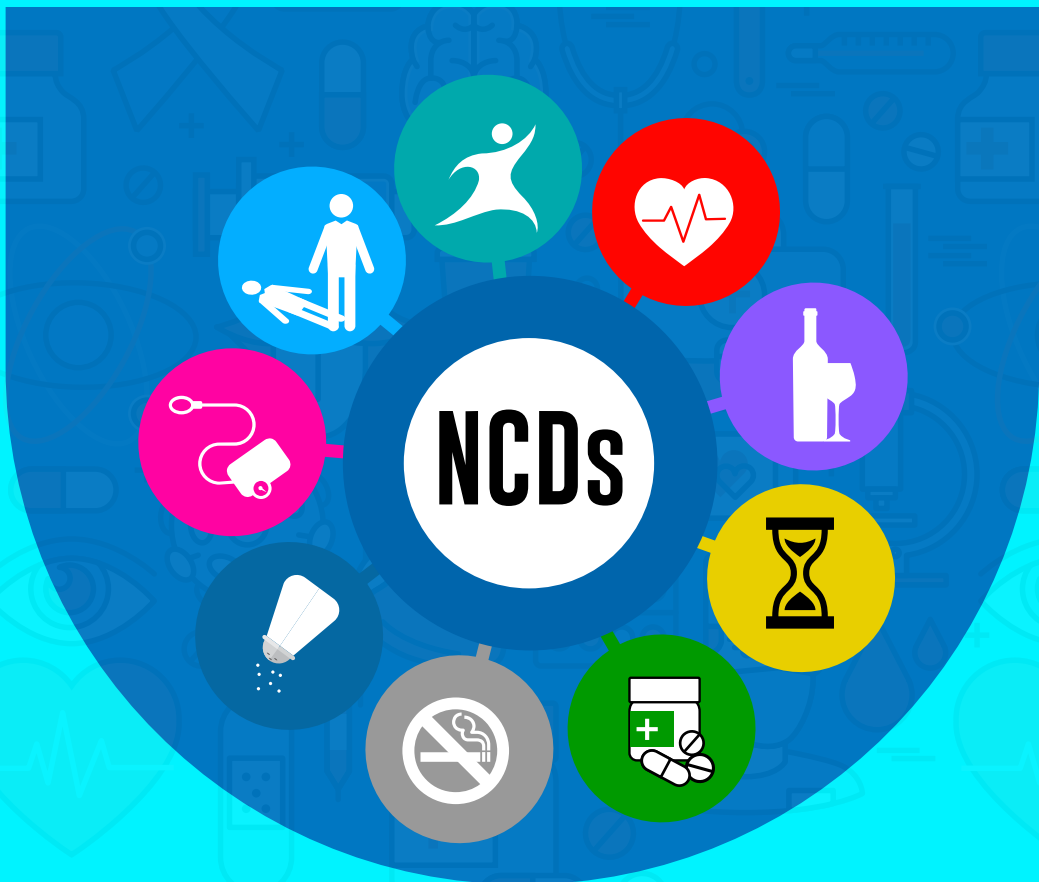




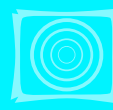
MINISTRY OF HEALTH
REPUBLIC OF GHANA

NATIONAL POLICY

NON-COMMUNICABLE DISEASES



MARCH, 2022



For all enquiries, write to the publishers:

Address:

Technical Coordination Directorate,
Ministry of Health,
P. O. Box MB-44
Accra, Ghana, West Africa
Tel/Fax: +233 302 666366
E-mail: info@moh.gov.gh
Website: www.mohghana.gov.gh





MINISTRY OF HEALTH
REPUBLIC OF GHANA

NATIONAL POLICY
**NON-COMMUNICABLE
DISEASES**

March, 2022



©2022 Ministry of Health, Ghana

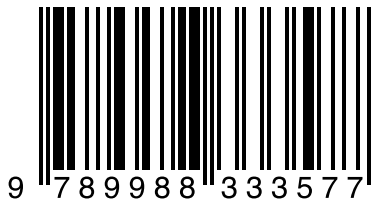
All rights reserved. No part of this publication may be produced, stored in any retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording and otherwise, without prior written permission of the Ministry of Health.

National Policy: Non- Communicable Diseases

Second Edition

ISBN 978-9988-3-3357-7

ISBN:978-9988-3-3357-7



FOREWORD BY MINISTER FOR HEALTH

Non-Communicable Diseases (NCDs) over the years have not been given much attention in Ghana and in most Low and Middle-Income Countries (LMICs). The overwhelming burden of communicable diseases and the scarcity of resources has led to the neglect of NCDs. Despite Ghana's recognition of the challenges posed by NCDs to the health of all residents in Ghana, NCDs still remain largely underfunded and less prioritized. Attempts in the past have achieved little success. The formulation of Ghana's NCD policy in 2014 and the accompanying strategic plan is one such effort.

Notwithstanding the seemingly neglect of NCDs in Ghana, some successes have been chalked particularly in the area of legislation. The Public Health Act 851 and subsidiary legislation on Tobacco (Tobacco Control Regulations LI2247 of 2017) and the National Alcohol Policy are some examples of legislative initiatives to reduce the burden of NCDs in Ghana. The establishment of a Multisectoral NCD Steering Committee was important in providing guidance to NCD prevention and control efforts in Ghana.

The need to revise the 2014 policy was informed by the requirements to align Ghana's NCD prevention and control efforts to global strategies and goals such as the United Nations Sustainable Development Goals (UN SDGs) and the World Health Organisation's Global Action Plan for NCD Prevention (2013 to 2020). Its revision was also driven by the desire to expand the scope of NCD prevention and control in line with government priorities as highlighted in the New Patriotic Party's 2016 manifesto and the need to build on achievements from the 2014 policy.

In formulating this policy, a team of experts in various aspects of NCD prevention and control was put together, with support and guidance from the Policy Unit of the Ministry of Health and the National Development Planning Commission. The technical working group engaged a diverse group of stakeholders to ensure policy buy-in and smooth implementation.

One of the biggest challenges in achieving the objectives of the previous policy was the issue of funding. Thus, in this policy, funding for NCD prevention and control has been prioritized as an objective and active efforts will be implemented to ensure resources are available for NCD prevention and control in Ghana. The MoH will work closely with the Ministry of Finance and other Ministries Departments and Agencies to ensure funds are available for the implementation of planned activities to guarantee success.



Hon. Minister Kwaku Agyeman-Manu (MP)
Minister for Health

STATEMENT BY MINISTER FOR FINANCE

The Ministry of Finance (MoF) is happy to work with the Ministry of Health in implementing this policy aimed at preventing and controlling Non-Communicable Diseases in Ghana. As a government agency, the MoF shares the vision of a healthy society to ensure productivity in Ghana. There is increasing evidence that the cost of doing little for NCDs has implications for a nation's Gross Domestic Product. For industry in particular, NCDs among workforce have implications for the fortunes of both private and public sectors. Staff absenteeism from having to access care for chronic NCDs, the cost of chronic medication as the case may be for most NCDs, the associated mental health problems such as depression and the projected impact of ability to execute their duties as expected have all highlighted the importance of NCD prevention and control.

The Ministry of Finance as the lead government agency for resource mobilisation and disbursement will collaborate with the Ministry of Health to incorporate local and international best practices to prevent and control NCDs in Ghana. To achieve the objectives of this policy, the Ministry of Finance will play an active role in the reconstituted Multisectoral NCD Steering Committee ensuring that all Ministries, Departments and Agencies (MDAs) and the various Metropolitan, Municipal and District Assemblies (MMDA's) include activities on NCD prevention and control in their annual budgets. The ministry will monitor all MDAs and MMDAs on their plans and budgets to ensure compliance.

Beyond this, the MoF will continue to engage multilateral and bilateral partners to explore external funding for NCDs. This will be in addition to other planned local revenue mobilisation plans for NCD prevention and control.

A healthy population is essential for economic growth and the MoF will fully support the implementation of this policy

Hon Ken Ofori Atta,
Minster for Finance

ACKNOWLEDGEMENTS

The Ministry of Health (MoH) wishes to acknowledge the leadership of the Ministry, in particular the Honourable Minister for Health, Kwaku Agyeman-Manu, the Hon. Deputy Ministers for Health, the Chief Director, Kwabena Boadu Oku-Afari, under whose leadership this document was developed.

Our profound gratitude also goes to the agencies and stakeholders of the Ministry for the valuable contributions that helped enriched the policy document. We are also grateful to other Ministries, Departments and Agencies as well as Development Partners, professional groups, Civil Society Organizations (CSOs) and individuals who spent time doing proofreading and providing vital information to improve the document.

Finally, we acknowledge the support of our Development Partners, most especially:

- The World Health Organisation for the provision of technical support for development of the policy.
- The World Bank for supporting the development of the NCDs policy and strategy
- PATH for supporting the formation and maintaining Steering and Technical Committees

Furthermore, we appreciate all members of the Technical Working Group whose tireless efforts made the policy document a success.

