Nigeria

National Cancer Control Plan
2018 – 2022

Contents

ABBREVIATIONS AND ACRONYMS

AORTIC	African Organisation 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	Federal Ministry of Health
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	National Cancer Control
NCCP	National Cancer Control Plan
NCD	Non-communicable disease
NGO	Non-governmental Organization
NHIS	National Health Insurance Scheme
NIMR	National Institute of Medical Research
NIPRID	National Institute for Pharmaceutical Research and Development
NPHCDA	National Primary Healthcare Development Agency
NUC	National University Commission
OSF	Open Society Foundation
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
SFH	Society for Family Health
SMoH	State Ministry of Health
SON	Standards Organisation 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

FOREWARD

The Federal Ministry of Health is deeply committed to the provision of high quality healthcare for all citizens of this country, especially the vulnerable and those in most need. It is against this backdrop that the Ministry is taking every step necessary to reduce the burden of disease and untimely death from all preventable causes.

Government's commitment to safeguarding the health of Nigerians assumes greater urgency in the case of Cancer because unlike most other disease conditions, it is complicated by psychological, social, economic and emotional consequences.

This Cancer Control Plan provides a clear road map as to how the Ministry envisions cancer control efforts for the country to be within the next five years and beyond. Beyond the cancer patients and their families, this plan will serve as launch pad to reduce the incidence and prevalence of cancer in Nigeria.

This Cancer Control Plan is the product of extensive cross-sectoral collaboration involving the government, academia, bilateral and multilateral organizations and civil society. I am optimistic that the diligent operationalization of this plan will bring about the way cancer control initiatives are implemented in this country.

I endorse and recommend the full implementation of the National Cancer Control Plan (2018-2022) for use in Nigeria especially by persons and organizations engaged in the work of cancer control. We appreciate our partners who have supported this process. It has not been an easy journey, but with their support, we have embarked on a pathway necessary to making Nigerians healthy. This is what the Federal Ministry of Health and Nigerian government stand for, and we remain committed to working with our partners to ensure that this Cancer Control Plan is fully implemented.

_____

Prof. Isaac F. Adewole FAS, FRCOG, FSPSP, DSc (Hons)
Honorable Minister for Health, Nigeria

ACKNOWLEDGEMENT

This Cancer Control Plan (CCP) has been developed by stakeholders from diverse backgrounds and expertise in cancer control and prevention. With a common vision to reduce the incidence and prevalence of cancer in Nigeria over the next 5 years and beyond, these stakeholders have focused their attention on strategies that will achieve the goals outlined in this document.

Federal Ministry of Health

and

African Palliative Care Association

American cancer Society

Cancer Control Steering Committee

Clinton Health Access Initiative

Elekta/JNC International Limited

Hospice and Palliative Care Association of Nigeria

Institute of Human Virology

International Atomic Energy Agency

Marie Stopes International

National Cancer Institute

Nigerian Cancer Society

Partnership for the Eradication of Cancer in Africa

Planned Parenthood Federation of Nigeria

Roche Products Limited

Society for Family Health

Stanford University

TANIT Medical Engineering Ltd/ Varian Medical Systems

The Albino Foundation

World Health Organization

All the stakeholders and others not mentioned in this document are appreciated. We also acknowledge the source of our data referenced in the document.

_____

Dr. Joseph Amedu mni,

Head, Department of Hospital Services, Federal Ministry of Health

CONTRIBUTORS

Name	Affiliation
Alemoh Lucy A	Federal Ministry of Health
Anita Okemini	Clinton Health Access Initiative
Ayisola Iroche	Roche Products Limited
Bernard John Ojonimi	Federal Ministry of Health
Comfort Daniel	Abuja Breast Cancer Support Group
Dogho-Afeofo Josephine	National Hospital Abuja
Dorcas M. Igeh	Egobekee Cancer Foundation
Dr. Abisola Adegoke	Federal Ministry of Health
Dr. Adamu Danladi Bojude	Federal Teaching Hospital Gombe
Dr. Bello Abubakar	National Hospital Abuja
Dr. Chika Nwachukwu	Stanford University, California, USA
Dr. Chris Igharo	American Cancer Society
Dr. David Atuwo	Federal Ministry of Health
Dr. Emeka Ofodire	Federal Ministry of Health
Dr. Faith Gregory Oweh	Partnership for the Eradication of Cancer in Africa (PECA)
Dr. Gregoire R. Williams	Partnership for the Eradication of Cancer in Africa (PECA)
Dr. Joseph Oihoma Onah	Clinton Health Access Initiative
Dr. Kayode S Adedapo	University Teaching Hospital, Ibadan
Dr. K. O. Ajenifuja	Obafemi Awolowo University Teaching Hospital, Ile-Ife
Dr. Kolawole Israel K	African Palliative Care Association/ University of Ilorin Teaching Hospital
Dr. Michael Odutola	Institute of Human Virology
Dr. Nwokwu Uchechukwu E	Federal Ministry of Health
Dr. Okai Haruna Aku	Planned Parenthood Federation of Nigeria
Dr. Okpii Emmanuel Chinedu	Planned Parenthood Federation of Nigeria
Dr. Olufunke Fasawe	Clinton Health Access Initiative
Dr. Otene Samuel Anaja	Hospice and Palliative Care Association of Nigeria/ Federal Medical Center, Makurdi
Dr. Owens Wiwa	Clinton Health Access Initiative
Dr. Oyegoke Adunola A	Federal Ministry of Health
Dr. Yinka Olaniyan	National Hospital Abuja
Dr. Peter Entonu	Society for Family Health
Dr. Ramatu Hassan	Federal Ministry of Health
Dr. Shehu U. Abdullahi	Aminu Kano Teaching Hospital
Dr. Teniola Akeredolu	Institute of Human Virology
Dr. Usman Malami Aliyu	Usman Dan Fodio University Teaching Hospital, Sokoto
Francis E Ibeke	Federal Ministry of Health
Gloria Orji	Project Pink Blue
Gyang Alice R	Federal Ministry of Health
Hannah J. Adagi	Federal Ministry of Health

Jake Epelle	The Albino Foundation
Jeff Grosz	Clinton Health Access Initiative
Kalina Duncan	Center for Global Health, National Cancer Institute, USA
Khalid Kassim	Yakubu Gowon Foundation
Leslie Given	Strategic Health Concepts, working with the Center for Global Health, National Cancer Institute, USA
Mishka Cira	Center for Global Health, National Cancer Institute, USA
Mojisola Rhodes	Clinton Health Access Initiative
Moyosere Adedibu	Marie Stopes International
Nneka Onyekaonwu	ISN Medical
Ochor Uzoma Noruh	Federal Ministry of Health
Oluwayemisi Adunola Louis	Roche Products Limited
Paulette Ibeka	Clinton Health Access Initiative
Pharm. Chukwudi Ehibudu	Roche Products Limited
Pharm. Emmanuel Ede	Society for Family Health (SFH)
Pharm. Fapohunda Kolapo	Roche Products Limited
Pharm. Lanre Arokoyo	Roche Products Limited
Pharm. Wale Akinbowale	Roche Products Limited
Prof. Agnes Nonyem Anarado	University of Nigeria Enugu Campus/University of Nigeria Teaching Hospital, Enugu
Prof. Ami Bhatt	Stanford University, California, USA
Prof. Bala M Audu	University of Maiduguri Teaching Hospital
Prof. E. U. Ajuluchuku	Federal Teaching Hospital Abakaliki/Ebonyi State University
Prof. Femi Ogunbiyi	University College Hospital, Ibadan
Prof. F. A. Durosinmi-Etti, OFR	Consultative Committee on Cancer Control/Lagos University Teaching Hospital
Prof. Hadiza Galadanci	Aminu Kano Teaching Hospital, Kano
Prof. Ifeoma Okoye	University of Nigeria Teaching Hospital, Enugu
Prof. Obiageli Nnodu	University of Abuja Teaching Hospital
Prof. Rollings Jamabo	University of Port Harcourt Teaching Hospital
Prof. Rose Anorlu	Lagos University Teaching Hospital
Prof. Sani Malami	Nigerian Cancer Society
Prof. Sunday Adeyemi Adewuyi	Ahmadu Bello University Teaching Hospital, Zaria
Runice C.W Chidebe	Project Pink Blue
Temitope Olukomogbon	Institute of Human Virology
Zainab T. Mahmood	FMoH

EXECUTIVE SUMMARY

This National Cancer Control Plan (NCCP) outlines key goals and objectives for Nigeria's cancer control efforts, and details the strategies that will allow the country to achieve its aims, while recognizing important challenges. The NCCP is guided by a set of core principles, namely: accountability, ownership, equity, integration, efficiency, sustainability, flexibility and transparency. Reflecting on the most recent Cancer Control Plan (2008-2013), seven priority areas of action were identified to guide cancer control initiatives in the country within the next 5 years and beyond.

Within the Cancer Control Plan, the Strategic Framework enumerates strategies to improve the country's cancer control program. The strategic framework for all the priority areas of action hinges on Health System Strengthening. The Strategic Framework's strategies are categorized based on priority areas of action, and performance indicators have been developed for each. The implementation framework details the activities, output, risk/mitigation strategies, responsible parties and expected delivery date for each. The monitoring and evaluation (M&E) framework describes a regular reporting structure, and seeks to ensure that data are available in a timely manner and used in decision making.

The National Cancer Control Program of the Federal Ministry of Health (FMoH) will serve as the coordinating body for the implementation of the National Cancer Control Plan. The FMoH, all 36 States and Federal Capital Territory (FCT) with support of the national cancer steering committee and development partners, will be responsible for the implementation of the plan. The states will develop annual operational plans that feed into the National Cancer Control Plan. The National Cancer Control program will support the states with the continuous monitoring and evaluation of the plans to ensure accountability.

Consequent upon the above, the total budget to implement this plan for the period January 2018 to December 2022 is estimated at NGN 97, 321,725,422.53 (USD 308,957,858.48). It is expected that the government (Federal and State) will provide 75% of the funding required to implement this plan while the donors and development partners will support by bridging the funding gap of 25 % over the next five years.

Finally, the Cancer Control Plan was developed through a consultative process that included stakeholders from the government, Federal Ministry of Health, academia, professional associations, pharmaceutical industry, development partners, cancer survivors and various facets of society. External reviews were provided by the Center for Global Health, at the National Cancer Institute, and a team of oncologist from the Stanford University, both in the United States of America.

