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MINISTRY OF HEALTH - ETHIOPIA

NATIONAL CANCER CONTROL PLAN OF ETHIOPIA

2025-2029



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FOREWORD

Cancer remains a significant public health challenge in Ethiopia, with an estimated 80,000 new cases diagnosed each year. It is a disease that not only affects the individuals diagnosed but also has a profound impact on their families, communities, and the healthcare system. Recognizing the critical importance of addressing cancer comprehensively, the Integrated National Cancer Control Plan (2025-2029) provides a roadmap for reducing the cancer burden in Ethiopia while improving outcomes for patients across the continuum of care.

This plan builds upon the achievements and lessons learned from the First National Cancer Control Plan (2015-2020) and the National Childhood and Adolescent Cancer Control Plan (2019-2023). It reflects Ethiopia's commitment to achieving global health goals, including the 2030 Agenda for Sustainable Development Goals (SDGs), by integrating cancer prevention, early detection, and treatment efforts into the broader national health agenda.

The National Cancer Control Plan emphasizes that about 40% of cancers can be prevented through lifestyle modifications, immunization, and environmental improvements, potentially preventing around 32,000 cases annually. Key interventions include tobacco control, promoting healthy diets and physical activity, increasing access to HPV and Hepatitis B vaccinations, and improving living conditions. Raising awareness about these risk factors is crucial for reducing the cancer burden in the country.

Early diagnosis and timely treatment are equally critical. One-third of cancers can be cured when detected early and managed appropriately. This plan prioritizes strengthening diagnostic and treatment services, ensuring accessibility, affordability, and quality care. It also adopts an integrated approach by focusing on three high-burden cancers (breast, cervical and childhood cancers) where proven interventions can be implemented at scale for maximum public health impact.

As a country, Ethiopia is committed to fulfilling its global obligations to combat cancer. This plan not only operationalizes the Ethiopia Cancer Control Strategy but also serves as a guide for developing the necessary guidelines, protocols, and capacity-building initiatives to address the cancer care continuum effectively.

The Integrated National Cancer Control Plan (2025-2029) reflects our resolve to build a future where fewer Ethiopians suffer from preventable cancers. It is a call to action for stakeholders at all levels—government agencies, healthcare providers, civil society, and international partners—to work together toward a shared goal of reducing the burden of cancer in Ethiopia.

Together, we can transform the cancer landscape in Ethiopia and move closer to achieving our vision of a healthier, more equitable future for all.



Dereje Duguma (MD, MIH)
State Minister
Federal Ministry of Health Ethiopia

ACKNOWLEDGMENT

The Federal Ministry of Health of Ethiopia extends its deepest gratitude to all individuals and organizations that contributed to the development of the Integrated National Cancer Control Plan (NCCP) for Ethiopia 2025–2029. This document represents a significant milestone in the country's ongoing efforts to combat the growing burden of cancer and improve the health and well-being of its people.

The successful design and development of the NCCP have been led by the Disease Prevention and Control Lead Executive Office and the Non-Communicable Disease (NCD) Desk at the Federal Ministry of Health. Special thanks go to the National Technical Working Group (TWG) for their invaluable expertise, dedication, and collaborative spirit throughout the process. Their strategic insights and tireless efforts have been instrumental in shaping this comprehensive plan.

We also express our heartfelt appreciation to our national and international partners, whose support and contributions have been critical to the development of the NCCP. Special recognition is due to the International Atomic Energy Agency (IAEA) and the World Health Organization (WHO) for coordinating the imPACT Review Mission. Their thorough evaluation of the previous NCCP and their strategic guidance have provided a strong foundation for the development of this updated plan.

This accomplishment is a testament to the collective efforts of stakeholders from across sectors, including governmental and non-governmental organizations, academia, professional associations, and civil society. Our Special gratitude goes to Mathiwose Wondu Ye-Ethiopia Cancer Society for their generous financial support to print and disseminate the plan for the end users. Your collaboration and commitment to addressing cancer prevention, treatment, and care in Ethiopia are deeply appreciated.

Finally, we acknowledge the voices of patients, caregivers, and communities whose lived experiences have inspired and informed the development of this plan. Your courage and resilience continue to drive our commitment to achieving equitable and sustainable cancer control in Ethiopia.

Together, we reaffirm our dedication to reducing the burden of cancer in Ethiopia and ensuring a healthier future for all.



Hiwot Solomon (Phd, MPH)
Lead Executive Officer
Diseases Prevention and Control Office
Federal Ministry of Health Ethiopia

EXECUTIVE SUMMARY

According to estimates from the population-based cancer registry in Addis Ababa, approximately two-thirds of all cancer cases in Ethiopia occur in women. Among the most prevalent types of cancer in the country, breast cancer and cervical cancer are particularly significant due to their high incidence rates. Colorectal cancer, non-Hodgkin lymphoma, and leukemia also rank among the top five most common cancers affecting the Ethiopian population.

For men, the primary cancer types differ, with prostate cancer leading in prevalence. Other commonly diagnosed cancers in men include thyroid cancer, lung cancer, stomach cancer, and liver cancer. These types of cancer highlight the gender-specific differences in cancer epidemiology within the country.

To address the cancer burden effectively, Ethiopia prioritizes three key cancer types based on their epidemiological significance and the availability of evidence-based, effective interventions. These priorities guide the allocation of resources and the design of public health initiatives. However, it is important to note that interventions for other types of cancer are also part of Ethiopia's comprehensive cancer control strategy.

The country's approach encompasses all aspects of cancer care, following strategic pillars that range from prevention and early detection to diagnosis, treatment, and palliative care. Prevention efforts include public education campaigns, vaccination programs, and initiatives to reduce risk factors such as tobacco use, harmful use of alcohol and unhealthy diets. Early detection strategies aim to improve awareness and access to screening programs, enabling timely diagnosis.

For diagnosis and treatment, investments are being made to strengthen healthcare infrastructure, train medical professionals, and improve access to essential diagnostic tools and therapies. Additionally, palliative care services are being integrated to ensure holistic support for patients and their families, addressing physical, emotional, and social needs.

The plan serves as a strategic framework to guide the nation's response to the growing burden of cancer. Grounded in the imPACT review recommendations, the plan underscores the need for a comprehensive approach to cancer prevention, early detection, diagnosis, treatment, and care, addressing both adult and pediatric cancers.

Cancer remains a critical health challenge, necessitating robust planning that aligns with Ethiopia's unique epidemiological profile, resource landscape, and health system priorities. The Integrated National Cancer Control Plan (iNCCP) prioritizes interventions that are people-centered, multisectoral, and tailored to Ethiopia's context while promoting continuous improvement through collaboration and innovation.

Strategic Priority Areas:

The plan identifies four priority areas for focused intervention, selected based on disease burden, cost-effectiveness, and feasibility:

1. Breast Cancer Management: Encompasses screening, early detection, timely diagnosis, and comprehensive treatment.
2. Cervical Cancer Screening and Treatment: Focuses on scaling up screening services, ensuring timely treatment, and advancing cervical cancer elimination strategies.
3. Childhood and Adolescent Cancer: Addresses the unique needs of children with cancer through evidence-based diagnosis, tailored treatments, and supportive care.
4. Other Cancers: interventions for other types of cancer are part of Ethiopia's comprehensive cancer control strategy (colorectal, prostate, NHL, Liver cancers)

Strategic Pillars:

Implementation is guided by five interconnected pillars that support the cancer continuum:

1. Cancer Prevention: Mitigating modifiable risk factors and promoting preventive strategies.
2. Early Detection and Recognition: Expanding access to effective screening and diagnostic services.
3. Diagnosis and Treatment: Strengthening capacity for timely and cost-effective medical interventions.
4. Palliative Care: Providing holistic care to enhance the quality of life for patients.
5. Psychosocial Support: Addressing the emotional and psychological needs of patients and their families.

Objectives and Approach:

The iNCCP adopts a comprehensive cancer continuum model, integrating interventions from prevention to end-of-life care. The overarching objectives of the plan include:

- Promoting prevention and early detection, with a particular focus on breast, cervical, and childhood cancers.
- Enhancing diagnostic and treatment services, alongside palliative and psychosocial care.
- Strengthening cancer surveillance systems, registries, and research capabilities.
- Fostering partnerships and coordination across stakeholders, including government, civil society, and healthcare providers.
- Aligning cancer control activities with the National Health Sector Transformation Plan.
- Engaging communities in cancer prevention, care, and advocacy efforts.

Stakeholder Engagement:

The iNCCP is designed to mobilize a wide range of stakeholders, including policymakers, healthcare providers, civil society and patients organizations, and caregivers, to foster a shared understanding of roles and responsibilities within the cancer control framework. Collaboration and innovation are central to achieving the plan's goals and addressing the challenges of cancer care in Ethiopia.

Summary:

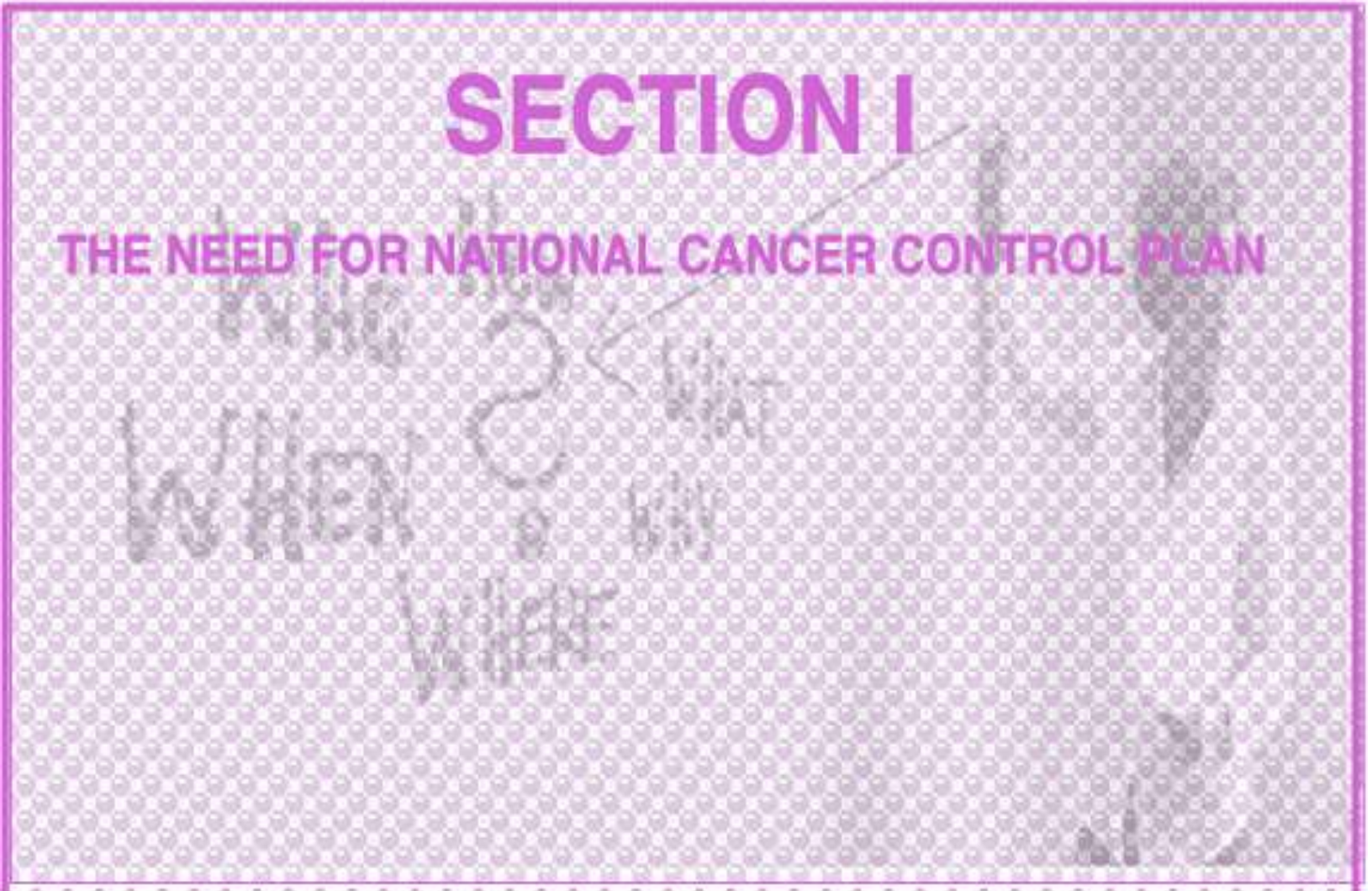
Ethiopia's iNCCP 2025-2029 represents a unified effort to reduce the cancer burden, improve outcomes, and enhance the quality of life for patients. By prioritizing evidence-based interventions, leveraging multisectoral partnerships, and integrating global best practices, the plan charts a sustainable path toward comprehensive and equitable cancer care.

ACRONYMS

AI	Artificial Intelligence
AIDS	Acquired Immunodeficiency Syndrom
ASLAN	The Aslan Project based in Washington DC
BC	Breast Cancer
BSE	Breast Self Examination
CBE	Clinical Breast Examination
CC	Cervical Cancer
CSOs	Civil Society Organizations
DHIS	District Health Information System
EHBP	Essential Health Benefit Package for Health
EPI	Expanded Program on Immunization
EFDA	Ethiopian Food and Drug Authority
EPSS	Ethiopian Pharmaceutical Supply Services
ETR	End Term Review
GBCI	Global Breast Cancer Initiative
GICC	Global Initiative for Childhood Cancer
HEWs	Health Extension Workers
HIV	Humn Immunodeficiency Virus
HPV	Human Papilloma Virus
HSTP	Health Sector Transformation Plan
IAEA	International Atomic Energy Agency
IARC	International Agency for Research on Cancer
IMCI	Integrated Management of Childhood Illnesses
iNCCP	Integrated National Cancer Control Plan
LEEP	Loop Electro Excision Procedure
LMIC	Low and Middle Income Countries
MDT	Multi Disciplinary Team
MoH	Ministry of Health
MTR	Mid Term Review
MWECS	Mathiwos Wondu YeEthiopia Cancer Society
NCACCP	National Childhood and Adolescent Cancer Control Plan
NCCP	National Cancer Control Plan
NCD	Non-Communicable Disease
PHO	Pediatric Hematooncologist
QA	Quality Assurance
SHS	Second Hand Smoke
SPHMMC	St Paul Hospital Millennium Medical College
TAPCCO	Tesfa Addis Parents Childhood Cancer Organization
TASH	Tikur Anbessa Specialized Hospital
TF	Task Force
TWG	Technical Working Group
UHC	Universal Health Coverage
VIA	Visual Inspection with Acetic Acid
WHO	World Health Organization

SECTION I

THE NEED FOR NATIONAL CANCER CONTROL PLAN



Chapter 1: Introduction

Chapter 2: Situation Analysis

CHAPTER 1: INTRODUCTION

1.1 OVERVIEW

This chapter describes the global and local burden of cancer, as well as the anticipated and projected changes in the future. It provides context to the cancer control continuum, outlining the opportunities for interventions at strategic level to reduce the disease burden, mortality and socio-economic impact to households and communities. In addition, a case is made for cancer control planning in addressing the public health challenge. Finally, the chapter puts this strategic plan development process into priority interventions.

The World Health Organization defines a National Cancer Control Program as a “public health program designed to reduce the incidence and mortality of cancer and improve the quality of life of cancer patients through systematic and equitable implementation of evidence-based strategies for prevention, early detection, treatment, and palliation, making the best use of available resources”. It works with health service providers to prevent cancer, diagnose cancer, treat cancer and increase survival and quality of life for those who develop cancer by converting the knowledge gained through research, surveillance and outcome evaluation into actionable strategies and interventions.

1.2 THE GLOBAL BURDEN OF CANCER

Cancer is one of the four leading Non-Communicable Diseases (NCDs), along with cardiovascular diseases, diabetes, and chronic respiratory diseases, which together account for over 60% of global deaths each year. According to WHO report, these diseases share common risk factors, including tobacco use, alcohol consumption, poor diet, and physical inactivity. Cancer alone causes approximately 10 million deaths annually, with 75% of these occurring in low- and middle-income countries (LMICs). If no action is taken, global cancer cases are projected to rise by 60% over the next two decades, with LMICs expected to see the largest increase at 81%. The impact of cancer goes beyond health, affecting productivity, increasing unemployment, reducing labor force participation, and limiting capital investment, which collectively hinder economic growth and development.

In 2022, the IARC estimates around 20 million new cancer cases and 9.7 million deaths. The estimated number of people who were alive within 5 years following a cancer diagnosis was 53.5 million. About1 in 5 people develop cancer in their lifetime, approximately 1 in 9 men and 1 in 12 women die from the disease (1)

Lung cancer is the most commonly occurring cancer worldwide with 2.5 million new cases accounting for 12.4% of the total new cases. Female breast cancer ranked second (2.3

million cases, 11.6%), followed by colorectal cancer (1.9 million cases, 9.6%), prostate cancer (1.5 million cases, 7.3%), and stomach cancer (970 000 cases, 4.9%).

Globally more than 400,000 cancer cases are expected to be diagnosed annually in 0-19 years of age. About 90% of them reside in LMICs. The five –year overall survival of childhood cancer is more than 80% in HICs and less than 30% in most LMICs (2,3). The reasons for this disparity are delay in diagnosis, an inability to obtain an accurate diagnosis, inaccessible therapy, abandonment of treatment, death from toxicity, and relapse. Improving access to essential medicines, improved diagnosis and supportive care is highly cost effective, feasible and significantly improves survival in all settings (4).

According to the CureALL framework, WHO GICC is focusing on six common childhood cancers. These include acute lymphoblastic leukemia, Burkitts lymphoma, Hodgkins lymphoma, retinoblastoma, nephroblastoma and low grade gliomas. Several tumor types occur almost exclusively in children, such as neuroblastoma, nephroblastoma, and retinoblastoma, whereas carcinomas, which are the predominant type in adults (breast, lung, or stomach cancer), are extremely rare in children.

Almost half of childhood cancers are hematolymphoid cancer (leukemia and lymphoma), and the most frequent other malignancies are tumors of the central nervous system and tumors that develop from embryonal tissues. Several tumor types occur almost exclusively in children, such as neuroblastoma, nephroblastoma, and retinoblastoma, whereas carcinomas, which are the predominant type in adults (breast, lung, or stomach cancer), are extremely rare in children.

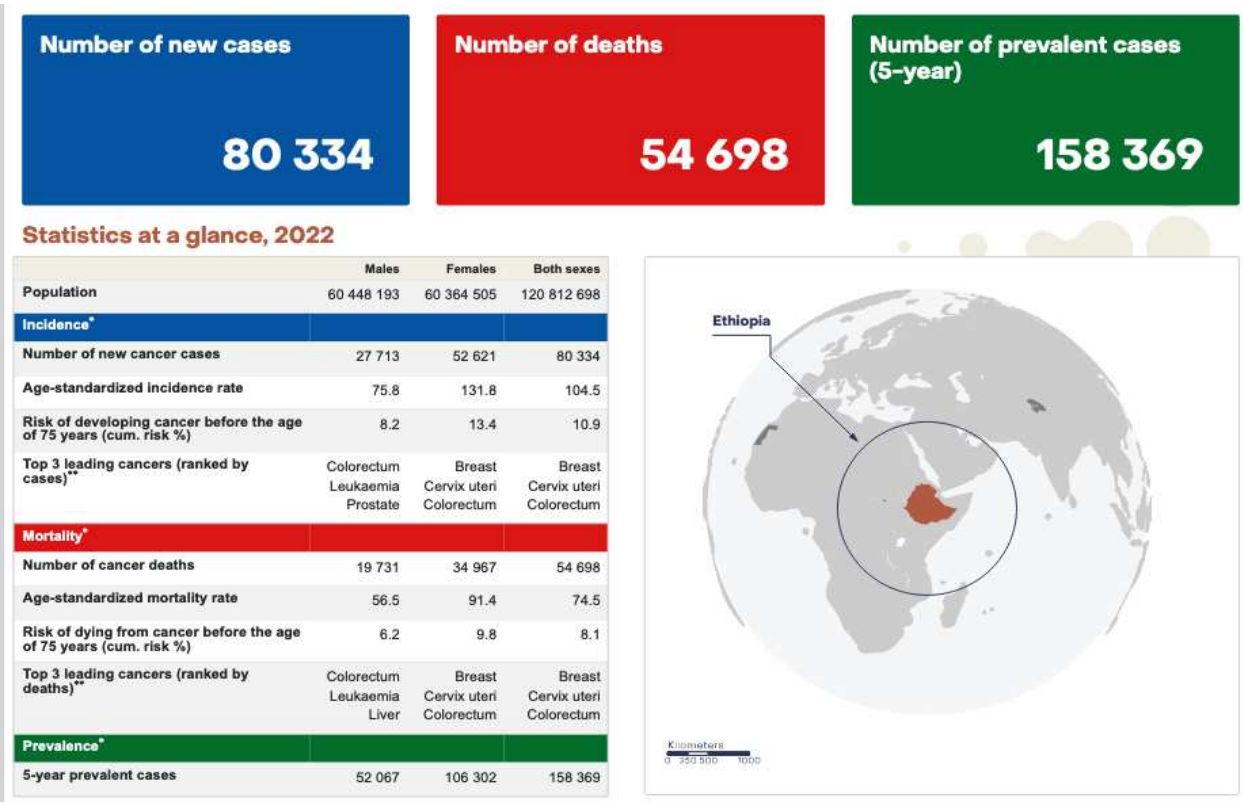
Pediatric oncology care has gradually improved over the years with groundbreaking reports displaying favorable survival outcomes of many childhood cancers. These achievements have emanated from better awareness, high level training of medical personnel, improved diagnostics and supportive care. All these milestones have been achieved in the developed world where governments and reliable stakeholders have provided sustainable financial support.