Table of Contents

FOREWORD BY MINISTER FOR HEALTH	3
STATEMENT BY MINISTER FOR FINANCE	4
List of Abbreviations	8
1 INTRODUCTION	9
1.1 Background	9-10
1.2 Maiden NCD Policy	11
1.3 Existing structures for NCD Prevention and Control	4
2.0 POLICY CONTEXT AND FRAMEWORK	13
1.3.1 Vision	13
1.3.2 Mission	13
1.3.3 Goal	13
1.4 Guiding Principles	13
3.0 POLICY OBJECTIVES, THEMATIC AREAS AND STRATEGIES	15
3.1.1 Primary Prevention	16
Health Promotion	16
Physical Inactivity	16
Alcohol Use	16
Tobacco Use	17
Diet and Nutrition	17
Immunization	17
3.1.2 Secondary and Tertiary Prevention	18
Screening and Early Detection	18
Clinical Care/Case Management	18
Palliative Care	18
Rehabilitation	19
3.1.3 NCDs of 'Special Concern'	19
Cancers	19
Injuries	19
Sickle Cell Disease	20
Oral Health	20
Eye Health	20
Mental Health	20

4.1 Roles and Responsibilities	24
Roles and Responsibilities Matrix	24-26
4.1.1 Ministry of Health	27
4.1.2 NCD Multisectoral Steering Committee	27
4.1.3 NCD Unit, MOH	27
4.1.5 Non-Governmental Organisations and Private Sector	27
4.1.6 Development Partners	28
4.2 Institutional Arrangement for Implementation	28
4.2.1 Multisectoral Collaboration and Health System Strengthening	29
4.2.2 Leadership and Governance Arrangements	28
4.2.3 National Multisectoral NCD Steering Committee	28
4.2.4 Division of Non-Communicable Diseases, Ghana Health Service	29
4.2.5 Human Resource Capacity	29
4.2.6 Provision of Essential Medicines and Devices	30
4.2.7 Surveillance	30
4.2.8 Financing	30
4.2.9 Research and Development	31
5.0 MONITORING AND EVALUATION	31
6.0 COMMUNICATION STRATEGY	31
Communication and Policy Dissemination	37-40
Members of the Technical Working Group	42
List of Contributors/Reviewers	43
List of Participating Institutions in Consultative/ Stakeholder Meetings	43
APPENDIX 3: REFERENCES	44-45

List of Abbreviations

AU	African Union
DALYs	Disability Adjusted Life Years
EML	Essential Medicines List
FDA	Food and Drug Authority
FCTC	Framework Convention on Tobacco Control
GDHS	Ghana Demographic and Health Survey
GHS	Ghana Health Service
GSA	Ghana Standards Authority
HPV	Human Papilloma Virus
IDSR	Integrated Disease Surveillance and Response
IMCC	Inter Ministerial Coordinating Committee
LI	Legislative Instrument
LMIC	Low Middle Income Countries
MDAs	Ministries, Departments and Agencies
MIYCN	Maternal, Infant and Young Child Nutrition
NCDPCP	NCD Control Programme
NCDs	Non-communicable Diseases
NGOs	Non-Governmental Organisations
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NSRC	National Road Safety Commission
PHC	Primary Health Care
RTAs	Road Traffic Accidents
SCD	Sickle Cell Disease
SDGs	Sustainable Development Goals
STG	Standard Treatment Guidelines
UHC	Universal Health Coverage
UN SDGs	United Nations' Sustainable Development Goals
WHA	World Health Assembly
WHO	World Health Organisation

1 INTRODUCTION

1.1 Background

Non-communicable Diseases (NCDs) refer to a broad category of disease conditions characterised by the inability of the affected person to transmit the disease to another person. In contrast to communicable diseases, most NCDs are chronic in nature and are associated with a multiplicity of behavioural risk factors, commonly, physical inactivity, tobacco use, harmful use of alcohol, unhealthy diet and air pollution. Other important risk factors include high blood pressure, high serum lipids, overweight/obesity, raised blood glucose and substance abuse.

Deaths from NCDs globally are very high. The World Health Organisation (WHO) estimates that a total of 41 million deaths or over 71% of global deaths are due to NCDs. It is also estimated that over 80% of global deaths from NCDs are due to these four groups of NCDs- Cardiovascular Disease, Cancers, Chronic Respiratory Diseases and Diabetes Mellitus. The high burden of NCDs on the global front has been recognised to be of such importance to be included in the United Nations' Sustainable Development Goals (UN SDGs). Goal 3 of the UN SDGs is focussed on health with target 3.4 aimed at reducing by one-third premature mortality from NCDs through prevention and treatment and promotion of mental health and wellbeing. Other targets of the SDGs (3.6, 3.8, 3.9, 3A, 3B and 3C) have direct implications for NCDs. In addition, the United Nations has placed NCDs further on the international stage with high-level meetings on NCDs further highlighting the importance of NCDs on the global stage.

In the last few decades, NCDs have gained recognition as a significant cause of morbidity and mortality in Ghana. This calls for a concerted response through robust policy formulation and implementation of clearly outlined strategies in a holistic approach to reduce the burden of NCDs. These actions must encompass all relevant sectors and stakeholders including non-health sectors, private sector, development partners and Non-Governmental Organisations (NGOs).

In Ghana, very limited population-based data on NCDs exist. Despite this, available data from research and surveys suggest that NCDs and their associated risk factors are on the ascendancy. Amidst the scarce nationally representative data on NCDs there are pockets of evidence on the growing burden of NCDs in Ghana. This is evident from the assessment of the Global burden of disease study by the Ministry of Health, Ghana in 2016 which shows a surge in the burden of NCDs and the second leading causes of Disability Adjusted Life Years (DALYs). The Ghana Demographic and Health Survey

(GDHS) of 2014 also estimates the prevalence of Hypertension in Ghana at 13% for both sexes among persons 15 to 49 years old². However, the prevalence of hypertension in older age groups is estimated to be higher. A prevalence of more than 50% among some sections of the Ghanaian population has been reported³. Similar high prevalence of other NCDs have been reported in Ghana^{4,5}. Evidence on cancers remain scanty but are assuming public health significance^{6–8} as are complications of NCDs such as hypertension and diabetes^{9–11}.

The WHO estimated that in 2016 there were over 94,000 deaths from NCDs in Ghana¹². The risk of premature death from NCDs among persons aged 30 to 70 years was estimated at 21%¹². The estimated age-standardized prevalence of hypertension of 22 and 28% in rural Ghanaian men and women respectively, with higher prevalence in urban Ghana (34% and 51% for men and women respectively)¹³. Nearly half of persons identified with hypertension have target end organ damage suggesting that these persons have had long-standing disease without appropriate treatment¹⁴.

For other NCDs such as Type II Diabetes Mellitus, the association with other co-morbidities such as hypertension and hyperlipidaemia has been found among Ghanaian residents¹⁵. For cancers, evidence of a higher burden among women compared to men has also been found with females accounting for more than two-thirds of cases reported^{6–8}. Among the women with cancer seen, the commonest cancers were breast (33.9%), cervical (29.4%) and ovarian (11.3%)⁷. Among males, the commonest reported cancers in Kumasi from the Kumasi Cancer Registry were liver and prostate cancers^{7,8}. For asthma, there is evidence of an increased prevalence among children aged 9–16 years from 3.1% to 5.2% between 1993 and 2003¹⁶. Although these indicate significant burden of NCDs, there is further evidence of poor awareness on NCDs. For example, a low level of awareness on hypertension and blood pressure control even among known patients^{2,17}

The burden of NCDs in Ghana is projected to increase due to ageing, rapid urbanization and unhealthy lifestyles. The proportion of children under five years of age who are overweight was less than 1% in 1988 but 3% in 2014. Less than 5% of adults consume adequate amounts of fruits and vegetables² and about 41% of adults do not engage in any vigorous physical activity¹⁸. Prevalence rates of major risk factors for NCDs – especially poor diets, overweight/obesity, physical inactivity, alcohol consumption and salt intake^{19,20}.

The increasing burden of NCDs and associated risk factors have implications for healthcare delivery in Ghana. In line with the objective of attaining Universal Health Coverage (UHC), in a way that truly leaves no one behind, access to quality healthcare that ensures financial risk protection for people with NCDs must be assured through the National Health Insurance Scheme (NHIS) and other funding mechanisms.

1.2 Maiden NCD Policy

Ghana's first NCD Policy and Strategy (2013 – 2017) achieved several successes during the period of implementation. These include the:

- Promulgation of the Public Health Act with a section on Tobacco Control Measures
- Passage of Tobacco Control Regulations (LI2247, 2016)
- Inclusion of Diabetes, Hypertension and Road Traffic Injuries in Ghana's Integrated Disease Surveillance and Response (IDSR)
- The constitution of a Multisectoral NCD Steering Committee
- Development of National Cancer Treatment Guidelines
- Inclusion of some NCDs in the benefits package of the NHIS (Diabetes, Hypertension, Breast Cancer etc)
- Development of Tobacco Cessation Guidelines
- Development of a National Alcohol Policy

These achievements notwithstanding, there remain several challenges to NCD prevention and control in Ghana.

