharan region: CT (0.89 vs 1.036); MRI (0.26 vs 0.67); Mammograms (0.18 vs 1.48); X-ray (22 vs 20) available staff complement comprising six nuclear medicine physicians, 10 nuclear medicine technologists and four radio pharmacists. Nigeria has well established training programs in radiology, radiography, biomedical engineering and medical physics. Available radiology sub-specialty training includes neuroradiology, paediatric radiology, breast imaging and interventional radiology.

Radiologists are an integral part of the MDT meetings in majority of the teaching hospitals. Access to imaging services is however hampered by lack of sustained power supply leading to frequent equipment breakdown, lack of service contracts and preventive maintenance of equipment, weak systems for quality assurance and insufficient numbers of radiology personnel. An approach that enhances regular preventive maintenance, promotes retention of trained staff and strengthens national and hospital-based radiation safety and protection programmes would be beneficial.

2.9 Radiation Safety

The country promulgated the "Nuclear Safety and Radiation Protection Act" No. 19 (the Act) in 1995 to establish the Nigerian Nuclear Regulatory Authority (NNRA) as the designated regulatory body and assigns to it specific functions including issuance of authorizations, verifying compliance through inspections, and applying sanctions in cases of non-compliances. However, a management system aligned with its safety goals for radiation safety is yet to be established. There is a national policy and strategy for safety. The document however needs to be aligned with key provisions of the IAEA GSR Part 1 such as conventions and other relevant international instruments, expanded scope of the governmental, legal and regulatory framework, ensuring adequate human and financial resources, and promoting leadership and management for safety. There is limited availability of both extremity and internal dosimetry services;

where available, non-systematic use of dosimeters was observed. Additionally, despite widespread availability of radiation warning signs, control and supervised zones were not adequately identified and signalized. The country has also not developed diagnostic reference levels.

Radioactive Material Security Nigeria prioritizes the security of radioactive materials in healthcare through its nuclear regulatory framework, led by the NNRA. The country collaborates with the IAEA, adopting the Integrated Nuclear Security Sustainability Plan (INSSP). Nigeria is a party to key IAEA conventions and actively works on improving regulatory infrastructure through benefiting from projects like the Regulatory Infrastructure Development Project (RIDP). Having hosted its first International Physical Protection Advisory Service (IPPAS) mission in 2023, Nigeria continues to strengthen its nuclear security regime through international cooperation and expert.

2.10 Patient Navigation and Care Coordination

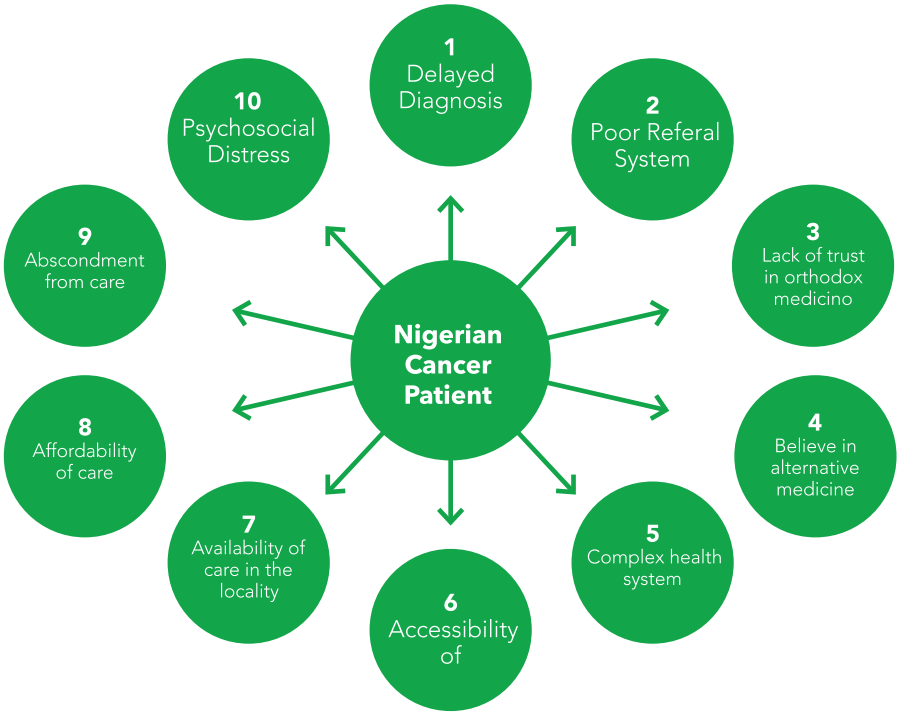
Patient navigation in the cancer care setting refers to individualized assistance offered to patients, families, and caregivers to help overcome health care system barriers and facilitate timely access to quality health and psychosocial care from pre-diagnosis through all phases of the cancer experience.

The main goal of patient navigation is to eliminate barriers to care to save lives from cancer. Patient navigation is designed to 1) break down barriers to care so that all individuals with cancer receive timely diagnosis and treatment and 2) reduce the number of patients who quit treatment.

A patient navigation program has at its core a person—or team of people—dedicated to guiding cancer patients, family members, survivors, and caregivers through the complexities of their experience with cancer by helping them access medical, financial, insurance, and social supports. These individuals are called patient navigators.

Health care professionals, health care facilities, and health systems can derive multiple benefits from delivering cancer care using patient-centered care approaches like patient navigation. Patient navigation services, however, are currently limited in scope and reach in Nigeria. Although some CSOs collaborate with hospitals to provide some support services to cancer patients, these services are fragmented in most cases and do not meet the standard definition of patient navigation. Examples of such services include connecting patients with healthcare providers, interpreting medical information for patients, follow up with patients to remind them of their appointment schedules, emotional and psycho-social support, linking patients to social welfare programs for financial assistance etc.

The patient navigation services currently being provided in some of our hospitals include guiding patients through hospital visits, helping both patients and caregivers understand diagnoses and treatment recommendations, linking patients to social welfare programs that provide financial assistance, sending appointment reminders, and conducting follow-ups to ensure continuity of care. The figure below shows the barriers and challenges that Nigerian cancer patients face.



Adapted from Chidebe, RCW. Navigating in the Ocean of Pain & Abject Lack: Patient Navigation in Nigeria

2.11 Cancer Care Financing

Nigeria is yet to meet up with the Abuja declaration on Health Financing in 2001 which advocated for a 15% annual national budget commitment to health. Approximately 60% of healthcare services are provided privately. Total health expenditure as a percentage of government budget is estimated at 4%3 while out of pocket expenditure contributes to more than three quarters (76%) of current health expenditure. This has posed significant barriers to effective cancer care, contributing to preventable morbidity and mortality.

Access to cancer care services remains limited, particularly for people living in rural and underserved regions. Most cancer treatment facilities are concentrated in urban centers, leaving rural populations with little or no access to necessary services. Even in urban

areas, the number of healthcare institutions offering comprehensive cancer care is grossly inadequate to meet the needs of the growing population.

The cost of cancer treatment in Nigeria is often beyond the financial capacity of most citizens. Expenses related to chemotherapy, radiation therapy, and associated diagnostic procedures are prohibitively high. As of 2024, a full course of chemotherapy ranged between N1,320,000 and N28.3 million (approximately $862 to $18,500 USD), while radiation therapy for breast cancer cost between N800, 000 and N3.0 million (around $522 to $1,961 USD). These figures far exceed the average Nigerian's economic capacity.

To put this into perspective, Nigeria's GDP per capita in 2024 stood at $2,447 (World Bank, 2020). A single session of chemotherapy could cost up to 35% - 756% of the nation's daily GDP per capital, while radiation therapy for breast cancer could reach as high as 21% - 80% of the monthly GDP per capita. These staggering costs impose severe financial hardship on individuals and families.

The consequences of the high costs of cancer care devastating. Studies have shown that 68% of breast cancer patients in Nigeria do not have health insurance. Furthermore, 95% of households experience financial catastrophe following a breast cancer diagnosis, and 86% spend more than 25% of their annual income on cancer-related expenses[10]. This financial strain leads to delayed or abandoned treatment, poor health outcomes, and a rising national cancer burden.

To bridge the affordability gap in cancer treatment, the Nigerian government has launched several initiatives aimed at easing the financial burden on patients and improving access to care.

One of the most impactful efforts is the Cancer Access Partnership (CAP) program. This initiative, a collaboration between the Federal Ministry of Health's NSCCP, ACS, CHAI, significantly reduces the cost of chemotherapy drugs by as much as 50%. This has made life-saving treatment more attainable for many Nigerians who would otherwise be unable to afford it.

The implementing agencies of the Basic Health Care Provision Fund (BHCPF), NHIA has developed a catastrophic Health Insurance Fund to provide comprehensive treatment for cancers, sickle cell disease and renal disease. This will, in the interim complement the National Cancer Health Fund (NCHF) that supports provision of chemotherapy and radiotherapy services for patients with breast, cervical and prostate cancers in 6 public comprehensive cancer centers across the country. To complement government effort, the Nigerian Cancer Society has set up National Cancer Intervention Fund to support cancer care services.

2.12 National Quality Assurance and Quality Improvement (QA/QI) Program for Cancer Care

Despite our progress in strengthening infrastructure, policy, and workforce capacity, major gaps persist in the quality, consistency, and equity of cancer services delivered across the country. Patients continue to encounter late presentation, diagnostic delays, variability in guideline adherence, weak referral pathways, and limited data use for decision-making.[10] These system-wide gaps undermine the effectiveness of investments in cancer control and contribute to preventable deaths.

Global evidence shows that countries that embed structured QA/QI systems into cancer control strategies achieve earlier detection, improved treatment outcomes, and increased survival. Quality is not an optional add-on; it is the foundation that translates resources, policies, and clinical expertise into improved outcomes and lives saved. For Nigeria, a coordinated national QA/QI program ensures that cancer care delivered across all states is consistent, evidence-based, and patient-centered.

[10] Anyanwu, S. N., Egwuonwu, O. A., & Ihekwoaba, E. C. (2011). Acceptance and adherence to treatment among breast cancer patients in Eastern Nigeria. The Breast, 20, S51-S53.

CHAPTER THREE: **STRATEGIC FRAMEWORK**

3.1 Vision

A Nigeria where cancer burden is reduced by 50% in 2030 through a multi sectorial sustainable approach, leveraging on the available health systems and resources.

3.2 Mission

To improve our public health care system that is equipped, staffed with trained, and competent personnel to provide a full range of comprehensive cancer risk assessment, prevention, screening and early detection, diagnosis, treatment, survivorship and End-of-Life care options across the country.

3.3 Goal

To reduce cancer incidence and mortality in Nigeria by 50% by 2030.

3.4 General Objectives

i. To strengthen cancer prevention, risk assessment, screening, and early detection.
ii. To ensure timely, equitable, and high-quality cancer diagnosis, treatment, survivorship, and End-of-Life care.
iii. To strengthen cancer surveillance, registration, strategic information systems, and research capacity.
iv. To advance partnerships, coordination, workforce development, and innovations that enhance cancer control.
v. To promote active subnational, community, and patient engagement across the continuum of cancer control.
vi. To leverage AI for accelerating infrastructural and operational capabilities of stakeholders in achieving cancer care goals

3.5 Guiding Principles of the Cancer Control Plan:

The Nigerian National Cancer Control Plan is guided by the following key principles:

i. Ownership and leadership in the implementation of the national plan across the three tiers of government.
ii. Equitable and sustainable distribution of services that is affordable and accessible.
iii. Partnership, and collaboration with development partners and stakeholders at different levels with clear understanding of roles, responsibilities and mandates.

3.6. Strategic Pillars, Objectives, and Activities

The National Cancer Control Plan 2026-2030 shall be implemented under 5 Strategic Pillars which include:

3.6.1. PILLAR 1: Cancer Risk Assessment, Prevention and Early Detection

Strategic Goal: To strengthen and expand quality, equitable, and evidence-based cancer risk assessment, prevention, and early detection services in order to reduce the burden of preventable cancers and ensure early identification of others for timely and effective treatment.

The country adopted the National Comprehensive Cancer Network (NCCN) harmonized guidelines for sub-Saharan Africa which has Screening Guidelines for high burden cancers amenable to population-level screening and/or early diagnosis interventions such as cervical, breast, colorectal and prostate cancers which account for over 50% of all new cancer diagnoses and 40% of deaths in the country (GLOBOCAN 2022). About 5-10% of all cancers globally are attributed to genetic factors which are non-modifiable though amenable to early diagnosis and treatment.

Tobacco use is one of the most important risk factors responsible for one in five cancers and one in three cancer-related deaths globally.[11,12] It has been estimated that the prevalence of tobacco use in Nigeria is 5.6%.[5] Some viral infections have been identified as major risk factors and can be prevented through vaccination. Routine vaccination programmes for Hepatitis B and Human Papillomavirus (HPV) are in place in Nigeria for prevention of liver and cervical cancers respectively. To achieve the WHO 90:70:90 cervical cancer elimination targets, at least 1.6 million women will need to be screened annually. The Breast Cancer Screening Programme targets to reach 4.8 million women annually. Progressively, a population-based screening programme for colorectal and other cancers will need to be established.

1. Strategic objective 1.1:

Reduce exposure to modifiable cancer risk factors and address underlying social and environmental determinants.

[11] WHO report on the global tobacco epidemic, 2023 Country Profile, Nigeria.

[12] Nigeria National Tobacco Control policy: Federal Ministry of Health Abuja.

Strategy 1.1.1: Reduce prevalence of tobacco use and tobacco-related products and by-products from 5.6% by 50% to 2.8% by 2030.

Activities:

- **i.** Advocate for increased excise taxation to the WHO recommended 70% of retail price, and continued use of pricing mechanisms to limit access to tobacco products.
- **ii.** Integrate tobacco control key messages in cancer awareness, education, and mass media campaigns.
- **iii.** Integrate tobacco control strategies into the cancer prevention and control interventions in the community, schools and workplaces.
- **iv.** Support provision of tobacco cessation services (counselling and pharmacotherapy) through integration at health facilities and cancer treatment centers

Strategy 1.1.2: Promote consumption of healthy diets, physical activity, reduce overweight and obesity.

Activities:

- **i.** Integrate health education and awareness interventions in cancer control activities in schools, community and in health care facilities at all levels to promote healthy nutrition and physical activity and mitigate overweight and obesity.
- **ii.** Support enactment of policies and legislation to reduce marketing and advertising of unhealthy foods and drinks, and to provide incentives for access to and sale of healthy foods.
- **iii.** Work with stakeholders to review policies on urban and city designs to promote active lifestyles.
- **iv.** Promote establishment of workplace and community wellness programs.

Strategy 1.1.3: Reduce exposure to environmental and occupational risk factors.

Activities:

- **i.** Institute active surveillance programs for food, environmental and occupational risk factors for cancer.
- **ii.** Create public awareness and sensitize communities on environmental and occupational risk factors.
- **iii.** Advocate for the review, enactment and enforcement of existing policies, laws, regulations and guidelines to limit exposure to environmental and occupational toxins and pollutants.
- **iv.** Promote research on the role of chemicals, pesticides, environmental and occupational risk factors and pollutants, in cancer causation.

Strategy 1.1.4: Reduce exposure to known infectious agents associated with cancer

Activities:

i. Promote routine HPV vaccination in all eligible girls to achieve 90% HPV vaccination by 2030.
ii. Promote strategies to reduce transmission of HPV, Hepatitis B and C, HIV, HHV-8, HTLV-1, EBV among others.
iii. Develop and implement a targeted screening and treatment program for Hepatitis B Virus to address liver cancer across the country.
iv. Promote availability and appropriate use of diagnostic and therapeutic interventions for HBV, HCV, schistosomiasis, Helicobacter pylori, HIV infections, among others.

3.6.1.2 Strategic objective 1.2: Address non-modifiable risk factors including age, ethnicity, race, family history of cancer, and gender.

Strategy 1.2.1: Create awareness among the general public on familial and hereditary cancers

Activities:

i. Integration of key messages on familial and hereditary cancers into existing cancer IECs.
ii. Integrate content on familial and hereditary cancers in community health strategy materials.

Strategy 1.2.2: Build the capacity of health care workers for screening and linkage to diagnosis and care for familial and hereditary cancers.

Activities:

i. Integrate content on familial and hereditary cancers in training materials for primary health workers.
ii. Promote training of health workers on early detection of familial and hereditary cancers.
iii. Adopt a screening tool for use by primary health workers in identifying individuals with high risk of- familial and hereditary cancers.

Strategy 1.2.3 (Genomics): Increase identification of individuals at high hereditary cancer risk through genetic risk assessment from baseline to 10X of eligible individuals by 2030.

Activities:

i. Implement standardized family-history risk assessment tools at secondary and tertiary facilities.
ii. Establish genetic counseling units in at least 12 tertiary hospitals by 2030.
iii. Train healthcare providers on referral criteria for genetic counseling and testing.
iv. Conduct public education campaigns on hereditary cancers (e.g., BRCA, Lynch syndrome).

Strategy 1.2.4 (Genetic Testing / Genomics): Expand access to genetic testing for hereditary cancers to at least 1 center per geopolitical zone by 2030.

Activities:

i. Equip designated tertiary centers with validated genomic testing technologies.
ii. Establish national guidelines for cancer genetic counseling and testing.
iii. Strengthen partnerships with accredited genomic laboratories and international research networks.
iv. Integrate genomic testing into clinical pathways for high-risk patients.

Strategy 1.2.5 (High-Risk Screening – Genomics): Ensure 80% of individuals with confirmed hereditary cancer risk (e.g., BRCA, Lynch) enroll in enhanced early detection pathways by 2030.

Activities:

i. Develop enhanced surveillance protocols for hereditary cancer carriers.
ii. Train clinicians on risk-based screening and follow-up.
iii. Use digital tools to track screening adherence among high-risk groups.
iv. Collaborate with patient advocacy groups to support high-risk individuals.