There are many challenges in the developing world that have to be confronted and overcome. The incidence of cancer and cancer mortality is unknown in most developing countries. The awareness of cancer is very low among the population. The knowledge of cancer and the capacity of health workers are in most cases substandard. The number of health workers in childhood cancer care is extremely low. The underfinanced health infrastructure is not set up to tackle chronic health problems.

1.3 THE CANCER BURDEN IN ETHIOPIA

In Ethiopia, the estimated age-standardized incidence rate of cancer is 104.5 per 100,000 population. According to IARC's GLOBOCAN 2022 data, there were approximately 80,334 new cancer cases reported (27,713 in men and 52,621 in women) and 54,698 cancer-related deaths (19,731 in men and 34,967 in women). Women bear a disproportionate burden, with breast cancer leading (16,904 new cases), followed by cervical cancer (8,168 new cases) and colorectal cancer (3,204 new cases). For men, the most common cancers are colorectal cancer (3,347 new cases), leukemia (2,636 new cases), and prostate cancer (2,317 new cases).

Figure 1: Cancer Incidence and Morbidity Estimate for Ethiopia , Globocan 2022.



	Males	Females	Both sexes
Population	60 448 193	60 364 505	120 812 698
Incidence*			
Number of new cancer cases	27 713	52 621	80 334
Age-standardized incidence rate	75.8	131.8	104.5
Risk of developing cancer before the age of 75 years (cum. risk %)	8.2	13.4	10.9
Top 3 leading cancers (ranked by cases)**	Colorectum Leukaemia Prostate	Breast Cervix uteri Colorectum	Breast Cervix uteri Colorectum
Mortality*			
Number of cancer deaths	19 731	34 967	54 698
Age-standardized mortality rate	56.5	91.4	74.5
Risk of dying from cancer before the age of 75 years (cum. risk %)	6.2	9.8	8.1
Top 3 leading cancers (ranked by deaths)**	Colorectum Leukaemia Liver	Breast Cervix uteri Colorectum	Breast Cervix uteri Colorectum
Prevalence*			
5-year prevalent cases	52 067	106 302	158 369

Lack of national cancer registry makes it very difficult to know the exact burden of cancer in Ethiopia and that these estimates are highly likely to underestimate the real burden. The population-based cancer registry in Addis Ababa estimates that two-thirds of all cancers in Ethiopia occur in women. The five most commonly occurring cancers in Ethiopian are breast cancer, cervical cancer, colorectal cancer, non-Hodgkin lymphoma, and leukemia. In men, the most common cancers are prostate cancer, thyroid cancer, lung cancer, stomach cancer, and liver cancer.

GLOBOCAN 2022 reports that the incidence of all cancers (excluding non-melanoma skin cancers) in Ethiopia is 5,842 cases among children aged 0–19 years and 4,119 cases among those aged 0–14 years. The most common cancers in Ethiopian children include acute lymphoblastic leukemia (ALL), non-Hodgkin lymphoma, rhabdomyosarcoma, Wilms tumor, and neuroblastoma. Central nervous system (CNS) tumors, which are the second most common childhood malignancy, are often underreported due to the limited availability of diagnostic tools such as CT scans, MRI, and histopathology. About 80% of cancer cases are diagnosed at advanced stages, with an estimated 12,000 cancer patients being treated annually.

Table 1: ***Estimated number of new cancer cases in Ethiopia from 2022 to 2030***

Top 5 cancers + childhood	**2022**	**2030**
Breast	16 904	25 814
Cervix	8 168	9 866
Colorectum	6 551	8 772
Leukemia	4 721	5 988
NHL	3 568	4 642
Childhood cancer (0-19 years)	5 842	6 809

Table 2: Estimated number of cancer deaths in Ethiopia from 2022 to 2030

Top 5 cancers + childhood	**2022**	**2030**
Breast	9 626	14 705
Cervical	5 975	7 178
Colorectum	4 863	6 508
Leukaemia	3 482	4 451
NHL	2 343	3 060
Childhood cancers (0-19)	3 199	3 727

Source: GLOBOCAN 2022: Estimated Cancer Incidence, Mortality and Prevalence Ethiopia.

In Ethiopia, the situation for childhood cancer reflects the challenges faced by other resource-limited countries. Children with cancer often receive incomplete, inadequate, or no treatment, and those with incurable conditions are frequently sent home without access to palliative care. The country faces significant shortages of trained medical professionals, proper healthcare facilities, essential chemotherapy drugs, and basic pain medications needed to treat cancer patients. As a result, childhood cancer care is minimally addressed within the public health system, and inadequate resources are allocated for its treatment.

1.4 RATIONALE FOR THE NATIONAL CANCER CONTROL PLAN

The Integrated National Cancer Control Plan 2025-2029 highlights Strategic priority areas and strategic interventions for implementing Ethiopia's Cancer Control Plan. The plan is grounded in the imPACT review recommendations, which emphasized the need for Ethiopia to develop a comprehensive strategy that accurately reflects the true burden of cancer, including cancers affecting children and adolescents.

Cancer control planning is essential in all resource settings to address health impacts, manage socioeconomic changes, and meet population health needs by focusing on cancer prevention, early detection, treatment, and care for those affected. Effective planning requires an understanding of the local context, learning from past experiences, and a commitment to continuous improvement. Additionally, cancer control plans that are goal-oriented, people-centered, realistic, multisectoral, and developed through a participatory and iterative process are more likely to achieve successful implementation.

This National Cancer Control Plan has been developed to guide the country in prioritizing specific interventions for cancer prevention and control. It is based on the existing disease burden, the prevalence of risk factors, global priorities tailored to the local context, and available resources. Recognizing the need to maintain focus on cancer interventions amidst competing national priorities, such as the burden of communicable diseases, this strategic plan serves as a roadmap to inform and align cancer prevention and control efforts among all stakeholders.

1.5 TARGET AUDIENCE

This strategic plan is relevant to a wide range of stakeholders, including government bodies, policymakers, health strategists, healthcare providers, civil society organizations, and others whose work directly or indirectly impacts cancer control services. It also addresses those involved in managing and delivering cancer care across the continuum, as well as individuals living with cancer, their families, and caregivers. By outlining clear priority interventions, the strategy fosters collaboration through a multisectoral approach and provides all stakeholders with a shared understanding of their roles within the broader cancer control framework. Ultimately, it aims to reduce the cancer burden and improve the quality of life for cancer patients.

1.6 MODEL OF CANCER CONTROL IN ETHIOPIA

Cancer is a challenging disease to treat, often progressing slowly over time. Some types, such as breast and cervical cancer, can benefit from early screening and detection, allowing treatment before the disease advances to more severe stages. However, many patients present with cancer at a late stage due to factors like limited awareness, inadequate access to diagnostic and screening facilities, and a shortage of skilled healthcare providers. As a result, treatment becomes more difficult and often requires long-term care. Early detection, better access to healthcare resources, and improved training for healthcare professionals are essential to improving cancer outcomes and reducing its impact.

Cancer control involves a comprehensive approach that spans a range of interventions. These include preventing the disease through awareness and lifestyle changes, offering early screening and detection services, providing diagnostic and treatment options, and ensuring palliative and pain management for terminally ill patients. This continuum of care is essential for managing cancer at every stage, from prevention to end-of-life care, ensuring that individuals receive the appropriate support throughout their cancer journey.

Because it is generally not possible to prevent cancer in children, the most effective strategy to reduce the burden of cancer in children and improve outcomes is to focus on a prompt, correct diagnosis followed by effective, evidence-based therapy with tailored supportive care.

The Integrated National Cancer Control Plan (iNCCP) in Ethiopia focuses on four priority areas for intervention, prioritized based on the disease burden, availability of screening and early detection, and cost-effective interventions. The cancer continuum model is applied across all three priority areas to ensure a comprehensive approach to cancer care. These priority areas are:

1. **Breast Cancer Management**: This involves screening, early detection, diagnosis, and treatment to manage breast cancer effectively.
2. **Cervical Cancer Screening and Treatment**: This focuses on providing screening services and timely treatment for cervical cancer, with an emphasis on early detection. It also provides a general guidance on cervical cancer elimination strategy
3. **Childhood and Adolescent Cancer**: This area targets the diagnosis, evidence-based treatment, and tailored supportive care for childhood and adolescent cancers, ensuring effective therapy and support throughout the treatment process.
4. **Other Cancers**: Focus on addressing all other types of cancers by implementing the adopted strategic pillars.

Table 3: Cancer Control Priority Areas and the Global Policy Context

PRIORITY AREAS	GLOBAL STRATEGIC INITIATIVES	STRATEGIC GUIDE IN ETHIOPIA
1. Breast Cancer	Global Breast Cancer Initiative	National Breast Cancer Guideline
2. Cervical Cancer	Global Cervical Cancer Elimination Initiative	National Cervical Cancer Screening and Treatment Guideline
3. Childhood and Adlolesent Cancer	Global Initiative for Childhood Cancer	Integrated National Cancer Control Plan
4. Other Cancers	The World Health Organization (WHO) Resolution WHA58.22 underscores the critical need for member states to formulate and implement comprehensive strategies for cancer prevention and control.	The integrated National Cancer Control Plan (iNCCP)

The following table illustrates the model of cancer care continuum, which encompasses the entire range of interventions—from prevention and early detection/recognition to treatment, rehabilitation, and palliative care. This model serves as a framework for coordinating efforts and ensuring a comprehensive approach to cancer care.

Table 4: Cancer Control Pillars by Priority Areas

STRATEGIC PILLARS	PRIORITY AREAS			
	Breast Cancer	**Cervical Cancer**	**Childhood and Adlolescent Cancer**	**Other Cancers**
1. Primary Prevention	√	√		√
2. Early Detection/Recognition	√	√	√	√
3. Diagnosis and Treatemt	√	√	√	√
4. Psychosocial Support/Surviorship	√	√	√	√
5. Supportive and Palliative Care	√	√	√	√

Continuous research, surveillance, and systematic monitoring are crucial for the effective coordination and progress of a national cancer control program. These activities help identify trends, evaluate the effectiveness of interventions, and ensure that resources are appropriately allocated. By tracking data and progress, policymakers can refine and improve strategies over time.

1.7 POLICY CONTEXT IN CANCER CONTROL

1.7.1 THE GLOBAL COMMITMENTS TO CANCER CONTROL

The World Health Organization has published four specific cancer control initiatives:

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

The WHO launched this Strategy in 2020, with Strategic targets for attainment by 2030 (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). Achievement of these targets by 2030 will put countries on the path to eliminate cervical cancer within a century.

b) The Global Breast Cancer Initiative (GBCI):

The WHO established this in 2021 to spur collective global action and provide momentum to halt the rising breast cancer burden through strengthening health systems. The Initiative seeks to avert about 2.5 million deaths by 2040, through achieving specific targets under each of the 3 pillars it anchors on: 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:

This initiative was launched in 2018 and aims to achieve at least 60% survival for childhood cancer globally by 2030 through increased capacity of countries to provide quality services for children with cancer. Although childhood cancers cannot be prevented, there exist significant differences in survival rates with more than 90% achieved in most developed countries as compared to between 10-30% in LMICs. The establishment of a childhood cancer program to spearhead the implementation of the CURE ALL framework to increase access, advance quality and save lives will be prioritized in this strategic plan to achieve 60% survival rates for childhood cancer by the year 2030.

d) The Global Initiative for Cancer Registry Development:

Cancer surveillance is achieved through cancer registration. Cancer registries may be population-based (PBCR) or hospital based (HBCR), with rather different methods of working, and objectives while complementing each other. For cancer control planning, a functional PBCR is required to constantly provide surveillance data, burden and trends of cancer occurrence. As per IARC recommendations, a high quality PBCR should ideally achieve 20% of the national population coverage.

1.7.2 ETHIOPIA's COMMITMENT TO CANCER CONTROL

Ethiopia has prioritized the prevention and control of Non-Communicable Diseases (NCDs) by establishing a dedicated coordination unit within the Ministry of Health in 2013. Among the top NCD priorities are cancer control, cardiovascular diseases (CVD), chronic respiratory diseases (CRD), diabetes (DM), and eye health.

A strong commitment has been demonstrated for cancer prevention and control. The launch of Ethiopia's first costed National Cancer Control Plan (NCCP) 2016-2020 and the National Childhood and Adolescent Cancer Control Plan (NCACCP) marked the beginning of robust implementation efforts.

The following table (table 5) summarizes relevant strategy documents and their relevance to National Cancer Control Plan.

Table 5: Strategy documents and their relevance to cancer control plan

Policy Document	Relevance to Cancer Control
National Strategic Plan for the Control of Noncommunicable Diseases (NCDs)	Addresses cancer as part of the broader strategy to control noncommunicable diseases, focusing on prevention and management.
Guidelines for Cervical Cancer Prevention and Control	Specific focus on cervical cancer prevention, including vaccination, screening, and early detection.
National Food and Nutritional Strategy	Promotes healthy eating, which is critical for reducing cancer risks and supporting cancer patients' nutritional needs.
Strategy on Viral Hepatitis	Reduces the risk of liver cancer by addressing viral hepatitis through prevention and treatment programs.
Reproductive Health Strategic Plan	Focuses on reproductive health, including the prevention and early detection of reproductive organ cancers (e.g., breast, cervical).
National Mental Health Strategy	Supports the mental health of cancer patients, helping them cope with the psychological challenges of diagnosis and treatment.
Tobacco Control Act	Reduces tobacco consumption, a major risk factor for lung and other cancers.
National Palliative Care Guidelines	Provides guidelines for palliative care, improving the quality of life for terminal cancer patients through pain management and support.
Strategic Plan for National Blood Transfusion Services	Ensures the availability of safe blood for cancer patients undergoing chemotherapy and other treatments requiring blood transfusions.
National Radiation Protection Guidelines	Ensures the safe use of radiation in cancer treatment, minimizing risks to both patients and healthcare providers.
National Essential Medicines List (6th edition, 2020)	Includes 54 essential cancer medicines, ensuring availability and access to critical cancer treatments.
Public-Private Partnership Strategy for the Federal Ministry of Health	Facilitates collaboration between public and private sectors to enhance cancer care infrastructure and services.
National Health Equity Strategy	Promotes equitable access to cancer care, ensuring that underserved populations receive timely and appropriate treatment.
National specialty and sub-specialty service road map 2020 - 2029	This roadmap supports the cancer control plan's goals of reducing cancer-related morbidity and mortality through integrated, equitable, and high-quality healthcare services.

This plan collectively contribute to the broader health policy framework in Ethiopia by addressing systemic factors (such as healthcare infrastructure, financing, and human resources), as well as cancer-specific factors (such as prevention, treatment, palliative care, and early detection).

Ethiopia's approach to cancer control involves integrating cancer care across multiple health programs, ensuring that cancer prevention is part of broader NCD initiatives, health promotion, and immunization efforts. This creates synergies that strengthen the effectiveness of the NCCP and promote a holistic approach to cancer care.

Ethiopia has made significant progress in cancer prevention and treatment, underscoring its commitment to reducing the burden of cancer and other non-communicable diseases (NCDs). The following milestones highlight the country's achievements:

1. **Expansion of Cancer Treatment Centers**:
    - The number of comprehensive cancer treatment centers in Ethiopia has increased from 1 to 7, with 2 centers located in Addis Ababa and 5 distributed across regional areas to ensure equitable access to care.
    - In collaboration with international partners such as the ASLAN Project and St. Jude Global Health, 5 pediatric hematology-oncology centers and 8 Satellite Clinics have been established nationwide, improving care for children with cancer.
2. **Decentralizing Breast Cancer Chemotherapy in Ethiopia:**
    - To address the high prevalence of breast cancer, comprising 32% of all cancer cases in Ethiopia, a national initiative was launched to decentralize chemotherapy services.
    - Currently, 30 regional peripheral hospitals across Ethiopia are equipped to provide these essential chemotherapy services.
3. **Investment in Human Resources for Cancer Care**:
    - The country has significantly expanded its workforce of clinical oncologists, growing from 3-4 to over 50, with an additional 40 residents currently undergoing specialized training.
    - Ethiopia now boasts 20 pediatric hematology-oncologists, with 7 more pursuing fellowship programs in preparation for full certification.
4. **Advancement in Radiation Treatment Technology**:
    - Ethiopia has upgraded its radiation treatment capabilities, replacing outdated 2D Cobalt-60 machines, which had been in use since 1999, with modern 3D Linear Accelerator (LINAC) technology. Four centers are now equipped with state-of-the-art LINAC machines and operational since November 2020, enhancing the quality and precision of cancer treatments.
5. **Community-Level Cervical Cancer Screening**:
    - A large-scale cervical cancer screening program has been implemented across more than 1,500 public health facilities, with over 1 million women aged 30-49 screened to date.

1.8 DEVELOPMENT OF NATIONAL CANCER CONTROL PLAN 2025-2029

This integrated cancer control plan was developed through a participatory and interactive process, engaging stakeholders in a spirit of dialogue and consultation. It outlines the disease burden, assesses current control efforts, and sets clear goals and objectives. The plan prioritizes populations, strategies, and interventions based on the burden of disease, equity considerations, feasibility, implementation effectiveness, cost-effectiveness, and appropriateness to the local context.

The Ministry of Health, through the National Cancer Control Program, conducted a final evaluation of the National Cancer Control Plan (2016–2020) and the National Childhood and Adolescent Cancer Control Plan (NCACCP) 2019-2023. To inform the new strategy, the Ministry requested an imPACT review from UN agencies, including the World Health Organization, the International Atomic Energy Agency, and the International Agency for Research on Cancer. This review provided an objective analysis of cancer control efforts in Ethiopia and offered recommendations for Strategic focus areas.

A National Technical Working Group (TWG) was established to lead the development of the iNCCP. The process involved the following three Strategic steps, guided by a Cancer Team and supported through stakeholder discussions, meetings, and workshops:

a) **Gap Analysis**:
   - An assessment of the previous strategic plan's implementation and the current status of cancer control efforts in Ethiopia.

b) **Prioritization**:
   - Identification of strategic result areas and the development of goals and objectives for the next five years.

c) **Interventions Selection**:
   - Multi-stakeholder engagement to identify specific interventions under each priority areas and strategic pillars, based on feasibility, evidence, and alignment with national values.

This collaborative and evidence-based approach ensures the new strategic plan is well-positioned to address Ethiopia’s cancer burden effectively and equitably.

CHAPTER 2: SITUATION ANALYSIS

2.1 OVERVIEW

This chapter presents a situational analysis of cancer in Ethiopia and summarizes the findings from the final evaluation of the previous strategy, with a focus on Strategic result areas. It highlights the major achievements, challenges encountered during implementation, and emerging contextual realities observed during the strategy period. A comprehensive environmental scan is conducted using a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis. Finally, the chapter outlines strategic priorities, aligning global cancer control efforts with the future of health in Ethiopia.

2.2 REVIEW OF NCCP 2016-2020 AND NCACCP 2019-2023

The National Cancer Control Plan (NCCP) for Ethiopia, covering the period 2016-2020, marks the country's first such initiative. It was developed through a consultative process led by the National Cancer Coordination Committee and the NCD Case Team of the Federal Ministry of Health. The plan is comprehensive, addressing various aspects of cancer care across its continuum, with the Federal Ministry of Health and Regional Health Bureaus responsible for its implementation.

Both NCCP and the NCACCP document consists of two main sections. The first includes an introduction, a stakeholder analysis, and a SWOT analysis, offering an overview of how the plan aligns with other national policies and strategies. The second section outlines the vision, mission, goal, general objectives, guiding principles, strategies, and activities along the cancer care continuum. It also provides a detailed implementation framework and a cost estimation section.

The documents are well-aligned and complements ministerial and health sector strategic documents, including the NCD plan. It is integrated within the Health Sector Transformation Plan (HSTP) and the essential benefit package for health.

Ethiopia's national cancer coordination structure needs to be strengthened. At the level of the MoH, there are two designated officers and two cancer technical advisors seconded by partners to the Federal Ministry of Health. At the regional level, there are not yet any designated cancer focal points. The major stakeholders and institutions at national, regional and local levels involved in planning and implementation support of NCCP/NCACCP include:

Table 6: Stakeholders involved in Ethiopia's National Cancer Control Plan 2016-2020

Stakeholder/Institution	Roles and responsibilities	Function
Office of the First Lady	Co-chair of the National Cancer Committee	Governance-Advisory
Federal Ministry of Health	Coordination and leadership	National Process owner
Regional Health Bureaus	Regional coordination and leadership	Regional Process owner
Other government line ministries	Multisectoral collaboration	Supportive
Civil Society Organizations (local and International)	Advocacy, Capacity Building	Supportive
International Organizations including multilaterals like WHO	Financial and technical resources	Supportive
Health Care Providers	Service delivery	Supportive

In the 2016-2020 period, there was a National Cancer Control Committee co-chaired by the First Lady (no longer in place).

There is a need to enhance the human resource capacity and technical expertise of the Ministry of Health (MoH) and regional offices to effectively plan, implement, and coordinate cancer control programs. Civil society organizations (CSOs) play a significant role in the development and implementation of the National Cancer Control Program (NCCP). For instance, one staff member has been seconded as a cancer focal point at the Ministry, supporting the development of guidelines and NCD-related documents.

CSOs contribute through advocacy, capacity building, and supportive care services for cancer patients undergoing treatment. For example, the Mathiwos Wondu-Ye Ethiopia Cancer Society offers accommodation, food, skills training, and psychological support to cancer patients at the Tikur Anbessa Specialized Hospital, while Tesfa Addis Parents Childhood Cancer Organization (TAPCCO) provides similar services across all five pediatric oncology programs. However, there is a need to improve coordination among CSOs and strengthen institutional and financial sustainability.

Ethiopia has mixed financing for the health system with the contribution of donors, government and households (out-of-pocket) being 33.9%, 32.2%, and 30.5%, respectively as per the National Health Accounts 2019/2020. The remainder, 3-4%, was contributed from private employers, non-governmental organizations, and other sources.