Key among these are

- Weak data collection systems for NCDs
- Poor funding of NCD-related activities (preventive and health promotion for risk reduction and treatment adherence)
- Poor funding for the NCD Prevention and Control Programme (NCDPCP)
- Lack of staff for the NCD programme

These present challenges to programme planning and implementation to achieve policy and strategic objectives. The weak NCDPCP also meant that it was unable to coordinate NCD-related activities in the country. There is the need to consolidate the gains achieved under the previous policy and strategy and to institute measures to address the challenges as well as align this new policy to current best practices.

1.3 Existing structures for NCD Prevention and Control

The NCD Prevention and Control Programme (NCDPCP), which is a unit under the Disease Control Department of the Ghana Health Service, has been leading in the programmatic efforts at NCD prevention and control. With guidance from the NCD Steering Committee established under the previous policy and strategic plan, the NCDPCP has continuously engaged stakeholders and partners in implementing its mandate.

In addition to the NCDPCP and the Steering Committee, other existing approaches such as the concept of One Health, collaboration with security agencies on Port Health; the Ministry of Education and the Ghana Education Service on school health; the Ministry of Gender, Children and Social Protection on Cancer are all indicative of efforts at intersectoral collaborations on NCDs.

Scope of the Policy

This policy shall focus on the Primary, secondary and tertiary Prevention and management of NCDs including interventions such as Health Promotion, Physical Inactivity, Alcohol Use, Tobacco Use, Diet, Nutrition and Immunisation as well as Screening and Early Detection, Clinical Care, Rehabilitation and Palliative Care. NCDs of 'Special Concern' such as Cancers, Injuries, Sickle Cell Disease, Mental Health, Oral Health and Eye Health shall receive attention under this Policy. General Health System Strengthening Particularly Financing, Research and Development shall also be enhanced to support NCD activities.

Policy Development Process

This Policy was developed under the stewardship of the Honourable Minister for Health, Kwaku Agyeman-Manu (MP), and the Health Sector Working Group under the leadership of the Chief Director of the Ministry of Health Mr. Kwabena Boadu Oku-Afari. The Technical work was handled by a Technical Working Group constituted by the Ministry. A draft policy document was subjected to a thorough stakeholder consultation, review and validation. The validated draft policy was submitted to Cabinet and was subsequently approved and adopted for implementation.

2.0 POLICY CONTEXT AND FRAMEWORK

This policy derives inspiration from chapter six of the 1992 Constitution of the Republic of Ghana, the Directive Principles of State Policy, which amongst others requires the state to ensure the realization of the right to good healthcare for people living in Ghana. It is also inspired by the overall national policy framework developed by the National Development Planning Commission, named the 'Coordinated Program of Economic and Social Development Policies (2017-2024)'. This Policy is also aligned to the over-arching National Health Policy themed "Ensuring Healthy Lives for All" as well as the Universal Health Coverage (UHC) Roadmap for Ghana (2020-2030). It also recognizes other relevant sector-wide policies such as the Health Promotion Policy, the Wellness Policy, the Alcohol Policy and the National Healthcare Quality Strategy.

The policy also recognizes several global, regional and sub-regional compacts and policy frameworks including the United Nations Sustainable Development Goals (SDGs) themed, "Transforming our World: the 2030 Agenda for Sustainable Development", the Astana Declaration on Primary Health Care (PHC), the Africa Union (AU) "Agenda 2063: The Africa We Want", WHO Framework Convention on Tobacco Control (FCTC), , the African Health Strategy (2016-2030), the Africa Health Transformation Agenda (2015-2020), the WHO Global Action Plan for the Prevention and Control of Non-Communicable Disease 2013, the World Health Assembly Resolution Agenda 64, 2011 and the WHO Global Action Plan for prevention and control of non-communicable diseases 2013-2030.

The Ghana NCD Policy is aligned to the National Health Sector Vision, Mission and Goals. It takes cognisance of the fact that health is a critical tool for economic and social development.

1.3.1 Vision: Attain a healthy population for national development through a reduction in the burden of NCDs.

1.3.2 Mission: To prevent and control avoidable NCD-related morbidity and mortality through health promotion, strengthening of health systems and provision of health resources, partnerships and empowerment of communities.

1.3.3 Goal: Ensure that the burden of NCDs is reduced to the barest minimum to render it of little or no public health importance and an obstacle to socio-economic development.

1.4 Guiding Principles : The following principles underpin this policy for the prevention and control of NCDs in Ghana: Evidence-informed-The policy recognises the need to generate and use local data and research findings including relevant international research to support decision making on NCD prevention and control. Guidelines and policy implementation plans will be guided by this.

Cost-effective Interventions - The policy recognises the scarcity of resources and the need to prioritise interventions for specific NCDs. Selected interventions will be driven by cost-effectiveness.

Universal Health Coverage- In line with the United Nations Sustainable Development Goals, this policy will be guided by the vision to achieve universal health coverage for NCD prevention and control for all residents in Ghana.

Primary Health Care (PHC) approach – The primary healthcare approach recognizes that healthcare is not a short-lived intervention but on-going process of alleviating the underlying socio-economic conditions that contribute to poor health.

- Social Determinants of Health - The policy recognizes that the health of an individual is influenced by economic and social circumstances and will ensure these are considered in the implementation process to reduce health inequities.
- Culturally relevant - to the extent possible, interventions would respect the cultural sensibilities of the communities in which they will be implemented
- Gender sensitive - the policy will respond to the gender dimensions of NCDs including NCDs affecting women
- Community participation - The Policy emphasizes the role of the community members and leaders in decision-making about their own health. The policy encourages and values community inputs to identify NCDs priorities and needs expressed by the population.
- Integrated service delivery - The policy recognizes NCD as part of the package of services particularly at the Primary Care level. For efficiency and to reflect their shared common risk factors, NCD programmes for specific diseases will be integrated into the health system at all levels.

- Affordable technology - the best evidence-based interventions may not necessarily be affordable in a limited resource setting such as Ghana. The most affordable technology, medicines and delivery systems will be employed in the implementation of the NCD policy.
- All sectors of the Ghanaian population are actively involved, including the private sector and civil society groups
- It leverages and builds on existing assets in terms of infrastructures and human resources, but also institutional bodies;

Legal determinants of health- Informed by recent evidence, the policy recognizes legislation as crucial for effective non-communicable disease prevention and control; it is required for protecting the health and well-being of society. The recent Lancet Commission on the legal determinants of health identifies law as a poorly utilised tool in advancing global health in general 21.

Life course approach (LCA)- the policy recognises different needs for different NCDs across the age spectrum. NCD prevention and control programmes will target all ages and will be designed to address specific challenges for defined age-groups. In particular, among others, LCA will focus on Infants/Children (Counselling, Education on Breastfeeding, Early care seeking, Immunization, Micronutrient supplementation, Growth promotion, Infant and young child feeding counselling); Adolescents - Personal Hygiene, Specialised services (Mental health screening -drugs abuse; STI); Adults - Healthy lifestyle, Screening for NCDs and risk factors; and the Aged – Screening, Clinical care etc.

3.0 POLICY OBJECTIVES, THEMATIC AREAS AND STRATEGIES

The objectives of Ghana’s NCD Policy are to:

1. Reduce exposure to risk factors that contribute to NCDs
2. Strengthen early detection and management to reduce morbidity and mortality from NCDs
3. Strengthen the Health System for NCD Prevention and Control
4. Strengthen multisectoral collaboration for NCD Prevention and Control
5. Ensure sustainable funding and other resources for NCD prevention and control

Strategies and activities towards achieving these objectives will be aligned to all sectors- governmental, non-governmental and private sector ensuring synergy and complementarity in NCD prevention and control.

This policy will focus on the following main and sub-thematic areas;

3.1 Sub-Thematic Areas

1. Primary Prevention

- a. Health Promotion
- b. Physical Inactivity
- c. Alcohol Use
- d. Tobacco Use
- e. Diet and Nutrition
- f. Immunisation

2. Secondary and Tertiary Prevention

- a. Screening and Early Detection
- b. Clinical Care
- c. Rehabilitation
- d. Palliative Care

3. NCDs of Special Focus

- a. Cancers
- b. Injuries
- c. Sickle Cell Disease
- d. Mental Health
- e. Oral Health
- f. Eye Health

4. Health System Strengthening

5. Financing

6. Research and Development

3.1.1 Primary Prevention

This policy will seek to prevent NCDs by focussing on the following:

Health Promotion

Health promotion is of utmost importance in empowering individuals to make healthy choices to prevent NCDs. This policy will promote good health through health education, creating supportive environments, strengthening community action for health, developing personal skills and reorienting health services to include health promotion. Other strategies to be adopted include the development and implementation of targeted social and behaviour change communication interventions and the use of all media (social, print and electronic) to reach the entire population.

Physical Inactivity

Physical activity is an important factor in preventing NCDs. This policy will seek to promote and integrate physical activity into every setting in which Ghanaians live, work and play. This policy will institute measures that will address the multiplicity of barriers to physical activity such as lack of knowledge, lack of appropriate environments for physical activity and legislation to institutionalise physical activity across all sectors.