3.6.1.3 Strategic objective 1.3: Improve secondary prevention of cancer through screening, early diagnosis and institutionalized referral linkage to care

Strategy 1.3.1: Accelerate equitable access to quality cancer screening & early diagnosis interventions

Activities:

i. Strengthen provision of organized cancer screening and early diagnosis services as appropriate at all levels of health care.

ii. Promote access to screening and early diagnosis for hard-to-reach groups and within communities through innovative mobile clinics and use of self-care approaches.
iii. Promote integrated programs for early identification of lung cancer in tuberculosis/chest clinics.
iv. Strengthen implementation of preventive oncology in all health facilities

Strategy 1.3.2: Increase the diversity and capacity of the health workforce and health care service delivery systems for cancer screening and early diagnosis.

Activities:

i. Increase the number and diversity of trained health workers to deliver cancer prevention and screening services.
ii. Include cancer screening and early diagnosis content in pre-service training curricula of medical and other health workforce and training programs through collaboration with health training institutions.
iii. Provide resources, incentives and technical assistance through mentorship to expand workforce and systems capacity to provide or link clients to culturally competent and accessible screening service.

Strategy 1.3.3: Optimize referral mechanisms and improve linkages to care to reduce loss to follow up

Activities:

i. Identify and address health system factors that impact timeliness of diagnosis of symptomatic cancer and provide rapid linkages to confirmatory diagnosis.
ii. Establish a national cancer screening data repository for longitudinal client tracking to support follow up, provide feedback to referring facilities and conduct client navigation.
iii. Integrate cancer screening into Digital Health Information System 2 (DHIS2)
iv. Strengthen integrated sample/specimen referral and tracking systems, including timely relay of results.
v. Train, mentor and deploy community and in-facility navigators to facilitate referrals and linkages to care.

Strategy 1.3.4 (Equity): Reduce geographic disparities in access to screening and genomics services by expanding services to at least 80% of rural LGAs by 2030.

Activities:

i. Deploy mobile screening units to remote and underserved communities.
ii. Strengthen Primary Healthcare-level capacity for early detection services.
iii. Provide targeted community engagement in hard-to-reach areas.
iv. Monitor and report screening coverage disaggregated by geography and socioeconomic status.

Strategy 1.3.5 (Timely Linkage to Diagnosis): Ensure that 80% of individuals with positive screening tests receive diagnostic confirmation within 60 days by 2030.

Activities:

i. Implement tracking and referral systems between screening and diagnostic centers.
ii. Train providers on prompt management of abnormal screening results.
iii. Strengthen tele-consultation systems for diagnostic triage in remote areas.
iv. Establish quality assurance systems for timely follow-up of positive screens.

Strategy 1.3.6 (Impact / Outcomes): Reduce late-stage presentation of priority cancers (breast, cervical, prostate) by 30% by 2030.

Activities

i. Implement public awareness campaigns emphasizing early symptoms.
ii. Expand integrated referral networks linking Primary Health Care to diagnostic centers.
iii. Strengthen systems for stage-at-diagnosis reporting.
iv. Train health workers on early clinical detection at the point of care.

3.6.1.4 Strategic objective 1.4: Strengthen early detection of childhood cancers

Strategy 1.4.1: Improve public awareness of childhood cancers and the importance of early detection.

Activities:

i. Integration of key messages on childhood cancers into existing public health promotion programs.
ii. Train and engage community health workers, cancer survivors, administrators

and other stakeholders to mobilize parents or guardians of children with symptoms to visit the nearest health facility.

Strategy 1.4.2: Build capacity of health care workers for early detection of childhood cancers

Activities

i. Train healthcare workers on early warning signs and clinical presentation of childhood cancers and importance of prompt referral.
ii. Promote the use of the Childhood Cancer Assessment Tool for evaluation of children for possible cancer within the IMCI (integrated management of childhood illnesses) approach.
iii. Establish targeted screening and cancer preventive surveillance services for children with retinoblastoma.

3.6.1.5 Strategic objective 1.5: Strengthen multi-sectoral response and coordination in cancer prevention and early detection

Strategy 1.5.1: Strengthen the National Technical Working Group on cancer prevention and early detection.

Activities

i. Review TWG membership and existing terms of reference annually to ensure appropriate multi-sectoral representation.
ii. Establish/ strengthen multidisciplinary teams for specific disease/thematic areas (breast, cervical, risk-reduction, screening etc.).
iii. Promote knowledge exchange and sharing among relevant members and organizations through knowledge exchange/ consultative forums.

3.6.2 PILLAR 2: Timely and Accurate Cancer Diagnosis

Strategic Goal: Ensure timely, accurate, safe, and equitable cancer diagnostic services through standardized imaging practices and robust quality assurance systems to improve patient outcomes.

Cancer intervention implementations, imaging, pathology and laboratory medicine diagnosis is the beginning of cancer care journey. Early diagnosis is a critical first step in achieving higher survival rates, reducing treatment severity and improving the quality of life of people living with cancer. It forms the basis for guided biopsy, accurate stag-

ing, evidence-based treatment, follow-up and monitoring of patient outcomes, as well as research and planning. Early diagnosis is associated with better clinical outcomes and prognosis. It is, therefore, essential to prioritize access to timely, quality and comprehensive diagnostic services. Cancer diagnostic services encompass pathology, laboratory medicine, diagnostic imaging, and interventional radiology specialties. In the country, challenges facing these aspects of diagnosis have contributed to a longer turnaround time for cancer diagnosis resulting in 70% of cancer cases being diagnosed in late stages of the disease. This strategy will seek to strengthen comprehensive cancer diagnostic services that function according to set evidence-based standards. To achieve this, it will be important to equip health facilities with the necessary infrastructure and essential commodities, training and capacity strengthening for primary care providers and community health care workers on early diagnosis, and to optimize diagnostic networks across facilities, employing, where feasible, the latest technology available, digital tools and innovative models for service delivery.

While cancer is a genetic disease, there exists very limited availability of genomic testing services in Nigeria for diagnosis and treatment monitoring of cancers, and most tests are currently performed outside the country. Radiology services include the fields of diagnostic radiology, interventional radiology, nuclear medicine, and image-guided interventions. This strategy seeks to address diagnostic gaps by working with relevant stakeholders to improve and further expand access to comprehensive diagnostic cancer imaging and interventional services.

3.6.2.1 Strategic objective 2.1: Strengthen cancer diagnostic imaging and interventional radiology services

Strategy 2.1.1: Strengthen coordination and standards for cancer imaging services

Activities:

- **i.** Development of National Quality Assurance (QA) and radiation safety and accreditation guidelines in collaboration with relevant regulatory and professional bodies.
- **ii.** Develop and disseminate operational standards and guidelines for cancer imaging, including for childhood cancers.
- **iii.** Develop and implement guidelines for the utilization of teleradiology services.
- **iv.** Development of guidelines and a regulatory framework for the procurement, evaluation, installation, and commissioning of radiological equipment in collaboration with the relevant regulatory bodies in line with the National Nuclear Medicine Policy and Strategic Plan.[13]

Strategy 2.1.2: Increase access to quality, accurate, and efficient cancer diagnostic imaging services nationwide

Activities:

- **i.** Optimize and expand the range and scope of medical imaging equipment and services available in the different levels of care for cancer diagnosis.
- **ii.** Establish interventional radiology services in the 6 geopolitical zones
- **iii.** Expand nuclear medicine services to at least 8 additional centers (at least 1 in each geopolitical zone).
- **iv.** Develop and disseminate standardized structured staging and reporting templates and capacity building of health care workers on their use to improve reporting standards (such as AJCC staging system for routine reporting, BIRADS system in mammogram and ultrasound reporting etc.).
- **v.** Promote the development and implementation of PPPs to address gaps in cancer diagnostic imaging and interventional services.

3.6.2.2 Strategic Objective 2.2: Strengthen cancer pathology diagnostic and Laboratory medicine services.

Strategy 2.2.1: Improve coordination and standards for cancer pathology services

Activities

- **i.** Strengthen and equip the all the Tertiary Hospitals to provide basic and advanced pathology and laboratory medicine services including Immunohistochemistry and molecular testing.
- **ii.** Establish and implement quality control mechanisms and external quality assurance (EQA) programs and ensure accreditation of all pathology laboratories.
- **iii.** Review and disseminate the national cancer specimen handling guidelines and develop algorithms for pathology diagnostics workup of priority cancers.
- **iv.** Develop and implement guidelines for the utilization of telepathology services.
- **v.** Develop protocols to guide cancer diagnosis for priority cancers.

[13] Nigerian National Nuclear Medicine Policy and Strategic Plan: Federal Ministry of Health and Social Welfare; August 2025

Strategy 2.2.2: Increase timely access to quality and accurate cancer pathology and laboratory medicine services nationwide

Activities:

i. Expand and improve the availability of histopathology laboratory infrastructure at national and all state referral hospitals.
ii. Adopt and adapt innovative service delivery models such as rapid diagnostic and mobile testing facilities to enhance timely cancer diagnosis.
iii. Establish frozen section services at the tertiary hospitals.
iv. Establish a national archiving system for tissue blocks and biobanking with linkage to the gross specimen image, whole slide image (WSI), and the final pathology report.
v. Work with relevant stakeholders to improve testing for blood and blood products.
vi. Strengthen and expand availability of HPV testing platforms for cervical cancer screening including point of care testing and HPV self-testing.
vii. Explore genomic testing services for improved cancer diagnosis, research, and treatment monitoring of cancer patients.

3.6.2.3 Strategic Objective 2.3: Strengthen the availability and capacity of human resources to support cancer diagnosis

Strategy 2.3.1: Enhance the availability of human resources for cancer diagnosis

Activity:

i. Promote appropriate recruitment of personnel at cancer imaging, pathology, and laboratory medicine facilities as per international and national standards by levels of care.
ii. Enhance the capacity strengthening of human resources for cancer diagnosis
iii. Collaborate with local and international institutions to establish and strengthen local fellowship programs for subspecialty training in cancer diagnosis and implementation of cancer guidelines and decision aids.
iv. Work with health training institutions to include basic cancer diagnosis content in pre-service training curricula of medical and other health workforce and training programs.

3.6.3. PILLAR 3: Cancer Treatment, Survivorship and End-of-Life care

Strategic Goal: Ensure timely, equitable, and patient-centered cancer treatment, while strengthening access to high-quality, sustainable care and supporting survivorship and palliative services to optimize quality of life for all cancer patients.

Cancer management is one of the major components of effective cancer control programs and should be guided by the principles of Universal Health Coverage (UHC) including accessibility, comprehensiveness, affordability and timeliness. It encompasses surgery, systemic therapy, radiotherapy, nuclear therapy, bone marrow transplant, palliative care, survivorship and rehabilitation services. It is offered through multidisciplinary teams to ensure patient-centered care and clinical effectiveness. These should include core clinical services such as medical oncology, surgery, radiation oncology, pharmaco-oncology, pathology, palliative care, psycho-oncology, oncology nursing, nutrition and rehabilitation, as appropriate. Effective cancer management, therefore, requires a highly trained and qualified workforce, robust referral pathways and efficient health information systems with collaboration among facilities at all levels of care (including primary and secondary levels) as well as with policies. Programs such as the for communities by communities which train early career investigators and communities to lead and develop creative solutions that end cancer in Nigeria are examples of ongoing partnerships to mobilize change at all levels.

The integration of cancer research into clinical cancer care, particularly outcomes and health systems research to inform policy and value-based investments will be prioritized. This strategy will support the implementation of the National Policy and strategic Plan for Hospice and Palliative Care 2021 towards improving access to palliative care services across all levels of care.[14]

In line with the Global Initiative for Childhood Cancer (2018), this strategy aims to increase the survival rate of children with cancer to 60% by 2030, and improve quality of life of children surviving cancer. Additionally, this strategy seeks to to increase the use of research evidence in cancer control policymaking to address vaccine preventable cancers (HPV-related cervical cancer and liver cancer) in Nigeria.

3.6.3.1 Strategic objective 3.1: Development, review and dissemination of NCCN Harmonized cancer treatment guidelines for cancer management

Strategy 3.1.1: Review and disseminate the NCCN Harmonized cancer treatment guidelines as adopted by the Federal Ministry of Health and Social Welfare

Activities:

i. Review and update national cancer treatment guidelines for all major cancers biannually.

[14] National Policy and Strategic Plan for Hospice and Palliative Care: Federal Ministry of Health Abuja, Nigeria, 2021

ii. Conduct training and capacity building for health workers on guideline implementation.
iii. Develop guidelines for rehabilitation of children and adolescents with cancer.
iv. Support the review and dissemination of guidelines for establishment of cancer centers.
v. Work with stakeholders to develop and implement policies and regulations on traditional and alternative medicine.
vi. Dissemination and implementation of National Nuclear Policy and strategy for management of radioactive waste.

Strategy 3.2.2: Enhance coordination, policy regulation and standards for quality cancer care services

Activities:

i. Strengthen the framework for accreditation of facilities providing cancer management services.
ii. Enforce the establishment and implementation of multidisciplinary teams in all facilities providing cancer care.
iii. Support the integration of cancer research in all facilities providing cancer treatment services
iv. Promote the implementation and uptake of evidence-based policies, including vaccine preventable cancer polices (i.e. HPV and HBV) for management of cervical and liver cancer.

3.6.3.2 Strategic objective 3.2: Improve availability and capacity of a skilled multi-disciplinary team of oncology human resources for health across all levels of care.

Strategy 3.2.1: Improve availability of human resources for health in oncology

Activities:

i. Develop and implement an Oncology Human Resource Development Plan.
ii. Collaborate with local and international training institutions to establish and strengthen oncology training programs, fellowships and preceptorships.
iii. Develop a mechanism for resource sharing of specialized human oncology workforce for service provision among counties.
iv. Provide dedicated scholarships for training of a multidisciplinary team of oncology personnel.
v. Work with relevant stakeholders to address scopes of practice, recognition,

accreditation, schemes of service, and career development for the various oncology cadres.

vi. Provide workplace incentives and implement mechanisms for effective oncology human resource management.

Strategy 3.2.2: Strengthen the capacity of oncology workforce for quality service provision

Activities:

i. Establish continuous professional development programs that enable mentorship, regular in-service training, exchange and knowledge transfer for oncology professionals.
ii. Promote development of a framework to vet oncology practitioners before recognition or board certification.
iii. Train and expand a diverse cancer workforce by further developing and promoting opportunities for capacity building and sensitization of health care workers including through e-learning.

3.6.3.3 Strategic objective 3.3: Increase access to timely, equitable, and patient-centered cancer care services

Strategy 3.3.1: Improve availability of cancer treatment services

Activities:

i. Establish and equip five additional comprehensive cancer centers and expand access to cancer management services across the country.
ii. Strengthen the capacity of Tertiary hospitals to efficiently provide comprehensive cancer care including bone marrow transplantation and other cell therapies.
iii. Strengthen blood donor services and blood availability at federal and state cancer centers.
iv. Adopt integrated electronic health management systems for oncology that are interoperable with existing digital health platforms.
v. Promote utilization of tele-health in the provision of cancer services.
vi. Establish and optimize patient navigation between and within facilities across all levels.
vii. Institute mechanisms for regular service audits to monitor treatment outcomes and establish quality assurance programs at cancer treatment centers.
viii. Strengthen nuclear and radiation medicine regulation, knowledge and utilization.

Strategy 3.2.2: Strengthen availability of palliative, rehabilitative and survivorship services

Activities:

i. Develop a harmonized palliative care curriculum for training of health workers, community health volunteers and other key resource persons.
ii. Ensure consistent availability of essential opioids and develop appropriate guidelines and SOPs to guide their appropriate use.
iii. Ensure the availability of palliative care services in all secondary and tertiary facilities with linkages to primary and community home-based care.
iv. Address social and structural determinants of health that impede access and exacerbate disparities.
v. Integrate survivorship care into primary, secondary, and tertiary health services.
vi. Establish patient navigation and follow-up systems to ensure continuity of care.

Strategy 3.2.3: Improve childhood cancer treatment, palliative care, survivorship and rehabilitation

Activities:

i. Operationalize the childhood cancer Technical Working Group.
ii. Advocate the provision of Universal health coverage for childhood cancer through integration as part of essential benefit package of services.
iii. Establish paediatric oncology centers of excellence at the federal tertiary hospitals and their care networks.
iv. Provide a defined basic package of care for paediatric cancer management at the federal, state and private tertiary cancer centers.
v. Create an efficient system for expedited referral of children with suspected cancer to the tertiary cancer centers of excellence.
vi. Define required competencies and skills mix of pediatric oncology human resources and promote their accreditation to optimize provision of childhood cancer care.

Strategy 3.3.4: Strengthen the supply chain of oncology health products and technologies

Activities:

i. Strengthen the supply chain subcommittee to undertake accurate forecasting, quantification and supply chain planning including for childhood cancer.
ii. Develop innovative strategies to improve access to affordable oncology health products and technologies including local manufacturing, pooled procurements, framework agreements and access programs.

iii. Engage the national procurement agency and other stakeholders to ensure consistent availability of essential cancer health products and technologies for treatment, palliative care, rehabilitation and survivorship.

Strategy 3.3.5: Review, disseminate, and enforce guidelines for establishing and accrediting comprehensive cancer centers.

Activities:

i. Review and update operational standards and accreditation criteria for cancer centers.
ii. Support the establishment of new centers in underserved regions.
iii. Conduct periodic accreditation and compliance audits.

Strategy 3.3.6: Develop policies and regulations for the safe integration of traditional and complementary medicine into cancer care.

Activities:

i. Engage stakeholders to develop regulatory framework and policies.
ii. Disseminate guidelines to healthcare facilities and traditional medicine practitioners.
iii. Monitor adherence and patient safety outcomes related to alternative therapies.

Strategy 7: Implement the National Nuclear Medicine Policy and strategic framework for the safe management of radiotherapy and radioactive resources.

Activities:

i. Develop operational protocols for installation, commissioning, and utilization of radiotherapy equipment.
ii. Train personnel on radiation safety, QA, and regulatory compliance.
iii. Conduct routine inspections and audits of radiological services.