The 20-year Health Care Financing Strategy has been instrumental in building strong resource mobilization and allocation systems to support the Health Sector Transformational Plan (HSTP). It is estimated that NCDs currently account for about 25% of the total health expenditure on health. Cancer is already integrated in the HTSP and is part of the Essential Health Benefit Package for Health (EHBP) which lists about 218 priority NCD interventions with 70 interventions targeting neoplastic conditions, among which there are 10 high-priority interventions for cervical cancer. There is however a need to review the integrated cancer services in the EHBP to better define essential services across the cancer care continuum and their level of service delivery (for example cryotherapy provision is listed to begin from secondary hospitals and above which limits the provision of cervical cancer "screen and treat" services that can be easily implemented at lower-level facilities to achieve the 90:70:90 targets for cervical cancer elimination).

The community-based health insurance (CBHI) has been scaled up in most Woredas and has a coverage of about 75% targeting the unemployed (7). It costs 921 Birr per year for each family and those with CBHI can access all services available at government facilities. However, due to unavailable services in government facilities, even with CBHI 60-70% of families face out-of-pocket expenditures seeking the services and purchasing health products and technologies including medicines not provided in private facilities.

A comprehensive law was implemented in February 2020 to increase the tax share of the average retail price of cigarettes from 33% to approximately 54%. However, tobacco product taxes are not yet earmarked as a "sin-tax" for NCDs and cancer control financing. The NCCP would benefit from a resource mobilization strategy for cancer control and there is need to identify current and potential donors, development partners and other possible sources of funding (including from the private sector) and forge partnerships and advocacy efforts at the national level for the NCCP.

Analysis and Summary of Ethiopia's NCCP imPACT Mission Findings:

In November 2023, Ethiopia's National Cancer Control Plan (NCCP) underwent a comprehensive review by an *imPACT* mission coordinated by the International Atomic Energy Agency (IAEA) and the World Health Organization (WHO).

Positive Strategic Findings

- Ethiopia has demonstrated commendable efforts in integrating cancer control measures into the Health Sector Transformation Plan (HTSP) and the Essential Health Benefit Package (EHBP).
- These steps signify recognition of cancer as a public health priority and commitment to improve access to cancer care

Major Challenges Identified

1. **Governance and Coordination**:
   - The lack of an advisory body for the NCCP hinders effective governance and oversight.
   - Coordination remains limited due to insufficient allocation of technical and financial resources at both national and regional levels.
2. **Financial Burden on Patients**:
   - The high out-of-pocket costs for cancer services pose a significant challenge.
   - Limited availability of public cancer services, essential health products, and technologies forces patients to seek private care, increasing financial strain.

2.3 LESSONS LEARNED

The lessons learned from the implementation of the NCCP 2016-2020 emphasize the importance of a comprehensive, multi-faceted approach to cancer control. Below is a summary of the Strategic points:

1. **Multi-Stakeholder Involvement**
   - Engaging various stakeholders, including governments, is essential not only during the drafting of strategic plans but also during implementation, monitoring, and evaluation.
2. **Health System Programmatic Approach**
   - A structured health system approach is necessary for effective implementation of cancer control programs.
3. **Global Alignment**
   - Aligning with global advancements and frameworks ensures relevance and effectiveness in addressing cancer control challenges.
4. **Integration of Services**
   - Integration of cancer control efforts into broader health systems, especially for prevention and early detection, enhances sustainability and operational efficiency.
5. **Economic Considerations**
   - Conducting cost-effectiveness and cost-benefit analyses is critical to the successful implementation of cancer control initiatives.
6. **Sustainable Financing**
   - Ensuring increased and sustainable funding for cancer screening programs is vital for equitable access to cancer services.

7. **Governance and Coordination**
    - Strengthened governance and coordination mechanisms are required to promote policy cohesiveness and improve the execution of cancer control strategies.
8. **Evidence Generation:**
    - The need for establishing monitoring and evaluation system for decision making and the significance and need for establishing national cancer registry.

Prioritization in the New Plan

The Integrated National Cancer Control Plan aligns with the World Health Assembly resolution on cancer, advocating for an integrated approach. This prioritization includes:

a) **Primary Prevention**:
    - Addressing cancer through prevention measures within the broader non-communicable diseases (NCD) agenda.

b) **Health system wide approach:**
    - This involves the implementation of cancer control across the healthcare delivery system, tailored to the expertise and capacity of each level, through task-sharing and the development of healthcare workers.

c) **Policy Coherence**:
    - Ensuring alignment with broader health strategies.

d) **Horizontal Integration**:
    - Delivering cancer services as part of a comprehensive health care package, particularly at the primary care level.

e) **Prioritization**:
    - Selecting and implementing priority cancer types based on epidemiology and impact of intervention

2.4 STRENGTH, WEAKNESS, OPPORTUNITIES AND THREATS

*Table 7:**SWOT Analysis by Pillars of Cancer Care***

I. Primary Prevention of Cancer			
Strength	Weakness	Opportunities	Threats
• Availability of strategy on disease Control • Availability of National Action Plan on NCDs • Breast and Cervical cancer Control guidelines available and HPV demonstration in progress • Introduction of HPV vaccination to routine program for adolescent girls • Hepatitis B vaccination incorporated in childhood immunization • Expansion of primary health care (PHC) services all over the country • Availability of community conversation structure • Availability of local social structures like "EDIR"	• Lack of communication strategy on cancer • Lack of awareness of risk factors • Lack of coordinated prevention activities and ownership • Lack of IEC/BCC materials on cancer • Adult risk group HBV immunization not implemented • Lack of strong advocacy group	• Health Extension Program is an asset to reach the rural community • GAVI supports childhood immunization • Availability of FM radio services in local languages. • Guidelines on breast and cervical cancers available • Expansion of radiotherapy centers • Cancer care professions development • Improvement in cancer evidence availability like population-based cancer registry	• Workload on HEWs and Health Development Army. • Cancer myths promoted by traditional healers and cancer prevention counteracts beliefs by local communities • Resistance from tobacco, alcohol, and, packed-food-processing industries. • Long-term funding commitment from donors is not assured

Strength	Weakness	Opportunities	Threats
II. Early Detection and Screening			
• Availability of low-cost approaches like VIA for cervical cancer • Government commitment to scale up national screening services for cervical cancer • Launch of advanced screening methods like HPV DNA •	• Low awareness about cancer screening and prevention • Inadequate and unskilled staff • Lack of pathology lab and expertise • In adequate number of partners working on this area of work	• Availability of telecom infrastructure all over the country to practice telemedicine and e-health applications • Possibility of using new technologies, such as HPV DNA testing, and outreach approaches to reach more women more efficiently • Partners available to Financially and technically support new technologies and scientific advance	• Expensive but cost-effective intervention • Lack of budget • Sustainability not assured • Competing health priorities • Lack of ownership • Cultural diversity and acceptability issue
III. Cancer Diagnosis & Treatment			
• Availability of the three-tiered health care delivery system (preventive to advanced care) • Expansion of health care services all over the country • Availability of Cancer plan and strategy • Pharmaceuticals and medical supplies control and regulation authority available • Medicines procurement and logistic system available	• Inadequate number of expertise on cancer diagnosis and treatment • Inadequate diagnostic and treatment facilities • The service is limited in tertiary hospitals and centralized • No functional public–private partnership • Cancer medicine and supplies are not available, if available not affordable • No networking of institutions in capacity- building and sharing resources	• Availability of mid-level professionals all over the country for possible task-sharing • Can be integrated in health care delivery system • Availability of telecom infrastructure widely gives opportunity for capacity building through e-learning. • Partners willing to participate in training of health workers • International interest to support cancer initiatives (e.g. IAEA) • Possibility of “twinning” relationships with internationally known cancer-treatment centers • Decentralization of cancer treatment	• Interventions are expensive. • Sustainability not assured • Radiotherapy equipment status relative to population need is grossly inadequate

Strength	Weakness	Opportunities	Threats
IV. Cancer palliative care			
• Included in National Cancer Control and Prevention Strategic Plan. • Availability of the three-tiered health care delivery system.	• Minimal palliative care knowledge and practice by health workers. • Inadequate palliative-care structure in health care system. • No home based palliative care by health care workers	• Community conversation structure, local social structures like “EDIR”,” • WHO guidelines on palliative care available • Associations and local NGOs working on palliative care available.	• Lack of budget & funding • Sustainability not assured
V. Cancer Surveillance and Research			
• Health information technicians widely available in the country • Research institutions and universities available • Demographic and Health Survey (DHS) conducted regularly • Government policy on research	• No nationally representative cancer data • National cancer registry unavailable. • Information officers not trained in cancer-specifics • Lack of accurate mortality surveillance • Inadequate institution based cancer registry • Lack of repesentative population based cancer registry.	• Hospital-based cancer registry initiatives available. • Partners willing to participate in implementing cancer registry strengthening and research work. • Population-based cancer registry in Addis Ababa provides a foundation for extending to a national registry through the development of satellite centers	• HMIS policy not accommodating cancer registry as an independent registry. • Current PBCR in Addis Ababa dependent on donors

2.5 Stakeholders Analysis

Table 8: Stakeholder Analysis: General Cancer Control

Stakeholder	Role of stakeholder	Current status	Interest	Influence	Position	Impact
MOH-Ethiopia	• National coordination and leadership	• Established NCD Desk • Assigned cancer control team • Led the development of NCCP • Cancer control set as a priority, and reflected in the HSTP • Resource-mobilization, prioritization	H	H	O	H
Regional Health Bureaus (RHBs)	Regional coordination & leadership	• Endorsing national policies/strategies • Regional NCD focal point established • Regional resource-mobilization, prioritization	H	H	O	H
Other government sector ministries	• Control tobacco use and alcohol consumption • Increase taxation on tobacco and alcohol, and use the revenue to support activities against NCDs and cancer control • Information in curricula on healthy life styles (Ministry of Education) • Build sport facilities and promote community play-ground space to encourage physical activity, sports, ((Urban Planning) • Promotion of sports/physical activity. – (Sports Commission) • Security of agricultural products, foods and fishery products (Ministry of Agriculture?) Control	• Need multi-sectoral coordination mechanism	L	M	S	H

	and regulation of imported foods • Ministry of Women, children and youth affairs, • particularly for women's cancers- breast, ovarian, cervical etc. • gender issues and access for women for care for all cancers					
Civil Society Organizations (CSOs)	Advocacy on: • Cancer information dissemination • Stigma-reduction • Resource-mobilization • Community participation • Equal access and opportunity to cancer health care services • Delivery of quality cancer services.	• Very few, and most localized in the capital • General lack funding for cancer	M	M	S	H
Cancer patients, survivors and their associations	• Have the right to get treatment, psychosocial support and palliative care • Break the silence, and get involved in community education • Formulate support groups for patients with cancer	• Lack of cancer information. • Late presentation for care and treatment • Very few get cancer care services • Weak patient involvement • Patients are silent and stigmatized	H	H	S	H
Religious leaders	• Dissemination of cancer information • Psycho-social support • Referral of patients to facilities	• No awareness on cancer	H	H	S	H
International organizations, Academia and funders	• Financial and technical support	• Technical and financial support	H	H	S	H
Community	• Dissemination and enforcement of cancer awareness, and provision of information and referral to facilities	• Weak awareness on cancer	H	H	S	H

S=Supportive; O= Owner ; H=High; Medium; L=Low

Table 9: ***Stakeholders Analysis: Childhood Cancer***

Ethiopia Childhood Cancer Control Draft Stakeholder Mapping and Analysis

Stakeholder Cluster	Stakeholder Groups	Current Main Action Group Cluster(s)						Comments, Focus Area & Strategies for Further Engagement
		SD	HW	IS	MPT	FG	F&C	
National	MOH	●	●	●	●	●	●	Develop childhood cancer specific policy and strategies
National	*EPSS,FDA, EPHI,Blood Bank*	●	●	●	●	●	●	Avail medical supplies and equipment, ensure and regulate safety of drugs and food, conduct research, avail timely, uninterrupted supplies of blood and blood products
National	MOE, MOA, MOTR, MOWSA, MOF, Customs	●	●	●	●	●		Design curriculum, safe agricultural practices, issue duty free privileges, provision of funding, promote children right for access to treatment and adherence, promote innovative treatment, digitalize healthcare, and application of advanced technology, promote discounted and quality pharmaceutical product, importation and trade, expedite and prioritize customs clearance.
Health Facilities	University Hospitals, Hospitals, Health Centers	●	●	●	●	●	●	Treatment and care for children with cancer
Regional government	Regional Health Bureau, Zonal and Wereda Health Office	●	●	●	●	●	●	Implement childhood cancer activities
National	Professional Associations (Medical – e.g. EMA, ENA, ESHO, EPS etc)		●	●		●	●	Give technical support and capacity building of childhood cancer professional
National	Public Enterprises (Ethiopian Airlines, Ethiotelecom, etc)			●	●	●	●	Funding, free ticket for patients, in-kind support, awareness raising, tele-medicine
Community	Academia and research		●	●	●	●	●	Capacity building, community support activities and research, advancing knowledge and care in childhood cancer
Civil Society	CSOs (e.g., TAPCCO, MWECS, Individuals, sport clubs….)	●	●	●	●	●	●	Proactive support for children with cancer and their families
Civil Society	Volunteers (Celebrities, sport clubs, individuals, traditional healers)					●	●	Proactive support for children with cancer and their families
Civil Society	Faith-based					●	●	Proactive support for children with cancer and their families
Civil Society	Corporates (Private and Diagnostics)	●	●	●	●	●		Proactive support for children with cancer and their families
Civil Society	Media (Social Media, & Mainstreamed media)					●	●	Highlight the curability of childhood cancers; mobilize civil society
Global	UN Agencies (UN, WHO, UNICEF, UNDP, IAEA)		●	●	●	●		To promote childhood cancer as global health agenda /issue declarations, Ensure that childhood cancer is given due attention and avail resources (medicine, equipment, knowledge and experience share etc), support childhood cancer programs (guidelines, technical and financial supports), technical support, equipment support, ensuring safety specific to childhood cancer
Multilateral	World Bank, IMF, Africa CDC, US CDC		●	●	●	●		Support in technical and financial support in childhood cancer programs
Global & Bilateral	USAID, FCDO (Former DFID), Irish Aid, JICA, GIZ, SIDA, CIDA	●	●	●	●	●	●	Health system strengthening for childhood cancer treatment, education, nutritional support, technical, financial support, and support civil societies
International	Funding Partners (ASLAN, AAP, UICC, UOC-IIPAN, Embassies…)	●	●	●	●	●	●	Technical and Financial, capacity building
International	Academic and Support Networks (St. Jude, CCI, UCL,)		●	●	●	●		Capacity Building and technical support

CSO = civil society organization; NGO = non---governmental organization; SD = service delivery; HW = health workforce; IS = information systems; MPT = medical products & technologies; FG = finance & governance; F&C = family & community engagement

SECTION II



Chapter 3: The Strategic Model

Chapter 4: iNCCP Implementation Strategy for Priority Areas

Chapter 5: Implementation and Coordination Framework

Chapter 6: Monitoring and Evaluation

Chapter 7:The Cost of iNCCP Ethiopia

Chapter 8: Implementation Strategy

CHAPTER 3: STRATEGIC MODEL

3.1 OVERVIEW

The comprehensive approach to cancer control outlined in the National Cancer Control Plan (NCCP) emphasizes the need for an integrated system spanning from prevention through to survivorship or end-of-life care. This strategy should be aligned with the healthcare system's capacity and tailored to the specific cancer burden in the country.

The evaluation of the NCCP 2016-2020 revealed gaps in its inclusiveness, particularly in addressing cancer pathology, imaging services, and childhood cancer. Scaling up diagnostic pathology and imaging is critical for early detection, as limited access to these diagnostic tools hinders timely cancer diagnoses. Early diagnosis is crucial since the stage at diagnosis is a major factor influencing cancer outcomes at the population level. Additionally, the fragmentation and lack of coordination in cancer registration systems have been a significant issue, highlighting the need for a more unified approach.

The new National Cancer Control Plan (NCCP) will integrate the national strategy for childhood cancer while also prioritizing advancements in breast and cervical cancer at the global level. A comprehensive and coordinated approach is crucial to enhance cancer detection, treatment, and outcomes for the population.

3.2 GOAL, VISION, MISSION, GOAL, OBJECTIVES AND GUIDING PRINCIPLES

3.2.1 VISION

Ethiopia free from preventable burden of cancer

3.2.2 MISSION

To reduce cancer-related morbidity and mortality in Ethiopia through nationwide collaboration and strengthened capacity for prevention, diagnosis, treatment, and care.

3.2.3 GOAL

To reduce premature mortality from cancer in Ethiopia by 15% by the year 2029.

3.2.4 OBJECTIVES

a) Promote cancer prevention and early detection, with a focus on breast ,cervical and childhood cancers.
b) Enhance cancer diagnosis, treatment, and palliative care services.
c) Strengthen cancer surveillance, registry systems, and research initiatives.
d) Encourage partnerships, coordination, collaboration, and innovation in cancer control efforts.
e) Integrate cancer control activities into the National Health Sector Transformation Plan.
f) Promote community engagement and participation in cancer prevention, control, and care.

3.2.5 GUIDING PRINCIPLES

The Ethiopian National Cancer Control Plan is guided by the following Strategic principles:

1. **Ownership, Leadership, and Fairness**
2. **Equity and Accessibility**
3. **Partnership, Coordination, and Teamwork**
4. **Innovation, Creativity, and Accountability**
5. **Systematic and Integrated Approach**
6. **Sustainability**
7. **Evidence-Based Practice**
8. **Patient-centered**

3.3 STRATEGIC PILLARS, OBJECTIVES AND INTERVENTIONS

3.3.1 PILLAR 1: CANCER PREVENTION

STRATEGIC PILLAR OVERVIEW:

In Ethiopia, breast and cervical cancers are among the most common, representing 32% and 13% of total cancer cases, respectively. Early diagnosis and screening are vital in reducing mortality for these cancers.

Tobacco is the most important risk factor responsible for one in five cancers and one in three cancer-related deaths globally. As per the STEPS 2015 survey, tobacco use among adults age 15+ years was estimated at 5%. An estimated 12.5 % of adults consume alcohol. About 6.3% of Ethiopians are overweight or obese while only about 3 % of Ethiopians consume the recommended five servings of fruits and vegetables daily.

Some viral infections are known cancer risk factors and can be prevented through vaccination. Routine vaccination programs for prevention of Hepatitis B and Human Papillomavirus (HPV) are in place in Ethiopia. Ethiopia has made significant progress in its vaccination efforts, particularly for Hepatitis B, with over 85% of infants receiving the recommended three-dose regimen. For HPV, the country has ramped up its efforts, launching a large-scale campaign in November 2024 to vaccinate over 7.4 million girls aged 9–14 through schools and community outreach. Despite these positive strides, global HPV vaccination coverage remains below the target, with Ethiopia, like other countries, still working toward meeting the 90% goal set for 2030.

Ethiopia has introduced screening programs for breast and cervical cancer, with cervical cancer screening coverage projected to reach 20% by the end of 2024.

This strategy will also support the development, review and implementation of guidelines related to cancer prevention and early detection as well as integration of key interventions into other public health programs.

STRATEGIC OBJECTIVE 1: REDUCE EXPOSURE TO MODIFABLE CANCER RISK FACTORS

STRATEGY 1: TOBACCO CONTROL

OVERVIEW:

Tobacco smoking is a major cause of various cancers, including those of the lung, esophagus, larynx, mouth, throat, kidney, bladder, pancreas, stomach, and cervix, with about 70% of lung cancer cases attributed to smoking. Second-hand smoke (SHS), or environmental tobacco smoke, is also proven to cause lung cancer in non-smokers.

Additionally, smokeless tobacco, such as chewing tobacco or snuff, increases the risk of cancers in the mouth, esophagus, and pancreas due to the harmful chemicals it contains.

OBJECTIVE 1: REDUCE PREVALENCE OF USE TO TOBACCO AND TOBACCO-RELATED PRODUCTS AND BY-PRODUCTS BY 30% BY 2029

STRATEGIC INTERVENTIONS:

1. Advocate for the enactment of a comprehensive tobacco control law:
2. Integrate tobacco-related health risks into school health education:
3. Enforce 100% smoke-free environments in workplaces and public spaces:
4. Prohibit all tobacco advertising, promotion, and sponsorship:
5. Mandate prominent health warnings on tobacco packaging:
6. Establish a nationwide pilot smoking cessation program in healthcare settings:
7. Boost public awareness on tobacco addiction and cessation resources:

STRATEGY 2: CONTROL OF HARMFUL USE OF ALCOHOL

OVERVIEW:

The risk of developing cancer increases with the amount and duration of alcohol consumption. The more alcohol consumed, the greater the risk. Even moderate drinking, defined as up to one drink per day for women and up to two drinks per day for men, can raise the risk for some cancers. Reducing or eliminating alcohol consumption can significantly lower the risk of these cancers.

OBJECTIVE 1: 10% RELATIVE REDUCTION IN HARMFUL USE OF ALCOHOL BY 2029

STRATEGIC INTERVENTIONS:

1. Adopt the NCD Global Strategy on Harmful Use of Alcohol
2. Raise Public Awareness, Especially Among Young People, About Alcohol-Related Health Risks
3. Incorporate Information on Alcohol Risks into School Health Programs
4. Work with Other Relevant Sectors to Reduce Alcohol-Related Problems:
5. Promote Legislation on Alcohol Production and Consumption
6. Ban Alcohol Trade Near Schools

STRATEGY 3: REDUCE CONSUMPTION OF UNHEALTHY DIETS, PREVALENCE OF PHYSICAL INACTIVITY, OVERWEIGHT AND OBESITY

OVERVIEW:

Dietary modification plays a crucial role in cancer prevention, as overweight and obesity are linked to an increased risk of cancers such as those of the esophagus, colorectal system, breast, endometrium, and kidneys. Diets rich in fruits and vegetables may offer protective effects, while maintaining a healthy body weight through regular physical activity and balanced nutrition can significantly reduce cancer risk. National policies that raise awareness and promote healthy lifestyles are essential to reducing exposure to cancer risk factors and providing support for individuals to adopt habits that prevent cancer and cardiovascular diseases.

