NATIONAL MULTI-SECTORAL ACTION PLAN FOR THE PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES (2019 – 2025)

World Health Organization
Nigeria

National Multi-Sectoral Action Plan for the Prevention and Control of Non-Communicable Diseases (2019 – 2025)

Federal Ministry of Health 2019


#beatNCDsNG

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

BMI	Body Mass Index
COPD	Chronic Obstructive Pulmonary Disease
CRDs	Chronic Respiratory Diseases
CSOs	Civil Society Organizations
CVDs	Cardio-Vascular Diseases
FBO	Faith-Based Organization
FCPCC	Federal Competition and Consumer Protection Commission
FMARD	Federal Ministry of Agriculture and Rural Development
FME	Federal Ministry of Education
FMEn	Federal Ministry of Environment
FMoIC	Federal Ministry of Information and Culture
FMLE	Federal Ministry of Labour and Employment
FMOF	Federal Ministry of Finance
FMOH	Federal Ministry of Health
FMOJ	Federal Ministry of Justice
FMPWH	Federal Ministry of Power, Works and Housing
FMWASD	Federal Ministry of Women Affairs and Social Development
FMYS	Federal Ministry of Youths and Sports
FRSC	Federal Road Safety Commission
GAP	Global Action Plan
GATS	Global Adult Tobacco Survey
GDP	Gross Domestic Product
GYTS	Youth Tobacco Survey
HDI	Human Development Index
HMH	Honourable Minister of Health
HPV	Human Papilloma Virus
IFG	Impaired Fasting Glucose
IGT	Impaired Glucose Tolerance
LGAs	Local Government Areas
LMICs	Low- and Middle-Income Countries
MBNP	Ministry of Budget and National Planning
MHAC	Mental Health Action Committee

MDAs	Ministries, Departments and Agencies
MHGAP	Mental Health Gap Action Programme
MNSDs	Mental, neurological and substance use disorders
MPI	Multidimensional Poverty Index
MSAP	Multi-sectoral Action Plan
NAFDAC	National Agency for Food and Drug Administration and Control
NASCP	National AIDS and STIs Control Programme
NATOCC	National Tobacco Control Committee
NBC	National Broadcasting Corporation
NBS	National Bureau of Statistics
NCDs	Non-Communicable Diseases
NDLEA	National Drug Law Enforcement Agency
NEMA	National Emergency Management Agency
NGOs	Non-governmental organisations
NHIS	National Health Insurance Scheme
NIMR	Nigerian Institute of Medical Research
NIPRD	National Institute for Pharmaceutical Research and Development
NMSAP	Multi-sectoral Action Plan
NOA	National Orientation Agency
NPHCDA	National Primary Health Care Development Agency
NPoPC	National Population Council
NSHDP	National Strategic Health Development Plan
PHC	Primary Health Care
PLHIV	People Living with HIV
RMNCAH+N	Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition
RTC	Road Traffic Crash
SDGs	Sustainable Development Goals
SON	Standards Organisation of Nigeria
UDA	Urban Development Authorities
UHC	Universal Health Coverage
WAHO	West African Health Organization
WHO	World Health Organisation
WHO FTC	WHO Framework on Tobacco Control

FOREWORD

Non-Communicable Diseases (NCDs), which include Cardio-Vascular Diseases (CVDs), Cancers, Chronic Obstructive Pulmonary Diseases (COPD),Diabetes and Mental Ill-Health are now the leading causes of disability and death globally and fast outpacing mortality and morbidity due to communicable diseases in low and middle income countries.

Fortunately, NCDs are preventable and its control can be achieved by targeting the associated risk factors including cigarette smoking/use of tobacco products, harmful alcohol intake, physical inactivity, unhealthy diet and most recently, climate change. It is therefore obvious that the control of all the risk factors does not rest with the health sector alone but requires action by other sectors as well.

For this reason, the Federal Ministry of Health has taken the lead in establishing a Multi-Sectoral Action Plan on NCDs. The purpose of the multi-sectoral action is to ensure that sectoral policies have consideration for health and wellbeing of Nigerians. The development of this plan has therefore been in collaboration with other relevant government MDAs, civil societies as well as local and international non-governmental organization.

This national multi-sectoral action plan for NCDs establishes a framework for reducing morbidity and mortality of NCDs by instituting cost-effective policies and social interventions that will influence behaviours and lifestyle changes and reduce the modifiable risk factors for the prioritized NCDs. Major NCDs covered in this document includes: cardiovascular diseases, diabetes mellitus, chronic respiratory diseases, cancers, sickle cell disease, mental neurological and substance use disorders, as well as road traffic injuries.

I strongly believe that a conscious and judicious implementation of the Multi Stakeholder Action Plan on Non-Communicable Diseases 2019–2025 across all relevant sectors will result in improved health indices for Nigeria.

Thank you.

Professor Isaac F. Adewole Fas, FSPSP, FRCOG, DSc (Hons)
Honourable Minister of Health

ACKNOWLEDGEMENTS

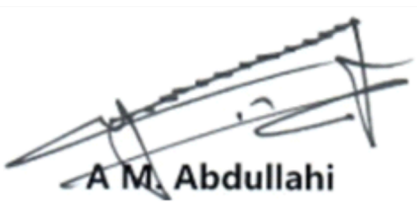
The Federal Ministry of Health would like to thank all partners and stakeholders who participated in the development of this Multi-Sectoral Action Plan for the prevention and control of NCDs in Nigeria.

We wish to express our gratitude to the Honourable Minister of Health for his leadership and commitment, and for prioritizing NCDs as a public health problem of national concern.

We are grateful to World Health Organization and the Health Strategy and Delivery Foundation for providing technical assistance in the development of this document.

Our appreciation also goes to heads of MDAs and their Multi-Sectoral Action Plan focal points for contributing towards the development of this plan.

We commend and sincerely thank all our implementing partners, NGOs/CSOs as well as the Director, Department of Public Health, National Coordinator and members of staff of the NCDs Division for their invaluable contributions to the development and review of this action plan.



Permanent Secretary
Federal Ministry of Health

EXECUTIVE SUMMARY

The National Multi-Sectoral Action Plan (NMSAP) for the prevention and control of Non-Communicable Diseases (NCDs) in Nigeria 2019 – 2025 is a strategic guide for the national response to NCDs for the next seven years in Nigeria. The development of the NMSAP is guided by the WHO Tools for National Multi-sectoral Action Plan for prevention and control of Non-Communicable Diseases (NCD MAP Tool). The document aligns with the National Health Strategic Development Plan II (NHSDP II), the Sustainable Development Goals 2015-2030 and the Economic Recovery and Growth Plan (ERGP). This document establishes a framework for reducing morbidity and mortality of NCDs within the context of the broader Nigerian health system. It aims to inform stakeholders on the strategic direction to be considered when developing programmes on prevention and control of NCDs. Development partners and stakeholders will also use this document in aligning their priorities and supporting the country in its effort to lower the burden of NCDs.

The development of this document was led and coordinated by the NCD Division of the FMoH. Cognisant that the determinants for NCD interventions lie outside the Health Ministry, a wide range of relevant stakeholders from Non-Health Ministries, Departments and Agencies (MDAs and Non-Governmental Organisations/Civil Society Organisations (NGOs/CSOs) participated in the development of this document.

The methodology for the development of the NMSAP followed a sequential process including a meta-analysis of primary research and review of national level surveys to determine the prevalence of major NCDs in Nigeria(cardiovascular diseases, diabetes mellitus, chronic respiratory diseases, cancers, sickle cell disease, mental neurological and substance use disorders and road traffic injuries).Findings of the meta-analysis and other available data were used as baseline to adapt global targets on NCDs and set specific national targets.

The specific national targets were based on a baseline of 2017 and 2018, and targets were set up to 2025 using the WHO worksheet for NCD targets. The initial draft of the implementation plan was then developed in line with WHO “best buys” and recommendations. This was followed by a series of workshops with relevant stakeholders to review, validate and cost the implementation plan.

The plan has an overarching vision, mission, goal and target statements. The plan also has 5 specific objectives that will help in meeting these statements. The objectives include:

1. To strengthen governance and stewardship for NCD prevention and control;
2. To promote healthy lifestyle and implement interventions to reduce modifiable NCDs risk factors;
3. To strengthen and orient health systems to address prevention and control of NCDs at all levels of care and contribute to the attainment of universal health coverage;
4. To monitor trends and determinants of NCDs and evaluate progress in their prevention and control;
5. To promote and support national capacity for quality research and development for prevention and control of NCDs.

Each of the objectives has strategic areas that capture the specific issues/challenges to be addressed in NCD prevention and control. Each of the strategic areas has priority interventions which are evidence-informed and cost-effective interventions that responds to the issues and challenges in NCD prevention and control, outlined in the strategic area. Each priority intervention in turn has priority actions that will need to be taken to achieve universal coverage of the priority intervention. The priority actions are further broken down into activities and sub-activities in the implementation plan. The MDA or organization responsible for each activity and time frame are also clearly stated. The strategic areas for each objective and their priority intervention will make up the strategic framework. While the priority actions, activities, sub-activities, time frame and organization responsible make up the implementation plan.

An accountability framework with specific output and outcome indicators has been included to ensure adequate monitoring and evaluation of progress made in the implementation of the plan in the six years

A multi-sectoral coordination mechanism for NCDs is also in place to guarantee effective coordination of NCD programmes and activities across all sectors critical to the implementation of the plan. The NCD coordination mechanism has been structured in three levels, namely: The national NCD governing council (NNGC); the national NCD expert technical working group; and the expanded technical working group. The NNGC comprising of Ministers of the different NCD related sectors will function as the highest decision-making body on the prevention and control of NCDs in Nigeria. The NCD expert technical working group will include representatives of key NCD stakeholder groups while the expanded technical working group split into 4 sub-committees will include all stakeholders who wish to join the partnership. For each level of membership, a chair and secretary will be designated.

1. INTRODUCTION

The rapid rise in NCDs represents one of the major health challenges to global development, consequently, threatening economic and social development including the lives and health of millions of people. The rapid increase in these diseases occurs disproportionately in poor and disadvantaged populations and is contributing to widening health inequalities between and within countries.

Countries are increasingly responding to the growing challenges and approaching it from a multi-sectoral perspective. With the participation of a wide range of stakeholders drawn from multiple sectors in Nigeria, this document focuses on seven major NCDs which contribute substantially to morbidity and mortality of NCDs in Nigeria. These include: cardiovascular diseases, diabetes mellitus, chronic respiratory diseases, cancers, sickle cell disease, mental neurological and substance use disorders and road traffic injuries.

The National Multi-sectoral Action Plan (NMSAP) for the prevention and control of Non-Communicable Diseases (NCDs) in Nigeria 2019– 2025 is a strategic guide for the national response to NCDs for the next seven years in Nigeria. This is the first plan that addresses NCDs in the country and has been adapted from the Global NCDs Action Plan. It aims to inform stakeholders on the strategic direction to be considered when developing programs on prevention and control of NCDs. Donors will also use this document to align their priorities and support the country in its effort to lower the burden of NCDs. This document establishes a framework for reducing morbidity and mortality from NCDs within a health in all policies approach.

This National Multi-Sectoral Action Plan for NCDs focuses on cost-effective policy and social interventions that will influence behaviours and lifestyle changes and reduce the modifiable risk factors for the prioritized NCDs.

1.1. Overview of NCDs

Non-Communicable Diseases are chronic diseases that are not passed from person to person. They have varying rates of progression depending on when interventions to slow their progression was started and sustained. The four main types of NCDs are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory

diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes. These major NCDs share four major behavioural risk factors namely: tobacco use and exposure, unhealthy diet, physical inactivity and harmful use of alcohol. Other NCDs of public health importance in Africa include but not limited tohaemoglobinopathies, mental neurological and substance abuse disorders, injuries from road traffic crashes, oral and eye diseases.

The burden of NCDs is rapidly increasing globally. NCDs currently account for over 70% of all global deaths. In low-and middle-income countries, an estimated 48% of NCD related deaths occur among people less than 70 years.

In Nigeria, there is very limited evidence on the burden of NCDs and its trends, however a recent systematic review on NCDs-related studies conducted across the country on seven NCD disease (cardiovascular diseases, diabetes mellitus, chronic respiratory diseases, cancers, sickle cell disease, mental neurological and substance use disorders and road traffic injuries indicate a rising trend in prevalence and incidence.

1.2. Country Profile

1.2.1. Geo-Political Profile

Nigeria has an areaof 923,768 square kilometres and is located along the West Coast of Africa. It lies between latitudes 40o and 140o North of the equator and between longitudes 20 and 140 East of the Greenwich Meridian. There are two marked seasons: the dry season lasting from November to March and the rainy season lasting from April to October. The climate is drier further North with extremes of temperatures, sometimes reaching as high as 44°C and falling as low as 14°C. Temperatures at the coast seldom rise above 32°C but humidity is typically high.

The country is a federation of 36 states and the Federal Capital Territory, Abuja, with 774 Local Governments Areas (LGAs). Nigeria has a rich cultural diversity of about 400 ethnic groups and 450 languages. English is the official language while the other three main languages are Hausa, Igbo and Yoruba.

1.2.2. Population and Health Profile

According to the 2006 National Population Census, Nigeria had a population of 140,431,790 with an uneven distribution of the population across the country. This placed Nigeria as the most populated country in Africa. The World Population Prospects

2017 puts the current population estimate of Nigeria as 190,886,000 with a male to female population of 96,729,000 and 94,157,000 respectively. It also indicates that Nigeria's population is the world's fastest growing and is projected to surpass that of the Unites States of America by 2050. The most densely populated states in the country are Lagos, Kano, Anambra and Imo. Nigeria has been ranked by the World Bank in 2016 as a lower middle-income country.

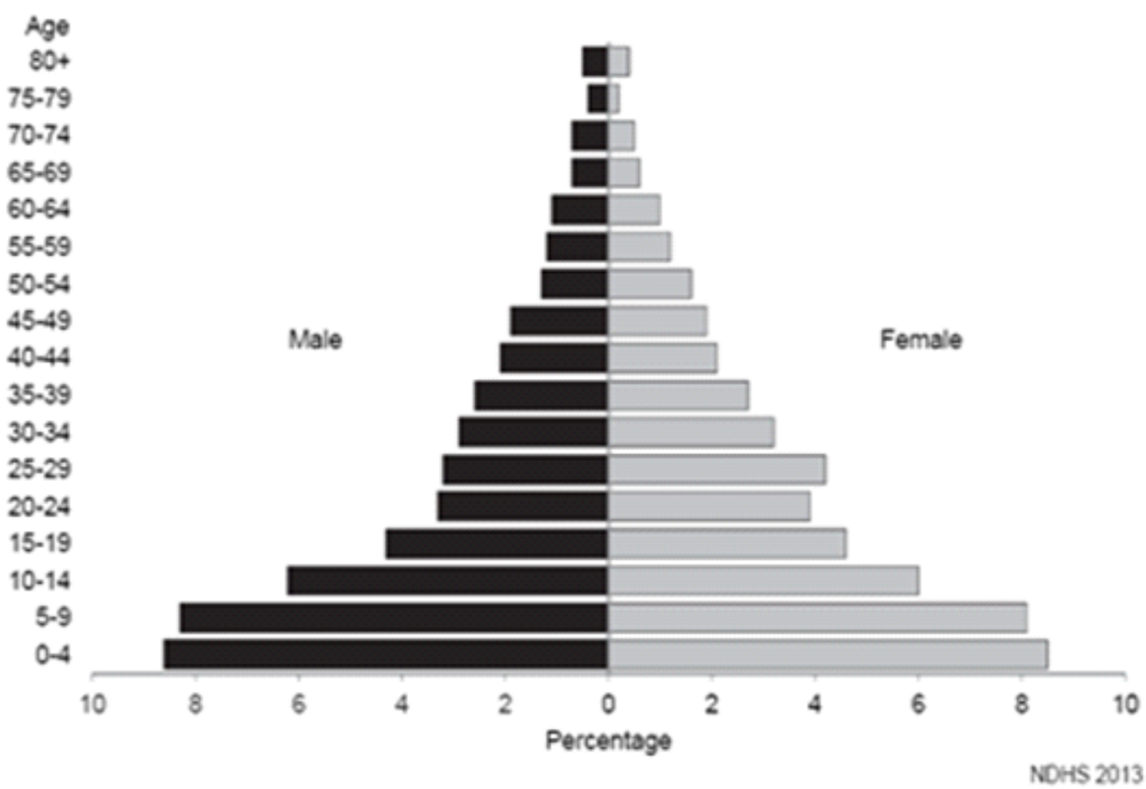


Figure1: ***The Age-Sex Structure of Nigeria's Population (NDHS 2013)***

Nigeria's population pyramid is characterized by a broad base and a narrow head which indicates high fertility rates as seen in Figure 1. Children under-15 account for 46% of the population whereas 4% of the population represent 65 years and above. The ratio of males to females is 51% to 49% respectively. The life expectancy has steadily improved from 45.9 years from 1990-1995 to 54.5 years in 2016. The life expectancy is expected to rise further to 58.5 years by 2025-2030 (World Population Prospects, the 2017 Revision).

Table 1: ***Population and Health Trend (NDHS 2003, 2008, 2013 AND 2018)***

Indicators	2003	2008	2013	2018
Population growth rate, percent	2.8	-	3.2	-
Total fertility rate	5.7	5.7	5.5	5.3
Crude birth rate per 1000 population	41.7	40.6	39	38
Age-adjusted death rate per 1000 population	-	4.6	3.5	
Maternal mortality ratio per 100 000 live births	800	545	576	
Infant mortality rate per 1000 live births	100	75	69	67
Under age 5 mortality rate, total, per 1000 live births	185	162	128	132
Population 65 years and over percent	2,110	10,063	10,771	

Nigeria is experiencing rapid urbanization. According to the World Urbanization Prospects, the 2014 revision, 68% of the population live in the urban areas while 32% live in the rural areas. The proportion of population living in the urban areas had increased by an urbanization growth rate of 3.75% from 15% in 1960 to 46.9% in 2014 (World Urbanization Prospects 2014, United Nation Population Division).

1.2.3. Economic Profile

According to the Economic Recovery Growth Plan (2017-2020), Nigeria's real GDP in 2017 is estimated at NGN 69,447.74 Billion Naira with a growth of 2.19%. Although the economy depends highly on the oil and gas sector, it accounts for only 10% of the Gross Domestic Product (GDP) with the remaining 90% coming from the non-oil sector. The 10% contribution however, accounts for over 90% of export earnings and 62% of government revenues from 2011-2015.

The United Nations Development Programme Human Development Report (UNDP HDR) 2016 report estimates Nigeria's Human Development Index (HDI) to be 0.571 which classifies the country in the low development category. About 50.9% of Nigeria's population are multi-dimensionally poor with 18.4% living in near multidimensional poverty. The Multidimensional Poverty Index (MPI) identifies multiple deprivations suffered by households in 3-dimensions - health, education and living standards.

It is estimated that greater than 60% of the Nigerian population live on US$ 1 or less a day. Human development indicators paint a bleak picture of Nigeria's health and education systems. Nigeria's primary school net enrolment rate is 54% and 10 million children of school age do not attend school. Unemployment is high at a rate of 14%, especially among youth (NBS Q4 2016).

Table 2: ***Economic and Health Indicators***

Indicators	
Gross Domestic Product (GDP) per capita	$2,178 (world bank 2016)
Gross National income	$2, 450 (world bank 2016)
Inflation Rate (%)	15.74 (ERGP 2017 -2020)
Unemployment Rate (%)	14% (NBS, Q4 2016)
Current Health Expenditure per capita (USD)	79 (GHED, 201 6)
Domestic General Government Health Expenditure (% of current health expenditure)	13 (GHED, 201 6)
Total Expenditure on Health (THE) % GDP	4% (NHA 2017)
Out of pocket (OOP) as % of Total Health Expenditure	76.6% (NHA, 2017)
External Sources of Funding for NCD s (in million current USD)	15 (GHED, 201 6)
External Sources of Funding for injuries (in million current USD)	12 (GHED, 2016)
Proportion of Total Health Expendit ure on NCD	7.9% (NHA 2017)
Expenditure on Non Communicable Diseases (Naira)	342 billion (NHA 2017)
Household contribution to expenditure on NCDs	84.8% (NHA 2017)

GHED, Global Health Expenditure Database *NHA, National Health Account

1.2.4. Social Determinants of Health

The 2013 National Demographic and Health Survey (NDHS) indicates a literacy level of 75% in males and 53% in females. The level of education is linked to health-seeking behaviour. About 97% of women with higher education received antenatal care from a skilled provider, as opposed to 36% of mothers with no education. Similarly, 95% of women in the highest wealth quintile received antenatal care from a skilled provider as opposed to the 25% in the lowest quintile.

The NDHS 2013 survey illustrated a significant link between educational attainment and the level of wealth. Approximately 67% of men in the lowest wealth quintile have no education while only 1% of men in the highest wealth quintile have no education. Similarly, 87% of women in the highest wealth quintile have attended and complete secondary education but only 4% of those in the lowest wealth quintile have attained a similar level of education. Almost half of the population in the wealthiest quintile live in the urban areas, with 5% living in the rural areas.

1.2.5. Health System Profile

Nigeria's health care delivery system is made up of three levels- tertiary, secondary and primary, which are provided by federal, state and local governments respectively. The private sector and NGOs complement health care delivery at all levels. The country is experiencing a double burden of communicable and non-communicable diseases resulting in an increased demand on health services (WHO, 2005).

As at 2017, the budgetary allocation for Health at the Federal level was 4.17 %. Therefore, the country is still very far away from the target of a minimum of 15% budgetary allocation for health made in Abuja Declaration of 2001.

Since the National Health Insurance Scheme (NHIS) became operational in Nigeria 2005, less than 5% of the population have been covered by the scheme. Majority of those covered are from the formal sector and this is a major impediment to the attainment of the Universal Health Coverage (UHC). As a result, the greatest percentage of health financing is from out-of-pocket expenditure which is estimated at 72% (GHED, 2014).

2. DEVELOPMENT OF THE MULTI-SECTORAL ACTION PLAN

The methodology and process for the development of this document was guided by the WHO Tools for National Multi-Sectoral Action Plan for Prevention and Control of Non-Communicable Diseases (NCD MAP Tool).

The methodology involved the following critical steps;

1. Coordination by NCD Division of the Federal Ministry of Health;
2. Conducting a situation analysis;
3. Adapting global targets; and,
4. Developing the strategic and implementation framework.

2.1. Coordination

The NCD Division of the FMoH is responsible for the overall coordination of all NCD prevention and control activities in Nigeria. Therefore, knowing that the determinants for NCD interventions lie outside the Health Ministry, the NCD Division engaged a wide range of relevant stakeholders from both health and non-health Ministries, Departments and Agencies (MDAs and Non-Governmental Organisations/Civil Society Organisations (NGOs/CSOs) in the development of this document.