3.6.4. PILLAR 4: Advocacy, Partnerships, Coordination, and Financing

Strategic Goal: Strengthen advocacy, multi-sectoral partnerships, coordination, and sustainable financing to ensure an effective, equitable, and robust national cancer control response in Nigeria.

Successful cancer control greatly depends on having a clear, multisectoral coordination structure and effective partnerships that enable all stakeholders to define their value in a comprehensive cancer control framework to stimulate collective action by everyone. Sustained improvements in capability and capacity for cancer care will require the participation of state and non-state actors to implement programs and optimize the cancer ecosystem successfully.

This strategy will seek to provide training, sensitization and awareness programmes on prevention, early diagnosis, treatment, palliative care and control of cancer for all including but not limited to employees of all Ministries, Departments, agencies, of federal and state governments, communities, employees of private and informal sectors, media among other stakeholders with targeted programs for disadvantaged populations to ensure equity. It will address social determinants of health to ensure better health outcomes. With lessons learnt from programs like the Cancer Control Change Scholars program led by the Nigerian Institute of Medical Research, we will bring together teams of policy actors to design and assess the acceptability, appropriateness, and feasibility of dissemination strategies to bridge the research evidence-to-policy gaps for policymakers for vaccine-preventable cancers in Nigeria.

3.6.4.1 Strategic objective 4.1: Inform and empower the Nigeria population on cancer prevention and control and address cancer stigma

Strategy 4.1.1: Identify and map the appropriate communication tools based on stakeholder needs and current determinants of health.

Activities:

- **i.** Increase awareness of cancer-related stigma and disparities through data collection, analysis and dissemination of findings.
- **ii.** Identify and engage multisectoral stakeholders to support cancer communication and the reduction of cancer stigma.
- **iii.** Develop new and scale up effective, evidence-based interventions to improve health outcomes among priority populations and other populations or geographic areas experiencing disparities.
- **iv.** Develop and disseminate cancer screening, diagnosis and treatment services directory that is publicly available.

Strategy 4.4.2: Mainstream Advocacy, Communication, and Social Mobilization on cancer across all sectors

Activities:

- **i.** Train, equip, and mentor community health resource persons and other stakeholders to increase cancer awareness among the general public.
- **ii.** Mobilize political commitment, involvement, accountability, and resource for cancer advocacy and communication activities.
- **iii.** Involve persons living with cancer, caregivers, and community leaders in cancer advocacy and communication.
- **iv.** Work with communities to reframe cancer services and cancer-related messaging so that they do not stigmatize people or behaviours.

Strategy 4.4.3: Promote knowledge sharing within and outside the health sector on cancer

Activities:

- **i.** Conduct regular National Cancer Summit annually in collaboration with relevant stakeholders including civil society.
- **ii.** Provide support for state Ministries of Health to develop cancer action plans to implement the national cancer control strategy.
- **iii.** Observe priority cancer commemoration days from the community level.
- **iv.** Promote the establishment of State cancer control focal points in the state Ministries of Health to oversee implementation of cancer control activities.
- **v.** Establish a National Steering Committee on Cancer Prevention and Control with members health and non-health actors.

Strategy 4.4.4: Strengthening supply chain management for cancer prevention and control health products and technologies (HPTs) at all levels

Activities:

- **i.** Ensure availability of commodities, equipment, infrastructure at health facilities.
- **ii.** Review and update essential cancer prevention and control commodities and supplies in the Nigeria Essential Medicines & Supplies Lists.
- **iii.** Support local manufacturing of commodities and technology transfer and nurture innovation.

3.6.4.2 Strategic objective 4.2: Strengthen engagement and partnerships at National and state levels

Strategy 4.2.1: Strengthen cancer control coordination structures

Activities:

i. Convene regular coordination meetings with state Ministries of Health to disseminate cancer policies and provide technical support on their implementation.
ii. Develop a mechanism for sharing regional cancer control resources between states, including human resources, infrastructure, and commodities.
iii. Ensure continuity of essential cancer services during emergencies and pandemics.

Strategy 4.2.2: Strengthen cancer control legislative framework

Activities:

i. Support enactment of legislation to reduce the marketing and advertising of unhealthy foods and drinks.
ii. Advocate for policies and legislation that promote access to essential cancer services including screening and diagnosis.
iii. Review and update national cancer policies, including NCCP implementation plans.
iv. Advocate for legislative measures to support cancer control (e.g., tobacco control, vaccine mandates, funding allocation).
v. Monitor and evaluate policy implementation and compliance across sectors.

Strategy 4.2.3: Strengthen the National Cancer Control Program (NCCP)

Activities:

i. Deploy adequate staff to deliver its mandate as per its staff establishment structure.
ii. Build the capacity of NCCP Staff to deliver on its mandate.
iii. Facilitate the NCCP to conduct capacity building, provision of technical support, supportive supervision to state Ministries of Health and all the cancer treatment centers across the country for cancer control and to develop and support policy implementation.
iv. Provide adequate resources for the development and regular dissemination of cancer prevention and control policies/guidelines.

3.6.4.4 Strategic objective 4.4: Strengthen partnerships for cancer prevention and control at all levels

Strategy 4.4.1: Strengthen multisectoral partnerships in cancer control

Activities:

- **i.** Strengthen Public, Private, and Partnerships to enhance cancer control across the continuum of care.
- **ii.** Promote strategic collaborations with cancer Health Products and Technologies manufacturers, emphasizing framework agreements and local manufacturing to enhance access to quality and affordable cancer commodities.
- **iii.** Work with regulatory bodies to streamline processes for the review, evaluation, and clearance of new cancer screening, diagnostic, and treatment health products and technologies, including those for cancer research and clinical trials.

3.6.4.5 Strategic objective 4.5: Increase innovative sustainable financing for comprehensive cancer prevention and control at national and state levels

Strategy 4.5.1: Strengthen innovative financing mechanisms for an effective cancer response

Activities:

- **i.** Increase public financing for cancer control including in the UHC benefit package.
- **ii.** Leverage on the catastrophic Health Insurance fund and BHCPF in NHIA to cushion individuals from catastrophic health expenditure and impoverishment.
- **iii.** Support state governments to create cancer control annual work plans; and to allocate budget lines for cancer prevention and control.

Strategy 4.5.2: Ensure adequate financing toward achieving a 60% survival rate for children with cancer

Activities:

- **i.** Advocate for the provision of sustainable, comprehensive cancer care for children as per the CURE ALL framework.
- **ii.** Advocate for Universal Health Coverage with differentiated care packages for children.
- **iii.** Institutionalize mechanisms for facilitating and financing national/state procurement of essential childhood cancer medicines, rehabilitative and other health products and technologies.
- **iv.** Create a social protection package for childhood cancer patients and their families for their protection against catastrophic expenditure.

Strategy 4.5.3: Advance implementation of evidence-based policies for vaccine preventable cancers towards achieving global goals.

Activities:

i. Build grassroot units to sensitize both policymakers and communities including cancer researchers, healthcare providers, and community actors about research evidence, polices and guidelines for vaccine-preventable cancers in Nigeria.
ii. Recognize and/or identify existing robust tools that advance uptake of evidence, including policy-to-practice plans on vaccine-preventable cancers for diverse populations.
iii. Integrate database and platforms that leverages existing national, regional, and facility-level cancer registries and information health systems
iv. Champion potential partnerships with universities, hospitals, community-based organizations, and professional organizations geared towards development and uptake of clear guidelines for the diagnosis, prioritization programs, and tailored referral pathways for vaccine preventable cancers.
v. Kick-off targeted awareness including crowdsourcing approaches such as open calls, designathons, and gamified solutions that educate all levels of individuals, communities, and healthcare workers on preventive services for vaccine-preventable cancers.
vi. Build capacity of policymakers and program implementers on implementation science to accelerate the uptake and sustainment of evidence-based, vaccine preventable cancer interventions in Nigeria.

3.6.4.6 Strategic Objective 4.6: Strengthen data-driven decision-making and monitoring

Strategy 4.6.1: Establish robust monitoring, evaluation, and reporting systems to inform advocacy, partnerships, and resource allocation.

Activities:

i. Expand and strengthen the national cancer registry network.
ii. Develop national dashboards and periodic performance reports for stakeholders.
iii. Conduct data-sharing agreements with research institutions, NGOs, and international partners.

3.6.5. PILLAR 5: Strategic Information, Registration, Surveillance and Research

Strategic Goal: Establish a comprehensive, sustainable, and integrated framework for cancer registration, surveillance, research, and knowledge management to generate timely, high-quality evidence that informs policy, planning, and practice.

Monitoring and evaluation (M&E) is critical to cancer control programs. Effective M&E includes tracking of performance periodically, to guide corrective actions. Monitoring involves routine collection of data against well-defined indicators to provide detailed information on progress and gaps. Evaluation involves collection of data at discrete time-points to assess effectiveness or impact of cancer control interventions. A well-functioning integrated health information system is critical for effective Monitoring and evaluation and continuous quality improvement in cancer control. Cancer surveillance is primarily conducted through cancer registration.

3.6.5.1 Strategic objective 5.1: Strengthen availability, quality, demand and utilization of cancer data at both national and sub-national levels

Strategy 5.1.1: Enhance the coordination structures and optimize cancer surveillance data use.

Activities:

- **i.** Develop and deploy standardized surveillance protocols.
- **ii.** Increase reporting rates and utilization of cancer surveillance data.
- **iii.** Publish and disseminate cancer surveillance reports.
- **iv.** Advocate for inclusion of key cancer indicators in national and state surveys

Strategy 5.1.2: Create a framework for service and data quality improvement at all levels

Activities:

- **i.** Standardize data collection tools and protocols for cancer registries.
- **ii.** Conduct training for registry staff on data entry, coding, and quality assurance.
- **iii.** Integrate registries with national health information systems for real-time reporting. Conduct periodic Service Quality Audits (SQA) and Data Quality Audits (DQA) and incorporate recommendations into continuous quality improvement (CQI).
- **iv.** Provide technical support to sub-national levels for Continuous Quality Improvement for all cancer control interventions.

Strategy 5.1.3: Implement a monitoring and evaluation framework for the National Cancer Control Plan.

Activities:

- **i.** Launch and disseminate the Monitoring, Evaluation and Learning (MEAL) framework.
- **ii.** Conduct annual, mid-term and end-term and impact evaluation of implementation of the NCCP and disseminate the findings to all stakeholders.

3.6.5.2 Strategic objective 5.2: Strengthen cancer registration in the country

Strategy 5.2.1: Enhance population-based (PBCR) and hospital-based cancer registration (HBCR)

Activities:

- **i.** Strengthen the existing Population Based Cancer Registries.
- **ii.** Establish, strengthen and sustain hospital-based cancer registries at all cancer treatment centers and ensure linkages to their respective PBCR and HMIS.
- **iii.** Adopt and utilize global standard guidelines for cancer registration and reporting to ensure efficiency and harmonization.
- **iv.** Establish mechanisms for auditing the cancer registration process and data quality.
- **v.** Create awareness and utilization of data from cancer registries.
- **vi.** Enhance training and mentorship of health records and information officers on cancer registration in collaboration with the IARC regional cancer registration collaboration center.
- **vii.** Publish annual cancer burden report based on PBCR and disseminate it to all stakeholders.

3.6.5.3 Strategic objective 5.3: Strengthen cancer research in Nigeria

Strategy 5.3.1: Support and adequately resource a comprehensive cancer research agenda to inform policy

Activities:

- **i.** Implement the national cancer research agenda.
- **ii.** Create a national cancer research repository for use by all stakeholders.
- **iii.** Create a knowledge translation/management mechanism for cancer research.
- **iv.** Provide training and capacity building for researchers and health professionals.
- **v.** Facilitate research collaborations with universities, institutions, and international partners.

vi. Create a data-sharing framework to promote cancer research and surveillance using data available at the established population-based cancer registries.

Strategy 5.3.2: Enhance adoption of cancer research into clinical and policy practice

Activities:

i. Establish a cancer research center of excellence in the country and optimize collaborations and synergy.
ii. Conduct cancer economic investment cases on priority cancer control topics in Nigeria.
iii. Develop and disseminate policy and evidence briefs from priority cancer research topics.
iv. Formulate mechanisms for incorporating research findings into cancer protocols and policies.
v. Build research capacity for health care workers and other stakeholders at both national and sub-national level.
vi. Expand community engagement in cancer research initiatives

3.6.5.4 Strategic objective 5.4: Strengthen ethical and equitable international research collaborations

Strategy 5.4.1: Identification and coordination of international research collaborations

Activities:

i. Identify and coordinate research collaborations with international investigators and institutions to advance cancer research while ensuring Nigerian researchers have leadership roles, authorship recognition, and capacity-building opportunities.
ii. Develop and enforce guidelines and agreements to prevent "vampire science", ensuring that foreign collaborators do not exploit Nigerian researchers or data, and that intellectual property rights are fairly shared.
iii. Establish policies and protocols for the collection, storage, transfer, and use of Nigerian biosamples, including Material Transfer Agreements (MTAs) that protect local ownership and regulatory compliance.
iv. Build national capacity for data management, laboratory analysis, and research ethics review to strengthen Nigeria's bargaining position and ensure research benefits are retained locally.

v. Monitor and evaluate international collaborations through periodic audits and reporting, ensuring compliance with ethical, legal, and capacity-building commitments.

3.6.5.5 Strategic objective 5.5: Strengthen knowledge management and dissemination

Strategy 5.5.1: Develop systems to collect, analyze, and share evidence to inform policy, planning, and practice.

Activities:

i. Establish a centralized knowledge management platform for cancer data and research outputs.
ii. Develop and disseminate policy briefs, guidelines, and evidence summaries to stakeholders.
iii. Conduct workshops and seminars to translate research evidence into practice.

3.6.5.6 Strategic objective 5.6: Ensure sustainability and governance of strategic information systems

Strategy 5.6.1: Strengthen governance, financing, and capacity for long-term sustainability of cancer registration, surveillance, and research systems.

Activities:

i. Establish national governance structures and technical working groups for strategic information.
ii. Develop sustainable financing mechanisms for registry, surveillance, and research activities.
iii. Monitor and evaluate performance of strategic information systems regularly.

3.6.6. PILLAR 6: Patient Navigation and Care Coordination

Strategic Goal: Ensure timely, equitable, and patient-centered access to cancer care by institutionalizing patient navigation and care coordination[15] across the six geopolitical zones in Nigeria, supporting patients and their families from diagnosis through survivorship and end-of-life care by 2030.

[15] Oncology Nursing Society (ONS), Association of Oncology Social Work (AOSW), & National Association of Social Workers (NASW). (March 2010). Joint Position on the Role of Oncology Nursing and Oncology Social Work in Patient Navigation https://aosw.org/wp-content/uploads/2023/08/PR-PositionPatientNav.pdf

Strategic Objective 6.1. To facilitate the establishment and integration of patient navigation across all institutions providing cancer care in Nigeria.

6.1.1 Strategy: Establish a National Patient Navigation Desk to coordinate and oversee implementation and integration of patient navigation in the Nigeria health care delivery system.

Activities:

- **i.** Conduct Needs Assessments (NA) for implementation of Patient Navigation across all the FTHIs with mandate to provide cancer care
- **ii.** Recruit / deploy health workers to be trained as clinical, physical and resource navigators across all the FTHIs with mandate to provide cancer care
- **iii.** Train the Patient Navigator (s) on provision of clinical, physical and resource navigation services
- **iv.** Develop Facility Patient Navigation Pathway (FPNP) & Patient Education Materials (PEMs)
- **v.** Facilitate the development and signing of MOU between FTHIs and NGOs to jointly implement patient navigation
- **vi.** Establish collaboration between private and public diagnostic centers of the FTHIs to enhance diagnostic services for cancer patients
- **vii.** Secure budget line / financial resources for implementation of patient navigation
- **viii.** Develop "From Screening to Survivorship (FS2S)" Charter for patient navigation
- **ix.** Establish a Peer Support Group/Cancer Support Group
- **x.** Pilot patient navigation implementation in selected FTHIs in the 6-geopolitical zones of the country.
- **xi.** Set-Up Monitoring, Evaluation & Research Team/ Desk for implementation of patient navigation

3.6.6.2 Strategic objective 6.2 To standardize the quality and professionalism of oncology patient navigators through training and re-training

Strategy 6.2.1: Develop a nationally accredited certification program for oncology patient navigators.

Activities:

- **i.** Establish a committee to create a nationally accredited curriculum for oncology patient navigator training.
- **ii.** Develop Standard Operating Procedures (SOPs) for implementation of patient navigation
- **iii.** Develop guidelines for the recruitment of clinical and non-clinical (physical and resource) patient navigators

iv. Develop and obtain national consensus for patient navigator roles and responsibilities

3.6.6.3 Strategic objective 6.3 To eliminate abscondment from oncology care in cancer treatment facilities through systematic follow-up and effective navigation.

6.3.1 Strategy: Implement a multi-faceted follow-up and navigation system to track and engage cancer patients, ensuring continuity of care and minimizing abscondment

Activities:

i. Develop and implement a comprehensive patient navigation tracking document to monitor patient progress, outcomes, and navigator interventions
ii. Identify, adapt, and deploy existing technology tools (e.g., mobile apps, electronic health records) to support patient navigation
iii. Develop and disseminate culturally sensitive, patient-centred education materials (e.g., print, digital, audio-visual) to promote health literacy
iv. Establish and facilitate sustainable support groups for cancer patients and caregivers

3.6.6.4 Strategic objective 6.4 Improve care coordination across the cancer continuum by strengthening referral pathways, multidisciplinary care teams, and information-sharing systems.

6.4.1 Strategy: Establish a national cancer care coordination mechanism that integrates referral pathways, multidisciplinary teams, and standardized information-sharing systems to ensure seamless care transitions.

Activities:

i. Develop and disseminate national referral algorithms linking primary, secondary, and tertiary care.
ii. Establish multidisciplinary tumor boards in cancer centers to guide treatment planning.
iii. Implement digital health tools for real-time patient tracking and intra/inter-facility communication.

