Republic of Zambia
Ministry of Health

2022-2026 National Health Strategic Plan

"Towards Attainment of Quality Universal Health Coverage Through Decentralisation"

FOREWORD

Zambia, like many other Sub-Saharan African (SSA) countries, is faced with a high burden of disease, especially: maternal, child and adolescent health problems; communicable diseases (Malaria, HIV/AIDS, Sexually Transmitted Infections (STIs), Tuberculosis (TB), COVID-19, among others, and a growing burden of non-communicable diseases (NCDs). Even though there has been progress in selected health indicators, particularly for maternal and child health, this progress has been inadequate and below the targets.

This strategic plan focuses on addressing the health sector challenges and accelerating progress towards attainment of the national and global health goals, aimed at ensuring equitable access to quality healthcare to all in Zambia, as close to the family as possible, Leaving No One Behind. This is expected to lead to the attainment of the Sustainable Development Goals (SDGs), particularly the targets under SDG 3 "Good health and wellbeing for all", other health-related SDG targets, and ultimately, Universal Health Coverage (UHC).

Further, the plan is in line with, and seeks to contribute to the national development agenda, as outlined in the Eighth National Development Plan (8NDP) and the Vision 2030, which expresses the Zambian people's aspiration to become "a prosperous middle-income nation by 2030". It also resonates with the United Party for National Development (UPND) government's strategic socio-economic development agenda, focused on expanding coverage and improving the quality of health services provided to our people.

The Plan recognizes that all health care interventions are critical, however, due to the constraints on available resources and capabilities, interventions need to be prioritized. In this respect, the main focus is on strengthening prevention; Primary Health Care (PHC), health promotion, public health security and nutrition. This will be done by increasing access to quality health services through infrastructure development, ensuring timely, adequate and equitable availability of quality essential medicines and medical supplies, availability of human resource for health, scaling up healthcare financing and strengthening leadership and governance, and other supporting systems.

The country aims to reduce maternal and child mortality rates, malaria, HIV, TB and NCDs incidence among other key health outcomes, and combat COVID-19 through decentralised integrated community and primary health care approach. It is acknowledged that, good health is a function of not only health care services, but also other socio-economic factors, such as education, agriculture, housing, water and sanitation, sport and the environment. The Plan, therefore, calls for strong and well-coordinated multi-sectoral collaboration and partnerships, in order to efficiently and effectively address all the social determinants of health, to reduce the disease burden.

It is my wish that, with concerted effort and commitment from the Government, Cooperating Partners, NGOs, the private sector; the Civil Society, the Church, traditional and local authorities, communities and other stakeholders, the successful implementation of this Plan will contribute to socio economic development of the country.

I, therefore, implore all stakeholders involved in the implementation of this Plan to fully dedicate themselves to this important national duty.

Hon. Sylvia T. Masebo, MP
MINISTER OF HEALTH

ACKNOWLEDGEMENTS

The National Health Strategic Plan (NHSP) 2022–2026 was developed through a consultative process, with broad participation and contributions from various individuals and institutions. I, therefore, wish to extend my sincere appreciation to all those who contributed to this process.

Special tribute goes to the World Health Organization (WHO), the Global Fund (GF) and other Cooperating Partners, for their technical and financial support rendered to the process of developing this plan.

I also wish to express my gratitude to the members of staff from Ministry of Health headquarters, Provincial Health Offices (PHOs), District Health Offices (DHOs), hospitals/health facilities, health Statutory Institutions and training institutions, representatives of Line Ministries, Churches Health Association of Zambia (CHAZ), Non-Governmental Organisations (NGOs), private sector and other relevant stakeholders, for their participation, contributions and support to this process.

Special thanks to the Policy and Planning Department staff and the consultant, for their commitment and taking the lead in the development of the Plan.

It is my desire that the aspirations of this Strategic Plan will be realised and contribute to the positive health outcomes.

Prof. Lackson Kasonka
Permanent Secretary – Technical Services
MINISTRY OF HEALTH

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ACRONYMS

7NDP	Seventh National Development Plan
8NDP	Eighth National Development Plan
AAP	Annual Action Plan
ABC	Activity-Based Costing
ADH	Adolescent Health
AfSBT	Africa Society for Blood Transfusion
AIDS	Acquired Immunodeficiency Syndrome
AMR	Anti-Microbial Resistance
ANC	Antenatal Care
ART	Antiretroviral Therapy
ARV	Antiretroviral Drugs
AYP	Adolescent and Young People
BSIS	Blood Safety Information System
CAC	Comprehensive Abortion Care
CBOH	Central Board of Health
CBV	Community Based Volunteers
CDH	Cancer Diseases Hospital
CHAs	Community Health Assistants
CHAZ	Churches Health Association of Zambia
CHW	Community Health Workers
COVID-19	Corona Virus Disease 2019
CPs	Cooperating Partners
CSO	Central Statistical Office
CSOs	Civil Society Organizations
CT	Computed Tomography
CVDs	Cardiovascular Diseases
DHIS2	District Health Information System 2
DHO	District Health Office
DHS	Demographic and Health Survey
DNA	Deoxyribonucleic Acid
EH	Environmental Health
EID	Early Infant Diagnosis
EmONC	Emergency Obstetric and New-born Care
EMTCT	Elimination of Mother-to-Child Transmission
ENC	Essential New-born Care
ENT	Ear, Nose, and Throat
EPI	Expanded Programme on Immunization
ETAT	Emergency Triage Assessment and Treatment
FANC	Focused Antenatal Care
FBO	Faith Based Organization
FETP	Field Epidemiology Training Programme
FFP	Fresh Frozen Plasma

FP	Family Planning
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
GHE	Government Health Expenditure
GMP	Growth Monitoring Programme
GNC	General Nursing Council
GRZ	Government of the Republic of Zambia
HACCP	Hazard Analysis of Critical Control Points
HFCA	Health Facility Catchment Area
HiAP	Health in All Policies
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPCZ	Health Professional Council of Zambia
HPV	Human Papilloma Virus
HRH	Human Resources for Health
HRIS	Human Resource Information System
iCCM	Integrated Community Case Management
ICT	Information Communication Technology
ICU	Intensive Care Unit
IDSR	Integrated Disease Surveillance and Response
IEC	Information, Education and Communication
IFMIS	Integrated Financial Management Information System
IHP+	International Health Partnerships and Related Initiatives
IHR	International Health Regulation
IMAM	Integrated Management of Acute Malnutrition
IMR	Infant Mortality Rate
IP	Infection Prevention
IPC	Infection Prevention and Control
IPTp	Intermittent Preventive Treatment of Malaria during Pregnancy
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Net
JAR	Joint Annual Review
LARC	Long-Acting Reversible Contraceptives
LCMS	Living Conditions and Monitoring Survey
LLITN	Long-Lasting Insecticide-Treated Net
LMIS	Logistics Management Information System
LNOB	Leaving No One Behind
M&E	Monitoring & Evaluation
MC	Male Circumcision
MDA	Mass Drug Administration
MDG	Millennium Development Goal
MDR-TB	Multi-Drug Resistant Tuberculosis
MDSR	Maternal Death Surveillance Review
MMR	Maternal Mortality Ratio
MNCH	Maternal, New-born and Child Health

MOF	Ministry of Finance
MOGE	Ministry of General Education
MOH	Ministry of Health
MPDSR	Maternal and Peri-Natal Death Surveillance Response
MSL	Medical Stores Limited
MTEF	Medium Term Expenditure Framework
MTR	Mid-Term Review
NAC	National AIDS Council
NCDs	Non-Communicable Diseases
NCHS	National Community Health Strategy
NDQCL	National Drug Quality Control Laboratory
NFL	National Food Laboratory
NFNC	National Food and Nutrition Commission
NGOs	Non-Governmental Organizations
NHA	National Health Accounts
NHC	Neighbourhood Health Committee
NHCP	National Health Care Package
NHP	National Health Policy
NHSP	National Health Strategic Plan
NMCZ	Nursing and Midwifery Council of Zambia
NMR	Neonatal Mortality Rate
NTDs	Neglected Tropical Diseases
NTOP	National Training Operating Plan
NTP	National Tuberculosis Programme
PBCR	Population Based Cancer Registry
PBTC	Provincial Blood Transfusion Centre
PHC	Primary Health Care
PHO	Provincial Health Office
PNC	Post-Natal Care
PLHIV	People Living with HIV
PMDT	Programmatic Management of Drug-Resistant Tuberculosis
PPP	Public Private Partnership
QA	Quality Assurance
QC	Quality Control
QI	Quality Improvement
RAF	Resource Allocation Formula
RBCE	Red Blood Cell Exchange
RCC	Regional Collaborating Centre
RED/C	Reach Every District and Every Child
RH	Reproductive Health
RHC	Rural Health Centre
RMNCAH_N	Reproductive, Maternal, New-born, Child, Adolescent Health and Nutrition
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goal
SGBV	Sexual Gender Based Violence

SHI	Social Health Insurance
SI	Statutory Instruments
SMAG	Safe Motherhood Action Group
SMC	Senior Management Committee
SOP	Standard Operating Procedure
SQA	Service Quality Assessment
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
STI	Sexually Transmitted Infection
SWAp	Sector Wide Approach
TB	Tuberculosis
TBT	Tuberculosis Preventive Therapy
TDRC	Tropical Disease Research Centre
THE	Total Health Expenditure
TPE	Therapeutic Plasma Exchange
TTI	Transfusion Transmissible Infections
TWG	Technical Working Group
UNAIDS	United Nations AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UPND	United Party for National Development
UTH	University Teaching Hospital
VAT	Visual Assessment for Treatment
VMMC	Voluntary Medical Male Circumcision
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
ZAMMSA	Zambia Medicines and Medical Supplies Agency
ZAMPHIA	Zambia Population HIV Impact Assessment
ZAMRA	Zambia Medicines Regulatory Authority
ZDHS	Zambia Demographic and Health Survey
ZFDS	Zambia Flying Doctors Services
ZNBTS	Zambia National Blood Transfusion Service
ZNPHI	Zambia National Public Health Institute

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1. EXECUTIVE SUMMARY

1.1 Introduction

The National Health Strategic Plan (NHSP) 2022-2026 was developed within the context of the national and health sector development planning frameworks. The Plan is guided by the Vision 2030, the Eighth National Development Plan (8NDP), other relevant national, regional and international policy and strategic development frameworks and aligned to the United Party for National Development (UPND) Manifesto. The Plan represents a comprehensive strategic framework and direction for the health sector for the next five years, focusing at achieving the national health goals and objectives, towards attainment of targets under Sustainable Development Goal No. 3 (SDG 3) "Good health and well-being for all" and quality Universal Health Coverage (UHC).

The Plan has been structured along the World Health Organisation (WHO) health system building blocks. It was developed through a broadly consultative process, involving all the main stakeholder groups.

1.2 Background

Over the years, Zambia's population has continued to rapidly grow, rising from 13.1 million in 2010 to 18.4 million in 2021. In 2018, the estimated total fertility rate was 4.7 births per woman of reproductive age, a decline from 5.3 births per woman in 2013/14. Majority of the Zambian population is affected by poverty, with 54.40% in 2015 classified as poor and 40.80% as extremely poor (CSO, 2015).

The country has continued to experience a huge burden of disease, mainly characterized by: high prevalence and impact of communicable diseases, particularly, malaria, HIV and AIDS, Sexually Transmitted Infections (STIs) and Tuberculosis (TB); and high maternal, neonatal and child morbidity and mortality. The country is also faced with a rapidly rising burden of non-communicable diseases, including cancer diseases, mental health, diabetes mellitus, cardiovascular diseases (CVD) and trauma. Since the late 2019, Zambia has also not been spared from the global COVID-19 pandemic, which engulfed the entire country, leading to significant morbidities and mortalities, deterioration in the health status of the population and devastated the economy.

Although there has been notable progress in most of the key areas of health service delivery, as well as in health systems strengthening, significant gaps and challenges still exist and the health status of most, especially women, children, adolescents and the most vulnerable groups remains a challenge and of major concern.

1.3 Vision, Mission, Overall Goal, Priorities and Principles

Vision: A Nation of Healthy and Productive People.

Vision: A Nation of Healthy and Productive People.

Mission: To provide equitable access to cost-effective, quality health services, as close to the family as possible, Leaving No One Behind.

Overall Goal: To improve the health status of the people in Zambia, in order to contribute to increased productivity and socio-economic development.

National health priorities: The main national health priority areas will include: strengthening prevention and Primary Health Care (PHC); Maternal, neonatal, child and adolescent health and nutrition; Communicable diseases - malaria, HIV and AIDS, STIs and TB control; Non-Communicable Diseases (NCDs); and strengthening of the integrated health support systems.

Health sector values and principles: The following have been identified and adopted as the health sector values and principles: Safety; Quality; Equity; Access; Affordability; Efficiency and effectiveness; Transparency and Accountability; Participation; Partnerships; Decentralization; and Good governance.

1.4 Strategic Directions and Interventions

1.4.1 Strategic Direction 1 - Strengthen Health Service Delivery in order to Attain Quality Universal Health Coverage (UHC) by 2030

1.4.1.1 Situation Analysis

Over the past 5 years, notable progress was recorded under all the major health programmes. However, on the other hand, the population continued with rapid growth, and the disease burden remained high, demanding for scaling up of appropriate services. The recent trends and situation, in respect of service delivery are summarized below.

- Primary Health Care (PHC): During implementation of the NHSP 2017–2021, the PHC programme was strengthened by establishing the Community Health Unit (CHU) at the head office, and the development and implementation of the National Community Health Strategy (NCHS) and a community health investment case. Training, capacity-building and recruitment of community health cadres, including Community Health Assistants (CHAs) and Community Health Volunteers (CHVs) were all scaled up. Nevertheless, major gaps and challenges have been identified and need to be addressed, in order to further strengthen PHC. The following were the developments in the main PHC service delivery areas:

- Reproductive, Maternal, Neonatal, Child and Adolescent Health and Nutrition (RMNCAH-N): Progress was made towards increasing contraceptive prevalence rate for currently married women aged 15 – 49 years, which rose from 45% in 2014 to 50% in 2018, against the target of 60%, and the unmet need dropped from 21% to 20% over the same period (ZDHS 2018). The country also recorded a reduction in under 5 and infant mortality rates, with Under-five Mortality Rate (U5MR) reducing from 75 in 2013/14 to 61/1000 live births in 2018, compared to the target of 35 /1000 live births. Infant mortality Rate (IMR) reduced from 45 to 42/1000 live births, against the target of 15/1000 live births, during the same period.

However, adolescent friendly services were not utilized due to limitation in coverage and other social barriers to Adolescent and Young People (AYP). Despite considerable positive trends noted in the nutrition status among under 5 children, the prevalence of malnutrition still remains unacceptably high, with stunting currently at 35%, against the target of 14%, ranking third highest in the southern region, wasting at 4% against the target of 1%, and underweight at 12% compared to the target of 2%.

- Communicable Diseases: In Zambia, the main communicable diseases of public health concern include malaria, HIV and AIDS, Sexually-Transmitted Infections (STIs) and Tuberculosis (TB).

  Malaria remains a major public health concern, leading to significant illness and death. According to national estimates, in 2021, there were 340 malaria cases per 1,000 population, against the target of less than 5 cases per 1,000, and 8 in-patient malaria deaths per 100,000 population. In the same year, Zambia recorded a total of 6,262,775 cases and 1,480 deaths due to malaria. The goal of attaining malaria elimination remains the national aspiration.

  HIV and AIDS remains among the top five causes of morbidity in Zambia. The national HIV prevalence in Zambia remains high, at over 11% in the 15-49 age group, with urban areas (15.9%), recording twice as high compared to rural areas (7.1%) (ZDHS, 2018). However, with increasing access to effective HIV prevention, diagnosis, treatment and care, including for opportunistic infections, HIV has become a manageable chronic health condition, and people living with HIV can now live long and healthy lives. During the period of the NHSP 2017-2021, Zambia performed well in its efforts towards the attainment of the UNAIDS 90-90-90 targets, with 90.1% of the population knowing their HIV status, 98% of the persons living with HIV being put on Anti-Retroviral Therapy (ART) and 96.6% being virally suppressed (ZAMPHIA, 2021).

  Tuberculosis (TB) ranks among the top ten causes of mortality. However, the country has made tremendous progress in responding to the TB epidemic in the country. Between 2016 and 2021, the TB incidence in Zambia has declined from 376/100,000 to 319/100,000 population (WHO Global Report 2021/MOH TB Annual Report 2021).

  The Corona Virus 2019 (COVID-19) global pandemic has devastated the Zambian population and economy since 2020 and left a trail of significant numbers of morbidities and mortalities. As of 31st December, 2021, the cumulative mortalities stood at 3,734. In response to the pandemic, Government embarked on mass vaccination, and as of 31st December, 2021, about 1,217,415, representing 14 % of 8.4 million target.

- Non-Communicable Diseases (NCDs): In Zambia, according to WHO's Zambia NCD profile, NCDs accounted for 23.0% of total deaths. Cardiovascular diseases accounted for 8.0%, cancers 4.0%, chronic respiratory diseases 1.0%, diabetes 1.0% and other NCDs accounted for 9.0% (WHO, 2014b). Addressing NCDs is an integral part of the 2030 Global Agenda for Sustainable Development Goal 3 (SDG3), target 3.4 which calls on countries to reduce morbidity and mortality due to NCDs by a third by 2030 relative to

2020 levels, and to promote mental health and wellbeing.

Other areas of public health concern in Zambia include Viral Hepatitis, Neglected Tropical Diseases (NTDs), Ear, Norse and Throat (ENT), eye health, and other health concerns.

The Ministry of Health has observed that, despite the efforts and progress recorded under these programmes, major challenges and gaps have been still exist, which need to be addressed, in order to achieve the national health goals.

1.4.1.2 Strategic Focus

The Plan focuses at ensuring delivery of safe, quality, efficient, and effective health services across the country, considering equity of access, cost-effectiveness, human rights, gender and socio-economic conditions of different populations. The approach is to strengthen prevention with Primary Health Care (PHC) as an engine for delivering health services to all. In addition, the referral systems will be strengthened to facilitate timely access to the next level of health services.

The Plan has identified specific goals, objectives and strategic interventions for each programme area for the plan period. The focus will be on achieving the following goals by programme area:

#	Intervention Area	Specific Goal
1.	Primary Health Care (PHC)	To contribute to the attainment of Universal Health Coverage (UHC) by 2030, by providing comprehensive essential PHC services to all Zambians.
1.1	Health Promotion and Education	To empower individuals, families, households and communities with knowledge and skill to realize the highest level of health and well-being.
1.2	Community Health	To create an enabling environment for implementation of PHC in Zambia.
1.3.	Reproductive, Maternal, Neonatal, Child and Adolescent Health and Nutrition (RMNCAH-N)	• To Reduce Maternal Mortality from 278 to less than 100/100,000 live births by 2026. • To reduce Neonatal Mortality Rate from 27/1000 live births to 12/1000 live births by 2026. • To reduce under-five Mortality from 61/1000 live births to 25/1000 live births by 2026. • To improve the health status of Adolescents in Zambia. • To improve the nutritional status of Zambian population, particularly for children, adolescents and women in child bearing age in line with the Global Nutrition Targets 2030.

1.4.	Communicable Diseases	? To reduce malaria incidence from 340/1,000 to 201/1,000 by 2026. ? To reduce the HIV incidence from 28,000 to 15,000 by 2026. ? To reduce Tuberculosis incidence from 319/100,000 population in 2020 to 169/100,000 by 2026. ? To reduce Hepatitis B Incidence to less than 1.8/100,000 population by 2026.
1.5	Non-Communicable Diseases (NCDs)	? To reduce morbidity and mortality due to NCDs and to promote mental health and well-being. ? To mitigate the disease burden arising from mental health through the use of comprehensive promotional, preventive, curative and rehabilitative services. ? To reduce premature mortality from adult cancer by 30% and improve childhood cancer survival to over 60% by 2026.
1.6	Other Areas of Public Health Concern (Neglected Tropical Diseases; Environmental Health; Public Health Security; Social Determinants of Health)	? To eliminate and control Neglected Tropical Diseases ? To reduce the incidence of environmental related diseases through promotion of Environmental Health Services at all levels of care ? To safe-guard national public health security by preventing and controlling infectious and non-infectious public health threats in Zambia by the year 2026. ? To increase the proportion of Districts implementing the Whole-of-Society and Whole-of Government approach on actions that address Social Determinants of Health from the current 5% to 30% by 2026.
2.	Clinical Care	? To improve clinical health outcomes (management of conditions and treatment outcomes) by 2026. ? To ensure availability of adequate supplies of safe blood and blood products to all patients in Zambia.
3.	Diagnostic Services	To provide quality, accurate, timely, cost effective and appropriate diagnostic services at all levels of care by 2026.
4.	Rehabilitative Services	Provision of rehabilitative services at all levels of care to improve health outcome.

1.4.2 Strategic Direction 2: Strengthen Integrated Health Support Systems to facilitate attainment of the targets under SDG 3 and UHC

1.4.2.1 Situation Analysis

Health Workforce: The health workforce situation in Zambia remains a major concern, in terms of numbers, quality and equity. The Ministry has emphasised the need to ensure availability of adequate, competent and well-distributed health workforce across the country. According to the 2020 WHO report, the Zambia doctor to patient ratio was at 1 to 12,000, compared to the ideal doctor patient ratio of 1 to 5,000. Further, the report revealed the nurse to patient ratio was 1 to 14,960, compared to the ideal of 1 to 700. The clear implication is that despite efforts towards attaining the WHO health worker to patient ratio, the recruitment of competent and adequate health staff needs to continue and be scaled up.

Essential Medicines, Medical Supplies and Vaccines: The procurement and supply of essential medicines and medical supplies remains a major concern for the health sector in Zambia, with stock-outs at all the levels of care. In 2021, the Zambia Medicines and Medical Supplies Agency (ZAMMSA) was established, through an Act of Parliament (Act No. 9 of 2019), which transformed the Medical Stores Limited (MSL) into ZAMMSA, with an additional mandate of procurement of medicines and medical supplies for the public health sector. Further, there have been improvements in the storage capacity across the country, through the establishment of seven (7) regional hubs as at 2021. However, the problem of stock-outs of essential medicines and medical supplies has not yet been resolved and needs urgent attention.

Health Infrastructure, Equipment and Transport: Health infrastructure, medical equipment and transport are important physical inputs that are essential for the delivery of quality health services. Many people across the country still face challenges in accessing health services. In order to address the capacity and access barriers in the provision of health services, the Ministry has continued to invest in maintenance, rehabilitation, upgrading, and construction of health facilities. Procurement and distribution of essential medical equipment and transport, and to negotiate for more optimal funding. One of the major challenges is the high number of stalled projects, which needs to be addressed.

Health Information, research and Innovation: Health Information Systems (HIS), research and innovation are important in generating and promoting the utilization of high-quality information required for the promotion, restoration and maintenance of a population's health. Health information systems are essential for monitoring, measuring and evaluating public health trends.

During the period 2017 to 2021, the Health Management Information System (HMIS) was strengthened to be responsive to programme needs. However, there is need for further strengthening and harmonization of health information systems in order to scale-up access, and utilization of quality and timely health information.

Health Care Financing (HCF): During the implementation period of the NHSP 2017-2021, one key achievement was the development of the National Health Care Financing Strategy (2017 - 2027), whose goal is to attain adequate, sustainable and predictable financing through existing and new sources. Another major achievement was the successful introduction of the National Health Insurance Scheme (NHIS).

The 2017-2021 NHSP targeted to achieve the Abuja target of 15% of the national budget. However, despite the observed nominal increase in financing to the health sector, the share of health funding to the total public budget decreased, from 8.9% in 2018 to 8.1% in 2021, and remained far below the Abuja target. There is still a significant financing gap requiring renewed commitment and effort from the Government and its Cooperating Partners. Further, the National Health Accounts (NHA) 2016 report reveals that the health sector was heavily dependent on external assistance, with an annual average of 42% (US$22.58 per capita) of the total per capita health expenditure from donors and 41% (US$25.04 per capita) from the Government in 2016. A large proportion of donor funding was made off-budget (MoH Action Plan 2017-2021).

Leadership and Governance: The International Health Partnerships (IHP+) provides a framework for analysing governance of the health sector by focusing on broader issues of policy, legislation, coordination, equity, effectiveness and efficiency, transparency and accountability, intelligence and information, and ethics. An important development towards strengthening the health sector's leadership and governance in Zambia has been the existence of a strong Sector-wide Approach (SWAp) mechanism, for coordination of the participation of the sector partners in health sector. Decentralisation of health systems and services will form part of the main focus of the repositioning of the health sector, to deliver universal health coverage to the people of Zambia.

1.4.2.2 Strategic Focus

The Ministry's main focus in implementing the planned interventions under the integrated health systems component, will be on ensuring the achievement of the following goals.

#	Intervention Area	Goal
1.	Health Workforce	To increase availability of skilled, motivated, equitably distributed staff and effective support services to contribute to the effective delivery of health services.
2.	Essential Medicines, Medical Supplies and Vaccines	To secure adequate, quality, efficacious, safe, and affordable Essential Medicines and Medical Supplies through an efficient and effective supply chain system.
3.	Health Infrastructure, Equipment and Transport	To increase the availability and access to health infrastructure, equipment and transport by 2026.

4.	Health Information, Research and Innovation	? To strengthen integrated health information systems. ? To strengthen the National Health Information Management and Research.
5.	Health Care Financing	To attain adequate, sustainable and predictable financing through existing and new sources for improved health outcomes by 2026.
6.	Leadership and Governance	To ensure a well-functioning health sector to respond to the health needs of the Zambian People by 2026.

1.5 Implementation Arrangements

Implementation of the NHSP will be a coordinated effort by the MoH, together with the various stakeholders, which will include relevant line ministries/departments, other socio-economic sectors, the Churches Health Association of Zambia (CHAZ), the private sector, Cooperating Partners (CPs), Civil Society Organisations (CSOs), including, Non-Governmental Organizations (NGOs), Faith-based Organisations (FBOs), and other stakeholders. Overall coordination will rest with senior management of the MoH, to ensure that all players support the same priorities and the same interventions, in a coherent and coordinated manner.

1.6 Monitoring and Evaluation

Monitoring of the implementation of this Plan will largely be based on the existing, as well as new systems for routine, periodical and ad hoc collection and reporting of health information. These will include: the systems coordinated by MoH, such as the HMIS, Integrated Disease Surveillance and Response (IDSR), Human Resource Information System (HRIS), Electronic Logistics Management Information System (eLMIS); and Healthcare Financing System (HCF). This will be complemented by other important information systems augmenting the HMIS that are coordinated by other government departments and line ministries, such as the Zambia Demographic and Health Surveys (ZDHS), the Living Conditions Monitoring Surveys (LCMS), National Census of Population and Housing, systems collecting vital statistics on births, citizenship and deaths, and the Integrated Financial Management Information System (IFMIS).

This NHSP will undergo two (2) evaluations, namely, a Mid-term Review (MTR), after the first two and a half (2.5) years of implementation, and a final review at the end of the duration. The final review will form part of the situation analysis process for development of the next NHSP. Other annual and/or interim reviews may be considered and undertaken through the SWAPs.

1.7 Costing and Financing of the NHSP

The Strategic Plan was costed based on Output-Based Budgeting (OBB) Medium-Term Expenditure Framework (MTEF) projections and the planned performance targets. The costing was also guided by the assumptions which were issued by the Government for the preparation of the MTEF plans for 2022 to 2024.The total cost of the Plan for the five (5) years duration is estimated at ZMW 158.3 Billion (equivalent to US$ 7.9 Billion).

A financing gap analysis was also carried out in order to estimate the additional funding needed over the next 5 years. This was based on the projected Government funding to the health sector based on the Medium-Term Expenditure Framework (MTEF) and the projected funding from the Cooperating Partners (CPs). Based on this analysis, the overall funding gap is estimated at approximately ZMW 27.6 Billion (equivalent to US$ 1.3 Billion) or 17% of the total cost (financing needs).

It is assumed that this gap would be covered through additional funding from the following potential sources including: progressive increase in government funding to the health sector towards the Abuja target of 15% on the national budget; expected improvements in the coverage and performance of the National Health Insurance Management Authority (NHIMA); possible savings through performance improvement and prudent management of resources; and constructive engagement with the sector partners for more support and stronger partnership and coordination.

2 INTRODUCTION

2.1 CONTEXT

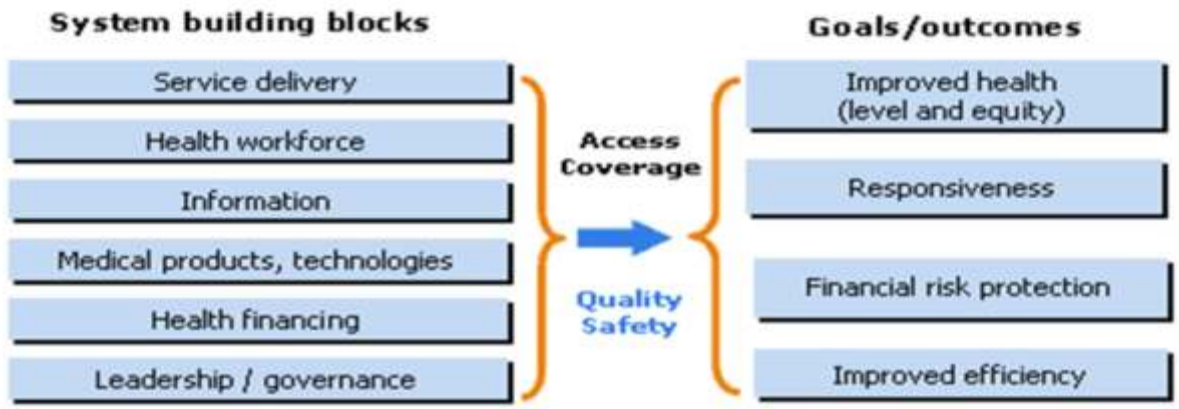
The National Health Strategic Plan (NHSP) 2022-2026 was developed within the context of the national and health sector development planning frameworks, which include: the country's long-term plan, Vision 2030; Eighth National Development Plan (8NDP), the National Health Policy, program specific strategic plans; 3-year Medium-Term Expenditure Framework (MTEF) rolling plans; and Annual Action Plans (AAP) and budgets. The Plan is aligned to the World Health Organisation (WHO) global Universal Health Coverage (UHC) principles, and the United Nations (UN) Sustainable Development Goals (SDGs), in particular, SDG 3, which focuses on the "health and wellbeing of the population". Annex 7 illustrates the existing health sector planning framework for Zambia, which has adopted a bottom-up approach.

The NHSP 2022-2026 presents a comprehensive strategic framework for the health sector for the next five years. It builds upon the experiences and lessons learnt from the implementation of the last NHSP, the achievements made and challenges experienced, and focus the sector towards achieving the national health goals and objectives identified for this period. The Plan serves as a blueprint to guide the sector's strategic agenda for the next five years, from 2022 to 2026.