The Division formed a core technical team that provided technical assistance in the development of the MSAP. The technical assistance provided involved a review of the burden and pattern of NCDs in Nigeria, outlining the methodology for developing the MSAP and facilitating the review and finalization meetings.

This team which was made up of representatives from NCD Division of FMoH, World Health Organization and Health Strategy and Delivery Foundation, was also responsible for drafting and finalizing the MSAP.

2.2. Conducting a Situation Analysis

2.2.1. Meta-analysis to determine the burden of NCDs

A meta-analysis was conducted to determine the:

a) Prevalence of diabetes mellitus, cardiovascular diseases, sickle cell and chronic obstructive pulmonary disease in Nigeria.

b) Incidence of cancers in Nigeria.

c) Prevalence of shared metabolic risk factors- obesity, hypertension and dyslipidaemia.

d) Pattern of the shared behavioural risk factors- tobacco use, harmful use of alcohol, unhealthy diets and physical inactivity.

2.2.2. Review of national level surveys

The database of the National Bureau of Statistics was searched to determine the number of deaths and injuries from road traffic accidents.

The Global Adult Tobacco Survey and Global Youth Tobacco Survey was also reviewed to determine the burden of tobacco use.

2.2.3. Stakeholder and policy landscape analysis

A stakeholder and policy landscape analysis was also conducted to identify existing policies, plans and programmes from other health and non-health MDAs that have a bearing on the development and implementation of the MSAP.

2.3. Setting national targets

Findings from the meta-analysis and other available data were used as baseline to adapt global targets on NCDs and to set specific national targets. The specific national targets were based on the baseline of 2017 and 2018, and targets were projected up to 2025.

The WHO worksheet for NCD targets was used to calculate the expected changes from baseline based on the agreed target for relative reduction or absolute reduction of NCDs and their risk factors outlined in the Global monitoring framework on NCDs. The calculations from these targets (nine of them) were then transferred to an Excel sheet and annual progressions from 2018 to 2025 were interpolated to determine the national targets.

This MSAP also includes NCDs such as injuries, sickle cell disease and MNSD that are not covered in the global target. Thus, the targets for road traffic accidents were adapted from the SDG targets for reducing deaths and injuries from road traffic accidents.

2.4. Developing the Implementation Plan

2.4.1. Developing the Initial Draft

The implementation plan comprises of 5 strategic objectives. Each of these objectives has a strategic area. Each of these strategic areas has priority interventions that align closely with the WHO "best buys". For diseases, not covered by the WHO "best buys", recommendations from other WHO documents were reviewed and included. The enabling actions that will be needed to implement each of these priority interventions were used to develop priority actions, activities and sub-activities for the MSAP implementation plan.

2.4.2. Prioritization and Consensus Building Workshop

A 3-day workshop was held to review the strategic framework and implementation plan. Participants from this workshop was drawn from various Ministries, Departments and Agencies that were identified to be critical in the implementation of the NMSAP.

A formal approach was used during the workshop for consensus building and prioritization. ***This involved the following steps;***

1. Voting to prioritize and streamline the proposed "best buys" interventions.
2. Utilizing nominal group technique to brainstorm and propose interventions for NCDs
   such as injuries and MNSD that are not covered by the "best buys".
3. Scoring of the activities and sub-activities for implementing each of the priority intervention using a scoring template. The scoring was based on a Likert scale of 0 – 5 to score the feasibility of conducting the interventions in line with existing plans, policies and resources within the various ministries, departments and agencies.

2.4.3. Validation Process

The draft of the NMSAP that emanated from the prioritization and consensus-building workshop was shared to the workshop participants for their feedback and consideration remotely. The same scoring template that was used during the prioritization and consensus-building workshop was used to elicit feedback on implementation considerations. These feedbacks were collated and used to further refine the NMSAP. Following this, a one-day validation workshop was convened for final voting and consensus building to ensure that the NMSAP holistically addresses NCD prevention and aligns closely with national development priorities and plans.

3. SITUATION ANALYSIS

3.1. Global Overview of NCDs Burden and Control

3.1.1. Global Burden of NCDs

Non-CommunicableDiseases (NCDs) are the leading cause of death globally. They are chronic, non-contagious diseases capable of causing long term debilitation and disability if not prevented or properly controlled. NCDs affect the highly productive populations thereby posing a huge socio-economic burden and consequently undermining national development.

According to WHO NCDs Global report 2014, NCDs were responsible for 38 million (68%) of the world's 56 million deaths in 2012. More than 40% of them (16 million) were premature deaths under age 70 years. Almost three quarters of all NCD deaths (28 million), and most premature deaths (82%), occur in low- and middle-income countries. The 2011–2025 cumulative economic losses due to NCDs under a "business as usual" scenario with no intervention in low- and middle-income countries have been estimated at US$ 7 Trillion. This sum far outweighs the annual US$ 11.2 Billion cost of implementing a set of high-impact interventions to reduce the NCD burden (From Burden to "Best Buys": Reducing the economic impact of Non-Communicable Diseases in LMICs).

There is a direct link between NCDs and poverty as the presence of NCD risk factors and/or diseases, further deepens poverty. NCDs and their risk factors also increases both individual and household expenditure. NCDs disproportionately affect the poor in low- and middle-income countries thereby widening the inequality gap.

Lifestyles and behaviours are responsible for the modifiable risk factors that give rise to the major NCDs. These modifiable risk factors include tobacco use, harmful use of alcohol, physical inactivity and unhealthy diets such as excessive consumption of red meat, salt, saturated fat, refined sugars in foods and drinks, sub-optimal consumption of fibre and micronutrients.

Other risk factors include hereditary conditions such as sickle cell carrier status, albinism, usage of illicit drugs, unsafe sex practices, unsafe water, poor sanitation and hygiene, outdoor and indoor smoke from solid fuels, exposure to harmful radiation

(domestic or industrial). Infectious agents such as bacteria, viruses and parasites in the environment as well as climate change contribute to an emerging increase in NCDs. The above risk factors are fuelled by increasing globalization, urbanization and industrialization in the last few years.

Global Response and Commitment (Including Regional Commitments)

Globally, key milestones have been reached to address NCDs. These spans from developing the Global Strategy for the Prevention and Control of NCDs, its adoption in 2000 and setting of the 9 global targets for NCDs by 2025.

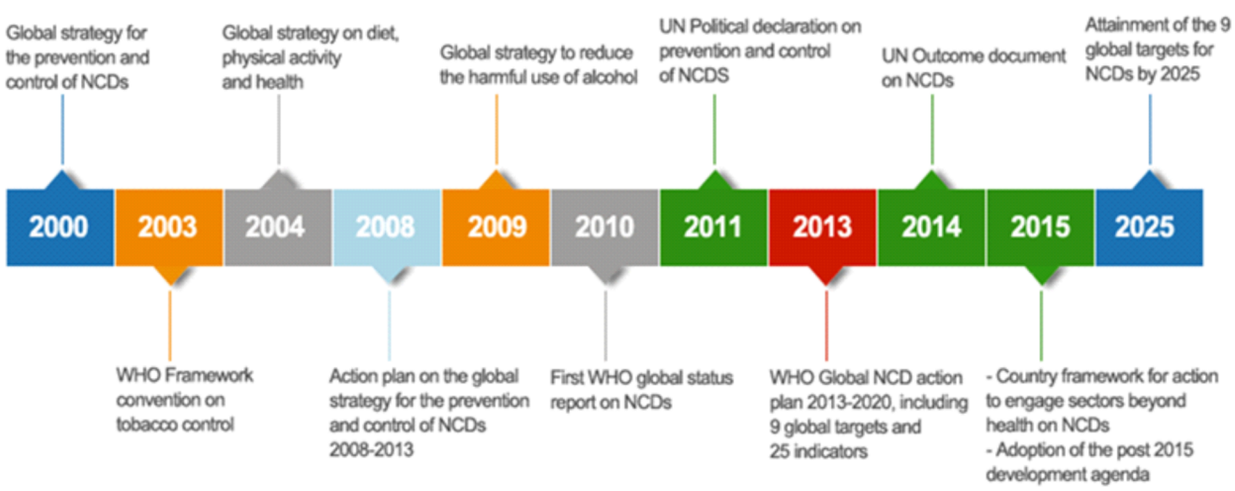


***Figure 2:* Global and Regional Responses- Global status report (2014)**

Heads of State from the African region adopted the Brazzaville declaration on NCDs. The declaration urged action by various stakeholders to address major NCDs and priority conditions (cardiovascular diseases, diabetes, cancer and chronic respiratory diseases, blood disorders sickle cell disease, mental health and injuries) which represent a significant challenge to people in the Africa region:

In the declaration, the ministers also committed to develop national NCD action plans and strengthening institutional capacity for NCD prevention and control among others. The WHO Regional Framework for Integrating Essential Non-Communicable Diseases in Primary Health Care Services (AFR/RC67/12) recommends the strengthening of PHCs to respond to major NCDs.

At the sub-regional level, the West African Health Organization (WAHO), in collaboration with member States developed a strategic plan for the prevention and control of NCDs.

3.2. Overview of NCDs Burden and Control in Nigeria

Nigeria is undergoing a demographic and epidemiological transition with concomitant increase in risk factors for NCDs. According to the WHO NCD Country profile 2016 report, NCDs were estimated to cause approximately 617 300 deaths, representing 29% of total deaths in Nigeria. Out of these, injuries accounted for 8%, followed by cardiovascular diseases with 11%.Premature mortality due to NCDs, which is defined as the probability of dying between ages 30 and 70 years from the main NCDs is 22%.

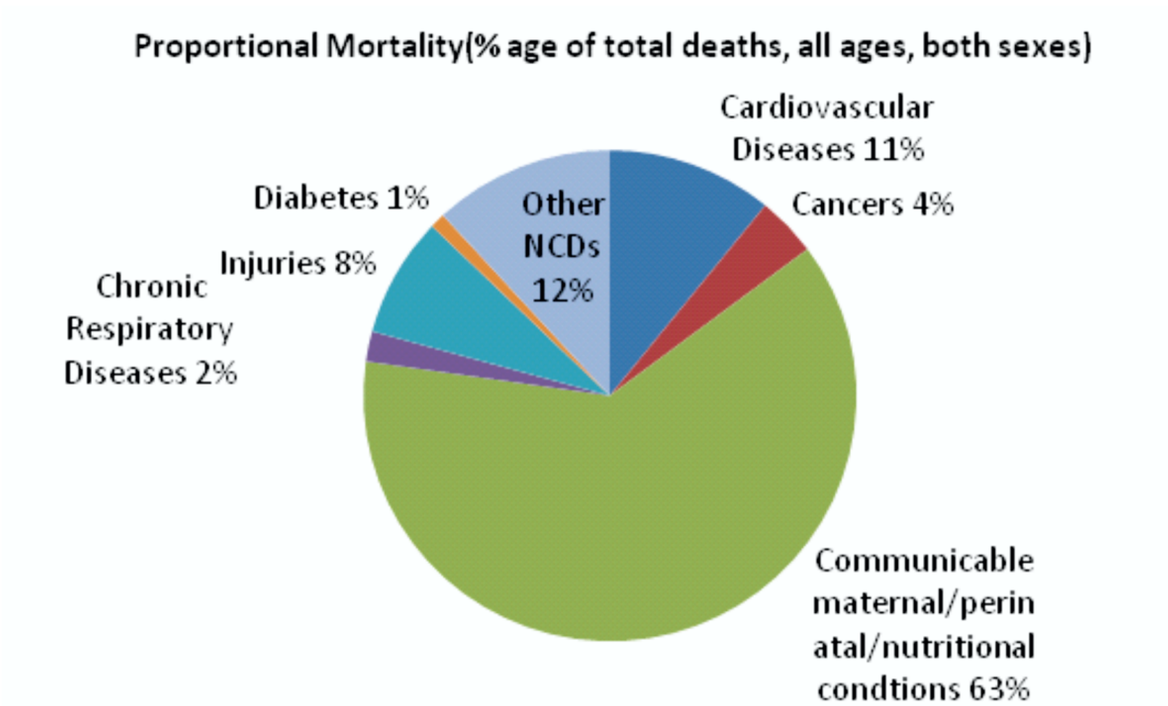


Figure 3: ***Premature Mortality by NCD Type***

3.2.1. Burden of NCDs in Nigeria

Major NCDs in Nigeria include: cardiovascular diseases (such as hypertension, coronary heart diseases and stroke), cancer, diabetes mellitus, sickle cell disease, chronic respiratory diseases (CRDs), mental, neurological and substance use disorders (MNSDs) and road traffic injuries, and oral health disorders (OHDs). The situation analysis assessed the current burden (prevalence and trend) of these NCDs and their metabolic and behavioural risk factors in Nigeria.

3.2.1.1. Prevalence/Incidence of Major NCDs

A. Cardiovascular Diseases

- The prevalence of Hypertensive Heart Disease (not hypertension) was 27.6%.
- The prevalence of cardiomyopathies from various causes was 11.5%.
- Ischemic Heart Disease has a prevalence of 0.7%.
- The prevalence of stroke survivors was 6.7%.
- The incidence of stroke in Nigeria (new cases) was 25.9 per 100,000 persons per year between 2000 and 2015.

B. Diabetes

- The overall prevalence of Diabetes in Nigeria was 4.1%.
- The highest prevalence was observed in the south-south region at 8.5%.
- An increase in prevalence was observed with increasing age.

C. Cancers

- **Among men the top five cancer sites and their incidence were:**
  - Prostate (12.5/100,000).
  - Non-melanoma skin (4.1/100,000).
  - Colorectal (3.0/100,000).
  - Connective and soft tissue (2.1/100,000).
  - Non-Hodgkin lymphoma (1.9/100,000).
- **Among women, the top two cancer sites and their incidence were:**
  - Breast (26.0/100,000).
  - Cervix (11.4/100,000).
  - Non-melanoma skin (3.6/100,000).
  - Colorectal (2.6/100,000).
  - Non-Hodgkin lymphoma (1.3/100,000).

D. Chronic Obstructive Pulmonary Disease

- The estimated prevalence of Chronic Obstructive Pulmonary Disease (COPD) in Nigeria was 6.9% (5.1 - 8.7).
- Prevalence of COPD significantly increases with advancing age (a trend that agrees with observations in global and other national COPD studies).
- The prevalence in men was higher at 7.9% (5.9 - 9.9) compared with women at 5.3% (3.5 - 7.0).

E. Sickle Cell Disease

- The overall pooled prevalence of reported sickle cell anaemia in Nigeria was 1.5%.
- The prevalence was highest in persons aged 0-5 years, at almost 2%.
- A decreasing prevalence was observed as age at screening increases (less than 1% in persons older than 15 years), suggesting higher mortality rates with increasing age.
- About 25% of the Nigerian adult population are carriers of the S gene.

F. Injuries from Road Crashes

- In 2017, about 5,121 deaths and 31,094 injuries occurred as a result of road crashes.2

G. Mental, Neurological and Substance Abuse Disorder

- Local surveys show lifetime prevalence of mental disorders in Nigeria to be between 12.1% and 26.2%. The most common mental disorders were anxiety disorders with 5.7% lifetime prevalence.
- The pattern of substance abuse varies by geo-political zone but the most commonly used illicit drug is cannabis and inhalants.
- There is anecdotal evidence on the misuse of both prescription drugs (like opioid pain medications) and over-the-counter medications.

3.2.1.2. Metabolic Risk Factors for CVD, Diabetes, COPD and Cancers

These are physiological changes in the body that give rise to four major NCDs such as CVD, Diabetes, COPD, and cancer. These physiological changes include; raised blood pressure (hypertension) increased weight gain (obesity/overweight), impaired glucose tolerance (pre-diabetes) and raised blood cholesterol (dyslipidaemia). In the absence of lifestyle changes or drug treatment, these physiological changes continue and progress and give rise to any/combination of the four major NCDs. The meta-analysis showed the prevalence and pattern of these metabolic risk factors in Nigeria.

A. Raised Blood Pressure (Hypertension)

- The pooled crude prevalence of hypertension was 31.2% (men 29.5%, women 31.1%).
- The prevalence of pre-hypertension was 30.8%.
- The mean systolic and diastolic blood pressure in Nigeria were 131mmHg and 81 mmHg, respectively.

B. Pre-Diabetes

- Impaired Glucoses Tolerance (IGT) and Impaired Fasting Glucose (IFG) were estimated at 10.0% and 5.8%, respectively.

C. Obesity/Overweight

- The pooled prevalence of overweight, Body Mass Index(BMI 25+ kg/m2) was 25% (men 25.2%, women 25.5%).
- The pooled prevalence of obesity (BMI 30+ kg/m2) was estimated at 14.3% (men 12.9%, women 19.8%).
- The prevalence of obesity and overweight were highest in the middle-aged group (30-50 years).
- The mean BMI was 25.6 kg/m2, and the mean waist circumference was 86.5 cm.

D. High Blood Cholesterol (Dyslipidaemia)

- The prevalence of hypercholesterolemia was 40% (men 41.1%, women 44.6%).
- The mean concentration of total cholesterol was 4.93 mmol/l.
- The mean LDL-cholesterol was 2.6 mmol/l.
- The mean HDL-cholesterol was 1.6 mmol/l.
- The mean triglycerides was 1.5 mmol/l.

3.2.1.3. Behavioural Risk Factors for CVD, Diabetes, COPD and Cancers

Behaviours and lifestyle influence both the onset and progression of metabolic risk factors. These behavioural risk factors are also known as modifiable risk factors. They are greatly influenced by the prevailing social, economic, environmental and policy factors (distal determinants of health). Four major behavioural risk factors were assessed in the meta-analysis and are discussed within the scope of this document.

A. Tobacco Use

- Tobacco use is a major preventable cause of NCDs and is responsible for 80% of the six million premature deaths annually in low-and-middle income countries including Nigeria.
- It is associated with over 25 diseases including asthma, bronchitis, emphysema, diabetes mellitus and various cancers. Others are pulmonary tuberculosis, tooth decay, cataract, hearing loss, wrinkling of skin, poor wound healing, osteoporosis, congenital malformations, intrauterine growth retardation, low birth-weight, miscarriages and infertility.

- According to the most current Nigeria Global Adult Tobacco Survey (GATS)5
- About 5.6% of Nigerian adults aged 15 years and older (4.5 million adults) currently use tobacco products (4.1 million are men and 0.45 million are women).
- About 17.3% of adults (2.7 million adults) who worked indoors were exposed to second-hand tobacco smoke at the workplace.
- About 6.6% of adults were exposed to second-hand tobacco smoke at home.
- About 29.3% of adults were exposed to second-hand tobacco smoke when visiting restaurants.

- **The GATS report also revealed that Nigerians generally have a good knowledge of the harmful effects of tobacco on health.**
- About 82.4% believed smoking causes serious illness.
- About 51.4% believed smoking causes stroke.
- About 76.8% believed smoking causes heart attack.
- About 73.5% believed smoking causes lung cancer.
- About 44.5% believed smoking causes bladder cancer.
- About 75.1% believed that breathing other people's smoke causes serious illness in non-smokers.
- Among youths in Nigeria, the Global Youth Tobacco Survey (GYTS) was carried out at two sub-national levels in 2001 and 2008 among students aged 13-15 years in secondary schools.
- According to the 2008 GYTS:
- There was an overall relatively low proportion of students currently smoking cigarettes in Nigeria, 2.6%-6.2%.
- Current use of any tobacco product was 14.6%-26.1%.
- Susceptibility to initiate smoking during the next year was 3.6%-16.2%.
- Exposure to second-hand smoke at home was 15.5%-31.3%.
- Exposure to second-hand smoke in public places was high 35.5%-55.5%.
- Some students (1 in 7) and overall 50% favour ban of smoking in public places.
- In all centres, there was considerable knowledge that smoking from others is harmful as indicated by 38.2%-67.8%e of the students.

B. Harmful Use of Alcohol

- Alcohol is one of the major risk factors for NCDs contributing significantly to premature deaths, avoidable disease burden and has a major impact on public health and socio-economic status.
- Harmful use of alcohol was defined in most instances as exceeding the recommended 4 and 3 standard drinks per day for male and female, respectively.
- The prevalence of harmful use of alcohol was estimated at 34.3% (28.6%-40.1%), with prevalence in men 43.9%, (31.1%-58.8%).

C. Physical Inactivity

- Physical inactivity is a serious behavioural risk factor for NCDs.
- Physical inactivity was defined as having less than 30 minutes of moderate activity per day for at least 3 days/week.
- The prevalence of physical inactivity among adults was 52 % (33.7%-70.4%).
- Prevalence in physical inactivity in men was 49.3% (24.7%-73.9%) and women 55.8% (29.4%-82.3%).

D. Unhealthy Diet

- Unhealthy diet is a risk factor for NCDs.
- Anecdotally, it can be observed that the food consumption pattern in Nigeria is changing rapidly towards unhealthy diets with increasing consumption of processed foods high in salt, sugar and trans-fats.
- Excessive salt intake is a recognized risk factor for CVDs in Nigeria. Mean sodium consumption in Nigeria ranges from 2.85 g/day to 10g/day.
- The meta-analysis broadly defined unhealthy diets as having less than 3-5 servings of fruits or vegetables per day, and/or daily intake of high fat or high sugar meals.
- The meta-analysis showed the prevalence of unhealthy diets to be 74.8% (62.5%-87.1%) with similar prevalence in males and females.

3.2.2. Response to NCDs in Nigeria

There are existing health sector and non-health sector responses to the growing threat of NCDs in Nigeria.

3.2.2.1. Health Sector Response to NCDs

A. Existing and Ongoing Efforts in NCD Prevention and Control by the Federal Ministry of Health Concerted efforts have been made by the Federal Ministry of Health since 1988 to reduce the burden of NCDs in Nigeria. The Non-Communicable Disease Control Programme, now a Division, was established in 1989 with the mandate to serve as the arrowhead for the response to NCDs in Nigeria. This was followed shortly by the establishment of an expert committee on NCDs to guide and advise the government on the implementation of policies and programmes for the prevention and control of NCDs.

In addition, a national survey on NCDs was carried out in 1990-1992 to determine the prevalence of major NCDs in Nigeria, their risk factors and health determinants. Documents for health professionals on management of NCDs and health education materials were also developed. Attempts to integrate NCDs into the Primary Health Care (PHC) have also been made but with minimal success.

The annual commemoration of NCDs-related Global Days with a wide range of activities such as press briefing, awareness campaign rallies, sensitization workshops/seminars for the general public, school children etc., have contributed greatly to awareness creation on NCDs and their risk factors among the general public.

Following the political declaration of the high-level meeting of the 66th UN General Assembly on Prevention and Control of NCDs in September 2011, more actions have been taken to increase the momentum of the already existing efforts for the prevention and control of NCDs in Nigeria. These include:

- Flagging-off of the National Stroke Prevention Programme in October 2013 by the former President of Nigeria. The programme is aimed at encouraging Nigerians to live healthy and to regularly carry out medical check-ups in order to reduce the risk of having stroke.
- Development of a draft NCD desk guideline for clinicians and health educators in secondary health care facilities. This document is yet to be approved by the Honourable Minister of Health (HMH).
- Intensified efforts to effectively control tobacco in Nigeria in line with the WHO Framework on Tobacco Control (WHO FCTC) by the Federal Ministry of Health and stakeholders.