OBJECTIVE 1: A 25% RELATIVE REDUCTION INSUFFICIENT INTAKE OF FRUITS AND VEGETABLES BY 2029

OBJECTIVE 2: A 10% RELATIVE REDUCTION IN PREVALENCE OF INSUFFIENT PHYSICAL INACTIVITY BY 2029

OBJECTIVE 3: TO REDUCE OVERWEIGHT AND OBESITY BY AT LEAST 15% BY 2029

STRATEGIC INTERVENTIONS:

1. Promote public awareness on risks of overweight, obesity, unhealthy diet, and physical inactivity
2. Control the import of processed foods having high fat, sugar, and salt
3. Promote physical activity in workplaces
4. Promote healthy diet and physical activities around schools
5. Develop and implement national guidelines on physical activity
6. Promote the availability of playgrounds per vicinity

STRATEGY 4: CONTROL OF BIOLOGICAL AGENTS CAUSING CANCER

OVERVIEW:

Certain infections are known to increase the risk of various cancers. For instance, Hepatitis B and C are linked to liver cancer, while Human Papillomavirus (HPV) is associated with cervical and other cancers. HIV weakens the immune system, making individuals more susceptible to cancers like Kaposi's sarcoma and lymphoma. Helicobacter pylori, a bacterium, raises the risk of stomach cancer, and schistosomiasis can lead to bladder cancer. It is estimated that infections contribute to about 20% of cancer cases in developing countries and 6% in developed nations. Preventative measures such as vaccination, early detection, and effective treatment of these infections are crucial to reducing cancer risks.

OBJECTIVE 1: ACHIEVE 90% HPV VACCINATION COVERAGE FOR 14-YEAR-OLD GIRLS BY 2024

OBJECTIVE 2: TO ENSURE INTEGRATION OF HBV VACCINATION INTO ROUTINE IMMUNIZATION SERVICES

STRATEGIC INTERVENTIONS:

1. Strengthen Health Promotion and Prevention Strtegies for Infectious Disease ((like HPV, HIV, and Hepatitis B) Related Cancers
2. Targeted Screening and Control of Pathological Agents
3. Vaccination Against Viral Infections
4. Treat Infectious Diseases Associated with Cancers
5. Promote Healthy Sexual Behavior

STRATEGY 5: CONTROL OF ENVIRONMENTAL AND OCCUPATIONAL HAZARDS

OVERVIEW:

Environmental pollution from carcinogenic chemicals in air, water, and soil accounts for 1-4% of all cancers globally. People are exposed to these carcinogens through contaminated drinking water, indoor air pollution, and food or water tainted by substances like aflatoxins, dioxins, and asbestos. Coal (charcoal) fire-induced indoor air pollution notably increases lung cancer risk. Occupational exposure to carcinogenic substances is

linked to cancers of the lung, bladder, larynx, skin, esophagus, and leukemia. Additionally, ionizing radiation is a known cause of cancers such as leukemia, lung, thyroid, and breast cancer.

OBJECTIVE 1: REDUCE EXPOSURE TO ENVIRONMENTAL HAZARDS CAUSALLY ASSOCIATED WITH CANCER

STRATEGIC INTERVENTIONS:

1. Enforce and Strengthen the Legal Framework to Protect Workers and the General Population from Environmental Carcinogens
2. Regulate the Disposal of Toxic Wastes
3. Promote Protection of Workplace Exposure to Hazards
4. Promote Stopping the Use of All Forms of Asbestos
5. Develop Regulatory Standards on the Use of Known Carcinogens in a Workplace
6. Enforce National Radiation Protection Guidelines

STRATEGIC OBJECTIVE 2: ADDRESS NON-MODIFIABLE RISK FACTORS

STRATEGY 1: PROMOTE PUBLIC AWARENESS ON CANCER PREVENTION, EARLY DETECTION AND CARE

OVERVIEW:

By leveraging the established networks of primary health care system, cancer-related information can be delivered directly to the communities. Messages about prevention, early detection, treatment options, and cancer awareness can be tested and tailored to suit the cultural context of different regions in Ethiopia. Culturally appropriate, accurate, and clear information is essential to ensure that individuals are well-informed and can make decisions about their health and cancer care.

OBJECTIVE 1: TO REACH AT LEAST 50% OF THE POPULATION WITH CANCER PREVENTION AWARENESS INFORMATION BY 2029

OBJECTIVE 2: TO INTEGRATE CANCER PREVENTION ACTIVITIES AT PRIMARY HEALTH CARE LEVEL BY 2029

OBJECTIVE 3: TO INTEGRATE CHILDHOOD CANCER EARLY DETECTION AND REFERRAL AT PRIMARY HEALTH CARE LEVEL BY 2029

STRATEGIC INTERVENTIONS:

1. Training Health Workers and HEWs (Health Extension Workers)
2. Leveraging on Commemoration Days
3. Building Cross-Sector Networks
4. Developing and Testing Awareness Messages

3.3.2 PILLAR 2: EARLY DETECTION AND RECOGNITION

STRATEGIC PILLAR OVERVIEW:

Early detection involves identifying cancer in symptomatic individuals and screening asymptomatic high-risk groups. It is a crucial strategy that encourages vigilance for early signs of disease, which can significantly reduce the burden and improve outcomes for cancers that are detectable in their early stages, such as those of the cervix, breast, colon, prostate, and childhood cancers. Due to the high incidence and mortality rates of breast and cervical cancers, which together account for 34% of total cancer cases and 58% of cancer-related deaths in adults, these two types are prioritized for intervention in Ethiopia. Both cancers have proven strategies for early detection and screening.

For childhood cancers, the causes remain largely unknown, and as a result, there are no established prevention strategies. The focus for improving cancer care in children and adolescents is on early recognition, timely referral, accurate diagnosis, and effective treatment. The updated National Cancer Control Program (NCCP) aims to enhance early detection efforts for breast, cervical, and childhood cancers to improve diagnosis and treatment outcomes.

STRATEGIC OBJECTIVE 1: TO IMPROVE SECONDARY PREVENTION OF CANCER THROUGH SCREENING, EARLY DIAGNOSIS AND LINKAGE TO CARE

OBJECTIVE 1: SCREEN 70% OF ELIGIBLE WOMEN AGED 30-49 FOR CERVICAL CANCER

OBJECTIVE 2: 60% OF BREAST CANCER CASES IDENTIFIED AT STAGES I AND II

STRATEGIC INTERVENTIONS:

1. Implement National Breast Cancer Early Detection, Diagnosis, and Care Guidelines
2. Strengthen Provision of Organized Cancer Screening and Early Diagnosis Services at All Health Facilities.

3. Scale Up Cervical Cancer Screening Using HPV DNA and Strengthen Prompt Treatment
4. Commit to the global goal of eliminating cervical cancer by 2030

STRATEGIC OBJECTIVE 2: INCREASE THE DIVERSITY AND CAPACITY OF THE HEALTH WORKFORCE AND HEALTH CARE SERVICE DELIVERY SYSTEMS FOR CANCER SCREENING AND EARLY DIAGNOSIS

OBJECTIVE 1: AT LEAST 50% OF HEALTH WORKERS TRAINED ON CANCER

STRATEGIC INTERVENTIONS:

1. Utilize Harmonised and CPD-Approved Training Packages for In-Service Training of Health Care Providers
2. Increase the Number and Diversity of Trained Health Workers
3. Include Cancer Screening and Early Diagnosis Content in Pre-Service Training
4. Provide Resources, Incentives, and Technical Assistance Through Mentorship

STRATEGIC OBJECTIVE 3: OPTIMISE REFERRAL MECHANISMS AND IMPROVE LINKAGES TO CARE TO REDUCE LOSS TO FOLLOW UP

OBJECTIVE 1: 20% REDUCTION IN LOSS TO FOLLOW UP

OBJECTIVE 2: 100% OF CASES LINKED TO CARE THROUGH REFERRALS

STRATEGIC INTERVENTIONS:

1. Address Health System Challenges Impacting Timeliness of Diagnosis and Ensure Rapid Linkage to Confirmatory Diagnosis
2. Create a National Cancer Screening Data Repository for Longitudinal Tracking
3. Integrate Cancer Screening Data into DHIS II
4. Strengthen Specimen Referral and Tracking Systems
5. Train, Mentor, and Deploy Community and In-Facility Navigators to Facilitate Referrals and Linkages to Care

STRTEGIC OBJECTIVE 4: TO STRENGTHEN EARLY DETECTION AND RECOGNITION OF CHILDHOOD CANCERS

OBJECTIVE 1: 60% OF THE POPULATION HAVE AWARENESS ABOUT CHILDHOOD CANCER

OBJECTIVE 2: % OF CHILDHOOD CANCER RECOGNIZED OR DETECTED BY THE COMMUNITY

STRATEGY 1: IMPROVE PUBLIC AWARENESS OF CHILDHOOD CANCERS AND THE IMPORTANCE OF EARLY DETECTION

STRATEGIC INTERVENTIONS:

1. Involve childhood cancer survivors in awareness and outreach efforts
2. Partner with local health administrators, community leaders, and organizations to raise awareness and provide resources for families.
3. Establish referral networks to ensure children are directed to appropriate healthcare facilities for diagnosis and treatment.
4. Provide culturally tailored information to address barriers to care in specific communities.
5. Use local health data to identify areas with higher symptom prevalence and target those regions with focused awareness campaigns and services.

STRATEGY 2: BUILD CAPACITY OF HEALTH CARE WORKERS FOR EARLY DETECTION OF CHILDHOOD CANCERS

STRATEGIC INTERVENTIONS:

1. Develop and implement regular training programs on the early warning signs and clinical presentation of childhood cancers.
2. Integrate a childhood cancer-specific assessment tool into the existing IMCI framework used by healthcare workers in routine child health checks.
3. Implement national and regional screening programs for early detection of retinoblastoma.
4. Establish specialized clinics for pediatric ophthalmology
5. Create awareness campaigns for parents and caregivers about the importance of regular eye check-ups for early cancer detection.
6. Strengthen referral pathways to ensure prompt diagnosis and treatment once childhood cancer is suspected.
7. Create a clear system of communication between primary healthcare providers and specialists to ensure timely and appropriate care.
8. Provide access to a multidisciplinary team of specialists, including oncologists, surgeons, pediatricians, and social workers.
9. Set up a national cancer registry on childhood cancer
10. Advocate for policies that reduce the cost of cancer treatments for children

3.3.3 PILLAR 3: CANCER DIAGNOSIS AND TREATEMT

STRATEGIC PILLAR OVERVIEW:

Early and accurate cancer diagnosis is the foundation of effective cancer care. Detecting cancer at an early stage significantly improves survival rates, reduces the severity of treatment, and enhances the quality of life for those affected. It enables guided biopsies, precise staging, evidence-based treatment planning, and effective monitoring of patient outcomes. Additionally, early diagnosis supports research efforts and informs healthcare planning. Since earlier detection is strongly associated with better clinical outcomes and prognosis, ensuring timely access to high-quality and comprehensive diagnostic services must be a top priority.

Cancer diagnostic services include critical specialties such as pathology, laboratory medicine, diagnostic imaging, and interventional radiology. However, in Ethiopia, significant challenges in these areas have led to delayed cancer diagnoses, with 70% of cases being identified at advanced stages of the disease. This strategy aims to enhance comprehensive cancer diagnostic services that adhere to established standards. Key interventions will include equipping health facilities with the required infrastructure and essential supplies, building the capacity of primary care providers to enable early diagnosis, and optimizing diagnostic networks across facilities. Where feasible, the strategy will leverage the latest technologies, digital tools, and innovative service delivery models to improve efficiency and accessibility.

Cancer management is a critical component of effective cancer control programs and should align with the principles of Universal Health Coverage (UHC), ensuring accessibility, comprehensiveness, affordability, and timeliness. It includes a range of services such as surgery, systemic and nuclear therapies, radiotherapy, bone marrow transplant, palliative care, survivorship, and rehabilitation, delivered through multidisciplinary teams to provide patient-centered and clinically effective care. Core clinical services encompass medical oncology, surgery, radiation oncology, pathology, pharmaco-oncology, palliative care, psycho-oncology, oncology nursing, nutrition, and rehabilitation, tailored to meet patient needs comprehensively.

In Ethiopia, childhood cancer care is largely limited to national referral hospitals and a few private facilities, leading to low survival rates of 20-30%. Prompt referrals from lower-level

facilities, however, have been shown to improve treatment outcomes. Aligned with the Global Initiative for Childhood Cancer (2018), this strategy aims to increase the survival rate to 60% by 2030 and enhance the quality of life for childhood cancer survivors by improving access to timely, high-quality care.

3.3.3.1 CANCER DIAGNOSIS

STRATEGIC OBJECTIVE 1: STRENGTHEN CANCER DIAGNOSTIC IMAGING AND INTERVENTIONAL RADIOLOGY SERVICES

STRATEGY 1: STRENGTHEN COORDINATION AND STANDARDS FOR CANCER IMAGING SERVICES

STRATEGIC INTERVENTIONS:

1. Enhance the National Cancer Imaging Diagnosis TWGs
2. Advocate for National QA and Radiation Safety Guidelines
3. Develop Operational Standards for Cancer Imaging
4. Develop best practice guidelines for the effective and secure use of teleradiology in cancer diagnosis, ensuring timely access to specialist consultations.
5. Advocate for a regulatory framework for the procurement, evaluation, and installation of radiological equipment, ensuring safe and effective use in cancer imaging.
6. Develop an Imaging Diagnosis Directory

STRATEGY 2: : INCREASE ACCESS TO QUALITY, ACCURATE, AND EFFICIENT CANCER DIAGNOSTIC IMAGING SERVICES NATIONALLY

STRATEGIC INTERVENTIONS:

1. Expand the availability of advanced imaging technologies ((PET -CT, and SPECT-CT)) at different care levels, particularly in underserved areas, while providing training to healthcare workers on their use.
2. Expand Interventional Radiology Services
3. Broaden Nuclear Medicine Services
4. Standardize Reporting and Staging
5. Foster Public-Private Partnerships (PPPs)

STRATEGIC OBJECTIVE 2: STRENGTHEN THE CANCER PATHOLOGY DIAGNOSTIC AND LABORATORY MEDICINE SERVICES.

OBJECTIVE 1: ACHIEVE EARLY BREAST CANCER DETECTION RATE OF 60% USING IMAGING TECHNOLOGY

STRATEGY 1: IMPROVE COORDINATION AND STANDARDS FOR CANCER PATHOLOGY SERVICES

STRATEGIC INTERVENTIONS:

1. Strengthen the National Pathology TWG Committee
2. Develop National Quality Assurance and Safety Guidelines
3. Implement Quality Control and External Quality Assurance Programs

4. Review and Disseminate National Cancer Specimen Handling Guidelines
5. Develop and Implement Guidelines for Telepathology Services
6. Develop Protocols for Cancer Diagnosis of Priority Cancers

STRATEGY 2: INCREASE TIMELY ACCESS TO QUALITY AND ACCURATE CANCER PATHOLOGY AND LABORATORY MEDICINE SERVICES COUNTRYWIDE

OBJECTIVE 1: ACHIEVE EARLY CANCER DETECTION RATE OF 60% USING PATHOLOGY SERVICES

STRATEGIC INTERVENTIONS:

1. Expand and Improve Histopathology Laboratory Infrastructure
2. Implement rapid diagnostic services
3. Partner with telemedicine and digital health platforms to integrate remote diagnostics and provide timely cancer detection.
4. Work alongside the National Tissue and Transplant Authority to enhance testing protocols for blood and blood products, ensuring their safety and compatibility for cancer patients who may require blood transfusions or organ transplants.
5. Strengthen and Expand HPV Testing for Cervical Cancer Screening
6. Strengthen Public-Private Partnerships for Cancer Diagnostic Services

STRATEGIC OBJECTIVE 3: : STRENGTHEN THE AVAILABILITY AND CAPACITY OF HUMAN RESOURCES TO SUPPORT CANCER DIAGNOSIS

STRATEGY 1: ENHANCE THE AVAILABILITY OF HUMAN RESOURCE FOR CANCER DIAGNOSIS

STRATEGIC INTERVENTIONS:

1. Provide Continuous Education and Professional Development
2. Partner with medical schools, universities, and specialized training centers to develop and implement curriculums that meet the need for iNCCP

3. Develop the Scope of Practice, Certification, and Accreditation system
4. Promote practices that encourage effective collaboration between professionals, ensuring that the cancer care process is cohesive and efficient.

STRATEGY 2: ENHANCE THE CAPACITY OF HUMAN RESOURCES FOR CANCER DIAGNOSIS

STRATEGIC INTERVENTIONS:

1. Develop a Comprehensive Training Program for Cancer Diagnosis
2. Create a sustainable, skills-based training program focused on key areas in cancer diagnosis.
3. Create and Distribute a Training Package for Cancer Diagnostic Techniques

4. Strenthen Fellowship Programs in Collaboration with Institutions
5. Integrate Cancer Diagnosis Training into Pre-Service Education
6. Promote inclusion of cancer diagnosis content in pre-service curricula for students and health professionals.
7. Provide a Comprehensive Directory of Cancer Diagnostic Resources
8. Develop and maintain a directory of county-level cancer diagnostic services and local resources for laboratory personnel.

3.3.3.2 CANCER TREATMENT

STRATEGIC OBJECTIVE 1: STRENGTHEN COORDINATION TO GUIDE RELEVANT STANDARDS FOR PROVISION OF QUALITY CANCER MANAGEMENT

OBJECTIVE 1: DEVELOP STANDARDS FOR CANCER CARE

STRATEGY 1: DEVELOPMENT, REVIEW AND DISSEMINATION OF GUIDELINES FOR CANCER MANAGEMENT ACTIVITIES

STRATEGIC INTERVENTIONS:

1. Review and Disseminate National Cancer Treatment Protocols:
2. Develop and Disseminate National Radiotherapy Protocols
3. Work with national and international experts to develop and promote guidelines for establishing comprehensive cancer centers that meet international standards.
4. Advocate for the creation of a national policy and strategy on the safe and sustainable use of nuclear technology in medicine, including the safe disposal and management of radioactive waste.

STRATEGY 2: ENHANCE COORDINATION, REGULATION AND STANDARDS FOR QUALITY CANCER CARE SERVICES

STRATEGIC INTERVENTIONS:

1. Strengthen the National Cancer Treatment TWG (Technical Working Group)
2. Establish a National Center of Excellence for Specialized Cancer Management
3. Advocate establishment of Ethiopian Cancer Institute

4. Strengthen the Framework for Accreditation of Facilities Providing Cancer Management Services
5. Encourage the Establishment and Implementation of Multidisciplinary Teams in All Facilities Providing Cancer Care
6. Multidisciplinary teams specialists (oncologists, surgeons, radiologists, palliative care experts, etc.) to develop comprehensive treatment plans for patients, improving the overall quality and effectiveness of cancer care.
7. Support the Integration of Cancer Research in All Facilities Providing Cancer Treatment Services

STRATEGIC OBJECTIVE 2: . IMPROVE AVAILABILITY AND CAPACITY OF A SKILLED MULTI-DISCIPLINARY TEAM OF ONCOLOGY HUMAN RESOURCES FOR HEALTH ACROSS ALL LEVELS OF CARE.

OBJECTIVE 1:TO ESTABLISH MDT IN ALL CANCER CENTERS

STRATEGY 1: IMPROVE AVAILABILITY OF HUMAN RESOURCES FOR HEALTH IN ONCOLOGY

STRATEGIC INTERVENTIONS:

1. Create and implement a strategic plan for oncology workforce development.
2. Partner with local and international institutions to strengthen oncology programs and fellowships.
3. Establish systems for sharing specialized oncology professionals among regions.
4. Address scopes of practice, accreditation, and career pathways for oncology professionals
5. Collaborate with institutions and professional societies to establish institution-based MDTs
6. Facilitate experience sharing among institutions through novel modalities like virtual MDTs
7. Facilitate collaboration of local MDTs with regional, and international MDTs

STRATEGY 2: STRENGTHEN THE CAPACITY OF ONCOLOGY WORKFORCE FOR QUALITY SERVICE PROVISION

STRATEGIC INTERVENTIONS:

1. Establish continuous professional development programs
2. Train and expand a diverse cancer workforce

STRATEGIC OBJECTIVE 3: INCREASE ACCESS TO TIMELY CANCER CARE SERVICES

OBJECTIVE 1: ACHIEVE 30% TREATMENT COVERAGE FOR CANCER INCIDENCES

STRATEGY 1: IMPROVE AVAILABILITY OF CANCER TREATMENT SERVICES

STRATEGIC INTERVENTIONS:

1. Establish additional comprehensive cancer centers and enhance childhood cancer services
2. Improve capacity for advanced cancer care, including bone marrow transplants and cell therapies.
3. Improve blood donor services and availability at national and regional cancer centers.
4. Implement interoperable electronic health systems for oncology.
5. Utilize tele-health for cancer service delivery.

6. Improve patient navigation systems across all care levels.
7. Conduct regular audits and establish quality assurance programs at cancer centers.
8. Enhance regulation, knowledge, and utilization of nuclear and radiation medicine.