2.2 PLANNING APPROACH AND PROCESS

The planning method and process took a systems approach and were structured along the World Health Organisation (WHO) health system building blocks, as illustrated below.

Figure 1: The WHO Six Health System Building Blocks



The methodology benefited from the existing relevant literature, knowledge-base and tools on the subject matter of corporate strategy development, which facilitated good understanding of the task at hand.

At global level, the planning approach was guided by: The Porter's Value Chain Model used to analyse systems and generic strategies; the WHO's Universal Health Coverage (UHC) approach, health system building blocks, and the guidelines and tool kit for development of national

health policies and strategic plans. At national level, the approach and process were guided by the Guidelines on the Development of National Policies and Strategic Plans for public sector institutions, issued by the Management Development Division (MDD), Cabinet Office, and the concept note and roadmap developed by the Ministry of Health (MoH) for this purpose.

The process of developing the Plan commenced before the end of the implementation period of the NHSP 2017-2021. It involved extensive consultations and participation of all the key stakeholder groups, including internal sector stakeholders at all levels, the relevant government ministries and departments, the private sector, the Civil Society Organisations (CSOs) and Cooperating Partners (CPs), who are expected to supplement the government's efforts, with additional financing and technical support towards the successful implementation of the plan.

The planning process commenced with the establishment of the Core Team for coordinating the strategic planning process, and the engagement of stakeholders for technical and financial assistance to support the process. The Core Team then developed a concept note and roadmap, which were considered, approved and adopted by the Senior Management Committee (SMC) of the Ministry of Health and were used to guide the process. The strategic planning process included the following main phases:

2.2.1 Inception Phase

This phase focused on the establishment of the coordination mechanisms, and development and adoption of the concept note and roadmap. This also involved mobilization of the required resources, technical assistance (Consultant), logistics, and sensitization of all the key stakeholders, through the established sector coordination mechanisms.

2.2.2 Strategic Review Phase

2.2.2.1 Literature Review

This phase involved the identification and desk review of international and local literature and tools relevant to the process. The relevant tools were developed to guide consultations with stakeholders. The key documents reviewed included: the UN SDGs; WHO Reports; Vision 2030; the Eighth National Development Plan (8NDP); the Zambia Demographic and Health Survey 2018 (ZDHS 2018); Living Conditions Monitoring Survey (LCMS) 2015 Report; Zambia Economic Reports. Other documents reviewed included the National Health Policy (NHP) 2013; the NHSP 2017-2021 Mid-Term Review (MTR) report; Medium-Term Expenditure Framework (MTEF) 2021-2023 plan, Annual Action Plan (AAP) and budget and Health Sector Statistical Bulletins.

2.2.2.2 Stakeholder Consultations

This phase involved extensive consultations with the key stakeholders at different levels with broad representation, through consultative meetings and workshops. The key stakeholders consulted included the health sector, internal stakeholders at all levels, relevant government ministries and departments, the private sector, Civil Society Organisations (CSOs), research

and academia and development Cooperating Partners (CPs).

2.2.3 Development Phase

2.2.3.1 Development of the NHSP

This was an inclusive process involving the active participation of all key stakeholders. It was achieved through targeted consultations and interactive planning workshops. It involved carrying out a strategic review of the sector, formulation and consensus on the priorities, strategic focus and interventions, drafting the narrative NHSP, development of the Monitoring and Evaluation (M&E) framework and costing of the Plan.

2.2.3.2 Review and Approval

This phase included internal and external stakeholders' review and validation of the draft strategic plan, Annual Consultative Meeting (ACM) and final approval by the Senior Management Committee (SMC) of MoH.

2.2.3.3 Dissemination and Implementation

Chapter 7 of the Plan outlines the implementation arrangements to ensure efficient and effective execution of the Plan to achieve the intended goals. The implementation phase will commence with the official launch and dissemination of the Plan.

2.3 POLICY AND STRATEGIC LINKAGES

The NHSP has been developed as an integral part of the Eighth National Development Plan (8NDP) and the Vision 2030. This will be implemented within the context of the overall national development agenda.

The Plan is aligned to health sector and multi-sector policy and strategic frameworks, such as: the National Health Policy (NHP) 2013; the National Multi-sectoral HIV and AIDS Policy and strategic framework; the National Food and Nutrition Policy; the National Youth, Sport and Child Development Policy; and the National Decentralisation Policy. Within the health sector, the NHSP is linked to programme and project-specific, sub-sectors, statutory boards and health training institution strategic frameworks and plans, which are used as the tools for its implementation.

At international level, the Plan is linked to various relevant policies and strategic frameworks such as: The WHO's Universal Health Coverage (UHC); the United Nations (UN) Sustainable Development Goals (SDGs), the Paris Declaration on Aid Effectiveness of 2005, and the International Health Partnerships (IHP+) and related initiatives. At regional level, the Plan is linked to the Abuja and Maputo Declarations on health; disease-specific policy frameworks; and other regional policy and partnership instruments adopted and ratified by Zambia.

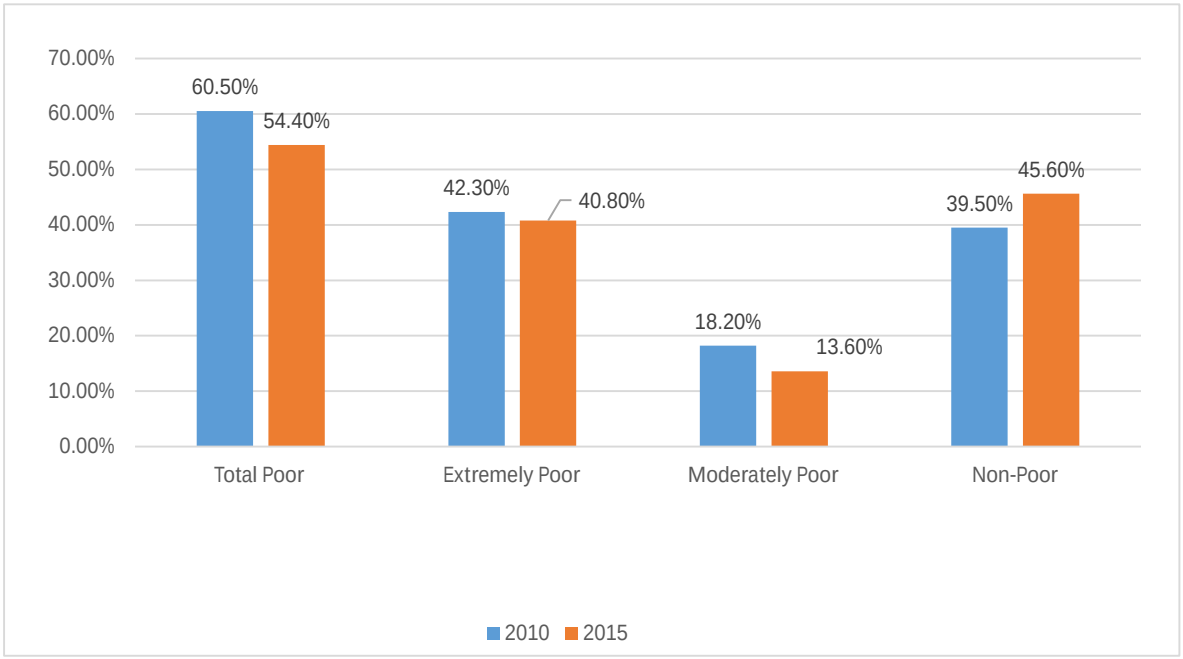
3 BACKGROUND

3.1 COUNTRY CONTEXT

Zambia is a land-linked country and strategically located in the southern part of the Sub-Saharan Africa region, and shares boundaries with eight (8) neighbouring countries, namely, Angola, Botswana, Democratic Republic of the Congo (DRC), Malawi, Mozambique, Namibia, Tanzania and Zimbabwe. The country covers a geographical area of 752,612 square kilometres. Administratively, Zambia is divided into 10 provinces and subdivided into 116 districts, as at 31st December 2021. Two (2) of these provinces, namely, Lusaka and Copperbelt, are classified as predominantly urban, while the remaining eight (8), as predominantly rural provinces (CSO, 2010). The Western province has the largest proportion of households in the poorest quintile (47%), while Lusaka (51%) has the largest proportion of households in the wealthiest quintile (ZDHS 2018).

Over the years, Zambia's population has continued to experience rapid growth, rising from 13.1 million in 2010 to 18.4 million in 2021, at an estimated population growth rate of 2.8 percent per annum (CSO, 2010). In 2018, the estimated total fertility rate was 4.7 births per woman of reproductive age, a decline from 5.3 births per woman in 2013/14. According to the Living Conditions Monitoring Survey (LCMS) of 2015, the majority of the Zambian population is affected by poverty. In the Zambian context, poverty is defined as "lack of access to income, employment opportunities, and entitlements, including freely determined consumption of goods and services, shelter, and other basic needs (CSO, 2015). In 2015, an estimated 54.40% of the population was classified as poor, while 40.80% as extremely poor (CSO, 2015). Figure 2 below, presents the trends in poverty levels in Zambia from 2010 to 2015.

Figure 2: Zambia: Poverty Trends from 2010 to 2015



`Source: Zambia Living Conditions Monitoring Survey 2015, Central Statistical Office, 2016

Poverty is more prevalent in rural areas, where an estimated 82.1% (from 76.6% in 2010) of the population is classified as poor, compared with 17.9% (from 23.4% in 2010) in urban areas (CSO, LCMS 2015).

In 2021, the Zambian economy grew by an estimated 3.6%, bolstered by firmer copper prices, favourable external demand, good rainfall, and post-election market confidence. This followed a 2.8% recession recorded in 2020. However, poverty remained high at about 60% of the population and the impact of the COVID-19 crisis was high. The medium-term outlook, while positive, faces downward risks from prolonged debt negotiations and low COVID-19 vaccination rates (Macro Poverty Outlook, World bank 2021). The Kwacha appreciated by 21% in 2021, reflecting an improved reserve position from the new International Moratory Fund (IMF) Special Drawing Rights (SDR) allocation, high post-election consumer and investor confidence, and increased portfolio inflows from non-resident holders of domestic sovereign debt. Gross International Reserves significantly reduced below the targeted 3 months import cover. There were also persistent high fiscal deficits, averaging 7.5% of Gross Domestic Products (GDP) during 2017-2019, compared to planned deficits of less than 5% of GDP. The outturns were largely driven by higher than planned disbursements on capital projects and the depreciation of the Kwacha, which resulted in higher than planned debt service payments. (Economic Recovery Programme Report, 2020).

Despite the observed nominal increase in financing to the health sector, the share of health funding to the total public budget continues to decrease, from 8.9% in 2018 to 8.1% in 2021. Further, notwithstanding the government's commitment to reach the Abuja target of 15% of public health allocation, there is still a long way to go.

3.2 STAKEHOLDER ANALYSIS

The health sector is broad, complex and has many stakeholders, with varying interests and roles in the existence and performance of the sector. Table 1 below presents a summary of the key stakeholders in the health sector and their respective interests and roles.

Table 1: Health Sector Stakeholders' Interests and Roles

#	Stakeholder Category	Interest / Role in the Health Sector
A	Internal Stakeholders	
1.	Ministry of Health (MoH) Head Office	Interested in the overall success of the health sector and attainment of national health goals, as well as the relevant regional and international commitments. Responsible for providing overall efficient and effective leadership and coordination.
2.	Provincial Health Offices (PHOs)	Responsible for providing leadership and coordination of health service delivery at provincial level.

4.	District Health Offices (DHOs)	Responsible for providing leadership and coordination of health service delivery at district level, and ensuring community participation and access to the required health services.
5.	Health Facilities	Responsible for delivery of the specific goods and services under their respective mandates.
6.	Health Statutory Boards / Bodies	Responsible for delivery of specific goods and/or services to the health sector, based on the respective mandates.
7.	Health Training Institutions	Training and capacity building for health workers, to produce appropriately qualified health workers
B.	External Stakeholders	
1.	Central Government (Executive, Legislature and Judiciary)	Overall national policy direction, legislative and judicial support to the sector. Financial support, through the national treasury.
2.	Other Government line ministries and departments	Providing support to the health sector, in line with their respective mandates, including addressing the social-determinants of health and SDGs under their mandates.
3.	Patients, communities and the general public	This represents the main stakeholders, the cause for the existence of the health sector. Interested in accessing adequate, safe, quality, efficient and effective health information and services, as close to the families as possible.
4.	Private sector	Interested in the various forms of business opportunities presented by the sector. Also interested in conducive business environment, transparency and fair play in accessing these opportunities.
5.	Civil Society/Non-Governmental Organisations (NGOs)	Participation and support to the health sector through provision of mandated goods and services, including advocacy, community engagement, health services delivery and playing the role of watchdog on transparency and accountability. The Churches Health Association of Zambia (CHAZ) and several other CSOs are involved in the actual delivery of health services.
6.	Cooperating Partners (Regional and international community)	The Cooperating Partners (CPs)/ donors represent the international community in providing the much needed technical and financial support to the sector.
7.	Research institutions /Academia	Interested in generating and sharing evidence and knowledge on health, for information, education, and for influencing policy and management decision making.

3.3 THE NATIONAL HEALTH SYSTEM

The attainment of Universal Health Coverage (UHC), which is the overarching target that should facilitate achievements of all the other health targets under Sustainable Development Goal 3 (SDG3) is directly linked with the performance of the health systems. Zambia would only be able to provide the essential health and related services to its people if it has a functioning health system, that can provide the services, as, when and where needed.

The existing national health system comprises promotive, preventive, curative, palliative and rehabilitative services. The health service delivery structures are established at different levels. These health services are organised along a pyramidal structure, with Primary Health Care (PHC) services at community level (Health Posts, Health Centres and Mini-Hospitals) at the base, followed by the first and second level hospitals at district and provincial levels respectively, third-level (tertiary) and fourth-level (specialized) hospital services at national level. These levels of care are linked by a referral system intended to provide citizens with access to the health services they need.

Currently the health services in Zambia are provided by the public, private, faith-based and civil society- owned not-for-profit health facilities. Alternative health services are also provided by traditional health practitioners and herbal health services providers at community levels.

The system is also supported by disease specific programmes, service statutory institutions, regulatory statutory institutions and training institutions, each with specific roles and responsibilities. These include:

- Disease Specific Programmes: The Reproductive, Maternal, Neonatal, Child and Adolescent Health and Nutrition (RMNCAH-N) Programme; National Malaria Elimination Programme; National HIV/AIDS and STIs Programme; National Tuberculosis (TB) Programme; National Cancer Diseases Programme; and others.
- Service Statutory Institutions: These are statutory institutions responsible for providing specific services or research support to the health system. These include: The National Food and Nutrition Commission (NFNC); National HIV/AIDS/STI/TB Council (NAC); Tropical Disease Research Centre (TDRC); Zambia Flying Doctors Service (ZFDS); Zambia Medicines and Medical Supplies Agency (ZAMMSA); Zambia National Blood Transfusion Service (ZNBTS); and the Zambia National Public Health Institute/ Africa (ZNPHI).
- Regulatory Statutory Institutions: Responsible for regulating specific health services and functions. They include: the Health Professions Council of Zambia (HPCZ); National Health Research Authority (NHRA); Nursing and Midwifery Council of Zambia (NMCZ), formerly known as the General Nursing Council (GNC); Food and Drugs Control Laboratory (FDCL); and the Zambia Medicines Regulatory Authority (ZAMRA).
- Health Training Institutions: These are facilities engaged in the provision of health training services at different levels, including certificate, diploma, degree and post-graduate levels. These include public, private and civil society-owned universities, institutes, colleges and schools, spread across the country.

Health services are provided in all the 10 provinces and in all the 116 districts of Zambia, under the Ministry of Health (MoH), coordinated by the headquarters at national level, Provincial Health Offices (PHOs), District Health Offices (DHOs) and Statutory Institutions. As at December 2021, the country had 7 fourth-level hospitals, 7 third-level hospitals, 36 second-level hospitals, 100 first-level hospitals, 62 mini hospitals, 1,720 health centres and 1,388 health posts. Out of the 3,320 health facilities, 2,834 are Government owned, 385 private-owned, while 101 are Faith-based Health facilities. Tables 2 and 3 below, present analyses of the existing health facilities, as at 31st December 2021, by type, level and distribution by province.[1]

Table 2: Zambia: Health Facilities by Type (level) and by Province, 2021

#	Province	Number of Health Facilities by Level of Care								
		4th Level Hospitals	3rd Level Hospitals	2nd Level Hospitals	1st Level Hospital	Mini - Hospital	Health Centre Urban	Health Centre Rural	Health Post	Total
1.	Central	-	1	1	10	7	30	126	154	329
2.	Copperbelt	1	2	9	12	6	150	58	150	388
3.	Eastern	-	1	2	12	7	18	152	156	348
4.	Luapula	-	-	2	12	16	11	131	110	282
5.	Lusaka	6	2	7	10	5	282	62	108	482
6.	Muchinga	-	-	2	7	5	4	54	88	160
7.	Northern	-	-	2	9	9	16	90	160	286
8.	North - Western	-	-	3	10	3	9	148	145	318
9.	Southern	-	1	6	8	2	47	158	161	383
10	Western	-	-	2	10	7	7	144	150	320
	Zambia	7	7	36	100	6	574	1,123	1,382	3,296

Table 3: Health Facilities by Type of Ownership, by Province

	Number of Health Facilities by Ownership				
#	Province	Government	Private	Faith Based HF	Total
1.	Central	306	11	12	329
2.	Copperbelt	308	68	12	388
3.	Eastern	321	10	17	348
4.	Luapula	275	2	5	282
5.	Lusaka	216	257	9	482
6.	Muchinga	151	2	7	160
7.	Northern	278	2	6	286
8.	North - Western	297	6	15	318

[1]Health Facility Listing, 2021

9.	Southern	352	17	14	383
10.	Western	306	6	8	320
	Zambia	2,810	381	105	3,296

Please note that 248 out of 257 Private Health Facilities for Lusaka Province are "unclassified" under the category of level of Care.
Source: Ministry of Health, 2021

Note that the levels of care outlined above may not reflect the actual services being provided by each level because of certain inadequacies, such as equipment, infrastructure and health personnel.

3.4 THE KEY DETERMINANTS OF HEALTH

The health of individuals and communities is to a large extent determined by the environments and circumstances in which they live and operate. These factors are commonly referred to as the determinants of health. They include the social and economic environment; the physical environment; and the person's individual characteristics, behaviour and circumstances.

Even though most of these factors are cross-cutting and beyond the normal scope of the health sector, it is the responsibility of the health sector to advocate for and ensure that such factors are considered and included in the health sector and national development agendas, in order to promote good health and quality of life of the population. It is also the responsibility of the health sector to promote and coordinate multi-sectoral responses, to prevent and control these factors. In Zambia, the key determinants of health manifest and impact on the health status of the population in different ways, as discussed below.

3.4.1 Social and Economic Environment

The social and economic environment is a major determinant of health. It includes factors such as the demographic situation and trends, education and literacy, poverty, gender, income and socio-economic status, employment and working conditions.

i. Demographic Situation and Trends: Since the country's independence, the population of Zambia has rapidly grown from about 3 million people in 1964, to 13.2 Million in 2010 and an estimated 18.4 million in 2021. The average life expectancy at birth has also increased from 40.5 years in 1998 to 51.3 years in 2010 and 64.19 years as at 2020 (UN). The rapid population growth has placed an increasing burden on the national economy, particularly the country's capacity to keep pace with the health needs of a rapidly increasing population and its dynamics.

ii. Education and Literacy: The association between education and health is that education produces benefits that later predispose the recipient to better health outcomes, such as access to better employment opportunities, and improved income generating capacity. Literacy, empowers the beneficiaries with capacity to read, understand and communicate written information on health promotion and well-being. Zambia's literacy rate stands at 68 percent for women and 82 percent for men aged between 15 - 49 who are illiterate (ZDHS, 2018).

iii. Poverty: Poverty is among the key determinants of health as it has significant potential to adversely impact on the standards of living, nutrition and capacity of the affected to meet the health costs. Poverty in Zambia is high, estimated at 60% (Macro Poverty Outlook, World Bank 2021).

iv. Nutrition: Access to good nutrition is a major determinant of health, particularly among children and women. In Zambia, prevalence of malnutrition in children under the age of 5 years is high, leading to wasting, under-weight and stunting. Levels of wasting have declined from 6% in 1992, 5% in 2007 to 4% in 2018. Underweight prevalence has also declined from 21% in 1992, 15% in 2007 to 12% in 2018. However, prevalence of stunting has remained high at 35% in 2018.

v. Social and Cultural Environments: Zambia has a multi-cultural society, characterized by different racial and ethnic groups, religious and traditional groupings, political and other social groupings, urbanization, and increasing access to the internet, mobile phones, social media and other sources of information, with significant potential for promoting good health. However, there are still several social, cultural and religious beliefs and practices that negatively affect health, such as sexual cleansing of surviving spouses, unsafe traditional male circumcision procedures, early marriages for the girl child, gender discrimination and risky traditional health practices.

vi. The Family and Community: The families and communities have an important role in shaping the character and behaviours of the people. Peer pressure also has potential to mislead people, particularly the adolescents, into practices that are risky to health, such as alcohol and substance abuse, smoking, sexual abuse, and violence. These could lead to severe consequences on health, including the risks of contracting HIV and other Sexually Transmitted Infections (STIs), trauma, teenage pregnancies and mental illnesses.

vii. Gender Equality: In Zambia gender inequalities are manifested in several ways and represents a major factor to inclusive socio-economic development. Females are more vulnerable to gender discrimination than males in terms of recognition and representation at all levels. Gender inequality disproportionately affects women and girls. In most societies, they have lower status and have less control over decision-making about their bodies, in their intimate relationships, families and communities, exposing them to violence, coercion and harmful practices (Gender and Health, WHO Q & A, 2021). Women and girls face high risks of sexually transmitted infections including HIV at 7.2 percent for males compared to 14.2 percent for females (ZDHS, 2018). Gender inequality also poses barriers for women and girls to access health information as indicated from the literacy levels that stands at 68 percent for women and 82 percent for men aged between 15 - 49 who are illiterate (ZDHS, 2018).

viii. Income and Socio-economic Status: The country is experiencing high levels of unemployment and weak socio-economic status of the population, which have implications on the health status of the population. Inequality in income distribution as

measured by the Gini Coefficient worsened due to the fact that growth was driven by industries that were not labour intensive. At the National level, the Gini Coefficient (The Gini Coefficient is a statistical measure of a degree of variation represented in a set of values, used especially in analysing income) worsened to 0.69 in 2015 from 0.60 in 2006. Between 2011 and 2015, rural income inequality remained constant at 0.60 while urban income inequality worsened to 0.50 in 2015 from 0.60 in 2006.

3.4.2 Physical Environments

i. Water and Sanitation: In Zambia, 72% of households have access to an improved water source. Poor access to safe water and improved sanitation at 54% (ZDHS, 2018) has continued to drive diseases, such as diarrhoea, including cholera.

ii. Climate Change: Climate change is a major global threat to health, and is becoming a major problem for Zambia. Climate change leads to floods or droughts. Floods bring about epidemics such as diarrhoeal diseases, while droughts can lead to food shortages impacting negatively on nutrition status of the population.

iii. Employment and Working Conditions: Whilst it is recognized that in Zambia there are appropriate legal, regulatory and institutional frameworks, aimed at assuring healthy working environments, there are still challenges with respect to enforcement, leading to occupational health challenges.

3.4.3 Personal Health Practices and Coping Skills

Personal character and commitment to health seeking behaviours, including personal hygiene, promotion of healthy lifestyles and early seeking of appropriate treatment and care, are critical to health. These require continuous strengthening of health promotion and education.

3.5 HEALTH SECTOR PERFORMANCE AND TRENDS

3.5.1 Disease Burden

Zambia continues to experience a huge burden of disease, mainly characterized by high prevalence and impact of communicable diseases, particularly, malaria, HIV and AIDS, Sexually Transmitted Infections (STIs), and Tuberculosis (TB), and high maternal, neonatal and child morbidity and mortality. The country is also faced with a rapidly rising burden of non-communicable diseases, including cancer diseases, mental health, diabetes mellitus, cardiovascular diseases (CVD), and trauma. Although there has been some progress in most of the key areas of health service delivery, and in health systems strengthening, over the medium term, the health status of most of the population, especially women and children, remains a challenge. Tables 4 and 5 below present the Top 10 Causes of morbidity and mortality, respectively.

Table 4: The top 10 Causes of Morbidity, all ages, 2017 -2020

Disease Name	Incidence per 1000			
	2017	2018	2019	2020
Malaria	335.5	298.2	296.1	394.7
Respiratory Infection : Non-Pneumonia	440.1	429.6	371.7	317.1
Musculoskeletal	80.2	81.5	76.3	76.5
Diarrhoea Non-Bloody	103.9	99.4	89.8	75.3
Digestive: Non-Infectious	57.3	55.9	53.0	49.6
Trauma: Non RTA	20.7	18.4	26.4	28.5
Skin Diseases : Non-infectious	28.7	25.3	23.8	24.7
Dental Carries	25.1	23.6	21.5	18.9
Throat Diseases	24.8	23.2	18.7	17.5
Respiratory Infection : Pneumonia	23.7	21.4	19.2	15.5

Source: Annual Health Statistical Report, 2020

Table 5: Top Ten Causes of mortality, all ages in Zambia 2017 - 2020

Disease Name	Case Fatality Rates (1000)			
	2017	2018	2019	2020
Malaria (Confirmed)	19.9	18.4	21.0	23.3
Anaemia	80.4	67.0	71.0	69.6
Cardio – vascular diseases	134.2	62.6	45.2	151.2
RI : pneumonia	52.9	137.9	140.8	61.6
Tuberculosis	130.5	147.5	145.5	135.9
Hypertension	44.5	55.9	51.6	54.1
Diarrhoea : Non –bloody	26.8	20.1	22.8	24.4
Diabetes	56.3	120.9	110.9	79.3
Digestive : Non-infectious	32.6	30.8	38.1	33.9
Severe Malnutrition	118.6	60.1	61.2	102.1

Source: Annual Health Statistical Report, 2020

3.5.2 Trends in Selected Health Sector Indicators

During the implementation of the last NHSP, from 2017 to 2021, progress was reported in most of the key areas of health service delivery, and in health systems strengthening. However, notwithstanding this progress, significant gaps still exist and the health status of most, especially women and children, remains a challenge. The attainment of Universal Health Coverage (UHC). With access to quality and affordable health care at all stages of life, Leaving No One Behind, still remains the national aspiration.

The table below presents recent trends in the performance of selected health indicators in Zambia. The performances of each programme area are more specifically discussed in Chapter 5 “Strategic Directions and Interventions”, under the situation analysis for each programme area.

Table 6: Trends in Selected Key Health Sector Indicators

#	Indicator	2016 (Baseline)	2017	2018	2019	2020
1.	Percentage of 1st Antenatal visits in 1st Trimester	24.4%	17.1	30.8%	38%	31.8%
2.	Coverage of deliveries taking place in health facilities	67%	69%	75%	80.5%	73.9%
3.	Expended deliveries attended by skilled health personnel	54%	64%	74%	75%	70%
4.	Number of maternal deaths	768	809	788	739	755
5.	Fully immunized	85%	86%	88%	88.8%	88.7%
6.	Malaria incidence per 1000 population	336	335.4	292.2	296.1	394.7
7.	TB Treatment success rate	85%	88%	90%	90%	89%

Source: Annual Health Statistical Report, 2020

4 VISION, MISSION, OVERALL GOAL, PRIORITIES AND PRINCIPLES

4.1 VISION

A Nation of Healthy and Productive People.

4.2 MISSION

To provide equitable access to cost-effective, quality health services, as close to the family as possible, Leaving No One Behind.

4.3 OVERALL GOAL

To improve the health status of people in Zambia, in order to contribute to increased productivity and socio-economic development.

4.4 NATIONAL HEALTH PRIORITIES

Table 7 below presents the identified national health priority areas for the planned period.

Table 7: National Health Priority Areas

Health Service Delivery Priorities	Health System Priorities
i. Health Promotion and Education. ii. Primary Health Care (PHC) and Community Health. iii. Maternal, Neonatal and Child Health, Youth and Adolescent Health. iv. Communicable Diseases, Especially Malaria, HIV/AIDS, STIs and TB. v. Non-Communicable Diseases (NCDs), including Cancers, Cardio-Vascular Diseases, Diabetes and Mental Health. vi. Public Health Security. vii. Environmental Health and Food Safety. viii. Health Service Referral Systems. ix. Hospital Services.	i. Health Workforce, ii. Essential Drugs and Medical Supplies, iii. Infrastructure, Equipment and Transport, iv. Health Information, Research and Innovation, v. Health Care Financing, vi. Leadership and Governance,

4.5 HEALTH SECTOR PRINCIPLES AND VALUES

The following will be the key principles and values for the health sector during the planned period:

i. Safety
ii. Quality
iii. Equity
iv. Affordability
v. Efficiency and effectiveness
vi. Transparency and accountability
vii. Participation
viii. Partnerships
ix. Decentralization
x. Good Governance

5 STRATEGIC DIRECTIONS AND INTERVENTIONS

5.1 STRATEGIC DIRECTION 1 – STRENGTHEN HEALTH SERVICES DELIVERY, IN ORDER TO CONTRIBUTE TO ATTAINING QUALITY UNIVERSAL HEALTH COVERAGE BY 2030

5.1.1 Primary Health Care

5.1.1.1 Overview

Primary Health Care (PHC) is defined as "essential health care made universally accessible to individuals and acceptable to them, through their full participation and at a cost the community and country can afford". This new approach came into existence in 1978, following an international conference held in Alma-Ata (USSR). It has all the hallmarks of a primary health care delivery, first proposed by the Bore Committee in 1946 and now espoused worldwide by international agencies and national governments. However, the Alma-Ata international conference gave primary health care a wider meaning and definition, as presented above. The concept of primary care was accepted by all countries as the key to attainment of Health for all by 2000. It has also been accepted as an integral part of the country's health system.

Primary health care is founded upon the following principles:

i. Equitable Distribution / accessibility: Equity or equitable distribution of health services, i.e. health services must be shared equally by all people irrespective of their ability to pay, and all (rich or poor, urban or rural) must have access to health services.

ii. Community Participation: Notwithstanding the overall responsibility of the central and state governments, the involvement of individuals, families, and communities in promotion of their own health welfare, is an essential ingredient of primary health care.

iii. Intersectoral Coordination: There is an increased realization of the fact that the components of primary health care cannot be provided by the health sector alone.

iv. Appropriate Technology: In this context, appropriate technology has been defined as "technology that is scientifically sound adaptable to local needs and acceptable to those who apply it and those for whom it is used, and that can be maintained by the people themselves in keeping with the principle of self-reliance with the resources the community and country can afford".

v. Health Promotion: Health promotion is the process of enabling people to increase control over and to improve their health. To reach a state of complete physical mental and social wellbeing, an individual or group must be able to identify and realise aspirations, to satisfy needs, and to change or cope with the environment. (Otawa Charter:1986).