- Two sub-national Global Youth Tobacco Surveys (GYTS) were successfully conducted in 2001 and 2008 and reports released in 2001 and 2008 respectively.
- The Global Adult Tobacco Survey (GATS) was successfully conducted in Nigeria in 2012 and the report was released in 2013. This made Nigeria the first country in Sub-Sahara Africa to successfully conduct GATS.
- A National Tobacco Control Act was enacted in 2015.
- The National Tobacco Control Committee (NATOCC) was established to provide leadership for tobacco control implementation in the country.
- Development of the National Nutrition Guideline on Prevention and Control of NCDs.
- Contextualization of the WHO Mental Health Gap Action Programme (MHGAP) to respond to mental, neurological and substance abuse disorders.
- Finalization of the Mental Health Policy and Legislation.
- Development of a National Guideline for the Control and Management of Sickle Cell Disease.
- Establishment of six (6) Sickle Cell Disease centres in Federal Medical Centres in the 6 geopolitical zones in the country between 2011 and 2012.

B. Existing and Ongoing Efforts in other Disease Prevention and Control by the Federal Ministry of Health

The current demographic and epidemiological transition in Nigeria has created a situation where both communicable and non-communicable diseases co-exist at population and individual level. Over the past decade, health system reforms have focused mainly on communicable diseases such as HIV/STI, Malaria and Tuberculosis. Therefore, existing and ongoing efforts in communicable disease prevention and control provide unique opportunities and entry points for NCD prevention and control. Using a chronic care model, service delivery for these communicable diseases can effectively and efficiently be integrated with prevention, care and treatment of NCDs.

Other cross-cutting health response on Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition (RMNCAH+N) provide opportunities for integrating NCD prevention, care and treatment. Nutrition policies and guidelines that emphasize exclusive breastfeeding and healthy infant and young child feeding practices provide a platform for introducing life-long healthy eating behaviours in young children and reduce metabolic risk factors for insulin

resistance and dyslipidaemias. Effective RMNCAH programs provide an entry point for early diagnosis and management of diabetes, hypertension and metabolic risk factors in women and girls. National immunization programmes provide opportunities for integrating life-course vaccinations for Human Papilloma Virus (HPV) and Hepatitis B Virus (HBV) among adults.

Existing and ongoing national efforts in HIV/STI, Tuberculosis, malaria, RMNCAH+N, immunization programs include;

- National Guidelines for HIV Prevention, Treatment and Care developed in 2016 by the National AIDS and STDs Control Programme (NASCP) of the Federal Ministry of Health. This guideline is aimed at achieving HIV epidemic control (90-90-90 targets) and emphasizes commencing anti-retroviral treatment for all HIV positive persons regardless of CD4 count (test and treat approach). This plan also recognizes the use of the chronic care model for early diagnosis and management of NCDs among People Living with HIV (PLHIV).

- National Strategic Plan of Action for Nutrition (2014-2019) developed by the Nutrition Division of the Family Health Department of the Federal Ministry of Health. This plan identifies a set of priority areas such as maternal nutrition, Infant and young child feeding, management of severe acute malnutrition in children under five and micronutrient deficiency control. This plan also prioritized healthy diets to prevent non-communicable diseases.

- Integrated Maternal, Newborn and Child Health strategy by the Family Health Department of Federal Ministry of Health. The ongoing update of this document will include quality improvement strategies that emphasize early identification of NCD related indirect (such as gestational diabetes) and direct causes (such as hypertension in pregnancy) causes of maternal deaths. Therefore, this strategy aims to strengthen the RMNCH continuum of care services in Nigeria and scale up coverage of NCD prevention, care and treatment for women and girls

- National Tuberculosis Control guideline developed by the National Tuberculosis and Leprosy Control Program of the Federal Ministry of Health. This guideline emphasises integrated services for NCD (hypertension & diabetes) prevention, care and treatment in persons with Tuberculosis.

- National Malaria Elimination Plan developed by the National Malaria Control Program of the Federal Ministry of Health. This plan focuses on community-wide strategies that will facilitate malaria elimination in Nigeria.

All these strategies if properly harnessed will contribute to raising community awareness and involvement in NCD control.

C. Existing and Ongoing efforts in other Disease Prevention and Control by other Health-Related Departments and Agencies

1) National Health Insurance Scheme (NHIS)

The National Health Insurance Scheme (NHIS) was established under Act 35 of the 1999 Constitution by the Federal Government of Nigeria to achieve universal health access and coverage through a combination of health financing mechanisms. Currently the NHIS will be directly involved in administrative management, disbursement and monitoring of the Basic Health Care Provision fund. This fund provides opportunity to achieve universal coverage and access for NCD prevention and treatment services. National Primary Health Care Development Agency (NPHCDA)

The Agency was established in 1992 to provide technical and programmatic support to States, LGAs, and other stakeholders in the functioning, planning, implementation, supervision and monitoring of primary health care services in Nigeria. NPHCDA is responsible for the implementation of routine immunization services, and currently finalizing plans to introduce and institutionalize a country-wide program for Human Papilloma Virus (HPV) vaccination of girls aged 9 -13 years. The Agency is also making efforts to introduce life-course vaccines for adults including Hepatitis B virus (HBV).

2) National Agency for Food and Drug Administration and Control (NAFDAC)

The Agency has the statutory responsibility to regulate and control the importation, exportation, manufacture, advertisement, distribution, sales and use of foods, drugs, cosmetics, medical devices, bottled water and chemicals. NAFDAC also has the statutory duty to conduct tests and ensure compliance with specified standards for foods, drugs, cosmetics, medical devices, bottled water and chemicals. So far, the Agency has successfully enacted and implemented reformulation policies to fortify table salt with iodine, elimination of bromate in bread making and fortification of processed foods with Vitamin A. The agency will play a vital role in enacting and implementing reformulation policies to reduce salt content and eliminate trans-fats in the food chain.

3) **Nigerian Institute of Medical Research (NIMR)**

This is the apex research institute for conducting and disseminating medical research in Nigeria. The Institute is currently conducting various researches on NCD prevention and control.

4) **National Institute for Pharmaceutical Research and Development (NIPRD)**

This institute was established under the Science and Technology Act of 1980 with the primary objective of developing drugs, biological products and pharmaceutical raw materials from indigenous resources. So far, the Institute has led the development of a drug for the prophylactic management of sickle cell called "Niprisan". This drug has undergone randomized controlled clinical trials and has been found to be efficacious in the prophylactic management of patients with sickle cell disease. The drug is currently undergoing large-scale clinical trials and being prepared for commercial marketing.

3.2.2.2. Non-Health Sector Response to NCDs in Nigeria

Other non-health MDAs in Nigeria have existing and ongoing plans and programmes that act as distal determinants of health and influence the burden of NCDs and their behavioural risk factors.

The table below provides an overview of the non-health sector responses to NCD prevention and control within the scope of this document.

Table 3: ***Prevention and Response to Injuries***

Non-Health MDA Involved in the Response	Existing and Ongoing Efforts by Non-Health MDA Involved in the Response
Federal Road Safety Commission (FRSC)	Developed and currently implementing the Nigeria Road Safety Strategy (2014-2018) to prevent road traffic crashes and respond to post-crash injuries

Table 4: ***Prevention and Response to Mental, Neurological and Substance Abuse Disorders***

Non-Health MDA Involved in the Response	Existing and Ongoing Efforts by Non-Health MDA Involved in the Response
National Drug Law Enforcement Agency (NDLEA)	Have enacted and enforced laws that reduce the supply for illicit drugs.

Table 5: ***Prevention of Physical Inactivity***

Non-Health MDA Involved in the Response	Existing and Ongoing Efforts by Non-Health MDA Involved in the Response
Federal Ministry of Power, Works and Housing (FMPWH)	Responsible for rural and urban planning as well as construction of inter-state roads around the country.
Federal Ministry of Youths and Sports (FMYS)	Responsible for designing and implementing National competitive sports programmes.
State/LGA level Urban Development Authorities	Responsible for the planning and development of “healthy cities”.

Table 6: ***Reduce Consumption of Unhealthy Diets***

Non-Health MDA Involved in the Response	Existing and Ongoing Efforts by Non-Health MDA Involved in the Response
Federal Ministry of Agriculture and Rural Development (FMARD)	Promote food safety and nutrition through agricultural production, and ensure quality control and standardization for healthy options.
Standards Organization of Nigeria (SON)	Establish and regulate the quality of products and commodities imported into/ or manufactured in Nigeria.
National Agency for Food and Drugs Administration and Control (NAFDAC)	Develop and enforce regulations on food quality, safety and standards.

Table 7: ***Cross-cutting Issues on Resource Mobilisation, Information Dissemination and***

Non-Health MDA Involved in the Response	Existing and Ongoing Efforts by Non-Health MDA Involved in the Response
Federal Ministry of Budget and National Planning (FMBNP)	Responsible for developing national economic plans and budgetary allocations. The ministry will facilitate budgetary allocation for NCD prevention and control activities outlined in the NMSAP.
Federal Ministry of Finance(FMoF)	Responsible for disbursing government funds and formulating relevant fiscal policies that have a bearing on the health of Nigerians.

Table 7: Cross-cutting Issues on Resource Mobilisation, Information Dissemination and Enacting and Enforcing Regulations

Non-Health MDA Involved in the Response	Existing and Ongoing Efforts by Non-Health MDA Involved in the Response
Federal Ministry of Trade and Industry (FMoTI)	Responsible for enforcing existing excise duty rate on tobacco(20%) and encouraging investments in healthcare.
Federal Ministry of Information and Culture (FMoIC)	Responsible for disseminating information on national priorities. Works in synergy with Agencies such as National Broadcasting Commission and National Orientation Agency to disseminate information.
Federal Ministry of Labour and Employment (FMLP)	Currently no NCD specific response but will be responsible for creating workplace policies that promote healthy work environments and physical activity.
Federal Ministry of Justice (FMOJ)	Responsible for sector wide legislative reforms by drafting and gazetting laws and regulations for reforms.
Federal Ministry of Environment (FMEn)	Responsible for the development and enforcement of environmental standards and regulations including food safety inspection.
Federal Ministry of Education (FMoE)	Responsible for instituting physical education in school curriculum and enforcing standards for physical education in schools and their environments. Responsible for instituting additional NCD education (nutrition, drug abuse etc.)
Federal Competition and Consumer Protection Commission (FCCPC)	Consumer education and assessment of products.
Federal Ministry of Youths and Sports (FMYS)	Responsible for sports development programmes.

3.2.3. Constraints to NCDs Prevention and Control in Nigeria

The following health and non-health sector constraints impede NCD prevention and control in Nigeria:

1. The poor use of up-to-date evidence for policy and service delivery decision making for NCDs prevention and control;
2. Weak surveillance and data management system for NCDs. The National Health Management Information System does not comprehensively capture NCDs;
3. Lack of up-to-date and nationally representative data on NCDs. Currently, Nigeria relies on estimates from the 1990-1992 NCD survey, which is too out dated and practically unsuitable for planning purposes;
4. Inadequate funding for NCD control and prevention from both domestic and international sources;
5. Poor coverage of NCDs in benefits package and basic healthcare provision fund of NHIS, as well as the Minimum Standards for Primary Health Care in Nigeria;
6. Poor coverage of NCD drugs and commodities in the Essential Medicines List;
7. Poor integration between NCDs and existing health services for communicable diseases at all levels of care;
8. Lack of policies/strategic plan of action for physical inactivity, unhealthy diet, and harmful alcohol intake; and,
9. Slow progress in developing regulations for enforcing some aspects of the National Tobacco Act 2015.

3.2.4. Potential Future Direction for NCD Prevention and Control in Nigeria

- Establish adequate surveillance, monitoring and evaluations systems for NCD prevention and control including periodic STEPwise survey to determine the burden of NCDs in Nigeria;
- Establish an effective coordination mechanism, legislation and build multi-sectoral collaboration for NCDs prevention and control;
- Integrate NCDs management into primary healthcare services;
- Mobilize resources for NCDs control and prevention in the country;
- Establish a research agenda for NCDs prevention and control in the country.

3.2.5. SWOT Analysis for a Multi-Sectoral Response to NCDs in Nigeria

3.2.5.1. Strength

- Nigeria is party to the WHO FCTC and has passed the National Tobacco Act in 2015.
- There is existing NCD Division in the Department of Public Health of the Federal Ministry of Health.
- NCDs included in the current National Strategic Health Development Plan (2017-2022).

3.2.5.2. Weakness

- Poor NCD coordination mechanism at the State and Local Government levels.
- Paucity of nationally representative data on NCD risk factors and diseases.
- Poor leveraging on existing resources from HIV/TB/malaria/RMNCH control programs to strengthen health system response to NCDs.
- Lack of standardized national NCD reporting mechanism.
- Weak regulations for the control of alcohol, foods and beverages.

3.2.5.3. Opportunities

- Commitment of the management of the Federal Ministry of Health to regulate the National Tobacco Act 2015.
- Increased excise taxes from tobacco control can be channelled to fund healthcare especially NCDs.
- Re-inauguration of the multi-sectoralaction committee.
- The overwhelming support and collaboration of WHO and Nigeria State Governments provides an opportunity for the Federal Ministry of Health to undertake the STEPS survey and pilot the WHO PEN.
- Ongoing pilottesting of the WHO package on non-communicable diseases at the primary health care centres in Nigeria.
- A well-established office for management of Sustainable Development Goals.

3.2.5.4. Threats

- Other competing national priorities e.g. curbing insurgency from boko haram in the North-East,Niger Delta militancy in the South-South, control of epidemic prone diseases and other health emergencies.
- Dwindling funding from donors globally.
- Low level of awareness on NCDs.
- Tobacco Industry interference.

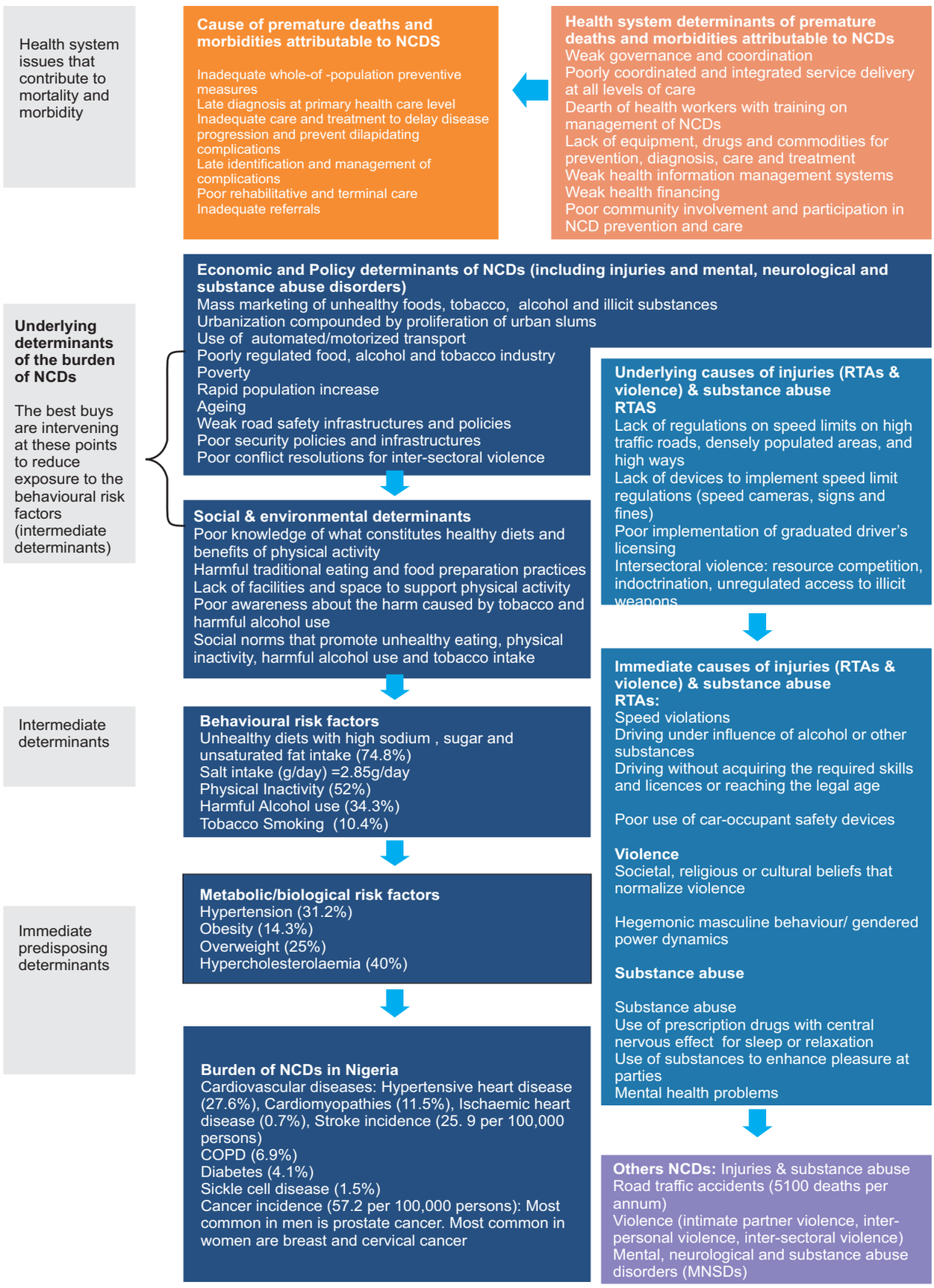


Figure 4: Scheme of Situation Analysis of NCDs

4. SCOPE AND STRUCTURE OF THE PLAN

4.1. Rationale for NMSAP

Nigeria is undergoing an epidemiological transition resulting in a double burden of communicable and non-communicable diseases; however, communicable diseases far more attention than non-communicable diseases. The prevention and control of NCDs lie partly in sectors outside of health sector and so a multi-sectoral approach is required to address them.

The prevention and control of NCDs do not lie within the health system alone, a whole-of-government, a whole-of-society and a multi-sectoral approach is needed to tackle NCDs. Thus, the need to involve a wide range of relevant stakeholders such as the Ministries of Power, Works & Housing, Finance, Agriculture and Rural Development, Information and Communication, Education, Women Affairs and Youth Development, Labour and Employment, Trade and Investment, Environment, Sports and Social Development, Budget and National Panning Commission, Competition and Consumer Protection Council, NAFDAC, SON, NPHCDA as well as the Civil Society Organizations cannot be overemphasized. The involvement of these stakeholders in the development of this strategic plan of action is crucial in creating a sense of ownership.

This document, therefore, is intended to provide government and all relevant stakeholders a framework for designing and implementing programmes and interventions that will address NCDs beyond the health sector. It will span a period of seven years (2019 - 2025) and it is in line with the National Health Strategic Development Plan II (NHSDP II) and the Sustainable Development Goals 2015-2030 and the Economic Recovery and Growth Plan.

4.2. Scope of the NMSAP

The National Multi-Sectoral Action Plan for the prevention and control of NCDs (2019 – 2025) has been developed in recognition of the huge contribution of NCDs to the burden of disease in Nigeria. Except for sickle cell disease, injuries and mental, neurological and substance abuse disorders, the major NCDs share common modifiable risk factors (tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol), and therefore an integrated approach is more cost effective than individual diseases approach. These integrated approaches are comprehensively outlined in the WHO "Best Buys" and other recommended interventions for the prevention and control of NCDs.

This plan covers the prevention and control of the following NCDs; CVD, diabetes, cancers, chronic respiratory diseases, sickle cell disease, injuries from road traffic crashes and mental, neurological and substance abuse disorders.

4.3. Linkage with Existing Global and National Plans

This multi-sectoral action plan for NCD prevention and control adopts an integrated approach.

The plan aligns with the Global Action Plan (GAP) on Prevention and Control of NCDs 2013 – 2020 and the Sustainable Development Goals (SDGs).

4.3.1. International Resolutions and Declarations that Informed the Development of the NMSAP

I. WHO Framework Convention on Tobacco Control (WHO FCTC) (Resolution WHA56.1).
II. Global Strategy on Diet, Physical Activity and Health (Resolution WHA57.17).
III. Global Strategy to Reduce the Harmful Use of Alcohol (Resolution WHA63.13).
IV. The Brazzaville Declaration on Non-Communicable Diseases Prevention and Control in the WHO African Region 2011.
V. Moscow Declaration at the First Ministerial Conference on Healthy Lifestyles and Non-Communicable Diseases Control 2011.
VI. Political Declaration of the High-Level Meeting of the General Assembly on the Prevention and Control of Non-Communicable Diseases: A/RES/66/2(2011)

4.3.2. National Plans that Informed the Development of the NMSAP

I. Economic Recovery and Growth Plan (2017).
II. National Strategic Health Development Plan (NSHDP) 2017 – 2022.
III. National Health Act (NHA).
IV. National Tobacco Control Act (NTCA).
V. National Health Policy 2004.

4.4. Structure of the NMSAP

The plan has an overarching vision, mission, goal and target statements. The plan has 5 specific objectives that will help in meeting these statements. Each of the objectives has strategic areas that capture the specific issues/challenges to be addressed in NCDs prevention and control. Each of the strategic areas has priority interventions which are evidence-informed and cost-effective interventions that responds to the issues and challenges in NCDs prevention and control outlined in the strategic area. Each priority intervention in turn has priority actions that will need to be taken to achieve universal coverage of the priority intervention. The priority actions are further broken down into activities and sub-activities in the implementation plan. The MDA or organization responsible for each activity and time frame are also clearly stated.

The strategic areas for each objective and their priority intervention will make up the strategic framework, while the priority actions, activities, sub-activities, time frame and organization responsible make up the implementation plan. The schema below is a pictorial representation of the structure of the plan.