3.6.6.5 Strategic objective 6.5: Strengthen patient and family support services by providing individualized assistance addressing psychosocial, financial, and logistical needs of patients and caregivers.

6.5.1 Strategy: Implement a comprehensive support services model that embeds dedicated patient navigators and social workers within cancer care teams to provide personalized assistance and connect patients with resources.

Activities:

- **i.** Train patient navigators on psychosocial support, financial counseling, and caregiver engagement.
- **ii.** Encourage the establishment of patient support groups and family caregiver programs in all tertiary institutions.
- **iii.** Develop information resources and digital platforms for patient education and self-management.

3.6.6.6 Strategic objective 6.6: Enhance digital patient navigation and telehealth integration by leveraging digital tools and telehealth to extend navigation services to remote and underserved populations.

6.6.1 Strategy: Develop and scale a patient navigation model combining digital tools (e.g., mobile apps, WhatsApp) with telehealth services to reach and support remote and underserved cancer patients.

Activities:

- **i.** Develop and implement a mobile application for patient navigation and appointment reminders.
- **ii.** Integrate teleconsultation services for follow-up, survivorship care, and palliative support.
- **iii.** Monitor and evaluate digital platform usage, coverage, and patient outcomes.

3.6.6.7 Strategic objective 6.7 Monitor and evaluate patient navigation and care coordination services by establishing a robust monitoring and evaluation framework to assess effectiveness, coverage, and patient outcomes.

6.7.1 Strategy: Develop a national patient navigation M&E framework with clear KPIs (e.g., patient retention, satisfaction, outcomes) and regular data reviews to drive quality improvements.

Activities:

- **i.** Develop standardized M&E tools for navigation activities, referral tracking, and patient satisfaction.

ii. Conduct periodic audits and evaluations of navigation and coordination services.
iii. Assess level of patient satisfaction of the services rendered.
iv. Use data to inform policy, scale-up decisions, and continuous quality improvement.

3.6.7 PILLAR 7: Artificial Intelligence and Digital Innovation in Cancer Control

Strategic Goal: Ensure safe, equitable, transparent and impactful deployment of Artificial Intelligence (AI) and digital technologies across the cancer continuum to enhance prevention, early detection, diagnosis, treatment planning, patient navigation, cancer registration, and system-wide decision making.

3.3.7.1 AI-Enabled Cancer Control: Applications Across the Cancer Care Continuum

AI has the potential to transform cancer care by improving accuracy, reducing delays, expanding access to scarce expertise, strengthening national planning, and enabling data-driven decision-making. When deployed responsibly and ethically, AI systems can support frontline health workers, enhance specialist workflows, optimize scarce resources, and generate real-time insights for cancer control. In many countries, particularly in LMICs, cancer care is hindered by fragmented data systems, limited diagnostic capacity, workforce shortages, and uneven distribution of specialists. These challenges contribute to delayed diagnoses, inconsistent care pathways, and incomplete cancer incidence reporting, resulting in up to 70% of cancers being detected at late stages.

This strategy prioritizes the development and deployment of safe, evidence-based AI systems tailored to national needs, supported by robust digital infrastructure, governance frameworks, workforce capacity-building, and multi-sector partnerships. AI will not replace health professionals; it will augment their ability to deliver quality care efficiently and equitably.

3.7.7.1 Strategic Objective 7.1: Establish a National Governance and Regulatory Framework for Safe and Ethical AI Deployment

Strategy 7.1.1: Develop and Implement National AI Standards, Policies, and Oversight Mechanisms

Activities:

i. Develop national guidelines for ethical and responsible AI in cancer care, aligned with WHO recommendations and national data protection laws (e.g., NDPR).
ii. Establish a National Committee on AI in Cancer Control to oversee safety, risk assessment, validation, and monitoring.
iii. Develop regulatory pathways for approval, procurement, deployment, and monitoring of AI-enabled medical technologies.

iv. Create standards for data privacy, cybersecurity, algorithm transparency, explainability, and accountability.
v. Implement mechanisms for post-market surveillance and real-world performance monitoring of AI tools.

3.7.7.2 Strategic Objective 7.2: Build AI-Optimized Digital Infrastructure to Support Cancer Control

Strategy 7.2.1: Strengthen Cloud-Based Data Systems and Interoperability

Activities:

i. Establish a national, secure cloud-based cancer data repository integrating imaging, pathology, laboratory, genomic, and clinical data.
ii. Implement standardized data formats and interoperability frameworks across facilities (HL7 FHIR, DICOM, SNOMED).
iii. Develop a national digital infrastructure enabling telepathology, tele-oncology, teleradiology, and real-time data connectivity.
iv. Ensure tertiary hospitals has high-speed internet connectivity.
v. Build disaster recovery, audit trails, access control, and cybersecurity layers for all cancer AI applications.

3.7.7.3 Strategic Objective 7.3: Strengthen AI-Augmented Cancer Prevention, Early Detection, and Diagnosis

Strategy 7.3.1: Implement AI Tools to Support Risk Prediction, Screening, and Diagnostic Workflows

Activities:

i. Training of healthcare personnel on the effective use of AI-powered technology in cancer care
ii. Deploy AI risk assessment tools in primary care and community settings to identify high-risk individuals for targeted screening.
iii. Implement AI-powered algorithms for triage of imaging (X-ray, mammography, CT scans) to reduce reporting delays and support scarce radiology expertise.
iv. Introduce telepathology and AI-assisted pathology for rapid slide review, quality assurance, and reducing diagnostic turnaround times.
v. Develop AI-powered decision aids for guided biopsy, staging, and reporting of priority cancers.
vi. Strengthen digital reporting systems using structured templates and automated coding systems.

3.7.7.4 Strategic Objective 7.4: Enhance AI-Supported Treatment Planning, Patient Navigation, and Care Coordination

Strategy 7.4.1: Deploy AI Tools That Improve Clinical Pathways and Patient Outcomes

Activities:

i. Implement predictive models to support treatment planning using patient-level clinical, imaging, and laboratory data.
ii. Integrate AI-driven clinical decision support tools for evidence-based therapy selection.
iii. Deploy digital patient navigation platforms that use AI to flag delays, missed appointments, or treatment interruptions.
iv. Use AI models to predict toxicity risks, monitor symptom progression, and support remote patient management.
v. Introduce automated reminder systems and telehealth platforms to improve continuity of care.

3.7.7.5 Strategic Objective 7.5: Strengthen Cancer Registration, Surveillance, and Health System Planning Using AI

Strategy 7.5.1: Modernize the National Cancer Registry With AI-Enhanced Automation

Activities:

i. Deploy AI tools to automatically extract cancer cases from clinical notes, pathology reports, and imaging systems.
ii. Strengthen real-time cancer incidence reporting, geospatial analysis, and trend monitoring.
iii. Use AI to improve data completeness, reduce backlog, and detect reporting errors.
iv. Create dashboards to support national cancer forecasting, burden estimation, and resource planning.

3.7.7.6 Strategic Objective 7.6: Build Workforce Capacity for AI and Digital Health

Strategy 7.6.1: Strengthen Human Resources for AI-Enabled Cancer Care

Activities:

i. Train clinicians, oncology nurses, radiologists, pathologists, registrars, and administrators on AI applications through continuous professional development.

ii. Introduce AI, digital literacy, and health informatics modules into pre-service/in-service training curricula.
iii. Develop national fellowship programs in digital oncology, medical AI, and data science.
iv. Build communities of practice linking local and international experts to support knowledge exchange.
v. Strengthen technical workforce capacity (data engineers, AI specialists, health informaticians).

3.7.7.7 Strategic Objective 7.7: Foster Multi-Sector Partnerships and Sustainable Innovation Ecosystems

Strategy 7.7.1: Promote Public-Private Partnerships (PPPs) and Collaborative Research

Activities:

i. Promote PPPs for AI tool development, data infrastructure deployment, and technology transfer.
ii. Strengthen collaborations with universities, start-ups, global cancer centers, and regulatory bodies.
iii. Support innovation challenges that encourage local AI solutions tailored to national cancer priorities.
iv. Develop mechanisms for sustainable financing, cost-sharing, and long-term maintenance of AI systems.
v. Ensure equitable distribution of AI-enabled services across rural, semi-urban, and urban settings.

CHAPTER FOUR: **STRATEGIC FRAMEWORK**

4.1 Overview

The prevention and control of cancer will require a well-coordinated multisectoral, multidisciplinary and whole-of-society approach with a focus for health-in-all-policies. The National Cancer Control Program under the Department of Hospital Services at the Federal Ministry of Health and Social Welfare is mandated to formulate cancer policies and guidelines across the cancer care continuum, disseminate them and guide their implementation. It provides capacity building and technical support to all states and health facilities as per the policy documents. The NCCP will coordinate implementation of this National Cancer Control Plan as well as annual monitoring and evaluation against set targets.

The National Institute for Cancer Research and Treatment is mandated to make recommendations and assist with the implementation of cancer policies and programmes as well as guide scientific improvement in cancer control and prevention in Nigeria. The National Technical Working Groups on Cancer Prevention and Control and Nuclear Medicine plays and advisory role to the Federal Ministry of Health on cancer control plans and policies formulation and implementation.

Institution	Responsibility
National Cancer Control and Nuclear Medicine Programme	• Disseminate and provide leadership in implementation of the Nigeria National Cancer Control Plan. • Provide technical support in the implementation of the Nigeria National Cancer Control Plan. • Coordination of partnerships and collaborations for cancer control through the Technical Working Groups, development partners and Agencies • Oversee operationalization of the National Cancer Control Plan, Monitoring, Evaluation, Accountability and Learning (MEAL) • Support establishment of State Cancer Control Programmes (SCCPs) at the SMOHs • Conduct routine supportive supervision of SCCPs

Institution	Responsibility
Federal and State Tertiary Health Institutions **NICRAT** **NIMR** **NIPRD** **FTHIs**	• Make recommendations in the formulation of cancer policies and priorities • Assist with the implementation of cancer policies including this National Cancer Control Plan • Support inter- and multi-sectoral collaboration and coordination of cancer prevention and risk reduction. • Coordinate and collaborate with international and local bodies/ institutions in cancer research. • Maintain a cancer register, catalogue store and ensure its linkage with the national health information systems and disseminate its results. • Support information and awareness creation and capacity building in collaboration with the NCCP, FMoHSW and SMOHs Departments for implementation of objectives of the NNCCP. • Support cancer education, training and capacity building. • Conduct cancer research and apply it to inform and guide policy. • Collaborate to develop mechanisms for research data sharing.
State Ministries of Health	• Implement National cancer prevention and control policies, strategies and guidelines. • Provide adequate infrastructure, equipment and commodities for screening, diagnosis, treatment, palliative care and survivorship services. • Provide and appropriately deploy adequate qualified personnel for cancer service delivery. • Mobilize and allocate adequate financial resources for cancer prevention and control. • Forge appropriate multi-sectoral partnerships at the state level. • Collect and report cancer data in DHIS and support cancer registries.
Development partners, International Non-Governmental Organizations (INGOs), NGOs, CSOs, FBOs	• Mobilize resources for the implementation of this National Cancer Control Plan. • Provide technical, logistical and capacity building support. • Collaborate with the FMoHSW and relevant Agencies to effectively implement the objectives of the NNCCP
Professional Associations	• Advocacy and provision of guidance on cancer matters. • Support professional development of their respective cadres. • Support the implementation of the National Cancer Control Plan.

Institution	Responsibility
Regulatory and statutory bodies	• Regulate and enforce aspects of this plan related to their respective bodies. • Establish and update mechanisms for recognition, certification and registration of oncology cadres within their jurisdictions.
NHIA/SHIA	• Provide timely sustainable, comprehensive medical insurance package for cancer screening, diagnosis, treatment, palliative care and survivorship in line with NHIA Act 2022
Media	• Dissemination of accurate cancer information to create public awareness
Survivors	• Adopt healthy lifestyles and positive health seeking behaviour. • Participate actively in cancer prevention and control. • Support cancer patients, survivors and their caregivers and reduce stigma and discrimination. • Champion cancer prevention and control measures

CHAPTER FIVE: **MONITORING, EVALUATION AND LEARNING MATRIX**

5.1 Pillar 1: Cancer Risk Assessment, Prevention and Early Detection

Goal: To strengthen and expand quality, equitable, and evidence-based cancer risk assessment, prevention, and early detection services in order to reduce the burden of preventable cancers and ensure early identification of others for timely and effective treatment.

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
1.1: Reduce exposure to modifiable cancer risk factors and address underlying social and environmental determinants.	**1.1.1:** Reduce prevalence of tobacco use and tobacco-related products and by- products by 50% from 3.4% to 1.7% by 2030	Advocate for increased excise taxation to the WHO recommended 70% of retail price and continued use of pricing mechanisms to limit access to tobacco products	NCCP/ FMOHSW SMOH, CSO, NCS	Number of advocacy programmes conducted on pricing mechanisms to limit access to tobacco products.	10%	15%	25%	35%	40%	50%
		Integrate tobacco control key messages in cancer awareness, education, and mass media		Percentage increment on taxation on tobacco pricing.						
		Integrate tobacco control strategies into the cancer prevention and control interventions in the community, schools and workplaces.		Number of cancer IEC materials and mass media campaigns conveying key tobacco control messages.						
		Partner with relevant enforcement agencies to enforce provision of Tobacco Control Act 2015		Number of cancer prevention and control interventions conveying tobacco control strategies at communities, schools and workplaces.						
		Support provision of tobacco cessation services (counseling and pharmacotherapy) through integration at health facilities and cancer treatment centers.		Number of partnerships enforcing the provision of Tobacco Control Act 2015						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
	1.1.2: Promote consumption of healthy diets, physical activity, reduce overweight and obesity	Integrate health education and awareness interventions in cancer control activities in schools, community and health care facilities at all levels to promote healthy nutrition and physical activity to mitigate overweight and obesity.	NCCP/FMOH, DFH, FME, SMOH CSO, NCS, SFH	Number of schools, communities and health care facilities who had participated in the program.	10%	15%	25%	35%	40%	50%
		Support enactment of policies and legislation to reduce marketing and advertising of unhealthy foods and drinks, and to provide incentives for access to and sale of healthy foods.		Number of policies and legislations developed/ enacted on the reduction of unhealthy diet.						
				Number of legislative engagements on reduction of marketing/ advertisement of unhealthy foods and drinks						
				Number of organizations receiving incentives for promoting access to healthy foods.						
		Work with stakeholders to review and implement policies on urban and city designs to promote active lifestyles.	NCCP/FMOH SMOH CSO NCS	Number of engagements with FMO Housing and Urban Development review and implement policies on urban and city designs.						
		Promote establishment of workplace and community wellness programs.		Number of workplace and community wellness programs established						
				Number of guidelines developed to prevent environmental carcinogens.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
	1.1.3: Promote consumption of healthy diets, physical activity, reduce overweight and obesity	Institute active surveillance programs for food, environmental and occupational risk factors for cancer.	NPHCDA NCCP/FMOH, FMOEnv, SMOH FMOA, CSO, NCS	Number of public awareness/ sensitization programmes created	10%	15%	25%	35%	40%	50%
		Create public awareness and sensitize communities on environmental and occupational risk factors.	FTHIs, NCCP/ FMOH, NIMR NICRAT	Number of communities sensitized on environmental and occupational risk factors for cancer						
		Advocate for the review, enactment and enforcement of existing policies, laws, regulations and guidelines to limit exposure to environmental and occupational toxins and pollutants		Number of advocacy visits conducted with relevant stakeholders						
		Promote research on the role of chemicals, pesticides, environmental and occupational risk factors and pollutants, in cancer causation.		Number of engagements with NIMR, NICRAT & FTHIs.						
	1.1.4: Promote consumption of healthy diets, physical activity, reduce overweight and obesity	Promote routine HPV vaccination in all eligible girls to achieve 90% HPV vaccination and 70% screening by 2030.	NPHCDA NCCP/ FMOH&SW, NSCAP/ FMOH, NACA, SMOH CSO and NCS	Number of health facilities that render routine HPV vaccination to eligible girls	10%	15%	25%	35%	40%	50%
				Total number of eligible girls and boys vaccinated.						
		Promote strategies to reduce transmission of HPV, Hepatitis B and C, HIV, HHV-8, HTLV-1, EBV among others.		Number of stakeholders engagement on strategies promotion to reduce transmission of HPV, Hepatitis B and C, HIV, HHV-8, HTLV-1, EBV.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Develop and implement a targeted screening and treatment program for Hepatitis B Virus to address liver cancer across the country.		Number of targeted screening and treatment programs develop and implement on Hepatitis B Virus to address liver cancer.						
		Promote availability and appropriate use of diagnostic and therapeutic interventions for HBV, HCV, schistosomiasis, Helicobacter pylori, HIV infections, among others.		Number of interventions promoted to enhance availability of diagnosis and therapy for HBV, HCV, schistosomiasis, Helicobacter pylori, HIV infections.						
1.2: Address non-modifiable risk factors including age, ethnicity, race, family history of cancer, and gender.	**1.2.1:** Create awareness among the general public on familial and hereditary cancers **1.2.2:** Build the capacity of health care workers for screening and linkage to diagnosis and care for familial and hereditary cancers.	Integrate key messages on familial and hereditary cancers into existing cancer IECs.	NCCP/FMOH, NSCAP/ FMOH, Family Health, NACA, SMOH, CSO, NCS	Number of cancer IECs materials with integrated key messages on familial and hereditary cancers.	10%	15%	25%	35%	40%	50%
		Integrate familial and hereditary cancers in community health strategy materials.	NPHCDA, FTHIs, NCCP/ FMOH NICRAT	Number of community health strategy materials with integrated familial and hereditary cancers.						
		Integrate familial and hereditary cancers in training materials for primary health workers.		Number of primary health workers training materials with integrated familial and hereditary cancers.						
		Promote training of health workers on early detection of familial and hereditary cancers.		Number of health workers training conducted on early detection including familial and hereditary cancers						
		Adopt a screening tool for use by primary health workers in identifying individuals with high risk of- familial and hereditary cancers	NCCP/FMOH, NICRAT, FTHIs, NIMR	Availability of an adopted screening tool for use by primary health workers to identify individuals with high risk of familial and hereditary cancers.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
1.3: Improve secondary prevention of cancer through screening, early diagnosis and institutionalized referral linkage to care	**1.3.1:** Accelerate equitable access to quality cancer screening & early diagnosis interventions	Strengthen provision of organized cancer screening and early diagnosis services as appropriate at all levels of health care.	NCCP/FMOH, NPHCDA, SMOH NICRAT, NIMR, FTHIs	Number of organized cancer screening conducted annually	10%	15%	25%	35%	40%	50%
				Number of early cancer diagnosis services strengthened at all levels of health care annually.						
		Promote access to screening and early diagnosis for hard-to-reach groups and within communities through innovative mobile clinics and use of self-care approaches.		Number of free/subsidized public cancer screening and early diagnosis conducted for hard-to-reach groups and communities using innovative mobile clinics and self-care approaches.						
		Promote integrated programs for early identification of lung cancer in tuberculosis/chest clinics.		Number of integrated programs conducted for early identification of lung cancer in tuberculosis/chest clinics.						
		Strengthen implementation of preventive oncology in all health facilities.		Number of health facilities implementing preventive oncology.						
	1.3.2: Increase the diversity and capacity of the health workforce and health care service delivery systems for cancer screening and early diagnosis	Increase the number and diversity of trained health workers to deliver cancer prevention and screening services.	NCCP/FMOH, NPHCDA, SMOH NICRAT, NIMR, FTHIs	Number and diversity of health workers trained to deliver cancer prevention and screening services.						
				Number and diversity of trained health workers providing cancer prevention and screening services.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Include cancer screening and early diagnosis content in pre-service training curricula of medical and other health workforce and training programs through collaboration with health training institutions.		Number of engagements with health training institutions on inclusion of cancer screening and early diagnosis content into pre-service training curricula of medical and other health workforce training programs.						
		Provide resources, incentives and technical assistance through mentorship to expand workforce and systems capacity to provide or link clients to culturally competent and accessible screening service.		Provide resources, incentives and technical assistance through mentorship to expand workforce and systems capacity to provide or link clients to culturally competent and accessible screening service.						
		Identify and address health system factors that impact timeliness of diagnosis of symptomatic cancer and provide rapid linkages to confirmatory diagnosis.		Number of health centers with improved timeliness of diagnosis of symptomatic cancer and rapid linkages to confirmatory diagnosis.						
		Establish a national cancer screening data repository for longitudinal client tracking to support follow up, provide feedback to referring facilities and conduct client navigation.		Establish a national cancer screening data repository for longitudinal client tracking to support follow up, provide feedback to referring facilities and conduct client navigation.						
		Integrate cancer screening into Digital Health Information System 2 (DHIS2)		Number of stakeholders engagement to integrate cancer screening into Digital Health Information System 2 (DHIS2)						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
				Availability of cancer screening data on Digital Health Information System 2 (DHIS2)						
	1.3.3: Optimize referral mechanisms and improve linkages to care to reduce loss to follow up	Strengthen integrated sample/specimen referral and tracking systems, including timely relay of results.	NCCP/FMOH, NPHCDA, SMOH NICRAT, NIMR, FTHIs	Number of Health facilities with strengthen integrated sample/specimen referral and tracking systems, including timely relay of results						
		Train, mentor and deploy community and in-facility navigators to facilitate referrals and linkages to care.		Number of community and in-facility navigators trained, mentored and deployed to facilitate referrals and linkages to care.						
		Coordinate the activities of all cancer support group in the country through the Nigerian Cancer Society Nigerian coalition for cancer survivors (NCCS).		Number of in country cancer support group activities been coordinated by the Nigerian Cancer Society Nigerian Coalition for Cancer Survivors (NCCS).						
		Development of referral protocol between primary to secondary to tertiary level of care.		A standardized referral protocol developed and disseminated to all levels of care.						
Strategic objective 1.4: Strengthen early detection of childhood cancers	**1.4.1:** Improve public awareness of childhood cancers and the importance of early detection	Integration of key messages on childhood cancers into existing public health promotion programs.	NCCP/ FMOH&SW, NICRAT, FTHIs, NIMR	Number of existing public health promotion programs with integrated key messages on childhood cancers.	10%	15%	25%	35%	40%	50%