_____

Dr. David Atuwo
National Coordinator, National Cancer Control Program, Federal Ministry of Health

SECTION 1 INTRODUCTION

Global Cancer Burden

Globocan estimates that there were 14.1 million new cancer cases, 8.2 million cancer deaths and 32.6 million people living with cancer (within 5 years of diagnosis) in 2012 worldwide. 57% (8 million) of new cancer cases, 65% (5.3 million) of the cancer deaths and 48% (15.6 million) of the 5-year prevalent cancer cases occurred in the less developed regions. The overall age standardized cancer incidence rate is almost 25% higher in men than in women, with rates of 205 and 165 per 100,000, respectively. Male incidence rates vary almost five-fold across the different regions of the world, with rates ranging from 79 per 100,000 in Western Africa to 365 per 100,000 in Australia/New Zealand (with high rates of prostate cancer representing a significant driver of the latter). There is less variation in female incidence rates (almost three-fold) with rates ranging from 103 per 100,000 in South-Central Asia to 295 per 100,000 in Northern America.

Projections from Globocan 2012 show that lower-income countries were home to 57% of new cancer cases and 65% of cancer deaths in 2012. Their share of the global incidence is expected to increase to approximately 70% of the predicted 24 million people who will be diagnosed with cancer annually by 2050. Breast cancer is the second most common cancer in the world and, by far, the most frequent cancer among women with an estimated 1.67 million new cancer cases diagnosed in 2012 (25% of all cancers).

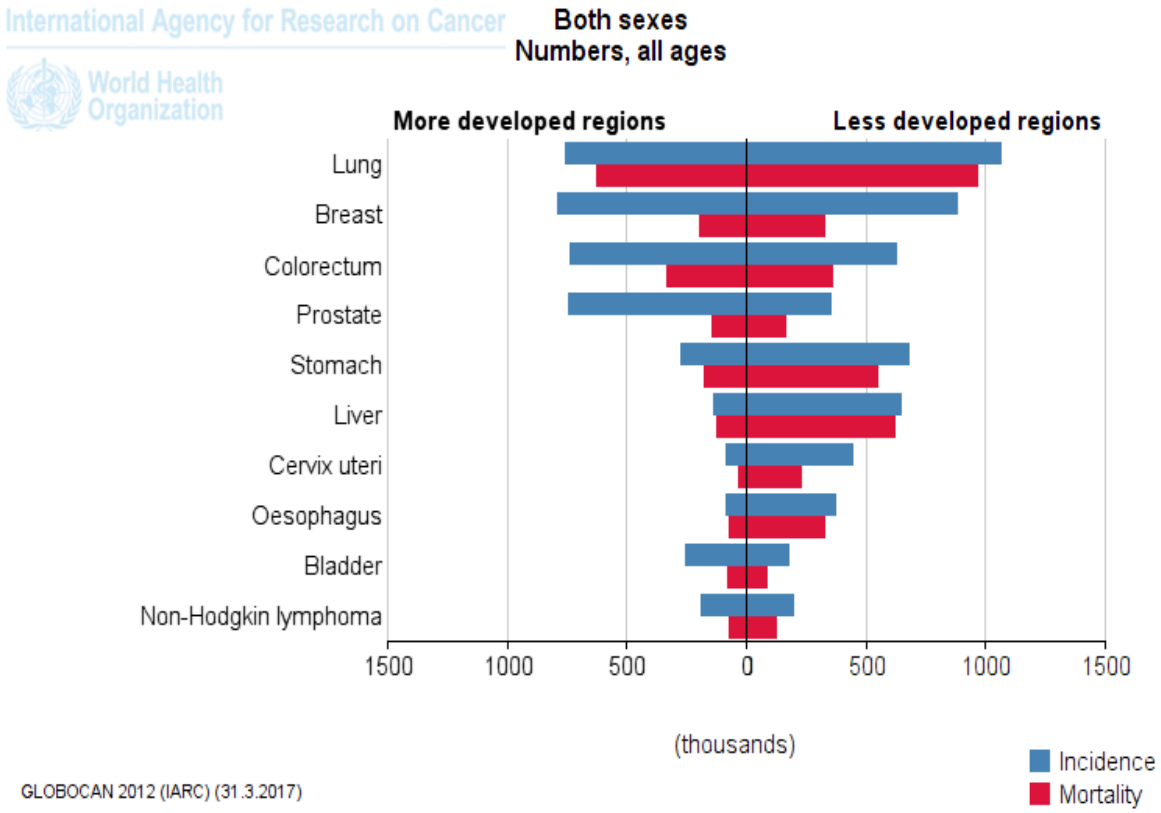
Liver cancer is the second most common cause of death from cancer worldwide, estimated to be responsible for nearly 746,000 deaths in 2012 (9.1% of the total). Liver cancer is largely a problem of the less developed regions where 83% (50% in China alone) of the estimated 782,000 new cancer cases worldwide occurred in 2012. It is the fifth most common cancer in men (554,000 cases, 7.5% of the total) and the ninth in women (228,000 cases, 3.4%). The prognosis for liver cancer is very poor (overall ratio of mortality to incidence of 0.95), and as such the geographical patterns in incidence and mortality are similar.

Colorectal cancer is the third most common cancer in men (746,000 cases, 10.0% of the total) and the second in women (614,000 cases, 9.2% of the total) worldwide. Almost 55% of the cases occur in more developed regions. Mortality is lower (694,000 deaths, 8.5% of the total) with more deaths (52%) in the less developed regions of the world, reflecting a poorer survival in these regions.

Cervical cancer is the fourth most common cancer in women, and the seventh overall, with an estimated 528,000 new cases in 2012. A large majority (around 85%) of the global burden occurs in the less developed regions, where it accounts for almost 12% of all female cancers. There were an estimated 266,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths. Almost nine out of ten (87%) cervical cancer deaths occur in the less developed regions.

Prostate cancer is the fourth most common cancer in both sexes combined and the second most common cancer in men. An estimated 1.1 million men worldwide were diagnosed with prostate cancer in 2012, accounting for 15% of the cancers diagnosed in men, with almost 70% of the cases (759,000) occurring in more developed regions. With an estimated 307,000 deaths in 2012, prostate cancer is the fifth leading cause of death from cancer in men (6.6% of the total men deaths).

Breast cancer ranks as the fifth cause of death from cancer overall (522,000 deaths) and while it is the most frequent cause of cancer death in women in less developed regions (324,000 deaths, 14.3% of total), it is now the second cause of cancer death in more developed regions (198,000 deaths, 15.4%) after lung cancer.



Sub-Saharan Africa and Nigeria Cancer Burden

Sub-Saharan Africa's cancer burden is significant and growing. Based on Globocan estimate of 2012, there were an estimated 626,400 new cases of cancer and 447,700 deaths from cancer in Sub-Saharan Africa. Based on population aging alone, cancer incidence in Sub-Saharan Africa is projected to increase by 85% in the next fifteen years. Cancer in Africa is characterized by late presentation, low access to treatment, and poor treatment outcomes. Delays in access to cancer treatment result in 80-90% of cases that are in an advanced stage at the time of arrival to treatment.

Table 1: Top Five Cancers of greatest burden in Nigeria

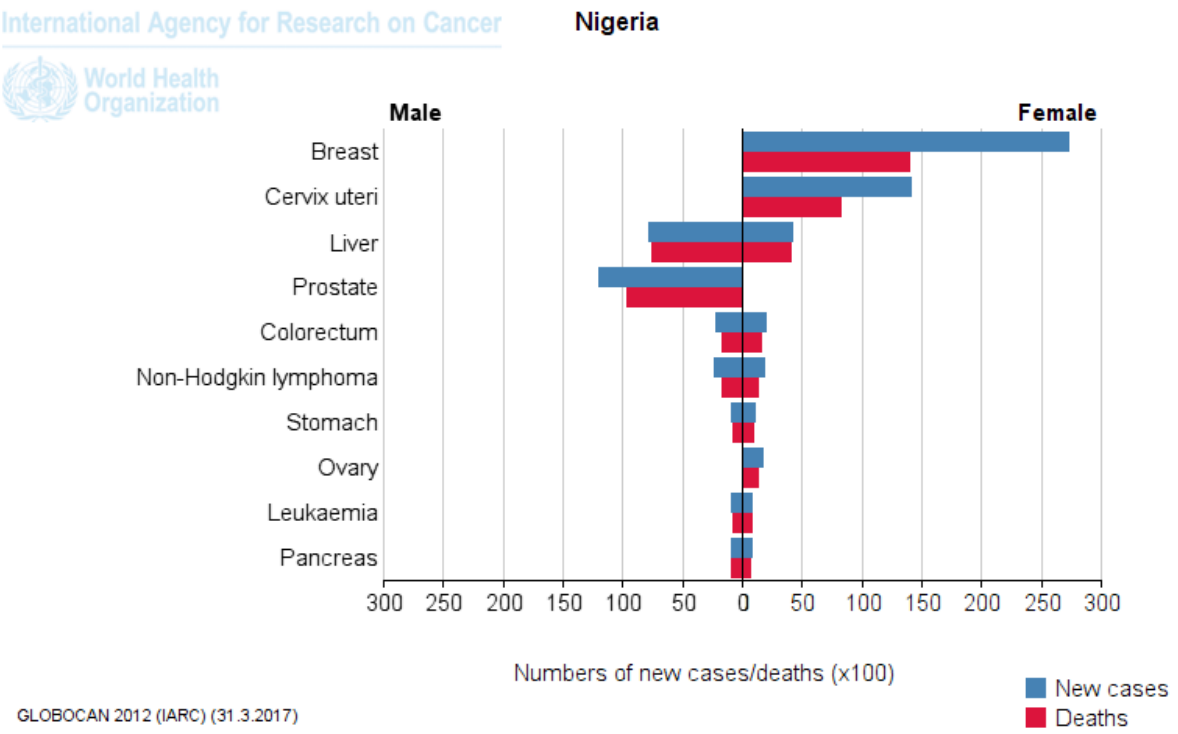
Male	Female	Both sexes
Prostate	Breast	Breast
Liver	Cervix uteri	Cervix uteri
Non-Hodgkin lymphoma	Liver	Liver
Colorectal	Colorectal	Prostate
Pancreas	Non-Hodgkin lymphoma	Colorectal

Globocan 2012 Data

Cancer is responsible for 72,000 deaths in Nigeria every year, with an estimated 102,000 new cases of cancer annually. Table 1 presents the five cancers of greatest burden in Nigeria. The data in the table shows breast and cervical cancers as the two most common types of cancer responsible for approximately 50.3% of all cancer cases in Nigeria[1,]. Particularly challenging, is the mortality incidence ratio of cancer for Nigeria when compared to other Nations. For example, while in America, 19% of all breast cancer cases result in death, this percentage is 51% in Nigeria, triple the rate seen in the US.