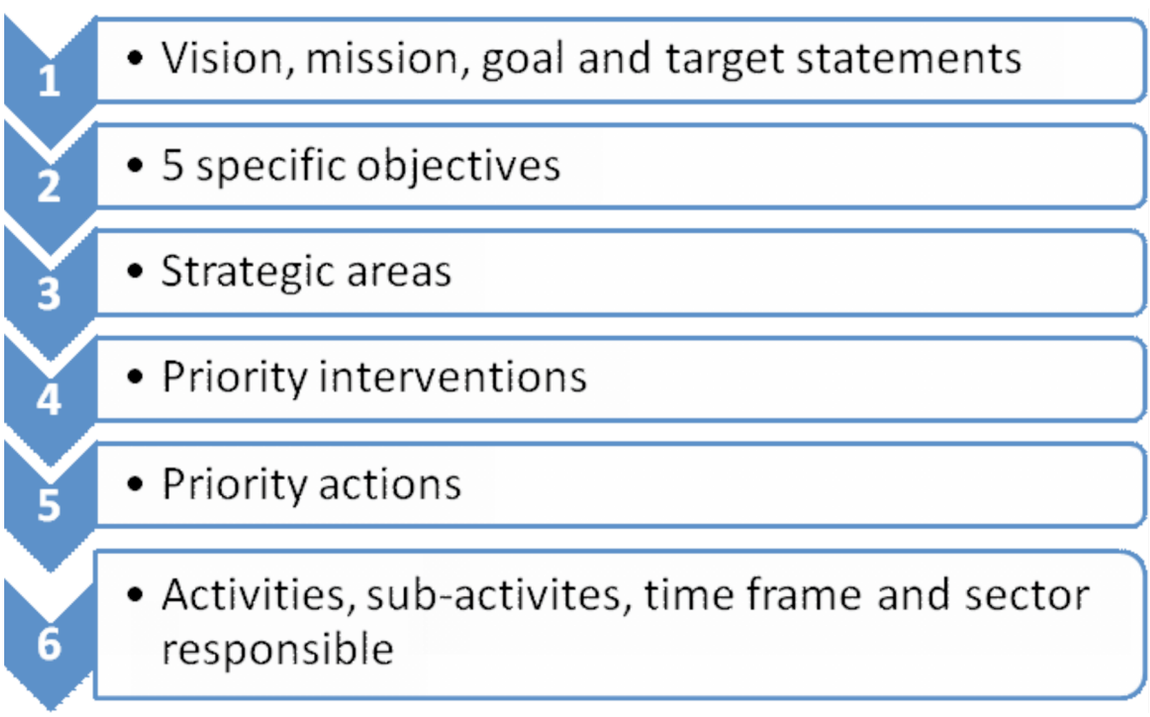


Figure 5: ***Structure of the MSAP***

5. NATIONAL STRATEGIC AGENDA FOR NCDS

5.1. Vision

A healthy Nigerian population with reduced burden of non-communicable diseases and enhanced quality of life for socio-economic development.

5.2. Mission

To provide a framework for strengthening multi-sectoral response to NCDs

Goal

To significantly reduce the burden of non-communicable diseases in Nigeria in line with global non-communicable diseases prevention and control targets.

5.3. Specific National Targets

5.3.1. Target Statements

The implementation of the MSAP aims to achieve these specific national targets as adapted from global NCD goals and SDGs are to achieve;

- At least25% relative reduction in unconditional probability of dying prematurely from cardiovascular diseases, cancer, diabetes, chronic respiratory disease, sickle cell disease, injuries, mental, neurological and substance abuse disorders.
- At least 10% relative reduction in the harmful use of alcohol.
- At least 10% relative reduction in prevalence of insufficient physical activity.
- At least 30% relative reduction in mean population intake of salt/sodium(>5gm/2gm/day).
- At least 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years.
- At least 25% relative reduction in the prevalence of raised blood pressure.
- At least 25% relative reduction in the prevalence of diabetes.
- At least 25% relative reduction in the prevalence of obesity.
- At least 50% absolute reduction in the number of deaths and injuries from road traffic crashes.
- At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks.
- An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities.

- At least 80% uptake of vaccines for carcinogenic viruses (HBV, high risk HPV serotypes and Pneumococcal vaccination among children).
- At least 80% of eligible population screened for early detection and management of NCDs.
- At least 80% of persons with NCDs have access to quality treatment facilities.
- At least 80% of adults are aware of their haemoglobin genotype.

5.3.2. Annual Progression for National Targets

The annual progression for the national targets is shown in the tables below. The data sources were from the meta-analysis and literature review. The annual progression facilitates tracking outcomes of NMSAP on an annual basis using the data available.

Table 8: ***National Progressions Towards Achieving Targets for Reducing the Burden of NCDs***

NCD or risk factor	2017/2018 (Baseline)	2019	2020	2021	2022	2023	2024	2025	Data source for baseline
Premature mortality from NCD (% of all NCD deaths occurring below 70 years)	71.00	66.56	64.34	62.13	59.91	57.69	55.47	53.25	WHO
Harmful use of alcohol (prevalence, %)	34.30	33.44	33.01	32.59	32.16	31.73	31.30	30.87	Meta-analysis
Physical inactivity (prevalence, %)	74.80	72.93	72.00	71.06	70.13	69.19	68.26	67.32	Meta-analysis
Salt/sodium intake (gram/day)	10.00	9.00	8.00	7.00	6.00	5.00	4.00	3.00	Oyebode 2016[10]
Tobacco use (prevalence, %)	5.60	5.18	4.97	4.76	4.55	4.34	4.13	3.92	GATS 2012
Raised blood pressure (prevalence, %)	31.20	29.25	28.28	27.30	26.33	25.35	24.38	23.40	Meta-analysis
Diabetes (prevalence, %)	4.10	3.84	3.72	3.59	3.46	3.33	3.20	3.08	Meta-analysis
Obesity (prevalence, %)	14.30	13.41	12.96	12.51	12.07	11.62	11.17	10.73	Meta-analysis
Annual number of deaths from road traffic accidents	5121	4801	4481	4161	3841	3521	3201	2881	Meta-analysis
Annual number of injuries from road traffic accidents	31094	29151	27208	25265	23322	21379	19436	17493	Meta-analysis
Sickle cell disease (prevalence, %)	1.50	1.41	1.36	1.31	1.27	1.22	1.17	1.13	Meta-analysis

Table 9: Annual Progression Towards Achieving Targets for Scaling Up NCD Prevention, Care and Treatment Interventions

Intervention coverage (%)	2018	2019	2020	2021	2022	2023 (National target)	2024	2025
Drug therapy to prevent CVD	7.13	13.25	19.38	25.50	31.63	37.75	43.88	50.00
Essential NCDs medicines and basic technologies to treat major NCDs	10.88	20.75	30.63	40.50	50.38	60.25	70.13	80.00
Uptake of vaccines for carcinogenic viruses (HBV, high risk HPV serotypes and pneumococcal vaccination among children)	10.88	20.75	30.63	40.50	50.38	60.25	70.13	80.00
Proportion of eligible population screened for early detection and management of NCDs	10.88	20.75	30.63	40.50	50.38	60.25	70.13	80.00
Access to quality treatment facilities for persons with NCDs	10.88	20.75	30.63	40.50	50.38	60.25	70.13	80.00
Proportion of Adults who are aware of their genotype	10.88	20.75	30.63	40.50	50.38	60.25	70.13	80.00

****Baseline coverage based on assumption agreed by stakeholders*

5.4. Objectives

The specific objectives of this plan are:

1. To strengthen governance and stewardship for NCD prevention and control;
2. To promote healthy lifestyle and implement interventions to reduce modifiable risk factors for NCDs;
3. To strengthen and orient health systems to address prevention and control of NCDs at all levels of care and contribute to the attainment of universal health coverage;
4. To monitor trends and determinants of NCDs and evaluate progress in their prevention and control; and,
5. To promote and support national capacity for quality research and development for the prevention and control of NCDs.

6. STRATEGIC FRAMEWORK FOR NMSAP

6.1. Strategic Areas and Priority Interventions

Each Strategic Objective has a list of strategic areas. These strategic areas are focused on the risk factors or diseases being addressed by the NMSAP. In turn, each strategic area has a list of priority intervention. These priority interventions were adapted from WHO recommendations for tackling NCDs, injuries from road traffic crashes and mental, neurological and substance abuse disorders. Each priority intervention will require policy, population-wide or health system actions to implement them and achieve universal access and coverage. These priority actions are also considered in this strategic framework.

6.1.1 Objective One: To Strengthen Governance and Stewardship for NCD Prevention and Control

Governance for preventing non-communicable diseases involves steering the entire country, states and communities towards the collective pursuit of health and well-being. It involves setting up mechanisms and platforms that are collaborative and participatory. These mechanisms must involve both health and non-health actors. They must also involve non-governmental stakeholders such as bilateral and multi-lateral agencies, donors, private sector, academia, professional bodies, civil society and non-governmental organizations.

Table 10: MSAP Strategic Areas and Priority Interventions for Governance and Stewardship for NCD Prevention and Control

Strategic Area	Priority Interventions
1.1. To strengthen governance, coordination, collaboration and leadership.	1.1.1. Establish a national coordination mechanism 1.1.2. Establish a mechanism for advocacy on NCDs prevention and control at all levels 1.1.3. Establish a Multi-Sectoral Technical Working Group (TWG) on prevention and control of NCDs 1.1.4. Increase and prioritize budgetary allocation for prevention and control of NCDs 1.1.5. Periodic reviews of existing policies and development of policies as necessary
1.2. To strengthen multi-sectoral action on NCDs	1.2.1. Establish partnerships with global and regional stakeholders for NCD prevention and control with clearly defined roles

Considerations/Priority Actions
Considerations: The national coordination mechan ism will involve a high-level coordinating body that either operates above the ministerial level (under the presidency) or within the Federal Ministry of Health. This coordination mechanism will be duplicated across all tiers of government . NCD Alliance ex ists but there is poor synergy between the alliance and FMoH and other advocacy organizations working in NCDs. There is currently no budget line for NCD prevention and control activities. ***Priority Actions*** 1. Establish a national coordination mechanism for NCDs 2. Strengthen advocacy for NCD prevention and control at all levels 3. Strengthen FMoH capacity to provide leadership and coordination for NCDs 4. Secure budgetary allocation for NCD prevention and control 5. Establish a multi-sectoral technical working group on NCD prevention and control 6. Establish partnerships with global and regional alliance for NCD prevention and control

6.1.2 Objective Two: To Promote Healthy Lifestyle and Implement Interventions to Reduce Modifiable Risk Factors for NCDs

In line with the Ottawa and Bangkok Charter on Health Promotion12, this objective recognizes the need to create health promoting policies and environments that will influence individuals to make healthier lifestyle/behavioural choices. These policy level approaches reduce modifiable risks and prevent onset of new cases of NCDs and reduce the economic costs of treating and managing these NCDs. Therefore, policy and population-wide efforts will be directed at reducing the use of tobacco, reducing the harmful use of alcohol, promoting healthy diets and physical activity, reducing injuries, reducing the burden of mental, neurological and substance abuse disorders.

Table 11: Priority Areas and Interventions to Promote Healthy Lifestyle

Priority Area	Priority Interventions
1.1 Reduce tobacco use	1.1.1 Increase excise taxes and prices on tobacco products 1.1.2 Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages 1.1.3 Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship 1.1.4 Reduce exposure to second-hand tobacco smoke 1.1.5 Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke
1.2 To reduce the harmful use of alcohol	1.2.1 Increase excise taxes on alcohol beverages 1.2.2 Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising across multiple channels 1.2.3 Enact and enforce restrictions on the physical availability of retailed alcohol via providing sales of alcohol in only licensed premises 1.2.4 Enact and enforce drink-driving laws and blood alcohol concentration limits via sobriety checkpoints
1.3 Promote healthy diets	1.3.1 Reduce salt intake through the reformulation of processed food products to contain less salt, set target levels for processed foods and adopt standards for front-of-pack labelling 1.3.2 Reduce sugar consumption through effective taxation on sugar-sweetened products 1.3.3 Promote, protect and support exclusive breastfeeding within the first hour of birth and for the first 6 months of life. 1.3.4 Replace trans-fats and saturated fats with unsaturated fats through reformulation, labelling using fiscal policies and/or agricultural policies 1.3.5 Limiting portion and package size to reduce energy intake and the risk of overweight/obesity 1.3.6 Implement nutrition education and counselling, mass media and behaviour change campaign on healthy diets including social marketing to reduce the intake of total fat, saturated fats, sugars and salt, and promote the intake of fruits and vegetables

1.4 Promote physical activity	1.4.1 Implement community-wide public education and awareness campaign for physical activity 1.4.2 Provide physical activity counselling and referral as part of routine primary health care services. 1.4.3 Ensure that macro-level urban design incorporates the core elements of residential density, connected street networks that include sidewalks, easy access to a diversity of destinations and access to public transport 1.4.4 Provide convenient and safe access to quality public open space and adequate infrastructure to support walking and cycling 1.4.5 Reinforce whole-of-school programme that includes quality physical education, availability of adequate facilities and programs to support physical activity for all children 1.4.6 Implement multi-component physical activity programmes and organize sport groups
1.5 Promote road safety and reduce injuries from road traffic crashes	1.5.1 Reduce exposure and risk to road traffic crashes through implementation of existing speed restriction and road safety policies 1.5.2 Enforce visibility for cyclers, bikers (e.g. through use of reflective jackets) and vehicles (e.g. high mounted head lamps) 1.5.3 Enforce the use of crash-protective devices in vehicles (e.g. seatbelts, age appropriate car-seats for infants)
1.6 To reduce the number of new cases of sickle cell disease	1.6.1 Raise public awareness on pre-marital/pre-conception screening for sickle cell disease using Point-of-Care devices. 1.6.2 Scale up universal screening for sickle cell disease using Point-of-care devices 1.6.3 Promote collaborative work with FBO, religious and traditional leaders

1.7	To prevent Mental Neurological and Substance use Disorders (MNSD)	1.7.1	Public awareness on the harms associated with substance abuse (including illicit substance use and misuse of prescription medication)
		1.7.2	Advocacy for de-criminalization of substance abuse users
		1.7.3	Include psycho-education for depression and suicide prevention in education curriculum
		1.7.4	Conduct a national survey on MNSD

Considerations/Priority Actions

- **Reduce Tobacco Use**

Consideration:

There is a National Tobacco Control Act, 2015 in place already. This Act will enable implementation of all the priority interventions. However, the regulations that will enable implementation of this Act is yet to be drafted. However, there are also some aspects of the Act that can be enforced without formal regulations.

Priority Actions:

1. Prioritization of effective implementation and enforcement of the National Tobacco Control Act, 2015.
2. Monitor tobacco use and prevention policies pursuant to WHO FCTC Article 20.
3. Institute an effective tobacco tax measure and fiscal resources to help meet public health fiscal needs.

- **Reduce the harmful use of alcohol**

Consideration:

There is no legislation, regulation or policy on alcohol control. However, there is a presidential approval to enforce new excise duty for alcoholic beverages. The new specific excise duty rate for alcoholic beverages cuts across beer and stout, wines and spirits for the three years, 2018 to 2020. Beer and stout will attract 0.30k per centilitre (Cl) in 2018 and 0.35k per Cl each in 2019 and 2020.Wines will attract N1.25k per Cl in 2018 and N1.50k per Cl each in 2019 and 2020, while N1.50k per Cl was approved for spirits in 2018, N1.75k per Cl in 2019 and N2 per Cl in 2020.

However, it is envisaged that this approval will be sustained by subsequent administrations

Priority Action:

To develop a national alcohol control policy

- **Promote healthy diets**

Consideration:

There is supporting legislation through the NAFDAC Act to support additional/new regulations on reformulation to reduce salt and replace trans-fats and saturated fats with unsaturated fats in industrially produced foods.

Considerations/Priority Actions
WHO has developed the SHAKE technical package to support development, implementation and monitoring of salt reduction strategies at population level. The package outlines evidence-informed policies and interventions which have proved to be effective in reducing population salt intake, provides evidence of the efficacy of the recommended interventions. This technical package will guide the development of reformulation regulations to reduce salt intake. WHO has also developed the REPLACE technical package to guide policy actions aimed at reducing and eliminating industrially packaged trans-fats. This technical package will also guide the development of reformulation regulations for replacing trans-fats and saturated fats with unsaturated fats. Other aspects of healthy eating that cannot be addressed through policies can be achieved through raising public awareness and health promotion in schools and communities. **Priority Actions:** 1. Develop a regulation on reformulation of industrially produced foods to reduce salt content and replace trans-fats and saturated fats with unsaturated fats. 2. Implement mass media campaigns to promote healthy diets. 3. Strengthen nutritional education in primary and secondary school curriculum. 4. Develop and implement a policy on marketing sweetened foods and non-alcoholic beverages to children.
• **Promote physical activity** **Consideration:** There are existing policies or regulations on the design of public infrastructures, residential areas, roads, and public transport to promote physical activity under the healthy city initiative. There are also existing policies and regulations to promote physical activity in schools and workplaces. **Priority Actions:** 1. Implement effective mass media campaigns that educate the public on the benefits of physical activity. 2. Strengthen physical activity in schools. 3. Create active environments in workplace and public spaces.
• **Promote road safety and reduce road traffic crashes** **Consideration:** There are existing policies or regulations being enacted and implemented by the Federal Road Safety Commission to implement speed limits and crash-prevention strategies. There are also existing messages to promote road safety. The gap is in terms of enforcement and public awareness. **Priority Actions:** 1. Implement effective mass media campaigns that educate the public on road safety, speed restrictions and crash-reduction measures. 2. Enforce existing regulations on speed restriction.

Considerations/Priority Actions

- **Reduce the number of babies born with sickle cell anaemia**

Consideration:

There are existing messages to raise public awareness on sickle cell but the media do not have the technical knowledge to disseminate these messages correctly. There are existing policies that make it mandatory to screen for haemoglobin genotype before getting regulatory identity documents (international passport, driver's license etc.);however, this is not adequately implemented. Faith-based organizations have also been conducting pre-marital screening for haemoglobin genotype without legislative support. Because of the unique opportunity it provides to raise awareness and promote informed decision on conception, pre-marital screening needs to be scaled up through legislative support.

Priority Actions:

1. Scale-up capacity to disseminate information on sickle cell disease.
2. Scale-up universal screening for sickle cell at multiple channels using point-of-care devices.

- **Prevent mental, neurological and substance abuse disorders (MNSD)**

Consideration:

There is poor awareness about the harms associated with substance abuse. There is currently no nationally representative survey on MNSD. Community level programs to prevent some mental health conditions have been piloted in Nigeria through the Mental Health GAP programme (MHGAP). Persons involved in substance abuse are currently being criminalized and this is a serious constraint to adequate care and treatment.

Currently, there is no legislation to guide care and treatment of mental health problems in Nigeria. The Lunacy Act of 1958 which was enacted during the colonial era promotes prejudice, stigma and discrimination of people living with or affected by mental health problems. Therefore, there is need for legislative reforms on mental health in Nigeria. This will ensure that the dignity and fundamental human rights of people living with/affected by mental health problems are upheld.

A National Mental Health Policy was developed in 2013 and there is need to review and update the policy to align with global response and priorities.

Priority Action:

1. Repeal the lunacy act of 1958 and replace it with a more evidence-informed law that is grounded in human rights principles.
2. Implement effective mass media and advocacy campaigns to raise awareness on prevention, promotion and access to care for MNSD.
3. Review and update the 2013 National Mental Health Policy to align with global response and priorities.

6.1.3 Objective Three: To Strengthen and Orient Health Systems to Address Prevention and Control of Non-Communicable Diseases at All Levels of Care and Contribute to the Attainment of Universal Health Coverage

A strong, resilient, effective and efficient health system is important to prevent NCDs and also to respond to the rising burden. Health systems should efficiently integrate health promotion, disease prevention, chronic care management, response to acute/emergency cases and rehabilitative or long-term support/end of life care for NCD control.

This objective aims at scaling up the coverage and access to evidence-informed and cost-effective interventions for NCD care and treatment. It also aims to remove all barriers (especially financial barriers) to management of risk factors in people at high-risk as well as chronic care and treatment in persons with NCDs.

This objective will emphasize improved patient pathways to care, better coordination and integration in service delivery and patient retention through patient-centred approaches.

Table 12: ***Priority Areas and Interventions to Strengthen Health Systems to Address NCDs***

Priority Area	Priority Interventions
1.1 To manage cardiovascular risk factors (hypertension and diabetes)	1.1.1 Assessment of risk for diabetes and hypertension, using a risk assessment tool 1.1.2 Provision of drug therapy (including glycaemic control for diabetes mellitus and control of hypertension) 1.1.3 Assessment of risk of adverse CVD in patient with diabetes and hypertension 1.1.4 Counselling to individuals who have had a heart attack or stroke and to persons with high risk (≥ 30%) of a fatal and non-fatal cardiovascular event in the next 10 years

Priority Area	Priority Interventions
1.2 To manage cardiovascular diseases including Acute MI, Rheumatic fevers, Rheumatic Heart Disease, Heart Failure, CCF (chronic cardiac/heart failure)and stroke)	1.2.1 Treatment of new cases of acute myocardial infarction with either: Acetylsalicylic acid (Aspirin) and/or Clopidogrel, or thrombolysis across all levels 1.2.2 Primary prevention of acute rheumatic fever and rheumatic heart diseases by increasing appropriate treatment of streptococcal pharyngitis at the primary care level 1.2.3 Appropriate management of congestive cardiac failure 1.2.4 Appropriate anticoagulation therapy for medium-and high-risk non-valvular atrial fibrillation +/- mitral stenosis 1.2.5 Appropriate treatment of confirmed ischemic stroke with low-dose acetylsalicylic acid (aspirin) 1.2.6 Appropriate care of acute stroke and rehabilitation in stroke units
1.3 To manage diabetes	1.3.1 Lifestyle interventions for preventing type-2 diabetes 1.3.2 Effective glycaemic control for people with diabetes, along with standard home glucose monitoring for people treated with insulin to reduce diabetes complications 1.3.3 Screening of people with diabetes for proteinuria and treatment with angiotensin-converting-enzyme inhibitor for the prevention and delay of renal disease 1.3.4 Preconception care among women of reproductive age who have diabetes including patient education and intensive glucose management 1.3.5 Preventive foot care for people with diabetes (including educational programmes, access to appropriate footwear, multidisciplinary clinics) 1.3.6 Diabetic retinopathy screening for all diabetes patients and laser photocoagulation for prevention of blindness
1.4 To manage cancers	1.4.1 Vaccination against human papillomavirus (2 doses) of 9–13-yearsfemales 1.4.2 Prevention of cervical cancer by screening women aged 30-59 years either through: • Visual inspection with acetic acid linked with timely treatment of pre-cancerous lesions

Priority Area	Priority Interventions
1.4 To manage cancers	• Pap smear (cervical cytology) every 3–5 years linked with timely treatment of pre-cancerous lesions; • Human papillomavirus tests every 5 years linked with timely treatment of pre-cancerous lesions 1.4.3 Screening for early detection of breast cancer (once every 2 years for women aged 40-70 years, possible use of ultra-sound, mammography) linked with timely diagnosis and treatment of breast cancer 1.4.4 Prostate Specific Antigen (PSA) for Benign Prostatic Hyperplasia (BPH) screening for prostate cancer in males 40 years and above 1.4.5 Treatment of colorectal cancer stages I and II with surgery +/- chemotherapy and radiotherapy 1.4.6 Treatment of cervical cancer stages I and II with either surgery or radiotherapy +/- chemotherapy 1.4.7 Treatment of breast cancer stages I and II with surgery +/- chemotherapy. 1.4.8 Basic long-term care and end-of-life care for cancer: hospital care with multi-disciplinary team and access to opiates and essential supportive medicine 1.4.9 Prevention of liver cancer through Hepatitis B immunization 1.4.10 Oral cancer screening in high-risk groups (for example, tobacco users, betel-nut chewers) linked with timely treatment 1.4.11 Population-based colorectal cancer screening, including through a faecal occult blood test, as appropriate, at age >50, linked with timely treatment 1.4.12 Promote use of sunscreen for prevention of skin cancers

Priority Area	Priority Interventions
1.5 To manage chronic respiratory disease	1.5.1 Symptom relief for patients with asthma with bronchodilators (e.g. inhaled Salbutamol) 1.5.2 Symptom relief for patients with chronic obstructive pulmonary disease with inhaled salbutamol 1.5.3 Treatment of asthma using low dose inhaled Beclometasone and short acting beta agonist 1.5.4 Access to improved stoves and cleaner fuels to reduce indoor air pollution 1.5.5 Cost-effective interventions to prevent occupational lung diseases, for example, from exposure to silica, asbestos 1.5.6 Influenza vaccination for patients with chronic obstructive pulmonary disease 1.5.7 Control of environmental air pollution from vehicular and stationary generator emissions
1.6 To manage sickle cell disease	1.6.1 Integrate genetic counselling in routine health services 1.6.2 Ensure availability and access of routine drugs and drugs that prevent anaemia and sickle cell crisis. 1.6.3 Institutionalize universal new-born screening
1.7 To manage mental, neurological and Substance abuse disorders	1.7.1 Integrate and scale-up management of common mental health disorders and suicide prevention strategies into services provided at PHCs 1.7.2 Scale up community-based care for low cost rehabilitation for children and adults with chronic mental illness 1.7.3 Ensure availability of drugs for treatment of mental “disorders” 1.7.4 Scale up psychosocial interventions for substance use disorders

Considerations/Priority Actions

Considerations:

There are existing policy and health financing constraints that impede universal access and coverage of these priority interventions. Therefore, the priority actions are aimed at removing these constraints. NCD prevention, care and treatment are not currently included in the minimum service package for primary health care in Nigeria.