STRATEGIC OBJECTIVE 4: STRENGTHEN THE SUPPLY CHAIN OF ONCOLOGY HEALTHPRODUCTS AND TECHNOLOGIES ACTIVITIES

OBJECTIVE 1:ACHIEVE ONCOLOGY COMMODITIES STOCK OUT BELOW 30%

STRATEGIC INTERVENTIONS:

1. Strengthen supply chain planning for accurate forecasting and availability, including childhood cancer needs.
2. Develop strategies to improve access to affordable oncology products through local manufacturing, pooled procurement, and access programs.
3. Collaborate with regulatory bodies to enhance quality assurance and post-market surveillance of oncology products.
4. Work with procurement agencies and stakeholders to ensure consistent availability of essential cancer care products for treatment, palliative care, and survivorship.

3.3.4 PILLAR 4: PSYCHOSOCIAL SUPPORT/SURVIORSHIP

STRATEGIC PILLAR OVERVIEW

Psychosocial support and survivorship pillar focuses on addressing the emotional, mental, and social needs of individuals affected by cancer. This strategic pillar aims to improve the quality of life for cancer patients and survivors by integrating psychosocial care into the health system. Key efforts include counseling services, support groups, community-based interventions, and capacity-building for healthcare providers. These initiatives ensure holistic care that extends beyond medical treatment, fostering resilience and long-term well-being for patients and their families.

STRATEGY 1: IMPROVE CHILDHOOD CANCER TREATMENT, PSYCHOSOCIAL SUPPORT, SURVIVORSHIP AND REHABILITATION

STRATEGIC INTERVENTIONS:

1. Operationalize the Childhood Cancer Technical Working Group
2. Identify and engage key stakeholders (oncologists, policy makers, advocacy groups, etc.).
3. Develop terms of reference (TORs) and a work plan for the group.
4. Schedule regular meetings and establish subcommittees for specific tasks.
5. Conduct a cost-benefit analysis to demonstrate the economic feasibility of integrating childhood cancer into UHC.
6. Engage policymakers to prioritize pediatric cancer in essential health packages.
7. Provide a Defined Basic Package of Care for Regional Cancer Centres
8. Create an Efficient Referral System
9. Define and Promote Competency Standards for Pediatric Oncology Professionals
10. Support the Review and Dissemination of National Palliative Care Guidelines
11. Develop Guidelines for Rehabilitation of Children and Adolescents with Cancer

3.3.5 PILLAR 5: SUPPORTIVE AND PALLIATIVE CARE

STRATEGIC PILLAR OVERVIEW

Supportive and palliative care focuses on enhancing the quality of life for individuals facing serious or life-limiting illnesses. It prioritizes a holistic approach to care, addressing not only physical symptoms but also emotional, social, and spiritual needs. This pillar ensures that patients and their families receive compassionate support throughout the healthcare journey, emphasizing dignity, comfort, and respect. By integrating palliative care early in the treatment process, it promotes better symptom management, informed decision-making, and a seamless transition across care settings.

STRATEGY 1: STRENGTHEN AVAILABILITY OF PALLIATIVE AND SUPPORTIVE CARE SERVICES

STRATEGIC INTERVENTIONS:

1. Create a standardized palliative care curriculum tailored for health workers, community health volunteers, and other key resource persons.
2. Ensure Consistent Availability and Proper Use of Essential Opioids
3. Integrate palliative care services into all county referral facilities, ensuring coverage across geographic regions.
4. Address Social and Structural Determinants of Health
5. Identify and mitigate barriers to accessing palliative care, such as poverty, stigma, and inadequate transportation.
6. Promote equity by prioritizing underserved populations and addressing disparities in care delivery.
7. Collaborate with community organizations and stakeholders to create supportive environments that enhance access to care.

CHAPTER 4: iNCCP IMPLEMENTATION STRATEGY FOR PRIORITY AREAS

PRIORITY AREA 1: BREAST CANCER MANAGEMENT

OVERVIEW:

Breast cancer poses a significant public health challenge in Ethiopia, where late diagnosis and limited access to healthcare services hinder effective treatment. Factors such as stigma, low awareness of symptoms, and insufficient screening programs contribute to delays in seeking medical help. Many women are diagnosed at advanced stages, reducing treatment success. Addressing this issue requires improving early detection, raising awareness, and strengthening healthcare infrastructure.

Ethiopia has embraced the Global Breast Cancer Initiative (GBCI) and is strategically implementing it through the National Guideline for Breast Health, Early Diagnosis, and Timely Breast Cancer Management in Ethiopia 2024-2028. This guideline, endorsed and available as a separate document, provides a detailed framework for addressing breast cancer across all three key pillars: early detection,timely diagnosis and treatment. Breast cancer has been prioritized in the country's updated National Cancer Control Plan (iNCCP), reflecting Ethiopia's commitment to improving early detection, diagnosis, enhancing access to timely treatment, and reducing the cancer burden. This integrated approach aims to strengthen healthcare infrastructure and raise awareness, addressing the growing public health challenge of breast cancer.

The Global Breast Cancer Initiative (GBCI) has an overarching goal of achieving a 2.5% annual reduction in breast cancer mortality**,** which aligns with the broader target of a 25% reduction in global breast cancer mortality by 2030**.**

STRATEGIC OBJECTIVE 1: HEALTH PROMOTION FOR EARLY DETECTION:->60% OF BREAST CANCER DETECTED AT STAGE I AND II

STRATEGIC INTERVENTIONS:

1. Launch national and local media campaigns to raise awareness about the importance of early breast cancer detection.
2. Improve access to affordable and accessible screening services for early breast cancer detection, especially health care level.
3. Enhance the training and skills of healthcare providers, especially primary care physicians, to recognize early signs of breast cancer.

4. Partner with local community organizations, schools, and workplaces to facilitate breast cancer awareness programs, offering resources, screenings, and support for early detection.
5. Establish systems to track breast cancer cases, monitor the stage of diagnosis, and ensure that women diagnosed at later stages are referred for prompt treatment.
6. Promote the use of digital tools to reach a wider population

STRATEGIC OBJECTIVE 2: TIMELY DIAGNOSIS: - EVALUATION, IMAGING, TISSUE SAMPLING AND PATHOLOGY COMPLETED WITHIN 60 DAYS

STRATEGIC INTERVENTIONS:

1. Implement clear referral protocols to ensure that patients are directed to the appropriate specialists quickly.
2. Improving Access to Diagnostic Imaging
3. Adopt centralized scheduling systems to streamline appointment bookings
4. Implement expedited diagnostic pathways for suspected high-priority conditions
5. mplement electronic health records (EHR) that can share diagnostic data across specialties
6. Streamline laboratory processes to reduce turnaround times
7. Introduce Patient Navigation and Support System
8. Train healthcare staff on the importance of timely diagnosis
9. Strengthen Data Monitoring and Continuous Improvement
10. Foster collaboration between hospitals, imaging centers, and laboratories

STRATEGIC OBJECTIVE 3: COMPREHENSIVE BREAST CANCER MANAGEMENT:- ACHIEVE 80% OF PATIENTS COMPLETING MULTIMODALITY TREATMENT

STRATEGIC INTERVENTIONS:

1. Develop patient education programs to inform about the benefits of completing multimodal treatment
2. Ensure that the treatment team (oncologists, surgeons, radiologists, psychologists, and support staff) collaborates effectively to monitor and support the patient through each phase of treatment.
3. Strengthen Support Services
4. Implement a robust follow-up system to track patient progress, side effects, and treatment adherence.
5. dentify and address common barriers to treatment completion, such as transportation issues, financial challenges, cultural or social factors, and communication barriers.
6. Gather Patient Feedback and use for Continuous Improvement

PRIORITY AREA 2: CERVICAL CANCER SCREENING AND TREATMENT

OVERVIEW:

Cervical cancer has been prioritized in Ethiopia's new Integrated National Cancer Control Plan (iNCCP), which aims to reduce the cancer burden in the country. The program focuses on strengthening cervical cancer prevention through HPV vaccination for girls aged 9–14 and early detection via screening methods such as Visual Inspection with Acetic Acid (VIA) and HPV testing.

By integrating cervical cancer into a comprehensive cancer control strategy, Ethiopia seeks to improve awareness, expand access to screening and treatment, and integrate these services into the broader healthcare system. This initiative reflects Ethiopia's commitment to addressing cervical cancer as a significant public health issue.

Ethiopia is committed to achieving the 90-70-90 strategy of the WHO's Global Strategy to Accelerate the Elimination of Cervical Cancer by 2030 (8). The goal is to reduce the global incidence of cervical cancer to fewer than 4 per 100,000 women annually. To achieve this, WHO has outlined three key pillars with specific targets and strategic interventions for each by the year 2030. The country is building on its ongoing national cervical cancer screening and treatment efforts, which have expanded to over 1,500 public health facilities and provided services to more than 1 million women aged 30–49 years. The cervical cancer program is guided by Ethiopia's National Cervical Cancer Screening and Treatment Guideline. However, the integrated National Cancer Control Plan (iNCCP) primarily provides a strategic overview of the cervical cancer program in Ethiopia.

STRATEGIC OBJECTIVE 1: 90% OF GIRLS FULLY VACCINATED WITH THE HPV VACCINE BY THE AGE OF 14.

STRATEGIC INTERVENTIONS:

1. Integrate HPV vaccination into national immunization programs as part of routine vaccines.
2. Increase access to HPV vaccines through cost-effective procurement and distribution.
3. Community awareness campaigns to educate families about the importance and safety of the HPV vaccine.
4. School-based vaccination programs to ensure high coverage among eligible girls.
5. Train healthcare workers to provide HPV vaccines and address vaccine hesitancy.
6. Engage community leaders and stakeholders to advocate for HPV vaccination.
7. Monitor vaccine coverage and safety through robust data and reporting systems.

STRATEGIC OBJECTIVE 2: ENSURE 70% OF WOMEN AGED 30-49 ARE SCREENED WITH A HIGH-PERFORMANCE TEST

STRATEGIC INTERVENTIONS:

1. Adopt and scale up HPV DNA testing as the preferred screening method.
2. Integrate screening services into existing health services, such as maternal and reproductive health programs.
3. Strengthen laboratory infrastructure for HPV testing and timely reporting.
4. Develop national screening policies and guidelines for systematic implementation.
5. Outreach and education programs to increase awareness about cervical cancer screening.
6. Task-sharing to primary healthcare workers to improve accessibility.
7. Implement self-sampling options for women in remote or underserved areas.
8. Ensure follow-up systems for women with positive results.

STRATEGIC OBJECTIVE 3: 90% OF WOMEN IDENTIFIED WITH CERVICAL DISEASE (PRECANCEROUS OR INVASIVE) RECEIVE APPROPRIATE TREATMENT

STRATEGIC INTERVENTIONS:

1. Strengthen treatment capacity for both precancerous lesions and invasive cancer.
2. Provide access to affordable and high-quality treatment options, such as cryotherapy, thermal ablation, or loop electrosurgical excision procedures (LEEP) for precancerous lesions.
3. Develop infrastructure for cancer care (e.g., surgical, radiotherapy, and chemotherapy services).
4. Train healthcare providers in early detection and management of cervical disease.
5. Ensure palliative care services are available for advanced-stage cervical cancer.
6. Develop referral systems to link screening and treatment services effectively.
7. Support financial protection schemes to reduce barriers to treatment access.
8. Strengthen cancer registries to monitor outcomes and improve treatment strategies.

PRIORITY AREA 3: CHILDHOOD AND ADOLESCENT CANCER CARE

OVERVIEW:

Childhood cancer in Ethiopia is a significant but often underrecognized public health challenge, with an estimated 6,000 new cases annually. Common types include leukemia, brain tumors, and lymphomas. However, the survival rates remain low due to late diagnoses, limited access to specialized care, inadequate diagnostic tools, and the high cost of treatment. Many children are referred to treatment centers at advanced stages, and there is a shortage of pediatric oncologists.

The inclusion of Ethiopia as a priority country for the Global Initiative for Childhood Cancer (GICC) highlights global recognition of the need to strengthen pediatric cancer care in the country. The GICC's overarching goal to achieve a 60% cure rate for children with cancer globally is ambitious and transformative for Ethiopia as well.

The inclusion of childhood cancer in Ethiopia's Integrated National Cancer Control Plan (iNCCP) aims to improve early detection/recognition, expand treatment access, and enhance outcomes, addressing the increasing burden on the healthcare system. The iNCCP seeks to prioritize childhood cancer within national cancer control efforts, ensuring it receives the necessary focus, resources, and commitment.

The overall aim of Ethiopia's childhood cancer control program is to align with the Global Initiative for Childhood Cancer and achieve a cure rate of at least 60% for childhood cancers.

STRATEGIC OBJECTIVE 1: REACH 80% OF THE POPULATION WITH INFORMATION ON CHILDHOOD AND ADOLESCENT CANCER BY 2029.

STRATEGY 1: DEVELOP AND IMPLEMENT CHILDHOOD AND ADOLESCENT CANCER EARLY DETECTION/RECOGNITION GUIDELINE FOCUSING ON RETINOBLASTOMA

STRATEGY 2: FULLY INTEGRATE CHILDHOOD AND ADOLESCENT CANCER EARLY RECOGNITION AND DETECTION ACTIVITIES AT THE PRIMARY HEALTH CARE LEVEL

STRATEGIC INTERVENTIONS:

1. Prepare and disseminate an early detection manual for childhood and adolescent cancer.
2. Train health workers, HEWs on early warning signs of childhood and adolescent cancer (e.g for retinoblastoma)
3. Leverage public commemoration days (e.g., Childhood Cancer Awareness Month, World Childhood Cancer Day) to promote early detection.
4. Establish partnerships with relevant sectors to increase childhood cancer awareness.

5. Develop and test tailored messages about childhood and adolescent cancer for distribution via HEWs, media, and community leaders.
6. Develop digital decision-making tool to enhance the early detection and referral of children suspected with cancer.

STRATEGIC OBJECTIVE 2: ENSURE 50% OF HEALTH WORKERS ACROSS ALL HEALTHCARE DELIVERY LEVELS CAN DETECT CHILDHOOD AND ADOLESCENT CANCER BY 2029.

STRATEGY 1: INTEGRATE CHILDHOOD CANCER RECOGNITION INTO THE IMMUNIZATION SCHEDULE AND WELL-CHILD VISITS BY 2029.

STRATEGIC INTERVENTIONS:

1. Develop and implement early detection tools for childhood and adolescent cancer.
2. Provide training for health workers (HEWs, nurses, general practitioners) on early detection.
3. Ensure inclusion of early detection, diagnosis, and treatment in pre-service training for health care workers.
4. Use media and other platforms to raise public awareness about early warning signs.

STRATEGIC OBJECTIVE 3: ENSURE 90% OF CHILDREN SUSPECTED TO HAVE CANCER ARE REFERRED FOR FURTHER INVESTIGATION BY THE PRIMARY HEALTH CARE LEVEL BY 2029.

STRATEGY 1: ESTABLISH A REFERRAL AND LIAISON SYSTEM BETWEEN HEALTH FACILITIES AND PEDIATRIC CANCER TREATMENT CENTERS BY 2029.

STRATEGIC INTERVENTIONS:

1. Map availability of childhood and adolescent cancer services nationwide.
2. Design and implement reporting and referral tools for health facilities.
3. Implement teleconsultation mechanisms for pediatric cancer management.
4. Conduct training for health workers on early detection and referral systems.

STRATEGIC OBJECTIVE 4: INCREASE THE NUMBER OF PEDIATRIC HEMATOLOGY-ONCOLOGY TREATMENT CENTERS FROM 15 TO 25 BY 2029.

STRATEGY 1: EXPAND CANCER TREATMENT CENTERS FOR CHILDHOOD CANCER

STRATEGY 2: ESTABLISH FULLY FUNCTIONAL PICUs IN ALL HOSPITALS WITH PEDIATRIC ONCOLOGY UNITS.

STRATEGY 3: ENSURE ACCESSIBILITY TO SUSTAINABLE AND AFFORDABLE MEDICATIONS ACROSS ALL PEDIATRIC ONCOLOGY TREATMENT CENTERS.

STRATEGY 4: INCREASE THE NUMBER OF SATELLITE PEDIATIC CANCER CLINICS

STRATEGIC INTERVENTIONS:

1. Train pathologists in pediatric hematopathology and pediatric solid tumors.
2. Equip all pediatric oncology centers with diagnostic services like histopathology and immunohistochemistry.
3. Establish comprehensive diagnostic centers for pediatric oncology.
4. Develop and implement standardized treatment protocols.
5. Strengthen the referral system between all health care levels.
6. Create sustainable drug supply chains and ensure availability of essential medicines.
7. Establish 10 more pediatric cancer treatment staellite clinics

STRATEGIC OBJECTIVE 5: ENSURE THAT MORE THAN 90% OF CHILDHOOD CANCER PATIENTS HAVE ACCESS TO SUPPORTIVE CARE SERVICES, INCLUDING BLOOD AND BLOOD PRODUCTS, AS WELL AS COMPREHENSIVE INFECTION PREVENTION RESOURCES.

STRATEGY 1: STRENGTHEN BLOOD BANK SYSTEMS TO EFFECTIVELY MEET THE NEEDS OF PEDIATRIC ONCOLOGY CENTERS.

STRATEGY 2: ESTABLISH FULLY FUNCTIONAL PEDIATRIC ICUs IN ALL HOSPITALS WITH PEDIATRIC ONCOLOGY UNITS.

STRATEGY 3: PROVIDE ACCESS TO INFECTION PREVENTION AND CONTROL RESOURCES IN ALL PEDIATRIC ONCOLOGY UNITS.

STRATEGIC INTERVENTIONS:

1. Enhance blood bank infrastructure and increase the frequency and reach of blood collection drives.
2. Develop and introduce specialized training programs in transfusion medicine.
3. Provide hospitals with essential Pediatric Intensive Care Unit (PICU) equipment and prioritize the training of pediatric intensive care specialists.
4. Establish comprehensive infection prevention protocols and ensure consistent access to necessary supplies.
5. Establish fully functional microbiology laboratories within pediatric oncology units.

STRATEGIC OBJECTIVE 6: ESTABLISH COMPREHENSIVE PALLIATIVE CARE, NUTRITION SUPPORT, AND PAIN MANAGEMENT SERVICES IN ALL PEDIATRIC ONCOLOGY CENTERS BY 2029

STRATEGY 1: DEVELOP, IMPLEMENT, AND INTEGRATE PALLIATIVE CARE AND NUTRITIONAL REHABILITATION PROGRAMS IN ALL PEDIATRIC ONCOLOGY CENTERS

STRATEGIC INTERVENTIONS:

1. Develop and implement standardized palliative care guidelines
2. Ensure access to essential pain management medications
3. Develop comprehensive nutrition and rehabilitation programs:

STRATEGIC OBJECTIVE 7: DECREASE TREATMENT ABANDONMENT BY 60% BY 2029.

STRATEGY 1: ESTABLISH PSYCHOSOCIAL AND FAMILY SUPPORT PROGRAMS IN ALL PEDIATRIC ONCOLOGY CENTERS BY 2029

STRATEGIC INTERVENTIONS:

1. Create child and family-friendly environments in oncology units.
2. Implement art, music, and pet therapy programs.
3. Provide accommodations, transportation, and nutritional support for families.
4. Establish patient navigation systems to prevent treatment abandonment

PRIORITY AREA 4: OTHER CANCERS

OVERVIEW:

According to estimates from the population-based cancer registry in Addis Ababa, approximately two-thirds of all cancer cases in Ethiopia occur in women. Among the most prevalent types of cancer in the country, breast cancer and cervical cancer are particularly significant due to their high incidence rates. Colorectal cancer, non-Hodgkin lymphoma, and leukemia also rank among the top five most common cancers affecting the Ethiopian population.

For men, the primary cancer types differ, with prostate cancer leading in prevalence. Other commonly diagnosed cancers in men include thyroid cancer, lung cancer, stomach cancer, and liver cancer. These types of cancer highlight the gender-specific differences in cancer epidemiology within the country.

To address the cancer burden effectively, Ethiopia prioritizes three key cancer types based on their epidemiological significance and the availability of evidence-based, effective interventions. These priorities guide the allocation of resources and the design of public health initiatives. However, it is important to note that interventions for other types of cancers including hematologic malignancies are also part of Ethiopia's comprehensive cancer control strategy.

The country's approach encompasses all aspects of cancer care, following strategic pillars that range from prevention and early detection to diagnosis, treatment, and palliative care. Prevention efforts include public education campaigns, vaccination programs, and initiatives to reduce risk factors such as tobacco use and unhealthy diets. Early detection strategies aim to improve awareness and access to screening programs, enabling timely diagnosis.

For diagnosis and treatment, investments are being made to strengthen healthcare infrastructure, train medical professionals, and improve access to essential diagnostic tools and therapies. Additionally, palliative care services are being integrated to ensure holistic support for patients and their families, addressing physical, emotional, and social needs.

According to the International Agency for Research on Cancer (IARC), the most prevalent other cancer types in Ethiopia are: Colorectal Cancer (common in males); Leukemia (in both genders); Prostate Cancer ;Stomach Cancer; Lymphoma (in both genders); Pancreatic Cancer; Ovarian Cancer; Lung Cancer ;Esophageal Cancer; Liver Cancer; Bladder Cancer; and Kidney Cancer.

STRATEGIC OBJECTIVE 1: TREAT ALL (100%) TYPES OF OTHER CANCERs IN ALL CANCER TREATMENT CENTERS

STRATEGIC INTERVENTIONS FOR FOR SPECIFIC CANCERS:

1. Colorectal Cancer:

- Screening Programs:
  - Implement national colorectal cancer screening programs using stool-based tests or colonoscopy for high-risk populations.
- Treatment Access:
  - Train general surgeons in colorectal cancer surgeries and ensure access to specialized care in comprehensive cancer centers.
- Public Awareness:
  - Educate communities about early symptoms like rectal bleeding and changes in bowel habits.