In addition to the high mortality incidence ratio of cancer, the availability and quality of cancer data presented for Nigeria is poor. The Globocan data estimation system presents low scores for availability of mortality and incidence data in Nigeria. For cancer incidence in Nigeria, the 2012 cancer incidence data presented by Globocan are estimated as the weighted average of local incidence rate from available regional data. In the case of cancer mortality data the quality has an even lower value based on the method of estimation. Considering the absence of mortality rates for the country, the rates presented for 2012 were arrived at after modeling survival rates from the weighted incidence rates for the country. This reveals a very critical need in overhauling the country's cancer registry.

[1] Globocan 2012 data



Review of Nigeria Cancer Plan 2008 – 2013

The Nigeria Cancer Plan 2008-2013 had goals and priority areas that were achieved with some still in the process of being implemented while others are yet to commence. The table below summarizes those priority areas at the various stages of implementation before the timeline for the Nigeria Cancer Plan elapsed in 2013. The insights obtained based on reflections from the goals, priority areas and strategies have greatly informed the development of the 2018-2022 Plan.

Completed	In progress	Not started
○ Increased cancer Information dissemination, education and cancer outreach services nationwide ○ Increased opportunities for cancer training for relevant healthcare providers and advocates. This has led to the development of training programs for multidisciplinary cancer management. ○ Improved the documentation of the location and quality of	○ The development of policy and regulation priorities for cancer care and services within the context of non-communicable diseases (NCD). The NCD policy has not been completed. ○ On-going improvement in access to clinical services for cancer prevention, early detection, diagnoses and treatment ○ On-going effort in encouraging cancer facilities to register at	○ Integration of primary prevention into primary health care (PHC) delivery. HPV vaccine yet to be introduced into the PHC routine vaccine schedule ○ The development of a comprehensive database of private and public funding agencies of cancer scientists in Nigeria

existing cancer facilities, manpower and services through the establishment of national and regional registration centers for cancer facility proposed activities ○ Improved the cancer surveillance system to delineate public health priorities as well as plan and monitor comprehensive strategies for cancer control. We have graduated from 3 registries to 24 hospital based registries, 6 of which are population based. ○ Facilitated the process of quality palliative care services including pain control through advocacy to lift the ban on importation of narcotic analgesics.	the regional and national registration centers. Partner groups and NGOs are still not reporting data ○ Improved cancer research capacity in the country. Worked with National Institute of Medical Research (NIMR) and National Institute for Pharmaceutical Research and Development (NIPRID) to publicize the need for research and how other research agencies and institutions can access funds.	○ The development of opportunities for the dissemination of cancer research findings to other researchers, academia, policy makers and the general public in Nigeria ○ The comprehensive survey of all the cancer data sources in the country ○ Creation of opportunities for national and international cancer research collaborations among institutions and scientists ○ Establishment of palliative care units at tertiary facilities despite availability of palliative nurses.

SECTION 2 STRATEGIC FRAMEWORK

Vision

To reduce the incidence and prevalence of cancer in Nigeria

Mission

To reduce exposure to risk factors of cancer; establish a framework to ensure access to cancer screening, care and improved quality of life of people affected by cancer.

Goals

1. Make screening services and early detection of cancer available for all Nigerians
2. Improve access to quality, cost effective and equitable diagnostic and treatment services for cancer care
3. Achieve best possible quality of life for patients and families facing a life limiting/threatening or terminal cancer

4. Increase cancer awareness and advocate for cancer control amongst the populace.
5. Conduct and support integrated programs that provide high quality population and facility based cancer data for dissemination, research and planning.
6. Ensure the availability of drugs, consumables and functional equipment for cancer care in Nigeria
7. Ensure effective coordination and adequate resources for cancer in Nigeria.

Outcomes

- Reduce incidence of common cancers in Nigeria;
- Improved Financing from Government, Private Sector, NGO'S/CSO's
- Reduce Morbidity and Mortality through early detection methods.

Timeframe

The plan will be implemented over a five-year period 2018 – 2022. The plan will be implemented in phases based on impact and feasibility as follows:

Phase I – This phase covers short term, high impact and feasible activities to be implemented from 2018 – 2019.

Phase II – This phase covers medium and long-term actions to be implemented from 2020 – 2022
Adjustments may be made periodically to this phasing depending on existing resources and evidence.

Guiding Principles:

The following principles will guide implementation of the plan:

- Ownership and accountability - The government must play a leading role in the development and implementation of the policy and be accountable.
- People-centered – Interventions and initiatives must adhere to a people-centered approach.
- Encompass the entire cancer care continuum from primary prevention to tertiary care.
- Involving the whole of society – Building multi-sectoral partnerships and community participation are essential to a successful implementation of the plan.
- Integral to health systems strengthening
- Flexibility through a phased approach – A phased approach to allow for flexibility to intervene at different points along the continuum depending on our local situation, capacity and resources.
- Continuous monitoring and evaluation that reveal outcome to inform efficient implementation of the plan

SECTION 3 PRIORITY AREAS OF ACTION

3.1 **Goal 1A and 1B - PREVENTION**
3.2 **Goal 2 - TREATMENT**
3.3 **Goal 3- HOSPICE AND PALLIATIVE CARE**
3.4 **Goal 4 - ADVOCACY AND SOCIAL MOBILIZATION**
3.5 **Goal 5 - DATA MANAGEMENT AND RESEARCH**
3.6 **Goal 6 - SUPPLY CHAIN MANAGEMENT AND LOGISTICS**
3.7 **Goal 7 - GOVERNANCE & FINANCE.**

3.1 PREVENTION

GOAL 1A: Encourage lifestyle modifications that reduce contact between individuals and carcinogens for all Nigerians.

Situational Analysis

Cancer prevention is defined as the reduction of cancer mortality via reduction in the incidence of cancer. This can be accomplished by avoiding a carcinogen or altering its metabolism; pursuing lifestyle or dietary practices that modify cancer-causing factors or genetic predispositions; medical interventions (e.g., chemoprevention), vaccination or risk-reduction surgical procedures[2]. In Nigeria, the absence of an enabling legislation that reduces the exposure of Nigerians to carcinogens e.g. tobacco use, alcohol consumption, food labeling, mandatory vaccination, expiration dates etc. has significantly increased the risk of developing cancers. This can be mitigated by legislation and creation of appropriate awareness and increased taxation on tobacco products and alcoholic beverages.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. To attain 90% coverage for Human Papilloma Virus (HPV) vaccine coverage, among eligible population-(children aged 9-13yrs) in Nigeria by 2022.	1.1 To extend the National immunization programme to include HPV vaccination for children aged 9-13yrs	Percentage coverage for 2 doses of the HPV vaccine.

[2] https://www.cancer.gov/about-cancer/causes-prevention/hp-prevention-overview-pdq

2. To attain 95% Hepatitis B vaccination coverage among eligible Nigerians by 2022	2.1 Institute a mandatory Hepatitis B vaccination for eligible children	Percentage of the eligible population vaccinated with full dose of Hepatitis B vaccines.
3. To stop the smoking of tobacco in public places.	3.1 To drive the enforcement of the law prohibiting smoking in public places with deployment of 'no smoking' signs and increased taxation on tobacco products 3.2 To create designated smoking areas in public places	The proportion of public places with 'no smoking' signs and full compliance The proportion of public places with designated smoking areas created.
4. To create awareness on the health impact of consumption and usage of carcinogenic substances.	4.1 To enforce the inclusion of disclaimer messages on all promotions/advertisement of food, drugs, cosmetics and beverages. 4.2 Use of Social Behavioral Change Communication (SBCC) to drive healthy lifestyle modification	50% increase over the baseline survey for Knowledge, Attitude and Practice.

Goal 1B: Make screening services and early detection of cancer available for all Nigerians

Situation Analysis

In Nigeria the absence of well-coordinated national screening programs has significantly contributed to late presentation of most cancer patients. In the short-term, the government at all levels can coordinate the existing screening programs by different organizations to increase the uptake of screening services. Long term, Government at all levels should incorporate routine screening of the eligible cancers into existing health programs. In Nigeria today, it is impossible to screen for all cancers. The following cancers are of public health importance: breast, cervical, prostate & colorectal cancers and can be prevented through early detection by screening.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. To achieve greater than 50% screening of eligible population by 2022	2.1 Conduct baseline survey to determine eligible population	Percentage increase of the baseline covered each year
	2.2 Establish a functional service taskforce/body that provides recommendations/guidelines for screening and early detection programs for common cancers in Nigeria	Percentage of national screening programs that follow recommendations/guidelines for addressing the detected abnormalities
	2.3 Conduct outreaches to underserved and hard to reach communities to promote awareness of cancer screening programs	
	2.4 Establish Nation-wide routine screening programmes for breast; cervical; prostate and colon cancers	
2. To refer all screened positive cases for treatment	2.1 Develop and disseminate referral protocol across all levels of care	Percentage of referred cases that get treated
3. To ensure that 40% of all levels of health care are strengthened to support cancer screening/early detection	2.2 Institutional capacity development to deliver cancer screening/early detection	Percent of Health facilities at all levels of healthcare (primary, secondary and tertiary), providing screening/early detection
	2.3 Use see and treat model to establish long-term follow up and referral	

3.2 DIAGNOSIS AND TREATMENT

GOAL 2: To improve access to quality, cost effective and equitable diagnostic and treatment services for cancer care

Situational Analysis

The management of cancer involves the use of a multi-modal approach which includes surgery, chemotherapy, radiotherapy, nuclear medicine and palliative care. The absence of a well-structured tumor board at the comprehensive cancer care centers affects the quality of care cancer patients receive. The country only has 8 public and 1 private comprehensive cancer care centers. These comprehensive cancer care centers are expected to offer pathology, molecular and imaging diagnostics, with any or a combination of surgery, chemotherapy, radiotherapy and nuclear medicine services as part of treatment for cancer patients. Most times, these centers are non-functional because the machines are down which further worsens the timely access to treatment in Nigeria. The country doesn't have medical oncology as a specialty rather those trained as radiation oncologist also have training in the administration of chemotherapy. In some centers, the surgeons also administer chemotherapy to their patients.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. To increase by at least 50% the functionality of the comprehensive cancer care centers by the year 2022	1.1 Strengthen cancer care and management services	Number of comprehensive cancer care centers in the country that can offer radiotherapy as part of treatment for cancer patients
2. To increase human capacity development for healthcare personnel in cancer diagnosis and treatment by 60% by the year 2022	2.1 Improve health care providers knowledge on standards of care for effective treatment and quality cancer care	Number of comprehensive cancer care centers in the country with a functional multi-disciplinary tumor board
	2.2 Update the treatment guideline for the management of cancer patients	Number of comprehensive cancer centers in the country that have adopted and implemented the updated treatment guideline for the management of cancer patients
	2.3 Establish Medical Oncology and Nuclear medicine specialties in the post graduate	Medical oncology and nuclear medicines specialties established in the postgraduate medical colleges

	medical colleges (West African College of Physicians and National Postgraduate Medical College.	