The Alma-Ata Declaration has outlined 8 essential components of PHC, namely:

i. Education concerning prevailing health problems and the methods of preventing and controlling them. In this Plan, education has been combined with Health Promotion, which have been addressed under Section 5.1.1.2 of this plan. Health promotion and education are important interventions for improving responsiveness to health services at all the levels of care. Zambia has prioritised prevention of diseases and illnesses. In this regard, health promotion and education have been identified among the important interventions for strengthening prevention.

ii. Promotion of food supply and proper nutrition. As indicated under Element 1, HP has been combined with education, under Section 5.1.1.2.

iii. An adequate supply of safe water and basic sanitation. This aspect will be addressed by working with the relevant ministry responsible for water and sanitation by addressing the relevant social determinants of health.

iv. Maternal and child health care, including family planning. These areas of health service delivery have been addressed under Section 5.1.1.4 – Reproductive, maternal neonatal, child and adolescent health and nutrition (RMNCAH-N).

v. Immunization against major infectious diseases. This has been addressed under the section on child health.

vi. Prevention and control of locally endemic diseases. This has been addressed under Public Health Security.

vii. Appropriate treatment of common diseases and injuries. This cuts across all the health facilities at PHC level.

viii. Provision of essential drugs. This basically refers to essential medicines used at PHC level, in particular, Health Centre Kits.

Zambia is a signatory to the Alma-Ata Declaration and has adopted the PHC approach. In the Zambian context, PHC services are delivered at community level, primarily in the communities, at Health Post (HP), Health Centre (HC), and district (Level 1) hospital levels. The Zambian Government shares with the WHO and UNICEF vision for PHC in the 21st century "Towards Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs)".

The government's policy direction on primary health care provision will be guided by the National Decentralisation Policy of 2012. This is in line with the Constitution (Amendment) Act, No. 2 of 2016 under Article 147 and 148 on the devolution of functions, decision-making authority and transfer of resources from Central Government to Local Authorities. To this effect, the Ministry has finalised the "Health Sector Devolution Plan" and is ready for implementation, in a phased approach.

During the duration of this Strategic Plan, the following PHC services will be provided.

5.1.1.2 Health Promotion and Education

5.1.1.2.1 Situation Analysis

Health promotion is the process of enabling people to increase control over and to improve their health. To reach a state of complete physical, mental and social wellbeing, an individual or group must be able to identify and realise aspirations, to satisfy needs, and to change or cope with the environment. (Otawa Charter:1986).

Half of Zambia's population is under the age of 15 and approximately 20% are children under five. The country's literacy rate is at 66% (women) and 82% (men) aged 15-49 years. The country is grappling with disproportionately high dual disease burden (communicable and non-communicable diseases) leading to high morbidity and mortality. Preventable diseases account for nearly 80% of the total deaths in Zambia, the majority of which are caused by malaria, tuberculosis, childhood diseases (diarrheal and respiratory) and HIV-related opportunistic diseases [3]. However, community health literacy on preventable diseases and promotion of healthy lifestyles is still low, leading to risky behaviours which result in increased morbidity and poor health outcomes. According to ZDHS 2018, the knowledge, attitudes and practices related to HIV prevention showed:

i. Low comprehensive knowledge of HIV with less than half (46%) among women and men aged 15-49 years.

ii. Low knowledge of Mother-To-Child-Transmission of HIV with 60% of women and 50% of men aged 15-49 years know that HIV can be transmitted a baby during pregnancy, labour/delivery, or breastfeeding.

iii. High multiple sexual partners with 2% of women and 15% of men aged 15-49 reported having two or more sexual partners in the 12 months prior to the survey.

iv. Low condom use, with 35% of women and 54% of men reported using a condom during their last sexual intercourse with a non-marital or non-cohabiting partner.

v. Coverage of HIV testing at 85% of women and 75% of men aged 15-49 have been tested for HIV and received the test results.

vi. Male circumcision at 32% of men aged 15-49 years.

Low comprehensive knowledge is a predictor of low risk perception and indulgence in risky behaviours, hence low self-efficacy and ability of individuals, family or community to engage in prevention and protective actions.

This is further amplified in health services delivery, where health seeking behaviour is low. For instance, despite high antenatal attendance at 97% and health facilities deliveries at 84% in 2018, maternal mortality ratio remains high at 278/100,000 live births as at 2018. In addition, poor nutrition including overweight and obesity affects the population, particularly children

[3] https://www.zamstats.gov.zm/phocadownload/Demography/SAVVY%20Report%202015%20-16.pdf

and women, contributing to increased burden of Non-Communicable Diseases (NCDs), and is mainly attributable to the preference for fast foods and unhealthy lifestyles[4] which is modifiable. Imaging diseases and events such as the COVID-19 pandemic, including the interventions pose another dimension of health promotion. The surge of epidemic prone and emerging diseases has been attributed to individual and community behaviours. Despite the provision of information, myths and misconceptions on Coronavirus infection and vaccination constantly require challenging through provision of correct, current, consistent and accurate information to individual and the community. In order to attain improved health outcomes, it is vital to enhance health promotion and education at all levels.

The following are the main challenges for health promotion and education:

i. Policy gaps.
ii. Inadequate health knowledge.
iii. Myths and misconceptions.
iv. Low risk perception by community members.
v. Low self-efficacy to undertake behavioural change.
vi. Inadequate Health Promotion personnel positions for sub-national level.
vii. Emerging diseases and other health threats.

5.1.1.2.2 Goal, Objectives and Strategic Interventions

Goal: To empower individuals, families, households and communities with knowledge and skill to realize the highest level of health and well-being.		
#	Objectives	Strategic Interventions
1.	To increase social and behavioural change communication (SBC) at all levels of care.	1.1 Scale up SBC programmes. 1.2 Enhance promotion of healthy lifestyles. 1.3 Enhance workplace health programmes (both primary preventive care and occupational health). 1.4 Scale up health promoting school and other congregate settings. 1.5 Strengthen risk communication and community engagement. 1.6 Enhance health promotion for people with disabilities. 1.7 Enhance social marketing of health services.
2.	To increase advocacy among policy leaders at all levels.	2.1 Scale up advocacy programmes at all levels including Indaba, and coordination and execution of health events (commemorations of health days). 2.2 Engage policy makers, civic, traditional and religious leaders on various issues of health concern. 2.3 Support policy formulation to prevent disease and promote health.

[4] CSO 2013-2014 ZDHS

3.	To standardise health promotion and communication.	3.1 Strengthen coordination among stakeholders in different settings. 3.2 Strengthen collaboration with health-related sectors, 3.3 Empower Health Care Providers, Teachers, Learners and Community with knowledge and skill in Health Promotion 3.4 Promote innovation for sustainability. 3.5 Strengthen the Health Promotion coordination mechanism through Technical Working Groups .
4.	To foster formative research to inform behavioural change interventions.	4.1 Strengthen research to inform behavioural change interventions.

5.1.1.3 Community Health

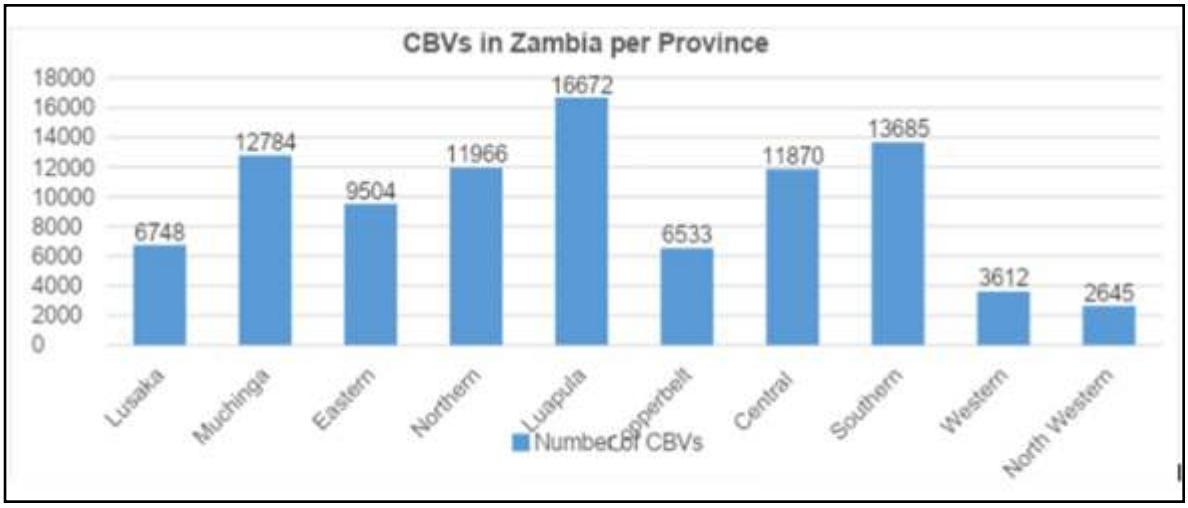
5.1.1.3.1 Situation Analysis

During the NHSP 2017–2021 period, PHC was strengthened, through a number of key interventions. In 2018, the Ministry established a Community Health Unit (CHU), as a mechanism for ensuring the delivery of PHC, Leaving No One Behind. The community health structures provide a platform for multi-sectoral and collaborative efforts for strengthening PHC as a vehicle for advancing UHC in Zambia. Efforts towards strengthening community health in Zambia have been guided by the National Community Health Strategy (NCHS) and its operational plan. Furthermore, a community health investment case was developed in 2019 to outline the extent to which the community health program is supported, the existing financing gaps and opportunities.

As a way of increasing point of access to care, Neighbourhood Health Committees (NHCs) are a link between the health facility and the community. The NHC provides a platform for the citizenry to participate in the health care system of the country in line with the decentralisation policy.

According to the 2020 Community Health Mapping Report, there are a total of 90,016 Community-based Volunteers (CBVs), against the country's population of over 18 million. Even though CBVs are unevenly distributed across the country, they are the largest and most complementary resource in implementation of PHC and UHC- related approaches. Figure 3 below presents the distribution of CBVs in Zambia by provinces.

Figure 3: Zambia: Distribution of Community-Based Volunteers (CBVs) by Province



Source: Community Health Mapping Report, 2020

Notwithstanding the progress recorded, there is no legal framework for the engagement of community based volunteers.

5.1.1.3.2 Goal, Objectives and Strategic Interventions

The Government is determined to make better use of the option of engaging communities to contribute to key national health goals. During the course of this Plan, the Ministry will strengthen PHC through engagement of CHAs and CBVs to improve community health.

Goal: To contribute to the attainment of Universal Health Coverage (UHC) by 2030, through provision of comprehensive essential PHC services to all Zambians.

#	Objectives	Strategic Interventions
1	To create an enabling environment for implementation of PHC in Zambia.	1.1 Review the National Community Health Strategic Framework (NCHSF 2019-2021) and develop a new one for 2022-2026. 1.2 Develop a National PHC Strategic Framework 2022-2026. 1.3 Develop and periodically review and update National PHC guidelines. 1.4 Strengthen policy and regulatory framework for PHC implementation 1.5 Strengthen the structures and functions of health facility and community health management committee's (NHCs). 1.6 Establish and strengthen linkage of PHC with community structures at the ward level.
2.	To increase demand and points of access to services in the utilization of PHC and CHC.	2.1 Strengthen demand creation initiatives for PHC. 2.2 Strengthen linkage between health facilities and communities 2.3 Leverage on appropriate technology for information IEC.

3.	To mobilize and invest adequate resources in Primary Health Care services.	3.1 Advocating to include PHC services in the benefit package for the National Health Insurance Scheme 3.2 Strengthen innovative resource mobilization mechanisms.
4.	To strengthen the Community Health Management Information System (cHMIS) towards increasing utilisation of PHC and community health data for decision making and policy direction.	4.1 Strengthen PHC reporting systems and integrate in the cHMIS. 4.2 Strengthen PHC on DHMIS to provide quality data including event-based reports. 4.3 Scale up use of digitized cHMIS. 4.4 Strengthen compatibility and integration of different level health information systems (cHMIS, DHMIS, HMIS, eLMIS etc.).

5.1.1.4 Reproductive, Maternal, Neonatal, Child and Adolescent Health, and Nutrition

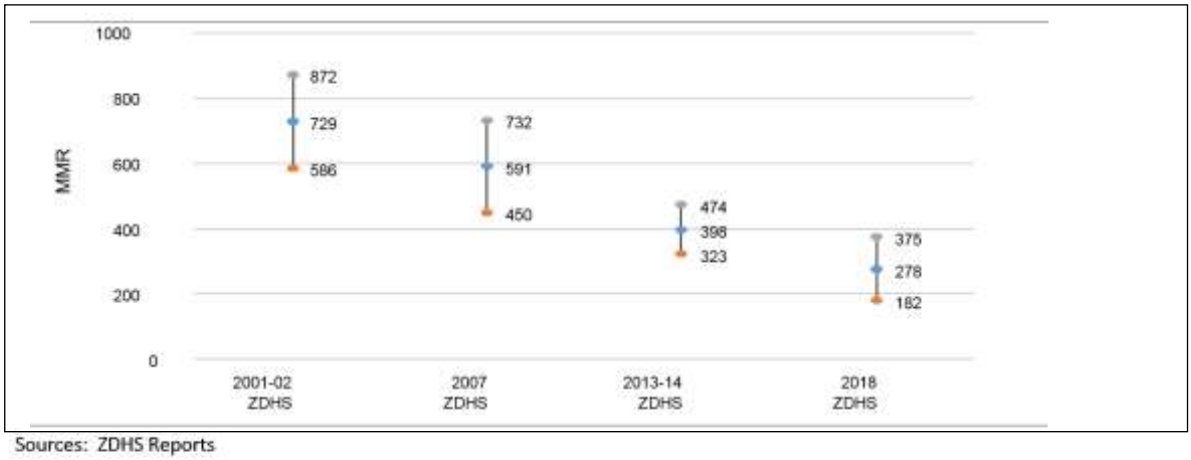
5.1.1.4.1 Reproductive and Maternal Health

A) Situation Analysis

During the implementation of the NHSP 2017–2021, reproductive health recorded progress concerning contraceptive prevalence rate for currently married women aged 15–49 years, which increased from 45% in 2014 to 50% in 2018 (ZDHS), against the target of 60%, and the unmet need dropped from 21% to 20% over the same period. Among sexually active unmarried women, around 43% are using a modern method of family planning. Further, efforts have been made to improve coverage of Human Papilloma Virus (HPV) vaccine in the first two years of vaccine introduction for the eligible girls in the target sites, which was recorded at 76.3% in 2019 and 79% in 2020. Nonetheless, this coverage remains low for a country with such a high burden of the disease.

Over the past 5 years, Zambia has made significant improvements in population health outcomes. Maternal Mortality Ratio (MMR) has reduced from 398 deaths per 100 000 live births in 2013/14 to 278 in 2018, against the target of 100. Figure 6 below presents the trends in MMR in Zambia, from 2001 to 2018.

Figure 4: Zambia: Trends in MMR in Zambia from 2001 to 2018



Sources: ZDHS Reports

[5]ZDHS 2018

B) Goals, Objectives and Strategic Interventions

During the duration of this plan, the health sector would aim at facilitating access to good quality maternal health services which meet the expectations of clients. The Ministry has developed the RMCAHN Roadmap 2021 – 2026, which is in line with the objectives and strategic interventions outlined in this section. The following are the goal, objectives and strategies which will be implemented, to improve reproductive and maternal health.

Goal: To Reduce Maternal Mortality from 278 / 100 000 in 2021 to less than 100/100 000 live births by 2026.		
#	Objectives	Strategic Interventions
1.	To increase the proportion of pregnant women attending the first Antenatal Clare (ANC) within the first trimester from 33% in 2021 to 60% by 2026.	1.1 Capacity building in Antenatal Care (ANC). 1.2 Develop and implement a communication strategy for maternal and reproductive health. 1.3 Strengthen community mobilization for maternal and reproductive health. 1.4 Strengthen communication between communities and the health care system. 1.5 Strengthen normative guidance for ANC service delivery. 1.6 Capacity building for Community-based Volunteers (CBVs) and Safe Motherhood Action Groups (SMAGS) in ANC. 1.7 Strengthen data management and data audit. 1.8 Strengthen inclusion of marginalized and vulnerable population in accessing RMNCHA-N services. 1.9 Scale-up Respectful Maternity Care (RMC) trainings 1.10 Strengthen the Service Quality Assessment (SQA) and Quality Assurance (QA) / Quality Improvement (QI) projects. 1.11 Develop ANC Information, Education Communication (IEC) materials in English and the seven local languages 1.12 Incentivise CBVs and SMAGs with enablers 1.13 Strengthen commodity supply chain for Laboratory reagents, drugs and Imaging commodities to support ANC services.
2.	To increase the proportion of women attending Post-natal Care (PNC) within 48 hrs of delivery from 51% in 2021 to 60% by 2026.	2.1 Strengthen normative guidance on Post-Natal Care (PNC) service delivery. 2.2 Strengthen capacity for PNC. 2.3 Strengthen supervision of integrated reproductive and maternal health services. 2.4 Scale up provision of PNC IEC materials in English and the seven local languages 2.5 Strengthen data management and data audit generated during provision of PNC. 2.6 Strengthen provision of transport used by PHNs and SMAGS for domiciliary visits and contact tracing of defaulting clients. 2.7 Strengthen the SQA and QA/QI projects. 2.8 Scale up Respectful Maternity Care (RMC) trainings.

#	Objectives	Strategic Interventions
3.	To increase the proportion of health facilities with functional Emergency Obstetric and Neonatal Care (EmONC), both Basic and Comprehensive, from 65% in 2021 to 100% by 2026.	3.1 Capacity building of health providers in EmONC. 3.2 Strengthen leadership and management at service delivery point. 3.3 Scale up Basic Emergency Obstetric and Neonatal Care (BEmONC) and Community Emergency Obstetric and Neonatal Care (CEmONC) sites. 3.4 Strengthen supervision and mentorship of staff. 3.5 Enhance provision of ambulance services for referral of EmONC and BEmONC clients to the next level of care. 3.6 Strengthen commodity supply chain for EmONC, BmONC and Comprehensive EmONC services.
4.	To reduce the proportion of pregnant women with complications of abortion from 5% in 2021 to 3% by 2026.	4.1 Capacity strengthening for Comprehensive Abortion Care (CAC). 4.2 Enhance advocacy for revision of the Termination of Pregnancy (ToP) Act of 1972. 4.3 Enhance advocacy for full implementation of Sexual and Reproductive Health and Rights (SRHR) Protocols (e.g. Maputo Protocol). 4.4 Develop communication tools on reproductive health services for the differently abled people. 4.5 Strengthen supply chain of Misoprostol and mifepristone. 4.6 Strengthening adherence to Infection Prevention (IP) guidelines.
5.	To increase the proportion of deliveries attended by skilled personnel from 69% in 2021 to 80% by 2026.	5.1 Strengthen capacity for skilled delivery by Scaling up and institutionalizing Respectful Maternity Care (RMC). 5.2 Strengthen integrated people-centred health service delivery. 5.3 Strengthen leadership and management at service delivery point. 5.4 Scale up recruitment of skilled birth attendants. 5.5 Expand infrastructure of maternity annexes. 5.6 Strengthen community sensitization on danger signs of pregnancy and benefits of institutional deliveries.
6.	To increase the proportion of pregnant women screened for syphilis at first antenatal visit from 44% in 2021 to 90% in 2026.	6.1 Integrate service delivery. 6.2 Strengthen capacity of health care providers. 6.3 Strengthen provincial and technical support supervision for supply chain. 6.4 Strengthen RPR Syphilis testing to ANC mothers at booking. 6.5 Strengthen last mile distribution of Reproductive Health (RH) commodities.

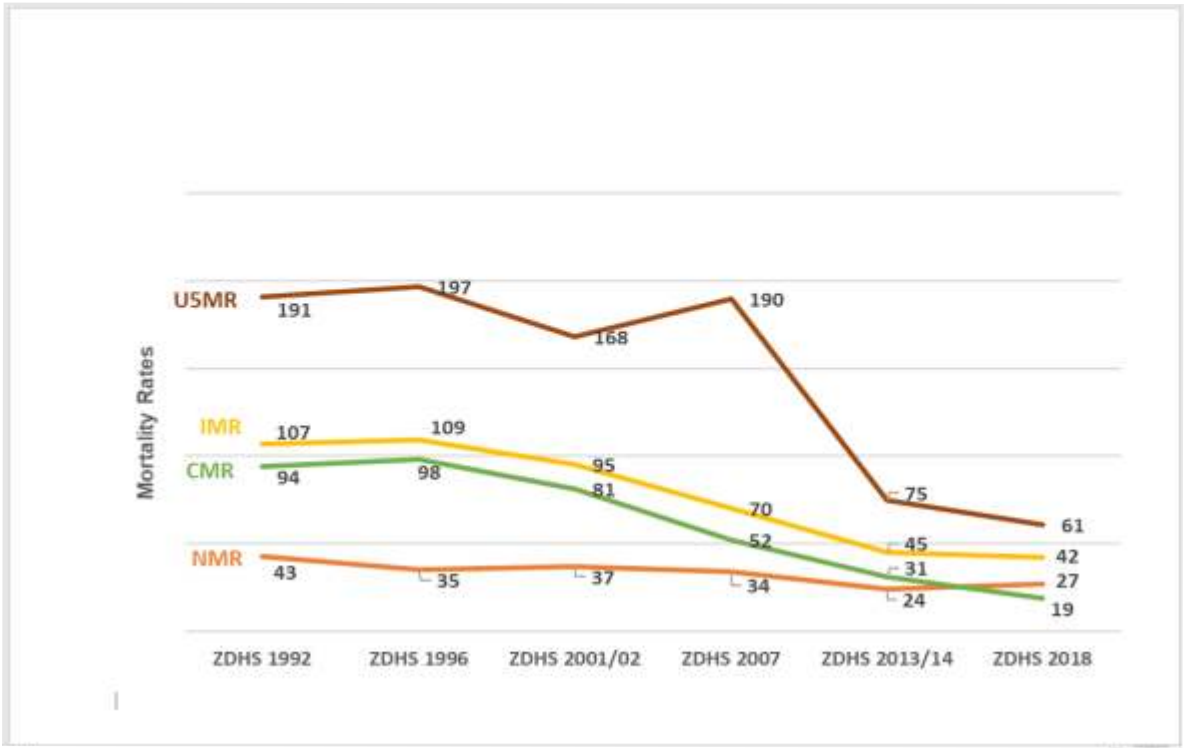
#	Objectives	Strategic Interventions
7.	To increase the proportion of married women accessing modern contraceptives from 48% in 2018 to 70% by 2026.	7.1 Strengthen Maternal and Perinatal Death Surveillance Response (MPDSR) processes at national and subnational levels. 7.2 Strengthen and institutionalize SQA and QI interventions. 7.3 Strengthen implementation of the guidelines for continuation of essential services amid covid-19 pandemic. 7.4 Capacity Strengthening for Family Planning (FP) service delivery. 7.5 Promotion of inclusion of the marginalized and vulnerable married populations. 7.6 Strengthen male involvement.
8.	To increase proportion of married women using any method of Family Planning (FP) from 50% to 60% 2026.	8.1 Raise awareness to create demand for FP. 8.2 Strengthen male involvement in FP and in accessing modern FP. 8.3 Promote inclusion of marginalized and vulnerable populations in FP services. 8.4 Increase availability of various FP Options. 8.5 Promote training of more staff in 8.6 Long-acting reversible conception (LARC).
9.	To increase the proportion of the sexually active unmarried women (15-49 years) using modern contraceptives from 43% in 2018 to 60% in 2026.	9.1 Strengthen MPDSR processes at national and subnational level. 9.2 Strengthen and institutionalize SQA and QI interventions. 9.3 Strengthen the implementation of guidelines for continuation of essential services amid covid-19 pandemic. 9.4 Capacity Strengthening for FP service delivery. 9.5 Promote the inclusion of the marginalized and vulnerable populations. 9.6 Strengthen awareness of contraceptives services in schools, tertiary institutions and work places 9.7 Strengthen youth friendly spaces in Health Facilities (HFs), schools and tertiary institutions. 9.8 Strengthen variety of commodity supply chain.
1.	To increase the proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods from 68.5% in 2018 to 80% 2026.	1.1 Ensure availability of, and access to family planning options in all facilities. 1.2 Strengthen Youth Friendly Services. 1.3 Strengthen availability of instruments for LARC. 1.4 Promote training of youths in FP as champions. 1.5 Strengthen supply chain for various commodities for FP. 1.6 Strengthen capacity in RMC. 1.7 Create awareness and demand for FP services using various platforms.

5.1.1.4.2 Neonatal and Child Health and Development

A) Situation Analysis

Zambia recorded reductions in under 5 and infant mortality rates between 2013 and 2018. Under-five Mortality Rate (U5MR) reduced from 75/1000 in 2013/2014 to 61/1000 live births in 2018, compared to the target of 35/1000 live births. Infant mortality Rate (IMR) reduced from 45 to 42/1000 live births against the target of 15/1000 live births. In the same period, Child Mortality Rate (CMR) which depicts deaths from the first birthday to just under the age of five years, also showed a significant reduction, from 31 to 19 deaths per 1000 live births (ZDHS, 2018). On the other hand, Neonatal Mortality Rate (NMR) has over the years remained stagnant, with very minor variations. Between 2014 and 2018, NMR increased from 24 to 27 per 1000 live births, compared with the 2021 target of 5. This translates into the neonatal period (first 28 days of life) being responsible for 45% of all the deaths in the under-five period. This further translates into two thirds (69%) of all deaths in the under-five period occurring between the neonatal period and the first year of life (CSO, 2018). Figure 4 below, presents the trends in NMR, IMR, CMR and U5MR from ZDHS 1992 to ZDHS 2018.

Figure 5: Zambia: Trends in NMR, IMR and U5MR from 1992 to 2018



Source: Based on the ZDHS Reports

Among the key strategies for preventing morbidity and mortality and improving the lives of children under five years of age are: The Expanded Programme on Immunization (EPI), the Nutrition Programme; Early Childhood Development (ECD) and the Integrated Management of Neonatal and Childhood Illnesses (IMNCI), among others. Progress has been recorded under all these interventions, as follows:

i. Overall, coverage of fully immunized children aged 12-23 months has improved from 68% in 2013/14 to 75% in 2018. Similarly, coverage of each of the basic vaccination has also improved over the last 5 years.

ii. The nutritional status of children has shown improvements. For example, stunting reduced from 40% in 2013/14 to 35% in 2018 whereas wasting reduced from 6% in 2013/14 to 4% in 2018.

iii. Early Childhood Development (ECD) interventions support children's development from birth to age seven and include programmes and services that support nurturing care, including health, nutrition, Water, Sanitation and Hygiene (WASH), play, gender, learning and protection. These interventions address four developmental domains of a growing child – physical, cognitive, linguistic and socio-emotional development. ECD Implementation has over the years been taking central role and is a critical component of programming for children.

iv. IMNCI is a cornerstone of health service delivery at the primary health care level. However, implementation of the IMNCI strategy has been constrained by inadequate levels of trained staff at both facility and community levels. For example, in 2018, only 45% of health facilities had at least 60% trained health workers attending to sick children, while only 32% of health facilities received at least one supervisory visit during the survey period (IMNCI Health Facility Survey, 2018).

The main challenges affecting effective implementation of neonatal and child health and development programmes include the following:

i. Inadequate human resources.

ii. Inadequate equipment, child friendly drugs and other commodities.

iii. Inadequacies in infrastructure normally without dedicated space for implementation of child health related services

iv. Health system challenges including inadequate transport for effective referral systems; outreach services, etc.

B) Goals, Objectives and Strategic Interventions

In order to significantly reduce under 5 mortality, the following will be the goals, objectives and strategic interventions for the neonatal, child health and development programmes during the life of this strategic plan.

Goal 1 : To reduce Neonatal Mortality Rate from 27/1000 live births to 12/1000 live births by 2026.		
#	Objectives	Strategic Interventions
1	To increase the proportion of new-borns receiving postnatal care within 48 hrs from 51% in 2021 to 80% by 2026.	1.1 Strengthen postnatal service delivery. 1.2 Expand spaces and infrastructure for PNC services. 1.3 Strengthen provision of equipment and instruments for PNC. 1.4 Capacity building for skilled birth attendants. 1.5 Provide PNC protocols and guidelines. 1.6 Strengthen PNC data management.

#	Objectives	Strategic Interventions
2	To reduce the incidence of neonatal deaths due to prematurity from 35/1000 (2018) to 19/1000 by 2026.	2.1 Strengthen provision of essential new-born care/advanced neonatal resuscitation in all delivery centres including for Kangaroo Mother Care (KMC). 2.2 Strengthen commodity supply chain and equipment such as resuscitaires, warmers and oxygen. 2.3 Strengthen provision of surfactant and drugs. 2.4 Strengthen provision of instruments and equipment such as CPAP sets and its consumables. 2.5 Strengthen provision of comprehensive ANC, intrapartum and Postnatal Care services. 2.6 Strengthen infection prevention practices. 2.7 Strengthen swabbing and fumigation of theatres, labour wards, ANC and PNC wards.
3	To reduce the incidence of neonatal deaths due to birth asphyxia from 42/1000 in 2018 to 30/1000 by 2026.	3.1 Scale up community sensitization on benefits of early ANC attendance, hospital delivery and postnatal care attendance. 3.2 Strengthen neonatal resuscitation trainings and essential/community new-born care. 3.3 Strengthen intrapartum management and PNC of neonates. 3.4 Strengthen supply of drugs, equipment like resusctaire, and oxygen.
4	To reduce the incidence of neonatal deaths due to infection from 14/1000 in 2018 to 5/1000 by 2026.	4.1 Make available the basic equipment, drugs and commodities for neonatal services. 4.2 Strengthen adherence to IP guidelines and practices in ANC, intra and postpartum, fumigation and swabbing of surfaces. 4.3 Strengthen screening and treatment of maternal infections during ANC 4.4 Strengthen comprehensive management of a sick neonate. 4.5 Strengthen swabbing and fumigation of theatres, labour wards, ANC and PNC wards.
5	To increase the number of hospitals providing quality in-hospital care for small and sick new-borns from 4 in 2021 to 20 in 2026	5.1 Strengthen referral systems from lower to higher service delivery institutions. 5.2 Strengthen the construction of NICU in districts. 5.3 Capacity building for neonatologists and neonatal nurses. 5.4 Strengthen procurement and provision of neonatal equipment and drugs in hospitals.