2. Prostate Cancer:

- Early Detection:
  - Introduce prostate-specific antigen (PSA) testing for men over 50 in high-risk regions.
- Specialized Care:
  - Train urologists and oncologists to manage localized and advanced prostate cancer.
- Lifestyle Education:
  - Promote awareness of modifiable risk factors, such as diet and physical activity.

3. Lung Cancer:

- Tobacco Control:
  - Strengthen smoking cessation programs and enforce anti-smoking legislation.
- Screening for High-Risk Groups:
  - Introduce low-dose CT scans for early detection in high-risk populations (e.g., long-term smokers).
- Access to Advanced Treatment:
  - Expand the use of targeted therapies and immunotherapies for advanced cases.

4. Liver Cancer:

- Vaccination Programs:
  - Strengthen hepatitis B virus (HBV) vaccination programs as a preventive measure.
- Screening and Monitoring:
  - Introduce regular screening for at-risk populations (e.g., chronic HBV or HCV carriers) using ultrasound and alpha-fetoprotein (AFP) tests.

- Specialized Treatment:
    - Build capacity for liver surgeries, radiofrequency ablation, and liver transplant services.

5. Hematologic Malignancies:

- Access to Bone Marrow Transplant (BMT):
    - Establish atleast two specialized centers for autologous and allogeneic stem cell transplants.
- Expand Chemotherapy Availability:
    - Ensure that essential chemotherapy regimens for leukemia and lymphoma are widely available.
- Diagnostic Advances:
    - Equip labs for flow cytometry and cytogenetics to improve diagnostic accuracy.

CHAPTER 5: IMPLEMENTATION AND COORDINATION FRAMEWORK

5.1 OVERVIEW

The coordination and implementation framework serves as a guide for the execution of Ethiopia's Integrated National Cancer Control Plan (iNCCP) within the country's wider healthcare system. It clearly outlines the roles and responsibilities of all stakeholders involved in cancer control. The framework is designed to be adaptive and flexible, enabling the country to respond effectively to the increasing cancer burden and other public health challenges that could hinder progress in cancer control.

The Integarted National Cancer Control Plan, coordinated and developed by the Diseases Prevention and Control Executive Office and the Non-Communicable Diseases Desk of the Federal Ministry of Health, is responsible for developing cancer control strategies and guidelines across the entire cancer care continuum. These plan is disseminated to relevant stakeholders, and their implementation is carefully guided and monitored. The iNCCP also provides capacity building and technical support to regions and healthcare facilities, in line with the strategic plan. Furthermore, the NCCP is tasked with overseeing the implementation of the strategic plan, as well as conducting annual monitoring and evaluation against predefined targets.

5.2 INSTITUTIONAL FRAMEWORK

The Ethiopia National Cancer Control Plan (NCCP) outlines two levels of coordination for cancer control in the country:

Table 10:Ethiopia National Cancer Control Plan Coordination

Level	Key Stakeholders/Functions	Roles and Responsibilities
National	Federal Ministry of Health (MOH)	*Strategic Leadership:* Sets the national vision and priorities for cancer control as part of the broader health agenda.
		Policy Development: Formulates national cancer control strategies, regulations, and funding frameworks.
		Stakeholder Engagement: Facilitates collaboration across ministries (e.g., Education, Finance) and with private and non-governmental organizations (NGOs).
		Resource Mobilization: Secures funding and technical support from international donors and partners.
		Capacity Building: Provides training programs for healthcare providers to improve cancer care delivery.
	National Cancer Technical Working Groups (TWGs)	Expert Guidance: Offers technical expertise on cancer prevention, diagnosis, treatment, and palliative care strategies.
		Standards Development: Designs clinical guidelines, protocols, and quality standards for cancer services.
		Research and Innovation: Promotes evidence-based approaches by supporting research on cancer epidemiology, treatment efficacy, and local innovations.
		Monitoring and Evaluation: Tracks progress and identifies gaps in implementing national cancer programs.Coordinate MTR and ETR processes.
	National Steering Committee (to be established)	*Governance Oversight:* Coordinates cross-sectoral collaboration among public, private, and civil society stakeholders.
		Policy Alignment: Ensures that national cancer control efforts align with Ethiopia's broader health sector transformation goals.
		Accountability and Reporting: Monitors performance, addresses challenges, and reports progress to the MOH and international partners.
Regional	Regional Health Bureaus and Acdemic Institutions	*Decentralized Implementation:* Tailors national cancer control strategies to the unique needs of regional populations.
		Health System Strengthening: Oversees integration of cancer services with general health services in primary, secondary, and tertiary facilities.
		Research and Innovation: Promotes evidence-based approaches by supporting research on cancer epidemiology, treatment efficacy, and local innovations
		Monitoring and Evaluation: Tracks progress and identifies gaps in implementing national cancer programs.
		Capacity Building: Provides training programs for healthcare providers to improve cancer care delivery.

5.3 Roles and responsibilities

Table 11:Roles and Responsibilities of stakeholders in cancer control in Ethiopia

Actors	Roles and Responsibilities
Ministry of Health	1. Lead the development, dissemination, and implementation of the National Cancer Control Plan (NCCP). 2. Provide ongoing technical support for the successful execution of the NCCP. 3. Build and enhance capacity for cancer prevention and control in line with national cancer guidelines and strategies. 4. Coordinate partnerships and collaborations with key stakeholders involved in cancer control efforts. 5. Oversee the operationalization of the Monitoring, Evaluation, Accountability, and Learning (MEAL) Framework for the NCCP. 6. acilitate cancer advocacy, communication, and social mobilization, working closely with all relevant stakeholders.
Ministry ff Health Departments And Agencies	1. Support the implementation and execution of the National Cancer Control Plan. 2. Participate in and contribute technical expertise to Technical Working Group (TWG) meetings as required. 3. Integrate cancer prevention and control into their specific programming, in alignment with the guidance from the Cancer TWGs. 4. Provide expert advice and guidance on the use of digital health solutions to enhance the implementation of the National Cancer Control Strategy. 5. Support community-level initiatives and activities that contribute to the success of the National Cancer Control Strategy.
Regional Governments/Regional Health Bureaus	1. Implement national cancer prevention and control strategies and guidelines. 2. Provide adequate infrastructure, equipment and commodities for screening, diagnosis treatment, palliative care and survivorship services. 3. Provide and appropriately deploy adequate qualified personnel for cancer service delivery. 4. Mobilize and allocate adequate financial resources for cancer prevention and control. 5. Integrate cancer prevention and control into the broader county health sector plans and establish county cancer control programs. 6. Forge appropriate multi-sectoral partnerships at the regional level. 7. Collect and report cancer data and support cancer registries.
Othe sector ministries	1. Collaborate with Ministry of Health in mainstreaming cancer prevention and control into their strategies and routine activities, including creation of a cancer focal/information desk. 2. Enforce the implementation of the NCCP through a multi-sectoral approach for an effective cancer control response.

Actors	Roles and Responsibilities
Civil Society organizations	1. Support cancer advocacy, communication and social mobilization activities. 2. .Advocate for resources towards implementation of the plan 3. Support provision of cancer prevention and control services.
Private sectors	1. Support cancer prevention and control interventions. 2. Complement the ministry in service delivery. 3. Support training and capacity building of oncology health workforce 4. Support local manufacturing of quality, health products and technologies 5. Support the ministry in evidence generations and best practices
Development partners, International Non-Governmental Organizations (INGOs), NGOs, CSOs, FBOs	1. Mobilize resources fand align with the givernment for NCCP implementation. 2. Provide logistical and technical ccapacity building support
Professional associations	1. Advocacy and provision of guidance on cancer matters. 2. Support professional development of their respective cadres. 3. Support the implementation of the strategy. 3. Collaborate with the minitry of health in technical support areas
Regulatory Agencies	1. Regulate and enforce aspects of this national plan related to their respective bodies. 2. Establish and update mechanisms for recognition, certification and registration of oncology cadres within their jurisdictions.
Academic, Research, and Training Institutions	1. Conduct cancer education and training 2. Conduct professional development 3. Conduct cancer research to inform and guide national strategies 4. Collaborate to develop mechanisms for research data sharing
Media	1. Disseminate accurate data to the public
General Public	2. Adopt healthy lifestyles and health seeking behaviour. 3. Participate actively in cancer prevention and control. 4. Support cancer patients, survivors and their caregivers and reduce stigma and discrimination. 5. Actively participate in patient support, navigation and network
Survivors	1. Champion cancer prevention and control measures.

CHAPTER 6: MONITORING, EVALUATION, ACCOUNTABILITY AND LEARNING (MEAL)

6.1 OVERVIEW

Monitoring and evaluation are essential for cancer control plans, providing high-quality data to support decision-making at every stage. This includes building the case for a plan, identifying priorities for impact, tracking intervention performance, addressing gaps, and evaluating overall effectiveness to ensure program goals are achieved.

The implementation and governance of the iNCCP are integrated within the existing Monitoring and Evaluation (M&E) framework of the Ministry of Health. A robust formative program monitoring tool will serve as the cornerstone for tracking progress. Additionally, routine supervisory visits will be conducted to ensure continuous oversight and operational excellence. To evaluate the program's effectiveness and inform evidence-based decision-making, a comprehensive Mid-Term Review (MTR) and End-Term Review (ETR) will be systematically carried out. These reviews will generate critical insights to enhance program quality, address gaps, and support ongoing improvements.

To enhance cancer surveillance and improve healthcare outcomes, comprehensive cancer centers will implement both population-based and facility-based cancer registries. These registries will systematically collect, store, and analyze data on cancer incidence, treatment, outcomes, and survival rates. By integrating data from diverse sources, these registries will provide a comprehensive understanding of the cancer burden at the national and regional levels. The insights generated from this data will be invaluable in informing evidence-based decisions related to resource allocation, policy development, and the prioritization of cancer care initiatives. Ultimately, this initiative will guide the country in addressing cancer disparities, optimizing healthcare strategies, and improving the efficiency and effectiveness of cancer treatment and prevention programs.

6.2 INDICATORS AND TARGETS FOR PRIORITY AREAS

Table 12:Trackable Indicators by each priority areas

Priority Areas	Key Indicators	Baseline	Target	Annual Progresses towards Target[1]				
				2025	2026	2027	2028	2029
1. Breast Cancer	>60% of Breast Cancer Detected at Stage I And II	35%	60%	35%	40%	45%	50%	60%
	Evaluation, Imaging, Tissue Sampling and Pathology Completed within 60 Days	120 days	60 days	120 days	100 days	80 days	70 days	60 days
	80% of Patients Completing Multimodality Treatment	30%	80%	30%	45%	55%%	65%%	80%
2. Cervical Cancer	90% of girls fully vaccinated with the HPV vaccine by the age of 14.	80%	90%	80%	82%	85%	87%	90%
	Ensure 70% of women aged 30-49 are screened	20%	70%	20%	30%	40%	60%	70%
	90% of Women Identified with Cervical Disease (Precancerous or Invasive) treated	70%	90%	70%	75%	80%	85%	90%
3. Childhood and Adlolesent Cancer	Achieve 60% survival rate for children with cancer	30%	60%	30%	35%	40%	45%	60%
4. Other Cancers	100% of cancer treating centers promptly diagnose and treat other cancers (colorectal, NHL, Prostate, liver, lung etc…)	17%	100%	17%	26%	40%	62%	100%

[1] *Progress monitoring will be conducted through annual reports, alongside comprehensive evaluations during the mid-term review (MTR) and end-term review (ETR).*

6.2.1 MONITORING AND EVALUATION APPROACHES

STRATEGY: STRENGTHENING MONITORING AND EVALUATION OF CANCER CONTROL ACTIVITIES.

OBJECTIVE: TO MONITOR AND EVALUATE CANCER CONTROL INTERVENTIONS

STRATEGIC INTERVENTIONS:

1. Install a comprehensive cancer surveillance system
2. Develop monitoring and evaluation guidelines and tools.
3. Develop a monitoring and evaluation framework for cancer Control
4. Conduct a mid-term (year 2-3) assessment of plan to evaluate the effectiveness and progress of implemented strategies.
5. Conduct an end-term review to assess the overall success and impact of the interventions.

6.2.2 CANCER REGISTRIES

STRATEGY: ESTABLISH NATIONAL POPULATION BASED AND HEALTH FACILITY BASED CANCER REGISTRIES

STRATEGIC INTERVENTIONS:

1. Establish population-based cancer registry in all of the 5-university affiliated cancer treatment centers
2. Implement standardized methods and coding systems for consistent data documentation.
3. Advocate for laws mandating cancer case reporting and ensuring data privacy.
4. Provide ongoing training for healthcare professionals on data management and registry protocols.
5. Establish and strengthen health facility-based cancer registry in all cancer treatment centers
6. Integrate cancer registries with national health information systems and collaborate globally.
7. Raise awareness and engage stakeholders, including the public, healthcare providers, and NGOs.
8. Continuously evaluate the effectiveness and impact of the registry on cancer care and policy.
9. Secure long-term funding from various sources to maintain and expand registry operations.

CHAPTER 7: COSTING NATIONAL CANCER CONTROL PLAN 2025-2029

7.1 OVERVIEW

The National Cancer Control Plan in Ethiopia prioritizes cost-effectiveness and affordability to ensure value for money in cancer care. It emphasizes equitable access to services and focuses on the prioritization of cancer types based on epidemiological data and the effectiveness of interventions. The plan also leverages partnerships and collaboration to enhance resource mobilization and create synergies for effective implementation.

7.2 SUMMARY OF INCCP COSTING BY STRATEGIC PILLARS

Table 13: ***Projected cost of the National Cancer Control Plan by strategic pillars (X 1000 USD)***

Strategic Pillar	2025	2026	2027	2028	2029	Total cost	% Share
Prevention of Cancer	4,601.62	4,831.70	5,073.29	5,326.95	5,593.30	25,426.86	18.03
Early Detection/recognition	2,376.54	611.73	2,226.60	2,210.70	2,284.76	9,710.33	6.89
Diagnosis and Treatment of Cancer	12,164.10	12,772.31	13,410.92	14,081.47	13,496.15	65,924.94	46.75
Psychosocial Support/Surviorship	1,880.62	1,934.48	1,526.47	1,654.33	2,079.28	9,075.18	6.44
Supportive and Palliative Care	3,031.56	3182.16	2340.32	2506.04	3679.32	14,739.40	10.45
Cancer Surveillance and Research	2180.14	2164.2	2166.46	2189.86	2171.52	10,872.18	7.71
Monitoring and Evaluation	1054.28	1054.88	1055.54	1056.26	1057.04	5,278.00	3.74
Total	27,288.86	26,551.46	27,799.60	29,025.61	30,361.37	141,026.90	100.00

Table 14:Detailed budget by category of costing for the Ethiopian National Cancer Control Plan (X1000 USD)

Cost Category	Implementation Years						
	2025	2026	2027	2028	2029	Total cost	% Share
Training	3,000.00	3,150.00	3,307.50	3,472.88	3,646.52	16,576.89	11.75
Strategy development	88.32	22.24	22.48	22.72	22.98	178.74	0.13
Workshops	1721.54	1734.2	1747.92	1762.72	1778.72	8,745.10	6.20
Medicine	6,000.00	6,300.00	6,615.00	6,945.75	7,293.04	33,153.79	23.51
Medical Equipment	9,000.00	9,450.00	9,922.50	10,418.63	10,939.56	49,730.68	35.263
Human Resource	513.6	543.28	586.74	633.68	684.38	2,961.68	2.00
Awareness Raising	4,601.62	3,170.52	3,411.56	3,578.26	3,799.72	18,561.68	13.16
Research and publications	1076.0	1076.0	1076.0	1076.0	1076.0	5,380.00	3.81
M&E	1054.28	1054.88	1055.54	1056.26	1057.04	5,278.00	3.74
Manual Development	233.5	50.34	54.36	58.72	63.42	460.34	0.33
Total	27,288.86	26,551.46	27,799.60	29,025.61	30,361.37	141,026.90	100

CHAPTER 8: IMPLEMENTATION STRATEGY

8.1 IMPLEMENTATION OF PRIORITY AREAS BY HEALTH SERVICE DELIVERY LEVELS

Table 15: Key interventions of priority areas by health facility levels

PRIORITY AREA 1: BREAST CANCER MANAGEMENT

Priority Areas	Health Service Levels and Strategic Interventions at each level			Key Results Area
	Primary	Secondary	Tertiary	
Breast Cancer	1. General Public Education/Campaigns Using Predesigned Education Materials 2. Educate individuals on how to recognize normal breast changes and detect any unusual signs, such as lumps or persistent pain. This empowers individuals to take an active role in monitoring their health. 3. Provide personalized counseling sessions to address fears, myths, or misconceptions related to breast health. These sessions can help build trust and encourage proactive behavior. 4. Offer CBEs conducted by trained healthcare professionals to detect any abnormalities in individuals who may not yet exhibit symptoms. 5. Establish a system for timely referral to diagnostic centers or specialists for further evaluation of any abnormalities detected during self-examinations or CBEs. 6. Ensure continuous support and tracking for individuals referred for diagnosis. Provide feedback to improve program outcomes and address gaps in the process.	1. Confirmation of Breast Cancer Diagnosis • Ensure accurate and timely diagnosis of suspected cases. • Establish clear pathways for linking confirmed cases to treatment facilities and services. 2. Mammography Services • Provide mammography screening where available to facilitate early detection. • Promote access to quality imaging services for high-risk populations. 3. Capacity Building and Training • Develop training programs for healthcare providers, including mentorship and coaching. 4. Follow-Up and Feedback • Implement systems for regular follow-up with patients to monitor treatment adherence and outcomes.	1. Specialized Care and Treatment: • Providing comprehensive care • Ensuring access to advanced treatment modalities 2. Early Detection and Diagnosis: • Establishing and expanding breast cancer screening programs • Conducting confirmatory diagnostic tests 3. ICapacity Building and Training: • Training healthcare professionals • Mentorship and coaching 4. Offering reconstructive surgery options 5. Palliative and Terminal Care: • Providing specialized palliative care 6. End-of-life care and psychosocial support Follow-Up and Monitoring: • Regular follow-up . 7. Multidisciplinary Care and Collaborative Approaches: 8. Developing multidisciplinary oncology teams, • Investing in modern diagnostic and treatment equipment	1. >60% of Breast Cancer Detected at Stage I And II 2. Evaluation, Imaging, Tissue Sampling and Pathology Completed within 60 Days 3. Achieve 80% of Patients Completing Multimodality Treatment

PRIORITY AREA 2: CERVICAL CANCER SCREENING AND TREATMENT

Priority Areas	Health Service Levels and Strategic Interventions at each level			Key Results Area
	Primary	Secondary	Tertiary	
Cervical Cancer	1. Public Education and Campaigns: • Utilize predesigned educational materials to raise awareness about cervical cancer, prevention methods, and early detection. 2. Support and Conduct Cervical Cancer Elimination Strategy: • Implement and promote national or regional strategies aimed at eliminating cervical cancer, including vaccination, screening, and treatment. 3. Counseling, Cervical Cancer Screening, and Treatment: • Offer counseling to individuals on the importance of cervical health and available preventive measures. • Provide cervical cancer screening (Visual Inspection with Acetic Acid - VIA) and treatment for identified cases. • Treat eligible precancerous lesions with Cryo or Thermal Ablation 4. Referral for Advanced Cases: • Refer individuals diagnosed with advanced cervical cancer for further treatment options, including LEEP (Loop Electrosurgical Excision Procedure) and other advanced treatments. 5. Follow-Up and Feedback: • Ensure proper follow-up with patients who have undergone screening, treatment, or referral for advanced cases.	1. Receive and Treat Advanced Cases • Address complex or high-level cases (with LEEP or advanced procedures), ensuring appropriate medical or programmatic intervention. 2. Support and Conduct CC Elimination Campaigns • Provide support for and actively participate in implementing a strategy to eliminate cervical cancer 3. Capacity Building and Training (Mentorship, Coaching) • Provide mentorship, coaching, and training to staff or stakeholders, enhancing their skills and knowledge to improve overall program effectiveness. 4. Follow Up and Feedback • Ensure consistent follow-up on cases or activities, and gather feedback to assess progress, challenges, and areas for improvement.	1. Receive and Manage Advanced Cases: • Provide specialized care for patients with advanced cervical cancer lesions, ensuring comprehensive diagnosis and treatment. 2. Specialized and Terminal Care: • Offer specialized treatments, including palliative or end-of-life care, tailored to the needs of terminally ill patients. 3. Support Implementation of CC Elimination Strategy: • Actively contribute to or oversee efforts aimed at eliminating CC 4. Capacity Building and Training: • Provide training, mentorship, and coaching to healthcare professionals or teams to enhance their skills and effectiveness. 5. Follow-up and Feedback: • Ensure continuous monitoring and assessment of patient progress or the implementation of programs, offering feedback to improve care outcomes.	1. 90% of girls fully vaccinated with the HPV vaccine by the age of 14. 2. Ensure 70% of women aged 30-49 are screened with a high-performance test 3. 90% of Women Identified with Cervical Disease (Precancerous or Invasive) Receive Appropriate Treatment