3.3 SUPPLY CHAIN MANAGEMENT (LOGISTICS)

GOAL 3: To ensure the availability of drugs, consumables and functional equipment for cancer care in Nigeria

Situational Analysis

Medical devices are assets that directly affect human lives. They are considerable investments and in many cases have high maintenance costs. It is important therefore, to have a well-planned and managed maintenance program that is able to keep the medical equipment in a health-care institution reliable, safe and available for use when it is needed for diagnostic procedures, therapy, treatments and monitoring of patients' treatment progress[3].

The decline in the number of available radiation therapy units speaks to a poor maintenance culture in Nigeria. Whereas machine breakdown is a common event at the best of times, the overwhelming demand on existing facilities makes a breakdown almost inevitable. There is a need to factor in the cost of operation and continuous maintenance of equipment in the establishment of radiation therapy centers. The lack of a sufficient number of trained maintenance engineers makes the turnaround time for repairs very long. There is a need to procure radiation therapy equipment with input from end users. Most items are purchased second-hand without operation manuals and accessories and without an established contract for repair with suppliers at the time of installation. There is no accredited maintenance group and no quality assurance manual[4].

The chemotherapy market in Nigeria is currently defined by a fragmented supplier landscape, low volumes, variable quality, and a lack of transparency in pricing. As a result, the top quality generic manufacturers often do not bid on tenders in these markets, leading to lower quality and less price competition.

[3] Medical equipment maintenance programme overview WHO Medical device technical series

[4] Irabor OC, Nwankwo KC, Adewuyi SA. The Stagnation and Decay of Radiation Oncology Resources: Lessons from Nigeria. Int J Radiat Oncol Biol Phys. 2016 Aug 1; 95(5):1327-33. doi: 10.1016/j.ijrobp.2016.04.026.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. Establish a functional and sustainable supply chain mechanism by the year 2020	1.1 Strengthen oncology supply chain management system	Percent of identified gaps from the assessment of the country oncology supply chain that is addressed
2. Develop a robust maintenance strategy for equipment used in the management of cancer patients by the year 2020	2.1 Ensure availability of functional equipment for the management of cancer patients in all the comprehensive care centers	Percent of time that all the laboratory, pathology, diagnostic radiology, nuclear medicine and radiotherapy equipment in the country at the government owned comprehensive cancer care centers are functions
	2.2 Build capability of local equipment maintenance staff on planned and corrective maintenance.	Number of local engineers trained that are working in each of the comprehensive cancer care centers
3. Establish a coordinated procurement mechanism that will drive cost reduction by an estimated 40-50% for cancer drugs and consumables by the year 2020	3.1 Ensure all comprehensive cancer care centers in Nigeria centrally procure oncology drugs and consumables	Percent of comprehensive cancer care centers that pool procurement of chemotherapy drugs
	3.2 Ensure visibility into stock availability across the different layers of the supply chain	Percent of comprehensive cancer care centers that report no stock out of, analgesics, antiemetic and commonly used chemotherapy drugs for breast, cervical, prostate, colorectal, liver, and other high burden cancers in Nigeria

3.4 HOSPICE AND PALLIATIVE CARE

GOAL 4: To provide the best quality of life for cancer patients, survivors, and their families

Situation Analysis

Palliative care is defined as an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering, by means of early identification and impeccable assessment, and treatment of pain and other problems, physical, psychological, social and spiritual. This holistic approach to care, which incorporates all domains of human experience of illness, is traditionally applied to help cancer patients and their families cope with the effects of the disease and the side effects of cancer treatment. Comprehensive cancer control encompasses primary prevention, early detection/screening, treatment and palliative care. The palliative care component of cancer control needs further emphasis in Nigeria because many of our cancer patients have no hope of cure as they present to hospital late, which makes the disease far advanced at presentation, when cure is no-longer feasible or curative treatments such as surgery and radiotherapy may not be available or affordable. Palliative care then remains the only source of succor. WHO declares that "The provision of palliative care for all individuals in need is an urgent humanitarian responsibility".

The need for palliative care will continue to grow as a result of the rising burden of non-communicable diseases and ageing population. Based on WHO's estimation of need for palliative care as 1% of a country's total population, Nigeria with an estimated population of 170 million inhabitants as at 2012, would have an estimated palliative care burden of about 1.7 million.

Palliative care is at its infancy in Nigeria compared to Eastern/Southern Africa. Nigeria does not have a palliative care policy. However, approval has been given by the Honorable Minister of Health to develop a policy document.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. Develop and support the adoption of national guidelines and policy for Hospice and Palliative Care (HPC) by the year 2019	1.1 Develop Nationally acceptable guidelines and policies for providing quality HPC services for all cancer survivors	Number of facilities using existing guidelines and policy document for hospice and palliative care services
2. Increase access to quality palliative care services for cancer patients and their care givers at all levels of health	2.1 Generate comprehensive data base of palliative care needs of the country and available facilities, manpower and drugs by	Available comprehensive data on patient load, facilities, manpower and

care by 75% by2022.	2018 and annually update through registration	drugs across the country.
	2.2 Establish a HPC unit in every facility that provides cancer care across the country with a focus on including providers of psychosocial support	Number of cancer care facilities that have a HPC unit that has adopted the HPC guidelines
	2.3 Develop the capacity of facilities to optimally adhere to the developed HPC guidelines for cancer survivors and their caregivers	Number of providers trained on adherence to the HPC guidelines
	2.4 Increase availability of HPC services	
	2.5 Build capacity of formal and informal care-givers to provide effective HPC	
3. Increase by 25% yearly e improved access to pain management for cancer patients and survivors	3.1 Establish a functional Drug Revolving Fund (DRF) for narcotic medicines.	Functional drug revolving fund established
	3.2 Develop pain management guidelines	Existing document on pain management guidelines
	3.3 Build capacity of healthcare workers on pain management	Number of healthcare workers trained on effective pain management
	3.4 Support the local production of narcotic medicines to drive down the price and increase access for cancer survivor	Number of local manufactures that produce and supply narcotics to health facilities
4. Increase by 25% yearly population awareness on hospice and palliative care	4.1 Integrate Palliative care into curriculum of healthcare providers	Number of Training Institutions with Full integration of hospice and palliative care into the curricula of healthcare professionals.
	4.2 Establish National training scheme to provide continuing education	

	programme for practicing healthcare providers in Clinical training/skills acquisition	Number of Healthcare workers who have undertaken Updates in ongoing continuous palliative care education program.
	4.3 Educate the public on palliative care, hospice care and end-of-life care using the PPP Model.	Annual achievement of 25% increase in population awareness of palliative care, hospice and end-of-life care in the country by 2022

3.5 ADVOCACY AND SOCIAL MOBILIZATION

GOAL 5: Increase cancer awareness and advocate for cancer control amongst the populace.

Situational Analysis

One of the important ways of reducing the burden of cancer in Nigeria is the use of advocacy and social mobilization. With Nigeria signing and adopting a political declaration of the United Nations high level meeting on the prevention and control of Non communicable disease, the ground is ripe for an immediate action and advocacy for change through various forms of persuasive communication to create an environment conducive for improving cancer awareness, encouraging early presentation, reducing barriers to cancer control, developing a comprehensive cancer advocacy plan and allocating necessary resources for priority interventions to reduce the cancer burden in Nigeria.

There are well organized social and faith based organizations as well as community leaders willing to work with health workers in the primary health care and community ward facilities to achieve the overall goal of improving the health of the nation as relates to cancer. Considering the growing use and reach of social media, the existing mass media networks and the increasing numbers of corporate organizations that are willing to have improved and coordinated working relationships. Nigeria is placed to benefit from the incorporation of the existing community health workers into a mass national cancer awareness campaign. Such campaigns will be the vessel through which harmful practices and cultural beliefs can be identified and appropriately addressed to mitigate the devastating impact in our society.

A precise advocacy strategy for a comprehensive cancer control would involve collaborative action that will be aimed at decision makers, targeting influential leaders and groups, and the general public in order to mobilize the whole society in a sustained fight against cancer. Currently, cancer control

sensitization activities at all the level of government are very low or non-existent. Although human resource for cancer advocacy is poor, existing structures such as primary health care systems (PHC's), community based organizations and health workers are opportunities for advocacy. We have able existing structures mainly for HIV prevention that is motivated by NGOs and International organization's support and funding. If such can be sought for and applied to cancer control and prevention we are going very far.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. To plan and conduct effective cancer awareness and sensitization activities across the 36 states and FCT by 2022.	1.1 National, Zonal, States, local government and grassroots cancer education and awareness	Number of States implementing Cancer awareness activities based on the national cancer control plan (2018-2022)
2. To increase by 25% yearly, human resource capacity in advocacy for effective cancer control among stakeholders in all sectors of society	2.1 Capacity Building in advocacy for maximum dissemination of information on cancer control.	Number of community health workers, nurses, journalist, clergy, youths and community leaders.
3. Advocate for the mainstreaming of cancer prevention interventions into existing structures at all levels by 2022.	3.1 Involve varied societal groups in the cancer awareness	Percent of institutions at (primary and secondary levels) implementing prevention interventions
4. To continuously advocate for cancer care and control legislation and support from policy makers, community leaders and philanthropists until 2022.	4.1 To advocate for additional registries.	Number of new Cancer care and Control legislation/policies passed

5. To mitigate harmful cultural practices and beliefs	5.1 Engage community influencers and leverage on media links	Number of sensitization meetings, dialogues and trainings held with herbalist and faith healers.