Goal 2: To reduce under five Mortality from 61/1000 live births to 25/1000 live births by 2026.		
#	Objectives	Strategic Interventions
1	To increase fully immunized coverage of under-one children from 88% in 2021 to 95% in 2026.	1.1 Increase availability of cold chain equipment for vaccine storage. 1.2 Strengthen provision of integrated outreach for immunisation services. 1.3 Strengthen data management. 1.4 Strengthen capacity building for SMAGS and CBVs providing RMNCHA-N services. 1.5 Strengthen implementation of QA/QI projects in immunisation to improve low performance indicators. 1.6 Promote RED/C Strategy. 1.7 Strengthen Supplemental Immunization Activities (SIAs).
2	To increase the number of health facilities with at least 60% staff trained in IMNCI from 45% in 2018 to at least 80% in 2026.	2.1 Strengthen capacity of health workers in IMNCI.
3	To increase implementation of Early Childhood Development (ECD) services to cover at least 50% of all service provision sites by 2026	3.1 Strengthen capacity of health care service providers in provision of ECD interventions. 3.2 Create space for ECD service provision. 3.3 Ensure availability of tools for ECD service provision. 3.4 Strengthen provision of nutrition and initiation of breastfeeding in the 1st hour of delivery and exclusive breastfeeding. 3.5 Strengthen prompt screening and treatment of childhood illnesses. 3.6 Strengthen provision of baby friendly environment to promote play and brain development. 3.7 Strengthen and promote immunization. 3.8 Strengthen Emergency Triage Assessment and Treatment (ETAT) .

5.1.1.4.3 Adolescent Health

A) Situation Analysis

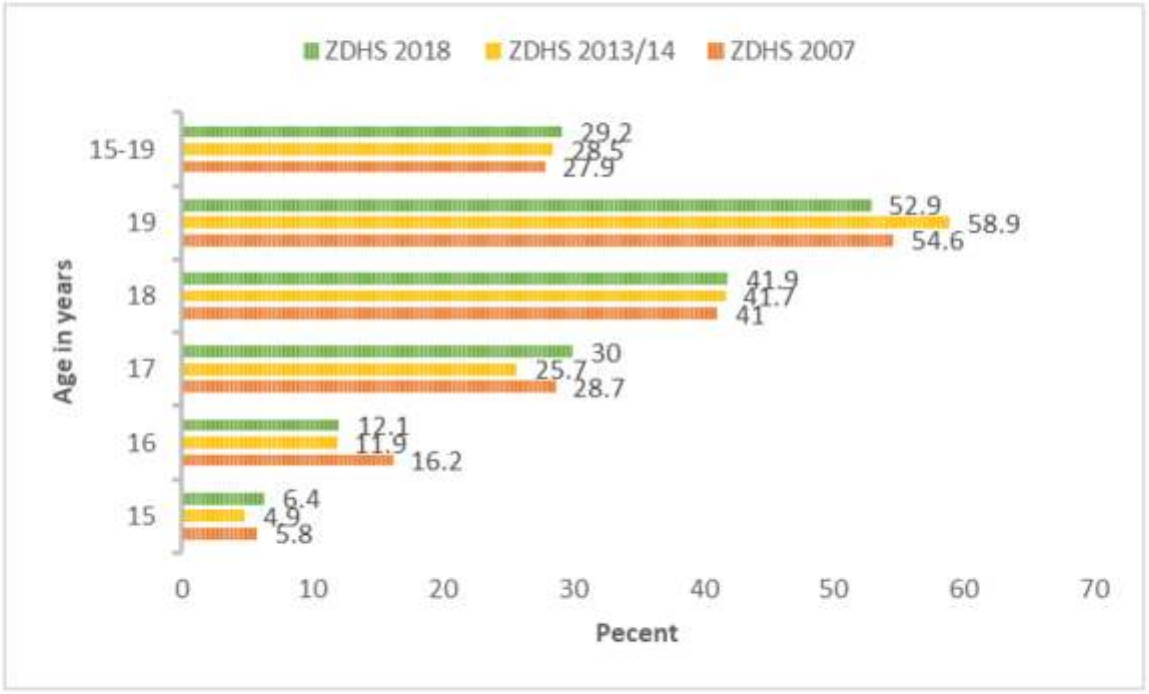
According to the World Health Organization, adolescence is the period of life from ages 10 to 19 years. In Zambia, about one quarter (24%) of the total population are adolescents. Investing in adolescent health has triple dividends – improving adolescents' health now; protecting the health of adolescents in adulthood; and protecting the health of the future generation (their offspring).

The access to, and utilization of general health services, remains poor among adolescents. Although the availability of youth friendly services, youth clubs and peer educators at health facilities and HIV clinics provide a safe space for adolescents and young people to openly discuss the issues they face, adolescent friendly services are not widespread and as such are not always utilized and accessed by majority of Adolescent and Young People (AYP). Use and delivery of Sexual and Reproductive Health (SRH) services including prevention and response to Sexual and Gender-based Violence (SGBV), enforcement of Comprehensive Sexual Education (CSE), and vulnerability (i.e. AYP with special needs) are also affected by socio-cultural norms, myths and misconceptions, poor services, lack of knowledge and mistrust of health workers.

Risky behaviours in the light of HIV and SGBV remain a source of concern as early sex debut is reported at 12.7% in girls and 16.3% in boys below age 15, with 28.3% females and 6.8% males having declared it as unwanted before the age of 18 (VAC 2015). Among 15- to 19-year-old, 59.9% girls and 55.3% boys reported to never had sexual intercourse before. The ZDHS 2018 reports that 65.3% of girls and 40.4% of boys aged 15-19 were tested for HIV while 36 % of boys were circumcised. It was further reported that 29.2% girls became pregnant.

The ZDHS 2018 reported a slight reduction in total fertility rate among adolescents aged 15 to 19 years from 141 per 1000 in 2014 to 135 per 1000 in 2018, against the 2021 target of 121. Whilst the percentage of adolescent girls reporting having ever had a live birth remains at around 24%, the provincial picture of teenage pregnancy attests that even though the problem affects the whole country, it is more prevalent in rural provinces with Southern at 42.5%, Western at 41.2% and Eastern at 39.5% than in Lusaka which recorded the rate of 14.9% (ZDHS, 2018). Teenage pregnancy remains an issue of high priority as underage pregnancies put the adolescents and their offspring at risk for many adverse health conditions and reduce the demographic dividends. According to ZDHS 2018, teenage pregnancies contributed 3.5% of the maternal deaths. Figure 8 below, presents the trends in teenagers who have started childbearing.

Figure 6: Zambia: Percentage of Teenagers who have Started Childbearing



Source: Based on data from the ZDHS Reports

Further, the 2011 Global Youth Tobacco Survey (GYTS) reports that 26.5% of youth aged 13 to 15 years used any form of tobacco while the ZDHS 2018 reports that 2.9% of adolescent boys smoke any type of tobacco. It is evident that mental health outcomes are determined by multiple factors including relationships with peers, peer pressure, influence by social media, exploration of sexual identity but to mention a few. Alcohol and substance abuse are among the contributing factors to mental health problems among adolescents. According to WHO, about 10-20% of adolescents globally experience mental health conditions, most of which are underdiagnosed.

According to the Disability Survey 2015, the prevalence of disability was estimated to be 10.9 percent among adults (18+ years) and 4.4% among children, 2-17 years. The survey reports that approximately 24% of 12-17-year-old adolescents had poor mental health; 55% were sad or depressed while 48% were nervous, anxious or worried. Adolescents with disabilities and those with mental health problems are at high risk of sexual abuse.

The following have been identified as the main challenges under adolescent health:

i. High teenage pregnancies.
ii. Inadequate service providers and peer educators trained in adolescent health.
iii. Inadequate adolescent health spaces at facility and community level.
iv. Services provided to adolescents are not comprehensive or integrated.
v. Unprotective/unsupportive environment requiring participation of parents and community gatekeepers.
vi. Low health literacy levels among adolescents.

B) Goals, Objectives and Strategic Interventions

It is envisioned that the establishment of minimum adolescent health service platforms, where systems are available and capacities built at all levels of service will contribute to the provision of quality comprehensive adolescent friendly services at all levels. Presented below are the identified goal, objectives and strategies to be implemented in the plan period. A programme-specific ADH Strategic Plan 2022-2026 has been developed, which will guide implementation.

Goal: To improve the health status of Adolescents in Zambia		
	Objectives	Strategic Interventions
1.	To increase the proportion of districts with capacity to provide a minimum adolescent health service platform from 60% in 2021 to 100% of the districts by 2026.	1.1 Prioritize the delivery of comprehensive and integrated adolescent-responsive health services at all levels of service delivery (prioritize allocation of physical space/room and commodities). 1.2 Scale up pre-service and in-service adolescent health training of health workers and peer educators. 1.3 Strengthen and scale up outreach programmes to schools, tertiary institutions, boarding facilities, refugee camps, correctional facilities and communities.
2.	To increase adolescents' awareness and utilization of the available health services from 60% in 2021 to 100% of the districts by 2026.	2.1 Strengthen and scale up targeted innovative Social and Behaviour Change Communication (SBCC) platforms, such as social media, radio, TV, Information, Education and Communication (IEC) materials and campaigns with adolescents to promote the use of preventative health services. 2.2 Advocate for cultural and value shifts through changes in social norms and behaviours such as risky sexual behaviours, Sexual and Gender-Based Violence (SGBV), child marriage, alcohol, drugs and other harmful substances, etc. using the Adaptive Leadership Methodology. 2.3 Increase demand and utilization of relevant health services through peer education, outreach and multimedia platforms.
3.	To increase accessibility of adolescent health services by young people with special needs.	3.1 Scale up training of HCW trained in sign language. 3.2 Strengthen and scale up IEC for adolescents with visual impairment.

5.1.1.4.4 Nutrition

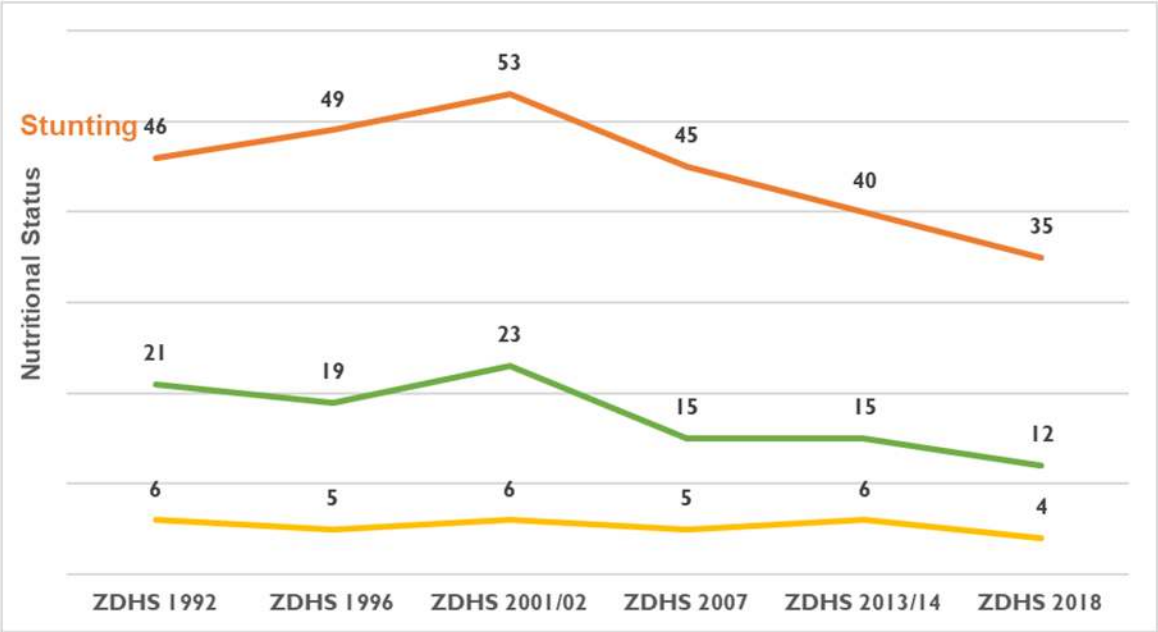
A) Situation Analysis

According to the WHO, healthy nutrition is critical in the prevention of diet-related risk factors, such as overweight and obesity, and associated non-communicable diseases (NCDs). Currently, Zambia faces a triple burden of malnutrition, manifesting as both under and over nutrition, as well as micronutrient deficiencies, which contribute to morbidity and mortality across all phases of life. The most nutritionally vulnerable populations are mothers, adolescents, Infants and young children. These need focused attention to avoid worsening the poor nutrition status reflected through selected indicators across the RMNCHA-N continuum of care. Additionally, other population groups in varying situations, such as acute and chronic illnesses or conditions, emergencies and geriatrics-care for old people, all require effective nutritional interventions.

During the period of implementation of the NHSP 2017–2021, progress was recorded on some indicators, while others revealed some challenges. Despite some positive trends noted in the nutrition status among under 5 children over time, the prevalence of malnutrition still remains unacceptably high, with stunting currently at 35% and ranking third highest in the southern region, wasting at 4% and underweight at 12%. Adequate nutrition, particularly during a child's first 1000 days (from conception to age 2 years of life), is critical and is a prerequisite for normal physical, cognitive and intellectual development, and general well-being. The statistics on nutrition (figure 9) among children show that the levels of underweight and wasting have reduced. The extent of wasting consistently declined from 6 % in 1992, 5% in 2007, and reached 4% in 2018, against the 2021 target of 1%. Similarly, underweight declined from 21% in 1992, 15% in 2007 and 12% in 2018, against the 2021 target of 2%. However, prevalence of stunting has remained high, leading to implementation of the multisector and multi-donor SUN/ Most Critical Days Programme (MCDP) focused at reducing the stunting prevalence. The programme is currently in 42 districts and is progressing in coverage.

Ten (10) % of women in the reproductive age group are underweight as determined by body mass index (BMI) below 18.5 (CSO, 2014). On the other hand, the prevalence of overweight among women has risen from 19% in 2007 to 23% in 2014, increasing the chances of NCDs (CSO, 2014). Nutrition status among adolescents is also a concern and needs attention. ZDHS 2013-14, indicated that 16.4% adolescent girls were undernourished while 8.6% were overweight and obese, while one-third of adolescent girls were anaemic. The poor nutrition situation among adolescent girls is attributable to poor dietary habits as reflected in the Adolescents Health Strategy 2017-2021 (MOH, 2017). The figure below presents trends in nutritional status for the period from 1992 to 2018.

FIGURE 7: ZAMBIA: Trends in nutritional status of children from 1992 to 2018



Source: Based on data from the ZDHS Reports

Despite recording progress on some nutrition indicators, gaps still exist, notably:

i. Inadequate intake of micronutrients and erratic supplies of commodities, such as iron, folate, other supplements and therapeutic supplies.

ii. Inadequate capacities including equipment, skills and staff to implement quality nutrition interventions.

iii. Inadequate use of nutrition information for decision making and irregular supply of data collection tools including under-5 cards and child health register.

iv. Inadequate community-based volunteers who are providing community level interventions.

B) Goals, Objectives and Strategic Interventions

The following will be the goals, objectives and strategic interventions for the nutrition programme for the plan period. A new National Nutrition Strategic Plan 2022 - 2026 has been developed to guide implementation.

Goal: To improve the nutritional status of Zambian population particularly for children, adolescents and women in child bearing age in line with the Global Nutrition Targets 2030.

#	Objectives	Strategic Interventions
1.	To improve Infant and Young child feeding programmes at all levels of care.	1.1 Strengthen Infant and Young child feeding programmes at all levels, including policy/ legislation formulation and enforcement of supportive measures.

#	Objectives	Strategic Interventions
2.	To improve integrated management of Acute Malnutrition at all levels of care.	2.1 Strengthen integrated management of Acute Malnutrition at all levels of care.
3.	To improve Micronutrient Intake and Supplementation among Mothers, adolescents and young Children.	3.1 Strengthen and scale up Micronutrient Intake and Supplementation among Mothers adolescents and young children.
4.	To Improve child growth monitoring and promotion.	4.1 Strengthen child growth monitoring and promotion through capacity building and improved data management.
5.	To improve nutrition therapy and dietetics services.	5.1 Strengthen nutrition therapy services in management of illnesses and conditions.
6.	To improve Nutrition education and counselling services and Social Behaviour Change Communication (SBCC).	6.1 Strengthen Nutrition education, counselling services and information dissemination through multimedia SBCC.
7.	To improve nutrition data capture and utilization.	7.1 Strengthen nutrition information system , to inform decision making at all levels.
8.	To improve Micronutrient Intake and Supplementation among Mothers, adolescents and young Children.	8.1 Strengthen Infant and Young child feeding programmes at all levels, including policy/ legislation formulation and enforcement of supp ortive measures.

5.1.1.5 Communicable Diseases

5.1.1.5.1 Malaria

A) Situation Analysis

Malaria remains a major public health concern which leads to significant illness and death in Zambia. The NHSP 2017 – 2021 aimed at eliminating local malaria infection and diseases in Zambia by 2021. However, according to national estimates, in 2021, there were 340 malaria cases per 1,000 population, against the 2021 target of five (5), and 8 malaria deaths per 100,000 population, against the target of Zero (0). In 2021, Zambia recorded a total of 6,262,775 cases and 1,480 deaths due to malaria. The burden of malaria incidence across the country varies widely, from zero to more than 500 cases per 1,000 population.

Malaria prevalence differs among provinces from as high as 63% in Luapula province to 3% in Lusaka and Southern provinces. Malaria prevalence is nine times higher in under five children from the lowest wealth quintiles than among the highest wealth quintile in the country. Among the children aged below 5 years, malaria prevalence increases exponentially with age from

19% among the 6 -11 months to 35% among those aged 48-59 months; rural areas have an estimated 3 times higher malaria prevalence than the urban areas. The dissimilarity in malaria burden is a result of a various geographic, climatic and social factors that are conducive or restrictive to malaria transmission. (National Malaria Elimination Centre, 2021).

While noting the progress made in combating malaria, there is need to continue scaling up interventions aimed at eliminating the disease.

The main challenges include:

i. Erratic availability of antimalarial drugs particularly at community level.

ii. Delays in receipt of key commodities, such as insecticides, Long-lasting Insecticide Treated Nets (LLINs), antimalarial medicines and malaria tests due to pipeline challenges as a result of the COVID 19 pandemic.

iii. Inadequate resources for full implementation of the National Malaria Elimination Strategic plan.

B) Goals, Objectives and Strategic Interventions

The ministry will continue implementing key interventions which include distribution of Insecticide Treated Nets (ITNs), Indoor-Residual Spraying (IRS), Presumptive Treatment of malaria in pregnancy and provision of prompt diagnostic and treatment services at both health facility and community levels. The table below presents the goal, objectives and strategies under this plan. A new dedicated National Malaria Elimination Strategic Plan (NMESP) 2022–2026 has been developed, to guide implementation of these strategic interventions.

Goal: To reduce malaria infection, disease and death in Zambia by 2026.		
#	Objectives	Strategic Interventions
1.	Reduce malaria incidence from 340 cases per 1,000 population in 2021 to 201 cases per 1,000 population by 2026.	1.1 Implement High impact interventions; vector control (IRS, LLINS, LSM), SBC 1.2 Enhanced Surveillance at all levels.
2	Reduce malaria deaths from 8 deaths per 100,000 population in 2021 to 4.7 deaths per 100,000 population by 2026.	2.1 Strengthen facility and community-based case management.

5.1.1.5.2 HIV/AIDS and Sexually Transmissible Infections (STIs)

A) Situation Analysis

The NHSP 2017–2021 aimed at reducing the incidence and prevalence of HIV, with the target of reducing the new HIV infections from 0.7% of the population in 2016, to 0.4% in 2021, through implementation of a package of proven interventions across the country. However, HIV and AIDS continue to be a major public health issue in Zambia and is one of the top five causes of morbidity among communicable diseases. The national HIV prevalence in Zambia remains

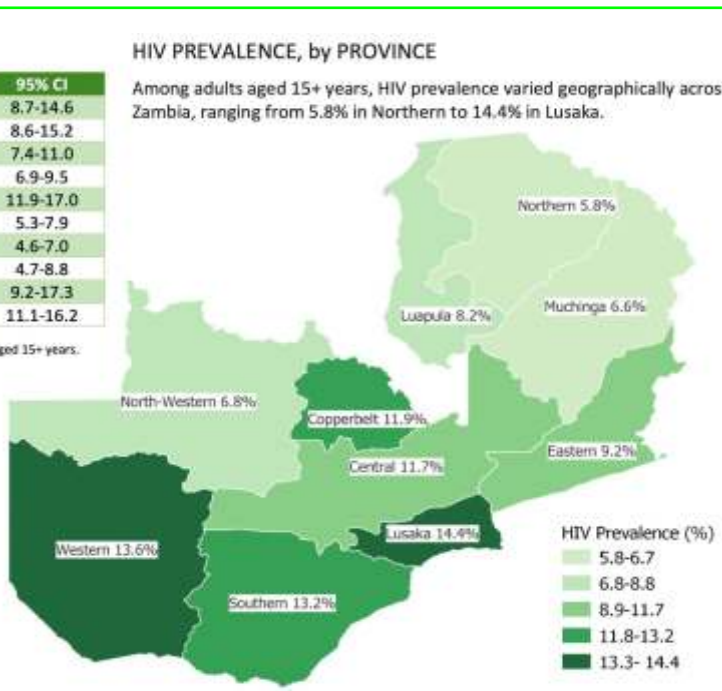
high, at over 11% in the 15-49 age group, with urban areas (15.9%) recording twice as high compared to rural areas (7.1%) (ZDHS, 2018). However, with increasing access to effective HIV prevention, diagnosis, treatment and care, including for opportunistic infections, HIV infection has become a manageable chronic health condition, enabling people living with HIV to have long and healthy lives. Over the last two decades, the response to HIV in Zambia has expanded from treatment-focused policies in the early 90s, which included a limited HIV prevention focus, to the development of prevention-specific policies and guidelines in more recent years.

During the implementation of the NHSP 2017-2021, Zambia performed well in its efforts towards the attainment of the UNAIDS 90-90-90 targets, with 89% of the population knowing their HIV status, 98% of the persons living with HIV being put on ART and 96% being virally suppressed. Further the incidence has reduced from 0.7% in 2016 to 0.31% in 2021 corresponding to approximately 28,000 new cases of HIV among adults (ZAMPHIA, 2021). The implementation of measures aimed at attaining Universal Health Coverage (UHC) has ensured that the entire population in Zambia, regardless of economic or geographic status, have access to HIV prevention and treatment services. The efforts made have resulted in a 28% reduction in AIDS-related deaths between 2005 and the year 2020. As at December 2021, a population of 1,197,742 or 93.5% of the eligible population were put on Anti-Retroviral Therapy (ART). This was attributed to the heightened Test and Treat programme alongside increased coverage of free anti-retroviral drugs. The figure below presents the trends in HIV prevalence among the 15-49 years age group.

Figure 8: Zambia HIV Prevalence by Province Among Adults (Zamphia, 2021)

Province	HIV Prevalence (%)	95% CI
Central	11.7	8.7-14.6
Copperbelt	11.9	8.6-15.2
Eastern	9.2	7.4-11.0
Luapula	8.2	6.9-9.5
Lusaka	14.4	11.9-17.0
Muchinga	6.6	5.3-7.9
Northern	5.8	4.6-7.0
North-Western	6.8	4.7-8.8
Southern	13.2	9.2-17.3
Western	13.6	11.1-16.2

Percentage and 95% CIs for HIV prevalence apply to adults aged 15+ years.



Source: ZAMPHIA, 2021 Summary Sheet

To mitigate the high HIV prevalence, Zambia has continued to promote HIV Prevention programming for all, with a particular focus on those most at-risk, such as adolescents, key/marginalized populations, and priority populations. Despite the availability of a widening array of effective HIV prevention tools and methods, and a massive scale-up of HIV treatment in recent years, new infections have not decreased sufficiently, with 28,000 new HIV infections in 2021 (ZAMPHIA 2021).

This trend calls for further improvements in the provision of more integrated preventive measures, such as Voluntary Medical Male Circumcision (VMMC), promotion of the correct and consistent use of condoms, Pre-exposure Prophylaxis (PrEP) and efficient and effective treatment of Sexually-Transmitted Infections (STIs), with a particular focus on those most at-risk, such as adolescents and other priority populations, as well as marginalized populations such as migrants, refugees and key populations. Further, HIV associated mortality is still high at 20,000 in 2021. People living with HIV (PLHIV) are also aging with over 21% above the age of 50 years old leading to an increase in the prevalence of non-communicable diseases (NCDs) among PLHIV.

The following have been identified as the main challenges and gaps:

i. High incidence of HIV especially among adolescents and young people
ii. High HIV associated mortality
iii. Lower rates of HIV identification, treatment coverage and viral load suppression rates in children.
iv. Higher HIV testing, treatment coverage, viral load suppression rates and mortality among men compared to females.
v. High HIV drug resistance rates to non-nucleoside reverse transcriptase inhibitors (NNRTIs) in Zambia.
vi. Inadequate coverage of diagnostic services for STIs in primary health care facilities.
vii. Suboptimal viral load coverage and suppression in certain provinces of the country (Luapula, Northern and Muchinga provinces).
viii. Recurrent stock outs of reagents and test kits for diagnosis of STIs.
ix. Health Management Information System HIV Prevention is still paper based.
x. Most Health Facilities do not have Counselling Rooms.
xi. Short fall in the constant supply of laboratory monitoring reagents including CD4 and blood chemistries.
xii. Suboptimal uptake of other biomedical prevention interventions.
xiii. Poor uptake of pre -exposure prophylaxis (PrEP).
xiv. Low and inconsistent condom use.
xv. Mother to Child Transmission (MTCT) of HIV still happening especially during the breastfeeding period.
xvi. Transactional and intergenerational sex (AYP).

B) Goals, Objectives and Strategic Interventions

During the course of this Plan, Zambia will continue implementing the HIV prevention, treatment, care and support Programmes, that have been proven to be efficient and effective and in line with modern global practice. The table below presents the goals, objectives and strategies to be implemented in the plan period. A new dedicated National HIV/AIDS/STIs Strategic Framework (NASF) 2022-2026 is being developed, to guide implementation of these strategic interventions.

Goals: To reduce the HIV incidence from 28,000 in 2021 to 15,000 by 2026.		
#	Objectives	Strategic Interventions
1.	To increase the percentage of people living with HIV who know their HIV status from 89% in 2021 to 95% in 2026	1.1 Strengthen universal HIV testing at all points of health service delivery. 1.2 Strengthen targeted HIV testing including using newer technologies such as self-testing for key and priority populations including adolescents and young people. 1.3 Scaling up of Index Testing; Index Partner testing / partner notification . 1.4 Peer/social network testing for key populations and hard to reach men, hotspots, at home and safe spaces. 1.5 Promote workplace HIV testing including self-testing.
2	To increase the percentage of the HIV children who receive lifelong ART from 72% in 2021 to 90% in 2026.	2.1 Operationalize the global alliance to end AIDS in children by 2030 country action plan. 2.2 Increase the coverage for newer paediatric ARVs including dolutegravir for children to 100% of the target populations .
3.	To maintain the coverage of ART for those living with HIV at above 95% through 2016	3.1 Strengthen ART retention and follow up differentiated service delivery model (DSD). 3.2 Strengthen patient tracking and follow up systems through establishing the patient master register system . 3.3 Link the ART services to the National Health Insurance Management Authority (NHIMA).
4	To increase the percentage of the people living with HIV on ART with suppressed viral from 96% in 2021 to 98% in 2026.	4.1 Establish and strengthen the electronic Viral load monitoring system through improved interoperability of systems . 4.2 Scale up the viral load coverage especially in areas with low viral load coverage and suppression .

#	Objectives	Strategic Interventions
5	**To scale up the advanced HIV disease package of Care to 95% of all eligible populations by 2026**	5.1 Establish intensive Advanced HIV mentorships across the country in all 116 districts in Zambia . 5.2 Strengthen monitoring, using the Tele-ECHO for mentoring and guidelines dissemination . 5.3 Strengthen the screening through training of health workers in all districts .
6	**To integrate NCD services in ART services to 60% of all people on ART by 2026**	6.1 Operationalize NCD/ART integration guidelines . 6.2 Streamline for the provision of NCD services input in ART service points . 6.3 Use the Tele -ECHO for mentoring and guidelines dissemination .
7	**To reduce MTCT rate from 8% in 2022 to ≤5% in 2026.** **To reduce case rate of paediatric new HIV infections to ≤ 50 case s per 100 000 live births**	7.1 Increase population-based ante-natal care first visit attendance (ANC-1) to 95% or more. 7.2 Increase testing of pregnant women to 95% or more. 7.3 Increase maternal ART coverage to 95% or more.
8	**To promote comprehensive HIV knowledge in adolescents and youn g people from 39% in 2021 to 95% by 2026**	8.1 Reinforce protective sexual behaviours by addressing knowledge, attitudes, skills and social norms.
9	**To increase coverage of Voluntary Medical Male Circumcision (VMMC) within the age groups 15-49 years (specifically 15 -29 years) to 95% by 2026**	9.1 Expand existing capacity to provide comprehensive VMMC services by introducing innovative and sustainable service delivery methods. 9.2 Eliminate missed opportunities for VMMC by facilitating the integrati on of MC services into other health programmes at all levels of care.
10	**To increase the uptake of PrEP in priority and key populations from 110,000 in 2021 to 220,000 annually by 2026**	10.1 Introduce Injectable PrEP. 10.2 Increase access to combination HIV prevention interventions. 10.3 Promote equity in comprehensive combination HIV prevention services.
11	**To raise awareness of STIs**	11.1 Increase awareness creation in the general population and protect key populations including mobile, migrant and internally displaced populations at ri sk of STI s. 11.2 Roll out of the STI guidelines.

5.1.1.5.3 Tuberculosis and Leprosy

A) Situation Analysis

The NHSP 2017–2021 aimed at reducing the number of Tuberculosis (TB) deaths in the population by 40% in 2021. TB remains a disease of public health concern in Zambia and ranks among the top ten causes of mortality. However, the country has made tremendous progress in responding to the TB epidemic in the country. Between 2016 and 2021, TB incidence in Zambia declined from 376/100,000 population to 319/100,000 population (WHO Global Report 2021/MoH TB annual report 2021).

During the implementation of the NHSP 2017–2021 significant progress was made towards further strengthening of the national response to TB. The TB programme has decentralized the diagnostic and treatment services to the lowest level of care, including the community level. This is an effort to increase access and equity to the much-needed TB services. The programme also introduced patient cantered model of care. In 2017, Zambia embarked on the decentralization of drug resistant TB services from only two (2) sites located in Lusaka and Ndola Districts to over 100 sites spread across the country. In the last 5 years, case detection rate for drug sensitive TB has increased from 60% to 68% and case detection for drug resistant TB has increased from 99 cases in 2015 to 509 in 2018 (MoH TB Annual Report 2021).

The coverage of TB Preventive Therapy (TPT) has been increasing each year. For instance, 49,000 were initiated on TPT in 2017, which increased to 300,687 in 2020. Since the scale up of TPT started at least 70% of people living with HIV who are currently on ART have since received one full course of TPT (MOH TB Annual Report, 2021).

During the period from 2019 to 2021, Zambia sustained a high treatment success rate of 90% for drug sensitive TB. Equally, the treatment success rate for drug resistant TB has improved from 33% in 2013 to 78% in 2021. Despite these successes, a significant number of TB cases are missed. This is partly due to the low coverage of TB diagnostics. For example, there is a 36% deficit in the coverage of GeneXpert machines. Out of the target of 490 GeneXpert machines, there are only 315 in the country. Recurrent stock out of TB microscopy reagents poses a major threat to case finding in places where they have no access to GeneXpert or reliable sample transport (MOH TB Annual Report, 2021).