PRIORITY AREA 3: CHILDHOOD AND ADOLESCENT CANCR CONTROL PLAN

Priority Areas	Health Service Levels and Strategic Interventions at each level			Key Results Area
	Primary	Secondary	Tertiary	
Childhood Cancer	1. Public Education on Childhood Cancer • Use predesigned educational materials (posters, brochures, videos, infographics, social media campaigns). • Conduct community outreach sessions in schools, community centers, and health fairs. • Highlight the importance of early detection and timely treatment. 2. Awareness Campaign on Recognizable Childhood Cancers • Focus on cancers that exhibit visible or noticeable signs, such as: a) Retinoblastoma: Symptoms like a white reflex in the pupil or squinting. b) Leukemia: Signs like prolonged fever, fatigue, or bruising. c) Wilms Tumor: Abdominal swelling or lumps • Empower families and caregivers with information on what symptoms to look for and when to seek medical attention. 3. Referral for Suspected Childhood Cancer Cases • Establish referral pathway to ensure suspected cases are evaluated promptly at specialized centers. 4. Follow-up and Feedback Mechanisms	1. Early Detection and Diagnosis: • Recognize and evaluate early warning signs and symptoms • Perform basic diagnostic investigations such as blood tests, • Collaborate with primary care providers for timely identification and referrals. 2. Laboratory and Pathology Support: • Conduct initial laboratory workups 3. Collect and transport samples for advanced pathological testing • Referral and Coordination with Specialists: • Establish clear referral pathways to link suspected or confirmed cases to Pediatric Hemato-Oncologists (PHOs) or tertiary care centers. • Provide detailed clinical summaries and test results 4. Initiation of Supportive Care: • Manage symptoms such as pain, anemia, and infections during the initial phase of care. • Provide nutritional support and psychological counseling. Offer palliative care 5. Follow-Up and Monitoring: • Monitor referred cases to ensure timely evaluation and initiation of treatment at tertiary centers. 6. Capacity Building and Community Engagement: • Train healthcare workers in recognizing childhood cancer • Conduct awareness	1. Clinical Care and Treatment • Comprehensive diagnostic (laboratory tests, imaging, and biopsies.) and treatment services including management of treatment related complications , including • Accurate staging of cancers to guide treatment plans. 2. Multidisciplinary Team Coordination • Collaboration between pediatric oncologists, surgeons, nurses, social workers, and other specialists. • Tumor board discussions to develop individualized treatment plans. • Integration of palliative care with curative and supportive services. 3. Provide Specialized Terminal Care 4. Capacity Building and Training 5. Follow-Up and Long-Term Care 6. Research and Data Management 7. Policy Advocacy and Resource Mobilization	Achieve at least 60% survival rate for children with cancer by 2029

PRIORITY AREA 4: OTHER CANCERS

Priority Areas	Health Service Levels and Strategic Interventions at each level			Key Results Area
	Primary	Secondary	Tertiary	
Other Cancers	• Public Education on Health Education and Awareness Campaigns • Lifestyle Interventions • HPV and Hepatitis Vaccinations • Tobacco and Alcohol Control control enforcement • Screening for High-Risk Populations c) Wilms • Referral	• Risk Factor Evaluation • Counseling • Collaborating with primary healthcare providers to develop community-specific cancer prevention strategies. • Training and capacity building • Surgical interventions • Palliativ care • Nutritional support • Pain management • Follow up • Referral and feedback	• Advanced comprehensive treatment • Counseling • Training and capacity building • Palliativ care • Nutritional support • Pain management • Follow up • Referral and feedback	prompt detection, diagnosis and Treatment of other common cancers like Colorectal, NHL and Propstate)

8.2 STRATEGIC PILLARS IMPLEMENTATION PLAN

8.2.1 PILLAR 1: CANCER PREVENTION

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y 4	Y5
Strategic Objective 1: Reduce exposure to modifable cancer risk factors **Strategy 1:** Tobacco Control **Strategy 2:** Control of Harmful Use of Alcoho **Strategy 3:** Reduce consumption of unhealthy diets, prevalence of physical inactivity, overweight and obesity **Strategy 4:** Control of Biological Agents Causing Cancer **Strategy 5:** Control of environmental and occupational hazards	**Objective 1:** Reduce prevalence of use to tobacco and tobacco-related products and by-products by 30% by 2029	1. Integrate tobacco-related health risks into school health education 2. Enforce 100% smoke-free environments in workplaces and public spaces 3. Boost public awareness on tobacco addiction and cessation resources	% reduction of obacco use prevalence	FDA, MOH, RHB,	X X X	X X X	X X X	X X X	X X X
	Objective 2: 10% Relative Reduction in Hamful Use of Alcohol by 2029	1. Adopt the NCD Global Strategy on Harmful Use of Alcohol 2. Raise Public Awareness, Especially Among Young People, About Alcohol-Related Health Risks 3. Incorporate Information on Alcohol Risks into School Health Programs	% Relative Reduction in Hamful Use of Alcohol by 2029		X X	X	X X	X	X

Strategic Objective	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 1: Reduce exposure to modifable cancer risk factors **Strategy 1:** Tobacco Control **Strategy 2:** Control of Harmful Use of Alcoho **Strategy 3:** Reduce consumption of unhealthy diets, prevalence of physical inactivity, overweight and obesity **Strategy 4:** Control of Biological Agents Causing Cancer **Strategy 5:** Control of environmental and occupational hazards	**Objective 3::** 25% Relative Reduction insufficient Intake of Fruits and Vegetables by 2029	1. Promote public awareness on risks of overweight, obesity, unhealthy diet, and physical inactivity 2. Control the import of processed foods having high fat, sugar, and salt	% Relative Reduction insufficient Intake of Fruits and Vegetables by 2029	FDA, MOH, RHB,	X	X	X	X	X
	Objective 4: 10% Relative Reduction in Prevalence of Insuffient Physical Inactivity by 2029	3. Promote physical activity in workplaces 4. Promote healthy diet and physical activities around schools	% Relative Reduction in Prevalence of Insuffient Physical Inactivity by 2029		X	X	X	X	X
	Objective 5: Reduce Overweight and Obesity by at least 15% by 2029	5. Develop and implement national guidelines on physical activity	% reduction in over weight and Obesity by at least 15% by 2029				X		
	Objective 6: Achieve 95% HPV vaccination coverage for 14-year-old girls by 202	1. Strengthen Health Promotion and Prevention Strategies for Infectious Disease ((like HPV, HIV, and Hepatitis B) Related Cancers 2. Targeted Screening and Control of Pathological Agents	Coverage of HPV vaccination		X	X	X	X	X
	Objective 7: To ensure integration of HBV vaccination into routine immunization services	1. Vaccination Against Viral Infections 2. Treat Infectious Diseases Associated with Cancers 3. Promote Healthy Sexual Behavior	Evidence of integration of HBV vaccination into routine immunization services		X	X	X	X	X

Strategic Objective	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 2: Address non-modifiable risk factors **Strategy 1:** Promote Public Awareness on Cancer Prevention, Early Detection and Care Causing Cancer	**Objectiae 1:** To Reach at least 50% of Public with information on Aon Cancer Prevention, Early Detection and Care	1. Implement National Breast Cancer Early Detection, Diagnosis, and Care Guidelines 2. Strengthen Provision of Organized Cancer Screening and Early Diagnosis Services at All Health Facilities: 3. Promote Access to Screening and Early Diagnosis for Hard-to-Reach Groups and Within Communities: 4. cale Up Cervical Cancer Screening Using HPV DNA and Strengthen Prompt Treatment 5. Commit to the global goal of eliminating cervical cancer by 2030, as set by the World Health Organization (WHO)	% of the Population reached with Cancer Prevention Awareness Information by 2029	MOH, RHB,	X	X	X	X	X
	Objective 2: To Integrate Cancer Prevention Activities at Primary Health Care Level by 2029	1. Building Cross-Sector Networks	Evidence of integration of Cancer Prevention Activities at Primary Health Care Level by 2029						
	Objective 3: To Integrate Childhood Cancer Early Detection and Referral at Primary Health Care Level by 2029	1. Developing and Testing Awareness Messages	Evidnce of Integration of Childhood Cancer Early Detection and Referral into Primary Health Care Level by 2029			X			

8.2.2 PILLAR 2: EARLY DETECTION/RECOGNITION

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 1: To improve secondary prevention of cancer through screening, early diagnosis and linkage to care	**Objective 1:** Screen 70% of Eligible women aged 30-49 for cervical cancer **Objective 2:** 60% breast cancer cases identified at stages I and II	1. Implement National Breast Cancer Early Detection, Diagnosis, and Care Guidelines 2. Strengthen Provision of Organized Cancer Screening and Early Diagnosis Services at All Health Facilities: 3. Promote Access to Screening and Early Diagnosis for Hard-to-: 4. scale up Cervical Cancer Screening Using HPV DNA and Strengthen Prompt Treatment 5. Commit to the global goal of eliminating cervical cancer by 2030	% of women aged 30-49 screened for CC % of breast cancer cases picked at stages I and II	FDA, MOH, RHB, Partners	X	X	X	X	X
Strategic Objective 2: Increase the diversity and capacity of the health workforce and health care service delivery systems for cancer screening and early diagnosis	**Objective 1:** at least 50% of health workers trained on cancer	1. Utilize Harmonised and CPD-Approved Training Packages for In-Service Training 2. Increase the Number and Diversity of Trained Health Workers 3. Include Cancer Screening and Early Diagnosis Content in Pre-Service Training	% of health workers trained on cancer						

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 3: Optimise referral mechanisms and improve linkages to care to reduce loss to follow up	1. 20% reduction in loss to follow up 2. % of cases linked to care through referrals	1. Address Health System Challenges Impacting Timeliness of Diagnosis and Ensure Rapid Linkage to Confirmatory Diagnosis 2. Create a National Cancer Screening Data Repository 3. Integrate Cancer Screening Data into DHIS II 4. Strengthen Specimen Referral and Tracking Systems 5. Train, Mentor, and Deploy Community and In-Facility Navigators to Facilitate Referrals and Linkages to Care	1.Proportion of cases lost to follow up 2.Proportion of cases liked to next level of care	FDA, MOH, RHB, Partners	X	X	X	X	X

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strtegic Objective 4: To strengthen early detection/recognition of childhood cancers Strategy 1: Improve public awareness of childhood cancers and the importance of early detection Strategy 2: Build capacity of health care workers for early detection of childhood cancers Strategy 3: Build capacity of health care workers for early detection of childhood cancers	1. 60% of the population have awareness about childhood cancer 2. % of childhood cancer recognized or detected by the community	3. Involve childhood cancer survivors in awareness and outreach efforts 4. Establish referral networks to ensure children are directed to appropriate healthcare facilities 5. Provide culturally tailored information 6. Develop and implement regular training programs on the early warning signs and clinical presentation of childhood cancers. 7. Integrate a childhood cancer-specific assessment tool into the existing IMCI 8. Establish specialized clinics for pediatric ophthalmology 9. Strengthen referral pathways to ensure prompt diagnosis and treatment once childhood cancer is suspected. 10. Establish or expand pediatric oncology centers 11. Provide access to a multidisciplinary team 12. Set up a national cancer registry on childhood cancer	1. Proportion of community with knowledge about childhood cancer 2. Proportion of childhood cancer picked by family/care giver	MOH, RHB, Health Facilities	X	X	X	X	X

8.2.3 PILLAR 3: CANCER DIAGNOSIS AND TREATEMT

CANCER DIAGNOSIS

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 1: Strengthen Cancer Diagnostic Imaging and Interventional Radiology Services **Strategy 1:** Strengthen coordination and standards for cancer imaging services **Strategy 2: :** Increase access to quality, accurate, and efficient cancer diagnostic imaging services nationally	**Objective 1:** Achieve early cancer detection rate of 60% using imaging technology	1. Enhance the National Cancer Imaging Diagnosis TWGs 2. Develop Operational Standards for Cancer Imaging 3. Advocate for a regulatory framework for the procurement, evaluation, and installation of radiological equipment, 4. Develop an Imaging Diagnosis Directory 5. Expand the availability of advanced imaging technologies PET-CT, SPECT-CT 6. Expand Interventional Radiology Services 7. Foster Public-Private Partnerships (PPPs)	Proportion of cases diagnosed with imaging technology at an early stage	MOH, RHB, Universities	X	X	X	X	X

CANCER DIAGNOSIS

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 2: Strengthen the cancer pathology diagnostic and Laboratory medicine services. **Strategy 1:** Improve coordination and standards for cancer pathology services **Strategy 2:** Increase timely access to quality and accurate cancer pathology and laboratory medicine services countrywide	**Objective 1:** Achieve early cancer detection rate of 60% using pathology services	1. Strengthen the National Pathology TWG Committee 2. Develop National Quality Assurance and Safety Guidelines 3. Develop Protocols for Cancer Diagnosis of Priority Cancers 4. Expand and Improve Histopathology Laboratory Infrastructure 5. Implement rapid diagnostic services 6. Strengthen and Expand HPV Testing for Cervical Cancer Screening 7. Strengthen Public-Private Partnerships for Cancer Diagnostic Services	Proportion of cases diagnosed with pathology services at an early stage	MOH, RHB, Universities	X	X	X	X	X

CANCER DIAGNOSIS

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 3: : Strengthen the availability and capacity of human resources to support cancer diagnosis Strategy 1: Enhance the availability of human resource for cancer diagnosis Strategy 2: Enhance the capacity of human resources for cancer diagnosis	Objective 1: Achieve evaluation and reporting of diagnostic results with in 60 days	1. Provide Continuous Education and Professional Development 2. Develop the Scope of Practice, Certification, and Accreditation system 3. Promote practices 4. Develop a Comprehensive Training Program for Cancer Diagnosis 5. Create a sustainable, skills-based training program focused on key areas in cancer diagnosis. 6. rovide a Comprehensive Directory of Cancer Diagnostic Resources	Lab results turnaround time of 60 days	MOH, RHB, Universities	X	X	X	X	X

CANCER TREATMENT

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 1: Strengthen coordination to guide relevant standards for provision of quality cancer management **Strategy 1:** Development, review and dissemination of guidelines for cancer management Activities **Strategy 2:** Enhance coordination, regulation and standards for quality cancer care services	**Objective 1:** Develop standards for Cancer care	1. Review and Disseminate National Cancer Treatment Protocols: 2. Advocate for the creation of a national policy and strategy on the safe and sustainable use of nuclear technology in medicine, including the safe 3. Strengthen the National Cancer Treatment TWG 4. Establish a National Center of Excellence for Specialized Cancer Management 5. Multidisciplinary teams specialists (oncologists, surgeons, radiologists, palliative care experts, etc.) 6. Support the Integration of Cancer Research in All Facilities Providing Cancer Treatment Services	# of standards d developed	MOH, RHB,	X	X	X	X	X
Strategic Objective 2: . Improve availability and capacity of a skilled multi-disciplinary team care. **Strategy 1:** Improve availability of human resources **Strategy 2:** Strengthen the capacity of oncology workforce	**Objective 1:** To establish MDT in all cancer centers	1. Create and implement a strategic plan for oncology workforce development. 2. Address scopes of practice, accreditation, and career pathways for oncology professionals. 3. Establish continuous professional development programs	Availability of MDT in all cancer treating centers		X	X	X	X	X

CANCER TREATMENT

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 3: Increase access to timely cancer care services **Strategy 1:** Improve availability of cancer treatment services	**Objective 1:** Achieve 30% treatment coverage for cancer incidences	1. Establish additional comprehensive cancer centers and enhance childhood cancer services 2. Improve capacity for advanced cancer care, including bone marrow transplants, nuclear medicine therapies and cell therapies. 3. Improve blood donor services and availability at national and regional cancer centers. 4. Utilize tele-health for cancer service delivery. 5. Improve patient navigation systems across all care levels. 6. Enhance regulation, knowledge, and utilization of nuclear and radiation medicine.	% of new cancer patients getting full treatment	RHbs, MOH	X	X	X	X	X

CANCER TREATMENT

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategic Objective 4: Strengthen the supply chain of oncology healthproducts and technologies Activities	**Objective 1:** Achieve Oncology Commodities stock out below 30%	1. Strengthen supply chain planning for accurate forecasting and availability, including childhood cancer needs. 2. Develop strategies to improve access to affordable oncology products 3. Collaborate with regulatory bodies to enhance quality assurance and post-market surveillance of oncology products. 4. Work with procurement agencies and stakeholders to ensure consistent availability of essential cancer care products	Stockout rate through out the year	MOH, EPSS, FDA, University Institutions	X	X	X	X	X

8.2.4 PILLAR 4: PSYCHOSOCIAL SUPPORT/SURVIORSHIP

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
Strategy Objective 1: Improve childhood cancer treatment, psychosocial support, survivorship and rehabilitation	All childhood cancer treating centers have psychosocial support, survivorship and rehabilitation program	1. Operationalize the Childhood Cancer Technical Working Group 2. Identify and engage key stakeholders (oncologists, policy makers, advocacy groups, etc.). 3. Develop terms of reference (TORs) and a work plan for the group. 4. Engage policymakers to prioritize pediatric cancer in essential health packages. 5. Create an Efficient Referral System 6. Define and Promote Competency Standards for Pediatric Oncology Professionals 7. Support the Review and Dissemination of National Palliative Care Guidelinesr	# of childhøod oncology centers with these services	RHBs, MOH, Universities	X	X	X	X	X

8.2.5 PILLAR 5: SUPPORTIVE AND PALLIATIVE CARE

Strategic Objectives	Objectives	Key Interventions	Monitoring indicators	Responsible Bodies	Time frame				
					Y1	Y2	Y3	Y4	Y5
STRATEGY 1: strengthen availability of palliative and supportive care services	All childhood cancer treating centers have supportive and palliative care services	1. Create a standardized palliative care curriculum tailored for health workers, community health volunteers, and other key resource persons. 2. Ensure Consistent Availability and Proper Use of Essential Opioids 3. Integrate palliative care services into all county referral facilities, 4. Identify and mitigate barriers to accessing palliative care, such as poverty, stigma, and inadequate transportation. 5. Promote equity by prioritizing underserved populations 6. Collaborate with community organizations and stakeholders to create supportive environments that enhance access to care.	# of childhøod oncology centers with these services	RHBs, MOH, University hospitals	X	X	X	X	X

APPENDICES

APPENDIX 1: CONCEPTS AND TERMINOLOGIES

CANCER: encompasses a group of more than 100 distinct diseases with diverse risk factors and epidemiology which originate from most of the cell types and organs of the body, and which are characterized by unrestrained proliferation of cells that can invade beyond normal tissue boundaries and metastasize to distant organs.

CANCER CONTROL CONTINUUM: describes the various stages from cancer prevention, early detection, diagnosis, treatment, survivorship, and end of life care.

NATIONAL CANCER CONTROL PLAN: a public health program designed to reduce cancer incidence and mortality and improve the quality of life of cancer patients, through the systematic and equitable implementation of evidence-based strategies for prevention, early detection, diagnosis, treatment and palliation, making the best use of available resources.

EARLY DETECTION OF CANCER: a concept of timely diagnosis of cancer, that includes two components; early diagnosis (or down-staging) and screening. Early diagnosis focuses on detecting symptomatic patients as early as possible, while screening consists of testing healthy individuals to identify those having cancers before any symptoms appear.

SCREENING: the application of simple tests/procedures across a healthy population before they develop any symptoms of the cancer to identify those with cancers. Screening is currently recommended for four types of cancer: breast, cervical, colorectal and lung cancer depending on resource levels and existing capacity. Screening for prostate cancer is controversial and is currently not recommended for routine use especially at population level.

MULTI-DISCIPLINARY TEAM: this is a concept in cancer management that provides that patient care is provided by a all-rounder team, including core clinical services such as medical oncology, surgery, radiation oncology, pathology, palliative care, psycho-oncology, oncology nursing, oncology pharmacy, nutrition and rehabilitation, as appropriate, to ensure patient-centered health care and clinical effectiveness.

UNIVERSAL HEALTH COVERAGE: providing healthcare in a framework that ensures that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.

imPACT ASSESSMENT: this is a mechanism coordinated by the International Atomic Energy Agency to assess a country's cancer control capacities and needs and identify priority interventions to effectively respond to its cancer burden.

APPENDIX 2: IMPACT REVIEW SUMMARY RECOMMENDATIONS

1. NATIONAL CANCER CONTROL PLANNING AND GOVERNANCE

Short term (6 to 12 months)
• Appoint an NCCP team to lead the process of a detailed review of the NCCP 2016-2020 and use the imPACT recommendations to inform the development of the new National Cancer Control Plan
• Develop a new National Cancer Control Plan for Ethiopia that includes childhood cancer in addition to other priority cancers, survivorship and rehabilitation, sets realistic targets for monitoring and evaluation and has a resource mobilization and financing strategy
• Establish an NCCP technical working group at the MOH to coordinate the cancer control activities and re-establish the National Cancer Control Committee chaired by the Minister of Health with representation from other key ministries and CSOs. The NCCP technical group should ideally report to the NCCC whose role is advisory.
Medium term (12 to 36 months)
• Establish mechanisms for review of the NCCP during its implementation possibly at mid-term and end-term for accountability and improvement
• Establish mechanisms to ensure the availability of essential cancer health products and technologies
• Advocate for utilization of tobacco and alcohol taxes (sin-tax) for cancer control
• Leverage on the integration of cancer control services within similar programs such as RH/FP/HIV especially in primary care level for shared resources and patient-centred
Long term (36 months and above)
• Review the essential health benefit package and essential lists for health products and technologies to comprehensively include cancer services by level of care. Palliative care medicines, in particular oral morphine, should be included. (WHO to be consulted in this process).
• Strengthen the availability of data for policy decision-making by linkage of PBCR to DHIS2 and ensure cancer surveillance and service statistics are well integrated in the DHIS2 platform for MOH planning and decision-making.