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Train and engage community health workers, cancer survivors, administrators and other stakeholders to mobilize parents or guardians of children with symptoms to visit the nearest health facility.		Number of trained and engaged community health workers, cancer survivors, administrators and other stakeholders to mobilize parents or guardians of children with symptoms to visit the nearest health facility.						
	1.4. 2: Build capacity of health care workers for early detection of childhood cancers	Train healthcare workers on early warning signs and clinical presentation of childhood cancers and importance of prompt referral.	NCCP/ FMOH&SW, NPHCDA, SMOH NICRAT, NIMR, FTHIs	Number of trained healthcare workers on early warning signs and clinical presentation of childhood cancers with prompt active referral.						
		Promote the use of the Childhood Cancer Assessment Tool for evaluation of children for possible cancer within the IMCI (Integrated Management of Childhood Illnesses) approach.		Number of Health facilities that uses the Childhood Cancer Assessment Tool to evaluate children for possible cancers within the IMCI (Integrated Management of Childhood Illnesses) approach.						
		Establish targeted screening and cancer preventive surveillance services for children with retinoblastoma		Number of targeted screening and cancer preventive surveillance services established for children with retinoblastoma.						
1.5: Strengthen multi-sectoral response and coordination in cancer prevention and early detection	**1.5.1** Strengthen the National Technical Working Group on cancer prevention and early detection.	Review TWG membership and existing terms of reference annually to ensure appropriate multi-sectoral representation.	NCCP/FMOH, NICRAT, FTHIs	Number of TWG membership and terms of reference reviewed annually to ensure appropriate multi-sectoral representation.	10%	15%	25%	35%	40%	50%

5.2 Pillar 2: Timely and Accurate Cancer Diagnosis

Goal: Ensure timely, accurate, safe, and equitable cancer diagnostic services through standardized imaging practices and robust quality assurance systems to improve patient outcomes.

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
2.1: Strengthen cancer diagnostic imaging and interventional radiology services	**Strategy 2.1.1:** Strengthen coordination and standards for cancer imaging services	Development of National Quality Assurance (QA) and Radiation Safety and Accreditation Guidelines in collaboration with relevant regulatory and professional bodies.	NCC&NMP/ FMOH&SW NNRA, FTHIs, SMOH CSO, NCS, RRBN NPMCN, WACP WACS, NMCN	Number of engagements with relevant regulatory and professional bodies to develop a National Quality Assurance (QA) and Radiation Safety and Accreditation Guidelines		25%	35%	50%	75%	100%
		Develop and disseminate Operational Standards and Guidelines for cancer imaging, including childhood cancers	NCC&NMP/ FMOH&SW SMOH, FTHIs	Number of engagements with relevant stakeholders to develop a national Operational Standards and Guidelines for cancer imaging, including childhood cancers						
				Number of health facilities who received the Operational Standards and Guidelines for cancer imaging						
				Number of health facilities with trained and deployed staff on the use of Operational Standards and Guidelines for cancer						
		Develop and implement guidelines for the utilization of teleradiology services.	FTHIs NCC&NMP/ FMOH&SW SMOH, CSO, NCS	Number of stakeholders engaged to develop and implement guidelines for the utilization of teleradiology services.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
				Number of Health facilities implementing guidelines for the utilization of teleradiology services.						
		Development of guidelines and a regulatory framework for the procurement, evaluation, installation, and commissioning of radiological equipment in collaboration with the relevant regulatory bodies in line with the National Nuclear Medicine Policy and Strategic Plan6	FTHIs NCC&NMP/ FMOH&SW SMOH	Number of engagement meetings with relevant regulatory bodies to development guidelines and a regulatory framework for the procurement, evaluation, installation, and commissioning of radiological equipment in line with the National Nuclear Medicine Policy and Strategic Plan						
	Strategy 2.1.2: Increase access to quality, accurate, and efficient cancer diagnostic imaging services nationwide	Optimize and expand the range and scope of medical imaging equipment and services available in the different levels of care for cancer diagnosis.	FTHIs NCC&NMP/ FMOH&SW SMOH	Optimize and expand the range and scope of medical imaging equipment and services available in the different levels of care for cancer diagnosis		25%	35%	50%	75%	100%
		Establish interventional radiology services in the 6 geopolitical zones		Number of geopolitical zones with established and accessible interventional radiology services						
		Expand nuclear medicine services to at least 8 additional centers (at least 1 in each geopolitical zone).		Number of new sets of Health facilities providing nuclear medicine services per geopolitical zone						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Develop and disseminate standardized structured staging and reporting templates and capacity building of health care workers on their use to improve reporting standards (such as AJCC staging system for routine reporting, BIRADS system in mammogram and ultrasound reporting etc.).		Number of stakeholders engagement meeting to develop standardized structured staging and reporting templates.						
				Number of health facilities with standardized structured staging and reporting templates						
				Number of health care workers with enhanced capacity on the use of reporting standards (such as AJCC staging system for routine reporting, BIRADS system in mammogram and ultrasound reporting etc.).						
		Promote the development and implementation of PPPs to address gaps in cancer diagnostic imaging and interventional services	FTHIs NCC&NMP/ FMOH&SW SMOH	Number of PPP health facilities on cancer diagnostic imaging and interventional services						
2.2: Strengthen the cancer pathology diagnostic and Laboratory medicine services.	**Strategy 2.2.1:** Improve coordination and standards for cancer pathology services Create awareness among the general public on familial and hereditary cancers.	Strengthen and equip all the Tertiary Hospitals to provide basic and advanced pathology and laboratory medicine services including Immunohistochemistry and molecular testing	FTHIs NCC&NMP/ FMOH&SW SMOH	Number of Tertiary Hospitals strengthened/ equipped and providing basic and advanced pathology and laboratory medicine services including immunohistochemistry and molecular testing		25%	35%	50%	75%	100%

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Establish and implement quality control mechanisms and external quality assurance (EQA) programs and ensure accreditation of all pathology laboratories.	FTHIs NCC&NMP/ FMOH&SW SMOH	Existence of quality control mechanisms and external quality assurance (EQA) programs						
				Number of health facilities with trained staff and implementing quality control mechanisms and external quality assurance (EQA) programs						
				Number of existing/newly accredited pathology laboratories						
		Review and disseminate the national cancer specimen handling guidelines and develop algorithms for pathology diagnostics workup of priority cancers	NCC&NMP/ FMOH&SW, NICRAT, FTHIs, NIMR	Number of stakeholders engagement meeting conducted to review the national cancer specimen handling guidelines and develop algorithms for pathology diagnostics workup of priority cancers.						
				Number of health facilities who received and uses the national cancer specimen handling guidelines and algorithms for pathology diagnostics workup of priority cancers.						
		Develop protocols to guide cancer diagnosis for priority cancers.	NCC&NMP/ FMOH&SW, NICRAT, FTHIs, NIMR	Number of stakeholders engagement to develop a guide protocol for diagnosis of each cancer of priority						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
				Number of cancer diagnosis guide protocols developed						
				Number of cancer diagnosis guide protocols disseminated and implemented						
				Number of health facilities implementing various cancer diagnosis guide protocols						
	Strategy 2.2.2: Increase timely access to quality and accurate cancer pathology and laboratory medicine services nationwide	Expand and improve the availability of histopathology laboratory infrastructure at national and all state referral hospitals linked to cancer registry.	NCC&NMP/ FMOH&SW, SMOH, NICRAT, NIMR, FTHIs	Number of Health facilities with expanded and improved availability of histopathology laboratory infrastructure at national and state referral hospitals linked to cancer registry.		25%	35%	50%	75%	100%
		Adopt and adapt innovative service delivery models such as rapid diagnostic test and mobile testing facilities to enhance timely cancer diagnosis	NCC&NMP/ FMOH&SW, SMOH, NICRAT, NIMR, FTHIs	Number of stakeholders engagement on the adoption and adaptation of innovative service delivery models to enhance timely cancer diagnosis.						
				Number of innovative service delivery models adopted and adapted to enhance timely cancer diagnosis.						
				Number of States/Health facilities the uses the adopted innovative service delivery models to enhance timely cancer diagnosis						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Establish frozen section services at the tertiary hospitals.	NCC&NMP/ FMOH&SW, SMOH, NICRAT, NIMR, FTHIs	Number of Tertiary Hospitals with established frozen section services.						
		Establish a national archiving system for tissue blocks and biobanking with linkage to the gross specimen image, whole slide image (WSI), and the final pathology report	NCC&NMP/ FMOH&SW, SMOH, NICRAT, NIMR, FTHIs	Number of stakeholders engagement meetings to establish a national archiving system for tissue blocks and biobanking with linkage to the gross specimen image, whole slide image (WSI), and the final pathology report.						
				Existence of a national archiving system for tissue blocks and biobanking with linkage to the gross specimen image, whole slide image (WSI), and the final pathology report.						
		Work with relevant stakeholders to improve testing for blood and blood products	NCC&NMP/ FMOH&SW, SMOH, NICRAT, NIMR, FTHIs	Number of partnerships to improve testing for blood and blood products.						
				Number of Health facilities with improved testing for blood and blood products.						
		Strengthen and expand availability of HPV testing platforms for cervical cancer screening including point of care testing	NCC&NMP/ FMOH&SW, SMOH, NICRAT, NIMR, FTHIs	Number of health facilities strengthened and providing HPV testing for cervical cancer screening including point of care testing.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Explore genomic testing services for improved cancer diagnosis, research, and treatment monitoring of cancer patients		Number of Health facilities providing genomic testing services for improved cancer diagnosis, research, and treatment monitoring						
2.3: Strengthen the availability and capacity of human resources to support cancer diagnosis	**Strategy 2.3.1:** Enhance the availability of the human resource for cancer diagnosis	Promote appropriate recruitment of personnel at cancer imaging, pathology, and laboratory medicine facilities as per international and national standards by levels of care.	MLSN, MDCN	Number of Health facilities with appropriate personnel at cancer imaging, pathology, and laboratory medicine facilities as per international and national standards by levels of care.		25%	35%	50%	75%	100%
		Enhance the capacity of human resources for cancer diagnosis	MLSN, MDCN	Number of Health facilities with enhanced human resources capacity for cancer diagnosis						
		Collaborate with local and international institutions to establish and strengthen local fellowship programs for subspecialty training in cancer diagnosis.	MLSN, MDCN	Number of engagement meetings with local and international institutions to establish and strengthen local fellowship programs for subspecialty training in cancer diagnosis.						
		Work with health training institutions to include basic cancer diagnosis content in pre-service training curricula of medical and other health workforce and training programs	MLSN, MDCN	Number of health training institutions with basic cancer diagnosis content included in pre-service training curricula of medical and other health workforce and training programs						

5.3 Pillar 3: Cancer Treatment, Survivorship and End-of-Life care

Goal: Ensure timely, equitable, and patient-centered cancer treatment, while strengthening access to high-quality, sustainable care and supporting survivorship and palliative services to optimize quality of life for all cancer patients.