Zambia attained the Leprosy elimination status in 2000, meaning there are less than 10 cases per 10,000 population. Despite attaining this status, pockets of leprosy cases are recorded across the country with higher proportions of cases detected in Western, Southern and Luapula provinces. There is a huge threat of a resurgence of Leprosy in Zambia because most of Zambia's neighbours are reporting more cases of Leprosy. Of concern is that we have a significant number of persons with latent infection of Leprosy which is currently not being treated. Management of leprosy is done through a decentralized model. Community-based support has been formed to offer support in the long term, after phasing out of leprosaria (sanatoriums). The closing up of Liteta and Chikankata Leprosy sites left leprosy patients without a permanent place they can go to for continuous help and treatment.

Key challenges and gaps under the TB and Leprosy Programme include:

i. Sub-optimal multi-disciplinary involvement in TB management.

ii. Low coverage of drug susceptibility testing to inform management of patients especially in cases of INH resistance.

iii. 3-4% of TB patients do not know their HIV status.

iv. Leprosy community-based groups lack capacity in contact tracing, case finding and adherence support.

v. Inadequate funding to implement Leprosy Programme.

B) Goal, Objectives and Strategic Interventions

The country will continue to scale up interventions aimed at reducing the number of morbidities and mortalities associated with TB. Case finding of both drug sensitive and drug resistant TB will be intensified. The table below presents the goals, objectives and strategies to be implemented in plan period. A dedicated Strategic Plan for the national TB programme has also been developed, to guide implementation of these strategies.

Goal: To reduce Tuberculosis incidence from 319/100,000 in 2020 to 169/100,000 population by 2026.		
#	Objectives	Strategic Interventions
1.	To increase case detection from 68% in 2020 to 86% by end of 2026.	1.1 Introduce and scale up program quality and efficiency for increasing TB case detection in health facilities. 1.2 Implement systematic and routine contact investigations for all TB cases. 1.3 Strengthen TB services for high-risk groups. 1.4 Implement intensified case finding approaches. 1.5 Strengthen TB services at community level.
2.	To increase the treatment success rate for drug sensitive TB from 90% in 2020 to at least 95% in 2026.	2.1 Enhance patient follow-ups/Scale up treatment support/Directly Observed Treatment (DOT). 2.2 Strengthen management of TB patients. 2.3 Promote nutrition support. 2.4 Ensure appropriate TB treatment for all detected patients. 2.5 Enhance patient centred care/optimization of quality of care.
3.	To increase the treatment success rate for Drug Resistant (DR) TB from 78% in 2021 to 85% in 2026.	3.1 Enhance early case detection. 3.2 Expand and strengthen capacity for treatment of DR-TB. 3.3 Improve the social welfare of drug resistant TB patients. 3.4 Accelerate access to Drug Susceptibility Testing (DST) through. decentralization of DST.
4.	To reduce the proportion of Grade 2 disability of Leprosy from the 70% in 2020 to 10% by 2026.	4.1 Strengthen leprosy index of suspicion and diagnostic capacity among health care workers. 4.2 Enhance provision of single dose rifampicin. 4.3 Enhance community case finding in leprosy hot spots.

5.1.1.5.4 Viral Hepatitis

A) Situation Analysis

Generally, viral hepatitis is caused by five distinct hepatitis viruses (A, B, C, D and E). The highest numbers of deaths attributable to viral hepatitis result from liver cancer and cirrhosis of the liver, which occur after decades of chronic hepatitis B or C infection. About 60% of liver cancer deaths are due to late testing and treatment of viral hepatitis B and C.

The Zambia Population-Based HIV Impact Assessment (ZAMPHIA), a household-based national survey conducted in 2016, indicated that the prevalence of infection with Hepatitis B Virus (HBV) among adults aged 15 to 59 years was higher among HIV-positive (7.1%) than HIV-negative (5.4%) individuals. Prevalence of HBV is especially high among HIV-positive males ages 15 to 59 years (10.2%). Similarly, among children aged 0 to 14 years, HBV infection is more prevalent among those living with HIV (5.2%) than those living without HIV (1.3%).

Surveillance data from the Zambia National Blood Transfusion Service (ZNBTS) on Hepatitis C Virus (HCV) antibody (serologies) since 2004, indicate that approximately 0.7-0.9% of blood donors were HCV positive. In studies of HBV mono-infection and HIV-HBV co-infection in Zambia, Hepatitis D Virus (HDV) antibody was rare (2-3%).

Some of the major challenges in the control of viral hepatitis infections in Zambia include:

i. A general lack of information on viral hepatitis (A, B, C, D and E) infections in Zambia.
ii. Inadequate availability of viral hepatitis screening and diagnostic testing platforms (e.g. HBV DNA, HCV RNA, FibroScan).
iii. Hepatis B birth-dose not offered to babies born from HBV positive mothers.
iv. Non-availability of laboratory diagnostic services in primary health facilities, leading to missed opportunities for diagnosis of patients.
v. Low skills set to manage viral hepatitis cases at primary health care facilities.
vi. Recurrent stock outs of drugs needed to manage the different types of viral hepatitis.
vii. Inadequate or poor viral hepatitis services targeted at key populations, such as female sex workers (FSW), and mobile, migrant and internally displaced populations.

B) Goal, Objectives and Strategic Interventions

The table below presents the goal, objectives and strategies to be implemented in the plan period:

Goal: To reduce Hepatitis B Incidence to less than 1.8/100,000 population by 2026.		
#	Objectives	Strategic Interventions
1.	To raise awareness of Hepatitis B (including other viral hepatitis infections A, C, D and E).	1.1 Increase awareness creation in the general population and protect key populations including mobile, migrant and internally displaced populations at risk of viral hepatitis.

#	Objectives	Strategic Interventions
2.	To increase access to comprehensive Hepatitis B control services (including other viral hepatitis infections A, C, D, and E) at all levels.	2.1 Scale up prevention, testing and treatment of viral hepatitis to cover all districts and provincial hospitals. 2.2 Increase capacities of health facilities and care providers in testing and treatment of viral hepatitis. 2.3 Strengthen viral hepatitis surveillance at all levels. 2.4 Introduce HBV birth-dose vaccination for babies born from HBV positive mothers.

5.1.1.6 Non-Communicable Diseases

5.1.1.6.1 Non-Communicable Diseases (General)

A) Situation Analysis

Non-Communicable Diseases (NCDs) refer to a group of health conditions of long duration and generally slow in progression, which include cardiovascular diseases (CVDs), cancers, chronic respiratory diseases and diabetes. Others include mental disorders, epilepsy, trauma (mostly due to road traffic accidents and burns), haemoglobinopathies (sickle cell anaemia), including some oral diseases, eye and ear disorders.

Addressing NCDs is an integral part of the 2030 Global Agenda for Sustainable Development Goal 3 (SDG3), target 3.4 which calls on countries to reduce morbidity and mortality due to NCDs by a third by 2030 relative to 2020 levels, and to promote mental health and wellbeing. Further, SDG target 3.5 and 3.6 urge countries to strengthen prevention and treatment of substance abuse and half deaths and injuries from road traffic accidents, respectively.

The NHSP 2017–2021 aimed at reducing the morbidity and mortality due to NCDs. However, evidence has shown that the burden of NCDs in Zambia is rapidly increasing. According to the WHO, the global share of NCD deaths, among all deaths, increased from 60.8 percent in 2000 to 73.6 percent in 2019, with over 41 million people dying of NCDs[6] each year , of which 85 percent of these "premature" deaths occur in low- and middle-income countries. Lately, Zambia has recorded increased morbidity and mortality due to NCDs[7] . In Zambia, according to WHO's Zambia NCD profile, NCDs accounted for 23.0% of total deaths. Cardiovascular diseases accounted for 8.0%, cancers 4.0%, chronic respiratory diseases 1.0%, diabetes 1.0% and other NCDs accounted for 8.0% (WHO, 2014b). In Zambia, roughly a fifth of the adult population aged 18-69 (19.1 percent) have raised blood pressure. Around 23 percent of men currently smoke tobacco, 16.8 percent of men engage in heavy episodic drinking and the population average daily salt intake is 9.5g per day, nearly twice the WHO recommendation of no more than 5g per day (STEPS Survey 2017).

The main gaps/challenges include:

I. Inadequate policies/legislation to support enforcement, prevention and control of NCDs.

https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases accessed 23/10/2021
MOH 2020 Annual Progress Report

ii. Insufficient community sensitization on prevention and control of NCDs risk factors.

iii. Inadequate awareness of NCDs leading to several disease and complications.

iv. Inadequate medical supplies for NCDs.

v. Inadequate infrastructure to support screening, diagnosis, treatment and care at primary health care leading to advanced disease.

vi. Inadequate integration of NCDs into routine monitoring and surveillance systems.

B) Goal, Objectives and Strategic Interventions

Zambia has set itself an ambitious target to reduce deaths due to NCDs by enhancing prevention and control interventions, strengthening prompt and effective diagnosis and case management. The following is the goal, objectives and strategies for the planned period.

Goal: To Reduce Morbidity and Mortality due to NCDs and to Promote Mental Health and well-being By 2026	
Objectives	**Strategies/Interventions**
1. To reduce the incidence and prevalence of NCDs through enhanced health promotion	1.1 Scale-up advocacy, communication and social mobilisation (ACSM) on the prevention and control of NCDs. 1.2 Strengthen capacity of communities for prevention and control of NCDs risk factors at all levels. 1.3 Strengthen policy and legislative for prevention and control of NCDs risk factors. 1.4 Strengthen multisectoral capacity for prevention and control of NCDs.
2. To reduce disability and mortality through early detection and management of NCDs at primary care level.	2.1 Strengthen capacity for early detection of NCDs. 2.2 Scale-up screening for NCDs at Community level and in congregate setting. 2.3 Strengthen the capacity of HCPs to use Package of Essential NCDs (PEN Plus). 2.4 Scale-up HIV/NCDs integration. 2.5 Strengthen the diagnostic capacity at primary health care including provision of equipment, technologies and medical supplies for disease detection & management (including mHealth, Telemedicine, etc). 2.6 Strengthen capacity for rehabilitation of patients with disabilities due to NCDs. 2.7 Strengthen palliative and terminal care for NCDs. 2.8 Integrate NCDs prevention and control in pre-service curriculum in training.
3. To provide evidence for programming and policy making on NCDs prevention and control	3.1 Strengthen NCDs surveillance and monitoring in the national surveillance and health management information systems 3.2 Strengthen data quality for NCDs

5.1.1.6.2 Mental Health

A) Situation Analysis

Mental and neurological disorders are common public health problems in Zambia. The management of these disorders are centralized at tertiary level with minimal or absolutely no interventions at primary health care level. Key achievements include: the enactment of the Mental Health Act No. 6 of 2019 and the approved National Alcohol Policy with its Implementation Plan of 2018.

Mental disorders have continued to increase particularly during the COVID-19 pandemic, mainly due to stress or anxiety, depression, harmful use of alcohol and drugs, self-harm and suicidal behaviours. Common mental disorders in Zambia include: Alcohol-induced disorders, Brief Psychotic disorders (BPDs), Schizophrenia, Cannabis-induced disorders, Cocaine/Heroin disorders, Bipolar disorders, Depression and Mania, Stress Reaction Adjustment Disorders and Schizo-affective disorders (Chainama Hills Hospital; 2020 Report). According to the STEPS survey, nearly 8.0% of the respondents acknowledged having considered attempting suicide in the last 12 months [8]. In addition, alcohol and substance abuse, particularly among adolescents continue to surge, which are related triggers to road traffic accidents, gender-based violence, HIV/AIDS, and loss of productivity in the workplace, with the potential for increased mental health disorders and other NCDs. Approximately, 1/1000 epilepsy cases are notified at health facilities in Zambia[9] with health facility mortality of 3/1000 (Chainama Hills Hospital; 2020 Report). Health seeking behaviour for epilepsy still remains a major challenge due to community myths and misconceptions. Epilepsy patients suffer stigma and discrimination due to insufficient information in the community.

The main challenges and gaps in mental health include:

i. Inadequate public education and awareness on mental health, to mitigate societal biases against mental health and stigmatization of persons living with mental health disorders.
ii. Abuse of social media platforms.
iii. Inadequate capacity to identify and manage mental disorders at all levels.
iv. Inadequate medical supplies, including anti-psychotic drugs.
v. Inadequate coordination of the multi-disciplinary approach in prevention and control of mental health problems including harmful use of alcohol and illicit drugs.
vi. Inadequate human, financial and material resources for prevention, promotion, treatment and rehabilitation services.
vii. Inadequate evidence-based information to inform decision makers and policy.
viii. Inadequate policy and legal framework supporting mental health.

[8] Zambia Stepwise Survey for NCDs Risk Factors 2017
[9] MOH 2020 Annual Progress Report

B) Goal, Objectives and Strategic Interventions

Goal: To mitigate the disease burden arising from mental health thro ugh the use of comprehensive promotional, preventive, curative and rehabilitative services.		
#	Objectives	Strategic Interventions
1.	To increase promotion of mental health care and preventive services to all people including vulnerable populations (children, women, the aged, migrants and refugees).	1.1 Develop national policy and strategy for mental health, that are in line with international and regional human rights instruments. 1.2 Facilitate functionality of multi-sectoral mental health promotion and prevention programmes. 1.3 Scale-up ACSM (including commemoration of World Mental Health and Suicide Prevention Days). 1.4 Enhance collaboration with traditional health practitioners, Religious leaders and mental health services users on mental health delivery. 1.5 Strengthen the legislation for mental health care. 1.6 Mobilize and align international mental health funding and partnerships for research initiatives in mental health
2.	To improve curative services of mental health care to all people including vulnerable populations (children, women, the aged, migrants and refugees).	2.1 Increase health facilities providing mental health services in the Provinces. 2.2 Enhancing capacity building for health care providers at primary health care level to adequately foster integration of mental health at community level. 2.3 Strengthen the availability, distribution and use of cost-effective psychotropic medicines. 2.4 Scale-up the provision of mental health services at all levels of care.
3.	To improve rehabilitative services of mental health care to all people including vulnerable populations (children, women, the aged, migrants and refugees).	3.1 Establish and strengthen capacity of mental health services for referral and rehabilitation, integrated at all the levels of care.
4.	To increase the provision of epilepsy health care to all patients.	4.1 Scale-up ACSM to reduce negative perceptions about those suffering from epilepsy (including commemoration of World Epilepsy Day). 4.2 Strengthen the availability, distribution and use of cost-effective anti-epileptic medicines. 4.3 Enhance collaboration with traditional health practitioners, the religious leaders and service users on epilepsy.

5.1.1.6.3 Cancer Diseases

A) Situation Analysis

Zambia experiences high morbidity and mortality rates from cancer which is one of the major non-communicable diseases. However, the country has a robust national cancer registry that has incorporated a population-based cancer registry for Lusaka District. All districts in Zambia except for five have facilities for cervical cancer screening and all provincial hospitals have facilities for treatment of pre-cancerous lesions whereas treatment of the cancer itself is only available at cancer diseases hospital (CDH) in Lusaka.

The NHSP 2017–2021 aimed at reducing Cancer incidence by type per 100,000 population from 58 in 2016 to 52.3 in 2021. However, a total of 13,831 new cancer cases with a corresponding 8,672 deaths were recorded in 2020 alone. In 2018, Zambia recorded a total of 12,052 new cancer cases with 7,380 deaths. About 61% of people living with cancer died in 2018 while 62% died in 2020. The top 5 cancers in 2020 in Zambia were cervical cancer, Kaposi's sarcoma, prostate cancer, breast and oesophageal cancers.

Worldwide, cervical cancer is the fourth most frequent cancer in women with an estimated 604 000 new cases in 2020. Of the estimated 342,000 deaths from cervical cancer in 2020, about 90% of these occur in low-and middle-income countries. Women living with HIV are 6 times more likely to develop cervical cancer compared to women without HIV and an estimated 5% of all cervical cancer cases are attributable to HIV (WHO, Fact sheet–Cervical Cancer, 2022). According to the Zambia National Cancer Registry data in the period 2010 - 2017 a total number of 21,192 women aged 15-65 were registered with various cancers and of these, 7,453 were Cervical cancer patients, illustrating that Cervical cancer is still the commonest cancer prevalent in Zambia, despite it being easily preventable and curable.

The country has prioritized the cervical cancer elimination program, as well as, early diagnosis and treatment for breast, childhood, prostate and colorectal cancers. Zambia seeks to transform the cervical cancer prevention programme into a population-based cervical cancer screening program that will now be called the Cervical Cancer Elimination Program of Zambia (CCEPZ) based on the WHO cervical cancer elimination strategy. Cervical cancer screening with HPV DNA testing will need to be incorporated into the cervical cancer screening program. Clearly, routine cervical cancer screening is largely not covering the target populations in the districts and there is need to increase the number of screening clinics in the districts in the next five (5) years.

On childhood cancers, Zambia was chosen as a WHO global initiative for childhood cancer (WHO GICC) in 2019. As LIC, the current estimated survival rate for childhood cancer is at 20%. The WHO GICC goal is to improve the survival rate for childhood cancer to at least 60% by 2030 for the index cancers. This will require a strong early diagnosis component and referral system coupled with development of provincial centres capable of diagnosing and commencing treatment of the children with the specialist hospitals with radiotherapy and bone marrow transplant services.

For breast cancer, the target is to reduce breast cancer mortality by 2.5% every year through early diagnosis to ensure that 60% of breast cancers are diagnosed in stage I and II, through timely diagnostics that must not last more than 60 days to complete and comprehensive treatment of 80% of breast cancer cases diagnosed. The country already has developed the early diagnosis guidelines and four (4) districts are implementing this service. A roll-out plan is what will be needed to cover the whole country.

Prostate cancer awareness will be encouraged as opposed screening, so as to encourage men with lower urinary tract symptoms to seek medical attention early. Colorectal cancer early diagnosis is a service that will need to be added to the cancer services during the five (5) years of this plan.

Since 2019, the country has also introduced Human Papilloma Virus (HPV) Vaccination. The coverage for the HPV Vaccine for the eligible girls in the target sites was 76.3% in 2019 and less than 50% in 2020 in the first two years of vaccine introduction. This coverage falls below the expected target of 90%. Cervical cancer screening with HPV DNA testing will need to be incorporated into the cervical cancer screening program. Clearly, routine cervical cancer screening is largely not covering the target populations in the districts and there will be need to increase the number of screening clinics in the districts in the next five (5) years.

Zambia has one chemo-radiation treatment facility at the Cancer Diseases Hospital (CDH), which was established in 2006. In a recent analysis of the performance of the National Cancer Control Programme (NCCSP) 2017-2021, only 16% of eligible women were reported to have been screened for cervical cancer at least once in their lifetime for women aged 25-59 years. Only 31% of women with invasive cervical cancer were treated. Less than 15% of Zambia's eligible population were accessing early diagnosis programs for breast, prostate, childhood and colorectal cancers. All districts in Zambia, except Lufwanyama, Nsama, Lunga, Lupososhi and Lunte have facilities for cervical cancer screening. Treatment of pre-cancerous lesions is available in all provincial hospitals whereas treatment of cancer itself is available at the Cancer Diseases Hospital (CDH) in Lusaka.

The main challenges include:

i. Shortages of medicines and supplies for cancer management and control.

ii. Inadequate national cancer programmes from community to tertiary institutions.

iii. Inadequate infrastructure and equipment to support screening, diagnosis, treatment and care at all levels.

B) Goal, Objectives and Strategic and Interventions

The table below presents the goal, objectives and strategic interventions for the planned period. A National Cancer Control Strategic Plan 2022-2026 and its implementation plan have been developed, providing frameworks for implementation of these strategies.

Goal: To reduce premature mortality from adult cancer by 30% and improve childhood cancer survival to over 60% by 2026.		
#	Objectives	Strategic Interventions
1.	To increase the number of sites providing cervical cancer elimination services from 55% in 2018 to 80% in 2026.	1.1 Scale up HPV vaccination to all eligible girls. 1.2 Improve screening of eligible women with HPV DNA testing and triage with Visual Assessment for Treatment (VAT). 1.3 Ensure treatment of women found with either pre-cancer and/or invasive cancer increase. 1.4 Strengthen capacity development of health care providers for cervical screening and treatment. 1.5 Strengthen capacity of health care system for ea rly detection of Cervical Cancers.
2.	To increase the number of hospitals with radiotherapy capacity in managing cancers from 1 hospital in 2021 to 3 hospitals by end of 2026.	2.1 Enhance the use of appropriate equipment and technology for diagnosis and treatment of cancer. 2.2 Decentralise treatment of Cancer to all provincial capitals starting with two, one in Ndola and the other in Livingstone
3.	To increase the percentage of the population under surveillance through a Population Based Cancer Registry from 14% to 20% by the end of 2026.	3.1 Strengthen the Zambia National Cancer Registry capacity for surveillance and monitoring of cancers. 3.2 Decentralize the population-based cancer registration of the National Cancer Registry to Ndola and Livingstone 3.3 Strengthen multi-sectoral response for cancers. 3.4 Draft and enact the Cancer Control Act to establish the National Cancer Institute of Zambia and Zambia National Cancer Registry by law.
4.	To increase early detection of cancer at level 1 and 2 hospitals by 50% by December 2026.	4.1 Strengthen early detection of breast cancers. 4.2 Enhance early diagnosis of prostate cancer in men. 4.3 Scale-up early diagnosis for childhood cancer in all districts in order to improve survival of children with cancer.
5.	To increase the number of trained cancer-care human resource across the continuum of care by December 2026.	5.1 Strengthen the training of core cancer care personnel 5.2 Create a cancer HR register.

5.1.1.7 Other Areas of Public Health Concern

5.1.1.7.1 Neglected Tropical Diseases

A) Situation Analysis

Neglected Tropical Diseases (NTDs) are a group of infectious diseases that affect poor people in the tropics. NTDs affect an estimated 1.7 billion people globally, and each year, about 185,000 people die as a result of these diseases. NTDs are disabling and cause severe morbidity and suffering in poor communities and perpetuate poverty because of their debilitating nature. The NTDs that are common in Zambia include Elephantiasis (Lymphatic Filariasis), Bilharzia (Schistosomiasis), Intestinal worms (Soil–transmitted helminthiasis), Trachoma, Sleeping

sickness (Trypanosomiasis), snake bites, Leprosy and Tape worm infestation (Taeniasis).

In line with the World Health Organisation, Neglected Tropical Diseases Road Map 2021 to 2030, Zambia is committed to controlling and eliminating NTDs. This will be achieved through the implementation of both community and school based interventions such as mass drug administration. However, evidence has shown that despite the significant efforts made, NTDs are still prevalent in the country.

In Zambia, about 13 million people are affected by NTDs. Elephantisis (Lymphatic Filariasis) is endemic in 96 out of the total of 116 districts of Zambia and is targeted for elimination through Mass Drug Administrations (MDAs) and Morbidity Management and Disability Prevention (MMDP). All the affected 96 districts have completed the 5th and final round of MDAs.

Bilharzia is endemic in 115 districts of Zambia, with prevalence across the country ranging from <1% in Ndola to 88.6% in Kafue district. The disease prevalence is = 50% in Chongwe, Luangwa, Rufunsa, Chilanga and Milenge districts. Approximately 4 million people are infected with this in Zambia. Bilharzia is targeted for control, through MDAs.

Trachoma MDAs were conducted during the period from 2012 to 2021 and are on going in some districts .Others have stopped MDA implementation ,as impact assessment results indicate an elimination status and are under surveillance .Trachoma MDA campaigns were conducted in line with the WHO recommended SAFE (Surgery ,Antibiotics ,Facial cleanliness , and Environmental cleanness)strategy .To date over 5 million people have received antibiotic treatment through MDAs and over 2000 sight saving surgeries have been conducted .

In the recent past ,Zambia has focused on delivering Preventive Chemotherapy NTDs interventions focusing on Bilharzia ,Trachoma ,Intestinal worm infestation and Elephantisis . Further , Case Management Neglected Tropical Diseases interventions have been implemented in Zambia to effectively manage Sleeping sickness ,Cysticercosis ,snake bites , rabies etc .

The country has conducted endemicity mapping for Elephantisis ,Bilharzia ,Trachoma and Intestinal Worm Infestation Further ,baseline surveys ,Mass Drug Administration (MDA)have taken place .MDAs have been scaled up to national scale with all endemic districts being treated since 2012 .The program has revised and realigned the national NTD masterplan 2022 2026 to the WHO NTD roadmap 2030 .

The main challenges for the NTDs programme include :

i . All prioritized NTDs in Zambia have no point -of care diagnostics for early detection at community and health facility levels .

ii . Serving the hard to reach populations and the marginalized in society ,due to poor road networks and finances .

iii . Development of Behaviour Change Communication (BCC) materials , following Knowledge ,Attitudes and Practices (KAP)Surveys ,has not been done .

iv . Inadequate coordination ,and inter sectoral collaboration necessary for the elimination

of NTDs .

v . Limited capacity for distribution of drugs .

B) Goal ,Objectives and Strategic Interventions

The table below shows goal ,objectives and strategic interventions to be implemented in the

Goal: To eliminate and control Neglected Tropical Diseases.		
#	Objectives	Strategic Interventions
1	To raise awareness on trachoma, Schistosomiasis, STH and Lymphatic Filariasis.	1.1 Ensure community awareness, and proper diagnosis and management of NTDs in health facilities. 1.2 Strengthen multi-sectoral collaboration in NTDs prevention and control interventions.
1.	To diagnose and manage NTDs in health facilities.	2.1 Scale up diagnosis and management of NTDs in health facilities.

5.1.1.7.2 Environmental Health, Food Safety and Occupational Health

A) Situation Analysis

Environmental health covers the theory and practice of assessing, correcting, controlling and preventing factors in the environment which can adversely affect the health of the present and future generations (WHO, 1993). The components include Food Safety, Built Environment, Occupational Health and Safety, pollution prevention and control, Water, Sanitation and Hygiene (WASH) promotion, port health services and climate change mitigation and adaptation measures.

In promoting food safety, Zambia enacted the Food Safety Act No 7 of 2019, replacing the Food and Drugs Act Chapter 303 of the Laws of Zambia. The Act provides for the implementation of Food Safety Management systems. Currently only 49, representing 5%, of the food manufacturers are implementing Hazard Analysis of Critical control points (HACCP), out of an estimated number of 970 registered food manufacturing premises.

The NHSP 2017–2021 aim was two-fold, namely: strengthening delivery of sustainable environmental health services; and promoting the health of the consumer by ensuring high standards in the production, collection, preparation, processing, storage, sale and consumption of food stuff. During this period, the Ministry was implementing interventions aimed at improving Water, Sanitation and Hygiene in order to prevent hospital acquired infections. The WHO and UNICEF joint monitoring report (2019) reveals that Zambia had 40% of healthcare facilities having basic water services, 93% with improved sanitation coverage and 40 % compliance to waste management standards. Further, water quality monitoring and control plays a key role in the early detection of water borne diseases such as cholera. Currently only 45 porta laboratories are available and placed in strategic districts to support water quality monitoring and control.

In the area of pollution prevention and control, poisoning is among the major public health problems, and Zambia has not been spared. The country has seen an increase in the number of

post-mortem cases of which poisoning is a cause of death (MoH, 2020). Further, the WHO has compiled statistics on the distribution of poisoning cases in Africa and Zambia was above the regional average (WHO, 2018). To address this, the Ministry of Health, collaborating with other stakeholders through the Chemicals Observatory for the Sound Management of Chemicals in Africa (Africa ChemObs) facilitated for the establishment of the national poison centre.

Points of Entry (PoE) play a pivotal role in addressing health threats across international borders. Zambia has 14 and 24 designated and authorised points of entry, respectively. Strides were made to operationalise 13 authorized points of entry by deployment of staff and requisite infrastructure.

With regard to issues of climate variability and change, the Ministry of Health, in collaboration with partners developed a Health National Adaptation Plan (HNAP) to climate change, which is aimed at ensuring that the health of the population in Zambia is protected from the effects arising from climate change (HNAP, 2019). Further, a Vulnerability Risk Assessment was undertaken.

Zambia will continue implementing interventions to improve environmental health. Despite the notable achievements, Environmental Health faces the following key challenges as outlined below:

i. Inadequate food establishments implementing Hazard Analysis of Critical Control Point (HACCP).

ii. Inadequate proportion of healthcare facilities adhering to Infection Prevention and Control/Water Sanitation and Hygiene (IPC/WASH) standards.

iii. Inadequate healthcare facilities complying to waste management guidelines.

iv. Nonexistence of Sub-National Poison Centres.

v. Inadequate Porta laboratories to enhance water quality monitoring and control.

vi. Inadequate designated Points of Entry.

vii. Low number of Healthcare facilities implementing mitigation and adaptation measures to climate change.

B) Goal, Objectives and Strategic Interventions

Presented below are the goal, objectives and strategic interventions to be implemented in the plan period.

Goal: To reduce the incidence of environmentally related diseases through pr omotion of Environmental Health Services at all levels of care		
#	Objectives	Strategic Interventions
1.	To increase the percentage of food establishments implementing HACCP and prerequisite programs (GMP, GHP) from 5% in 2020 to 15% by 2026.	1.1 Strengthen food safety by incorporating Hazard Analysis of Critical Control Points (HACCP) in the Food Safety regulations. 1.2 Capacity building for Food establishments in HACCP.

#	Objectives	Strategic Interventions
2.	To increase the proportion of healthcare facilities complying to WASH/IPC standards from 45% in 2020 to 70 % by 2026.	2.1 Support the healthcare facilities with IPC/WASH infrastructure and logistics. 2.2 Strengthen compliance to WASH/IPC in healthcare facilities.
3.	To increase the percentage of healthcare facilities complying to HCWM Management guidelines from 40 % in 2019 to 70% by 2026.	3.1 Strengthen compliance to Healthcare waste management guidelines. 3.2 Improve provision of primary waste and final waste disposal facilities.
4.	To increase the number of functional portable laboratories and consumables from 45 in 2021 to 60 by 2026.	4.1 Improve provision of portable laboratories and consumables. 4.2 Strengthen water quality monitoring and control. 4.3 Strengthen coordination with local authorities.
5.	To increase disease surveillance and inspections of premises at Point of Entry from 14 points in 2021 to 24 by 2026.	5.1 Strengthen the capacity of Points of Entry.
6.	To increase the percentage of health care facilities implementing mitigation and adaptation measures to climate change from 55 % in 2020 to 80% by 2026.	6.1 Strengthen implementation of mitigation and adaptation measures to climate change in healthcare facilities.
7.	To establish the National Food Laboratory (NFL) HQ as a reference laboratory and centre of excellence by 2026.	7.1 Increase the laboratory space by construction of annex building. 7.2 Equip the institution with the basic minimum of high precision equipment. 7.3 Train staff in modern method of analysis.
8.	To establish 20 laboratory hubs around the country by 2026.	8.1 Identify and develop premises into laboratories in conjunction with local authorities. 8.2 Provide basic laboratory equipment for water and food safety analysis.