Considerations/Priority Actions
There is no technical and clinical guidance on providing integrated services for NCDs prioritized in this document. Comprehensive NCD care and treatment is not included in the Basic Minimum Package of Health Services that will be financed through the Basic Health Care Provision Fund. NPHCDA does not currently implement life-course vaccination program. Therefore, there is no mechanism to scale-up hepatitis B virus vaccination to adults. However, there is an existing plan to roll-out HPV vaccine to girls aged 9-13 years. **Priority Actions:** 1. Integrate NCD prevention, care and treatment into basic primary health care with referral to all levels of care. 2. Build the capacity of health workers at all levels of care on integrated management of essential NCDs (CVD, diabetes, cancer, COPD, Sickle cell disease, MNSD and injuries). 3. Scale-up coverage of early detection and diagnosis at primary health care level. 4. Scale-up coverage of NCD prevention services at all levels of care. 5. Scale up care and treatment services for NCDs (CVD, diabetes, cancer, COPD, Sickle cell disease, MNSD and injuries) at all level of care. 6. Explore viable health financing mechanisms.

6.1.4 Objective Four: To Monitor Trends and Determinants of Non-Communicable Diseases and Evaluate Progress in their Prevention and Control

This objective recognizes and emphasizes the need for adequate health information for planning and implementing NCD control programs. Therefore, this objective aims to achieve adequate and timely data collection and analysis for monitoring and surveillance for NCDs.

Table 13: ***Priority Areas for Monitoring Trends and Evaluating Progress in NCD Prevention and Control***

Priority Area	Priority Interventions
1.1 To incorporate NCD into national health information system	1.1.1 Develop national targets and indicators for service delivery and multi-sectoral policy and plans based on global monitoring framework

Priority Area	Priority Interventions
1.2 To strengthen national NCD surveillance system including capacity	1.2.1 Establish and/or strengthen a comprehensive NCD surveillance system, including reliable registration of births of children with sickle cell and deaths by cause, periodic and routine data collection on risk factors and monitoring national response 1.2.2 Strengthen institutional capacity for surveillance and monitoring and evaluation 1.2.3 Strengthen human resources for surveillance and monitoring and evaluation 1.2.4 Integrate NCD surveillance and monitoring into national health information systems
1.3 To improve monitoring and evaluation of NCD programs	1.3.1 Monitor trends and determinants of NCDs and evaluate progress in their prevention and control

Considerations/Priority Actions

Considerations:

NCDs are not adequately captured in the national health management information system. The indicators are very few and focus on only new cases of diseases identified at service delivery points. The technical capacity (human resources, equipment and tools) required for surveillance is currently limited. Nationally representative Global Youth Tobacco Survey, STEPwise and MNSD surveys are yet to be conducted.

Priority Actions:

1. Integrate NCDs service delivery performance monitoring indicators into the National Health Management information system.
2. Strengthen technical capacity for NCD surveillance, monitoring and evaluation.
3. Integrate NCD surveillance system into civil registration and vital statistics systems.
4. Conduct periodic surveys on NCDs.

6.1.5 Objective Five: To Promote and Support National Capacity for Quality Research and Development for the Prevention and control of Non-Communicable Diseases

Research is important for evidence-informed decision-making on multi-sectoral NCD prevention and control. This will require a concerted effort to develop, implement and disseminate a national research agenda.

Table 14: ***Priority Areas and Interventions for Research on NCD Prevention and Control***

Priority Area	Priority Interventions
1.1 To set national research agenda	1.1 1 Develop and implement a prioritized national research agenda for NCDs 1.1.2 Prioritize budgetary allocation for research on NCD prevention and control
1.2 To strengthen national capacity for NCD research	1.2.1 Strengthen human resources and institutional capacity for research on NCDs 1.2.2 Strengthen research capacity through cooperation with foreign and domestic research institutes
1.3 To strengthen knowledge generation, translation and dissemination	1.3.1 Improve collaboration among research bodies in NCDs 1.3.2 Develop a mechanism to disseminate findings on NCDs
Considerations/Priority Actions	

Considerations:

Researchers and research organizations are currently conducting research on burden of NCDs and interventions to address NCDs. However, there is poor cohesion between researchers and existing research do not align well with national priorities on NCD prevention and control. There is also paucity of funding for research.

Priority Actions

1. Develop and implement a prioritized research agenda for NCD prevention and control.
2. Secure budgetary allocation for research on NCD prevention and control.
3. Strengthen technical capacity for research on NCD prevention and control.
4. Strengthen collaboration with foreign and domestic research institutes.
5. Establish knowledge translation mechanisms for NCD prevention and control.

Implementation Plan for NMSAP

7 IMPLEMENTATION PLAN FOR NMSAP

7.1 Objective One: To Strengthen Governance and Stewardship for NCD Prevention and Control

Table 15: ***Priority Actions to Strengthen Governance and Stewardship for NCD Prevention and Control***

1.Priority Action: Strengthen Advocacy for NCD Prevention and Control at All Levels				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
1.1	Set up a national NCD advocacy group	1.1.1 Periodic update on mapping of all NGOs/CSOs working on NCDs in the country	Lead MDA: FMoH Others: SMOH, NCD Alliance	2019
		1.1.2 Form national advocacy committee	Lead MDA: FMoH Others: CSOs	2018
		1.1.3. Convene Biannual NCD advocacy group meeting	Lead MDA: FMoH Others: CSOs	2018-2025
1.2	Advocate to relevant government non-health sectors and private industries to deliver on targets outlined in the MSAP	1.2.1. Develop advocacy toolkits with key messages based on the MSAP	Lead MDA: FMoH Others: CSOs	2019
		1.2.2 Conduct high level advocacy visits and engagements to relevant sectors and industry	Lead MDA: FMoH Others: CSOs	2019

2. Priority Action: Establish a Multi-Sectoral Technical Working Group on NCD Prevention and Control				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
2.1	Set-up a multi-sectoral technical working group on NCD prevention and control with representatives from non-health government MDAs, CSOs, implementing partners and the commercial sector	2.1.1 Conduct a mapping of all the relevant non-health MDAs, CSOs, implementing partners and commercial sector	Lead MDA: FMoH	2019
		2.1.2 Bi-annual meeting of the TWG	Lead MDA: FMoH	2019-2025
		2.1.3 Mapping of already existing policy documents	Lead MDA: FMoH	2019
2.2	Build the capacity of multi-sectoral TWG members	2.2.1 Conduct capacity building needs assessment	Lead Sector: FMoH Others: FMBNP Development partners	2019
		2.2.2 Conduct annual capacity building workshops	Lead Sector: FMoH Others: FMBNP Development / partners	2019-2025

3. Priority Action: Strengthen the Capacity of FMoH to Provide Leadership and Co-ordination for NCDs				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
3.1	Conduct trainings for NCD Federal officers on the mechanisms and processes for reformulation and fiscal policies	3.1.1 Conduct a training needs assessment	Lead Sector: FMoH Others: FMBNP Development / partners	2019
		3.1.2 Conduct annual trainings on NCD control policies and programming	Lead Sector: FMoH Others: FMBNP Development / partners	2019
3.2	Equip the NCD division with all requisite equipment and tools to provide oversight on NCD policymaking and programming	3.2.1 Conduct a needs assessment for the equipment needs	Lead Sector: FMoH Others: FMBNP Development / partners	2019
		3.2.1 Conduct a needs assessment for the equipment needs	Lead MDA: NCD Division-FMoH Others: DPRS of FMoH	2019

4. Priority Action: Establish a Coordinating Mechanism on NCD Prevention and Control				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
4.1	Set up NCD National Governing Council at the Federal level	4.1.1 Set up an inter-ministerial coordination mechanism	Lead MDA: FMoH	2019
		4.1.2 Convene an annual high level inter-ministerial meeting on NCD prevention and control	Lead MDA: FMoH	2019
4.2	Set up state level NCD coordination units	4.2.1 Set up NCD units within the public health department of the State Ministries of Health with clear TORs and reporting lines	Lead MDA: FMoH	2019

4.2	Set up state level NCD coordination units	4.2.2	Designate focal persons to cover all the relevant diseases and issues in NCD control programming	Lead MDA: FMoH	2019
		4.2.3	Set up NCD units within the disease control department of the State Primary Health Care Development Agency	Lead MDA: FMoH	2019
4.3	Set up LGA level NCD focal point	4.3.1	Designate NCD focal persons in LGAs	Lead MDA: SPHCDB	2019
4.4	Conduct coordination meetings at all tiers of government	4.4.1	Convene biannual national/state level consultative meetings on NCD prevention and treatment in the health sector with heads of NCD divisions in the SMoH and SPHCDBs	Lead MDA: FMoH	2019

5. Priority Action: Establish Partnerships with Global and Regional Alliance for NCD Prevention and Control

Activity Code	Activities	Sub-activities		MDA Responsible	Time Frame
5.1	Establish global and regional partnerships for NCD prevention and control	5.1.1	Participate in regional and international events, dialogues and meetings for NCD prevention and control	All MDAs	2019 - 2025

6. Priority Action: Prioritize and Increase Budgetary Allocation for NCD Prevention and Control				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
6.1	Advocacy for resource mobilization for NCDs	6.1.1 Develop Key Performance Indicators to be used for the monitoring and evaluation of NCDs	Lead MDA FMoH Others: FMoF, FMBNP	2019
		6.1.2 Submit a request letter to the DPRS of the Ministry of the Budget and planning to include NCD KPI's on the National M&E report	Lead MDA:FMoH	2019
		6.1.3 Develop an advocacy brief that outlines the economic burden and loss due to NCDs	Lead MDA: FMoF, Others: FMBNP, FMoH	2019
		6.1.4 Advocacy to the Honourable Minister of Budget and Planning, (i.e. to ensure that fact sheet and other relevant documents are included)	Lead MDA: FMoH	2019
		6.1.6 Conduct a Press Briefing on NCDs	Lead MDA: FMoH Others: FMoIC	2019

7.2. Objective Two: To Promote Healthy Lifestyle and Implement Interventions to Reduce Modifiable Risk Factors for NCDs

Implementation strategy

A phased approach will also be used to implement the activities and sub-activities in this objective.

Legislative and policy interventions will involve various stages of achieving legislative and policy reforms in Nigeria.

Capacity building workshops and trainings will involve the following phases; development of a training curriculum and materials, training of trainers at the federal level and step-down trainings. The step-down trainings can further be cascaded. This entails a central training at geo-political zones with the participation of representatives from 5-6 states per zone. followed by state-level training with participation from various LGAs and relevant sectors. Ideally, a training session should not have more than 30 participants.

Program implementation activities will entail targeted pilot programmes in selected states which will then be scaled-up to other states or nation-wide.

7.2.1 Reduce Tobacco Use

Table 16: ***Priority Actions to Enforce the National Tobacco Control Act (2015)***

1. Priority Action: Effective Implementation, Prioritization and Enforcement of the National Tobacco Control Act of 2015				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
1.1	Secure approval for regulation in the National Assembly	1.1.1 Advocacy to leadership of the NASS	Lead MDA: FMoH Others: NTCA, FOMJ, NATOCC	2019
		1.1.2 Development of Tobacco Control Guidelines	Lead MDA: FMoH Others: NTCA, NATOCC	2019

1.2	Implement non-regulatory NTCA activities	1.2.1	Advocacy to enforcement agencies on provisions (NPF, SON, CPC, NCS, NSCDC)	Lead MDA: FMoH Others: NTCA, CPC, NSCDC, NPF, FMIC	2019 - 2020
		1.2.2	Capacity building for enforcement agencies and the development of joint enforcement operations for tobacco control i.e. a coalition of key enforcement agencies	Lead MDA: FMoH Others: NATOCC	2019
		1.2.3	Public awareness on the NTCA	Lead MDA: FMoH Others: MOIC	2019-2025
1.3	Implement all regulations in the tobacco control act of 2015	1.3.1	Advocacy to enforcement agencies and the development of joint enforcement operations for tobacco control i.e. a coalition of key enforcement agencies	Lead MDA: FMoH Others: NTCA, NATOCC, CCPC.NPF, NSCDC	2019 - 2025
		1.3.2	Development of enforcement plan for enforcement agencies		
		1.3.3	Convene sensitization meeting for hoteliers and managers of public places on smoke free environment	Lead MDA: FMoH Others: NATOCC	2019 - 2025
		1.3.4	Convene sensitization meeting for stakeholders in film/ entertainment industry	Lead MDA: FMoH Others: NATOCC	2019 - 2025

1.3	Implement all regulations in the tobacco control act of 2015	1.3.5	Convene national Tobacco Control Committee meeting	Lead MDA: FMoH Others: NATOCC	2019 - 2025
		1.3.6	Convene technical Working Group meeting on Tobacco Taxation	Lead MDA: FMoH Others: NATOCC	2019 - 2025
		1.3.7	Convene technical Working Group meeting to develop strategies for the implementation of ban on Tobacco Advertising Promotion and Sponsorship (TAPS)	Lead MDA: FMoH Others: NATOCC	2019 - 2025
		1.3.8	Installation of track and trace system for tracking tobacco products	Lead MDA: FMoF Others: FIRS, NCS	2019 - 2021
		1.3.9	Advocacy to the Honourable Minister of Finance and Mr. President on the establishment and operationalization of the tobacco control fund pursuant to Section 8 of the NTC Act	Lead MDA: FMoH Others: NATOCC, NTCA	2019
1.4	Domestication of NTC Act in states	1.4.1	Advocacy and capacity building for SMOH and SMOF	Lead MDA: FMoH Others: FMOF, NTCA	2019 - 2025

7.2.2 Reduce Harmful Use of Alcohol

Table 17: ***Priority Actions on Harmful Use of Alcohol***

2. Priority Action: Implement Effective Mass media Campaigns that Educate the Public about the Harmful Use of Alcohol				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
2.1	Develop mass media campaign on harmful use of alcohol	2.1.1 Convene message design and materials development workshop on preventing harmful use of alcohol	Lead MDA: FMoH Others: FMoIC, NAFDAC, GALAXY, NOA	2019
2.2	Disseminate messages on preventing alcohol intake through multiple channels	2.2.1 Engage with National Broadcasting Corporation and media organizations to secure spots and spaces for television, radio, billboard messaging on harmful use of alcohol	Lead MDA: FMoH Others: FMoI, FMOE	2019
		2.2.2 Conduct targeted message programs on harmful use of alcohol	Lead MDA: FMoH Others: NBC	2019
3. Priority Action: Effective Population-wide Support for Harmful Alcohol Use to All Who want to Quit (Brief Advice, Toll-free lines, Social Media Support Group)				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
3.1	Develop messages to promote self-management of harmful alcohol use	3.1.1 Develop messages to support persons with alcohol dependence who want to quit	Lead MDA: FMoH Others: NBC; FMoIC, GALAXY, NGOs, FMSYD	2019
		3.1.2 Development of guideline on alcohol cessation services	Lead MDA: FMoH	2020

4. Priority Action: Develop an Alcohol Control legislation				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
4.1	Develop alcohol Control Policy that clearly stipulates annual increase in alcohol excise tax and regulations for sales, advertising and promotions of alcoholic drinks	4.1.1 Convene a policy dialogue meeting to develop the alcohol control legislation	Lead MDA: FMoH Others: FMOJ	2019
4.2	Implement alcohol control law and regulation	4.2.1 Convene an alcohol industry stakeholder engagement meeting to gain the buy-in of the alcohol manufacturing and sales industry	Lead MDA: FMoH NAFDAC	2019
		4.2.2 Disseminate policy briefs on alcohol legislation and regulation to all relevant stakeholders	Lead MDA: FMoH Others: FMOSYD	2019
4.3	Operationalise regulation on alcohol	4.3.1 Convene bi-annual meetings for regular updates on enforcement of alcohol control	Lead MDA: FMoH Others: CCPC	2019 - 2025

7.2.3 Promote Healthy Diet

Table 18: ***Priority Actions to Promote Healthy Diet***

5. Priority Action: Implement Effective Mass Media Campaigns to Promote Healthy Diet and Educate the Public on the Harms Associated with High Salt, Sugar and Trans-Fat Intake				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
5.1	Develop mass media campaign on the harms associated with high salt, sugar (sweetened) and trans-fat intake	5.1.1 Develop media materials and key messaging focused on harms associated with high-salt, high-sugar and trans-fat intake	Lead MDA: FMoH(Health Promotion) Others: NBC, FMoIC NAFDAC	2019

5.1	Disseminate messages through multiple channels	5.2.1 Engage with National Broadcasting Corporation and media organizations to secure spots and spaces for television, radio, billboard messaging	Lead MDA: FMoH Others: NBC; FMoIC	2020
		5.2.2 Conduct targeted message programs	Lead MDA: FMoH Others: NBC, NOA	2020

6. Priority Action: Develop and Implement a Regulation on Reformulation of Industrially Processed Foods to Reduce Salt and Replace Trans-Fat				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
6.1	Develop a mandatory food reformulation regulation under existing NAFDAC act	6.1.1 Conduct a food analysis to identify the different food sources (in-door and out-door) that contribute to high	Lead MDA: NAFDAC Others: FMoH, SON	2019
		6.1.2 Convene a consultative forum (written and face-to-face) with the food processing industry to discuss findings of the analysis	Lead MDA: NAFDAC Others: FMoH, SON	2019
		6.1.3 Develop targets/standardsfor salt reduction and elimination of trans-fats, in the various processed food types	Lead MDA: FMoH	2019
		6.1.4 Develop sanctions for non-compliance on standards/targets	Lead MDA: (FMoH) Others: NAFDAC, FMoJ	2019
6.1	Implement a mandatory food reformulation regulation	6.2.1 Establish enforcement team for salt and sugar reduction and replacement of trans-fat	Lead MDA: NAFDAC Others: FMoH	2019

		6.2.2 Coordination meeting to strengthen existing regulatory committee comprising of representatives from different regulators in the food industry with the oversight on the FMOH	Lead MDA: (FMoH) Others: CSOs, NAFDAC, SON	2019
		6.2.3 Provide quarterly update on progress with compliance by the different food industries	Lead MDA: NAFDAC Others: FMoH	2019 - 2025
		6.2.4 Provide an annual report on compliance with incentives for companies that show high level of compliance	Lead MDA: NAFDAC Others: FMoH	2019 - 2025

7. Priority Action: Strengthen Nutrition Education in Primary and Secondary Schools				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
7.1	Review existing policy on nutrition education for schools at all levels (home economics etc. at primary and secondary) at higher levels include in GS studies at tertiary level	7.1.1 Review curriculum and content for nutrition education	Lead MDA: FMoE Others: FMoH, FMARD	2019
		7.1.2 Disseminate nutrition education materials to schools	Lead MDA: FMoH	2019 - 2025

8. Priority Action: Develop and Implement a Policy on Marketing of Foods and Non-Alcoholic Beverages to Children				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
8.1	Advocate for review of food policy on marketing of foods including non-alcoholic drinks to children	8.1.1 Conduct a baseline study on the mode, timing and scope of advertising of foods to children	Lead MDA: NAFDAC Others: APCON, FMoH	2019

		8.1.2 Convene a consultative forum (written and face-to-face) with the food processing industry to discuss findings of the analysis	Lead MDA: NAFDAC Others: FMoH	2019
		8.1.3 Strengthen regulations on advertising of foods and drinks to children	Lead MDA: NAFDAC Others: FMoH	2020

7.2.4 Promote Physical Activity

Table 19: ***Priority Actions to Promote Physical Activity***

9. Priority Action: Implement Effective Mass Media Campaigns that Educate the Public on the Benefits of Physical Activity				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
9.1	Develop messages to promote self-management of harmful alcohol use	9.1.1 Develop and harmonize media and messaging materials on promoting physical activity	Lead MDA: FMoH Others: FMYS	2019
9.2	Disseminate messages through multiple channels	9.2.1 Engage with National Broadcasting Corporation, and media organizations to secure slots for television, radio, billboard messaging	Lead MDA: FMoH Others: FMYS, NBC; FMoIC, APCON, GALAXY	2020

10. Priority Action: Strengthen Physical Education and Activity in Schools				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
10.1	Strengthen physical education and activity in schools	10.1.1 Advocacy to National Council of Education to Implement the legislation to ensure that all schools have	Lead MDA: FMOE Other: FMoH	2019

11. Priority Action: Create Active Environments in Workplace and Public Spaces				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
11.1	Create active workplaces	11.1.1 Engage with Federal Ministry of Labour to strengthen existing policy on promoting physical activity in workplaces	Lead MDA: FMoH Others: FMYSD	2019
		11.1.2. Disseminate policy briefs on policies that support physical activity	Lead MDA: FMoH Others: FMOLE, FMSYD	2019 - 2025
		11.1.3 Strengthen monthly physical activity to be led by head of MDAs	Lead MDA: Office of Head of Office of the Civil Service Commission of the Federation	2019 - 2025
11.2	Create and promote the use of active public spaces through redesign of transport and recreational spaces	11.2.1 Advocate to Federal Ministry of Works and Area Councils / LGA municipal to promote cost-effective elements of the healthy cities initiative and include in future urban planning	Lead MDA: FMPWH Others: FMoH	2019
		11.2.2 Engage with Real Estate developers and their regulators to promote regulations that make it mandatory for residential areas to have safe spaces for non-motorized transports	Lead MDA: FMWPH and UDA	2019 - 2025
		11.2.3 Create better cycling networks, encourage bike share schemes, increase more walkable streets.	Lead MDA: FMWPH Others: UDA	2019 - 2025
11.3	Create community-wide opportunities and programmes to promote physical activity	11.3.1 Promote and facilitate monthly or weekly community-wide sporting programs (e.g. Lagos marathons, cycling, dancing, swimming)	Lead MDA: FMYS, Others: FMoH	2019 - 2025