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
3.1: Development, review and dissemination of NCCN Harmonized cancer treatment guidelines for cancer management.	**3.1.1** Review and disseminate the NCCN Harmonized cancer treatment guidelines as adopted by the Federal Ministry of Health	Develop guidelines for rehabilitation of children and adolescents with cancer.	NCCP/FMOH SMOH, CSO, NCS	Guidelines for rehabilitation of children and adolescents with cancer drafted and approved by relevant clinical committees.		25%	35%	50%	75%	100%
		Support the review and dissemination of guidelines for establishment of cancer centers.	NCCP/FMOH NIMR, NIPRD FTHIs, NMCN MDCN, SMOH NTHISC, TCAM – Dept. e.t.c.	National guidelines for cancer center establishment reviewed, updated, and disseminated to all relevant stakeholders.						
		Work with stakeholders to develop and implement policies and regulations on traditional and alternative medicine.	NCCP/FMOH NIMR, NIPRD FTHIs, NMCN MDCN, SMOH NTHISC, TCAM – Dept. e.t.c.	Numbers of policies and regulations on traditional and alternative medicine developed, approved, and implemented by regulatory bodies						
		Disseminate and implement the National Nuclear Medicine Policy and Strategy for management of radioactive waste.	FTHIs NCCP/ FMOH SMOH CSO NCS	National Nuclear Medicine Policy and Strategy disseminated to all relevant facilities and implemented.						
				50 % of facilities reporting compliance with radioactive waste management protocols within 3 years of implementation						
	3.1. 2: Enhance coordination, regulation and standards for quality cancer care services	Strengthen the framework for accreditation of facilities providing cancer management services.	FTHIs NCCP/ FMOH SMOH, private sector	Number of cancer facilities achieving accreditation under the strengthened framework						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Enforce the establishment and implementation of multidisciplinary teams in all facilities providing cancer care.	NCCP/FMOH SMOH	% of cancer care facilities with fully operational multidisciplinary teams, meeting at least quarterly.						
		Support the integration of cancer research in all facilities providing cancer treatment services.		% of cancer treatment facilities with at least one active cancer research project or collaboration.						
3.2. Improve availability and capacity of a skilled multi-disciplinary team of oncology human resources for health across all levels of care	**3.2.1:** Improve availability of human resources for health in oncology	Develop and implement an Oncology Human Resource Development Plan.	NCCP/FMH, FTHIs, SMOH	Oncology human resource plan developed and implemented.		25%	35%	50%	75%	100%
		Collaborate with local and international training institutions to establish and strengthen oncology training programs, fellowships and preceptorships	FTHIs, Training Institutions, Development Partners (Change capacity Programmes, BVGH, ACS and others) NCCP/FMOH, NICRAT	Number of collaborations established.						
		Develop a mechanism for resource sharing of specialized human oncology workforce for service provision among counties.	NCCP/FMOH, SMOH, FTHIs	Inter-county resource sharing mechanism for oncology workforce established and operational.						
		Provide dedicated scholarships for training of a multidisciplinary team of oncology personnel.		Number of oncology personnel (by cadre) trained under dedicated scholarships.						
		Work with relevant stakeholders to address scopes of practice, recognition, accreditation, schemes of service, and career development for the various oncology cadres.		Scopes of practice, recognition, accreditation, and career development frameworks approved for all oncology cadres.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Provide workplace incentives and implement mechanisms for effective oncology human resource management.		Workplace incentives implemented and HR management mechanisms operational in at least 80% of cancer care facilities.						
	3.2.2: Strengthen the capacity of oncology workforce for quality service provision	Establish continuous professional development programs that enable mentorship, regular in-service training, exchange and knowledge transfer for oncology professionals.	NCCP/FMOH, SMOH, FTHIs	Quarterly CPD sessions (mentorship, training, exchange programs) conducted for oncology professionals		25%	35%	50%	75%	100%
		Train and expand a diverse cancer workforce by further developing and promoting opportunities for capacity building and sensitization of health care workers including through e-learning.		Number of different oncology workforce trained.						
3.3: Increase access to timely cancer care services	**3.3.1:** Improve availability of cancer treatment services	Establish and equip six additional comprehensive cancer centers annually and expand access to cancer management services across the country.	NCCP/FMOH, SMOH, FTHIs	Number of new cancer centers established and equipped in each geo-political zone of the country.		25%	35%	50%	75%	100%
		Strengthen the capacity of Tertiary hospitals to efficiently provide comprehensive cancer care including bone marrow/organ transplantation and other cell therapies.		80% of targeted Tertiary hospitals providing comprehensive cancer care services, including transplants and cell therapies.						
		Strengthen blood donor services and blood availability at Federal and State cancer centers.		Blood availability meets 90% demand at Federal and State cancer centers, with 20% increase in voluntary donors annually.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Adopt integrated electronic health management systems for oncology that are interoperable with existing digital health platforms.		Interoperable e-health systems implemented in 80% of cancer centers,						
		Promote utilization of tele-health in the provision of cancer services.		Tele-health services available in the cancer centers.						
		Establish and optimize patient navigation between and within facilities across all levels.		Patient navigators trained and deployed in 80% of cancer facilities						
		Institute mechanisms for regular service audits to monitor treatment outcomes and establish quality assurance programs at cancer treatment centers		Quarterly audits conducted in 90% of cancer centers, with 80% implementation of quality improvement plans within 18 months.						
		Strengthen nuclear and radiation medicine regulation, knowledge and utilization.		80% of cancer centers comply with nuclear medicine regulations.						
	3.3.2: Strengthen availability of palliative, rehabilitative and survivorship services	Ensure implementation of the National Palliative Care Policy for training of health workers, community health volunteers and other key resource persons.	NCCP/FMOH, SMOH NICRAT, NIMR, FTHIs. DFDS / FMOH	National Palliative Care Policy implemented, with targeted health workers, CHVs, and resource persons trained		25%	35%	50%	75%	100%
		Ensure consistent availability of morphine and other opioid analgesics		Morphine and essential opioid analgesics available in all the tertiary health facilities providing palliative care services						
		Develop appropriate guidelines and SOPs to guide the rational use of opioid analgesics		Guidelines and SOPs for opioid use approved and disseminated to all facilities providing palliative						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Ensure the availability of palliative care services in all secondary and tertiary facilities with linkages to primary and community home-based care.		Palliative care services established in 100% of secondary and tertiary facilities, with linkages to primary/community home based care						
		Address social and structural determinants of health that impede access and exacerbate disparities		Assessment of social/structural barriers completed, with mitigation strategies implemented						
	3.3.3: Improve childhood cancer treatment, palliative care, survivorship and rehabilitation	Operationalize the childhood cancer Technical Working Group.	NCCP/FMOH, NPHCDA	TWG meets quarterly, with 80% attendance from key stakeholders		25%	35%	50%	75%	100%
		Advocate the provision of Universal health coverage for childhood cancer through integration as part of essential benefit package of services.	NCCP/FMOH, NPHCDA, SMOH, NICRA, NIMR, FTHIs	Childhood cancer included in NHIS essential benefit package						
		Establish paediatric oncology centers of excellence at the federal tertiary hospitals and their care networks		At least 1 FTHI designated as centers of excellence for paediatric oncology in each of the geo-political zone						
		Provide a defined basic package of care for paediatric cancer management at the federal, state and private tertiary cancer centers.		Standardized package approved by MOH and implemented for paediatric cancer at federal/ state/private centers by Q4 2024.						
		Define required competencies and skills mix of pediatric oncology human resources and promote their accreditation to optimize provision of childhood cancer care.		Accreditation program defined and implemented for pediatric oncology human resources (doctors, nurses, etc.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
	3.3.4: Strengthen the supply chain of oncology health products and technologies	Strengthen the supply chain subcommittee to undertake accurate forecasting, quantification and supply chain planning including for childhood cancer.	NCCP/FMOH, SMOH NICRAT, NIMR, FTHIs. DFDS / FMOH	Subcommittee meets quarterly and submits quarterly forecasts and supply plans to FMOH		25%	35%	50%	75%	100%
		Develop innovative strategies to improve access to affordable oncology health products and technologies including local manufacturing, pooled procurements, framework agreements and access programs.		Innovative strategies developed and implemented (e.g., local manufacturing partnerships, pooled procurement) to improve access and affordability of oncology health products.						
		Engage the national procurement agency and other stakeholders to ensure consistent availability of essential cancer health products and technologies for treatment, palliative care, rehabilitation and survivorship		Number of engagements with the National Procurement Agency and other stakeholders to ensure consistent availability of essential cancer health products and technologies for treatment, palliative care, rehabilitation and survivorship						

5.4 Pillar 4: Advocacy, Partnerships, Coordination, and Financing

Goal: Strengthen advocacy, multi-sectoral partnerships, coordination, and sustainable financing to ensure an effective, equitable, and robust national cancer control response in Nigeria.

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
4.1: Inform and empower the Nigeria population on cancer prevention and control and address cancer stigma	**4.1.1:** Identify and map the appropriate communication tools based on stakeholder needs and current determinants of health	Increase awareness of cancer-related stigma and disparities through data collection, analysis and dissemination of findings.	NCCP/FMOH SMOH, NIMR CSO, NCS NHIA, Development Partners	National cancer stigma survey conducted, with findings disseminated to stakeholders		25%	35%	50%	75%	100%

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Identify and engage multisectoral stakeholders to support cancer communication and the reduction of cancer stigma.		Number of multisectoral stakeholders (gov't, NGOs, media) identified and engaged.						
		Develop new and scale up effective, evidence-based interventions to improve health outcomes among priority populations and other populations or geographic areas experiencing disparities.		Number of evidence-based interventions developed and scaled up (e.g., screening programs, awareness campaigns), to reach priority population members.						
		Develop and disseminate cancer screening, diagnosis and treatment services directory that is publicly available.		Cancer screening, diagnosis, and treatment services directory developed and launched online and in print.						
	4.1.2: Mainstream Advocacy, Communication, and Social Mobilization on cancer across all sectors	Train, equip, and mentor community health resource persons and other stakeholders to increase cancer awareness among the general public.	FTHIs NCCP/ FMOH SMOH, CSO NCS	Number of community health workers trained, equipped, and mentored.		25%	35%	50%	75%	100%
		Mobilize political commitment, involvement, accountability, and resource for cancer advocacy and communication activities.		Number of high-level advocacy meetings held with policy-makers						
		Involve persons living with cancer, caregivers, and community leaders in cancer advocacy and communication.		Number of persons living with cancer and 5 caregivers engaged as advocates.						
		Work with communities to reframe cancer services and cancer-related messaging so that they do not stigmatize people or behaviours.		Stigma-free cancer messaging campaigns launched in communities.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
	4.1.3: Promote knowledge sharing within and outside the health sector on cancer	Conduct regular National Cancer Summit annually in collaboration with relevant stakeholders including civil society.	NCCP/FMOH SMOH, FTHIs, NCS, CSOs, private sector	Annual summit held with key stakeholders represented.		25%	35%	50%	75%	100%
		Provide support for state Ministries of Health to develop cancer action plans to implement the national cancer control strategy.		States develop and implement cancer action plans.						
		Observe priority cancer commemoration days from the community level.		Numbers of cancer days observed and commemorated.						
		Promote the establishment of State cancer control focal points in the state Ministries of Health to oversee implementation of cancer control activities.		Number of states that designate cancer control focal points.						
		Strengthen the National Technical Committee on Cancer Prevention and Control with members health and non-health actors.		Quarterly meeting of National Technical Committee held.						
	4.1.4: Strengthening of supply chain management for cancer prevention and control health products and technologies (HPTs) at all levels	Ensure availability of commodities, equipment, infrastructure at health facilities	NCCP/FMOH, DFDS/FMOH SMOH, FTHIs	Number of health facilities (n=50) that have essential cancer commodities, equipment, and infrastructure.		25%	35%	50%	75%	100%
		Review and update essential cancer prevention and control commodities and supplies in the Nigeria Essential Medicines & Supplies Lists.		Cancer prevention and control commodities reviewed and updated in NEM.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Support local manufacturing of commodities and technology transfer and nurture innovation		Number of local manufacturing partnerships established.						
4.2: Strengthen engagement and partnerships at National and state levels	**4.2.1:** Strengthen cancer control coordination structures	Convene regular coordination meetings with state Ministries of Health to disseminate cancer policies and provide technical support on their implementation.	NCCP/FMOH, FTHIs, SMOH	Quarterly meetings held with number of policy implementation updates and technical support provided.		25%	35%	50%	75%	100%
		Develop a mechanism for sharing regional cancer control resources between states, including human resources, infrastructure, and commodities.	FTHIs, NCCP/ FMOH, NICRAT	Resource-sharing mechanism established.						
		Ensure continuity of essential cancer services during emergencies and pandemics.	NCCP/FMOH, SMOH, FTHIs	Business continuity plan for cancer services implemented in the states.						
	4.2.2: Strengthen the cancer control legislative framework	Support implementation of legislation to reduce the marketing and advertising of unhealthy foods and drinks.	NCCP/FMOH, NICRAT, FTHIs, NCS, CSOs	Legislation drafted and submitted to National Assembly for the reduction of unhealthy food/ drink.		25%	35%	50%	75%	100%
		Develop relevant policies that promote access to essential cancer services including screening and diagnosis.		Number of policies developed and approved for implementation.						
	4.2.3: Strengthen the National Cancer Control Program (NCCP)	Deploy adequate staff to deliver its mandate as per its staff establishment structure.	NCCP/FMOH, FTHIs, SMOH	Number of staff positions filled and deployed to the NCCP		25%	35%	50%	75%	100%
		Build the capacity of NCCP Staff to deliver on its mandate		Number of NCCP staff trained and certified in cancer control.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Facilitate the NCCP to conduct capacity building, provision of technical support, supportive supervision to state Ministries of Health and all the cancer treatment centers across the country for cancer control and to develop and support policy implementation.		Number of capacity building workshops and supportive supervisions conducted.						
		Provide adequate resources for the development and regular dissemination of cancer prevention and control policies/ guidelines.		Resources allocated and deployed for the development and dissemination of cancer policies/guidelines.						
4.4: Strengthen partnerships for cancer prevention and control at all levels	**4.4.1:** Strengthen multisectoral partnerships in cancer control	Strengthen Public, Private, and Partnerships to enhance cancer control across the continuum of care	NCCP/FMOH, SMOH, FTHIs SMOH	Number of partnerships established.		25%	35%	50%	75%	100%
		Promote strategic collaborations with cancer Health Products and Technologies manufacturers, emphasizing framework agreements and local manufacturing to enhance access to quality and affordable cancer commodities.	NCCP/FMOH, SMOH, FTHIs SMOH, NICRAT	Number of framework agreements developed and signed with manufacturers.						
		Work with regulatory bodies to streamline processes for the review, evaluation, and clearance of new cancer screening, diagnostic, and treatment health products and technologies, including those for cancer research and clinical trials.	NCCP/FMOH, SMOH, FTHIs SMOH, NIMR	Quarterly meetings held with regulatory bodies leading to the review, evaluation and clearance of new cancer screening, diagnostic, and treatment health products and technologies.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
4.5: Increase innovative sustainable financing for comprehensive cancer prevention and control at national and State levels	**4.5.1:** Strengthen innovative financing mechanisms for an effective cancer response	Increase public financing for cancer control including in the UHC benefit package.	NCCP/FMOH, SMOH NICRAT, FTHIs, NHIA, NIMR	Cancer control budget allocation increased in national budget and included in UHC benefit package.		25%	35%	50%	75%	100%
		Leverage on the Catastrophic Health Insurance Fund and BHCPF in NHIA to cushion individuals from catastrophic health expenditure and impoverishment.		Number of cancer patients covered under Catastrophic Health Insurance Fund/BHCPF, with reduction in out-of-pocket payments.						
		Support state governments to create cancer control annual work plans; and to allocate budget lines for cancer prevention and control.		Number of states supported to develop cancer control annual work plans, with dedicated budget lines allocated.						
	4.5.2: Ensure adequate financing toward achieving a 60% survival rate for children with cancer	Advocate for the provision of sustainable, comprehensive cancer care for children as per the CURE ALL framework.	NCCP/FMOH, SMOH NICRAT, FTHIs, NHIA, NIMR	Number of advocacies leading to adoption of CURE ALL framework.		25%	35%	50%	75%	100%
		Advocate for Universal Health Coverage with differentiated care packages for children.		Number of advocacies leading to inclusion of UHC package for childhood cancer care.						
		Institutionalize mechanisms for facilitating and financing national/ state procurement of essential childhood cancer medicines, rehabilitation and other health products and technologies.		National procurement mechanism established, ensuring financing and availability of essential childhood cancer medicines.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Create a social protection package for childhood cancer patients and their families for their protection against catastrophic expenditure.		Social protection package created and launched, covering treatment costs childhood cancer patients.						

5.5 Pillar 5: Strategic Information, Registration, Surveillance and Research

Goal: Establish a comprehensive, sustainable, and integrated framework for cancer registration, surveillance, research, and knowledge management to generate timely, high-quality evidence that informs policy, planning, and practice.

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
5.1: Strengthen availability, quality, demand and utilization of cancer data at both national and sub-national levels	**5.1.1:** Enhance the coordination structures and optimize cancer surveillance data use.	Increase reporting rates and utilization of cancer surveillance data.	NCCP/ FMOH&SW NICRAT, FTHIs, SMOH, CSO, NCS	Number of cancer reporting rates and utilization of surveillance data.		25%	35%	50%	75%	100%
		Publish and disseminate cancer surveillance reports.		Number of national cancer surveillance reports published and disseminated.						
		Advocate for inclusion of key cancer indicators in national and state surveys		Inclusion of cancer indicators included in the national and state surveys.						
	5.1.2: Create a framework for service and data quality improvement at all levels	Conduct periodic Service Quality Audits (SQA) and Data Quality Audits (DQA) and incorporate recommendations into continuous quality improvement (CQI).	FTHIs NCCP/ FMOH&SW SMOH	Number of SQAs and 2 DQAs conducted annually (2024-2025) and incorporated in the CQI						
		Provide technical support to sub-national levels for Continuous Quality Improvement for all cancer control interventions.	FTHIs NCCP/ FMOH&SW SMOH, private sector	Technical support provided to 36 states, resulting for CQI targets for cancer control.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
	5.1.3: Implement a monitoring and evaluation framework for the National Cancer Control Plan.	Launch and disseminate the Monitoring, Evaluation and Learning (MEAL) framework.	NCCP/ FMOH&SW SMOH	MEAL framework launched and disseminated to stakeholders.						
		Conduct annual, mid-term and end-term and impact evaluation of implementation of the NCCP and disseminate the findings to all stakeholders.		Annual, mid-term, and end-term evaluations conducted, with findings disseminated to key stakeholders.						
		Develop and disseminate policy and evidence briefs from priority cancer research topics.	NCCP/ FMOHSW, FTHIs, NICRAT, NIMR, NIPRD	Number of policy briefs and evidence briefs developed and disseminated						
		Formulate mechanisms for incorporating research findings into cancer protocols and policies.		Mechanisms for incorporating cancer protocols/ policies formulated.						
		Build research capacity for health care workers and other stakeholders at both national and sub-national level		Number of healthcare workers/stakeholders trained in cancer research						
		Expand community engagement in cancer research initiatives		Number of community engagement in cancer research reached.						
5.2: Strengthen cancer registration in the country	**5.2.1:** Enhance population-based (PBCR) and hospital-based cancer registration (HBCR)	Strengthen the existing Population Based Cancer Registries	NCCP/ FMOH&SW, SMOH, FTHIs, NICRAT	2 existing PBCRs strengthened, covering 20% more population by Dec 2024.		25%	35%	50%	75%	100%
		Establish, strengthen and sustain hospital-based cancer registries at all cancer treatment centers and ensure linkages to their respective PBCR and HMIS		Number of hospital-based cancer centers establish and strengthened and linked PBCR and HMIS						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Adopt and utilize global standard guidelines for cancer registration and reporting to ensure efficiency and harmonization		Global standard guidelines adopted and utilized for cancer registration and reporting.						
		Establish mechanisms for auditing the cancer registration process and data quality		Mechanism for auditing cancer registration process and data quality established.						
		Create awareness and utilization of data from cancer registries.		Number of workshops conducted for policymakers/ stakeholders to create awareness and utilization of data from cancer registries.						
		Enhance training and mentorship of health records and information officers on cancer registration in collaboration with the IARC regional cancer registration collaboration center.		Number of health records officers trained/ mentored on cancer registration (IACR/IARC standards).						
		Publish annual cancer burden report based on PBCR and disseminate it to all stakeholders		Annual cancer burden report published and disseminated to key stakeholders.						
5.3: Strengthen cancer research in Nigeria	**5.3.1** Support and adequately resource a comprehensive cancer research agenda to inform policy	Implement the national cancer research agenda.	NCCP/ FMOH&SW, SMOH, FTHIs, NICRAT, NIMR	Number of priority areas under the cancer research agenda implemented.		25%	35%	50%	75%	100%
		Create a national cancer research repository for use by all stakeholders.		National cancer research repository established and made accessible to stakeholders.						
		Create a knowledge translation/ management mechanism for cancer research.		Knowledge translation platform created and launched for cancer research.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Create a data-sharing framework to promote cancer research and surveillance using data available at the established population-based cancer registries.	NCCP/FMOH, NPHCDA, NICRAT SMOH, NIMR, FTHIs	Data-sharing framework for promotion of cancer research and surveillance created and approved,						
	5.3.2: Enhance adoption of cancer research into clinical and policy practice	Establish a cancer research center of excellence in the country and optimize collaborations and synergy	NCCP/FMOH, SMOH NICRAT, NIMR, FTHIs	Cancer research center of excellence established,						

5.6 Pillar 6: Patient Navigation and Care Coordination

Goal: Ensure timely, equitable, and patient-centered access to cancer care by testing and institutionalizing a comprehensive patient navigation and care coordination model that supports patients across the cancer care continuum from pre-diagnosis through survivorship and end-of-life care by 2030.