Alcohol Use

Alcohol consumption is known to aggravate family problems and others such as addictions, accidents and criminal behaviour. Eighteen percent (18%) of women in Ghana drink alcoholic beverages with consumption ranging from 7% in the 15-19 age group to 26% in the 45 to 49 age group (23). This policy will initiate programmes to reduce the burden of alcohol use and its associated health challenges in Ghana. The areas of focus will include leadership, coordination and multisectoral action to reduce alcohol consumption, public education on the harmful effects of alcohol consumption, regulation of production, marketing and advertising, distribution and consumption of alcohol and the prevention and management of health effects of alcohol consumption. Pricing and tax measures to reduce consumption of alcohol and the provision of support for rehabilitation of persons from alcohol abuse problems shall be explored.

Tobacco Use

Ghana has made significant progress in the implementation of the WHO Framework Convention on Tobacco Control (FCTC). These include establishment of a Multisectoral Coordination mechanism and a Focal Point, the introduction of Pictorial Health Warnings, increased Ad Valorem taxation to 175%, awareness creation on harmful effects of cigarette smoking and tobacco industry interference, control of illicit trade and production of Cessation Guidelines to facilitate the process of quitting⁽³⁰⁾ among others. These have resulted a decrease in smoked tobacco use among Junior High School students from 4.8% in 2000 to 2.8% in 2017⁽³¹⁾. There is however an observed increase in the use of other forms of tobacco notably Shisha, previously unknown in Ghana but currently estimated to be used by about 1.3% among Junior High School students. There is the need to sustain the gains made and to introduce new measures to address emerging trends. This policy seeks to continue with the education of the population on the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke and support the enforcement of tobacco regulations

Diet and Nutrition

This policy seeks to ensure optimal nutrition and health of all persons living in Ghana in order to reduce the burden of NCDs. This will focus on healthy dietary choices to prevent NCDs and nutrition in persons with NCDs. The legal regime for nutrition in Ghana to prevent NCDs will be strengthened and will include regulation of the labelling, promotion, sale and advertisement of food and drinks including sugar-sweetened beverages, saturated fatty acids/trans fats and salt.

Immunization

Ghana's Expanded Programme on Immunization (EPI) seeks to reduce the incidence of vaccine-preventable diseases through the use of cost effective, efficacious and safe vaccines. The EPI schedule for childhood immunization includes vaccination against hepatitis B virus that can cause liver cancer and the pneumococcal vaccine that is particularly beneficial to children with SCD. This policy will seek to expand the coverage for hepatitis B immunization for at-risk adults including pregnant women and children at birth. The policy also seeks to include HPV vaccination against high-risk HPV serotypes 16 and 18.

3.1.2 Secondary and Tertiary Prevention

In line with objective 2 of this policy, the following will be the key areas of focus for secondary and tertiary prevention of NCDs:

Screening and Early Detection

Early detection targets persons with NCD symptoms and persons with no NCD symptoms but who are at risk of NCDs. For persons with NCD symptoms, the objective will be to get them to report to health facilities early enough to improve their clinical outcomes. For healthy individuals, screening will aim to detect risk factors or precursors of disease in order to prevent NCDs from becoming fully established. This policy seeks to establish screening services to contribute to the reduction in NCDs morbidity and mortality through the development and implementation of national guidelines for screening, the establishment of wellness clinics and the strengthening of the capacity of the Community-based Health Planning and Services (CHPS) to provide screening services.

Clinical Care/Case Management

Although this policy places premium on primary prevention and screening for NCDs, good clinical care is required to reduce mortality from existing disease. This policy will seek to improve access to clinical care nationwide for NCDs by addressing challenges in the health system such as inadequate infrastructure, limited geographic access, lack of functional equipment, equitable distribution of clinical manpower, clinical governance as well as disparities in quality of care. This policy seeks to ensure access to quality care for NCDs through the strengthening of existing structures for clinical governance and the development of standard treatment guidelines for NCDs.

Palliative Care

Palliative care caters for persons with chronic diseases, which are not curable and aims to relieve pain and suffering and improve quality of life. There is the need for improved coverage of palliative care across all levels of care especially since the increase in life expectancy may be associated with an improvement in lifespan with its attendant increase in the incidence of chronic diseases, some of which may be protracted and require long term pain management. The policy seeks to increase access to palliative care for all persons with chronic NCDs requiring such services through improving the governance and access to narcotic analgesics; the development of national guidelines for palliative care; the improvement and extension of palliative care services to include home-based palliative care and the training of healthcare staff for palliative care service delivery.

Rehabilitation

Rehabilitation is a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments. Rehabilitation targets improvements in individual functioning (e.g. a person's ability to eat and drink independently), includes making changes to the individual's environment. Barrier removal initiatives at societal level, such as fitting a ramp to a public building, are also considered rehabilitation in this policy. Rehabilitation along a continuum of care, from hospital to community can improve health outcomes, reduce costs (26,27), reduce disability and improve quality of life (28–31).

This policy shall seek to promote and bring together appropriate measures to enable persons with disabilities to attain and maintain their maximum independence, full physical, mental, social and vocational ability, and their full inclusion and participation in all aspects of life through the implementation of activities aimed at improving the availability and access to modern rehabilitation facilities, including orthotic and prosthetic gadgets; capacity building in the procurement, distribution, installation, use and maintenance of rehabilitation equipment and the provision of support, counselling and therapy services to restore and compensate for loss of function.

3.1.3 NCDs of 'Special Concern'

In the previous NCD Policy, the focus was on chronic NCDs with minimal or no mention of some categories of NCDs. This current policy seeks to highlight the importance of the following NCDs which have been included for emphasis and in no way an indication of superior importance. The following are the NCDs of special concern in this policy.

Cancers

When detected early, many cancers are curable. Care for cancer patients must include a multidisciplinary approach to ensure that quality of life is assured. This policy seeks to strengthen existing structures for the prevention and control of cancers in Ghana through the promotion of routine screening, increasing financial access to quality care for cancer and the strengthening of cancer surveillance.

Injuries

In this policy, injury is being included as a priority due to the public health importance of injury and related mortality. This policy seeks to innovatively address the various preventable causes of injuries through a concerted effort of all stakeholders. It will also focus on strengthening the health system to manage injuries when they occur and develop multisectoral plans for the prevention and control of injuries especially injuries sustained through road traffic accidents.

Sickle Cell Disease

Sickle Cell Disease (SCD) is a genetic disorder, which is inherited from both parents and results in defective haemoglobin. Persons with SCD are more prone to complications such as stroke, acute chest syndrome, priapism, bone damage and blindness. These complications affect the quality of life and have the potential of resulting in long term disability or death if not addressed. This policy seeks to create awareness, facilitate prevention and increase early diagnosis and management of SCD and traits to improve outcomes for affected persons through the promotion of awareness on and routine screening for Sickle Cell Disease and other haemoglobinopathies; the institutionalisation of New-born screening; improved access to clinical care for SCD including palliative and rehabilitative care for SCD and Financial risk protection for the management of SCD and complications

Oral Health

NCDs in general and most oral health conditions share similar risk factors such as alcohol use, tobacco use and unhealthy diets. Interventions for NCDs will therefore contribute to reduce the burden of oral health disorders. This policy recognises the importance of oral health as part of the broad spectrum of NCDs and will actively institute measures to improve oral health in Ghana. The policy will also focus on increasing access to oral health care in Ghana, promote and increase awareness on oral health care and attract investments into oral health care.

Eye Health

Diseases affecting the eye can be NCDs themselves such as Glaucoma but can also be as a result of complications of some NCDs such as Diabetes Mellitus or Hypertension. This policy recognises the importance of diseases of the eye and the association with other NCDs. Strategies to be adopted to improve access to eye care services and prevent eye-related complications of other NCDs will include the institution of screening programmes for eye health as part of the management of other NCDs, the integration of eye health promotion activities into mainstream NCD prevention and control and the strengthening of surveillance for eye health.

Mental Health

Mental health is an integral part of health and well-being, as reflected in the definition of health in the Constitution of the World Health Organization: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." However, mental health remains a neglected part of global efforts to improve health.

People with mental health conditions experience widespread human rights violations, discrimination and stigma. More than 80% of people experiencing mental health conditions, including individuals experiencing neurological and substance use disorders, are without any form of quality, affordable mental health care.

Mental Health is a recognized growing problem in Ghana requiring concerted effort to address it. In 2005, WHO estimated that, of the then 21.6 million Ghanaians, 2.1 million suffered various kinds of mental health conditions of which 650,000 were severe ²². A 2009 study, showed 41% Ghanaians had one or another form of psychological distress and this contributed to 7% GDP loss ²³.

There has been growing commitment to mental health in Ghana over the years. This has culminated in the enactment of the Mental Health Act, 2012 (Act 846), development of policies and strategies to strengthen leadership and governance to improve mental health care in Ghana. A lot of progress has since been made in the delivery of mental health services in the country though many challenges persist.

Health System Strengthening (Financing, Research and Development)

In line with the foregoing, this policy will seek to further strengthen the health system to deliver mental health services through health education, the training of mental health workforce, increase access to medicines for mental health, the development of comprehensive community-based mental health and social care services; the integration of mental health care and treatment into general hospitals and primary care, effective collaboration between formal and informal care providers; and the promotion of self-care.

General Health System Strengthening Particularly Financing, Research and Development shall therefore be enhanced to support NCD activities.