7.2.5 Promote Road Safety and Reduce Road Traffic Crashes

Table 20: ***Priority Actions to Promote Road Safety***

12. Priority Action: Implement Effective Mass Media Campaigns that Educate the Public on the Road Safety and Crash Reduction Measures				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
12.1	Disseminate existing messages through multiple channels	12.1.1 Engage with National Broadcasting Corporation and media organizations to secure spots and spaces for television, radio, print media &billboard messaging	Lead: FMoH & FRSC Others: FMoIC/NBC	2020
		12.1.2 Conduct targeted message programs on road safety	Lead: FMoH, FRSC Others: FMoIC/NBC/NOA	2020

13. Priority Action: Enforce Existing Regulations on Speed Restriction				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
13.1	Strengthen and enforce existing regulations on speed restrictions in Nigeria (Ref document: Nigeria Highway Code)	13.1.1 Advocate for speed restriction infrastructure such as road markings, signage and speed limit signs	Lead MDA: FMPWH Others: FMoH	2019
		13.1.2 Advocate to state government and LGAs to acquire and install speed cameras and radar guns	Lead MDA: FMPWH Others: FMoH	2019

7.2.6 Reduce the Number of Babies Born with Sickle Cell Anaemia

Table 21: ***Priority Actions to Reduce the Number of Babies Born with Sickle Cell Disease***

14. Priority Action: Scale-up Capacity to Disseminate Information on Sickle Cell Disease				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
14.1	Update existing key messages on sickle cell disease	14.1.1 Update and harmonize print IEC materials on awareness on sickle cell disease; awareness on preconception and national new-born screening for SCD	Lead MDA: FMoH Others: NBC; FMoIC, FMWASD	2019
		14.1.2 Produce radio jingles	Lead MDA: FMOH Others: NBC FMoIC	2019
14.2	Develop and disseminate messages through multiple channels	14.2.1 Train mass media practitioners on the usage of the materials developed	Lead MDA: FMOH Others: NBC; FMoIC	2020
		14.2.2 Secure spots in radio stations to disseminate jingles	Lead MDA: FMOH Others: NBC	2020

15. Priority Action: Universal Screening and Genetic Counselling for Sickle Cell at All Levels using Point-of-Care Devices				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
15.1	Collaboration with relevant stakeholders to implement universal screening for sickle cell	15.1.1 Advocacy and collaboration to Federal Ministry of Interior, Federal Road Safety Commission and faith-based organizations to screen clients for sickle cell disease	Lead MDA: FMoH	2019
		15.1.2 Training of staff working in Federal Ministry of Interior, Federal Road Safety Commission and faith-based organizations on screening for sickle cell	Lead MDA: FMoH	2019

7.2.7 Prevent Mental, Neurological and Substance Abuse Disorders

*Table 22: **Priority Actions to Prevent Mental, Neurological and Substance Abuse Disorders***

16. Priority Action: Repeal the Lunacy Act of 1958 and replace it with a more evidence-informed law that is grounded in human rights principles.				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
16.1	Develop and review a new mental health bill with key stakeholders	16.1.1 Convene a Mental Health Action Committee meeting to develop the new bill	Lead MDA: FMoH, Others: MHAC	2019
		16.1.2 Review the draft mental health bill with key stakeholders	Lead MDA: FMoH, Others: MHAC	2019
		16.1.3 Submit bill to national assembly	Lead MDA: FMoH, Others: MHAC	2019
		16.1.4 Support the public hearings for the mental health bill	Lead MDA: FMoH, Others: MHAC	2019
		16.1.5 Conduct advocacy visits to the National Assembly for passage of the draft bill	Lead MDA: FMoH, Others: MHAC	2019
		16.1.6 Conduct advocacy to the Presidency to sign the mental health bill into law	Lead MDA: FMoH, Others: MHAC	2019 - 2020

17. Priority Action: Review and update the 2013 National Mental Health Policy to align with the current global response and priorities				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
17.1	Review the existing national mental health policy	17.1.1 Convene a stakeholder meetings to review, update and validate the national mental health policy and implementation framework	Lead MDA: FMoH, Others: MHAC	2019

18. Priority Action: Implement Effective Mass Media and Advocacy Campaigns to Raise Awareness on Prevention, Promotion and Access to Care for MNSD				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
18.1	Develop awareness raising and advocacy messages on MNSD prevention, care and treatment	18.1.1 Number of messages developed on MNSD prevention, care and treatment	Lead MDA: FMoH, Others: MHAC	2019
	Implementation of drug and substance abuse education modules in the school curriculum	18.1.2 Number of reviewed and updated modules on substance abuse in the school curriculum	Lead MDA: FMoH, Others: MHAC	2019
		18.1.3 Number of schools using the reviewed curriculum	Lead MDA: FMoH, Others: MHAC	2019
	Disseminate messages through multiple channels	18.1.4 Number of mass media channels disseminating messages on MNSD	Lead MDA: FMoH, Others: MHAC	2019

7.3 Objective Three: To Strengthen and Orient Health Systems to Address Prevention and Control of Non-Communicable Diseases at All Levels of Care and Contribute to the Improvement of Universal Health Coverage

Implementation strategy

A phased and integrated approach will also be used to implement the activities and sub-activities in this objective.

Policy level actions targeted at the NPHCDA and NHIS will involve a cascade of advocacy and stakeholder engagement meetings.

An integrated guideline on NCD prevention, care and treatment will be adapted from existing WHO guidelines. Measures will be taken to ensure that the recommendations in the existing guidelines can be adapted and implemented in the context of the Nigerian health system.

Capacity building workshops and trainings will involve the following phases; development of a training curriculum and materials, training of trainers at the federal level and step-down trainings. The step-down trainings can further be cascaded. This entails a central training at geo-political zones with the participation of representatives from 5-6 states per zone and then followed by state-level training with participation from various LGAs and relevant sectors. Ideally, a training session should not have more than 30 participants.

Pilot projects on specific disease/risk factor areas may have already been carried out or currently ongoing. Using a person-centred approach, pilot programs on integrated delivery of NCD care and treatment services will be implemented in selected states depending on availability of funding. Learnings from these programs will be used to design scaled-up country-wide implementation.

*Table 23: **Priority Action to Strengthen Health Systems to Address Prevention and Control of NCDs***

1. Priority Action: NCD Management into Basic Primary Health Care with Referral to All Levels of Care Control of NCDs				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
18.1	Review ward health package and the minimum standards for primary health care to include comprehensive NCD prevention and treatment	1.1.1 Advocate to NPHCDA to review the ward health package and minimum standards for primary health care to elaborate NCD management	Lead MDA: FMoH	2019

		1.1.2 Convene a policy review meeting to expand the minimum standards for primary health care to include NCD management	Lead MDA: NPHCDA	2019
1.2	Develop service integration guidelines on NCDs using best practice and implementation research learning from the Nigerian-PEN pilot and MHGAP pilot	1.2.1 Conduct literature review to identify evidence-based best practices for NCD service integration at primary health care	Lead MDA: FMoH	2019
		1.2.2 Adapt best practices using lessons from the Nigerian-PEN pilot and MHGAP pilot	Lead MDA: FMoH	2019
		1.2.3 Convene a 3-day meeting to develop the zero-draft of the NCD service integration guideline	Lead MDA: FMoH	2019
		1.2.4 Conduct a 3-day meeting to finalize the NCD service integration guideline	Lead MDA: FMoH	2019
		1.2.5 Include NCD service integration into the integrated supportive supervision checklist	Lead MDA: FMoH Others: NPHCDA	2019

2. Priority Action: Build the Capacity of Health Workers at All Levels of Care on Integrated Management of Essential NCDs (CVD, Diabetes mellitus, Cancer, COPD, Sickle Cell Disease, MNSD and Injuries)

Activity Code	Activities	Sub-activities	MDA Responsible	Time Frame
2.1	Expand the task-shifting/task-sharing policy for frontline health workers at primary health care to include essential NCDs	2.1.1 Convene a technical working group to review best practices on task-shifting/task-sharing for NCDs at all levels of care	Lead MDA: FMoH, Others: MHAC	2019
		2.1.2 Develop a policy case and submit to the HMH to secure task-shifting/task-sharing policy for NCDs at all levels of care	Lead MDA: FMOH-HPRS	2019 - 2025

		2.1.3 Support the policy reform process through advocacy to the HMH and secure task-shifting and task-sharing for NCD management at all levels of care	Lead MDA: FMOH-HPRS	
		2.1.4 Revise the standing orders for all cadres of health care to include NCD management	Lead MDA: FMoH-HPRS Others: NPHCDA	2019 - 2025
2.2	Develop curriculum for in-service and pre-service training on NCD management	2.2.1 Conduct a workshop to develop in-service curriculum for NCD management including genetic counselling for sickle cell disease	Lead MDA: FMoH	2019 - 2025
		2.2.2 Conduct stakeholder engagement meetings with regulatory bodies of health profession education and heads of medical education schools (colleges of medicine, schools of nursing and midwifery, school of health technology) to review and expand pre-service curriculum to include NCD management	Lead MDA: FMoH	2019 - 2025
2.3	Build the capacity of all cadres of health workers on NCD management	2.3.1 Conduct Training of Trainers using the pre-service curriculum for integrated NCD management	Lead MDA: FMoH	2019 - 2025
		2.3.2 Conduct step-down trainings using the pre-service curriculum for integrated NCD management	Lead MDA: FMoH	2019 - 2025
		2.3.3 Train a pool of lay health workers (community volunteers and expert clients) on self-management of NCDs	Lead MDA: FMoH	2019 - 2025

3. Priority Action: Scale-up Coverage of Early Detection and Diagnosis at Primary Health Care Level				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
3.1	Include cost-effective tools and commodities for early detection in the essential medicines list	3.1.1 Convene a stakeholder meeting to review the essential medicines list and minimum standards for PHCs and include essential tools for NCD diagnosis and detection (glucometers, flowmeters, blood pressure monitors, Acetic acid, POC test for sickle cell haemoglobin etc.)	Lead MDA: FMoH Others: NPHCDA	2019
		3.1.2 Procure and disseminate tools for early detection and diagnosis to PHCs	Lead MDA: NPHCDA	2018
		3.1.3 Yearly quality assurance and test for equipment	Lead MDA: NPHCDA	2018

4. Priority Action: Scale-up Coverage of NCD Prevention Services at All Levels of Care				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
4.1	Roll-out the proposed human papilloma virus (HPV) for girls age 9-13 years	4.1.1 Conduct advocacy (written and face-to-face) to GAVI and other relevant stakeholders to include HPV vaccine among support being provided for Nigeria	Lead MDA: FMoH Others: NPHCDA	2019
4.2	Institutionalization of life-course vaccine including hepatitis B virus	4.2.1 Advocate for the institutionalization of life-course vaccine including	Lead MDA: FMOH Others: NPHCDA	2019
4.3	Include lifestyle and behavioural interventions for preventing CVDs, diabetes and cancers into primary health care	4.3.1 Include lifestyle and behavioural interventions for preventing CVDs, diabetes and cancers into guidelines on NCD management	Lead MDA: FMOH	2019 - 2025

		4.3.2 Training of relevant health workers on how to provide lifestyle and behavioural interventions for preventing CVDs, diabetes and cancers	Lead MDA: FMoH	2019 - 2025
		4.3.3 Roll-out a package of integrated prevention services for NCDs	Lead MDA: FMoH	2019 - 2025
		4.3.4 Implementation of genetic counselling and pre-marital/pre-conception screening for SCDs using POC devices	Lead MDA: FMoH	2019 - 2025

5. Priority Action: Scale-up Coverage of Treatment Services for NCDs (CVD, Diabetes, Cancer, COPD, Sickle Cell Disease, MNSD and Injuries)				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
5.1	Ensure commodity security for essential drugs for treating diabetes, COPD, hypertension and CVD, cancers, SCD	5.1.1 Review and compile cost-effective and efficacious medicines for managing diabetes, COPD, hypertension and, cancers, SCD, CVD	Lead MDA: FMoH	2019
		5.1.2 Engage with the Food and Drug Division of FMOH to secure inclusion of these medicines in the essential medicines list	Lead MDA: FMoH	2019
		5.1.3 Implement integrated commodity logistics for NCD medicines	Lead MDA: FMoH	2019
5.2	Develop clinical guidelines for care and treatment of diabetes, hypertension, CVD, COPD, Cancers, Sickle Cell Disease	5.2.1 Review literature to identify evidence-informed treatment and care modalities for NCDs	Lead MDA: FMoH	2019
		5.2.2 Convene workshops to adapt these evidence-informed treatment and care modalities for NCDS	Lead MDA: FMoH	2019

5.3	Integrate and implement services for managing injuries from Road traffic crashes into primary care	5.3.1 Develop guidelines/ protocols on pre-hospital care (to include ambulatory care/ transfusion services) and treatment of all injuries	Lead MDA: FMoH	2019
		5.3.2 Conduct bystander education for pre-hospital management of injuries	Lead SMDA: FMOH	2019
5.4	Establish community-based services for managing MNSD	5.4.1 Develop guidelines for community management of MNSD through community based lay health/volunteer workers	Lead MDA: FMoH	2019
		5.4.2 Train lay health/volunteer health workers on community-based management of MNSD	Lead MDA: FMoH	2019
		5.4.3 Implement community-based programmes for managing MNSD	Lead MDA: FMoH	2019
5.5	Establish long term care and End-of-life care services	5.5.1 Develop guidelines on long term care and End-of-life care services	Lead MDA: FMoH	2019

6. Priority Action: Explore Viable Health Financing Mechanisms				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
6.1	Include NCDs in benefits package for NHIS at all levels of care	6.1.1 Hold consultations and advocacy for inclusion of NCDs in all benefits package for NHIS at all levels of care	Lead MDA: FMoH Others: NHIS	2019 - 2025
		6.1.2 Engage with NHIS to expand the Basic Minimum Package of Health Services which will be financed by the Basic Healthcare Provision Fund to include comprehensive care and treatment of hypertension, diabetes, early detection of cancer, COPD, emergency care for stroke and heart attacks	Lead MDA: FMoH Others: NHIS	2019 - 2025

7.4 Objective Four: To Monitor Trends and Determinants of Non-Communicable Diseases and Evaluate Progress in their Prevention and Control

Implementation strategy

Activities aimed at revising NHMIS and civil registration tools and indicators will involve series of advocacy visits and technical engagements with the statutory bodies responsible for the revision such as HPRS department of FMoH and National Population Commission.

Periodic surveys will be implemented country-wide using a phased approach. This will entail securing funding from donors and Government of Nigeria (federal and state). The surveys will involve federal level training of trainers on data collection and management with state level step-down trainings for data collectors. Field activities can occur simultaneously in all the states or sequentially (i.e. covering one geo-political zone at different times).

Table 24: ***Priority Actions to Monitor Trends and Determinants of NCDs***

1. Priority Action: Integrate NCDs into the National Health Management Information System				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
1.1	Develop national indicators for NCD service delivery and MSAP	1.1.1 Convene a technical meeting to develop indicators and tools for NCD service delivery	Lead MDA: FMoH	2019
		1.1.2 Present the developed indicators to the National technical working group for NHMIS for adoption	Lead MDA: FMoH	2019
1.2	Develop tools and registers to include national indicators for NCD service delivery into NHMIS	1.2.1 Engage with the HPRS Department of FMoH to include key service delivery indicators into NHMIS	Lead MDA: FMoH	2019
		1.2.2 Print registers and ensure that they are included in the monthly summary forms and distribute tools for capturing NCD service delivery indicators	Lead MDA: FMoH	2019

2. Priority Action: Strengthen Technical Capacity for NCD Surveillance, Monitoring and Evaluation				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
2.1	Build the capacity of national and state level M&E Officers on NCD surveillance and monitoring	2.1.1 Convene a 3-day workshop to develop a training curriculum for NCD surveillance and monitoring based on the	Lead MDA: FMoH	2019
		2.1.2 Conduct a training of trainers workshop to build the capacity of a critical mass of M& E officers in FMOH and implementing partners on NCD surveillance and monitoring	Lead MDA: FMoH	2019 - 2025
		2.1.3 Conduct step-down training for state and LGA level M&E officers using a phased approach	Lead MDA: FMoH	2019 - 2025

2. Priority Action: Strengthen Technical Capacity for NCD Surveillance, Monitoring and Evaluation				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
2.1	Build the capacity of national and state level M&E Officers on NCD surveillance and monitoring	2.1.1 Convene a 3-day workshop to develop a training curriculum for NCD surveillance and monitoring based on the	Lead MDA: FMoH	2019
		2.1.2 Conduct a training of trainers workshop to build the capacity of a critical mass of M& E officers in FMOH and implementing partners on NCD surveillance and monitoring	Lead MDA: FMoH	2019 - 2025
		2.1.3 Conduct step-down training for state and LGA level M&E officers using a phased approach	Lead MDA: FMoH	2019 - 2025

3. Priority Action: Integrate NCD Surveillance into Civil Registration and Vital Statistics Systems (Deaths by Cause)				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
3.1	Include Haemoglobin genotype into birth forms and birth registers and NCD-related causes into death registration tools (vital statistics)	3.1.1 Engage with the National Population Commission to include Haemoglobin genotyping and NCD-related causes into death registration tools for vital statistics	Lead MDA: FMoH	2019
		3.1.2 Develop a process/mechanism for periodic data collection on NCD related deaths from vital statistics	Lead MDA: FMoH Others: NPopC, NBS	2019

4. Priority Action: Conduct Periodic Surveys on NCDs and Evaluate Progress in their Prevention and Control				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
4.1	Conduct periodic survey to monitor NCD risk factors	4.1.1 Conduct a STEP survey to determine the baseline burden of NCDs and their risk factors every 5 years	Lead MDA: FMoH Others: NPopC, NBS	2019 - 2025
		4.1.2 Incorporate NCDs into existing surveys such as MICS, NDHS	Lead MDA: FMoH Others: NPopC, NBS	2019
		4.1.3 Conduct the National MNSD survey	Lead MDA: FMoH Others: NPopC, NBS	2019 - 2025
		4.1.4 Conduct the National Global Youth Tobacco survey	Lead MDA: FMoH Others: NPopC, NBS	2019
		4.1.5 Conduct the National Global Adult Tobacco Survey	Lead MDA: FMoH Others: NPopC, NBS	2019
4.2	Develop a dashboard on NCD	4.2.1 Develop a dashboard for summarizing and disseminating data on NCDs from the NHMIS	Lead MDA: FMoH Others: NPopC, NBS	2019

7.5 Objective Five: To Promote and Support National Capacity for Quality Research and Development for Prevention and Control of NCDs

Implementation strategy

Priority setting for NCD research agenda will be conducted remotely using electronic methods of data collection for a Delphi style engagement with representatives of research institutes and researchers.

Capacity building and networking activities to improve research capacity will be conducted in a phased approach depending on funding availability.

Table 25: ***Priority Actions for National NCD Research Agenda***

1. Priority Action: Develop and Implement a Prioritized National Research Agenda for Non-Communicable Diseases				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
1.1	Set priorities for national research agenda	1.1.1 Conduct a mapping of research institutes and researchers	Lead MDA: FMoH	2019
		1.1.2 Conduct a consultative priority setting exercise (remotely or face to face) for NCD research in Nigeria	Lead MDA: FMoH	2019
		1.1.3 Publish prioritized research topics and cross-cutting issues	Lead MDA: FMoH	2019
2. Priority Action: Prioritize Budgetary Allocation for NCD Prevention and Control Research				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
2.1	Secure budgetary allocation for NCD prevention and control research in NCD budget line	2.1.1 Develop a costed research plan for NCDs	Lead MDA: FMOH Others: FMBP	2019
		2.1.2 Propose the inclusion of research cost as a line item within FMOH NCD budget line	Lead MDA: FMoH	2019 - 2025
		2.1.3 Advocate for budgetary allocation for research	Lead MDA: FMOH Others: FMBP	2019

3. Priority Action: Strengthen Technical Capacity for Research				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
3.1	Build capacity of researchers on NCDs	3.1.1. Conduct a workshop on research methodology for NCD Division-FMoH staff	Lead MDA: FMOH	2019
		3.1.2. Sponsor researchers on courses related to NCD prevention and control	Lead MDA: FMoH	2019

4. Priority Action: Strengthen Collaboration with Foreign and Domestic Research Institutes				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
4.1	Build collaboration with foreign and domestic research institutes	4.1.1 Map existing international and domestic research funding organizations	Lead MDA: FMOH	2019
		4.1.2 Respond to call/request for proposals	Lead MDA: FMoH	2019
		4.1.3. Attend international and domestic collaborative research meetings	Lead MDA: FMOH	2019

5. Priority Action: Strengthen Knowledge Translation in NCD Prevention and Control				
Activity Code	**Activities**	**Sub-activities**	**MDA Responsible**	**Time Frame**
5.1	Strengthen the dissemination and use of research findings in public health policy and programming clinical practice	5.1.1 Identify already existing research on NCD prevention and control	Lead MDA: FMOH	2019
		5.1.2 Develop an electronic database for existing evidence that are relevant to NCD prevention and control	Lead MDA: FMoH	2019
		5.1.3 Identify organizations that are working on knowledge translation (Nigerian branches of Cochrane, Campbell Collaborations.	Lead MDA: FMOH	2019
		5.1.4 Establish collaborative research sharing networks between researchers e.g. NCD evidence summit	Lead MDA: FMOH	2019
		5.1.5 Develop targeted communication and evidence summaries to policy makers	Lead MDA: FMOH	2019

8. Accountability Framework

8.1. Evaluating Impact and Outcomes of NMSAP

This impact and outcome evaluation should be marched against the annual progression towards targets for NCD prevention and control