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
6.1: To facilitate the establishment and integration of comprehensive patient navigation model across all institutions providing cancer care in Nigeria	Establish a National Patient Navigation Desk to coordinate and oversee implementation and integration of patient navigation in the Nigeria health care delivery system.	Conduct Needs Assessments (NA) for implementation of Patient Navigation across all the FTHIs with mandate to provide cancer care,	NCCP/FMOH, SMOH NICRAT, FTHIs, NGOs/CSOs, ACS, Private Sector	Needs assessment conducted across FTHIs with mandate to provide cancer care		25%	35%	50%	75%	100%
		Recruit / deploy health workers to be trained as clinical, physical and resource navigators across all the FTHIs with mandate to provide cancer care..		Number of health workers recruited / deployed and trained as clinical, physical and resource navigators.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Train the Patient Navigator (s) on provision of clinical, physical and resource navigation services.		Number of patient navigators trained in the provision of clinical, physical and resource navigation services.						
		Develop Facility Patient Navigation Pathway (FPNP) & Patient Education Materials (PEMs).		FPNP developed and PEMs available in all the cancer centers.						
		Facilitate the development and signing of MOU between FTHIs and NGOs to jointly implement patient navigation.		MOUs signed between FTHIs and partnering NGOs for joint implementation of patient navigation.						
		Establish collaboration between private and public diagnostic centres of the FTHIs to enhance diagnostic services for cancer patients.		Partnerships established between private and public diagnostic centers of the FTHIs.						
		Secure budget line / financial resources for implementation of patient navigation.		Dedicated budget line secured for implementation of patient navigation and funded.						
		Develop and implement "From Screening to Survivorship (FS2S)" Charter for patient navigation		FS2S Charter developed and validated by stakeholders. FS2S Charter implemented in the cancer centers.						
		Establish a Peer Support Group/ Cancer Support Group.		Number of cancer support groups established across the cancer centers.						
		Pilot implementation of comprehensive patient navigation model in selected FTHIs in the 6-geopolitical zones of the country partnering with local CSOs/ NGOs experienced in patient navigation and support to inform national scale-up.		Patient navigation piloted in selected states and recommendations made available.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Set-Up Monitoring, Evaluation & Research Team/ Desk for implementation of patient navigation.		M&E Research Team / Desk for patient navigation established and functional.						
6.2: To standardize the quality and professionalism of oncology patient navigators through training and re-training	Develop a nationally accredited certification program for oncology patient navigators.	Establish a committee to create a nationally accredited curriculum for oncology patient navigator training.	NCCP/FMOH, SMOH NICRAT, FTHIs, NGOs/CSOs, ACS, Private Sector	A National curriculum development committee established with a draft curriculum developed and approved.		25%	35%	50%	75%	100%
		Develop Standard Operating Procedures (SOPs) for implementation of patient navigation.		SOPs for implementation of patient navigation developed and approved.						
		Develop guidelines for the recruitment of clinical and non-clinical patient navigators.		National guidelines for recruitment of patient navigators finalized and disseminated.						
		Develop and obtain national consensus for patient navigator roles and responsibilities		National consensus on patient navigator roles and responsibilities achieved through stakeholder engagement.						
6.3: To eliminate abscondment from oncology care in cancer treatment facilities through systematic follow-up and effective navigation.	Implement a multi-faceted follow-up and navigation system to track and engage cancer patients, ensuring continuity of care and minimizing abscondment	Develop and implement a comprehensive patient navigation tracking document to monitor patient progress, outcomes, and navigator interventions.	NCCP/FMOH, SMOH NICRAT, FTHIs, NGOs/CSOs, ACS, Private Sector	Patient navigation tracking document finalized and rolled out in the cancer centers.		25%	35%	50%	75%	100%
		Identify, adapt, and deploy existing technology tools (e.g., mobile apps, electronic health records) to support patient navigation.		Number of existing technology tools (e.g., mobile apps, EHRs) adapted and deployed in the cancer centers.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Develop and disseminate culturally sensitive, patient-centred education materials (e.g., print, digital, audio-visual) to promote health literacy.		Number of culturally sensitive patient education materials developed and disseminated.						
		Facilitate the establishment of support groups for cancer patients and caregivers in all the cancer centers.		Number of support group established across the cancer centers.						
6.4: Improve care coordination across the cancer continuum by strengthening referral pathways, multidisciplinary care teams, and information-sharing systems	Establish a national cancer care coordination mechanism that integrates referral pathways, multidisciplinary teams, and standardized information-sharing systems to ensure seamless care transitions.	Develop and disseminate national referral algorithms linking primary, secondary, and tertiary care.	NCCP/FMOH, SMOH NICRAT, FTHIs, NGOs/CSOs, ACS, Private Sector	National referral algorithms developed and disseminated to the cancer centers.		25%	35%	50%	75%	100%
		Establish multidisciplinary tumour boards in cancer centres to guide treatment planning.		Number of cancer centers with functional multidisciplinary tumor boards.						
		Implement digital health tools for real-time patient tracking and intra/inter-facility communication.		Digital health tools (e.g., patient tracking systems) implemented in the cancer centers, with staff reporting improved communication and patient tracking.						
6.5: Strengthen patient and family support services by providing individualized assistance addressing psychosocial, financial, and logistical needs of patients and caregivers	Implement a comprehensive support services model that embeds dedicated patient navigators and social workers within cancer care teams to provide personalized assistance and connect patients with resources	Train patient navigators on psychosocial support, financial counselling, and caregiver engagement.	NCCP/FMOH, SMOH NICRAT, FTHIs, NGOs/CSOs, ACS, Private Sector	Number of patient navigators trained on psychosocial support, financial counseling, and caregiver engagement.		25%	35%	50%	75%	100%

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Encourage the establishment of patient support groups and family caregiver programs in all tertiary institutions.		Number of cancer centers with tertiary established patient support groups and family caregiver programs.						
		Develop information resources and digital platforms for patient education and self-management		Number of digital platforms (e.g., websites, apps) developed for patient education and self-management.						
6.6: Enhance digital patient navigation and telehealth integration by leveraging digital tools and telehealth to extend navigation services to remote and underserved populations	Develop and scale a patient navigation model combining digital tools (e.g., mobile apps, WhatsApp) with telehealth services to reach and support remote and underserved cancer patients.	Develop and implement a mobile application for patient navigation and appointment reminders.	NCCP/FMOH, SMOH NICRAT, FTHIs, NGOs/CSOs, ACS, Private Sector	Mobile app developed and piloted in selected cancer centers for patients reporting improved appointment adherence.		25%	35%	50%	75%	100%
		Integrate teleconsultation services for follow-up, survivorship care, and palliative support.		Teleconsultation services are integrated in cancer centers, with patients reporting satisfaction with follow-up care.						
		Monitor and evaluate digital platform usage, coverage, and patient outcomes.		Digital platform usage reports generated quarterly, with navigators using data for decision-making.						
6.7: Monitor and evaluate patient navigation and care coordination services by establishing a robust monitoring and evaluation framework to assess effectiveness, coverage, and patient outcomes.	Develop a national patient navigation M&E framework with clear KPIs (e.g., patient retention, satisfaction, outcomes) and regular data reviews to drive quality improvements.	Develop standardized M&E tools for navigation activities, referral tracking, and patient satisfaction.	NCCP/FMOH, SMOH NICRAT, FTHIs, NGOs/CSOs, ACS, Private Sector	M&E tools developed and rolled out in selected cancer centers, tracking navigation, referrals, and patient satisfaction.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
		Conduct periodic audits and evaluations of navigation and coordination services.		Number of audits conducted with action plans implemented in 100% of identified areas for improvement						
		Assess level of patient satisfaction of the services rendered.		Patient satisfaction surveys conducted bi-annually, with 50% of patients reporting high satisfaction (score 4/5) with navigation services.						
		Use data to inform policy, scale-up decisions, and continuous quality improvement.		Quarterly reports inform policy and scale-up decisions, with 2 policy briefs developed and shared with stakeholders.						

5.7 Pillar 7: Artificial Intelligence and Digital Innovation in Cancer Control

Goal: Ensure safe, equitable, transparent, and impactful deployment of Artificial Intelligence (AI) and digital technologies across the cancer continuum to improve prevention, early detection, diagnosis, treatment, navigation, and surveillance.

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
7.1: Establish a national governance and regulatory framework for safe and ethical AI deployment	**7.1.1:** Develop and implement national AI standards, policies, and oversight mechanisms	Develop national guidelines for ethical, safe, and responsible AI use in cancer care.	NCC&NMP/ FMOH&SW, NITDA, NHREC	Existence of national AI guidelines for cancer control.		15%	30%	50%	75%	100%
		Establish a National Committee on AI in Cancer Control.	NCC&NMP/ FMOH&SW	National AI Committee established and functional						
		Develop regulatory pathways for AI-enabled medical tools.	NCC&NMP, NAFDAC, MDCN, NITDA	Number of regulatory frameworks developed for AI tools.						
		Implement mechanisms for AI safety audits and post-market surveillance.	NCC&NMP, NICRAT	Number of AI systems undergoing annual performance audits.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
7.2 Build AI-optimized digital infrastructure for cancer control	**7.2.1:** Strengthen data systems, interoperability and secure digital infrastructure	Establish a national cloud-based cancer data repository integrating imaging, pathology, lab and clinical data.	NCC&NMP, NICRAT, NITDA	Availability of a national cloud-based cancer repository.		15%	30%	50%	75%	100%
		Implement national interoperability standards (HL7 FHIR, DICOM).	FMOH&SW, NITDA, FTHIs	Number of facilities compliant with data standards.						
		Expand connectivity and cybersecurity systems across cancer centers	FMOH&SW, NITDA, SMOH	Number of facilities with secure high-speed connectivity						
		Deploy telehealth, telepathology, and teleradiology digital infrastructure	NCCP/ FMOHSW, NICRAT, FTHIs, Private Sector	Number of facilities using digital tele-oncology services						
7.3: Strengthen AI-supported cancer prevention, early detection and diagnosis	**7.3.1:** Strengthen data systems, interoperability and secure digital infrastructure	Deploy AI-based risk stratification tools in primary care settings.	FMOH&SW, SMOH, NICRAT	Number of facilities using AI-based risk assessment tools.		15%	30%	50%	75%	100%
		Introduce AI algorithms for imaging triage (X-ray, CT, mammography, ultrasound).	NCC&NMP, FTHIs, RRBN FMOH&SW, FTHIs NCC&NMP, SMOH	ii. Number of radiology centers implementing AI-triage						
		Deploy AI-assisted pathology solutions (digital slides, WSI, automated QA)		iii. Number of pathology labs using AI-assisted tools						
		Implement structured digital reporting templates (AJCC, BIRADS).		iv. Number of facilities using digital structured reporting						
7.4 Enhance AI-supported treatment planning, care coordination and patient navigation	**7.4.1:** Deploy AI solutions that improve care pathways and patient outcomes	Deploy AI clinical decision support tools for treatment planning.	MDCN, NP-MCN, FTHIs	Number of oncology units using AI decision support tools.		15%	30%	50%	75%	100%
		Implement AI-driven patient navigation and follow-up systems.	FMOH&SW, SMOH, CSOs FTHIs, NICRAT	Number of facilities implementing digital navigation systems.						
		Use predictive analytics for toxicity monitoring and follow-up.		Number of oncology facilities using predictive monitoring tools.						

Strategic Objectives	Strategy	Activity	Lead/ Responsible Organization	Indicators	Baseline	Annual Targets				
						2026	2027	2028	2029	2030
7.5 Strengthen cancer registration and surveillance through AI innovation	**7.5.1:** Modernize the cancer registry using AI and automated data extraction	Implement AI tools for automated case-finding from pathology and clinical records.	NCCP/ FMOHSW, FTHIs, NICRAT, NCS	Number of registries using AI for automated case-finding.		15%	30%	50%	75%	100%
		Deploy AI for data abstraction, coding, deduplication, and linkage.	NICRAT, NCCP/ FMOH&SW	% reduction in registry backlog using AI.						
		Strengthen registry analytics with predictive and geospatial AI tools		Number of analytic dashboards deployed						
7.6 Build national workforce capacity for AI in cancer control	**7.6.1:** Promote PPPs and collaborative research	Train clinicians and registrars on AI-enabled tools.	NCC&NMP, NICRAT, NPMCN Universities MDCN, NMCN, MLSN	Number of trained health workers in AI for cancer care.		15%	30%	50%	75%	100%
		Develop local fellowship programs in digital oncology and medical AI.		Number of fellowship programs established.						
7.7 Foster multi-sector partnerships and sustainable innovation ecosystems	**7.7.1**: Promote PPPs and collaborative research	Develop PPPs for AI deployment in cancer diagnostics and navigation.	NCCP/ FMOH&SW, Private Sector NICRAT, NITDA	Number of PPP agreements signed.		15%	30%	50%	75%	100%
		Establish collaborations with academic and global cancer centers.		Number of active research/innovations MoUs.						
		Conduct local innovation challenges for AI-enabled cancer solutions.		Number of innovation challenges hosted						

CHAPTER SIX: **QUALITY ASSURANCE AND QUALITY IMPROVEMENT**

To position Nigeria as a leader in quality-driven cancer control and support the evolution towards a learning health system where improvement is continuous, strategic and measurable

6.1 Rationale for a National Quality Assurance and Quality Improvement (QA/QI) Program

This NCCP adopts the central hypothesis that a coordinated, system-wide national quality improvement program will increase the uptake of cancer screening, enable earlier-stage diagnosis, and improve adherence to treatment guidelines ultimately improving patient outcomes and survival across the population.

6.2 Vision and Core Components of the Quality Assurance and Quality Improvement (QA/QI) Program

The QA/QI program will be implemented under the leadership of the Federal Ministry of Health, aligned with national governance structures, and will focus on three core components:

1. National Coordination and Standardization

i. Establish a National Cancer Quality Coordination Platform to harmonize policies, protocols, and clinical standards.
ii. Develop and disseminate standardized, context-appropriate screening, diagnostic, and treatment pathways.
iii. Strengthen nationwide alignment to ensure consistent quality of care.

2. Strengthening Implementation Fidelity

i. Provide training, mentorship, and job aids to improve provider adherence to evidence-based guidelines.
ii. Implement audit and feedback cycles on key indicators such as screening coverage, biopsy turnaround time, and treatment completion.
iii. Implement patient navigation to reduce delays and loss to follow-up.
iv. Apply PDSA cycles to adapt and scale effective quality improvement interventions.

3. Measuring Impact, Learning, and Sustaining Gains

i. Apply the RE-AIM framework to evaluate improvements in coverage, quality, and outcomes.

ii. Track national QA/QI targets including:
   a. ≥20% increase in screening uptake
   b. measurable improvements in early-stage diagnosis
   c. ≥30% improvement in treatment guideline adherence
iii. Institutionalize regular quality review, MDT meetings, and data-driven decision-making.
iv. Integrate QA/QI functions into routine planning, financing, and supervision for sustainability.

6.3 Expected Benefits

The QA/QI program establishes a foundation for high-quality, people-centered cancer care in Nigeria. Expected benefits include:

i. Earlier detection and reduced mortality
ii. More efficient use of resources
iii. Reduced delays and unwarranted clinical variation
iv. Improved treatment adherence and patient outcomes
v. Strengthened public trust in cancer services
vi. Generation of local evidence to guide national and regional scale-up

6.4 Quality Assurance Framework

The Quality Assurance (QA) Framework provides the structure for tracking progress, assessing impact, and driving continuous Quality Assurance and Quality Improvement (QA/QI) within the Nigeria cancer control Plan. Driven by evidence-based implementation science frameworks, the quality assurance framework is designed to ensure accountability, enable adaptive learning, and support the long-term sustainability of high-quality cancer care across the country.

The QA framework integrates two globally recognized implementation science models:

1. Reach, Effectiveness, Adoption, Implementation and Maintenance (RE-AIM) Framework

- Used to evaluate Reach, Effectiveness, Adoption, Implementation, and Maintenance of interventions.

2. Consolidated Framework for Implementation Research (CFIR) Framework

- Used to assess contextual barriers and facilitators that affect implementation at national, state, and facility levels.
- A cycle of Plan–Do–Study–Act (PDSA) will guide iterative improvement across all participating facilities.

6.5 Strategic Objectives

i. **Monitor** the fidelity, consistency, and quality of cancer screening, diagnosis, treatment, and follow-up services.
ii. **Evaluate** the impact of QA/QI interventions on service delivery and patient outcomes.
iii. **Learn** from implementation experiences to strengthen policy, scale effective strategies, and inform continuous improvement.
iv. **Institutionalize** routine data use, performance feedback, and quality review mechanisms across all levels of the health system.