5.1.1.7.3 Public Health Security

A) Situation Analysis

The International Health Regulation (IHR) (2005) is an international legal instrument, that provides a unique global framework to protect people from health emergencies of any type. Whereby, its 196 States Parties including Zambia, commit to reporting public health emergencies of international concern and to strengthening national preparedness and response systems. Globally, management of health security has transformed, with a shift to establishment and utilisation of specialized dedicated National Public Health Institutes (NPHIs). This is showcased by the establishment of national Centres for Disease Control.

In line with this international best practice and global agenda, in 2015, Zambia joined other African Union Member States to pass a resolution that established the Africa CDC as a continental technical institution to provide leadership and ownership in safeguarding Africa's health security. This process was accelerated by gaps identified in the response during the devastating Ebola epidemic of 2014-16. The AU resolution which established the Africa CDC also called for each AU Member State to have a National Public Health Institute (NPHI).

The NHSP 2017–2021 aimed at improving national disease surveillance systems to address the burden of morbidity and mortality due to non-communicable and communicable diseases. In 2020, the Government of Zambia established the Zambia National Public Health Institute through the ZNPHI Act No. 19 of 2020. As a specialized technical institution, the ZNPHI is mandated to lead in safeguarding Zambia's health security through surveillance and disease intelligence systems, emergency preparedness and response capabilities, specialized laboratory functions, health information management systems, workforce development, and generation of scientific evidence through research. Additionally, the ZNPHI anchors Zambia's designated role as the Africa CDC Regional Collaborating Centre (RCC) for Southern Africa.

Zambia's national health security constantly faces both external and in-country threats arising from:

i. Increased interaction of the human population with natural habitats and wild animals, thereby facilitating exposure of the human population to new disease-causing agents.
ii. Effects of climate change, particularly global warming, leading to changes in behaviour, characteristics and geographic spread of disease vectors.
iii. Globalisation, including the ease of air travel, which exponentially increases the global spread of disease, exemplified by the current COVID-19 pandemic that spread to every country in just a few weeks.
iv. Zambia's geographic location at the heart of Southern Africa, surrounded by eight countries confers an increased risk of disease importation from neighbouring countries and beyond as people, animals and goods traverse the country.
v. Existence of epidemic-prone areas within the country, due to environmental, climatic, geographic, cultural and social-economic factors.
vi. Fragile neighbouring states with weak healthcare systems. The inadequacy of systems for the control of disease outbreaks increases the risk of disease spill-over across borders.
vii. Population movement for trade and socioeconomic activities, which exacerbates the risk of disease spread, compounded by the inevitable movement of displaced populations and refugees, and the unregulated movements across the country's long and porous borders.
viii. The lack of a dedicated national public health laboratory system, resulting in reliance on the already overstretched clinical laboratory system whose primary mandate is to support routine clinical patient management and therefore has limited test range.

Investment in Public Health security is key in ensuring security of the nation against outbreaks and public health threats from various diseases, conditions and events. In an effort to shield the

people from the potential public health threats and emergencies, a multi-sectoral response has been employed which includes heightened surveillance at community level, in health facilities, at ports of entry and in sentinel sites. In addition, rapid response teams at the national, provincial and district levels have been established. As regards to capacity building of staff, a training programme in field epidemiology has commenced and so far, a total of six cohorts have been trained.

Despite these achievements made, the following are the key challenges:

i. Emerging and re-emerging infections and other public health threats such COVID-19 pandemic, Ebola, measles, cholera, vaccine-derived polio, Listeriosis, yellow fever, influenza, typhoid, Rift Valley fever, dengue, plague, anthrax, Marburg and Foot and Mouth Disease among others.
ii. Inadequate high-level biocontainment infrastructure and measures to control pathogens responsible for diseases.
iii. Inadequate capabilities and capacity of rapid response teams (RRTs) at all levels to be able to respond to various outbreaks timely and effectively.
iv. Existence of epidemic-prone areas within the country, due to environmental, climatic, geographic, cultural and social-economic factors.
v. Inadequacy of systems for the control of disease outbreaks increases the risk of disease spill-over across borders.
vi. Lack of a dedicated national public health laboratory system leading to delays in detecting outbreaks, establishing diagnoses, and reporting of results.

B) Goal, Objectives and Strategic Interventions

Presented below are the goal, objectives and strategic interventions for the plan period.

Goal: To safeguard national public health security by preventing and cont rolling infectious and non-infectious public health threats in Zambia by the year 2026.		
#	Objectives	Strategic Interventions
1	To strengthen and equip the national surveillance system to generate timely, high quality data about all nationally notifiable and priority diseases.	1.1 Supply all facilities with the required paper-based and electronic tools to facilitate prompt reporting and transmission of data. 1.2 Strengthen event-based, facility-based, routine, sentinel and community-based surveillance. 1.3 Upgrade and reinforce the surveillance system for public health threats (epidemic- prone diseases, zoonotic, AMR, water-borne and water related diseases and other public health concerns). 1.4 Strengthen mechanisms for detection and management of cross boarder health threats. 1.5 Establish an interoperable, interconnected, real-time reporting system by strengthening the eIDSR platform to improve timeliness, completeness and data quality. 1.6 Strengthen community engagement in screening, prevention, detection and response to public health threats. 1.7 Conduct Surveys to inform the surveillance system 1.8 Strengthen analysis and use of surveillance data at national, provincial, district and facility levels.

#	Objectives	Strategic Interventions
2	To enhance the public health security of the country by being "Ready to Respond and Recover" from all public health events of concern.	2.1 Strengthen coordination at national, provincial and district levels through support towards policy level structures. 2.2 Support implementation of the International Health Regulations (IHR) through the National Focal Point (NFP) and established technical working groups (TWGs). 2.3 Enhance the capacities and capabilities of rapid response teams (RRTs) at all levels. 2.4 Support the implementation of the National Multi-Sectoral Cholera Elimination Program. 2.5 Ensure development and implementation of strategic documents
3	To establish a dedicated national public health reference laboratory to anchor a network of public health laboratories and institutions and strengthening the capacity of existing clinical laboratories.	3.1 Establish National Public Health Laboratory System. 3.2 Establish and enhance capacities for specialized testing. 3.3 Establish and maintain a bio-bank for pathogens and materials relating to public health. 3.4 Build capacity at all levels in quality management system, laboratory biosafety and biosecurity, and other competencies. 3.5 Coordinate national efforts in the fight against the threat of AMR. 3.6 Strengthen laboratory diagnostic capacity with an up-to-date lab supply of commodities for outbreak investigation and detection

5.1.1.7.4 Social Determinants of Health

Situation analysis

The Social Determinants of Health (SDH) are the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies and politics (WHO, SDH, 2021 Report).

SDH are complex, interrelated social structures and economic systems that shape the way people are born, grow and live. These include aspects of the social environment (e.g. discrimination, income, education level, marital status); the physical environment (e.g. place of residence, crowding conditions, built environment (e.g. buildings, spaces, transportation systems, and products that are created or modified by people); and health services (e.g. access to and quality of health services, insurance status).

Globally, health policies are being redefined around what is called "Social Determinants of Health". These determinants are the conditions that allow us to be and maintain our health. They are linked to a lack of opportunity; and to a lack of resources to protect, improve, and maintain health. Taken together, these factors are mostly responsible for health inequities, which are the unfair and avoidable differences in health status, seen within and between populations. The existing inequalities and unfair health conditions are a major source of concern in the mainstream population but more so for the most vulnerable groups such as key populations including migrant, mobile and internally displaced populations.

As part of the global community, Zambia has an obligation to provide quality and targeted health services for the vulnerable populations in line with transformative promise of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs). To this end, the Ministry is spearheading the implementation of the Health in All Policies strategy which promotes health development using Whole-of-Government and Whole-of-society approaches in order to achieve the SDG goal on health as she strives to move towards Universal Health Coverage and narrow the gaps in access to health services [10].

Although improvements have been made in the health status of Zambians, poverty, inequalities and marginalization remains a major threat to health. As the country's population is relatively young, almost half of the population (48%) is age 0-14, while only 3% is age 65 or older, access to social services is a challenge for majority of these sub populations. With the negative impact of emerging public health problems like COVID 19, access to social services especially for vulnerable sub-groups like mobile, migrant and internally displaced population tend to even be more restricted.

Though 72% of households have access to an improved water source for drinking, this access is more predominant in urban (92%) than rural areas, with 45% of the households having access to improved sanitation thereby, posing an inequality for the rural population. Similarly access to clean and safe water and sanitation remains a huge challenge for refugees, mobile, migrant and internally displaced populations. Meanwhile, the wealth distribution shows serious inequalities with 46% of household wealth of the population in the higher wealth quintile being in urban areas while compared to a meagre 3% of the population in rural areas.

The lack of or inadequate data on these populations make planning, delivery and evaluation of health interventions among these risky groups even more difficult to achieve.

With regard to educational attainment, majority of Zambians have either no formal education or only some primary education. Specifically, 60% of females and 54 % of males aged 6 and over have no education or have only some primary education. Literacy levels for women is at 66% and 82% of men age 15-49 are literate. Those in employment, 45% of women were currently employed, as compared with 75% of men age 15-49. In terms of health insurance, only 2% of women and 3% of men age 15-49 have health insurance.

The aforementioned are just a few among many other social determinants of health that are likely to affect the delivery and access to health services. Therefore, collaboration in awareness promotion with all stakeholders and action on the many factors that affect the health of all persons, to address these factors in our policies, practice, research, across sectors should be the focus.

[10] WHO, 2019. Health Equity and Social Determinants of Health in Zambia: Equality does not mean Equity

Goal; Objectives; and key strategies/ interventions

Goal: To increase the proportion of Districts implementing the Whole-of-Society and Whole-of Government approach on actions that address Social Determinants of Health from the current 5% to 30% by 2026.	
Objectives	Strategic Interventions
1. To increase the proportion of institutions with a shared vision for prioritization of determinants of health from 10 to 20 by 2026	1.1 Strengthen stakeholder engagement on in the implementation of Health in All Policies. 1.2 Review and develop Health in All Policies Strategic Framework 2022 – 2026. 1.3 Build capacity of key sectors to drive the Agenda toward Health and to ensure vulnerable populations are included in all policies at all levels. 1.4 Engage line ministries to harmonise their policies with the concept of Health In all Policies. 1.5 Establish integrated monitoring mechanism for the implementation of HiAP.
2. To increase institutional capacities and mechanisms for Districts to address social determinants of health and equity of access from 10% to 50% in 2026	2.1 Strengthen Healthy Cities Concept focusing on border and transit towns and cities. 2.2 Reorient stakeholders in the health sector on actions for addressing social determinants of Health. 2.3 Operationalise the findings of Health Impact Assessment and research on addressing issues regarding inequalities of marginalized populations. 2.4 Promote health equity in key policies, initiatives, programmes and actions across all sectors
3. To attain 50% of Districts with mechanisms for monitoring and reporting determinants of Health by 2026	3.1 Develop Health Impact Assessment guidelines. 3.2 Strengthen systems for monitoring of all determinants of health and health equity paying particular attention to gender, mobile, migrant and internally displaced populations. 3.3 Monitor indicators on equity for social determinants of health. 3.4 Develop policy briefs on social determinants.

5.1.2 Clinical Care Services

5.1.2.1 Situation Analysis

5.1.2.1.1 Hospital Services

During the implementation of the NHSP 2017-2021, access to quality health care was enhanced by opening up of three (3) hospitals and one (1) specialised hospital; Chinsali General Hospital, Kalindawalo General Hospital, Petauke District Hospital and the National Heart Hospital. Some urban clinics in Lusaka have also been upgraded to 1st level hospitals, these include Chawama, Kanyama, Matero, Chilenje and Chipata. On specialised care, a cath-lab was commissioned in UTH, Levy Mwanawasa hospital, and renal dialysis units were opened in Lusaka, Chipata, Solwezi, Livingstone, Kasama, Mansa, Kitwe and Ndola. Further, the renovation of Mainasoko Medical Centre. The capacity of healthcare personnel was enhanced by training of specialized personnel under the Specialised Training Programme. The total number under training is 447 out of the 500.

Challenges running across provision of effective clinical care services include:

i. limited and/or inadequate infrastructure;
ii. outdated and obsolete and/or insufficient equipment;
iii. inadequate and erratic funding;
iv. missing or poor maintenance services;
v. weak management and leadership; and
vi. huge outstanding debt.

The lack of specialized personnel for key sub-specialties at national and subnational level, such as interventional cardiology/radiology, renal dialysis, plastic and reconstruction and vascular surgeons still remains a challenge.

5.1.2.1.2 Surgical and Anaesthesia Services

Surgery and anaesthesia have traditionally been overlooked sectors of healthcare in low- and middle-income countries. To address this, concerted efforts have been made to improve the delivery of surgery, obstetrics and anaesthesia services in Zambia[11] . Every year, more than 18,010 patients get surgical services in tertiary hospitals in Zambia, like University teaching hospital (MoH Annual Report, 2021). Perioperative mortality ranges from nearly 0.6% in tertiary hospitals to 0.43% in district hospitals of Zambia, and around 62% of perioperative deaths are from avoidable surgical or anaesthesia related problems, such as delays in surgery, lack of the availability of blood, and poor postoperative care. [12],

[11] MOH, 2016. National Surgical, Obstetric, and Anaesthesia Strategic Plan (NSOASP) Year 2017-2021. Ministry of Health, Lusaka.
[12] Lillie, E.M.M.A., Holmes, C.J., O'Donohoe, E.A., Bowen, L., Ngwisha, C.L., Ahmed, Y., Snell, D.M., Kinnear, J.A. and Bould, M.D., 2015. Avoidable perioperative mortality at the University Teaching Hospital, Lusaka, Zambia: a retrospective cohort study. Canadian Journal of Anesthesia/Journal canadien d'anesthésie, 62(12), pp.1259-1267.

According to the 2021 harmonized health facility census, nearly 88% of health centres and hospitals in Zambia provide any minor surgical procedure. Only 55% of hospitals perform major surgeries in Zambia; where only 36% conduct laparotomy, 14% conduct cataract surgery, and 16-19% conduct orthopaedic surgery. Likewise, only 60% of hospitals in the country perform caesarean section, while only 45% and 21% hospitals perform tubal ligation and obstetric fistula repair, respectively. However, only 42% of hospitals perform paediatric surgeries, such as repairs of anorectal malformation, cleft lip and palate, clubfoot, and congenital hernia, paediatric escharotomy / fasciotomy and contracture release[14].

Slightly greater than a quarter of hospitals that provide major surgical services have staff trained in surgery, and overhead operating light, basic operation table and basic set of surgical instruments are available in only half of these hospitals. Similarly, anaesthesia machines are available in only 43% of hospitals that offer major surgical care; while on average, 47% of these facilities have medicines and commodities for anaesthesia. In general, the specialist health workforce density per 10,000 population is 0.16 for anaesthesiologists, 0.18 for obstetricians and gynaecologists, and 0.06 for surgeons.

5.1.2.1.3 Internal Medicine

The country has fully functional national renal services, which are currently being decentralized to the provinces. There are currently 11 renal units countrywide, which are based at the UTH Adult Hospital, UTH Children's Hospital, Kasama General Hospital, Mansa general Hospital, Solwezi General Hospital, Chipata General Hospital, Kitwe Central Hospital, Ndola Teaching Hospital, Livingstone Central Hospital, Arthur Davison Children's Hospital (ADCH) in Ndola and Maina Soko Military Hospital in Lusaka.

The demand for renal services has been increasing over the years and poses a challenge to service provision, which has been compounded by the high cost of providing the services. The unit cost per treatment is estimated between ZMW2,000 and ZMW2,500. Apart from the dialysis sessions the medicines required per each dialysis session is estimated to be between ZMW1,500 andZMW1,800, each chronic kidney disease patient needs three treatments per week for life or until they receive a kidney transplant. The country has 63 working machines distributed across the country. About 256,015 patients were being treated with permanent haemodialysis and peritoneal dialysis as of October 2021 countrywide. There are 750-850 patients receiving acute haemodialysis per year in the country as of September 2021. University Teaching Hospital (UTH) Adult Hospital accounts for more than 50% of patients.

Most of kidney disease patients die before they are referred to the dialysis units, while some of those that are referred have no access to dialysis due inadequate dialysis machines. Others opt

[13] Gajewski, J., Zhang, M., Bijlmakers, L., Pittalis, C., Borgstein, E., Mwapasa, G., Kachimba, J., Cheelo, M., Waterman, K. and Brugha, R., 2021. Rates of surgical deaths and infections at district hospitals in Malawi and Zambia: a prospective multicentre cohort study. BMJ Open, 11(12), p.e049126.

[14] MOH, 2022. Harmonized Health Facility Assessment, 2021 census (draft report). Ministry of Health, Lusaka.

for conservative treatment due to social factors like distance from the centres or lack of transport money. Prior to 2010, kidney patients were required to meet the cost of dialysis. Over the years, Government started subsiding the service and eventually took over the cost. This has dramatically increased the demand for the service over the years stretching the available dialysis slots allocated annually. UTH Adult Hospital has more than 40 chronic patients currently above its allocation.

The burden of kidney disease is further illustrated in the HIV population, with an estimated 8% prevalence of kidney disease among patients receiving combination ART for one year. This is a very high number when the number of patients on combination ART in the country (above 1 million at the end of 2020) is considered (MoH Annual report 2020).

5.1.2.1.4 Obstetrics and Gynaecology

Based on the last available ZDHS 2018, Zambia's maternal mortality ratio was 278/100,000 live births and this is a reduction from 398/100,000 live births in 2014/2013 (ZDHS 2013/2014). Even though this is a reduction, the maternal mortality ratio is still unacceptably high considering what we aspire to achieve of less than 70/100,000 live births by 2030 (SDGs number 3).

According to routine data from HMIS, the number of maternal deaths recorded were 787 in 100,000 live births in 2018, 726 in 2019, 757 in 2020 and 707 in 2021. The beginning of COVID-19 pandemic in 2020 had negative effects on access to health services as well as service delivery as is evidenced by the increase of the absolute number of maternal deaths in that particular year, despite the development and dissemination of guidelines for delivery of essential services amid COVID-19 pandemic.

In May 2019, maternal deaths were declared as a public health emergency and this was a call for action to further reduce these maternal deaths. The declaration has demanded all stakeholders, in the health sector, to play their part in reducing maternal mortality with utmost urgency. Although maternal mortality ratio has been declining over the years, the percentage of adolescent pregnancies has not declined much over the same period of time - having been 34% in 1992 and remained 29% in 2013-2014 and 2018 (2018 ZDHS). The scaling up of awareness messages of preventing maternal deaths and unwanted teenage pregnancy could be attributed to slight decline in the maternal and teenage pregnancies (MoH annual report 2021).

5.1.2.1.5 Paediatric Services

The country has a predominantly young population with 46% of the population aged below 15 years and approximately 80% of the population aged below 35 years. With this young proportion of the population, the scope of care is therefore wide and vary from new-born to adolescents. This means that the various age groups in the area of paediatrics will require and demand unique service of care.

The NHSP 2017-2021 aimed at reducing infant mortality rate from 75 to 35 per 1000 live births. However, the 2018 ZDHS revealed that infant mortality rate in 2018 was at 42 / 1000 live births

while the under-five mortality stood at 61/1000 live birth, and Neonatal mortality was record at 27 per 1000 live birth.

The NHSP 2017-2021 targeted reduction of NMR from 24/1000 to 12/1000 live births. Unfortunately, NMR increased from the 24 to 27/1000 by the 2018 ZDHS. Most deaths occur in the tertiary referral hospitals, as despite the increased awareness of emergency care for neonates as a lifesaving measure, most neonates arrive late and in poor state, dying in the first 24 to 48 hours of admission. Additionally, the referral hospitals are inadequately equipped to provide the much-needed treatment that is lifesaving (MoH Programme Report 2021).

The notable challenges in paediatric service delivery includes: ineffective referral system, inadequate hospitals offering paediatric services, and inadequate mentorship in paediatric services (MoH Programme Report 2021).

5.1.2.1.6 Mobile and Emergency Services

Mobile Health Services (MHS) are a complementary service delivery mode to people in hard-to-reach and remote parts of Zambia. The level of care is commensurate to that of second-level hospital services. This provides an opportunity for interaction and transfer of knowledge, skills and good attitudes from senior and well experienced health workers to junior health workers at the receiving districts. From the inception of the programme in 2011, a total of 729,046 clients were attended to and 32,857 operations were conducted through December 2020. These outreaches minimize the need for referral of patients from lower facilities, as most of them are seen and indeed operated upon during these visits. The medical equipment on the units has reached an end of useful life and needs replacement in order to maintain the level of care provided through Mobile Health Services (MHS).

Emergency Health Services (EHS) include Pre-hospital Care (Ambulance Service including Aero Medical Services) and Hospital Care [Accident and Emergency (A&E) departments]. The core mandate is to respond to emergencies, access, resuscitate, stabilize and transfer undifferentiated acutely severely ill or injured patients. The country still doesn't have a standalone ambulance service and is working on constructing purpose built emergency centres, procuring more ambulances and emergency equipment, training specialized human resources and strengthening communication and response systems to attain an efficient and effective EHS.

Zambia Flying Doctor Services (ZFDS) has been operating with inadequate aircraft for a long time now. Only one aircraft is operating, the other one has been grounded since 2017. There were 15 medical evacuations out of 48 carried out in 2020; 32 out of 72 facility visits were undertaken, in which 1,145 patients out of 1,200 were attended to; 10 out of 24 Specialist Outreach facility visits were undertaken in which 177 patients were attended to against the planned 80, and 41 out of 2,400 children were attended to during the routine outreach in the period under review. The poor performance is attributed to the inadequate funding for outreach and also inadequate aero transport.

5.1.2.1.7 Palliative Care

Recently, Palliative Care (PC) services have been prioritized. As of 2016, Zambia ranked alongside Zimbabwe and Malawi at "Level 4a" in terms of PC service provision (meaning "hospice-palliative care services are at a stage of preliminary integration into mainstream service provision") (APCA, 2016; Rhee, 2017). Currently PC services do exist in Zambia, but they are disjointed, the largest barriers being lack of financial support and education of health care workers. The Cancer Diseases Hospital (CDH) in Lusaka, the Livingstone Central Hospital (LCH) in Livingstone, Kitwe Teaching Hospital, Ndola Teaching Hospital, Mphanshya Mission Hospital and Mazabuka General Hospital have functional PC teams.

Due to inadequate trained healthcare workers in Palliative Care, it has been a challenge to provide quality Palliative Care services. Currently Zambia has slightly above 20 health workers trained in PC countrywide. Other health care workers have not been motivated to specialize in PC due to limited numbers of funded positions in the Civil service.

The major challenges are:

i. Ineffective pain control due to inadequate essential Palliative Care medications;
ii. Misconceptions about the use of opioids among prescribers and patients;
iii. Restrictions on opioid prescribers, as only physicians are allowed to prescribe opioids; and
iv. Poor nutritional status of some patients.

5.1.2.1.8 Eye Health Services

The NHSP 2017–2021 aimed at eliminating causes of avoidable or preventable blindness by 2021. However, eye health still remains a challenge. The prevalence of blindness in Zambia is 2.5%, of these 80% are preventable and treatable.

Eye health services are available in 66 districts out of the 116 in the country, while specialized eye health services are available at two tertiary eye hospitals namely: UTHs – Eye Hospital and Kitwe Teaching Eye Hospital. Currently in Zambia, one (1) ophthalmologist is responsible for 556,000 population. The existing situation is in contrast to WHO recommendation where the minimum requirement for provision of eye health services is one (1) ophthalmologist per 250,000 population; one (1) Ophthalmic clinical officer per 100,000 population, one (1) ophthalmic nurse per 100,000 population and one (1) optometrist per 250,000 population.

The challenges include the following:

i. Inadequate infrastructure in all eye health facilities;
ii. Inadequate eye health personnel;
iii. Inadequate and erratic supply of eye health services consumables; and
iv. Obsolete equipment.

5.1.2.1.9 Ear, Nose and Throat Heath Services

At least 5.5% of the Zambian population has significant hearing loss that requires intervention[15] . According to the WHO, 60% of the causes of hearing loss are preventable, or reversible[16] . At the Cancer Disease Hospital, laryngeal carcinoma is the commonest head and neck cancers (25.5%) followed by the nasopharyngeal carcinoma (18.4%). Majority of the patients present with late-stage disease, stage III (24.5%) and stage IV (51%). Only 6.1% present with stage I disease[18], [19] this complicates surgical treatment for head and neck cancers in Zambia.

Current situation in ENT Audiology and Speech and language therapy is as follows:

Workforce	6 qualified ENT surgeons, 1 audiologist ,0 speech therapists
Equipment	3 functional ENT/audiology units with comprehensive equipment
ENT drugs, consumables and assistive devices	No ENT drugs and consumables on the essential drug list. No accessibility to assistive hearing devices in public hospitals

5.1.2.1.9 Oral Heath Services

The burden of oral/dental diseases is high dental caries, a major oral health problem

affecting 60-90% of children in developing countries. Dental caries is among the top ten leading causes of morbidity in Zambia [2]. Oral health services are offered at health centre, district, provincial and tertiary health facilities.

80% of the Zambian population suffer from oral diseases [3]. These diseases are preventable. Oral and maxillofacial neoplasms, have increased leading to morbidity and mortality among patients. In 2020 we saw 67 and 100 in 2021 oral cancer patients (UTH maxillofacial register)

The existing oral heath outreach programs are inadequate and confined to selected parts of the country. The shortage and inequitable distribution of the oral health personnel has seriously affected efforts towards prevention of oral health diseases.

Although much has been done to procure and distribute dental equipment across the country, there are still gaps, which include:

i. Oral health disease burden is high (dental caries and gum disease 80%)
ii. Limited number of oral health personnel including specialist
iii. 0bsolete equipment and Instruments
iv. Inadequate oral health information systems and research

[15] World report on hearing. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO.
[16] World Health Organization ;2021 Deafness and Hearing loss https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss
[17] Chumba U, Nyagah S, Hapunda R. Patterns of head and neck cancers as seen at the cancer diseases hospital in Lusaka, Zambia
[19] Petersen PE, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C: The global burden of oral diseases and risks to oral health. Bulletin of theWorld Health Organisation 2005;83:661-69

5.1.2.1.10 Cardiovascular Services

In Zambia, Cardiovascular diseases are one of the leading causes of morbidity and mortality. Anecdotal data shows that among the non-communicable diseases, cardiovascular disease is the leading cause of hospital attendance. Other disease entities that constitute the main burden include:

i. Congenital Heart Disease - accounts for 1 out of every 100 live births. This translates into about 6,000 to 8,000 babies born with a heart condition every year. Congenital heart disease is second to communicable diseases in causing mortality in the first year of life.

ii. Rheumatic Heart Disease (RHD) - On a global scale, 39 million people are living with RHD (World Heart Federation). 80% of these are in Sub Saharan Africa. In Zambia, approximately 80,000 patients are symptomatic for RHD and need treatment. Of these, 8,000 need open-heart surgery annually. This disease results from sore throat infections caused by group A beta haemolytic streptococcus which infection is fuelled by overcrowding and other poor social economic conditions. Treatment of this infection is the most cost-effective intervention in the prevention of RHD.

iii. Hypertensive Heart Disease – 35% percent of the adult population in Lusaka are hypertensive (Goma Et al). Uncontrolled hypertension leads to stroke, heart attacks, heart failure, aortic aneurysms and dissections which can present with sudden death.

iv. Coronary Artery Disease - This disease is on the rise owing to lifestyle choices including excessive alcohol intake, smoking, sedentary lifestyles, and unhealthy nutrition.

The Government through the Ministry of Health recognized the importance of cardiovascular diseases and in 2021 designated the National Heart Hospital, as the Nation's Specialized Cardiac Centre with regional reach. The broad target is to increase access to cost effective specialized cardiac care to the citizens of Zambia.

5.1.2.2 Goal, Objectives and Strategic Interventions

Presented below are the goal, objectives and strategic interventions for the plan period.

Goal: To improve clinical health outcomes (management of conditions and treatment outcomes) by 2026		
#	Objectives	Strategic Interventions
1.	To increase the proportion of hospitals providing surgical services appropriate for the level of care from2 in 2021 to 6 by 2026.	1.1 Ensure availability of surgical equipment and consumables. 1.2 Improve the availability of surgeons of different specializations. 1.3 Build capacity of eye health personnel in cataract surgery. 1.4 Increase training outputs for eye health specialists. 1.5 Scale-up recruitment of eye health specialists. 1.6 Improve availability of infrastructure and cataract consumables.

#	Objectives	Strategic Interventions
2.	To increase the number of hospitals with capacity to provide Emergency Obstetrical and Neonatal Care (EmONC) from 60 % in 2021 to 80% by 2026.	2.1 Improve availability of Essential OBs and Gyn drugs, equipment and surgical supplies. 2.2 Set up High Dependent Units (HDU) and Triage to manage critical maternal cases. 2.3 Set up operating theatres for caesarean sections in all high delivery facilities. 2.4 Improve availability of obstetricians in all provinces 2.5 Build capacity of staff in quality control and improvement. 2.6 Strengthen adherence to protocols and standards and Referral Guidelines. 2.7 Strengthen referral system for paediatric patients referred within 48 hours of admission. 2.8 Strengthen Paediatrics triage system. 2.9 Build capacity for clinicians in clinical management. 2.10 Build capacity of staff in quality control and improvement. 2.11 Strengthen adherence to protocols and standards.
3.	To reduce the rate of reoperations, post elective Surgery from 100% in 2021 to 50% by 2026.	3.1 Create programmes focusing on Quality Improvement/Quality Assurance that track health outcomes. 3.2 Improve patient flows and overall service delivery in Surgery. 3.3 Strengthen adherence to surgical guidelines and protocols. 3.4 Establish trauma centres in accident hot spots.
4	To increase access to quality and timely anaesthetic and critical care services by 2026.	4.1 Strengthen the provision of quality, essential and emergency anaesthetic and Critical care services at all levels. 4.2 Provide appropriate equipment for safe delivery of anaesthesia and critical care at all levels of the health care system.
5.	To increase the number of hospitals utilizing telemedicine for management and treatment of patients from 5 hospitals in 2021 to 10 provincial hospitals by 2026.	5.1 Improve availability of equipment for telemedicine in all hospitals. 5.2 Build capacity of Clinicians in use of telemedicine. 5.3 Establish an innovation Centre for telemedicine 5.4 Establish a mobile tele medicine unit.
6.	To expand access to paediatric health services appropriate for the level of care to all health facilities by	6.1 Improve availability of surgeons in all provinces. 6.2 Build capacity in provision of paediatric health services by level of care.
7.	To expand access to obstetrics and Gynaecology (Obs and gyn) services appropriate for the level of care to all health care facilities by 2026.	7.1 Improve availability of Obs and gyn as well as, provide equipment and supplies. 7.2 Improve availability of obstetricians in all provinces. 7.3 Build capacity of staff in quality control and improvement. 7.4 Strengthen adherence to protocols and standards.