3.6 DATA MANAGEMENT AND RESEARCH

GOAL 6: To conduct and support integrated programs that provides high quality cancer data for dissemination, research and planning

Situation Analysis

Nigeria has graduated from having just 3 to 284 registries, 96 of which are population based (and 198 hospital-based). In addition, there exists a Nigerian National System of Cancer Registry that coordinates all cancer registries activities in the country. We have both institutional and state based registries and by 2013 from 18 states we captured approximately 6452 cases yearly but not zonal.[5] Even though all the cancer registries have the CanReg5 software designed by the WHO/IARC for data management, some of them are still not comfortable using it. The absence of a central coding system leads to poor data quality. The major challenge of the registries is lack of funding and continuous training of registry staff. In Nigeria, clinical and population-based research studies in oncology aren't well developed however; the nation plans to achieve significant progress on this over the next 5 years.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. To increase the registration of cancer cases from less than 10% yearly to more than 50% through effective cancer registration programs by the year 2022.	1.1 Integrate data collection for cancer into the Health management information systems (HMIS)	Number of hospital-based cancer registries with data captured in their HMIS tool
	1.2 Establish/strengthen cancer registries with a focus on population based cancer registries that capture the incidence and prevalence of different cancers per geo-political zone	Number of population-based cancer registry that are able to capture 80% of projected cancer cases with 80% validity and completeness on a timely basis
	1.3 Implement/Strengthen data flow on cancer case referral between the different levels of health care	Data flow system developed and operationalized
	1.4 Legislate for compulsory reporting of cancer cases i.e. make cancer a reportable disease	

[5] Cancer in Nigeria book, 2009-2013

2. Support effective data management of cancer-related data	2.1 Establish a centralized data base to capture all cancer programs implemented by government, NGOs and CSOs	A centralized Cancer Program Database developed and operationalized Number of cancer programs implemented by Government, NGOs and CSOs that are captured by the centralized cancer program data base
	2.2 Adopt the use of CanReg5 as a system for data collection, management and assessment of all cancer data to support early detection, prevention, treatment and palliative care programs by 2022.	Cancer data management system developed
	2.3 Create an effective mechanism for supervision, monitoring and evaluation of facilities and programs implementing cancer interventions across the country	Supportive supervision tools for cancer programs developed. % of programs that utilize supportive supervision tools
3. To secure funding and technical support for 80% of (of education, training and) research activities on prevention, early detection and management of cancer	3.1 Establish a fund for cancer research pooled from: academia (TETFUND, Government Ministries (through a budget line created for research) , companies that contributes to environmental pollution and other risk factors of cancer e.g. tobacco, telecoms and oil companies and International partner Public private partnership: telecoms, Oil &Gas	All sources of funds for cancer research identified. 0.5% of profit of companies identified goes into research fund Budget line for cancer research developed in the ministries (Health, Agric., Women Affairs etc.)
	3.2 Develop capacity for competitive grant proposal development for cancer research	Number of trainings and personnel trained on grant proposal development for cancer research

4. Support survey on Cancer prevalence across different populations	4.1 Implement a routine cancer surveillance to provide data for obtaining an annual report that presents cancer incidence in the country	

3.7 GOVERNANCE AND FINANCE

GOAL 7: To ensure effective coordination and adequate resources for cancer control and care in Nigeria

Situational Analysis

There is an existing leadership framework within the Federal Ministry of Health, which consists of the National Cancer Control Programme and, the Non-Communicable Diseases Unit. As with all departments in the FMoH, both report to the Honorable Minister of Health through the Department of Hospital Services and the Department of Public Health respectively. The functions of these two entities are however often impaired due to inadequate coordination of activities, funding, poor capacity and competing priorities. Poor coordination in Nigeria's cancer space affects provision of effective cancer care and control in the country. The product of this inadequate cancer control measures include: few well equipped cancer treatment centers, absence of treatment protocols, as well as inadequate infrastructure and manpower.

There ae other factors relating to access to service that negatively impact cancer control and are further aggravated by the poor coordination of activities in the space. Factors like prevailing poverty, the inadequate number of treatment centers, the high cost of cancer treatment and, poor uptake of health insurance services giving rise to low enrolment into the scheme, exacerbate cancer control in Nigeria. The implementation of efficient coordination mechanisms through a cancer control steering committee will contribute to improve cancer control and care in the country. In addition, the bill for the establishment of National Centre for Cancer Research and Treatment is awaiting Presidential accent while that for the establishment of National Agency on Cancer Control is awaiting public hearing in the Senate and House of Representatives. Once these bills are passed, they will further enhance a coordinated approach to cancer management.

Strategic Framework

OBJECTIVES	STRATEGIES	PERFORMANCE INDICATOR
1. To coordinate and provide effective leadership for the management and implementation of the National Cancer Control	1.1 Establish and implement framework for the periodic monitoring and coordination of all stakeholders and activities in the National Cancer Control Plan (NCCP)	1.1.1 Annual listing and publication list of stakeholders and activities 1.1.2 Percentage of stakeholders' activities

Plan (2018 – 2022)		accessed and evidence to be in line with the objectives of the national cancer plan. 1.2.1 Publications non-existent treatment guideline for commonest cancers in adults and pediatrics age groups in Nigeria.
	1.2 Program strengthening: Ensure the standardization and implementation of policies and guidelines for the 5 top cancers in Nigeria (list to be confirmed).	1.2.2 Percentage of treatment centers utilizing Published cancer treatment guidelines for common cancers.
2. To establish a standard quality service delivery system in all institutions across the continuum of cancer care by the year 2022	2.1 Develop and strengthen systems to improve accessibility and cost effectiveness of cancer care	2.1.1 Percentage increase in numbers of patients receiving care in all treatment institutions.
3. To deliver a sustainable financing solution for cancer care by 2022	3.1 Establish and implement innovative and sustainable finance mechanisms for cancer care in Nigeria	Number of cancer care projects financed by PPPs 3.1.1 Number of cancer care projects effectively finance and patients treated per annum
	3.2 Ensure effective budgeting and costing for cancer care including infrastructure, capacity building, information etc.	% of budget implementation achieved
4. To increase the number of skilled Healthcare Practitioners in cancer care by 15% annually	4.1 Develop and implement framework to improve capacity and number of skilled personnel for cancer care	% increase in number of skilled healthcare practitioners in cancer care.

SECTION 4 INSTITUTIONAL & COORDINATION FRAMEWORK

The National Cancer Control (NCC) program of the Federal Ministry of Health (FMoH), will serve as the coordinating body for the implementation of the national cancer control plan. The FMoH, all 36 States and Federal Capital Territory (FCT) with support of the national cancer steering committee and development partners, will be responsible for the implementation of the plan. The states will develop annual operational plans that feed into the national cancer control plan. The NCC program will support the states with the continuous monitoring and evaluation of the plans to ensure accountability. At the State level, the annual operational plans will be reviewed quarterly. The NCC program will facilitate the possibility of conducting a national baseline survey to generate data that will inform measurement of progress overtime. In addition, there will be a midline and end line evaluation of the national cancer control program.

The working assumption is that the government (Federal and State) will provide 75% of the funding required to implement this plan while the donors/development partners will support by bridging the funding gap of 25 %.

SECTION 5 IMPLEMENTATION FRAMEWORK

1. PREVENTION ***GOAL: Make screening services and early detection of cancer available for all Nigerians***						
ACTIVITIES	**OUTPUT**	**LEAD MDA**	**KEY PARTNERS**	**RISK**	**MITIGATION STRATEGY**	**DELIVERY/ COMPLETION DATE**
Invest in nationwide access to information on lifestyle modification, HPV vaccination	Nationwide access to information on lifestyle modification, HPV vaccination	FMOH (NPHCDA)	NGOs/ CSOs/ Private sector	Political will from policy makers, Opposition from religious groups, Availability of funds in view of competing health needs, Maintaining the cold chain	Legislation, public education enlightenment programme	2022
Develop health promotion programmes on healthy lifestyle, health educate *PWA on effect of direct exposure to sunlight	Positive change in lifestyle. Protective effect of sunscreen.	FMOH	NGOs/ CSOs/ Private sector	Resistance to changes	Educate Key opinion leaders and community influencers.	2022
Legislate against smoking, alcohol and carcinogenic chemical content of processed foods.	Legislation passed on the use of tobacco, alcohol and carcinogenic chemical content of processed foods	FMOH	NGOs/ CSOs/ Private sector	Resistance to change	SBCC	2022

Incorporate HPV vaccination into the National Programme on Immunization	HPV vaccine incorporated into national immunization program.	FMOH/ SMOH	NGOs/ CSOs/ Private sector			2022
Institute new-born screening for early signs of some common childhood cancers e.g. Retinoblastoma in all health facilities/well baby clinics.	New-born screening for childhood cancers instituted	FMOH	NGOs/ CSOs/ Private sector	Lack of skilled manpower	Manpower development	2022
Implement HPV-DNA testing/VIA and management of precancerous lesions at Primary Healthcare (PHC) level.	HPV-DNA testing/ VIA and management of precancerous lesions at PHC level instituted	FMOH/ SMOH	NGOs/ CSOs/ Private sector	Lack of skilled manpower, Funds to procure equipment	Manpower development, provision of funds	2022
Implement Clinical Breast Exam (CBE) at PHC level and mammography at Secondary and Tertiary level.	Clinical Breast Exam at PHC level and mammography at secondary and tertiary level implemented	FMOH/SM OH	NGOs/ CSOs/ Private sector	Lack of awareness on CBE among the populace. Funding for mammography at secondary and tertiary,	Public education, Provision of equipment.	2022
Institute digital rectal examination and prostate specific antigen (PSA) in prostate cancer screening at all levels.	Digital rectal examination and PSA screening instituted across all level of healthcare (primary,	FMOH/ SMOH	NGOs/ CSOs/ Private sector			2022

	secondary and tertiary)					
Institute stool DNA testing and colonoscopy in colorectal cancer screening.	Stool DNA testing ad colonoscopy for colorectal cancer screening instituted	FMOH	NGOs/ CSOs/ Private sector			2022
Establish national cancer screening guidelines for all levels of health care delivery	National cancer screening guidelines across all level of healthcare established	FMOH/SMOH	NGOs/ CSOs/ Private sector			2022