3.2 Summary of Policy Objectives and Strategies

1. Reduce exposure to risk factors that contribute to NCDs Strategies:

- a. *Public education on risk factors for NCDs*
- b. *Public education on mental health, oral health, eye health and injuries including Road Traffic Accidents (RTAs)*
- c. *Health education in schools on all NCDs*
- d. *Public education on Hepatitis B, Human Papilloma Virus (HPV) and Sickle Cell Disease (SCD)*
- e. *Vaccination for HPV as part of the national Expanded Programme for Immunisation (EPI)*
- f. *Implementation of Maternal, Infant and Young Child Nutrition (MIYCN) programme*
- g. *Provision of safe and enabling environment for physical activities*

2. Strengthen early detection and management to reduce morbidity and mortality from NCDs Strategies;

- a. *Promotion of prevention and routine screening for diagnosis of NCDs*
- b. *Increase access to care for NCDs at all levels*
- c. *Provision of support for counselling and therapy to restore and enable optimum function*

3. Strengthen the Health System for NCD Prevention and Control Strategies;

- a. *Establish a well-resourced NCD Division under the Ghana Health Service*
- b. *Strengthen research on NCDs*
- c. *Strengthen surveillance for NCDs*
- d. *Build human resource capacity at all levels for NCD prevention and treatment*
- e. *Strengthen availability and access to emergency services for injuries*
- f. *Institutionalise periodic evaluation of NCD prevention and control activities*

4. Strengthen multisectoral collaboration for NCD Prevention and Control Strategies;

- a. *Establish a multi-sectoral platform for NCD Prevention and Control*
- b. *Formulate, strengthen and enforce legislation, and guidelines to support NCD prevention and control*
- c. *Strengthen private sector involvement in NCD prevention and control*
- d. *Strengthen partnership with patient advocacy groups for NCDs*
- e. *Strengthen partnership with traditional authority to promote NCD prevention and control*

5. Ensure sustainable funding and other resources for NCD prevention and control Strategies

- a. Increase funding for NCD prevention and management services*
- b. Expand NHIS benefit package to include Wellness Services, Childhood Cancers, Cervical Cancer and Prostate Cancer*
- c. Integrate NCD interventions into all sector planning, budgeting and financial management systems for efficiency and sustainability of services.*

4.0 IMPLEMENTATION FRAMEWORK

The implementation arrangement for the NCD Policy is designed to ensure that there is effective coordination and collaboration between all implementing agencies. To achieve this, the policy and the accompanying strategic plan defines roles and responsibilities of all stakeholders for NCD prevention and control in Ghana. The Strategic plan will further identify lead agencies who have the responsibility to initiate designated activities in collaboration with all relevant agencies as determined. Action Plans based on the specific strategies shall be developed with guidance from the NCD Steering Committee.

To ensure a smooth implementation of this policy, clarity of roles and responsibilities of key actors in the NCD prevention and control continuum is essential. The key sectors and their responsibilities are as follows:

Objectives	Strategy	Responsibility	
		Lead MDA/Organisation	Collaborators
<p>Policy Objective 1: Reduce exposure to risk factors that contribute to NCDs</p>	<p>a. public education on risk factors for NCDs</p> <p>b. public education on mental health, oral health, eye health and injuries including Road Traffic Accidents (RTAs)</p> <p>c. health education in schools on all NCDs</p> <p>d. public education on Hepatitis B, Human Papilloma Virus (HPV) and Sickle Cell Disease (SCD)</p> <p>e. Vaccination for HPV as part of the national Expanded Programme for Immunisation (EPI)</p> <p>f. Implementation of Maternal, Infant and Young Child Nutrition (MIYCN) programme</p> <p>g. Provision of safe and enabling environment for physical activities</p>	<p>GHS</p> <p>GHS</p> <p>GES</p>	<p>WHO, EPA, MoH (FDA), GBC, GES, GIBA, GJA, ISD, MOI, NCCE, NRSA, NGOs in Health, EPA, Media, NGOs in Health, GNA, MMDAs, MoH and its agencies</p> <p>WHO, GHS, MOE, UNICEF, CHASS,</p>
<p>Policy Objective 2 Strengthen early detection and management to reduce morbidity and mortality from NCDs</p>	<p>a. Promotion of prevention and routine screening for diagnosis of NCDs</p> <p>b. Increase access to care for NCDs at all levels</p> <p>c. Provision of support for counselling and therapy to restore and enable optimum function</p>		
<p>3: Strengthen the Health System for NCD Prevention and Control</p>	<p>a. Establish a well-resourced NCD Division under the Ghana Health Service</p> <p>b. Strengthen research on NCDs</p> <p>c. Strengthen surveillance for NCDs</p> <p>d. Build human resource capacity at all levels for NCD prevention and treatment</p> <p>e. Strengthen availability and access to emergency services for injuries</p> <p>Institutionalise periodic evaluation of NCD prevention and control activities</p>		

Objectives	Strategy	Responsibility	
		Lead MDA/Organisation	Collaborators
<p>Policy objective 4: Strengthen multisectoral collaboration for NCD Prevention and Control</p>	<p>a. Establish a multi-sectoral platform for NCD Prevention and Control</p> <p>b. Formulate, strengthen and enforce legislation, and guidelines to support NCD prevention and control</p> <p>c. Strengthen private sector involvement in NCD prevention and control</p> <p>d. Strengthen partnership with patient advocacy groups for NCDs</p> <p>e. Strengthen partnership with traditional authority to promote NCD prevention and control</p>		
<p>5. Ensure sustainable funding and other resources for NCD prevention and control</p>	<p>a. Increase funding for NCD prevention and management services</p> <p>b. Expand NHIS benefit package to include Wellness Services, Childhood Cancers, Cervical Cancer and Prostate Cancer</p> <p>c. Integrate NCD interventions into all sector planning, budgeting and financial management systems for efficiency and sustainability of services.</p>		

4.1.1 Ministry of Health

The implementation of the NCD shall be a collective action by all stakeholders led by the MOH. The Minister with the support of the Inter-Ministerial Coordinating Committee will establish mechanisms that ensure the effective supervision and monitoring of the implementation of the policy across all Ministries, Departments and Agencies.

4.1.2 NCD Multisectoral Steering Committee

The National NCD multisectoral Steering Committee will be strengthened to advise the Minister of Health on actions to be taken to prevent and control NCDs and monitor their progress. This Committee will ensure that NCDs are given high priority in the national development agenda.

4.1.3 NCD Unit, MOH

The NCD Unit of under the Technical Directorate of the MOH shall be responsible for cross sector collaboration across agencies of the MOH and other relevant agencies. It will also serve as the secretariat of the Multisectoral NCD Steering Committee

NCD Division, Ghana Health Service

The Division will lead in the coordination and implementation of NCD-related activities countrywide working with all relevant sectors and MOH agencies. The NCD Division will serve as the secretariat for the Technical Committees of the Multisectoral NCD Steering Committee.

4.1.4 Other Government Ministries, Departments and Agencies

The NCD Policy recognizes that health cannot be improved by interventions within just the formal health sector. Favourable sector-wide public policies in areas such as trade, urban planning, transport, agriculture, education, finance and social services are essential. Hence, a whole of government approach (Health-In-All Policies) across all sectors will be adopted for the implementation of this policy. All relevant government MDAs and Metropolitan Municipal District Assemblies will be included in the NCD decision making and implementation processes.

4.1.5 Non-Governmental Organisations and Private Sector

Government will partner all local Non-Governmental Organizations (NGOs), Civil Society Organizations (CSOs), professional bodies, academia, Faith-Based Organizations (FBOs) and patient support/advocacy groups and the private sector in the implementation of the policy. NGO/CSO/FBO and private sector programs and interventions should be informed by and directly supportive of the policy objectives and outcomes. All NGOs will be required to liaise with the NCD Division of the Ghana Health Service in the implementation of their activities.