6.6. Key Evaluation Questions

6.6.1 Quality and Coverage

- Are cancer screening services reaching intended target populations?
- Is there improvement in early-stage diagnosis following QA/QI interventions?

6.6.2 Quality and Consistency of Care

- To what extent are facilities adhering to standardized national clinical pathways and guidelines?
- Are diagnostic and treatment timelines improving (e.g., biopsy turnaround time, diagnosis-to-treatment interval)?

6.6.3 Implementation Fidelity

- Are health workers implementing QA/QI processes as intended?
- What system, provider, or contextual factors influence implementation?

6.6.4 Sustainability and Scale-Up

- Are QA/QI practices being integrated into routine facility operations?
- What resources, governance structures, or incentives are required for long-term sustainability?

6.7 Quality Assurance Monitoring and Evaluation and Learning Indicators

6.7.1 Service Delivery and Outcomes

- ≥20% increase in screening uptake for cervical and breast cancer.
- Increase in early-stage diagnoses (Stage I/II) for breast and cervical cancers.
- ≥30% improvement in adherence to national treatment guidelines.
- Reduced diagnosis-to-treatment interval across facilities.
- Improved treatment completion rates.

6.7.2 Implementation and System-Level Performance

- Proportion of facilities meeting national QA standards.
- Number and frequency of multidisciplinary team (MDT) meetings.
- Completeness and timeliness of reporting to cancer registry and DHIS2.
- Frequency and effectiveness of audit and feedback cycles.

6.7.3 Patient Experience

- Patient satisfaction with navigation, treatment communication, and timeliness.
- Reduction in lost-to-follow-up during diagnosis and treatment.

6.8. Data Sources and Tools

i. National Cancer Registry
ii. DHIS2 cancer module
iii. Facility QA dashboards
iv. Clinical audit and case-note review tools
v. Patient navigation logs
vi. Patient exit interviews & satisfaction surveys
vii. CFIR-informed qualitative assessment tools
viii. Supervision and mentorship reports

6.9. Monitoring, Evaluation, and Learning (MEL) Processes

6.9.1 Routine Monitoring

- Monthly/Quarterly reporting on core QA indicators by facilities.
- Quarterly supervision visits to verify data quality and support QI teams.
- Real-time dashboards to support decision-making.

6.9.2 Midline and Endline Evaluation

- Midline evaluation at Year 2
- Endline evaluation at Year 4–5
- Mixed-methods analysis (quantitative + qualitative) to assess program impact.

6.9.3 Learning and Adaptation

- Quarterly learning sessions at facility, state, and national levels.
- Annual national quality performance report.
- Publication of best practices, case studies, and implementation briefs.
- Integration of lessons into updates of clinical guidelines, SOPs, and policy guidance.

6.10 Learning Agenda

The QA/QI MEL Plan embodies a national learning agenda focused on:

- Identifying "what works" for improving screening, diagnosis, and treatment quality in real-world Nigerian settings.
- Understanding contextual determinants of successful implementation.
- Developing scalable models for patient navigation, audit and feedback, and clinical mentoring.
- Strengthening the national cancer data ecosystem for long-term planning and budgeting.

6.11 Sustainability Strategy

Sustainability will be achieved through:

i. Developing a robust plan to continually monitor and evaluate how key partners learn, adapt, and nurture the core priorities over time.[16]
ii. Dedicated budget lines for QA activities at federal and state levels.
iii. Building local capacity in implementation science and quality management.
iv. Institutionalizing MDT meetings, review platforms, and data-driven decision-making within routine practice.

[10] Iwelunmor, J., Tucker, J. D., Ezechi, O., Nwaozuru, U., Obiezu-Umeh, C., Gbaja-Biamila, T., ... & Airhihenbuwa, C. O. (2023). Sustaining HIV research in resource-limited settings using PLAN (people, learning, adapting, nurturing): evidence from the 4 youth by youth project in Nigeria. Current HIV/AIDS Reports, 20(2), 111-120.

6.12. MEL Framework (RE-AIM + CFIR within PDSA Cycles)

RE-AIM Dimension	Evaluation Focus	Key Indicators	Data Sources/Tools	Frequency
Reach	Extent to which target populations are served by screening and early detection services.	% of eligible women screened for cervical cancer; % of eligible women receiving breast cancer screening (CBE/mammography where available); % of target men screened for prostate cancer.	Facility registers; DHIS2; National Cancer Registry; campaign reports.	Quarterly
Effectiveness	Change in service quality and patient outcomes.	% of breast, cervical, and prostate cancers diagnosed at early stage (I/II); treatment completion rates; diagnosis-to-treatment interval; patient satisfaction scores.	Clinical audit tools; oncology clinic records; EMR; patient exit interviews; registry data.	Semi-annual
Adoption	Uptake of QA framework and protocols by facilities and providers.	Number and % of facilities implementing standardized QA protocols; % of trained providers applying guidelines; # of MDT meetings conducted.	QA supervision reports; training registers; facility reports.	Quarterly
Implementation	Fidelity, reliability, and consistency of delivering guideline-concordant services.	% of facilities meeting defined QA benchmarks (e.g., biopsy TAT ≤14 days; documentation completeness; staging recorded; guideline-concordant treatment).	Facility QI dashboards; structured audit checklists; supervision reports.	Quarterly
Maintenance	Sustainability and institutionalization of QA processes.	Integration of QA indicators into routine HMIS; existence of budget lines for QA; continuity of QA/QI teams beyond project support.	Annual review reports; budget documents; policy memos.	Annual

6.13. Monitoring Plan

Monitoring Objective	Key Activities	Outputs/Indicators	Responsible Actors	Frequency
Establish plan for baseline performance and context	Conduct national and facility-level baseline assessment using standardized QA and CFIR-informed tools.	Baseline report on QA gaps, context, and performance for breast, cervical, and prostate cancer services.	NICRAT; FMOH; National QA Secretariat; State MoHs.	Once (Months 1–6)
Track routine service delivery and QA performance	Monthly reporting of core QA indicators through DHIS2-aligned electronic dashboards and facility tools.	Complete monthly dataset on screening, diagnosis, treatment, and QA indicators from participating facilities.	Facility QA focal persons; M&E officers; State MoHs.	Monthly
Provide supportive supervision and mentorship	Quarterly supervisory visits to verify data, provide feedback, and mentor facility QI teams.	Supervision reports; action plans; documented corrective actions.	National QA Secretariat; State supervisors; implementing partners.	Quarterly
Facilitate data review and adaptive management	Quarterly data review and learning meetings at facility, state, and national levels; use PDSA cycles.	Meeting minutes; revised QI plans; decisions on adapting interventions; performance dashboards updated.	QA Secretariat; facility leadership; State MoHs; FMOH.	Quarterly
Engage stakeholders and ensure accountability	Disseminate scorecards and briefs to FMOH, partners, and public (where appropriate).	QA scorecards; policy briefs; partner reports.	FMOH; NICRAT; NIMR Communications team; partners.	Semi-annual

6.14. Evaluation Plan

Monitoring Objective	Description	Key Indicators/ Measures	Methods	Timing
Impact on coverage and early detection	Assess effect of QA intervention on screening coverage and stage at diagnosis for breast, cervical, and prostate cancers.	≥20% increase in screening coverage; ≥15% increase in early-stage diagnosis (I/II).	Quasi-experimental pre-post and comparison site analysis; routine data analysis; difference-in-differences.	Baseline; Midline (Year 2); Endline (Year 4–5)
Impact on quality of treatment	Assess improvement in adherence to national treatment guidelines and completion of planned regimens.	≥30% improvement in guideline adherence score; improved treatment completion rates.	Clinical audits; case-note reviews; MDT documentation review.	Annual; Endline
Timeliness and patient experience	Evaluate diagnosis-to-treatment interval and patient satisfaction.	Reduced median time from diagnosis to treatment; improved patient satisfaction scores.	Time-motion analysis; patient exit interviews; surveys.	Baseline; Midline; Endline
Implementation processes & context	Identify determinants of successful implementation and reasons for variation across sites.	Qualitative themes on barriers/enablers; mapping to CFIR constructs.	Key informant interviews; focus group discussions; document review.	Annual; Endline
Scalability & sustainability	Assess integration of QA processes into routine systems and policies.	Number of states integrating QA into plans; existence of domestic financing; continuation of QI teams.	Policy and budget review; stakeholder interviews. Document review of plan.	Endline

6.15. Learning and Knowledge Translation

Learning Mechanism	Description	Outputs	Lead
Quarterly Learning Seminars	Share performance data, discuss challenges, highlight high-performing sites, and co-design adaptations.	Presentation decks; learning notes; updated QI plans.	National QA Secretariat; NICRAT.
Cross-Facility Learning Collaboratives	Link facilities into thematic collaboratives (e.g., cervical screening, breast diagnostics, navigation).	Peer-learning sessions; practice manuals; case studies.	NICRAT; State MoHs; partners.
Annual Learning & Policy Report	Synthesize evidence on what works, for whom, and under what conditions for NCCP QA.	Annual MEL/QA report; policy recommendations.	MEL Team; FMOH.
Policy Dialogue Forums	Engage decision-makers to translate findings into NCCP updates, guidelines, and budgets.	Policy briefs; NCCP revisions; endorsed recommendations.	FMOH; NICRAT.

6.16. Data Management and Quality Assurance

Domain	Standards/Actions
Data Quality	Routine data verification; consistency checks; supervision-linked validation; feedback to facilities.
Data Security & Confidentiality	Compliance with national policies; de-identified datasets for analysis; controlled access.
Data Systems Integration	Alignment with DHIS2 and National Cancer Registry; interoperable templates and codes.
Use of Data	Dashboards and scorecards for decision-making; regular visualization in review meetings.

6.17. Adaptive Learning Cycle (PDSA)

Step	Description	Key Actors
Plan	Identify gaps from MEL data; co-design targeted QA interventions and tests of change.	QA Secretariat; facility QI teams; State MoHs.
Do	Implement changes on a small scale within selected facilities or units.	Facility QI teams; clinical leads.
Study	Analyze performance data and qualitative feedback to assess effectiveness of changes.	MEL Team; QA Secretariat; facility teams.
Act	Scale successful changes; modify or drop ineffective ones; integrate into SOPs and policies.	NCCP/FMOHSW; NICRAT; State MoHs; facility management.

CHAPTER SEVEN: **HUMAN RESOURCES FOR HEALTH (HRH) FOR CANCER CONTROL IN NIGERIA**

(Strategic Oncology Workforce Planning and Development)

7.1. Background

Cancer control outcomes in Nigeria are critically dependent on the availability, distribution, competence, and retention of an adequately trained oncology workforce. Despite improvements in cancer policy frameworks, infrastructure, and service delivery platforms, persistent shortages in oncology Human Resources for Health (HRH) remain a major constraint to implementing the National Cancer Control Plan (NCCP).

As an example, training pathways for clinical and radiation oncologists in Nigeria require a minimum of five years post-graduation, other specialties require the same or longer duration and current workforce numbers remain insufficient to meet the rapidly growing national cancer burden. Attrition related to burnout, limited working conditions, and emigration further weakens workforce sustainability.

Recent reforms in the education sector, including a 100% increase in medical student intake, introduce an important contextual shift and creates an opportunity to increase the yield of oncology trainees if deliberate pipeline reforms are implemented.

7.2. Evidence Base and Problem Definition

A national, multi-institutional study of Nigerian medical students provides critical insight into oncology workforce pipeline challenges:

i. Willingness to pursue oncology careers is consistently low.
ii. There are no significant differences by type of medical school, level of training, or presence of oncology residency programmes.
iii. Undergraduate exposure to oncology is limited, fragmented, and insufficient to stimulate sustained career interest.
iv. Residency programmes alone do not generate pipeline growth without structured undergraduate integration.

These findings demonstrate a system-wide pipeline failure, rather than isolated institutional gaps, and indicate that oncology workforce shortages will persist without targeted policy intervention.

7.3. Policy Context: Medical Education Expansion

Nigeria produced 4,399 medical graduates in 2024. The planned doubling of annual medical student intake will increase future graduate output to approximately 8,800 doctors annually.

This expansion:

- Does not automatically strengthen the oncology workforce,
- Does increase the scale at which effective HRH reforms can operate.

Without reform, intake expansion risks producing larger cohorts with the same low oncology uptake. With targeted interventions, it can act as a force multiplier, accelerating workforce development within the NCCP timeframe.

7.4. Strategic Objectives

The NCCP oncology HRH objectives are to:

1. Establish a predictable, scalable oncology workforce pipeline aligned with cancer burden.
2. Integrate mandatory oncology competencies into undergraduate medical education.
3. Leverage existing cancer service platforms as training multipliers.
4. Strengthen mentorship, incentives, and early-career development pathways.
5. Improve retention, working conditions, and professional support for oncology personnel.

7.5. Strategic Interventions

7.5.1 Governance and Coordination

Establish a National Oncology Education and Workforce Task Team comprising:

- Federal Ministry of Health & Social Welfare
- Federal Ministry of Education
- NUC, MDCN, PCN, MLSCN, NMCN etc and postgraduate colleges
- Universities, teaching hospitals, specialty societies and associations

Function: Workforce forecasting, target setting, coordination, and annual reporting.

7.5.2 Education and Training Reform

Revise national basic certificates minimum standards to mandate:

- Defined oncology competencies (prevention, diagnosis, treatment principles, palliative care),
- Structured oncology exposure (6 - 8 weeks integrated across clinical disciplines),
- Intentional formal oncology assessments.

7.5.3 Service-Linked Training Platforms

Designate accredited cancer centers as Oncology Training Hubs mandated to:

- Provide undergraduate rotations and electives,
- Host open tumour boards and teaching clinics,
- Deliver national virtual oncology teaching programmes.

7.5.4 Financing and Incentives

Create dedicated oncology HRH budget lines for:

- Student bursaries with service commitments,
- Oncology summer schools and research internships in Federal Tertiary Health

Institutions and Research Institutes (eg, NICRAT, NIMR, NIPRD)

- Early-career research seed grants,
- Teaching and mentorship infrastructure.

7.5.5 Retention and Work Environment

Align oncology HRH with national retention strategies by improving:

- Equipment uptime and staffing ratios,
- Protected teaching and supervision time,
- Psychosocial support, CPD, and fellowship pathways.

7.6. Quantitative Projections (Illustrative)

Scenario	Oncology uptake	Potential entrants/year	10-year potential
Status quo	~1%	44–88	440–880
Partial reform	~2%	~176	~1,760
Moderate reform	~3%	~264	~2,640
Comprehensive reform	~5%	~440	~4,400

Interpretation: Modest increases in oncology uptake (1% —› 3–5%) yield transformational gains when applied to an expanded graduate pool.

7.7. Implementation Plan and Key Performance Indicators (KPIs)

Phase 1: 0–6 months	KPIs
Task Team constituted	Task Team operational
Virtual oncology teaching launched	≥6 medical schools engaged
National mentorship network initiated	≥200 student–mentor matches

Phase 2: 6–18 months	KPIs
Revised MBBS standards approved	Oncology competencies adopted nationally
First Oncology Training Hubs accredited	≥5 hubs linked to ≥15 schools
	≥60% final-year students completing oncology exposure

Phase 2: 6–18 months	KPIs
Incentives and retention measures scaled	≥3% oncology residency application rate
HRH indicators embedded in NCCP M&E	Annual vacancy and attrition reporting
	Burnout indicators tracked

CHAPTER EIGHT: **COSTING**

The main objective of this section is to provide cost estimates for the five-year period of the National Cancer Control Plan 2026-2030 in order for stakeholders to understand the estimated resources required to implement the plan. The approach assumed an inflation rate of 5% for the Nigerian Naira (NGN)) on the cost estimates. The official exchange rate used to convert the NGN to the USD is NGN 1, 530: 1 USD.

The National Cancer Control Plan opted for an activity-based costing approach to provide as close to accurate as possible costing estimates to inform better budgeting at all levels. It also recognizes the different contributions required by the respective stakeholders involved in the implementation of the plan. It is important to note that many of these activities could be supported by development partners.

Table: Cost breakdown by Priority Area and year (in **one-hundred thousand Nigerian Naira)**

Pillars	2026	2027	2028	2029	2030	Total (5-year)
Risk Assessment, Prevention and Early Detection	405,144.65	405,144.65	405,144.65	405,144.65	405,144.65	2,025,723.25
Timely and Accurate Cancer Diagnostic Services	398.50	398.50	398.50	398.50	398.50	1,992.50
Treatment, survivorship and End-of-Life care	21,821.49	21,821.49	21,821.49	21,821.49	21,821.49	109,107.45
Monitoring, Evaluation, Registration, Surveillance and Research	24,655.52	24,655.52	24,655.52	24,655.52	24,655.52	123, 277.60
Advocacy, Partnerships, Coordination and Financing	2, 810.83	2, 810.83	2, 810.83	2, 810.83	2, 810.83	14, 054.15
Patient Navigation and Care Coordination.	425.50	425.50	425.50	425.50	425.50	2,127.50
Artificial Intelligence and Digital innovation in Cancer Care	454, 875.12	454, 875.12	454, 875.12	454, 875.12	454, 875.12	2, 274, 375.6
Grand total						**4,550,658.05**

S/N	Pillars	Amount (NGN)	Amount (USD)
1	Risk Assessment, Prevention and Early Detection	202,572,325,000.00	132,400,212.42
2	Timely and Accurate Diagnostic Services	199,250,000.00	130,288.76
3	Treatment, Survivorship and End-of-Life care	10,910,745,000.00	7,131,205.88
4	Monitoring, Evaluation, Registration, Surveillance and Research	12,327,760,000.00	8,057,359.48
5	Advocacy, Partnerships, Coordination and Financing	1,405,415,000.00	918,571.90
6	Patient Navigation and Care Coordination	212,750,000.00	139,052.29
7	Artificial Intelligence and Digital innovation in Cancer Care	227,437,560,000.00	148,652,000.00
	Grand total	**455,065,805,000.00**	**297,428,690.72**

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