2. REGISTRATION AND SURVEILLANCE

Short term (6 to 12 months)
• AACCR to aim to achieve complete coverage of the target population of Addis Ababa by ensuring that all possible sources of information in the city are fully utilised so that its data can be accepted in the next edition of 'Cancer Incidence in 5 Continents'.
• MOH to increase interest in the activities of the AACCR as it is an important stakeholder in national cancer prevention and control.
• Increase frequency of data collection visits to the facilities
• Facilitate constitution of a multi-disciplinary advisory/technical committee to advise the MOH and other stakeholders on cancer registration and surveillance issues.
• Improve interaction with hospital units and MOH so that the MOH can fully appreciate the role of the registry in cancer prevention and control.
• Disseminate the upcoming report of the AACCR as widely as possible locally so that stakeholders appreciate the role of PBCRs in cancer control.
Medium term (12 to 36 months)
• Institutionalize cancer registration, surveillance and research within MOH structures.
• Ensure that cancer is a notifiable disease by law.
• Consider introducing an Oncology module in DHIS2 to facilitate capture of comprehensive data on cancer
• Improve the staffing situation and conditions of service of staff of AACCR
• Utilize training opportunities by IARC, AFCRN and other partners to improve cancer registration and surveillance in the country.
• Complete the establishment of sentinel PBCRS in the identified 4 regions of the country.
Long term (36 months and above)
• Introduce a budget line within the MOH for cancer registration and surveillance.
Absorb AACR staff within MOH structures

3. PREVENTION

Short term (6 to 12 months)
• Strengthen tobacco control enforcement measures (targeting betel quid) by increasing the role of medical officers of health and public health inspectors.
• Develop and implement a national plan for cervical cancer prevention, which should include an implementation strategy for scaling HPV tests.
• Integrate the National Plan for Cervical Cancer prevention with other strong programs such as HIV and family planning programme.
• Continue to increase population coverage of Hepatitis B vaccination to exceed 90% coverage, including the birth dose.
• Sustain the high coverage population vaccinated.
Medium term (12 to 36 months)
Conduct a new STEPS survey.
• Continue to increase awareness on the harmful effects of alcohol and tobacco in children and adolescents through educational and awareness building programs (School-Based Health program of Family Health Bureau, in collaboration with the Ministry of Education).
• Strengthen legislation on added salt in food, and labelling of all food companies (including local distribution) (Occupational health, environmental health and food safety).
• Make fruits affordable and promote fruits and vegetables consumption (NCD unit and nutrition unit).
Long term (36 months and above)
• Regularly monitor and report on the prevalence of risk factors and health promotion activities.

4. Early Detection

Short term (6 to 12 months)
• Develop and implement a national plan for breast cancer screening and control.
• Expand screening services and plan a phased national scale-up to increase coverage and assure regional equity.
• Implement CBE as one element of comprehensive breast health education and awareness building initiative.
• Strengthen quality control, follow-up and tracking of women with an abnormal cervical screening test (VIA or PAP, HPV) or clinical breast examination.
• Scale up HPV screening nationally. Assure follow-up and treatment of all women with screen positive results.
• Adopt a multi-pronged strategy for early diagnosis by strengthening public and provider awareness, knowledge, and concurrently improving referral pathways, with changes at policy, program and institutional levels.
Consider doing CBE in women aged 45 and over and stop doing CBE in women aged 35.
Medium term (12 to 36 months)
• Revise regulations to allow midwives to perform cryotherapy with appropriate training and supervision.
• Revise public health insurance regulations to reduce barriers to equitable access to early diagnosis and to minimize loss to follow-up.
• Increase the childhood cancer early detection capacity by developing the Childhood Cancer Early Diagnosis Guidelines to improve referral between the satellite clinics and the specialized Paediatric oncology centers.
• Strengthen referral pathways to improve early diagnosis of childhood cancer by the development of national referral guidelines.
• Consider developing an investment case for cancer prevention and early detection based on WHO “Best Buys and other recommendations for the Prevention and Control of Noncommunicable Diseases”
• Use trainers to train (annually or biannually) the primary health care staff on cancer signs and symptoms; Pap smear examination and CBE.
• Increase the number of staff at the primary health care level (public health nursing officer, medical officer) and increase the diagnostic capacity with adequate staffing and equipment (cyto-screeners, colposcopy, mammography).
Long term (36 months and above)
• Use unique national ID/personal ID in all databases (screening, laboratory, hospital) to facilitate links and patient follow up.
• Link the screening data with PBCR

5. DIAGNOSIS

Short term (6 to 12 months)
• Equipment. Ensure adequate number of cross-sectional imaging modalities (CT and MRI) to public hospitals and universities.
• Ensure adequate budgeting for future long service agreement/ service warranty at the time of equipment procurement to reduce equipment downtime.
• Nuclear Medicine. Staff for TASH and Jimma University should be available and well trained in the areas of nuclear medicine prior to opening of services.
• Establish Quality Assurance and Quality Improvement program (immediate)
• Sustain the high coverage population vaccinated.
Medium term (12 to 36 months)
• Establish nationwide radiology information system,
Long term (36 months and above)
•

6. Treatment

Short term (6 to 12 months)
• Increase availability of chemotherapy drugs in a sustainable manner and decrease shortages in the list.
• Revise the national medicines list to include important oncology drugs, such as anti-HER2 for breast cancer per WHO new list
• Train more nurses and create financial incentives/compensation for working overtime (to decrease the waiting time to start chemotherapy).
Medium term (12 to 36 months)
• Increase the number of clinical oncologists and the number of centers delivering chemotherapy and radiotherapy to meet the demand.
• Increase the number of specialized oncology nurses and trained general nurses
• Improve comprehensive services such as imaging, nuclear medicine and pathology by more expansion and benefit from private sector capabilities through PPP.
• Start a clinical pharmacy programme in one of the large universities. Clinical pharmacists can provide direct patient care to optimize the administration of medications.
Long term (36 months and above)
• Consider designating a 'center of excellence' that would include all cancer management specialties and become a national cancer institute.
• Develop immunophenotyping and molecular pathology (modern medical oncology).
• Continue the planned development of a bone marrow transplantation programme at TASH and Jimma, including labs, units, and trained staff.

7. SURGICAL ONCOLOGY

Short term (6 to 12 months)
• Ensure participation of surgeons in Multidisciplinary Tumor Board teams in different subspecialties.
• Establish mandatory guidelines, aligned to international guidelines (as adapted to low-resource settings) for the establishment and maintenance of cancer units offering surgery
• Strengthen the referral system from clinics to hospitals to orient patients efficiently, decrease waiting times, costs of transportation and accommodation.
Medium term (12 to 36 months)
• Expand in-country training of generalists by local and/or visiting surgical oncology experts for cervical and breast cancers.
Long term (36 months and above)
• As the surgical workforce per 100,000 population served is low at all levels of public health facilities, efforts should be made to improve equitable surgical access to all patients by increasing the capacity of well-trained surgeons
• Increase surgical oncology platforms (ORs, ICU, instruments)

8. RADIATION ONCOLOGY

Short term (6 to 12 months)
• Centres should plan for two or more teletherapy machines, particularly when linacs are selected, to allow coverage of service if a unit is down, to share costly dosimetry equipment and to allow sufficient number of oncologists for site specialisation.
• Brachytherapy should be available at all radiotherapy centres, given the prevalence of cervical cancer and impact of combined treatment.
• A human resources strategy should be developed for each facility to allow timely and quality training. The IAEA publication Setting Up a Radiotherapy Programme: https://www-pub.iaea.org/MTCD/Publications/PDF/pub1296_web.pdf may be helpful. In addition, an on line tool has been developed to assist calculating the increase in staffing requirements in relation to complexity of treatment: https://www.iaea.org/publications/10800/staffing-in-radiotherapy-an-activity-based-approach
Medium term (12 to 36 months)
• Complete construction at Gondar, Mekele and St Paul's.
• Develop HDR brachytherapy services in Hawassa and the other regional facilities when operational.
Long term (36 months and above)
• Install second teletherapy machines in every facility.

9. CHILDHOOD CANCER

Short term (6 to 12 months)
• Appoint a Childhood Cancer Focal Point person in the MoH.
• Include Childhood Cancer in the development of the new NCCP.
• Perform a situational analysis on the existing childhood cancer early diagnosis capacities.
• Strengthen the referral pathway through the development of national referral guidelines
Medium term (12 to 36 months)
• Strengthen pediatric hospital-based registries and establish a system for data to flow to the regional or national population-based registry.
• Expand workforce capacity in pediatric oncology by training more fellows and nurses.
• Increase the early detection capacity with the development of Childhood Cancer Early Diagnosis Guidelines
• Support the standardization of childhood cancer care with implementation of national guidelines for the treatment of most prevalent childhood cancers. Utilize already available NCCN, SIOP, ASLAN protocols with local adaptation.
• Introduce and implement Comprehensive Pediatric Palliative Care in all centres providing care for children with cancer.
• Consider public-private partnerships to support centralized diagnostic centers for essential pathology services (immunophenotyping, cytogenetics and molecular diagnostics) reducing financial toxicity to families. • Ensure continuous supply of chemotherapy and anti-infective drugs, and blood products. • Revitalize the National Pediatric Hematology Oncology Technical Advisory Committee.
• Long term (36 months and above)
• Based on the model already established at the five pediatric oncology centers, develop additional pediatric oncology centers and satellites wherever there are adult oncology centers to increase access to services and share resources.

10. PALLIATIVE CARE AND SURVIVORSHIP

Short term (6 to 12 months)
• Develop a framework for a National Palliative Care Task force
• Support the setting up of cancer survivorship
• Identify, empower, and partner with palliative care CSOs to do the last mile in providing palliative care services in the community and patients' homes •
Medium term (12 to 36 months)
• Expand the package of services as more capacity is developed at the hospitals and at home
• Develop and cost a rehabilitation services package for cancer patients in the country basing on the findings of the rehabilitation assessment
• Integrate rehabilitation services into all cancer units by providing personnel, assistive devices, and equipment
Long term (36 months and above)
• Establish a network of organisation for homebased care services to ensure patients can receive most of the palliative care services at home.
• Integrate palliative care and rehabilitation services as standard of care in all cancer activities to ensure patients get the service as part of a package

APPENDIX 3: RISK FACTORS BASELINE AND TARGET

Ser. No.	Indicators	Baseline	Target by 2025
1	Reduce overall premature mortality from Non-communicable Diseases	20% (WHO 2016 for Ethiopia)	25% relative reduction
2	Reduce prevalence of current tobacco use in persons aged 15+ years	5 % GATS Survey 2016	30% relative reduction
3	Reduce harmful use of alcohol in persons aged 15+ years	12.5% NCD STEPS by 2015	10% relative reduction
4	Reduce prevalence of current khat use in persons aged 15+ years	16% NCD STEPS by 2015	20% relative reduction
5	Reduce prevalence of insufficient physical activity in persons aged 15+ years	5.8% NCD STEPS by 2015	10% relative reduction
6	Reduce mean population salt intake to <5 grams per day in persons aged 15+ years	96.2% STEPS Survey in 2015	30% relative reduction
7	Reduce insufficient fruit and vegetable consumption in persons aged 15+ years	97.6% STEPS by 2015	25 % relative reduction
8	Reduce the percentage of people who are obese or overweight	6.3% STEPS in 2015	15% relative reduction
9	Reduce the age-standardized prevalence of raised total cholesterol among persons aged 18+ years	5.6% STEPS in 2015	10% relative reduction
10	Reduce prevalence of raised blood pressure in persons aged 15+ years	16% STEPS in 2015	25% relative reduction
11	Reduction in the prevalence of ARF/ RHD in age group 4-24 years old	17/1000 school children and young adults (NCDI Commission Report 2018)	25% relative reduction

Source: NATIONAL STRATEGIC PLAN FOR THE PREVENTION AND CONTROL OF MAJOR NON-COMMUNICABLE DISEASES 2013-2017 EFY (2020/21-2024/25)

APPENDIX 4: ESSENTIAL CANCER DRUG LIST IN ETHIOPIA

S.N	SHI code	Items Description
1	Acti-30	Actinomycin-D (Dactinmycin) - 0.5mg in Vial - Pow- der for Injection
2	Atra-10	All Trans Retinoic Acid (ATRA) - 10mg - Tablet
3	Anas-10	Anastrazole - 1mg - Tablet (Film Coated)
4	Arse-30	Arsenic Trioxide (ATO) - 1mg/1ml in 10ml Ampoule– Injection
5	Azac-30	Azacitidine - 100mg in Vial - Powder for Inj (Lyophilized)
6	Azat-11	Azathioprine - 50mg - Tablet (Film Coated)
7	Bend-30	Bendamustine HCl - 100mg in Vial - Powder for Injection (Lyophilized)
8	Bica-10	Bicalutamide - 50mg – Tablet
9	Bleo-30	Bleomycin sulfate - 15IU in Vial - Powder for Injection (Lyophilized)
10	Bort-30	Bortezomib - 3.5mg in Vial - Powder for Injection (Lyophilized)
11	Cape-11	Capecitabine - 500mg – Tablet
12	Carbo-31	Carboplatin - 450mg/45ml in Vial – Injection
13	Ambu-10	Chlorambucil - 2mg – Tablet
14	Cisp-31	Cisplatin - 50mg/50ml - Intravenous Infusion
15	Cycl-32	Cyclophosphamide - 1gm - in Vial - Injection
16	Cycl-31	Cyclophosphamide - 500mg - in Vial - Injection
17	Cyca-03	Cyclosporine A - 50mg – Capsule
18	Cyta-32	Cytarabine - 500mg/25ml in 25ml Vial – Injection
19	Daca-32	Dacarbazine - 500mg in Vial - Powder for Injection
20	Doce-30	Docetaxel - 80mg in Vial - Powder for Injection
21	Doxo-31	Doxorubicin HCl - 50mg in Vial - Powder for Injection
22	Epir-30	Epirubicin - 50mg in Vial - Powder for Injection
23	Etop-30	Etoposide - 50mg/2ml in 2ml Ampoule – Injection
24	Filg-30	Filgrastim - 300mcg/0.5ml in 0.5ml Ampoule – Injec- tion
25	Fluo-31	Fluorouracil - 50mg/10ml in 10ml Ampoule – Injection
26	Leuc-10	Folinic Acid - 15mg – Tablet
27	Leuc-30	Folinic Acid - 50mg/5ml in 5ml Ampoule – Injection
28	Gemc-30	Gemcitabine - 1gm in Vial - Powder for Injection
29	Gose-31	Goserelin Acetate - 10.5mg – Implant
30	Gose-30	Goserelin Acetate - 3.6mg – Implant
31	Ifme-30	Ifosfamide with Mesna-1g in Vial-Powder for Inj
32	Cort-31	Intrathecal Hydrocortisone - 100mg – Injection
33	Irih-30	Irinotecan HCl - 100 mg/5ml in Vial – Injection
34	Aspl-30	L-Asparaginase - 5,000 IU – Injection
35	Lena-01	Lenalidomide - 10mg - Capsule
36	Melp-10	Melphalan - 2mg – Tablet
37	Merc-10	Mercaptopurine - 50mg – Tablet
38	Metx-36	Methotrexate - 50mg - Powder for Injection
39	Nillo-01	Nilotinib - 200mg – Capsule
40	Onda-31	Ondansetron - 4mg/ml –in 2ml- Injection
41	Onda-10	Ondansetron - 8mg – Tablet
42	Oxal-30	Oxaliplatine - 50mg/10ml - Powder for Injection
43	Pacl-30	Paclitaxel - 100mg/16.7ml – Injection
44	Carp-01	Procarbazine Hydrochloride - 50mg – Capsule
45	Ritu-31	Rituximab - 500mg/50ml – Injection
46	Tamo-11	Tamoxifen Citrate - 20mg – Tablet
47	Thal-01	Thalidomide - 50mg – Capsule
48	Tran-10	Tranexamic acid - 500 mg – Tablet
49	Vinb-35	Vinblastine -1mg/ml in 10ml Vial-Powder for Injection
50	Vinc-36	Vincristine Sulfate - 2mg - Powder for Injection
51	Zole-30	Zoledronic acid - 4mg/5ml in 5ml Amp– Injection

APPENDIX 5: CANCER WORKFORCE AVAILABILITY IN ETHIOPIA

Table 16: Ideal need and availability of Cancer Control Workforce in Ethiopia

SN	List of HW Category	Reco. # in Ethiopia*	Current # in Ethiopia	Health Facility Type								% of met Needs
				Comrehensive cancer treatment centers							Chemo Centters	
				TASH	SPMMC	Hawassa	Jimma	Harar	Gondar	Aydar	(N=30)	
1	Clinical Oncologist	480	60	8	9	4	3	3	3	2	20	12.5
2	Hematologist	480	8	6	1	1		0		0	0	1.7
3	Gynecologic Oncologist	60	17	3	5	1	2	2	4	0	0	28.3
4	Breast Surgeon	1,200	6	4	0	0	0	0	0	0	0	0.5
5	Oncology Nurse	1000	28	10	4	2	3	4	1	4	0	2.8
6	Oncology Pharmacist	600	0	0	0	0	0	0	0	0	0	0.0
7	Pediatric Hemato-Oncologist	100	20	5	2	1	2	1	2	1	0	20.0
8	Medical Physicist	60	14	3	2	2	3	2	1	1	0	23.3
9	Radiation Therapy Technicians	800	28	9	0	5	6	6	1	1	0	3.5
10	Nuclear medicine physicians	240	17	10	2		2	1	1		0	7.1
11	Nuclear medicine technologist,	100	0									0
12	Radio pharmacist	60	4	4								6.7
13	Biomedical Engineers	240	200	1	0	0	0	0	0	0	0	83.3
14	Diagnostic Radiologists	1200	400	30	29	10	4	2	8	10	0	29.2
15	Pathologists	1200	130	16	12	10	8	5	7	4	0	10.8
16	Oncology Trained Physicians (GP)	2400	60								60	2.5
17	Oncology Trained Nurses	1000	56								56	5.6

* These calculations offer a rough estimate of the number of oncology professionals needed for a population of 120 million people in Ethiopia, based on standard guidelines. The actual needs may vary depending on specific cancer incidence rates and regional factors

APPENDIX 6: CANCER TREATMENT CENTERS , DECEMBER 2024.

SN	Name of Facility	Scope
1	Adama Hospital	All cancers
2	Ambo Hospital	Breast Cancer Chemotherapy
3	Assela Hospital	Breast Cancer Chemotherapy
4	Ayder Hospital	Comprehensive (+radiotherapy)
5	Debrebirhan Hospital	Breast Cancer Chemotherapy
6	Dessie Referral Hospital	All cancers
7	Felegehiwote Hospital -Bahirdar	All cancers
8	Goba Hospital	Breast Cancer Chemotherapy
9	Gondar Referral Hospital (Adult and Pediatric Cancer)	Comprehensive (+radiotherapy)
10	Hawassa Referral Hospital	Comprehensive (+radiotherapy)
11	Hiwot Fana Referral Hospital-Harar	Comprehensive (+radiotherapy)
12	Hossana Nigist Elenni Hospital	Breast Cancer Chemotherapy
13	Jijiga Hospital	Breast Cancer Chemotherapy
14	Jimma Hospital (Adult and Pediatric Cancer)	Comprehensive (+radiotherapy)
15	Nekemet Hospital	Breast Cancer Chemotherapy
16	St Paul Hospital (Adult, Heamtology and Pediatric Cancer)	Comprehensive (+radiotherapy)
17	Tibebe Ghion Hospital	All cancers
18	Tikur Anbessa Hospital (Adult, Heamtology and Pediatric Cancer)	Comprehensive (+radiotherapy)
19	Wolayta Sodo Hospital	All cancers
20	Worabe Hospital	All cancers
21	Yekati 12 Hospital (Addis Ababa)	All cancers
22	Axum Hospital (new)	Breast Cancer Chemotherapy
23	Zewditu Hospital	All cancers
24	Dila Hospital	All cancers
25	Debremarkos Hoospital	Breast Cancer Chemotherapy
26	Woldiya Hospital	Breast Cancer Chemotherapy
27	Debretabor Hospital	Breast Cancer Chemotherapy
28	Bona Hospital	Breast Cancer Chemotherapy
29	Dilchora Hospital	All cancers
30	Dubti Hospital	Breast Cancer Chemotherapy
Key 1:	**All Cancers:** Includes centers that provide treatment for all types of cancers, with at least one clinical oncologist on staff.	
Key 2:	**Breast Cancer Chemotherapy**: Refers to centers that focus exclusively on treating breast cancer using chemotherapy, along with follow-up care.	
Key 3:	**Comprehensive Centers (with Radiotherapy):** Encompasses centers equipped with all treatment modalities for cancer, including radiotherapy.	

APPENDIX 7: LIST OF CONTRIBUTORS

1	Dr. Abdu Adem	St. Paul MMC
2	Dr. Adamu Addissie	AAU-School of Public Health, EKCC project
3	Mr. Addisu Worku	MOH
4	Dr. Adugna Fekadu	AAU-CHS
5	Dr. Asmamaw Bezabeh	WHO
6	Mrs. Fantu Hawaz	TAPCCO
7	Mr. Bisrat Fantaye	MOH
8	Dr. Daniel Hailu	AAU, Pediatric Hemato-oncologist
9	Dr. Diriba Fufa	Jimma University, Pediatric Hemato-oncologist
10	Dr. Edom Seife	AAU-CHS
11	Mr. Ejigu Kebede	St. Paul MMC
12	Dr. Endale Anberber	AAU-CHS
13	Mr. Haileyesus Wossen	WHO
14	Dr. Hiwot Solomon	MOH
15	Dr. Kunuz Abdella	MOH
16	Ms. Kibeb Haile	MOH
17	Dr. Mathewos Assefa	AAU-CHS
18	Mr. Molalegn G/Senbet	AAU-CHS
19	Dr. Munir Awel	AAU-CHS
20	Dr. Mulugeta Ayalew	Gondar University, Pediatric Hemato-oncologist
21	Dr. Mulugeta Kassahun	St. Paul MMC
22	Dr. Muluken Gizaw	AAU-School of Public Health, EKCC Project
23	Ms. Sara Ibrahim	TAPCCO
24	Dr. Sefonias Getachew	AAU-School of Public Health, EKCC project
25	Dr. Selamawit Ayele	MOH
26	Dr. Soneya Worku	AAU-CHS
27	Mrs. Takelech Moges	MOH
28	Dr. Tadele Hailu	SPMMC University, Pediatric Hemato-oncologist
29	Dr. Tewodros Yalew	AAU-CHS
30	Mr. Wondu Bekele	MWECS
31	Dr. Yared Tilahun	CHAI
32	Mr. Zelalem Mengistu	MWECS

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