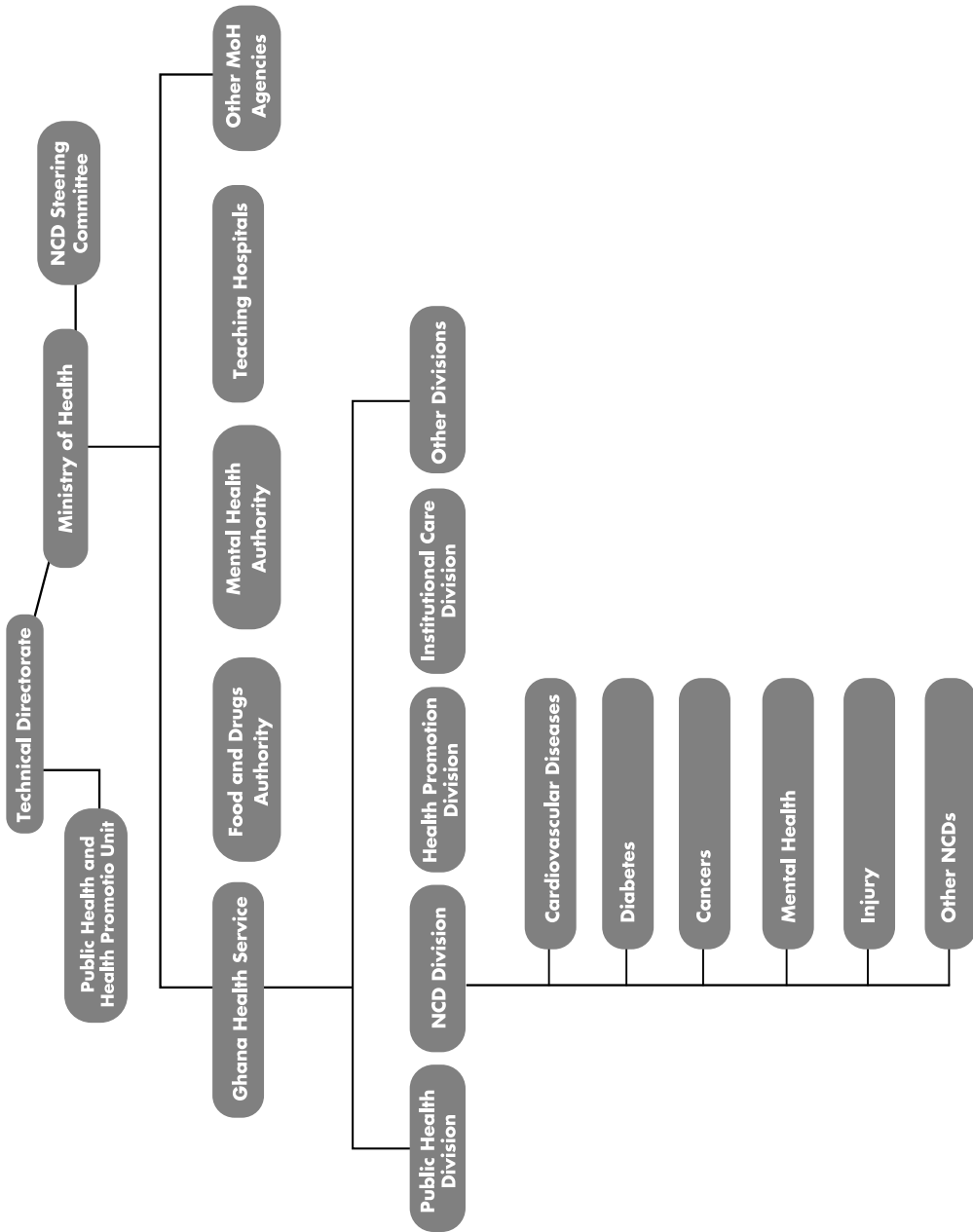


Figure 1: Organogram for the Health Sector NCD Prevention and Control

4.2.3 National Multisectoral NCD Steering Committee

A multisectoral NCD Steering Committee is a critical component for the prevention and control of NCDs. This policy will strengthen the committee to include all relevant sectors so as to provide strategic direction and guidance for NCD prevention and control in Ghana.

The functions of the committee will be:

- To provide leadership in the development of policies and action plans on NCD prevention and control
- To advocate and support legislation that facilitate or favour healthy lifestyle choices
- To identify, build or mobilize financial and human resource capacity and logistical support for NCDs
- To strengthen partnerships within the health sector and between non-governmental organizations (NGOs), civil society organizations (CSOs), the private sector and the community to promote healthy lifestyles

4.2.4 Division of Non-Communicable Diseases, Ghana Health Service

The NCD Department of the Ghana Health Service shall have the following functions

- Provide technical leadership and promote NCD prevention and control interventions at all levels using accessible and affordable strategies and technologies
- Develop, support, coordinate and monitor interventions to reduce modifiable risk factors such as unhealthy diets and physical inactivity
- Develop programmes aimed at early detection of NCDs and improve clinical and preventive care services
- Foster operational research on NCDs and their risk factors and to monitor NCD trends and patterns
- Lead in the development of Technical Guidelines for specific NCDs including guidelines for screening
- Collaborate with all sectors in the implementation of NCD prevention and Control programmes in Ghana

4.2.5 Human Resource Capacity

Efforts will be made to produce and equitably distribute motivated Human resources needed for NCD prevention and control. The Human resource needs for implementing the NCD policy will be situated within the larger context of the health sector human resource policy that focuses on increasing production and retention of staff and equipping them with the relevant tools to provide health care to all Ghanaians. Capacity building of staff that exists under the various levels will include the application of task shifting and task strengthening strategies.

4.2.6 Provision of Essential Medicines and Devices

Despite recognition of the importance of medicines and medical devices in the diagnoses and treatment of NCDs, the concentration of medicine provision and supply have been skewed towards infectious diseases. Additionally, drug availability and quality with respect to NCDs is not optimal. This policy seeks to improve access to essential medicines and supplies for NCDs through the implementation of clearly outlined strategies.

Strategies

1. Inclusion of essential medicines for NCDs in the Standard Treatment Guidelines (STGs) and the Essential Medicines List (EML)
2. Removal of taxes and levies on essential medicines and diagnostic devices used in the management of NCDs
3. Enforcement of regulations on all medicines (locally manufactured and imported) and diagnostic devices as set by the Food and Drug Authority (FDA) and Ghana Standard Authority (GSA)
4. Inclusion of NCD essential medicines, supplies and diagnostic devices in the MOH framework contract agreement with vendors.

4.2.7 Surveillance

Continuous, systematic collection, analysis and interpretation of NCD-related data including risk factors will be an essential component of Ghana's efforts at reducing the burden of NCDs. This policy will strengthen existing routine data collection systems and establish sentinel surveillance systems to improve the availability of data for action. Established data systems will be an essential component of the monitoring and evaluation framework for NCDs interventions in Ghana. the policy will also strengthen surveillance for NCD risk factors through the conduct of periodic surveillance.

4.2.8 Financing

NCDs have economic implications for the individual, family, community and the country. Direct and indirect economic costs of NCDs include cost of diagnostic tests, medicines for treatment, chronic nature of treatment for some NCDs and costs of accessing services limited by geography. These cost implications for NCDs and the high DALYs associated with NCDs highlight the need for sustainable financing for NCD prevention and control in Ghana. In line with the Government's "Ghana Beyond Aid" agenda there is the need to explore innovative ways for funding NCD prevention and control activities. This will be done in line with domestic, bilateral and multilateral funding mechanisms and within the current health financing arrangements. The policy will advocate for earmarked funds and increased budgetary allocations for NCDs.

NHIS coverage will be reviewed to include cancer screening programmes and treatment of common cancers besides cervical and breast cancer. The returns on targeted taxation on tobacco products, alcoholic and sugar-sweetened beverages, will be invested in programmes to prevent and control NCDs. Other innovative means of financing NCD prevention and control in Ghana will be explored.

Integration of services and programme funding arrangements will be pursued at all levels to reduce costs and promote cross programmatic efficiency.

4.2.9 Research and Development

The objective of research and development is to promote and support national capacity for high-quality research and development for the prevention and control of NCDs. This policy will support efforts at conducting research to inform decision making on NCDs and will prioritise multi-disciplinary collaborative research on NCDs including Epidemiological studies.

5.0 MONITORING AND EVALUATION

In order to ensure implementation and to guide the process and progress of implementation, a monitoring and evaluation (M&E) plan will be developed to guide all activities in line with the objectives of the policy. The M&E plan will be sector-specific and will be coordinated by the National NCD Steering Committee to ensure coherence. (Refer to Appendix 1)

6.0 COMMUNICATION STRATEGY

Communication and Policy Dissemination

The aims of the communication and policy dissemination strategy will be to raise awareness in ensuring that, all stakeholders appreciate the role they play in ensuring the effective implementation of the policy as well as key strategies.

The following steps shall be considered for the dissemination of the policy:

- a) *National Launching of the document*
- b) *Regional and institutional dissemination of the policy*

There shall be a National Launching of this policy to ensure that all key stakeholders and partners both local and international understand the major highlights of the document as well as have a buy-in for a successful implementation.

Private Sector and other relevant agencies as well as stakeholders shall be properly oriented on the Policy and encouraged to adopt the provisions of the policy in their routine management processes

APPENDIX 1

Indicator	Indicator Level	Definition	Target	Source
Objective 1: Reduce exposure to risk factors that contribute to NCDs				
Planned activities for public education on risk factors for NCDs				
SBCC strategy developed				
Number of publications /articles in print media				
Number of radio and TV discussions done				
Social media handles established and publicized				
Social media platforms managed and regular updates on NCDs provided				
SBCC materials developed				
Proportion of SBCC materials printed				
Proportion of SBCC materials disseminated				
Proportion of health facilities with NCD education as part of health promotion plan				
Number of advocacy campaigns organized				