Table 26: ***Evaluating Impact and Outcomes of NMSAP***

Framework Element	Indicator	Frequency of Reporting	Reporting Start Year	Data Source
Premature mortality from NCD	Mortality of NCD (Unconditional probability of dying)	3years	2019	NPC Vital Registers
Harmful use of alcohol	Total alcohol per capita consumption in litres of pure alcohol	5 years	2019	STEP wise survey
Physical inactivity	Prevalence of insufficiently physically active adults	5 years	2019	STEP wise survey
Salt/sodium intake	Mean population intake of salt in persons aged 18+ years	5 years	2019	STEP wise survey
Tobacco use	Prevalence of current tobacco use among adults	5 years	2019	GATS survey, DHS
Raised blood Pressure	Prevalence of raised blood pressure among adults	5 years	2019	STEP wise survey, DHS
Diabetes	Prevalence of raised blood glucose/diabetes among adults	5 years	2019	STEP wise survey
Obesity	Prevalence of overweight/ obesity among adults	5 years	2019	STEP wise survey, DHS
Sickle cell disease	Prevalence of sickle cell disease in children ≤ 59 months	5 years	2019	NHMIS
	New cases of sickle cell Diseases	Annually	2019	NHMIS
Mental, neurological and substance abuse disorders	Prevalence of MNSD	5 years	2019	MNSD survey
Deaths from Road Traffic accidents	Death rate due to road traffic injuries	Annually	2019	Road safety report
Drug therapy to prevent CVD	Proportion of eligible persons receiving NCD care	Monthly	2019	NHMIS
Essential medicines and basic technologies to treat major NCDs	Number of NCD medicines in essential medicines list	Five years	2019	NHMIS/LMIS
	Coverage of NCD Medicines and basic technology in PHCs	Annually	2019	NHMIS/LMIS

8.2 Monitoring and Evaluation of the NMSAP Implementation

8.2.1 Objective One: To Strengthen Governance and Stewardship for NCD Prevention and Control

*Table 27: **Priority Actions to Strengthen Governance and Stewardship for NCD Prevention and Control***

1. Priority Action: Strengthen Advocacy for NCD Prevention and Control at All Levels				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
1.1	Set up a national NCD advocacy group	1.1.1. Number of NGOs/CSOs that have been identified as potential members of the NCD advocacy group	Increased funding and capacity for advocacy activities	Technical and meeting reports from NCD advocacy group
		1.1.2. Number of NGOs/CSOs that are participating members of the NCD advocacy group		
		1.1.3. Number of advocacy group meetings convened		
1.2	Advocate to relevant government non-health sectors and private industries to deliver on targets outlined in the MSAP	1.2.1 Number of channels that have been used to disseminate the MSAP 1.2.2 Number of advocacy materials (policy briefs, radio messages etc.) produced and disseminated to stakeholders 1.2.3 Number of advocacy visits conducted	Commitment from both government and private sector stakeholders to implement recommendations of the MSAP	Technical and meeting reports from NCD advocacy group

2. Priority Action: Establish a Multi-Sectoral Technical Working Group on NCD Prevention and Control				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
2.1	Set-up a multi-sectoral technical working group on NCD prevention and control with representatives from non-health government MDAs, CSO, implementing partners and commercial sector	1.1.1 Proportion of all the relevant non-health MDAs, CSO, implementing partners and commercial sector participating in TWG meetings	Proportion of multi-sectoral activities implemented by the relevant MDAs, CSO, implementing partners and commercial sector	Technical and meeting reports of TWG
		2.1.2 Number of TWG meetings convened annually		
		2.1.3 Number of policy documents mapped		
2.2	Build the capacity of multi-sectoral TWG members	2.2.1. Proportion of all the relevant Non-health MDAs, CSOs, implementing partners and commercial sector that participated in capacity building workshops	Strengthened capacity for implementing NCD prevention and control among all relevant stakeholders	Technical reports of TWG capacity building workshops
		2.2.2. Number of capacity building workshops convened annually		
		2.2.3. Change in knowledge and skills about the various multi-sectoral NCD prevention and control activities		

3. Priority Action: Strengthen Capacity of FMoH to Provide Leadership and Coordination for NCDs				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
3.1	Conduct training of NCD Federal officers on the mechanisms and processes for reformulation and fiscal policies	3.1.1 Proportion of NCD federal officers participating in trainings on mechanisms and processes for reformulation and fiscal polices	Strengthened capacity of the NCD division of FMoH to provide leadership and coordination for NCDs	Technical reports
		3.1.2 Number of annual trainings on mechanisms and processes for reformulation and fiscal policies conducted		Needs assessment report, Equipment inventory report
3.2	Equip the NCD division with all requisite equipment and tools to provide oversight on NCD policymaking and programming	3.2.1 Number of required equipment and tools provided to the NCD division		

4. Priority Action: Establish a Coordinating Mechanism on NCD Prevention and Control				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
4.1	Set up Governing Council at federal level	4.1.1. Inter-ministerial coordination mechanism established	High level multi-sectoral coordination and commitment for the prevention and control of NCDs	Technical reports and communiqué
		4.1.2. Number of high level inter-ministerial meetings on NCD prevention and control convened annually		

4.2	Conduct training of NCD Federal officers on the mechanisms and processes for reformulation and fiscal policies	4.2.1. Proportion of states with NCD units within the public health department of the State Ministries of Health with clear TORs and reporting lines	Increased capacity of states to respond to NCD prevention and controls	Scorecards on state capacity to respond to NCD prevention and control
		4.2.2. Number of focal persons designated to cover all the relevant diseases and issues in NCD control programming in each state NCD unit		
4.3	Set up LGA NCD focal points	4.3.1 Established and functional NCD units within the disease control department of the State primary health care development agency		
		4.3.2 Proportion of LGAs with designated NCD focal persons		
4.4	Conduct coordination meetings at all tiers of government	4.4.1 Number of consultative meetings on NCD prevention and treatment in the health sector convened at the federal, state and LGA Level		

5. Priority Action: Establish Partnerships with Global and Regional Alliance for NCD Prevention and Control				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
5.1	Establish global and regional partnerships for NCD prevention and control	5.1.1 Number of regional and international events, dialogue and meetings for NCD prevention and control with representation of Nigerian stakeholders	Increased global and regional alliance in the prevention and control of NCDs in Nigeria	Meeting reports

6. Priority Action: Prioritize and Increase Budgetary Allocation for NCD Prevention and Control				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
6.1	Advocacy for resource mobilization for NCDs	6.1.1 Inclusion of NCD prevention and control KPIs in the national M&E report by the DPRS of the Ministry of the Budget and planning	Budgetary allocation and release for NCD prevention and control secured	National budget report and national financial expenditure reports
		6.1.2 Number of advocacy visits to relevant stakeholders conducted to secure budgetary allocation for NCDs		
		6.1.3 Number of press briefing on NCDs conducted		

8.2.2 Objective Two: To Promote Healthy Lifestyle and Implement Interventions to Reduce Modifiable Risk Factors for NCDs

8.2.2.1 Reduce Tobacco Use

Table 28: ***Priority Actions to Reduce Tobacco Use***

1. Priority Action: Effective Implementation, Prioritization and Enforcement of the National Tobacco Control Act of 2015				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
1.1	Secure approval of regulation in the National Assembly	1.1.1 Number of legislative advocacy visits to leadership of the NASS conducted	Approved regulation for implementing the tobacco control act	Guideline document
		1.1.2 Tobacco Control Guideline developed		
1.2	Implement non-regulatory NTCA activities	1.2.1 Number of advocacy visits to enforcement agencies	Complete implementation of the National Tobacco control act of 2015	Capacity building workshop and TWG reports; Progress report on implementation of National Tobacco control act
		1.2.2 Number of capacity building workshops conducted for enforcement agencies		
		1.2.3 Number of key enforcement organisation participating in tobacco control enforcement coalition		

		1.2.4 Number of public awareness programs conducted to raise awareness about the act		
1.3	Implement all regulations in the tobacco control act of 2015	1.3.1 Enforcement plan for enforcement agencies developed 1.3.2 Number of sensitization meeting for hoteliers and managers 1.3.3 Number of Tobacco Committee meetings conducted in a year 1.3.4 Number of TWG meetings on Tobacco Taxation and TAPS conducted in a year 1.3.5 Tobacco track and trace system installed		
1.4	Domestication of NTC act in states	1.4.1 Number of advocacy visits to SMOH AND SMOF	Number of States that have domesticated the National tobacco control act	Progress report on implementation of National Tobacco control act

8.2.2.2 Reduce Harmful Use of Alcohol

Table 29: ***Priority Actions to Reduce Harmful Use of Alcohol***

2. Priority Action: Implement Effective Mass Media Campaigns that Educate the Public about the Harmful Use of Alcohol				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
2.1	Develop mass media campaignmessages on harmful use of alcohol	2.1.1 Number of mass media messages developed on harmful use of alcohol	Change in level of awareness, knowledge and practices about harmful use of alcohol after dissemination of the messages	STEP survey
2.2	Disseminate messages on preventing alcohol intake through multiple channels	2.2.1 Number of mass media channels used to disseminate messages on harmful use of alcohol		
3. Priority Action: Effective Population-wide Support for Harmful Alcohol Use to All Who Want to Quit (Brief Advice, Toll-Free Lines, Social Media Support Group)				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
3.1	Develop messages to promote self-management of harmful alcohol use	Number of public awareness messages developed and disseminated to support persons with alcohol dependence who want to quit Lead MDA: FMoH 3.1.1 Others: NATOCC	Change in number of persons with alcoholdependence who have quit	

4. Priority Action: Develop an Alcohol Control Policy				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
4.1	Develop and secure a policy/legislation that clearly stipulates annual increase in alcohol excise tax and regulations for sale, advertising and promotion of alcoholic drinks	2.1.1 Milestones used to achieve policy for alcohol control	Policy for alcohol control developed	Gazette of the FMoH
4.2	Implement alcohol control policy and regulation Enforce alcohol control policy and regulation	4.2.1 Number of stakeholders' engagement meetings convened to gain the buy-in of the alcohol manufacturing and sales industry 4.2.2 Number of policy briefs disseminated	Full implementation of alcohol control act	Progress report on implementation of alcohol control act
4.3	Enforce alcohol control policy and regulation	4.3.1 Number of meetings with enforcement organizations (consumer protection organizations NAFDACetc.) conducted		

8.2.2.3 Promote Healthy Diet

Table 30: ***Priority Actions to Promote Healthy Diet***

5.Priority Action: Implement Effective Mass Media Campaigns to Promote Healthy Diet and Educate the Public on the Harms Associated with High Salt, Sugar and Trans-Fat Intake				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
5.1	Develop mass media campaign on the harms associated with high salt, sugar (sweetened) and trans-fat intake	4.1.1. Number of mass media messages developed on harms associated with high salt, sugar and trans-fat intake	Change in knowledge, attitude, practices and behaviours about harms associated with high salt, sugar and trans-fat intake	STEP survey
5.2	Disseminate messages through multiple channels rmful use of alcohol	5.2.1 Number of channels used to disseminate mass media messages on harms associated with high salt, sugar		
6. Priority Action: Develop and Implement a Regulation on Reformulation of Industrially Processed Foods to Reduce Salt and Replace Trans-Fat				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
6.1	Develop a mandatory food reformulation regulation under existing NAFDAC act	6.1.1 The number of frequently consumed processed foods identified to have high salt sugar and trans-fat intake	Enactment of mandatory food reformulation regulation	Regulation document

6.1	Develop a mandatory food reformulation regulation under existing NAFDAC act	6.1.2 Number of consultative forums (written and face-to-face) convened to promote mandatory food reformulation 6.1.3 Number of relevant stakeholders that participated in consultative forums 6.1.4 Number of guidelines or standard operating procedures developed to stipulate standards/targets for reformulation to reduce salt and sugar and replace trans-fat		
6.2	Implement a mandatory food reformulation regulation	6.2.1 Number of workshops convened to strengthen the capacity of existing food regulatory bodies 6.2.2 Proportion of food manufacturers/processors that are complying with reformulation regulation	Reduction of the level of salt and sugar and elimination of trans-fats from industrially processed foods	Progress report on implementation of reformulation regulation

7. Priority Action: Strengthen Nutrition Education in Primary and Secondary Schools				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
7.1	Integrate nutrition education into existing compulsory subjects in schools at all levels (home economics etc. at primary and secondary)	7.1.1 Reviewed curriculum and content for nutrition education in primary and secondary schools	Number of schools implementing nutrition education programs	Progress report on implementation of nutrition education
		7.1.2 Nutrition education materials disseminated to schools		

8. Priority Action: Develop and Implement a Policy on Marketing of Foods and Non-Alcoholic Beverages to Children				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
8.1	Advocate for a policy on marketing of foods and non-alcoholic drinks to children	8.1.1 Baseline study on the extent and pattern of food advertising to children conducted	Enactment of Regulation on food advertising to children	Regulation document
		8.1.2 Number of consultative forum (written and face-to-face) with the food processing industry and food regulatory bodies convened annually		

8.2.2.4 Promote Physical Activity

Table 31: ***Priority Actions to Promote Physical Activity***

9. Priority Action: Implement Effective Mass Media Campaigns that Educate the Public on the Benefits of Physical Activity				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
9.1	Develop mass media campaign on benefits of physical activity	9.1.1 Number of mass media messages developed to promote physical activity	Increase in level of knowledge, attitude, practices on physical activity	STEP survey
	Disseminate messages through multiple channels	9.2.1 Number of channels used to disseminate mass media messages		
10. Priority Action: Strengthen Physical Education and Activity in Schools				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
10.1	Strengthen physical education and activity in schools	10.1.1 Number of advocacy visits to school management boards to achieve enforcement of physical education and activity policies and regulation	Increase in level of physical activity among children, adolescents and young people in schools	School based physical activity survey
11. Priority Action: Create active environments in workplace and public spaces				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
11.1	Create active workplaces	11.1.1 Number of advocacy visits to Federal Ministry of Labour to strengthen existing policy on promoting physical activity in workplaces	Increase in level of physical activity among workers in public sector	MDA physical activity survey

		11.1.2 Number of policy briefs disseminated on policies that support physical activity		
		11.1.3 Proportion of MDAs implementing monthly physical activity programs		
11.2	Create and promote the use of active public spaces through redesign of transport and recreational spaces	11.2.1 Number of advocacy visits to Federal Ministry of Works and Area Councils/LGA municipal s to promote cost-effective elements of the healthy cities initiative and advocate its inclusion in future urban planning	Proportion of cities that are complying with the healthy city standards in Nigeria	National urban planning/healt hy city reports
		11.2.2 Number of advocacy visits/ engagement meetings with real estate developers and their regulators to promote regulations that make it mandatory for residential areas to have safe spaces for non-motorized transports		
		11.2.3 Number of cycling networks created		
11.3	Create community-wide opportunities and programmes to promote physical activity	11.3.1 Number of cities and communities that are conducting community wide physical activity programs	Increase in level of physical activity among community members	STEP survey

8.2.2.5 Promote Road Safety and Reduce Road Traffic Crashes

Table 32: ***Priority Actions to Promote Road Safety and Reduce Road Traffic Crashes***

12. Priority Action: Implement Effective Mass Media Campaigns that Educate the Public on the Road Safety and Crash Reduction Measures				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
12.1	Disseminate existing messages through multiple channels	12.1.1 Number of messages disseminated in mass media on road safety	Change in knowledge, attitude and practices on road safety	Road safety KAP surveys

13. Priority Action: Enforce existing regulations on speed restriction				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
12.1	Strengthen and enforce existing regulations on speed restrictions in Nigeria	13.1.1 Number of advocacy visits to FMOW & H to implement road markings and signage and install speed limit signs	Reduction in level of speed restriction violations and road crashes	Road safety report: Nigeria Highway Code
		13.1.2 Number of signage and speed limit signs installed		
		13.1.3 Number of advocacy visits to state governments and LGAs to acquire and install speed cameras and radar guns		

8.2.2.5 Reduce the Number of Babies Born with Sickle Cell Anaemia

Table 33: ***Priority Actions to Reduce the Number of Babies Born with Sickle Cell Disease***

14. Priority Action: Scale-up Capacity to Disseminate Information on Sickle Cell Disease				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
14.1	Update existing key messages on sickle cell disease	14.1.1 Number of messages developed to raise awareness about sickle cell disease	Change in knowledge, attitude and practices about sickle cell	NDHS
14.2	Develop and disseminate messages through multiple channels	14.2.1 Number of mass media practitioners trained on the usage of the materials developed		
		14.2.2 Number of radio stations disseminating jingles on sickle cell disease		
15. Priority Action: Universal Screening and Genetic Counselling for Sickle Cell at All Levels Using Point-of-Care Devices				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
15.1	Collaboration with relevant stakeholders to implement universal screening for sickle cell	15.1.1 Number of advocacy visits to/collaborative meetings with FRSC and faith based organizations to raise awareness on universal screening of their clients for sickle cell disease 15.1.2 Number of children screened for SCD 15.1.3 Number of staff trained in Federal Ministry of Interior, Federal road safety commission and faith based organizations on screening for sickle cell	Change in proportion of people screened for sickle cell disease	NDHS

8.2.2.6 Prevent Mental, Neurological and Substance Abuse Disorders

Table 34: Priority Actions to Prevent Mental, Neurological and Substance Abuse Disorders

16. Priority Action: Repeal the Lunacy Act of 1958 and replace it with a more evidence-informed law that is grounded in human rights principles.				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
16.1	Develop and review a new mental health bill with key stakeholders	16.1.1. A Mental Health Action Committee meeting convened to develop the new bill	A new Mental Health Act enacted	Gazette of the Act
		16.1.2 A draft mental health bill		
		16.1.3 Public hearings for the mental health bill convened by the National Assembly		
		16.1.4 Mental Health Bill passed by the National Assembly		
		16.1.5 Mental Health Bill signed into Law by the President		

17. Priority Action: Review and update the 2013 National Mental Health Policy to align with the current global response and priorities				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
17.1	Review the existing national mental health policy	17.1.1 Stakeholder meetings convened to review, update and validate the national mental health policy	Mental Health Policy developed, reviewed and validated	Policy document
		17.1.2 Mental health policy drafted		

18. Priority Action: Implement Effective Mass Media and Advocacy Campaigns to Raise Awareness on Prevention, Promotion and Access to Care for MNSD				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
18.1	Develop awareness raising and advocacy messages on MNSD prevention, care and treatment	18.1.1 Number of messages developed on MNSD prevention, care and treatment	Change in knowledge, attitude and practices on MNSD	MNSD survey
18.2	Implementation of drug and substance abuse education modules in the school curriculum	18.2.1 Number of reviewed and updated modules on substance abuse in the school curriculum		
		18.2.2 Number of schools using the reviewed curriculum		
18.3	Disseminate messages through multiple channels	18.3.1 Number of mass media channels disseminating messages on MNSD		

8.2.3. Objective Three: To Strengthen and Orient Health Systems to Address Prevention and Control of Non-Communicable Diseases at All Levels of Care and Contribute to the Improvement of Universal Health Coverage

Table 35: ***Priority Actions to Strengthen Health Systems for the Prevention and Control of NCDs***

1. Priority Action: Integrate Non-communicable Disease Management into Basic Primary Health Care with Referral to All Levels of Care				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
1.1	Review the minimum standards for primary health care to include comprehensive NCD prevention and treatment	1.1.1 Number of advocacy visits to NPHCDA to gain buy-in for the review of the ward minimum health package and minimum standards for primary health care to elaborate NCD management	Inclusion of comprehensive NCDs prevention and treatment in the ward minimum package and minimum standards for primary health care in Nigeria	Revised version of the minimum standards for primary health care in Nigeria
		1.1.2 Number of policy review meetings convened to expand the ward minimum health package and minimum standards for primary health care to include NCD management		
1.2	Develop service integration guidelines on NCDs using best practice and implementation research learnings from the Nigerian-PEN pilot and MHGAP	1.2.1 Number of evidence-informed recommendations identified on best practices for NCD service integration at primary health care	Number of guidelines, protocols, standards of operation developed on integrated NCD prevention, care and treatment	Guideline/SOPs and protocol documents

		1.2.2 Number of best practices identified from lessons learned from Nigerian-PEN pilot and MHGAP		
		1.2.3 Number of meetings convened to review and finalize NCD service integration guideline		
		1.2.4 Inclusion of NCD service integration into the integrated supportive supervision checklist		

2. Priority Action: Build the Capacity of Health Workers at All Levels of Care on Integrated Management of Essential NCDs (CVD, Diabetes, Cancer, COPD, Sickle Cell Disease, MNSD and Injuries)				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
2.1	Expand the task-shifting/task-sharing policy for frontline health workers at primary health care to include essential NCDs	2.1.1 The number of technical working group meetings convened to review best practices on task-shifting/task-sharing for NCDs at all levels of care	Task-shifting policy for NCDs secured	Task shifting policy document
		2.1.2 A policy case (memo) submitted to the HMH to secure task-shifting/task-sharing policy for NCDs at all levels of care		

		2.1.3 Number of advocacy visits to the HMH and secure approval for task-shifting and task-sharing for NCD management at all levels of care		
		2.1.4 standing orders for all cadres of health care revised to include NCD management		
2.2	Develop curriculum for in-service and pre-service training on NCD management	2.2.1 Number of workshops convened to develop in-service curriculum for NCD management including genetic counselling for sickle cell disease	Reviewed curriculum for in-service training on NCD management	Reviewed curriculum document
		2.2.2 Number of stakeholder engagement meetings with regulatory bodies of health profession education and heads of medical education schools (colleges of medicine, schools of nursing and midwifery, school of health technology) convened to review and expand pre-service curriculum to include NCD management		

2.3	Build the capacity of all cadres of health workers on NCD management	2.3.1 Number of Training of Trainers workshop convened using the pre-service curriculum for integrated NCD management	Change in knowledge and skills of health workers on NCD management	Training reports
		2.3.2 Number of step-down trainings conducted using the pre-service curriculum for integrated NCD management		
		2.3.3 Number of health workers trained on NCDs prevention, care and treatment		

3. Priority Action: Scale-up Coverage of Early NCD Detection and Diagnosis at Primary Health Care Level				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
3.1	Include cost-effective tools and commodities for early detection in the essential medicines list	3.1.1 Number of stakeholder meetings convened to review the essential medicines list and minimum standards for PHCs and include essential tools for NCD diagnosis and detection (glucometers, flowmeters, blood pressure, Acetic acid, POC test for sickle cell haemoglobin etc.)	Improved capacity of primary health facilities to conduct early detection and diagnosis of NCDs	Technical reports and health facility surveys
		3.1.2 Number/ types of tools and equipment procured and disseminated to PHCs for early detection and diagnosis at PHCs		

		3.1.3 Number of quality assurance tests conducted on procured equipment annually		

4. Priority Action: Scale-up Coverage of NCD Prevention Services at All Levels of Care				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
4.1	Roll-out the proposed human papilloma virus (HPV) for girls age 9-13 years	4.1.1 Number of advocacy (written and face-to-face) visits to GAVI and other relevant stakeholders conducted to include HPV and HBV among support being provided for Nigeria 4.1.2 Quantity of HPV and HBV provided by GAVI	Number of girls aged 9-13 that have been vaccinated against HPV Number of adults vaccinated against HBV	Vaccination coverage report
4.2	Institutionalization of life-course vaccine including hepatitis B virus	4.2.1. Number of advocacy exercise conducted for the institutionalization of life-course vaccine including HBV		
4.3	Include lifestyle and behavioural interventions for preventing CVDs, diabetes and cancers into primary health care	4.3.1 Number of recommendations on lifestyle and behavioural interventions included in NCD service delivery guidelines	Integration of NCD prevention into existing NCD care and treatment guidelines	Guideline documents
		4.3.2 Number of health care workers trainings on developed guidelines		
		4.3.3 Integrated prevention services for NCDs implemented at all levels of care		
		4.3.4 Genetic counselling and pre-marital/pre-conception screening for SCDs using POC devices at all levels of care		