2. DIAGNOSIS AND TREATMENT *GOAL: To improve access to quality, cost effective and equitable diagnostic and treatment services for cancer care*						
ACTIVITIES	**OUTPUT**	**LEAD MDA**	**KEY PARTNERS**	**RISK**	**MITIGATION STRATEGY**	**DELIVERY/ COMPLETION DATE**
Develop comprehensive cancer management guidelines by the year 2020	Comprehensive cancer management guideline developed	FMOH	NGOs/ CSOs/ Private sector			2020
Establish at least one center of excellence for cancer management in each geo-political zone by the year 2022	At least one center of excellence for cancer management in each of the 6 geo-political zones established	FMOH	NGOs/ CSOs/ Private sector			2022
Upgrade the existing radiological, radiotherapy and nuclear medicine services within the centers of excellence in the country.	Existing radiological, radiotherapy and nuclear medicine services in the centers of excellence upgraded	FMOH	NGOs/ CSOs/ Private sector			2020
Strengthen blood transfusion and laboratory services for accurate cancer diagnosis and supportive care.	Blood transfusion and laboratory services for accurate cancer diagnosis and supportive care strengthened	FMOH	NGOs/ CSOs/ Private sector			2020

Establish effective tumor board in all cancer treatment centers of excellence	Functional tumor board established in all comprehensive cancer care centers	FMOH	NGOs/ CSOs/ Private sector			2020
Ensure availability and access to quality, cost effective and equitable cancer treatment solutions	Cost effective and equitable cancer treatment solutions of high quality available and accessible	FMOH	NGOs/ CSOs/ Private sector			2020
Establish a patient navigation programme to support patients through the treatment journey	Patient navigation programme to support patients through the treatment journey established	FMOH	NGOs/ CSOs/ Private sector			2020
Establish a comprehensive sub-specialty oncology training programme at the Post-graduate medical colleges and other relevant institutions in Nigeria by 2022.	Comprehensive sub-specialty oncology training programme at the Post-graduate medical colleges and other relevant institutions in Nigeria.	FMOH	NGOs/ CSOs/ Private sector			2022

Facilitate collaboration and twinning with international bodies to support training and research in cancer care.	Collaboration and twinning with international bodies to support training and research in cancer care established	FMOH	NGOs/ CSOs/ Private sector			2022

3. HOSPICE AND PALLIATIVE CARE **GOAL: To provide the best quality of life for cancer survivors and their families**						
ACTIVITIES	**OUTPUT**	**LEAD MDA**	**KEY PARTNERS**	**RISK**	**MITIGATION STRATEGY**	***DELIVERY/ COMPLETION DATE***
Develop a National Policy and, guidelines for providing HPC for patients and cancer survivors	Draft policy and guideline developed	FMOH	ACS, EU, WHO, UNODC, OSF West Africa, etc.			2019
Secure approval of the HPC policy and, guidelines	Policy and guideline document approved	FMOH				2019
Generate comprehensive database of HPC needs	A Comprehensive database of HPC burden and available resources in the country	FMOH, SMOH	NGOs, WHO, CSOs, HPCAN			2018
Support each Cancer care Center to set up a HPC unit	HPC unit set up in cancer centers across the country	FMOH, SMOH	Cancer care centers, cancer control steering committee			2021
Support all HPC units to include all medical and psychosocial specialist and spiritual care providers	Membership of HPC units should include all relevant healthcare professionals.	FMOH, SMOH	Cancer centers, cancer control steering committee			2022
Support the adoption of the HPC guidelines by the HPC unit in every cancer care center	HPC guidelines adopted for implementation	FMOH, SMOH	Cancer care centers, cancer control,			2022

			steering committee			
Increase the number of health and non-health providers who offer palliative care services	Increased number of HPC providers	FMOH, SMOH	Cancer care centers, cancer control, steering committee			2019
Develop regulations and standards for HPC services	Regulations and standards for HPC developed	FMOH, SMOH	NGOs			2019
Train all members of the HPC unit on the implementation of the HPC guidelines	HPC providers trained to implement the national HPC guidelines	Cancer care centers	FMOH, SMOH, cancer control steering committee			2022
Train all oncologist, members of the HPC unit and other health providers of cancer care on the development of an effective HPC plan for cancer patients and their caregivers	Oncologist, members of the HPC unit and other health providers of cancer care trained on the development of an effective HPC plan	Cancer care centers	Universities and Tertiary Institutions, HPCAN, NGOs			2022
Engage the telecoms industry to establish **FREE** communication lines at each specialist palliative care unit for **Tele Consult** with patients and their family members	Free HPC tele consult established	Cancer care centers	Telecommunication companies, NGOs			2019

Support the provision and coordination of HPC services in secondary health facilities in each state	HPC services available at secondary facilities	FMOH, SMOH	Public Health institutions			2022
Support the provision and coordination of HPC services in private health facilities and centers	HPC services available at private facilities	FMOH, SMOH	Private Health institutions			2022
Integrate HPC services into the Primary Healthcare (PHC)	HPC services integrated into PHC	FMOH, SMOH	NPHCDA			2020
Support the provision and coordination of HPC services in at least one comprehensive primary health care facility per LGA	HPC available in Comprehensive PHCs	NPHCDA	FMOH, SMOH			2022
Integrate HPC services for coverage in the National Health Insurance Scheme (NHIS).	HPC services captured as coverable in the NHIS	NHIS	FMOH, SMOH			2019
Develop regulations and guidelines for implementing home-based HPC	Regulations and guidelines for implementing home-based HPC approved for implementation	FMOH, SMOH	CSOs, NGOs			2020
Support the promotion of home-based HPC in accordance to the regulations and guidelines	Home-based HPC available and implemented according to guidelines	FMOH, SMOH	CSOs, NGOs			2022

Establish accredited HPC training centers, one in each geo-political zone	Accredited HPC training centers established	FMOH, SMOH	Training institutions, Professional bodies; HPCAN			2020
Develop and implement in-service training on HPC for at least 10% of healthcare providers at all levels of health care	In-service training on HPC implemented	FMOH, SMOH	Health Facilities HPCAN			2020
Integrate palliative care into the training curricula of medical, nursing, pharmacy, social-work, nutrition, psychology, psychiatry physiotherapy etc.	HPC integrated into training curricula for different medical and health institutions	NUC, Tertiary Institutions and Postgraduate Colleges				2020
Establish a Drug Revolving Funding (DRF) Committee for Narcotics in line with FMOH DRF guidelines	DRF committees for narcotics established	FMOH	Cancer control Steering committee			2018
Create a budget line for DRF for narcotic medicines	Budget line for DRF created	FMOH	Cancer control steering committee			2018
Fund the DRF Account for narcotic medicines through budget appropriation	DRF account for narcotics funded	FMOH	Cancer control steering committee			2018
Develop curriculum and Training manuals for pain management	Curriculum and Training manuals for pain management	FMOH	Health Facilities			2019

Train a critical mass of HCW in at least 30 tertiary hospitals across the country on pain management	Critical mass of HCW in tertiary facilities trained on pain management	FMOH	Tertiary Health Facilities			2022
Train a critical mass of HCW in Secondary hospitals across the country on pain management	Critical mass of HCW in secondary facilities trained on pain management	FMOH	Secondary Health Facilities, NGOs			2022
Incorporate pain management in the curriculum of medical, nursing and pharmacy schools	Pain management integrated into training curricula for different medical and health institutions	Tertiary Institutions	NUC and Professional bodies			2020
Institute in-house training of healthcare workers on pain management	Pain management training integrated into in-house training HCW	Health Facilities	FMOH and SMOH			2020
Establish a production line for oral morphine solution and other narcotics at Federal Pharmaceutical Laboratory (FEPMAL)	FEPMAL producing oral morphine solutions	FMOH	FEPMAL, NAFDAC, NGOs			2020
Create enabling policies and support for local pharmaceutical industries to produce and market narcotic medicines	Policies supporting local production of narcotics established	FMoH	NAFDAC and SON			2020

Create regulations for the distribution of narcotics to ensure cancer patients in need of pain management medication are priority	Regulations and guidelines for the distribution of narcotics approved for implementations	NAFDAC; FMOH				2020
Create distribution hubs for narcotics for cancer care in each of the six geo-political zone	Distribution hubs for narcotics developed	NAFDAC; FMOH				2020
Develop and disseminate information, education and communication (IEC) materials on HPC for cancer patients to the medical community	IEC materials on cancer developed and disseminated to the medical community	FMOH	Health Facilities, Universities and tertiary hospitals			2019
Work with stakeholders/IPs and NGOs to source, develop and disseminate information, education and communication (IEC) materials on cancer to the general public	IEC materials on cancer awareness actively disseminated	FMOH	Health Facilities, CSOs, NGOs, NGOs			2019
Collaborate with relevant stakeholders/IPs and NGOs to organize annually hospice and palliative care awareness campaign especially during the celebration of world palliative care day.	HPC awareness campaigns	FMOH	Health Facilities, CSOs, NGOs			2019

Support stakeholders to organize annual general meeting and scientific session as a veritable platform for dissemination of information, education and communication on HPC to the medical community and	Meetings on HPC awareness	FMOH	Health Facilities, CSOs, NGOs,			2019

4. ADVOCACY AND SOCIAL MOBILIZATION **GOAL: Increase cancer awareness and advocate for cancer control amongst the populace.**						
ACTIVITY	**OUTPUT**	**LEAD MDA**	**KEY PARTNERS**	**RISKS**	**MITIGATION STRATEGY**	**DELIVERY/ COMPLETION DATE**
1.1.A Stepdown of cancer plan to all levels of government (Zonal, States, Wards, community leaders)	Cancer plan reviewed and adopted at all levels of government	FMOH, SMOH	Mass media networks, CSOs, NGOs, Corporate organizatio n Influential Individuals	- Poor buy-in to national plan. -Lack of proper coordination between implementing stakeholder groups.	- Involve representatives from every level of government in the preparation phase to ensure buy-in. - Training of trainers to ensure uniformity in implementation	2018
1.1. B) Effective demonstration of the different approaches to cancer control during the campaigns (e.g. a) lectures on different types of cancers with emphasis on early detection and early treatment, b) Screening for breast,		FMOH, SMOH				2019

cervical, prostate & colorectal lesions, c) Phone in radio programs d) Jingles on different stages of cancers, treatment & outcomes.						
1.1C) Sustain commemoration of World Cancer Day on 4th February and National Breast Cancer awareness month in October each year.	Yearly planned programs to commemorate these world events.	FMOH, SMOH	CSOs NGOs, FMOH, Corporate organisations, Celebrities	Funding restrictions to effect planned programs.	Effective and timely planning for collaboration and sustainability with donor agencies, FMOH and corporate groups with	2018
1.1D) Develop school-based activities targeting children, adolescents and youths in cancer prevention.	Designed Cancer prevention activities which have been adopted by schools		Ministry of Education, Education boards of all states, CSOs, NGOs,	- Unwillingness of schools to adopt the activities. - disaccord between implementing partner groups	Get buy-in from education boards or their representatives.	2018
1.1E) Leverage on existing community resources such as PHCs, WDCs, CBOs, etc.	Comprehensive list of participatory PHCs WDCs, CBOs		LGAs responsible for PHCs. Participating hospitals responsible for WDC's	-Poorly financed or equipped PHCs, WDCs. -Weak infrastructure of PHCs, WDCs to cope with workload	Ensure budget for sustainable community resources and infrastructure to allow maximum effectiveness.	2018