Indicator	Indicator Level	Definition	Target	Source
Planned activities for public education on mental health, oral health, eye health and injuries including RTAs				
Number of publication / articles in print media				
Number of radio and TV discussions done				
SBCC Materials developed				
Proportion of priority NCDs with SBCC materials printed				
Proportion of SBCC materials disseminated				
Social media handles established and publicized				
Social media platforms managed and regular updates on NCDs provided				
Number of NCD champions appointed				
Number of advocacy campaigns organized by NCD champions				
Proportion of district health directorates with pre-hospital care and transfer of the injured included in programme of work				
Proportion of Districts undertaking Road Safety campaigns				
Planned activities for Health education on NCDs in schools				
NCD education integrated into SHEP programme				
Proportion of SHEP programmes incorporating NCDs				
Age-specific NCD modules developed				
Proportion of facilitator -lesson reports with NCDs checked by head teachers and circuit supervisors				
Planned activities for public education on Human Papilloma Virus, Hepatitis B and Sickle Cell Disease				
Number of radio and TV discussions done				
Number of publications /articles in print media				
Proportion of at risk counselled				
Activities on vaccination for HPV as part of national EPI programme				
Inclusion of HPV in Ghana's EPI				
Education on HPV integrated into SHEP programme				
Planned activities for the implementation of Maternal, Infant and Young Child Nutrition Programme				
MIYCN Strategy updated				
Proportion of facilities implementing MIYCN Strategy				
Activities on provision of safe and enabling environment for physical activities				
Guidelines developed				
Number of radio and TV discussions done				
Number of publications/ articles in print media				
Number of corporate and community walks organized				
Proportion of districts with at least one designated area for physical activities created				
Proportion of new roads with pedestrian walkways				

Indicator	Indicator Level	Definition	Target	Source
Objective: 2 Strengthen early detection and management to reduce morbidity and mortality associated with NCDs				
Planned activities for health promotion and routine screening for NCDs				
Screening guidelines developed				
Proportion of health facilities implementing screening guidelines				
New-born SCD screening guidelines developed				
Proportion of health facilities offering new-born screening services for sickle cell				
Proportion of at-risk new-borns screened				
Proportion of health facilities offering routine and opportunistic BP, blood sugar and urine dipstick checks				
AWHC guidelines developed				
Proportion of health facilities with health and wellness clinics established				
Proportion of health facilities with staff trained on wellness clinic and AWHC guidelines				
Planned activities to increase access to care for NCDs at all levels				
NCD management guidelines for specific NCDs developed				
Proportion of facilities with no stock outs of essential NCD medicines (use targets in EML)				
Proportion of facilities with no stock outs of essential Mental Health Medicines (use targets in EML)				
Medical device guidelines developed				
Proportion of facilities with appropriate medical devices to monitor NCDs (use targets in medical device guideline)				
Planned activities to provide support for counselling and therapy to restore and enable optimum function				
Guidelines developed				
Proportion of Health facilities with trained staff on palliative care				
Per capita consumption of morphine				
Proportion of regional and teaching hospitals offering rehabilitation services				
Proportion of regional and teaching health facilities offering palliative care services				
Proportion of district hospitals with physiotherapists				
Proportion of regional and teaching hospitals with health personnel trained in palliative care				
Proportion of regional and teaching hospitals with health personnel trained in tobacco clinical cessation services				
Number of engagements with private sector				
Proportion of regional level facilities with alcohol and other substance abuse rehabilitation services				
Breast reconstruction included in the benefits package				
Stroke rehabilitation centres established				

Indicator	Indicator Level	Definition	Target	Source
Objective 3: Strengthen the Health System for NCD Prevention and Control				
Planned activities to establish an NCD Division under the Ghana Health Service				
Proposal developed				
Proposal submitted to Public Services Commission				
NCD Division Launched				
Planned activities to strengthen research on NCDs				
NCD Research network established				
Number of meetings held				
Systematic review on different NCDs completed				
Number of capacity building workshops organized				
Number of regions with capacity building workshop organized.				
Number of districts with capacity building workshop organized				
National NCD Research conference held				
Planned activities to strengthen surveillance for NCDs				
STEPS Survey conducted				
Data collection instruments reviewed				
Proportion of Districts trained on updated NCD data collection instruments				
Five (5) Cancer registries established				
Number of Sentinel sites established				
NCD indicators included in GDHS				
NCD indicators included in MICS				
Planned activities to build human resource capacity at all levels for NCD prevention and treatment				
% of regions with NCD policy and strategy disseminated				
% of districts with NCD policy and strategy disseminated.				
% of districts hospitals with front-line staff trained to carry out NCD screening guidelines				
% of Health Centres with front-line staff trained to carry out NCD screening guidelines				
% of CHPS staff trained to carry out NCD screening guidelines				
% of regions with front-line staff trained to carry out cervical and breast cancer screening				

Indicator	Indicator Level	Definition	Target	Source
% of districts with front-line staff trained to carry out cervical and breast cancer screening				
% of health centres with front-line staff trained to carry out cervical and breast cancer screening				
% of CHPS staff trained to carry out cervical and breast cancer screening				
% of Private facilities with front-line staff trained to carry out cervical and breast cancer screening				
% of districts with front-line staff trained to provide mental health services				
% of health centres with front-line staff trained to provide mental health services				
% of CHPS staff trained to provide mental health services				
% of districts with front-line staff trained to provide palliative care services				
% of districts level facilities with Physiotherapy services				
% of district hospitals with front-line staff trained to screen for diabetic retinopathy				
% of health centres with front-line staff trained to screen for diabetic retinopathy				
% of regions with glaucoma screening centres				
Number of regional cervical cancer screening centres				
% of Teaching Hospital facilities with multidisciplinary mental health teams				
% of regional hospitals with multidisciplinary mental health teams				
Planned activities to strengthen availability and access to emergency services for injuries				
% of health facilities with emergency units				
% of Ministries with first aid facilities				
% of Ministries with evacuation plan				
Number of Accident and Emergency centres established along major highways				
Number of commercial driver unions with members trained				
Planned activities to institutionalise periodic evaluation of NCD prevention and control activities				
Baseline (B), Midterm(M) and End-line (E) evaluation activities conducted				
Review of NCD prevention and control activities incorporated into Annual Health Sector Review reports				
Relevant indicators and targets revised				
Objective 4: Strengthen multi-sectoral collaboration for NCD Prevention and Control				
Activities to establish a multi-sectoral platform for NCD Prevention and Control				
Steering Committee established				
Number of meetings held				
Planned activities on formulation and strengthening legislation and guidelines to support NCD prevention and control				
Protocol Ratified				
Guidelines developed				
Taxation reviewed				
LI developed and passed by parliament				

Indicator	Indicator Level	Definition	Target	Source
Legislation developed and passed				
Survey Report on labelling of alcoholic products in Ghana				
Proportion of public places with “no smoking” signs clearly displayed				
Number of Surveys conducted				
Legislation enacted				
NCD Prevention activities included in Community Scorecard				
Standards developed and enforced				
Number of engagements with food industry players				
Percentage reduction in salt content of processed food				
Guidelines developed				
Proportion of schools implementing Nutrition friendly guidelines				
Published league tables for Nutrition-friendly schools at the national, regional and district levels				
Planned activities to strengthen private sector involvement in NCD prevention and control				
Number of engagements with corporate bodies on NCD prevention and control				
Number of engagements undertaken				
Number of regions with PPPs for comprehensive NCD care established				
Number of rehabilitation centres established				
Planned activities to strengthen partnerships with patient advocacy groups for NCDs				
Mapping of patient support groups conducted				
Number of patient support groups for specific NCDs created				
Number of meetings held				
Number of fundraising activities carried out				
Planned activities to strengthen partnerships with traditional authority to promote NCD prevention and control				
Number of Sensitisation sessions held				
Number of regions with sensitisation sessions on NCDs held				
Proportion of districts with community engagement activities implemented				
Number of traditional rulers designated as NCD advocates				
Number of advocacy sessions organised by designated traditional advocates				
Objective 5: Ensure sustainable funding and other resources for NCD Prevention and Control				
Planned activities to increase funding for NCD prevention and control				
RMP in place				
Donor Mapping in place				
Number of resource mobilization conferences organized				

Indicator	Indicator Level	Definition	Target	Source
% of funding target achieved per RM plan				
NCD Fund established				
% of budgeted funds for NCD related activities disbursed				
Proportion of Ministries with budget lines for NCDs				
Activity plan to expand NHIS benefit package to include wellness services, childhood cancers and prostate cancer				
Wellness services included in NHIS benefit package				
Childhood cancers and prostate cancer included in the benefit package				
Planned activities to integrate NCD interventions into all sector planning, budgeting and financial management systems for efficiency and sustainability of services				
NCD interventions integrated into planning and budgeting processes for Ministries				
Financial management of NCD interventions integrated into internal audit and control systems				