#	Objectives	Strategic Interventions
8.	To provide mobile health services to all under-served areas by 2026.	8.1 Increase the number of adequately equipped and functional mobile health units. 8.2 Scale up number of districts providing mobile health facilities. 8.3 Ensure availability of medical supplies and consumables for mobile health services.
9.	To expand access by provision of outreach services to hard-to-reach rural districts through aero-medical services.	9.1 Enhance specialist outreaches in all provincial hospitals and general hospitals. 9.2 To improve access to aero -medical and other air transport services.
10.	To expand access to emergency health units by 2026.	10.1 Establish dedicated space for emergency health services. 10.2 Build capacity of staff in emergency care. 10.3 Construct and operationalize the national emergency communication centre. 10.4 Enact the Ambulance Services Act.
11.	To expand access to comprehensive quality eye health services to cover all 116 district hospitals by 2026.	11.1 Establish and equip eye clinic department.
12.	To provide comprehensive Ear Nose and Throat services in an equitable manner	12.1 Strengthen capacities of health facilities to provide comprehensive ENT services across the country. 12.2 Increase the number of skilled workforce in ENT, audiology and speech therapy.
13.	To reduce cases of dental caries and periodontal diseases from 80% in 2023 to 70% by 2026.	13.1 Expand staff establishment of oral health personnel, including specialists. 13.2 Procure equipment (90 Dental chairs) and instruments and dental commodities for oral health. 13.3 Strengthen the oral health information system and research.

#	Objectives	Strategic Interventions
14.	To strengthen and scale up the treatment, rehabilitation, care, and support for people suffering from Cardiac conditions.	14.1 Enhanced health promotion and awareness. 14.2 Provide appropriate infrastructure, medical supplies, equipment, and technologies 14.3 Invest in research and new models of teaching, training and clinical care delivery. 14.4 Adopt best practices in patient care to provide a satisfactory service. 14.5 Explore use of telehealth for specialist consultations, pre-admission, outpatient clinics and secondary prevention for regional areas. 14.6 Strengthen skills and capacities of health workers in the prevention, management and care for cardiac patients. 14.7 Strengthen cardiac services by integration and prioritization of cardiac care in the existing health services including outreach. 14.8 Scale up early diagnosis of cardiac conditions at primary, secondary, and tertiary levels. 14.9 Strengthen case management of Cardiac complications.
15.	To increase access to quality Palliative Care services in the country	15.1 Provide quality, safe, and affordable essential supplies for palliative care services at all levels of care. 15.2 Strengthen community structures for PC provision.
16.	To provide equitable access to cost effective, quality Orthopaedic healthcare services as close to the family as possibly	16.1 Increase the number of health facilities providing essential Orthopaedic Services. 16.2 Increase the Number of practitioners that are able to provide Orthopaedic Services. 16.3 Reduce average waiting time to essential Orthopaedic Surgery. 16.4 Decentralize supply chain management of Orthopaedic implants.
17	To institutionalize Quality Assurance and Quality Improvement (QAQI) in all the interventions across all programmes by 2026.	17.1 Enhance the level of compliance with standards and guidelines 17.2 Strengthen Quality of Care Monitoring Framework 17.3 Strengthen service quality assessment at national and subnational levels. 17.4 Strengthen Continuous Health Systems Performance Assessments in facilities 17.5 Strengthen integration and coordination of performance improvement interventions into

5.1.2.3 Blood Transfusion Services

5.1.2.3.1 Situation Analysis

The Zambia National Blood Transfusion Service (ZNBTS) is centrally coordinated but sufficiently decentralized to render services to all hospitals. Each Provincial Blood Transfusion Centre (PBTC) has the capability to recruit blood donors, collect, process, test, store and distribute blood and blood components. The blood and blood components produced include whole blood, red cell concentrates, fresh frozen plasma, platelet concentrates and cryoprecipitate. The mandatory tests performed on donated blood for transfusion transmissible infections include; HIV, Hepatitis B (HBV), Hepatitis C (HCV) and Syphilis. Blood group determination is also performed at this level.

During the implementation of the NHSP 2017–2021, ZNBTS aimed at collecting 180, 000 blood units annually in order to meet the national needs for blood and blood components. On average, there were about 110,000 blood units collected per annum during 2017 to 2021. The proportion of repeat blood donors declined from 56% in 2012 to 48% in 2021.

ZNBTS also aimed at reducing the crude discard rates due to Transfusion Transmissible Infections (TTIs) from 10% in 2016 to 1% in 2021. However, by end of 2021, the crude discard rate was around 10% (3.0% attributable to HIV, 5.4% to HBV, 0.9% to HCV and 0.6% to Syphilis).

As the country adopts newer medical procedures, such as open-heart surgery, cancer treatments and tissue transplants, demand for blood, blood components and plasma-derived medicinal products is likely to grow. By 2021, demand for fresh frozen plasma (FFP) at Lusaka Provincial Blood Centre stands at 40%, while the facility is only providing 10%.

During the period 2017-2021, only six (6) Provincial Blood Transfusion Centres have the capacity (in terms of equipment) to perform blood components production. ZNBTS has also recently introduced fully automated blood processing, pathogen reduction and cellular technologies in order to perform procedures such as Apheresis, Therapeutic Plasma Exchange (TPE), Red Blood Cell Exchange (RBCE) Pathogen Reduction and Leucocyte Depletion technologies.

The following have been identified as the main challenges:

i. Disruptions in the supply chain for Blood Safety Commodities resulting in scaling down on operations.
ii. Lack of adequate operational vehicles for blood collections and post donation counseling activities.
iii. Absence of a robust Blood Donor Call Centre to facilitate Donor Recruitment, Recall and Retention Program.
iv. Limited capacity for blood component production which restricts roll out of Major Haemorrhage Protocols (MHP) and Haemotherapy.
v. Lack of capacity for Tissue and HLA typing which limits support to tissue and organ transplant as well as resolution of paternity disputes.
vi. Lack of a robust and coordinated legal framework for Blood Transfusion, Tissue, Organ Transplant and Human Genetics analysis.

5.1.2.3.2 Goal, Objectives and Strategic Interventions

Blood transfusion services will continue to be coordinated centrally, with decentralized service provision facilities, and ensure sufficient capacity to meet the blood transfusion needs of the country. The table below presents the goal, objectives and strategic interventions for the planned period.

Goal: To secure and provide adequate supplies of safe blood and blood products for all patients in Zambia.		
#	Objective	Strategic interventions
1	To increase the annual blood collection from 110,000 units in 2021 to 360,000 units in 2026.	1.1 Strengthen and expand blood donor retention schemes, using the Donor Recruitment, Retention and Recall strategy (DRRR). 1.2 Set up a National Call Centre (NCC), as part of marketing tool under Donor Recruitment, Retention and Recall (DRRR). 1.3 Secure adequate transport for collection, distribution of blood and post donation counselling activities.
2	To improve on availability and accessibility of safe blood and blood components in all health facilities by 2026.	2.1 Ensure uninterrupted supply of essential blood transfusion commodities, reagents and consumables. 2.2 Extend capacities for automated blood processing at provincial centres 2.3 Procure cold chain equipment to increase storage capacity for blood and blood components 2.4 Set up additional provincial storage hubs for blood and blood components at Choma, Katete, Lusaka, Kaoma, Kabompo, Mpika, Isoka, Mbala, Nchelenge, Ndola, Serenje and Mumbwa.
3	To expand capacities for apheresis procedures to meet the National needs for Plasma and cellular therapies by 2026.	3.1 Introduce Individual Donor-Nucleic Acid Testing (ID-NAT). 3.2 Extend capacities for Apheresis procedures to all Provincial Blood Centres.
4	To set up National Centre for tissue/HLA typing and Human genetic analysis and paternity testing by 2026.	4.1 Establish and operationalise National Centre for Tissue, HLA typing and Human Genetics.
5	To strengthen institutional and regulatory framework by 2026.	5.1 Review and finalize the Blood Transfusion, Tissue and Transplant Act.

5.1.3 Diagnostic Services

5.1.3.1 Situation Analysis

5.1.3.1.1 Pathology and Laboratory Services

Pathology and Laboratory Services are the most cost effective, least invasive source of objective health information in disease prevention and diagnosis, while improving patient outcomes, assuring patient safety, and fulfilling essential public health surveillance functions. Laboratory diagnosis provides information for the practice of evidence-based medicine thereby guiding treatment options and reducing treatment cost by avoiding superfluous use of medicines. About 70% of clinical decisions are based on laboratory testing[19].

Quality laboratory results are critical to informed decision making and effective patient management. In a quest to improve quality and attain international standards, Zambia enrolled nineteen (19) laboratories into the WHO/ African Society for Laboratory Management quality improvement process; six (6) laboratories received international accreditation to ISO 15189 with the Southern African Development Community Accreditation Service (SADCAS). The remaining thirteen (13) laboratories are implementing continual improvement projects and are yet to seek international accreditation. Amidst the successes scored, one (1) laboratory failed to maintain its accreditation status.

Zambia adopted the 2008 Maputo Declaration on standardization of laboratory equipment based on the level of care. To this end, haematology, clinical chemistry, CD4, viral load, and early infant diagnosis (EID) and some auxiliary equipment have been standardized by level of care. Streamlined funding for ART related programs mostly covering VL, EID and TB diagnosis have left haematology, chemistry, microbiology and parasitology challenged with frequent reagent stock outs due to inadequate funding support.

The provision of pathology and laboratory services is hampered by many challenges that include; unsupported laboratory management structure at the provincial and district health levels, non-inclusion of laboratory leadership in hospital management in a number of health facilities; disruptions in the supply chain management of laboratory supplies and reagents through stock outs, critical staff shortage especially on the back drop of the COVID-19 situation and ART scale up; further, the current laboratory organizational structure is outdated and needs to be revised.

Basic laboratory diagnostic services such as urine dipstick and malaria diagnostics are available in a bit less than two thirds of health facilities in the country, while rapid diagnostic tests for syphilis are available in only 35% of them. However, 94% of all health facilities have HIV diagnostic capacity, 14% have general microscopy, 6% have full blood count, 4% have TB, 7% have blood grouping and 0% have HPV DNA testing services. Around 55% of second level hospitals and 23% of third level and above hospitals do culture and sensitivity tests. Availability of 24-hour laboratory services is in 67% of hospitals in the country.

[19] https://health.usnews.com/health-news/patient-advice/articles/2015/01/30/hospital-labs-behind-the-scenes

There has been an increase in laboratory services. However, there has been no corresponding increase of laboratory space and a good number of available spaces do not conform to standard laboratory purpose designs. In addition, there are no standard laboratory infrastructure guidelines to guide laboratory construction and renovation. Only 398 out of over 2500 health facilities have laboratories and only five (5) laboratories are able to provide Histopathology services, due to limitations in both infrastructure and specialists required in the area.

The introduction and scale up of Information and Communication Technology (ICT) use in the public sector saw the implementation of the electronic Laboratory Information Management System (LIMS) in health facility laboratories covering viral load and Early Infant Diagnosis (EID) testing among other tests in 78 health facility laboratories. Different specimen registration, transportation tracking and digital results return systems were equally implemented to support over 1000 health facilities thereby reducing results turnaround time. Scaling up the use of ICT remains a challenge due to the high cost of capital investment (hardware and software), annual licensing costs and human behavioural change aspects towards use of ICT in place of traditional paper-based systems.

To sustain laboratory quality and increase the number of laboratories attaining and maintaining international accreditation, Zambia needs to implement the national certification program with a dedicated secretariat for all laboratories. This will require Zambia to increase the number of local mentors and assessors. There is also need for supporting the pre-service training of laboratory QMS at tertiary education levels. Other challenges include lack of a well-coordinated External Quality Assurance (EQA) system, weak Laboratory Information Management Systems (LIMS), weak Rapid Testing Continuous Quality Improvement (RTCQI).

The country has made strides in the practice of Biosafety Biosecurity. However, the following challenges exist:

i. Shortage of trained human resource;
ii. Inadequate availability of personnel protective equipment (PPE);
iii. Fewer biosafety training opportunities availability after formal preservice training;
iv. Most laboratory designs are not suitable for laboratory work;
v. Suboptimal documentation of laboratory acquired infections and risk assessments not done;
vi. Weak specimen referral system leading to delayed provision of care; and
vii. Unsupported laboratory management structure at the provincial and district health levels.

5.1.3.1.2 Radiology Services

Medical imaging is essential not only for initial diagnosis, but for monitoring disease response to treatment and deciding when to stop or adjust a treatment plan. The demand for medical imaging services has increased as a result of changes in the disease profile, with communicable diseases such as HIV/AIDS and TB and non-communicable diseases such as cancer, diabetes, and cardiac conditions becoming more prominent. Key to the provision of quality imaging

services, is the use of quality up-to-date medical imaging equipment in all modalities, such as film x-ray, contrast-aided imaging, ultrasound, magnetic resonance imaging, CT and interventional radiology.

Medical imaging services such as film x-ray, contrast-aided imaging and ultrasound, magnetic resonance imaging, CT and interventional imaging are currently available at all hospital levels. This is complemented by mobile facilities that offer x-ray and ultrasound.

The following gaps have been identified:

i. Inadequate and inappropriate imaging equipment to cover all levels of Care;
ii. Critical shortage of Imagers (radiologists, radiographers, and medical physicists);
iii. Lack of Picture Archive and Communications System (PACS) and Radiology Information System(RIS);
iv. Unreliable Maintenance and Service agreements for Imaging Equipment;
v. Poor supply chain management system for imaging consumables; and
vi. Inadequate QA/(QC) in medical imaging.

5.1.3.1.3 Nuclear Medicine

Nuclear medicine is a form of medical specialty in which radionuclides are used for diagnosis, treatment and monitoring of diseases ranging from cancers, non-communicable diseases and other ailments. It requires the administration of radionuclides to the patient by way of ingestion, injection or inhalation then the progress of the isotope through the body is followed using a gamma camera (SPECT/CT) which is capable of picking up gamma rays to detect or treat the pathology in a specific area of the body.

The department of Nuclear medicine has been operating since the 1980s, it started with a planar gamma camera until in 2008 when the SPECT-Gamma camera was purchased and installed with the help of the International Atomic Energy Agency (IAEA). This enabled the department to move from planar imaging (2D) to 3-D imaging. The department had been able to perform more than 2,000 studies, which included; myocardial perfusion scan, thyroid uptake scan, parathyroid scan, renal scintigraphy, bone scan, hepatobiliary scan, brain scans, prostate cancer (PSMA HYNIC), and therapeutic services such as Grave's disease, multinodular goitre and differentiated thyroid cancer. The SPECT gamma camera was on service contract until 2016, when the contract with Mediso (supplier) expired. This was followed by rapid deterioration of the machine functionality and hence service provision. Both cameras have not been functional since last year leading to a huge backlog of patients.

5.1.3.2 Goal, Objectives and Strategic Interventions

The table below presents the goal, objectives and strategic interventions for the plan period.

Goal: To Provide Quality, Accurate, Timely, Cost Effective a nd Appropriate Diagnostic Services at All Levels Of Care By 2026.		
#	Objectives	Strategic Interventions
1.	To increase the proportion of hospitals providing imaging services appropriate for the level of care by 2026.	1.1 Improve availability of imaging equipment and supplies. 1.2 Improve availability of staff appropriate for each level of care. 1.3 Build capacity at all levels of care for imaging supplies, assessment, quantification, procurement and management. 1.4 Assess and update the register for imaging services being provided by each level.
2.	To increase the proportion of hospitals providing laboratory services appropriate for the level of care by 2026.	2.1 Strengthen national laboratory testing capacity 2.2 Strengthen and maintain the existing laboratory supply chain management system across the laboratory network 2.3 Construct, rehabilitate and maintain laboratories 2.4 Strengthen Laboratory Equipment management, maintenance and disposal at all levels of care.
3.	To scale up implementation of Quality Management Systems (QMS) by increasing the number of accredited laboratories from 6 in 2021 to 20 in 2026 and certify 13 laboratories by 2026	3.1 Establish positions in provinces for Quality Assurance (QA) staff to oversee Implementation of QMS. 3.2 Strengthen, standardize and scale up the National QMS implementation across all levels of care. 3.3 Scale up electronic laboratory inf o rmation system to 534 laboratories 3.4 Implement quality improvement trainings and mentorship programs for laboratories targeted for accreditation and certification 3.5 Improve and standardise internal quality control in all laboratories 3.6 Establish and accredit in-country external quality assessment schemes 3.7 Strengthen the quality of Point of Care Testing (POCT). 3.8 Establish and accredit in-country calibration centres 3.9 Strengthen preservice QMS training 3.10 Develop the legal framework for Biosafety and Biosecurity (BSBS) for effective implementation and improvement. 3.11 Develop and implement a BSBS plan to include waste management for laboratory waste 3.12 Increase the External Quality Assessment (EQA) coverage.

1.	To reduce the Turn Around Time (TAT) of samples being referred to higher level facilities from 5 days on average to 2 days by 2026	1.1 Strengthen the laboratory networking system for specimen referral. 1.2 Strengthen digital Laboratory information management systems for routine, emergency testing and laboratory logistics to improve Laboratory service delivery at all levels of care. 1.3 Strengthen capacity of laboratory staff in sample biosafety and biosecurity.
2.	To strengthen human resource for medical laboratory to support quality clinical, public health and research laboratory services by 2026	2.1 Develop a regulatory framework for laboratory services (both public and private). Implement occupational health systems for sta? in order to retain a healthy workforce 2.3 Develop a national laboratory research agenda and plan to outline priority areas and identify collaborators
3.	To increase the number of facilities providing nuclear medicine services from 1 centre (2021) to 4 centres by 2026	3.1 Improve availability of nuclear medicine equipment and supplies in the old centre as well as the new ones 3.2 Establish E-patient record Management Systems (EMS) 3.3 Strengthen integration of nuclear medicine in national healthcare system development 3.4 Build capacity in nuclear medicine diagnosis and therapy 3.5 Support the local production of radioisotopes through the establishment of the Centre for Nuclear Science and Technology (CNST)

5.1.4 Rehabilitative Services

5.1.4.1 Situation Analysis

Rehabilitation is primarily focused on improving functioning so that people can perform to their maximum capacity, allowing inclusion and participation in society. It covers multiple areas of health and functioning, including physical, mental health, vision and hearing. The physical rehabilitation disciplines include physiotherapy, orthotics and prosthetics, occupational therapy, speech and language therapy.

Since 2018, there has been an improvement in delivery of physiotherapy services in first and third level hospitals due to improved staffing levels. Despite this improvement, delivery of services at sub national levels remain a challenge as only four out of eight third level and 34 second level hospitals currently provide orthotics and prosthetics services. Further, there is inadequate multi-disciplinary skills mix required in the provision of comprehensive rehabilitation which accounts for approximately 0.26 per 10,000 for all rehabilitation professionals in the country. This is compounded by inadequate infrastructure, equipment and supplies for continued service delivery.

In addition, it has been estimated that only 20% of people who need an assistive device have access to one, demonstrating inadequacy in the provision of Assistive Health Technology a component of rehabilitation which entails provision of assistive products for mobility, vision and hearing. The country currently has no priority list of assistive products to efficiently support provision of the service.

Noting the achievements and gaps that exist in the provision of rehabilitative services, the unit will focus to address the following challenges

i. Inadequate staffing levels to provide comprehensive rehabilitation services.
ii. Inadequate infrastructure, equipment and supplies.
iii. Inadequate provision of assistive products.
iv. Inadequate coverage of Community-Based Rehabilitation (CBR).

5.1.4.2 Goal, Objectives and Strategic Interventions

The table below presents the goal, objectives and strategic interventions for the plan period.

Goal: To ensure efficient and effective rehabilitative services at all levels of care, in order to contribute to improved health outcomes.		
#	Objectives	Strategies Interventions
1.	To increase the number of hospitals providing comprehensive rehabilitation services from 4 to 15.	1.1 Improve the provision of infrastructure for rehabilitation services. 1.2 Expand services to Primary Health Care (PHC) and the communities, in order to improve service delivery and accessibility. 1.3 Expand prosthetics/orthotics, occupational, speech and language therapy to second and first level hospitals 1.4 Building capacity in HR at all levels of care. 1.5 Improve the procurement of equipment and supplies for service provision.

#	Objectives	Strategies Interventions
2.	To scale up the implementation of community-based rehabilitation (CBR) services from 6 districts to 24.	2.1 Develop a National Rehabilitation Plan to strengthen governance. 2.2 Strengthen mentorship and technical support supervision. 2.3 Improve transport logistics to support CBR programmes.
3.	To increase the number of hospitals providing specialized, high- intensity rehabilitation services from 0 to 4 hospitals	3.1 Strengthen the provision of assistive products. 3.2 Develop a priority list for assistive devices to support provision of services. 3.3 Build capacity of staff in provision of technologically advanced rehabilitation services. 3.4 Improve the procurement of products and components/materials for manufacture of assistive devices.

5.1.5 Nursing and Midwifery Services

5.1.5.1 Situation Analysis

Nursing and midwifery services focus on strengthening nursing and midwifery education and practice and embracing strategic partnerships with the community, local and international stakeholders. The trends in nursing and midwifery education and practice are changing rapidly, with the evolving and emerging disease dynamics and greater client and patient expectations and service needs amidst shortage of nurses, midwives and lecturers leading to increased workload both in the clinical and training areas. Currently the country has 21,418 (70%) nurses against the establishment of 30,595 and 3,992 (34.37%) midwives against the establishment of 11,615 (MOH, 2021). The standard nurse patient ratio of 1:6, midwife patient ratio of 1:1, theatre nurse patient ratio of 2:1, tutor student ratio1:50 and clinical instructor student ratio of 1:10 could not be achieved. Although, the 2018 ZDHS shows a 97% antenatal attendance and 84% facility delivery most of them were not attended to by midwives but other health workers who may not have the skills as those of midwives

This situation is exacerbated by inadequate equipment and supplies needed to provide quality nursing and midwifery care. Despite the challenges, nursing and midwifery services should be of quality within the limited resources and dynamic professional roles. Therefore, there is need for pragmatic shift towards innovation, productivity and improved efficiency.

Improved Midwifery services play a critical role in improving both the maternal and perinatal health and thus reduce morbidities and mortalities. The practice of midwifery is influenced by the quality of training and the health care systems in which the services are conducted. The mushrooming of training institutions coupled with over enrolment and inadequate supervision affect the quality of midwifery and nursing training.

In order to improve midwifery practice and services the directorate will adapt the Midwifery Service Framework (MSF) whose priorities are improved midwifery workforce, improved midwifery knowledge, skills and attitude through enhanced education, training and regulation. The MSF model will also lead to actualization of the Presidential Directive to have improved

maternity services in the country. It is also hoped that through these priority areas, challenges with midwifery staffing, mushrooming of training schools, over enrolment, inappropriate infrastructure for labour and delivery, adequate medical and surgical supplies as well as weaknesses in the maternal health care systems would be addressed.

5.1.5.2 Goal, Objectives and Strategic Interventions

The table below presents the goals, objectives and strategic interventions for the next five years.

Goal: To improve the quality of nursing and midwifery education and practice standards at all levels of care and training by 2026.		
#	Objectives	Strategic Interventions
1.	To produce educated, competent, compassionate and motivated nursing and midwifery workforce.	1.1 Develop and review existing curricula in order to respond to current and emerging health needs some which are Nephrology Nursing, Cardiac Nursing and Vascular Nursing. 1.2 Strengthen the functionality of skills and computer laboratories. .. Expand clinical practicum sites for students' placements across all provinces. 1.4 Strengthen students clinical experience. 1.5 Enhance clinical mentorship. 1.6 Establish a criterion for direct Bachelors of Science degree graduates to teach in Training Institutions (TIs). 1.7 Strengthen the regulation of training institutions 1.8 Strengthen communication between TIs and Clinical sites in relation to coordination of students' clinical placements. 1.9 Strengthen provision of learning and training materials and library services. 1.10 Strengthen a nursing and midwifery services professional workforce at all levels of leadership, care provision and training institutions.
2.	To provide safe, acceptable, equitable and timely nursing and Midwifery services to clients at all levels of care.	2.1 Review nursing & midwifery protocols every five years to contribute to improvement of nursing and midwifery services. 2.2 Enhance professionalism in nursing and midwifery services. 2.3 Strengthen clinical nursing and midwifery audits at all levels of care. 2.4 Strengthen participation in inter-professional and nursing and midwifery clinical rounds to improve knowledge. 2.5 Strengthen capacity of Nurses and midwives in respectful maternity care. 2.6 Strengthen mentorship for qualified nurses. 2.7 Strengthen emergency preparedness and response in clinical settings. 2.8 Develop guidelines on the amenities required at a health facility to facilitate efficient nursing and midwifery service delivery.

		2.9 Strengthen availability of basic and specialized medical equipment to facilitate provision of nursing and midwifery care and training. 2.10 Enhance capacity of nurses and midwives on usage of all medical equipment to facilitate patient care. 2.11 Strengthen management of the reproductive health commodities. 2.12 Strengthen the referral systems.

5.2 STRATEGIC DIRECTION 2: STRENGTHEN INTEGRATED HEALTH SUPPORT SYSTEMS, TOWARDS ATTAINMENT OF UHC AND SDG 3

5.2.1 Health Workforce

5.2.1.1 Situation Analysis

The Government of the Republic of Zambia is committed to support the health sector and to ensure the availability of well-trained, competent and equitably distributed health workforce. Human Resources for health continues to be a major theme in the drive to achieve Universal Health Coverage (UHC) and to deliver health services, as close to the family as possible, using the primary health care approach. The Ministry of Health has stressed the need to ensure availability of adequate, competent and well-distributed health workforce across the country. In this regard, investments have been made in new recruitments and both pre-service and in-service training programs to ensure the workforce reflects both current and future health needs.

The NHSP 2017–2021 had three objectives on health workforce, namely: (1) to improve the availability and distribution of qualified health workers in the country; (2) to strengthen human resource management, in order to improve efficiency and effectiveness in utilisation of existing staff; and (3) to significantly increase the annual outputs of the health training institutions, to mitigate the critical shortage of qualified health workers. According to the 2020 WHO report, the Zambia doctor patient ratio was pegged 1 to 12,000, compared to the ideal doctor patient ratio of 1 to 5,000. Further the report revealed the nurse to patient ratio was 1 to 14,960 compared to the ideal of 1 to 700. The clear implication is that despite efforts in approaching WHO health worker to patient ratio, the recruitment of competent and adequate health staff needs to continue.

In order to address the health human resources challenges, the Ministry of Health establishment was expanded from 63,057 in 2016 to 126,831 positions in 2021. Out of this, 48% (63,878) of the positions have been filled, leaving a gap of 52%. In the next five years, the Ministry projects to have 70% of the Establishment filled by 2026 and has prioritised the following positions:

#	Cadre	Current filled against establishment in 2021	Projected number to be recruited	% filled establishment in 2026
1	Teaching staff	25%	200	34%
2	Orthopedic Technician	12%	20	26%
3	Medical Doctors	50%	2,100	84%
4	Dentists	34%	120	41%
5	Midwives	40%	3,200	67%
6	Laboratory	78%	558	91%
7	Clinical Officers	62%	2,600	95%
8	Clinical Anaesthestic	63%	435	99%

9	Clinical Obthamic	63%	240	99%
10	Clinical Ofiicer Dermatology/ENT	63%	80	80%
11	Medical Licentiate	63%	400	99%
12	Nutritionists	41%	441	66%
13	Environmental Health/Public Health	59%	800	73%
14	Nurses	70%	10, 200	98%
15	Pharmacy	70%	1500	75%
16	Physiotherapy	70%	700	75%
17	Radiology	70%	800	75%
18	Administrative staff	43%	2,400	48%
Total			26,081	

To strengthen human resource planning, training and development and reporting, the integrated Human Resource Information System (iHRIS) has been rolled out to all districts and is operational. The Ministry has also managed to develop and disseminate the National Training Operational Plan (NTOP 2019-2024) and National Human Resource for Health Strategic Plan (NHRH-SP) 2018-2024. This was developed on the premise that a health care crisis could be averted through focused scale ups of pre-service and in-service training programmes for both generalist and specialist health care workers.

A key human resource gap in the Zambian health sector is the low number of medical specialists in the country. To address this challenge, the Ministry of Health set a target to train 500 specialist doctors by 2021. The Specialists Training Programme (STP) was introduced in 2018 and managed to enrol 474 doctors by the end of 2021. The Ministry targeted to train 5,000 Community Health Assistants (CHAs), and as at end of year 2021, 3,400 were trained, representing 64% of the targeted number. In an effort to strengthen delivery of primary health services, the Ministry also commenced the training of Public Health Nurses, and 3,154 were trained as at December, 2021.

The Ministry had set a target to increase the number of graduates from health training institutions by 15% annually. However, even though the Ministry did not attain the target, it recorded an annual increase of 12% in the number of graduates from training institutions. This was as a result of an increase in the number of training institutions, coupled with increased private sector participation in the training of health workers.

Notwithstanding the achievements made, the health sector has continued to face a number of challenges in respect of health workforce. These include:

i. Inadequate staff (only 48% of the establishment is filled).
ii. High attrition of health workers, particularly in rural and remote areas.
iii. Inadequate specialized health workers.
iv. Inadequate financing and poor living conditions, especially for deployed health staff.
v. Limited in-service training and continued education opportunities for health workforce.
vi. Inadequate staffing of training institutions.

Strengthening transparency and accountability in the recruitment and deployment of healthcare workers is an important step in addressing some of these challenges, which still persist and contribute to weakening of the health system functioning.

5.2.1.2 Goal, Objectives and Strategic Interventions

The Ministry of Health will continue focusing on ensuring availability of adequate, competent and equitably distributed health workforce across the country. Further, in line with the decentralisation agenda, the Ministry will focus on providing technical support during the placement Ministry of Health Staff under the local authorities. Investments will also be made in both pre-service and in-service training programs, to ensure the workforce reflects both current and future health needs. The table below presents the goal, objectives and strategic interventions to be implemented during the strategic plan period.

Goal: To increase availability of skilled, motivated, equitably distributed health workforce and effective support services, to contribute to the effective delivery of health services.

#	Objectives	Strategic Interventions
1.	To increase the health workforce from 48% of the establishment in 2021 to 70% by 2026.	1.1 Scale up recruitment of health workers in accordance with the approved staff establishment and treasury authority. 1.2 Improve the equitable distribution of health workers through the needs and priority identification approach.
2.	To improve performance of health workers at all levels.	2.1 Strengthen the implementation of the Performance Management Package (PMP). 2.2 Strengthen implementation of the Human Resource Information System (HRIS), to support HR planning, training and decision making. 2.3 Strengthen retention mechanisms for health and teaching staff in health facilities and training institutions. 2.4 Integrate performance improvement into strategic objectives
3	To increase the number of specialized training from 500 in 2021 to 700 specialists by 2026.	3.1 Strengthen specialized trainings for all health workers. 3.2 Strengthen continued professional development for various health cadres. 3.3 Strengthen provision of teaching aids/job aids, transport, equipment, and learning materials. 3.4 Reintroduce and strengthen the training clinical dermatology, critical care, emergency surgical care, cancer disease and ENT programmes for mid-level clinical professionals.
4	To provide adequate appropriate utility transport for efficient logistical support.	4.1 Procure and equitably distribute adequate utility transport at all levels and across the country.