1.1F) Encourage adoption of healthy lifestyles that will enhance cancer prevention and early detection including tobacco control.	Targeted messages/programs on healthy lifestyles, cancer prevention and early detection in different languages that can easily be disseminated.		FMOH, Min of Education, Min of Transport, NGOs, CSOs, Min of Communication/Mass media	-Lack of coordination between various arms of government. -Insufficient budget allowance for adequate awareness and dissemination.	-Comprehensive plan for dissemination with buy-in of all members. -Adequate budgeting allowance for dissemination. -Low cost methods for production and dissemination to various levels	Quarterly programs that are to be run(aired/disseminated) year on year from 2018 - 2022
2.1A) Design Robust human resource capacity building programs for training of trainers which will ensure maximum dissemination of cancer awareness information	Comprehensive capacity building programs designed		Min of Education, AORTIC, NGOs, CSOs, corporate organisations.	-Timeline of trainings and numbers of master trainers trained who can effectively cascade the training. -Complicated programs that may be difficult to effectively disseminate.	-Robust selection process for recruiting master trainers. -Ensure capacity building programs are well thought out and planned but simple enough for easy dissemination at the various levels.	2018
2.1B) Quarterly lectures and demonstration activities on cancer awareness and control.	Lectures and demonstrations conducted on cancer awareness and control	FMOH	Ministry of Communication, Mass media Networks, Corporate Organizatio	-Inadequate planning or timing of lectures and demonstrations. - Poor turnout at demonstrations or lectures which will	Thorough planning to involve all stake holders ensures best results. Adequate advertising and awareness of events to ensure maximum	Quarterly events on year to year basis from 2018 – 2022.

			ns	hamper effective cancer awareness.	attendances	
3.1 A) Health sector stakeholders (NHIS, NPHCDA NGOs, CSOs etc.) to be involved in an effective cancer control plan by 2019/2020.	Appointment of health sector stakeholders as members of steering committee on national strategic cancer control plan	FMOH	Corporate organizations, NHIS, NPHCDA, NGOs, CSOs	-Attendance of appointed members at key planning events. - Ineffective logistical planning to ensure finished plan by 2019/2020	- Give adequate notice when planning key events to ensure maximum participation. - Ensure budget provision from partners to ensure adequate logistical planning	2018
3.1 B) First ladies of states, faith based groups, union organizations/associations, traditional rulers, media houses, etc., to be involved in making cancer everyone's business and implement the cancer control plan.	- Commitment from First ladies, FBO's, traditional rulers, Media networks etc. to implement the national cancer control plan.	FMOH,	NGOs, CSOs, Governor's wives forum	-Conflict of interest of members who run their own NGOs. - Inadequate funding for mass awareness campaigns and effecting of plan.	- Strict selection criteria for electing members to mitigate potential conflicts of interests. - Source and utilize inexpensive means of mass awareness campaigns from key partners that can aid effecting of plan	Quarterly meetings throughout the year from 2018 – 2019.
3.1 C) Synergize with the stakeholders in Polio, Ebola, Tobacco and HIV successful campaigns.	Established relationships with campaign organizers from successful Polio, Ebola, HIV programs.	FMOH	NACA, NPHCDA, NAFDAC, NGOs, CSOs	-Ineffective strategies in the implementation of cancer campaigns. - Unwillingness of groups to	-Invite all stakeholders to open event where sharing of ideas and strategies would be encouraged.	2018

				cooperate for effective results	- Allow groups to have a sense of ownership of the cancer plan	
4.1 A) The NCCP office to ensure the bill on cancer plan is formulated and presented to legislators for enactment before end of 2018.	-Bill on cancer plan formulated, presented and enacted by the legislators.	FMOH, National assembly	NGOs, CSOs	-Incomplete national cancer plan by 2018. - Bill on Cancer plan not presented on time for enactment at end 2018.	- Ensure stakeholders work towards timely completion of cancer plan 2018-2022. - Scheduled meetings and reviews to ensure timely formulation and presentation of cancer bill for enactment	End of 1st quarter 2018 so that bill can be budgeted for.
4.1 B) Sensitize and solicit support from Philanthropist and community leaders for the implementation of the bill when passed.	Philanthropists and community leaders sensitized on support granted for cancer bill and its implementation.	FMOH	Philanthropists, community leaders, NGOs, CSOs	Failed sensitization of philanthropists.	Strategic sensitization meetings to ensure buy-in from philanthropists and community leaders	2018
5.1 A) Involve Brand ambassadors such as celebrities, influential persons to be involved in championing the fight in dispelling harmful cultural beliefs and practices that negatively affect cancer	Brand ambassadors and cancer champions engaged and involved in fighting to dispel harmful beliefs	FMOH, SMOH	Celebrities, cancer champions /survivors, Community leaders, NGOs and CSOs, Faith based	People unwilling to fully participate in fight against harmful beliefs because of own beliefs or conflicts of interests	Get buy-in of celebrities, reps from FBOs, Community leaders and involve them in planning to ensure ownership of the plan, allowing for improved success.	Quarterly event to be held throughout the cancer plan 2018 - 2022

control.			Organisations.			
5.1B) Creation of drama/soaps/jingles using script writers, actors and actresses, as well as school children & villagers.	Jingles/drama/soaps created and prepared for dissemination	FMOH, SMOH	Min of Education, Media networks, Selected schools, min of Communication	Insufficient budget for creation of drama/jingles etc.	Involve philanthropists and corporate organizations at every stage of planning to ensure adequate budgeting.	2018

5. DATA MANAGEMENT AND RESEARCH **GOAL 5: To conduct and support integrated programs that provides high quality cancer data for dissemination, research and planning**						
Activities	**Output**	**Lead MDA**	**Key Partners**	**Risk**	**Mitigation strategy**	**Delivery/ Completion Date**
Include cancers as part of the integrated disease surveillance system of the country		FMOH	NGOs			2019
Develop protocols for frontline health care workers to identify common cancers and refer to higher levels of care	Protocols for identifying common cancers developed	FMOH	NGOs; Cancer Centers and Health Facilities			2020
Establish more cancer registries where they don't exist	Additional cancer registries established	FMOH	NGOs; Cancer Centers and Health Facilities			2020
Adopt for use the existing SOPs of the African cancer registry network	SOPs adopted					2020
Train more data collectors for the cancer registries	More data collectors trained					2021
Employ more cancer registrars	Additional Cancer registries employed	FMOH	Health Facilities; Cancer Centers; NGOs			2022

Develop and implement infrastructure and tools for data capturing in the registries	Additional Tools for data capturing developed	FMOH	NGOs			2019
Implement supportive supervision to coordinate the activities of cancer registries	Supportive supervision implemented	FMOH				2020
Develop curriculum for training CHEWs on cancer basics	Training curriculum for CHEWs developed	FMOH	Health Facilities; Cancer Centers			2021
Identify all organizations working on cancer prevention, early detection, treatment and palliative care	Database of organizations working in the cancer space	FMOH	NGOs; CSOs			2019
Develop data tracking and supervisory tools	Data tracking and supervisory tools developed	FMOH				2019
Push for a bill of establishing a trust fund for cancer research and training.	Bill for trust fund developed	FMOH	NGO			2018
Develop Advocacy Deck for budgetary allocation for cancer research	Advocacy deck developed	FMOH	NGOs; Cancer Centers			2018

			and Universities and Research centers			
Conduct training of health care workers in cancer care on grant and proposal writing	Training on grant and proposal writing for cancer research	FMOH	NGOs; Cancer Centers and Universities and Research centers			2018

6. SUPPLY CHAIN MANAGEMENT (LOGISTICS) GOAL: To ensure the availability of drugs, consumables and functional equipment for cancer care in Nigeria						
ACTIVITIES	**OUTPUT**	**LEAD MDA**	**KEY PARTNERS**	**RISK**	**MITIGATION STRATEGY**	**DELIVERY/ COMPLETION DATE**
Conduct an assessment of a functional oncology supply chain system that is adaptable to Nigerian context.	Assessment of a functional supply chain outside of Nigeria conducted	FMOH	NGOs/ CSOs/ Private sector			2018
Conduct an assessment of the oncology supply chain system in Nigeria to identify gaps.	Assessment of oncology supply chain system in Nigeria conducted	FMOH	NGOs/ CSOs/ Private sector			2018
Develop a framework that addresses identified gaps.	Framework to address identified gaps from assessment developed	FMOH	NGOs/ CSOs/ Private sector			2018
Review existing maintenance plan.	Robust maintenance plan/strategy developed	FMOH	NGOs/ CSOs/ Private sector			2018
Assess and effect repair of non-functional equipment.	Repair of non-functional equipment across all comprehensive cancer care centers in Nigeria effected	FMOH	NGOs/ CSOs/ Private sector			2018

Support the deployment of new equipment.	New laboratory, pathology, diagnostic radiology, nuclear medicine and radiotherapy equipment procured and installed in comprehensive cancer care centers in the 6 geopolitical zones	FMOH	NGOs/ CSOs/ Private sector	Funding	Public Private Partnership	2020
Conduct workforce capability assessment of local technicians.	Workforce capability assessment conducted	FMOH	NGOs/ CSOs/ Private sector			2019
Train local equipment maintenance staff based on identified gaps from the workforce capability assessment.	Training of local equipment maintenance staff conducted	FMOH	NGOs/ CSOs/ Private sector			2019
Integrate oncology into existing supply chain management unit at the FMoH.	Oncology integrated into existing supply chain management unit at the FMoH	FMOH	NGOs/ CSOs/ Private sector			2020
Establish coordinated procurement and distribution of oncology drugs and consumables for Nigeria.	Coordinated procurement of chemotherapy drugs and consumables established for all comprehensive cancer care centers	FMOH	NGOs/ CSOs/ Private sector			2018

Support the development and deployment of a supply chain management tool that creates visibility into stock across different layers of the supply chain.	Supply chain management tool deployed in all oncology pharmacies at the comprehensive cancer care centers	FMOH	NGOs/ CSOs/ Private sector			2020