APPENDIX 2: LIST OF SUPPORTING INDIVIDUALS AND INSTITUTIONS

Members of the Technical Working Group

Prof Jacob Plange-Rhule	Chair, NCD Steering Committee	Chairman
Dr.(Mrs) Martha Gyansa-Lutterodt	Director, Technical Coordination	Directorate
Dr Baffour Awuah	Special Advisor to Minister, MOH	Co-Chair
Dr Dennis Odai Laryea	Programme Manager NCDs, GHS	Technical Lead
Mrs Joana Ansong	NPO, WHO Country Office, Ghana	Member
Dr Mary Efua Commeh	Deputy Programme Manager, NCDs	Member
Dr SallyAnne Ohene	NPO, WHO Country Office, Ghana	Member
Mr Benjamin Nyakutsey	PPME Directorate, MOH	Member
Mr Daniel Degbotse	PPME Directorate, MOH	Member
Dr Emmanuel Odame	Director PPME, MOH	Member
Dr Badu Sarkodie	Public Health Division, GHS	Member
Dr Kyei Faried	DCD/PHD, GHS	Member
Mr Kwadwo Asante	HPD, Ghana Health Service	Member
Dr Joel Yarney	Korle Bu Teaching Hospital	Member
Dr Caroline Amissah	Mental Health Authority	Member
Dr Prince Pambo	Civil Service Clinic, OHCS	Member
Mrs Gifty Ampah	Family Health Division, GHS	Member
Mr Ernest Amoah Ampah	Ghana Education Service	Member
Dr Mary Amoako-Coleman	NMIMR, University of Ghana	Member
Ms Edith Gavor	GNDP, Ministry of Health	Member
Mrs Rahilu Haruna	PPME Directorate, MOH	Member
Dr Philip Tanbong	Independent Consultant	Member
Dr Lawrence Ofori-Boadu	ICD Division, GHS	Member
Dr Samuel A Kaba	ICD Division, GHS	Member
Dr Yaw Ampem Amoako	Komfo Anokye Teaching Hospital	Member
Emelyn Lovette Yorke	PPME Directorate, MOH	Member
Kafui Dansu	PPME Directorate, MOH	Member
Bigool Mark	PPME Directorate, MOH	Member

List of Contributors/Reviewers

Prof Ama DeGraft-Aikins- University of Ghana, Legon

Dr Amos Laar- University of Ghana, Legon

Dr Kwesi Amissah-Arthur- Korle Bu Teaching Hospital

Mr Percy Agyekum- Food and Drugs Authority

Mrs Olivia Boateng- Food and Drugs Authority

Dr James Addy- Eye Unit, GHS

Dr Maxwell Adjei Kudzo- Oral Health Unit, GHS

Mr Ad Adams Ebenezer- Stroke Support Network Ghana

Mrs Mary Mpereh- National Development Planning Commission

Mr. William Frimpong-Bonsu- Consultant to MoH

Dr. Mark Bigool

List of Participating Institutions in Consultative/Stakeholder Meetings

Centre for Plant Medicine Research	Ministry of Finance
Civil Service Clinic	Ministry of Gender, Children and Social Protection
Council for Scientific and Industrial Research	Ministry of Health
Customs Division, Ghana Revenue Authority	Ministry of Information
Disease Surveillance Department, GHS	Ministry of Justice and Attorney General
Eye Unit, GHS	Ministry of Roads and Highways
Food and Agriculture Organisation	Ministry of Trade and Industry
Food and Drugs Authority	Ministry of Youth and Sports
Ghana Armed Forces- 37 Military Hospital	Ministry of Youth and Sports
Ghana College of Physicians and Surgeons	National Commission for Civic Education
Ghana Education Service	National Development Planning Commission
Ghana Immigration Service	National Health Insurance Authority
Ghana Medical Association	National Road Safety Commission
Ghana News Agency	NCD Alliance Ghana
Ghana Police Hospital	Nutrition Department, GHS
Ghana Police Service	Pharmaceutical Society of Ghana
Ghana Revenue Authority	PPME Directorate, MOH
Ghana School Feeding Programme	PPME Division, GHS
Ghana Standards Authority	Public Health and Health Promotion Unit, MOH
Ghana Statistical Service	Regional Institute for Population Studies, University of Ghana
Health Promotion Division, GHS	Research and Development Division, GHS
Institutional Care Division, GHS	School of Public Health, University of Ghana
Komfo Anokye Teaching Hospital	Technical Coordination Directorate, MOH
Korle Bu Teaching Hospital	United Nations Development Programme
Mental Health Authority	World Health Organisation
Ministry of Education	

APPENDIX 3: REFERENCES

1. World Health Organisation. Non communicable diseases. World Health Organization. <http://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>. Accessed June 6, 2018.
2. Ghana Statistical Service, Ghana Health Service, ICF International. Ghana Demographic and Health Survey 2014. Accra, Ghana; 2015.
3. Addo J, Agyemang C, Smeeth L, de-Graft Aikins A, Edusei AK, Ogedegbe O. A review of population-based studies on hypertension in Ghana. *Ghana Med J*. 2012;46(2 Suppl):4-11.
4. Gatimu SM, Milimo BW, Sebastian MS. Prevalence and determinants of diabetes among older adults in Ghana. *BMC Public Health*. 2016;16(1174). <https://link.springer.com/content/pdf/10.1186/s12889-016-3845-8.pdf>. Accessed January 12, 2018.
5. Amoah AGB, Owusu SK, Adjei S. Diabetes in Ghana: a community based prevalence study in Greater Accra. *Diabetes Res Clin Pract*. 2002;56(3):197-205.
6. Calys-Tagoe BN, Yarney J, Kenu E, Owusu Amanhyia NAK, Enchill E, Obeng I. Profile of cancer patients' seen at Korle Bu teaching hospital in Ghana (A cancer registry review). *BMC Res Notes*. 2014;7(1). doi:10.1186/1756-0500-7-577
7. Laryea DO, Awuah B, Amoako YA, et al. Cancer incidence in Ghana, 2012: evidence from a population-based cancer registry. *BMC Cancer*. 2014;14(1):362. doi:10.1186/1471-2407-14-362
8. Amoako YA, Awuah B, Larsen-Reindorf R, et al. Malignant tumours in urban Ghana: evidence from the city of Kumasi. *BMC Cancer*. 2019;19(1):267. doi:10.1186/s12885-019-5480-0
9. Plange-Rhule J, Phillips R, Acheampong JW, Saggarr-Malik AK, Cappuccio FP, Eastwood JB. Hypertension and renal failure in Kumasi, Ghana. *J Hum Hypertens*. 1999;13(1):37-40. doi:10.1038/sj.jhh.1000726
10. Eastwood JB, Kerry SM, Plange-Rhule J, et al. Assessment of GFR by four methods in adults in Ashanti, Ghana: the need for an eGFR equation for lean African populations. *Nephrol Dial Transplant*. 2010;25(7):2178-2187. doi:10.1093/ndt/gfp765
11. Amoako YA, Laryea DO, Bedu-Addo G, Andoh H, Awuku YA. Clinical and demographic characteristics of chronic kidney disease patients in a tertiary facility in Ghana. *Pan Afr Med J*. 2014;18. doi:10.11604/pamj.2014.18.274.4192

12. World Health Organization. NonCommunicable Diseases Country Profiles 2018.; 2018.
13. Agyemang C, Meeks K, Beune E, et al. Obesity and type 2 diabetes in sub-Saharan Africans - Is the burden in today's Africa similar to African migrants in Europe? The RODAM study. *BMC Med.* 2016;14(1):166. doi:10.1186/s12916-016-0709-0
14. Addo J, Smeeth L, Leon DA. Hypertensive target organ damage in Ghanaian civil servants with hypertension. *PLoS One.* 2009;4(8):e6672. doi:10.1371/journal.pone.0006672
15. Danquah I, Bedu-Addo G, Terpe K-J, et al. Diabetes mellitus type 2 in urban Ghana: characteristics and associated factors. *BMC Public Health.* 2012;12:210. doi:10.1186/1471-2458-12-210
16. Addo-Yobo EOD, Woodcock A, Allotey A, Baffoe-Bonnie B, Strachan D, Custovic A. Exercise-Induced Bronchospasm and Atopy in Ghana: Two Surveys Ten Years Apart. *PLoS Med.* 2007;4(2). doi:10.1371/journal.pmed.0040070
17. Lamptey P, Laar A, Adler AJ, et al. Evaluation of a community-based hypertension improvement program (ComHIP) in Ghana: data from a baseline survey. *BMC Public Health.* 2017;17. doi:10.1186/s12889-017-4260-5
18. Ghana Statistical Service (GSS), Ghana Health Service (GHS), ICF Macro. Ghana Demographic and Health Survey 2008. Calverton, Maryland, USA; 2009.
19. de-Graft Aikins A, Kushitor M, Koram K, Gyamfi S, Ogedegbe G. Chronic non-communicable diseases and the challenge of universal health coverage: insights from community-based cardiovascular disease research in urban poor communities in Accra, Ghana. *BMC Public Health.* 2014;14(Suppl 2):S3. doi:10.1186/1471-2458-14-S2-S3
20. Cappuccio FP, Kerry SM, Micah FB, Plange-Rhule J, Eastwood JB. A community programme to reduce salt intake and blood pressure in Ghana [ISRCTN88789643]. *BMC Public Health.* 2006;6(1):13. doi:10.1186/1471-2458-6-13
21. Gostin LO, Monahan JT, Kaldor J, et al. The legal determinants of health: harnessing the power of law for global health and sustainable development. *The Lancet.* 2019;393(10183):1857-1910. doi:10.1016/S0140-6736(19)30233-8
22. Ofori-Atta A, Read UM, Lund C, MHaPP Research Programme Consortium. A situation analysis of mental health services and legislation in Ghana: challenges for transformation. *Afr J Psychiatry.* 2010;13(2):99-108.
23. Canavan ME, Sipsma HL, Adhvaryu A, et al. Psychological distress in Ghana: associations with employment and lost productivity. *Int J Ment Health Syst.* 2013;7(1):9. doi:10.1186/1752-4458-7-9