5. Priority Action: Scale-up Coverage of Treatment Services for NCDs (CVD, Diabetes, Cancer, COPD, Sickle Cell Disease, MNSD and Injuries)				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
5.1	Ensure commodity security for essential drugs for treating diabetes, COPD, hypertension and CVD, cancers, SCD	5.1.1 Number of advocacy visits conducted to achieve inclusion of drugs for treating diabetes, COPD, hypertension, CVD, cancers and SCD in the national essential medicines list 5.1.2 Integrated commodity logistics for NCD medicines achieved	Change in the number and types of essential drugs for treating diabetes, COPD, hypertension, CVD, cancers and SCD included in the essential medicines list	Updated version of the essential medicines list
5.2	Develop clinical guidelines for care and treatment of diabetes, hypertension, CVD, COPD, Cancers, Sickle Cell Disease Integrate and implement services for managing injuries from Road traffic crashes into integrated NCD management guidelines	5.2.1 Number of workshops to develop evidence-informed treatment and treatment and care modalities for NCDs 5.2.2 Guidelines on pre-hospital care (to include ambulatory care/transfusion services) and treatment of all injuries integrated into NCD management guidelines 5.2.3 Number of bystander education conducted for pre-hospital management of injuries	Improvement in quality of care for NCDs Improvement in quality of care for NCDs	Facility based data Trainings/ activity reports
5.3	Establish community-based services for managing MNSD	5.3.1 Number of guidelines for community MNSD developed 5.3.2 Number of lay health/volunteer health workers trained on community based management of MNSD		

		5.3.3 Number of community based programmes the management of MNSD rolled out		
5.4	Establish long term care and End-of-life care services	5.4.1 Number of guidelines on long term care and end of life care services		

6. Priority Action: Explore Viable Health Financing Mechanisms				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
6.1	Include NCDs in benefits package for NHIS at all levels of care	6.1.1 Number of consultations and advocacy visits held to secure inclusion of NCDs in all benefits package for NHIS at all levels of care and expand the Basic Minimum Package of Health Services which will be financed by the Basic Healthcare Provision Fund to include comprehensive care and treatment of hypertension, diabetes, early detection of cancer, COPD, emergency care for stroke and heart attacks	Reduced out-of-pocket payments/ expenditure for NCD prevention, care and treatment	Health financing surveys

8.2.4. Objective Four: To Monitor Trends and Determinants of Non-Communicable Diseases and Evaluate Progress in their Prevention and Control

Table 36: ***Priority Actions to Monitor Trends and Determinants of NCDs***

1. Priority Action: Integrate NCDs into the National Health Management Information System				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
1.1	Develop national indicators for NCD service delivery and MSAP	1.1.1 Number of technical meetings and advocacy visits conducted to develop national indicators for NCD service delivery and MSAP	Expansion in the number of indicators and tools for NCD service delivery in NHMIS	NHMIS
1.2	Develop tools and registers. Include national indicators for NCD service delivery into NHMIS	1.2.1 Number of tools (Registers/Monthly summary forms) disseminated for capturing NCD service delivery indicators	Higher reporting rates on NCD service delivery in NHMIS	NHMIS
2. Priority Action: Strengthen Technical Capacity for NCD Surveillance, Monitoring and Evaluation				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
2.1	Build the capacity of national and state level M& E officers on NCD surveillance and monitoring	2.1.1 Number of workshops convened to develop a training curriculum for NCD surveillance and monitoring based on the nationally set targets, indicators and goal as well as the global monitoring framework	Change in knowledge and skills on NCD surveillance and monitoring among national, state and LGA NCD M&E officers	Training and monitoring reports
		2.1.2 Number of national, state and LGA level M&E officers trained on NCD surveillance and monitoring		

3. Priority Action: Integrate NCD Surveillance into Civil Registration and Vital Statistics Systems (Births from SCD, Deaths by Cause)				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
3.1	Include Haemoglobin genotype into birth forms and birth registers and NCD-related causes into death registration tools (vital statistics)	3.1.1 Number of advocacy visits and engagement meetings with National Population Commission for inclusion of haemoglobin genotype into birth forms and birth registers and NCD-related causes into death registration tools (vital statistics)	Inclusion of haemoglobin genotype into birth forms and birth registers and NCD-related causes into death registration tools (vital statistics)	Civil registration forms and registers

4. Priority Action: Conduct Periodic Surveys on NCDs and Evaluate Progress in their Prevention and Control				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
4.1	Conduct periodic survey to monitor NCD risk factors	4.1.1 Number of nation-wide STEP surveys conducted to determine the baseline burden of NCDs and their risk factors over a five year period 4.1.1 Number of NCDs indicators included into existing surveys such as MICS, NDHS 4.1.2 Number of nation-wide national MNSD survey conducted over a Five-year period 4.1.3 Number of nation-wide National Global Youth Tobacco survey conducted over a five year period 4.1.4 Number of nation-wide National Global Adult Tobacco survey conducted over a five year period	Improved capacity for NCD surveillance	Survey reports
4.2	Develop a dashboard on NCD	4.2.1 A dashboard for summarizing and disseminating data on NCDs from the NHMIS is developed		

8.2.5 Objective Five: To Promote and Support National Capacity for Quality Research and Development for Prevention and Control of NCDs

Table 37: ***Priority Actions to Promote National Research on NCDs***

1. Priority Action: Develop and Implement a Prioritized Research Agenda for NCD Prevention and Control				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
1.1	Set priorities for national research agenda	1.1.1 Number of research institutes and researchers identified 1.1.2 Number of prioritized research topics and cross-cutting issues identified	Priority research agenda for NCD prevention and control developed and published	Research priority setting report
2. Priority Action: Prioritize Budgetary Allocation for NCD Prevention and Control Research				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
1.1	Secure budgetary allocation for NCD prevention and control research in NCD budget line	2.1.1 A costed research plan for NCDs developed 2.1.2 Inclusion of research cost as a line item within FMoH NCD budget line	Increased funding for NCD research	Budget report
3. Priority Action: Strengthen Technical Capacity for Research				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
3.1	Build capacity of researchers on NCDs	3.1.1 Number of workshop on research methodology conducted for NCD Division-FMoH staff	Improved capacity to manage NCD-related research	Training report

		3.1.2. Number of NCD-FMoH staff participating in research methodology workshops 3.1.3. Number of researchers participating in NCD-related research courses		

4. Priority Action: Strengthen Collaboration with Foreign and Domestic Research Institutes				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
4.1	Build collaboration with foreign and domestic research institutes	4.1.1 Number of international and domestic research funding organizations identified 4.1.2 Number of call/request for proposals identified and responded to 4.1.3 Number of international and domestic collaborative research meetings with representation from Nigeria	Improved collaboration between foreign and domestic research institutions	Meeting reports

5. Priority Action: Strengthen Knowledge Translation in NCD Prevention and Control				
Activity Code	**Activities**	**Output Indicators**	**Outcome Indicators**	**Data Sources**
5.1	Strengthen the dissemination and use of research findings in public health policy and programming clinical practice	5.1.1 Number of already existing research on NCD prevention and control identified	Increase in the use of domestic research in development of guidelines and policy documents in NCD prevention and control	Database of NCD research and evidence summaries in Nigeria

		5.1.2 An electronic database for existing evidence that are relevant to NCD prevention and control is developed 5.1.3 Number of organizations that are working on knowledge translation identified 5.1.4 Number of researchers and policy makers participating in collaborative research sharing network activities 5.1.5 Number of evidence summaries on NCDs research produced and disseminated to policy makers 5.1.6 Number of policy makers reached with evidence summaries on NCDs research		

9. FRAMEWORK ON THE NCD MULTI-SECTORAL COORDINATION MECHANISM

This framework aims to provide guidance on how various stakeholders will be engaged to form a strategic partnership for achieving the priority actions in the NMSAP and strengthen the health system to provide high quality and seamless NCD care and treatment services.

This framework will provide clarity on the roles and responsibilities of the different stakeholders as well as potential benefits this partnership may bring to them. The partnership will also outline the channels that will be used for engagement and communication between various partners.

9.1 Membership and roles

The partnership will include representation from the following groups of stakeholders whose roles are itemized below;

Table 38: ***NMSAP Stakeholders and their Roles***

S/No	Categories	Role
1.	Government ministries department and agencies	To strengthen governance and stewardship for NCD prevention and control Both health and non-health MDAs will be responsible for formulating relevant national policies, regulations and laws for NCD prevention and control
2.	Government ministries department and agencies	To represent the interest of people living with or affected by NCDs and ensure that their unique experiences and perspective are considered in the formulation of policies and health system strengthening
3.	Civil society organization	To advocate for policy reforms and investments and hold governments and donors accountable to commitments made on NCD prevention, treatment and care

4.	Private health sector	To ensure affordability and availability of drugs and supplies for NCD diagnosis, treatment and care
5.	Private non-health sector	Tto support health promotion programs for preventing NCDs. This will include media and telecommunications companies for dissemination of information. Food and beverage companies will also participate to support implementation of reformulation programs for elimination of trans-fats, salt and sugar reduction.
6.	Donors	To mobilize resources for health promotion and service delivery programs for NCD prevention, treatment and care.
7.	NGO/Implementing partner	To support health service delivery for NCD prevention, treatment and care
8.	Research Institutions	To support knowledge generation and translation for evidence-informed policy making and practice

9.2 Membership Structure

The partnership will have three levels of membership;

I. **The Governing council for NCD prevention and control:** This will include relevant government ministries, department and agencies that are involved in taking multi-sectoral policy actions for NCD prevention and control.

*Table 39: **Members of National NCD Governing Council (NNGC)***

S/No	Stakeholder	MDA
1.	Secretary to the Government of the Federation (SGF)	Presidency
2.	Minister	Ministry of Health
3.	Minister	Federal Ministry of Finance
4.	Minister	Ministry of Budget and National Planning
5.	Minister	Federal Ministry of Industry Trade and Investment
6.	Minister	Federal Ministry of Information and Culture
7.	Minister	Federal Ministry of Justice
8.	Minister	Federal Ministry of Power, Works and Housing
9.	Minister	Federal Ministry of Environment
10.	Minister	Federal Ministry of Agriculture and Rural Development
11.	Minister	Federal Ministry of Women Affairs and Social Development
12.	Minister	Federal Ministry of Youth and Sports
13.	Special Assistant to the President on SDG	Office of Special Assistant to the President on SDG
14.	Minister	Federal Ministry of Labour and Employment
15.	Minister	Federal Ministry of Education

TERMS OF REFERENCE

- Set national goals and objectives for NCD prevention and control.
- Approve national policies, strategies and plans for NCD prevention and control.
- Ensure the full engagement of partners and broad advocacy and communication.
- Oversee optimal use of existing resources and undertake resource mobilization for program implementation and research.
- Evaluate progress of the partnership towards established goals (impact and coverage of cost-effective interventions).

II. **National NCD expert technical working group:** This will include the two representatives from the next level of partnership. They will be responsible in setting the NCD agenda and in escalating all recommendations from the expanded technical working group to the NCD governing council for approval.

TERMS OF REFERENCE

- Develop draft National policies, Strategies and Plans on NCD prevention and control for approval by the NNGC.
- Facilitate capacity building for committee members
- Oversee the implementation of activities related to the prevention and control of NCDs in Nigeria.
- Provide training to states on optimal implementation of the plan.
- Coordinate regular monitoring, evaluation and reporting on national response to address including the implementation and updating of the national NCD MSA plan.
- Report to the NNGC annually.
- Lead advocacy for the implementation of the NCD MSA plan
- Engage with relevant industries to achieve the national targets set in the MSAP
- Develop annual research plan based on identified research priorities during implementation of the NCD MSA plan.

III. **The Expanded technical working group:** This will include all stakeholders who wish to join the partnership. The expanded technical working group will have 4 sub-committees. These includes:

1. **Regulations, policies and plans;**
2. **Health interventions;**
3. **Advocacy, communication, social and resource mobilization**
4. **Research and surveillance.**

A chair and secretary will be designated for each level of membership

9.3 Engagement Modality

- The governing council will meet once a year to prioritize and review policy actions.
- The NCD expert working group will meet quarterly to discuss and prioritize activities for NMSAP implementation.
- The expanded group will also meet quarterly or as the need arises and will participate in the annual NCD prevention and control conference.

9.4 HEALTH IMPACT AND ECONOMIC RETURNS OF THE NMSAP

NCDs contribute significantly to loss of lives and disabilities. This in turn have a negative impact on national productivity and economy. Therefore, it makes economic sense to invest in NCDs prevention and control interventions.

Prevention, early detection and effective treatment of NCDs will enable Nigerians to have healthier and longer lives, reduce the risk of catastrophic health expenditure and improve their productivity and earning capacity. This culminates at the national level to reduced national expenditure on health, a vibrant and productive workforce and a boost in gross domestic product.

Investing in the "Best Buys" outlined in the NMSAP will save thousands of lives and generate economic outputs of approximately NGN 3502.8 Billion (USD 9.73 Billion) by 2030.

Figure 6: ***Return on investments of implementing the "Best Buys" in Nigeria***


#BeatNCDsNG

BIBLIOGRAPHY

Adamson TA, Ogunlesi AO, Morakinyo O, Akinhanmi AO, Onifade PO, et al. (2015) Descriptive National Survey of Substance Use in Nigeria. J Addict Res Ther 6:234. doi:10.4172/2155-6105.1000234

Ekanem, A.I. (2008) Global Youth Tobacco Survey for Nigeria.

Federal Ministry of Health (2008) Data Profile on Non-Communicable Diseases in Nigeria: A Systematic Review of the Evidence.

Federal Ministry of Health (2018) Cost Estimates of the Nigeria Multi-Sectoral Action Plan for the Prevention and Control of Non-Communicable Diseases 2018-2023 FMOH Abuja.

Gureje O, Lasebikan VO, Kola L, Makanjuola VA (2006) Lifetime and 12-month Prevalence of Mental Disorders in the Nigerian Survey of Mental Health and Well-Being. Br J Psychiatry 188: 465–471.

Ministry of Budget and National Planning (2017) Economic Recovery & Growth Plan 2017-2020 MBNP, Abuja

National Bureau of Statistics (2017). Road Transport Data. [Online] Available at: http://nigerianstat.gov.ng/elibrary?queries[search]=transport%20data (Accessed: 2 August 2018).

World Health Organization.Nigeria Global Adult Tobacco Survey (2012). [Online] Available at: http://ghdx.healthdata.org/record/nigeria-global-adult-tobacco-survey-2012 (Accessed: 2 August 2018).

WHO(2017) Tackling NCDs "Best buys" and other recommended interventions for the prevention and control of Non-Communicable Diseases https://apps.who.int WHO assessed

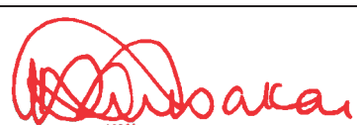
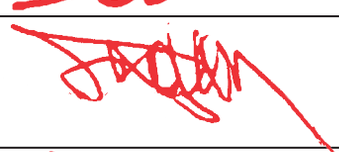
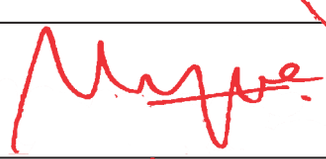
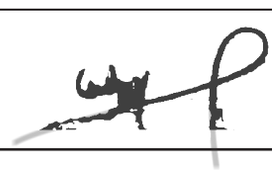
World Health Organization (2014) Global Status Report on Non-Communicable Diseases. Geneva, Switzerland: WHO;

WHO (2011) Scaling up Action Against Non-Communicable Diseases: How Much will it Cost? – Prepared by the World Health Organization, Geneva.

APPENDIX

1.0 Endorsements

We, hereby pledge to support Multi-Sectoral Action on Non-Communicable Diseases in Nigeria.

S/No	Name	Designation	Signature
1	Prof. Isaac F. Adewole	Honourable Minister Ministry of Health	
2	Mrs Zainab Ahmed	Honourable Minister Ministry of Finance	
3	Senator Udoma Udo Udoma	Honourable Minister Ministry of Budget and National Planning	
4	Suleiman Hassan	Honourable Minister Federal Ministry of Environment	
5	Aisha Abubakar	Honourable Minister Ministry of Women Affairs and Social Development	
6	Babatunde Raji Fashola	Honourable Minister Ministry of Power Works and Housing	
7	Chief Audu Ogbeh	Honourable Minister Ministry of Agriculture	
8	Dr Chris Ngige	Honourable Minister Ministry of Labour and Productivity	
9	Barr Solomon Dalung	Honourable Minister Youth and Sport Development	
10	Arc Sonny Echono	Permanent Secretary Federal Ministry of Education	
11	Dcns. Grace Gekpe	Permanent Secretary Federal Ministry of Information and Culture	

2.0 Core Technical Team of NMSAP Development

Organization	Name
FMoH	Dr Nnenna Ezeigwe
	Mrs Chiamaka Omoyele
	Dr Malau Toma
	Dr Alayo Sopekan
	Dr Ikponwosa Osaghae
	Mr. Emmanuel Abraham
WHO	Dr Rex Mpajanze
	Dr Mary Dewan
HSDF	Dr Lilian Anomnachi
	Dr Christine Ezenwafor
	Dr Ndukwe Ukoha
	Dr Bridget Nwagbara
	Priye Igali
	Ibrahim Khalil Ibrahim

3.0 Technical Working Group Members

S/N	NAME	ORGANISATION
	GOVERNMENT	
1	Dr Evelyn Ngige	Public Health Department, Federal Ministry of Health
2	Dr Nnenna Ezeigwe	Non-Communicable Diseases Division, Federal Ministry of Health
3	Dr. Alayo Sopekan	Non-Communicable Diseases Division, Federal Ministry of Health
4	Dr. Malau M.	Non-Communicable Diseases Division, Federal Ministry of Health
5	Etta Jeanette Nneka	Non-Communicable Diseases Division, Federal Ministry of Health
6	Chiamaka Omoyele	Non-Communicable Diseases Division, Federal Ministry of Health
7	Fortune M. Udott	Non-Communicable Diseases Division, Federal Ministry of Health
8	Emmanuel Abraham	Non-Communicable Diseases Division, Federal Ministry of Health
9	Akinkoye Kehinde Olanike	Non-Communicable Diseases Division, Federal Ministry of Health
10	Nwosu Ngozi U.	Non-Communicable Diseases Division, Federal Ministry of Health
11	Paul Samson	Non-Communicable Diseases Division, Federal Ministry of Health
12	Ologidi Ebiweni Lawrence	Non-Communicable Diseases Division, Federal Ministry of Health
13	ijeoma C Ike	Federal Ministry of Health
14	Onah Helen	Non-Communicable Diseases Division, Federal Ministry of Health
15	Odenigbo Grace	Non-Communicable Diseases Division, Federal Ministry of Health
16	Balogun Adeleke	Department of Health Planning Research and Statistics, Federal Ministry of Health
17	Welle Sylvanus	Health Promotion Division, Federal Ministry of Health
18	Pharm Ologun Taiye Joseph	Department of Food and Drugs Services, Federal Ministry of Health
19	Dr. Onuselogu Chinwendu Nwife	National Cancer Control Programme, Federal Ministry of Health
21	Eke Eucharia Onyinyechi	Nutrition Division, Family Health Department, Federal Ministry of Health
22	Ntia Thompson	Ministry of Budget and National Planning

23	Grace Obi-Ukpabi	Ministry of Budget and National Planning
24	Nwajagu Ifunanya	Federal Ministry of Justice
25	Abah Anthony O.	Federal Ministry of Justice
26	Odubanjo Olajumoke .A	Federal Ministry of Information and culture
27	Chinyere Ifeanyichukwu	Federal Ministry of Information and Culture
28	Febau Cephas Ebikeniye	Federal Ministry of Communication and Technology
29	Amuchi Edwin C.	Federal Ministry of Communication and Technology
30	Okereke Chinwe P.	Federal Ministry of Education
31	Ofuani Josephine	Federal Ministry of Women Affairs and Social Development
32	Dr. S. A Anzaku	Federal Ministry of Agriculture and Rural Development
34	N. Mohammed	Federal Ministry of Industry Trade and Investment
35	Beatrice U. Danladi	Federal Ministry of Foreign Affairs
36	Kabiru Mohammed	Federal Ministry of Youth and Sport Development
37	Janet Garba	Federal Ministry of Youth and Sport Development
38	Nongo Daniel N.	Federal Ministry of Power, works and Housing
39	Ogunrami.O.O	Federal Ministry of Power, works and Housing
40	Vivian Idogho	Federal Ministry of Finance
41	Rukayya Mohammad	Federal Ministry of Environment
42	Okunbo Ruth O.	Nigeria Police Force
43	Olusegun Jacob	National Primary Health Care Development Agency
44	Dr. Amina Abdul-One	National Primary Health Care Development Agency
45	Adeola Jegede	National Institute for Pharmaceutical Research and Development
46	Enwere Francis	National Health Insurance Scheme

47	Abioye Bolanle	National Health Insurance Scheme
48	Hasatu Sirika	National Agency for Food and Drugs Administration and Control
50	Cdr. B. Alti (Rtd)	National Emergency Management Agency
51	Dr Barth Ugwu	SON
TERTIARY INSTITUTIONS		
52	Dr. Taiwo Lateef Sheik	Ahmadu Bello University Teaching Hospital
53	Prof. Felicia Anumah	University of Abuja Teaching Hospital
54	Prof. Obiageli Nnodu	University of Abuja Teaching Hospital
55	Prof. Ima- Obong A. Ekanem	University of Calabar Teaching Hospital
56	Dr Osunkwo	National Hospital Abuja
NON-GOVERNMENTAL ORGANIZATIONS		
57	Lilian Anomnachi	Health Strategy Delivery Foundation
58	Ndukwe Ukoha	Health Strategy Delivery Foundation
59	Bridget Nwagbara	Health Strategy Delivery Foundation
60	Priye Ruth Igali	Health Strategy Delivery Foundation
61	Rita Melifonwu	Stroke Action Nigeria
62	Olu'seun Esan	Nigerian Tobacco Control Alliance
63	Prof. Sani Malami	NCD Alliance
64	Prof. Sunday A. Bwala	Stroke Reference Group
65	Mrs. S. D. Alexander	Policy Analysis Research and Statistics
	UN ORGANIZATIONS	
66	Dr Wondimagegnehu Alemu	World Health Organization
67	Dr Rex Mpanzanje	World Health Organization
68	Dr. Mary Dewan	World Health Organization
69	Sangeeta Carol Pinto	World Bank
70	Alamu Mary A	Food and Agriculture Organization


#BeatNCDsNG