7. Governance and Finance **GOAL:** To ensure effective coordination and adequate resources to reduce the incidence and prevalence of cancer in Nigeria by 25% in 2022 (from 102,000 cases per year and 80,000 dying per year)						
ACTIVITIES	**OUTPUT**	**LEAD MDA**	**KEY PARTNERS**	**RISK**	**MITIGATION STRATEGY**	**DELIVERY/ COMPLETION DATE**
Collate data on stakeholders in the cancer space in Nigeria by priority areas as outlined in the NCCP and update regularly	Published register of stakeholders and their activities in the cancer space	FMOH	NGOs/ CSOs/ Private sector	Lack of Funding	Private sector involvement	2018
To develop guidelines for the coordination of activities of different stakeholders to ensure alignment with the NCCP	Guidelines developed and disseminated	FMOH	NGOs/ CSOs/ Private sector	Lack of Funding	Private sector involvement	2018
Engage with stakeholders to review, streamline and align activities with the NCCP	Stakeholders report activities to the Ministry in line with the NCCP	FMOH	NGOs/ CSOs/ Private sector			2018
Organize annual stakeholder engagement (e.g. meetings, conferences, workshops) to review and address issues on implementation and progress.	Annual reviews conducted and reports developed	FMOH	NGOs/ CSOs/ Private sector		Leverage existing NGO/CSO platforms for stakeholder meetings	2018

Periodic review of activities across all priority areas of action and prepare quarterly progress reports	Quarterly reviews conducted and report s developed	FMOH	NGOs/ CSOs/ Private sector			2018
Leverage technology to improve update of stakeholders and activities	Improved update of stakeholders and activities	FMOH				2019
Conduct gap analysis annually across cancer care institutions in Nigeria and produce plans to improve accessibility to cancer care	Gap analysis conducted and plans to improve access to cancer care developed	FMOH	NGOs/ CSOs/ Private sector			2018
Monitor periodically the implementation plans developed to improve accessibility in cancer care	Implementation plan periodically monitored	FMOH				2018
Develop framework for a National cancer fund	Framework developed for national cancer fund					2019

Provide financial protection for indigent cancer patients e.g. Reimbursement of cancer care by the NHIS	Financial protection provided for indigent cancer patients	FMOH	NGOs/ CSOs/ Private sector			2020
Review and develop a regulatory framework for commodities for cancer care	Regulatory framework developed for commodities in cancer care	FMOH				2020
Ensure the alignment of FMOHs yearly cancer budgets with NCCP priorities in Phase 1 and Phase 2	FMoH Cancer budget aligned with NCCP priorities	FMOH				2018
Push for the passage of the bill on the establishment of National Centre for Cancer Research and Treatment	Bill passed and National Center for Cancer Research and Treatment established	FMOH, National Assembly	NGOs/CSOs/ Private sector			2018
Push for the passage of the bill on the establishment of National Agency for Cancer Control	Bill passed and the National Agency for Cancer Control Established	FMOH, National Assembly	NGOs/CSOs/ Private Sector			2019

SECTION 6 MONITORING & EVALUATION FRAMEWORK

PRIORITY AREAS	INDICATOR	DATA SOURCE	BASELINE	TARGET YEAR 1	TARGET YEAR 2	TARGET YEAR 3	TARGET YEAR 4	TARGET YEAR 5
PREVENTION	Percent coverage for HPV vaccine	FMoH	No	No	Yes	Yes	Yes	Yes
	Percent national screening programs that follow recommendations/guidelines for addressing detected abnormalities	FMoH/SMoH	TBD	25%	40%	60%	80%	100%
	Percent of Health facilities at all levels of healthcare (primary, secondary and tertiary), providing screening/early detection and HPV vaccination for cancer	FMoH/SMoH	TBD	30%	45%	60%	75%	90%

PRIORITY AREAS	INDICATOR	DATA SOURCE	BASELINE	TARGET YEAR 1	TARGET YEAR 2	TARGET YEAR 3	TARGET YEAR 4	TARGET YEAR 5
DIAGNOSIS AND TREATMENT	Number of comprehensive cancer care centers in the country that can offer radiotherapy as part of treatment for cancer patients	Tertiary hospitals	TBD	2	2	3	3	4
	Number of comprehensive cancer care centers in the country with a functional	Tertiary hospitals	0	1	1	2	2	2

	multi-disciplinary tumor board							
	Number of comprehensive cancer centers in the country that have adopted and implemented the updated treatment guideline in the management of patients	Tertiary hospitals	0	1	1	2	2	2

PRIORITY AREAS	PERFORMANCE INDICATOR	DATA SOURCE	BASELINE	TARGET YEAR 1	TARGET YEAR 2	TARGET YEAR 3	TARGET YEAR 4	TARGET YEAR 5
SUPPLY CHAIN	Percent of identified gaps from the assessment of the country oncology supply chain that is addressed	Assessment report	TBD	50%	75%	85%	90%	100%
	% of time that all the laboratory, pathology, diagnostic radiology and radiotherapy equipment in the country at the government owned comprehensive cancer care centers are functional	Tertiary hospitals	TBD	80%	85%	90%	95%	100%

	# of local engineers trained that are working in each of the comprehensive cancer care centers	Tertiary hospitals	TBD	1	2	3	3	3
	% of comprehensive cancer care centers that pool procurement of chemotherapy drugs	Tertiary hospitals	0%	25%	50%	75%	100%	100%
	% of comprehensive cancer care centers that report no stock-out of commonly used chemotherapy drugs	Tertiary hospitals	TBD	85%	90%	95%	100%	100%

PRIORITY AREAS	INDICATOR	DATA SOURCE	BASELINE	TARGET YEAR 1	TARGET YEAR 2	TARGET YEAR 3	TARGET YEAR 4	TARGET YEAR 5
HOSPICE AND PALIATIVE CARE	# of cancer care facilities that have a HPC unit that have adopted the HPC guidelines	Health Facilities	TBD	50%	75%	85%	90%	100%
	# of providers trained on adherence to the HPC guidelines	Health Facilities	TBD	50%	75%	85%	95%	100%

	# of healthcare workers trained on effective pain management	Health Facilities	TBD	60%	80%	90%	95%	100%
	# of local manufactures that produce and supply narcotics to health facilities	Health Facilities	0%	0%	20%	30%	35%	40%

PRIORITY AREAS	INDICATOR	DATA SOURCE	BASELINE	TARGET YEAR 1	TARGET YEAR 2	TARGET YEAR 3	TARGET YEAR 4	TARGET YEAR 5
ADVOCACY & SOCIAL MOBILIZATION	Number of States implementing Cancer Control activities based on the national cancer control plan (2018-2022)	State Cancer Control Plans	0	9	18	27	37	37
	% of planned cancer control sensitization activities conducted	Sensitization Activity Reports.	0	20%	40%	60%	80%	100%

	Capacity Building in advocacy for maximum dissemination of information on cancer control.							
	% of institutions across the three tiers of healthcare delivery system (primary, secondary and tertiary) implementing prevention interventions	Hospital and PHC Surveys	TBD	20%	40%	60%	80%	100%
	Number of new Cancer Control legislation/policies passed	1. National and State House of Assemblies 2. FMOH - Cancer Policies						
	% of identified harmful cultural practices/beliefs detrimental to cancer control which have been reduced.	Hospital & PHC Surveys	TBD	20% decrease	40% decrease	60% decrease	80% decrease	100% decrease
PRIORITY AREAS	**INDICATOR**	**DATA SOURCE**	**BASELINE**	**TARGET YEAR 1**	**TARGET YEAR 2**	**TARGET YEAR 3**	**TARGET YEAR 4**	**TARGET YEAR 5**

DATA MANAGEMENT AND RESEARCH	Number of population-based cancer registries per geo-political zone that receive complete data in a timely fashion	FMoH	TBD	60%	70%	80%	90%	100%
	Establish and Operationalize the database of all cancer control programs in the country	FMoH	TBD	50%	70%	80%	95%	100%

PRIORITY AREAS	INDICATOR	DATA SOURCE	BASELINE	TARGET YEAR 1	TARGET YEAR 2	TARGET YEAR 3	TARGET YEAR 4	TARGET YEAR 5
GOVERNANCE & FINANCE	% of activities in NCCP delivered/completed		0	30%	40%	60%	70%	80%
	% of institutions across the cancer continuum complying with standard service delivery guidelines		0	30%	40%	50%	60%	70%

	No of cancer care projects financed by PPPs		1	2	3	4	4	6
	% average of donor funding allocated to cancer		TBC	3%	4%	5%	6%	8%
	% of FMOH funding allocated to cancer care		Less than 1%	3%	4%	6%	7%	8%
	% increase in number of skilled healthcare practitioners in cancer care.		0%	15%	30%	45%	60%	75%

Section 7 COSTING

The main objective of this section is to provide cost estimates for the five-year period of the NCCP so that stakeholders know the cost required to operationalize the plan. The section also provides the cost estimates to be used for advocacy and resource mobilization from stakeholders (international donors and local private sector, civil society, and Government) in the fight against cancer in Nigeria. 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 315 NGN: 1 USD.

The National Cancer Control Plan opted for an activity-based costing approach so as 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)

Priority Areas	2018	2019	2020	2021	2022	Total (5-year)
Prevention	122,835.40	128,635.61	135,177.64	106,494.50	111,940.77	605,083.91
Diagnosis and Treatment	204.40	54.81	214.33	-	121.55	595.09
Hospice and Palliative Care	608.80	854.28	458.64	330.27	468.33	2,720.32
Advocacy	1,011.16	681.79	826.13	751.67	910.80	4,181.54
Data Management and Research	739.13	550.58	866.59	1,081.71	959.87	4,197.88
Supply Chain Management (Logistics)	731.84	82,317.92	86,469.43	90,671.78	95,326.92	355,517.88
Governance and Finance	371.60	140.28	257.54	14.47	136.74	920.64
	-	-	-	-	-	-
Grand total	**126,502.32**	**213,235.26**	**224,270.29**	**199,344.39**	**209,864.99**	**973,217.25**

S/N	Priority Areas	Amount (NGN)	Amount (USD)
1	Prevention	60,508,390,843.09	192,090,129.66
2	Diagnosis and Treatment	59,508,662.50	188,916.39
3	Hospice and Palliative Care	272,032,497.06	863,595.23
4	Advocacy	418,153,850.83	1,327,472.54
5	Data Management and Research	419,787,613.31	1,332,659.09
6	Supply Chain Management (Logistics)	35,551,788,079.18	112,862,819.30
7	Governance and Finance	92,063,876.56	292,266.27
	Grand total	**97,321,725,422.53**	**308,957,858.48**