5.2.2 Essential Medicines and Medical Supplies

5.2.2.1 Situation Analysis

The procurement and supply of essential medicines and medical supplies has remained a major concern for the health sector in Zambia since the 1970s. A number of significant interventions, however, have been attempted, aimed at improving the availability of health commodities and enhancing the performance of the pharmaceuticals supply chain within the health sector. The National Health Policy 2012, the National Drug Policy, the Medicines and Allied Substances Act No.3 of 2013, the Zambia Medicines and Medical Supplies Act No. 9 of 2019, the National Medicines Policy, the Public Health Act, and the Zambia Medicines Regulatory Agency Act, provide the policy and regulatory framework for the pharmaceutical sub-sector. Traditional and herbal medicines are not effectively covered. The framework seeks to provide for coordinated selection, forecasting, quantification, procurement, storage and distribution, rational use, quality control, local manufacturing and regulation of medicines and medical supplies.

During the reporting period (2017–2021), a number of key actions were undertaken on 3rd February 2021, the Zambia Medicines and Medical Supplies Agency (ZAMMSA) was established, through an Act of Parliament (Act No. 9 of 2019), which transformed the Medical Stores Limited (MSL) into ZAMMSA, with an additional mandate of being responsible for procurement of medicines and medical supplies for the public health sector in Zambia. This strategic direction is envisaged to improve responsiveness within the pharmaceutical supply chain which is expected to stabilize commodity security. In the past five years, the desired stock availability level of a minimum of 80% for key essential medicines and medical supplies could not be achieved, due to inadequate budgetary allocation of ZMW 1.4 billion against budget of ZMW 5.2 billion, and transparency and accountability challenges in the procurement processes. This deficit resulted in significant stock-outs and debt accumulation of about ZMW 2.2 billion. However, there is a significant increase in the national budget for essential medicines, to ZMW 3.4 billion, in the 2022 national budget. Improving oversight and efficiency along the medical and the procurement shift to ZAMMSA will be important, to address these problems and strengthen the supply chain.

Further, there have been improvements in the storage capacity across the country in that so far, five regional hubs have been established in four provinces (Luanshya, Chipata, Choma, Mansa, Mpika) and two others, are under construction (Mongu and Kabompo). Centrally, the storage capacity at ZAMMSA has been expanded from 7000 pallet spaces to 32, 000 pallet spaces on 22, 000 square metres warehousing floor space, with an additional construction of the cold chain storage with a 650 pallet spaces. In addition, the central store is being complemented by the Luanshya distribution store.

The establishment of the regional hubs is expected to collapse the lead time thereby improving access to commodities by service delivery points. However, there is need to support the hubs with appropriate resources to enable ZAMMSA to perform its decentralised functions.

The following are the main challenges:

i. Weak coordination mechanisms and accountability in supply chain management.
ii. Weak and inefficient medicines and commodities procurement processes.
iii. Inadequate quality management system for data in the supply chain.
iv. Insufficient integration of the logistics information system (e.g., ART, Voluntary Medical Male Circumcision (VMMC), nutrition, vaccines).
v. Limited scale up of implementation of electronic Laboratory Management Information Systems (LMIS).
vi. Limited storage and distribution capacity at district, and health facility levels.
vii. Insufficient capacity of local pharmaceutical manufacturing industry.
viii. Limited decentralization of pharmaceuticals and medical supplies regulatory functions.
ix. Insufficient capacity to stock hold and process orders in regional ZAMMSA hubs.
x. Inadequate capacity to fully implement the security of pharmaceuticals and medical supplies.
xi. Inadequate supply chain management research and development in order to improve quality of pharmaceutical services.
xii. Limited antimicrobial stewardship, including weaknesses in rational drug use (unsafe prescription of medicines).
xiii. Pilferage of medicines and medical supplies.
xiv. Limited scientific research in traditional medicines.
xv. Limited local manufacturing capacities of essential medicines and/or commodities and nearly full dependence on imported products.

5.2.2.2 Goal, Objectives and Strategic Interventions

Medicines and medical supplies play a critical role in the provision of curative and preventive services and, as such, the Ministry of Health will continue focusing on ensuring availability of adequate, quality, safe, efficacious and affordable essential medicines and medical supplies at all levels of health care. Below is the goal, objectives and strategic interventions for the strategic plan period. These strategies will be implemented by the Ministry of Health (MoH), statutory agencies and strategic cooperating partners.1

Goal: To secure adequate, quality, efficacious, safe and affordable Essential Medicines and Medical Supplies through an efficient and effective supply chain system.		
#	Objectives	Strategic Interventions
1.	To scale up decentralization of the regulatory network from 6 (60%) in 2021 to 10 (100%) provinces by 2026.	1.1 Decentralise the regulatory network for medicines and allied substances, by establishing offices in the remaining provinces. 1.2 Strengthen mechanisms for enforcing regulations to ensure compliance to the set standards for manufacture, exportation and importation, distribution, sale, and use of medicines and allied substances

#	Objectives	Strategic Interventions
2.	To improve availability of essential medicines and medical supplies in all health facilities, from 40% in 2021 to 90% by 2026.	2.1 Operationalise the National Drug Fund, supported by the national budget, NHIMA, Cooperating Partners. 2.2 Facilitate the availability of the Health Centre Kits Facilitate bulk supply of essential medicines. 2.3 Strengthen the last mile distribution systems. 2.4 Strengthen international, regional and local cooperation and partnerships in the area of health supply chain and pharmaceutical regulatory framework. 2.5 Strengthen accountability for medicines and medical supplies through innovations and technologies (Track and Trace Concept)
3.	To increase active local pharmaceutical manufacturing from 5 to more than 10 industries by 2026.	3.1 Creating an enabling environment for the sub-sector, including: policy; regulatory; investment; markets. 3.2 Ensure availability of locally produced essential medicines within the capacities and in conformity with quality and safety standards.
4.	To improve pharmaceutical care at all levels from 40% of facilities to more than 80% by 2026.	4.1 Strengthen pharmacovigilance activities and rational medicine use by monitoring adherence to treatment guidelines. 4.2 Strengthen Medicines and Therapeutic Committees (MTCs) in all districts and hospitals.
5.	To promote antimicrobial stewardship.	5.1 Ensure a well-functioning and coordinated antimicrobial stewardship program.
6.	To promote regular supply chain management and traditional medicines research and development.	6.1 Strengthen research programs relevant to pharmaceutical and medical supplies. 6.2 Create medicines research database. 6.3 Strengthen research in traditional, alternative medicines and spiritual healing.
7.	To establish medical oxygen supply systems in 60% of public hospitals in Zambia by 2026.	7.1 Strengthen medical oxygen bulk supply plants and oxygen reticulation in from <10% to 60% of all hospitals. 7.2 Build the capacity of personnel, from those involved in oxygen production to those involved in delivery to patients. 7.3 Strengthen research in key medical oxygen system priority areas and scale up research activities to all Level 1 facilities.
8	To Increase District and health facility storage capacities.	8.1 Improve storage capacity for service delivery points, 8.2 Scale up implementation of electronic LMIS to all service delivery points 8.3 Develop capacity in the existing regional ZAMMSA hubs to stock hold and process orders
9	To improve national pharmaceuticals supply chain coordination	1.1 Establish National Supply Chain electronic Dash Boards 1.2 Establish a National Supply Chain Data repository Centre 1.3 Establish a National Supply Chain Coordinating Tower 1.4 Hold bi-annual National Supply Chain Review Meetings
10	To improve the security of pharmaceuticals in the public health supply chain	10.1 Strengthen the National Task force against pilferage 10.2 Decentralize the task force to provinces, districts 10.3 Installation of CCTVs in Public health facility Pharmacies 10.4 Develop mechanisms for detecting and minimizing risks of pilfering Scale-up sensitisation of the public on pilferage of medicines

5.2.3 Physical Infrastructure, Medical Equipment and Transport

5.2.3.1 Situation Analysis

Physical health infrastructure and medical equipment are important inputs that are essential for the delivery of quality health services. Many people across the country still face challenges in accessing health services. These challenges include: the lack of primary health services in some areas; the long distances of travel, to access the nearest health facility/service; the inequitable availability and distribution of health infrastructure (facilities); inadequate essential medical equipment and transport. In order to address these barriers in the provision of health services, the Ministry has continued to invest in maintenance, rehabilitation, upgrading, and construction of health facilities, procurement and distribution of essential medical equipment and transport, and to negotiate for more optimal public health funding.

During the period 2017-2021, the following major investments were made in health infrastructure and medical equipment: 4 out of 6 targeted specialized hospitals were completed and over 563 out of 500 targeted health facilities were constructed by the end of 2021. This represents over 75 % overall achievement of planned NHSP 2017-21 targets for infrastructure development. However, notwithstanding these achievements, more than 1,200 health posts and 500 health centres are needed, to enable approximately over 6 million Zambians to have access to primary health services within a 5kms radius of their dwelling. Thirty-Six (36) out of 116 districts still do not offer first level services. Some key service areas still have infrastructure gaps that need addressing, like cancer services, maternal and child health, adolescent, physiotherapy, prosthetics and orthotics, mental health services, urgently need investments.

Most health posts, health centres, first level and general hospitals are in a bad state of repair, have inadequate services and facilities to provide the level of care as required in the basic health care package. Most of the primary healthcare facilities lack reliable power supply (as they are located very far away from the national grid), WASH facilities and healthcare waste management infrastructure are inadequate. The definition of the services at each level of care has evolved, largely driven by changes in the disease profile and increase in population. These challenges are negatively impacting access to and the quality of health services provided to the communities.

A major countrywide investment in medical equipment was last done in 2007 under the ORET project. Currently, the medical equipment is frequently breaking down, most of it is non-functional, whilst some of it has become obsolete and needs decommissioning. Most of the high-end equipment has reached its end of life, resulting in frequent break-downs, which has been exacerbated by the lack of maintenance contracts. There is urgent need to invest in the maintenance of health facilities and replacement of medical equipment countrywide, in order to improve service delivery. This calls for an efficient, transparent and well-managed procurement effort to ensure good quality equipment and facilities.

Other issues related to the above challenges that health infrastructure and medical equipment face are: stalled projects; inadequate planning and design of health infrastructure and medical

equipment; inadequate resources for health Infrastructure development and project implementation; inadequate budget for operation and maintenance of health infrastructure; low population density and sparsely distributed population.

Maintaining an effective transport system is essential for ensuring a functioning and integrated health delivery system. The Ministry continues to experience transport constraints, which adversely impact on the operations. For instance: less than 50% of the 116 districts have road-worthy utility vehicles; and basic life-support ambulances are unevenly distributed across the provinces. Transport constraints are especially severe for rural-based health facilities; most of the health centres use motor bikes for service delivery; and some remote health centres use bicycles. The challenges with availability and quality of the vehicles have been aggravated by the lack of financial resources to operate the logistics.

5.2.3.2 Goals, Objectives and Strategic Interventions

The Government will continue implementing health infrastructure and medical equipment development plans, through the construction, rehabilitation and replacement of infrastructure and equipment, in order to provide a conducive and sustainable environment for provision of quality health services at all levels of the health system and secure equitable geographical and social coverage. Below are the goals, objectives and strategic interventions for the plan period.

Goal: To increase the availability and access to health infrastructure by 2026.		
#	Objectives	Strategic Interventions
1.	To complete and equip all the unfinished health facilities in 2021 by 2026	1.1 Strengthen the network of service delivery 1.2 Complete stalled projects and the remaining and incomplete phases of districts hospitals countrywide. 1.3 Construct new health facilities and other health associated infrastructure. 1.4 Expand, upgrade and modernize hospitals and health associated infrastructure. 1.5 Rehabilitate and maintain health infrastructure essential medical equipment at all levels of service. 1.6 Establish biomedical regional/local workshops. 1.7 Undertake a countrywide investment in medical equipment
2.	To construct new health facilities in areas where equity was not considered by 2026.	2.1 Strengthen project planning for patient cantered health infrastructure and medical equipment. 2.2 Enhance capacity building, coaching and mentorship in health infrastructure planning. 2.3 Develop an infrastructure plan
3.	To improve the availability of Utilities and health waste management infrastructure at health facilities by 2026.	3.1 Improve provision of electricity/renewable energy, water and health waste disposal infrastructure.

4.	To ensure efficient and effective project implementation and Management by 2026	4.1 Strengthen Project management systems. 4.2 Strengthen collaboration with other line Ministries and Partners.
5	To improve availability of well-maintained fleet to ensure mobility for service delivery.	5.1 Improve availability of transport in the sector 5.2 Review and strengthen the fleet management plan

5.2.4 Health Information, Research and Innovation

5.2.4.1 Situation Analysis

Health Information Systems (HIS) are important in generating and promoting the utilization of high-quality information required for the promotion, restoration and maintenance of a population's health. Health information systems are essential for monitoring, measuring, and evaluating public health trends. The functions of a well-coordinated health information system are governance, creation and sustainability of knowledge translation. A health information system, therefore, should include availability and implementation of national policies, strategic plans, guidelines and standard operating procedures and progress reporting. Further, a good health information system should be able to reflect the context and priorities of a country in order to achieve Universal Health Coverage (UHC); align with the regional and global goals and targets, be able to provide accurate, timely information that will reliably and meaningfully measure progress and performance, as well as ensure data availability and feasibility of collection, quality and accuracy. Health information systems have great unexplored potential to advance anti-corruption, transparency, and accountability in the health sector. Publicly available health data from Health Management Information System (HMIS) can be used to communicate priorities, identify gaps, and signal what health facilities should be accountable for.

To this effect, during the period of the NHSP 2017 to 2021, the HMIS was strengthened to be responsive to programme needs and to ensure use of the information derived therefrom. Further, in order to ensure real time patient level data, the SmartCare was re-engineered to make it web-based and ensure responsiveness and usability at all levels. The SmartCare is an electronic system that captures and provides individual patient level information on various illnesses and diseases. The two systems have since been able to routinely provide a large database of service and disease indicators that are used to inform programming as well as policy decisions.

The health information system landscape in Zambia is managed under an array of subsystems coordinated within the Ministry of Health. These subsystems include: Health Management Information System (HMIS), Integrated Diseases Surveillance and Response (IDSR), Health Facility Census (HFC), Human Resource Information System (HRIS), Drug and electronic Logistics Management Information System (eLMIS). Further, there are critical systems that augment the HMIS that are coordinated by other government departments and line ministries such as the Zambia Statistics Agency's (ZAMSTAT), which coordinates the demographic and

health surveys, household surveys and census of population and housing; Department of National Registration, Passports and Citizenship in the Ministry of Home affairs, which coordinates the vital statistics on births, citizenship and death; and the Ministry of Finance and National Planning (MoFNP), which coordinates the integrated Financial Management Information system (IFMS) as a means of strengthening accountability and enhancing transparency in the management of public funds.

Notable challenges have been faced in various facets of the HIS implementation especially with regards to organizational (planning, leadership and governance), Technical (technology) and behavioural processes as:

i. Lack of a guiding framework to coordinate and govern partners in the HIS ecosystem.
ii. Multiplicity of programme based HIS solutions resulting in overburdening frontline staff, duplication of work and compromised data quality.
iii. Inadequate ICT infrastructure.
iv. Inadequate staff.
v. Inadequate supply of registers and tools.
vi. Lack of adoption of standard-based systems and processes to ensure interoperability amongst many systems, rather than just data integration between singular systems.
vii. Lack of HMIS Standard Operating Procedures (SOPs) or guidelines available at all levels.

In addition to health information systems related to health programs data as described above, health research and innovation are critical to improvements in the health sector. Research and Innovation can only thrive with a strong National Health Research System (NHRS). The World Health Organization Research for Health Strategy 2016-2025 states that NHRS are vital for research generation, dissemination and utilization in addressing the health needs of the population. Hence the WHO Forty-eighth Session of the African Regional Committee requested Member States to draft national research policies and strategies, build national research capacities, and establish coordination mechanisms and national ethics committees. To build NHRS the Zambian government has established the National Health Research Authority (NHRA) to regulate, coordinate, promote research, build research capacity and facilitate knowledge translation.

The following are the main challenges:

i. Inadequate dissemination and utilization of research findings
ii. Inadequate funding for priority research work
iii. Inadequate studies to focus on development of new vaccines, medicines and appropriate technologies to respond to current and emerging issues in Zambia and globally
iv. Weak research information management system
v. Inadequate research infrastructure and individual capacities
vi. Inadequate legal and policy frameworks.

5.2.4.2 Goal, Objectives and Strategic Interventions

The following will be the goals, objectives and strategic interventions for the plan period. These strategic interventions will be implemented through the Digital Health and the NHRA Strategic Plans being developed by the Ministry.

Goal 1: To improve health information systems Governance structures through the use of Digital Health Technologies, in order to generate quality, reliable and timely information to aid decision-making. Goal 2: To strengthen National Health Research Systems through improved resource mobilization and research governance in order to improve generation of research evidence for evidence-based policies and decisions.		
#	Objectives	Strategy
1.	To strengthen integrated health information systems.	1.1 Improve effective HIS Leadership, Governance, Legislation and Policy. 1.2 Improve electronic HIS performance and Interoperability. 1.3 Improve capacity to manage HIS data 1.4 Improve the quality and timely availability of health data/information at all levels. 1.5 Scaling up number of facilities using digital health technologies to generate information.
2.	To strengthen the National Health Information Management and Research.	2.1 Integrate data use as an integral component of health services management and organizational rules. 2.2 Employ horizontal team approach to data use and Reporting at all levels. 2.3 Decentralize research coordination, promotion, and knowledge translation through institutionalization of research at all levels of the healthcare system 2.4 Improve research financing through increased budgetary provisions and resource mobilization 2.5 Improve research regulation by reviewing current policy and regulatory framework 2.6 Improve national research capacity through training and research infrastructure development 2.7 Improve research management information system through digitization 2.8 To strengthen analysis and use of data for decision -making at every level. 2.9 Strengthen and facilitate evidence-based research in mental health 2.10 Create an enabling environment for Implementation research conducted in various areas and levels of care of mental health.

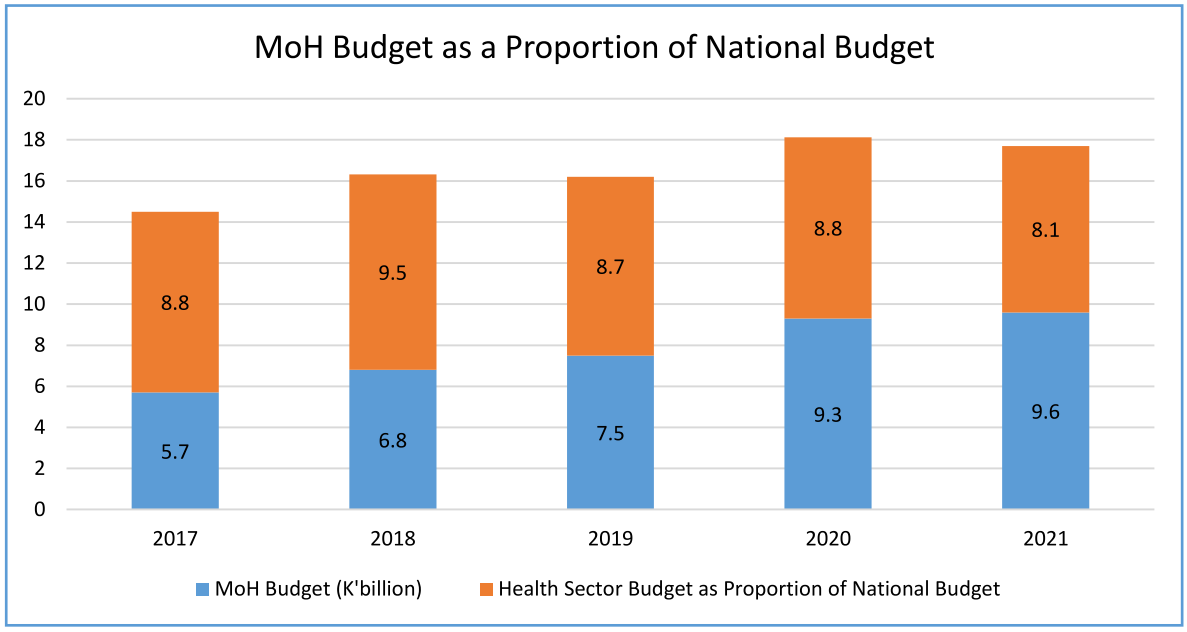
5.2.5 Health Care Financing

5.2.5.1 Situation Analysis

The Ministry of Health developed the National Health Care Financing Strategy (2017–2027) whose goal is to attain adequate sustainable and predictable financing, through existing and new sources. Notable achievement during the implementation period of the NHSP 2017-2021 was the successful introduction of the National Health Insurance Scheme (NHIS), through the enactment of the National Health Insurance Act (2018). As of December, 2021, there were 1,277,960 members registered by the National Health Insurance Management Authority (NHIMA).

The 2017-2021 NHSP targeted to achieve the Abuja target of 15% of the national budget to the health sector. However, the Government allocated an average of 9% hence the 2021 target was not achieved, even though the budget has been increasing in nominal terms. Figure 8 below presents the trends in government funding to the health sector, from 2015 to 2021.

Figure 9: Health Sector Budgetary Allocation in Zambia, 2017 – 2021.



Source: Ministry of Health

The National Health Accounts Report (NHA) for 2016 shows that Zambia's Current Health Expenditure (CHE) per capita was 58 USD in 2016. According to the World Bank (2017) report, this is significantly below the average of 98 USD in sub-Saharan Africa region (excluding South Africa). The WHO, Global Health Expenditure Database shows that Zambia's current health expenditure per capita stood at USD 76 and the Low Middle Income Countries stood at USD 97.7 in 2018.

The National Health Accounts (NHA) report reveals that the health sector was heavily dependent on external assistance with an annual average of 42% (US$22.58 per capita) of the total per capita health expenditure coming from donors, and 41% (US$25.04 per capita) coming from the government in 2016. Further, majority of the donor funding was off-budget,

Some of the challenges include the following:

i. Low and erratic funding to the health sector (from the Government?).
ii. Low contribution of domestic revenue to health sector leading to heavy dependence on external sources of funding.
iii. Few public-private partnerships and limited private sector participation in health financing,
iv. Weak Social Health Insurance Scheme system.
v. Delayed full implementation of the Social Health Insurance Scheme.
vi. Weak partnerships with CPs and civil society.
vii. Weak systems and processes for evidence-based planning and budget execution.
viii. Lack of consistent National Health Accounts data.
ix. Weak system that links budget, disbursement and expenditure to performance.
x. Weak mechanisms of incorporating CPs budgets into the overall sector budget at various levels.
xi. Weak evidence-based resource allocation formula (RAF) at all levels.
xii. High level of fragmentation of resources for health services.
xiii. Lack of harmonization of donor funding in the health sector, leading to duplication and inefficiency.
xiv. Lack of a mechanism to track and coordinate donor-funded projects in the health sector
xv. Losses, wastage and diversion of the health budget.

5.2.5.2 Goal, Objectives and Strategic Interventions

The Ministry will aim at ensuring provision of adequate, sustainable and predictable financing through existing and other innovative mechanisms. The table below presents the goal, objectives and strategic interventions for the plan period.

Goal: To attain adequate, sustainable and predictable financing through existing and new sources for improved health outcomes by 2026.		
#	Objectives	Strategic Interventions
1	To increase funding to the health sector by mobilizing adequate and sustainable financial resources.	1.1 Strengthen resource mobilization in the health sector, towards attainment of Universal Health Coverage (UHC). 1.2 Lobby for increase of government funding to the health sector to reach the Abuja declaration target of 15% of the national budget. 1.3 Increase Government funding to the national nutrition programme, in order to reduce the existing over-dependence on external support and ensure sustainability. 1.4 Strengthen private sector participation, public-private partnerships (PPPs). 1.5 Increase external funding through direct sector budget support. 1.6 strengthen partnerships with CPs and civil society.

2	To ensure efficient and effective pooling of health resources, in order to promote equity and minimize the risks of catastrophic health expenditure by the households.	2.1 Strengthen pooling mechanisms for health care financing. 2.2 Strengthen the Social Health Insurance Scheme, to increase its contribution to health care financing. 2.3 Strengthen the mechanisms of incorporating CP budgets into the overall sector budget at various levels.
3	To ensure effectiveness, efficiency, and equity in resource allocation and utilization.	3.1 Strengthen evidence-based resource allocation at all levels. 3.2 Strengthen systems and processes for evidence-based planning and budget execution, including profiling.
4	To ensure transparency and accountability in resource utilization.	4.1 Institutionalize the system for NHAs at all levels. 4.2 Strengthen the system that links budget, disbursement, and expenditure to performance. 4.3 Strengthen health financing systems governance, audits, transparency and accountability at all levels. 4.4 Strengthen the Results Based Financing mechanism.

5.2.6 Leadership and Governance

5.2.6.1 Situation Analysis

Leadership and governance entail the provision of strategic direction and development of and appropriate policies and plans that involve effective oversight, regulation, essential partnerships and integrate all the building blocks of the health system to achieve the desired results. Leadership and governance also deal with the interrelationships, roles, and activities of the various agencies in the production, distribution, and consumption of health services. The organizational structures governing these processes are also considered in dealing with leadership and governance issues. The International Health Partnerships (IHP+) provides a framework for analysing governance of the health sector by focusing on broader issues of policy, legislation, coordination, equity, effectiveness and efficiency, transparency and accountability, intelligence and information and ethics.

The Ministry of Health develops policies, laws, regulations, strategies, standards and guidelines, whenever need arises but within the established governance and management framework. These policies, laws and regulations are considered to be the fibre that hold the sector together. They streamline and standardize daily operational activities, allowing the healthcare systems and services to run efficiently.

Leadership and governance ensure that there is efficiency and effectiveness in the management and administration of the health systems. This calls for development of policies and legislations to guide the achievement of national and sector goals and also ensure that there is transparency and accountability in the utilisation and management of resources. The Ministry of Health will continue using the Sector Wide Approach (SWAp) framework as a platform for sector coordination. Decentralisation of health systems and services will form part

of the main focus of the repositioning of the health sector, to deliver universal health coverage to the people of Zambia.

The NHSP 2022-2026 will address the following challenges in the area of leadership and governance:

i. Lack of updated regulatory frameworks to provide policy and legal framework for new reforms.
ii. Weak SWAp coordination mechanisms at subnational level.
iii. Fragmented and uncoordinated framework for Civil Society and Non-Governmental Organisations.
iv. Weak subnational level structures.
v. Inadequate research work to feed into policy formulation.
vi. Weak transparency, involvement and accountability mechanisms in cooperation with the public health related private sector.
vii. Weak Corporate Governance Systems to promote transparency and accountability mechanisms in the private sector.
viii. Weak inter/multi sector coordination and integration with the interlinked line ministers and sectors (i.e. education, gender, digitalization, agriculture/food security, industrialization, jobs/growth, business/private sector).

5.2.6.1.1 Policy Framework

The Ministry is responsible for the development and implementation of all the policies within the health sector. However, these policies are approved by the Central Government, through the Cabinet Office. When policies are approved, they are operationalized through the following means, among others: Implementation Plans, Procedures, Guidelines, Strategic Plans, Action Plans, Cabinet Circulars, under the overall guidance of the Republican Constitution.

During the health reforms period, Government approved a number of national policies which were meant to implement the reforms. However, over time these policies became outdated but are still in use in the sector.

In 2013 the National Health Policy was approved to provide the overall strategic direction to would-be initiatives, programmes and policies in the health sector. Through this Policy, it was envisaged that Zambia would reach the objective of the 'Health for All' principle as adopted by the World Health Organization, with priority given to the provision of free Primary Health Care services to the Zambian citizens. However, like other policies in the sector, this policy has also outlived its ten-year life span and is currently under review to take care of emerging issues. There is, therefore, need to expedite its review and completion, in order to harmonize the various policies and pieces of legislations in the health sector.

During the last NHSP implementation period, the Ministry developed a number of policies, including the National Alcohol Policy of 2019 and the Health in All Policies 2019, which were

approved by Cabinet. In the same period, the Ministry commenced the processes to evaluate and revise the National Health Policy. This process will be accelerated during the plan period.

5.2.6.1.2 Legislative Framework

Health laws are used to facilitate the implementation of the policies, and to formalize commitment to goals, such as the goal of Universal Health Coverage, creating a drive for action. They are also used to enable cooperation, achieve health goals and create institutions in the sector and relationships, such as contracts for providing health services. Annex 4 presents a list of the various pieces of legislation regulating the health sector in Zambia.

Following the repeal of the National Health Services Act (NHSA) of 1995, the health sector has continued operating without an overall health services Act. It is expected that a bill to replace the National Health Services Act of 1995 will be expedited in order to cover a number of important health related developments that have taken place in the sector.

In the NHSP 2017-2021 period, the Government enacted various health related pieces of legislations to facilitate for the implementation of Human Rights-Based health service delivery programs. These included the Mental Health Act, the National Health Insurance Act, Nurses and Midwifery Act, Food and Safety Act, Zambia Medicines and Medical Supplies Act, Zambia Public Health Institute Act, among others. Additionally, there were a number of on-going legislations that needed to be concluded and presented for enactment, such as the Traditional Complementary and Alternative Medicines Bill, the Tobacco Control Bill, the Health Professions Bill among others which have been carried over to the next NHSP period 2022-2026.

In the NHSP 2017-2021, the Ministry of Health provided for the ratification of a number of international agreements where Zambia is part to and developed a number or Statutory Instruments (SIs) such as the COVID- 19 SIs.

There are other laws and policies that are not specifically concerned with the health sector, but which are relevant for the proper functioning of the health system. The Anti-Corruption Act, which aims to promote integrity, transparency, accountability and management of public affairs and property; the United Nations Convention Against Corruption; and the African Union Convention on Preventing and Combatting Corruption; as well as the Southern Africa Development Community Protocol against Corruption are all important to ensure that their health system is governed and managed in line with good governance principles to promote public health outcomes.

5.2.6.1.3 Coordination of the Health Sector

Coordination of the health sector partners is guided by the Sector Wide Approach (SWAp) mechanism. Partners that support the implementation of the National Health Strategic Plan (NHSP) include relevant line Ministries/ Government departments, Health Cooperating Partners (CP), Civil Society Organizations (CSO)/Non-Governmental Organizations (NGOs) and the Private Sector. These Partners provide financial, material and technical support. Therefore, coordination mechanisms that align the interests of all stakeholders and address arising

challenges are essential.

The MoH ensures coordination of stakeholders through the implementation of the SWAp calendar using the following meetings:

i. Annual Consultative Meeting (ACM): This is a high-level meeting where the Minister of Health engages Ambassadors, High Commissioners, Heads of missions, United Nations family and Heads of Bilateral and Multilateral Partners, and CSOs that support the NHSP.

ii. Policy Meetings: These meetings are designed to monitor progress made in the implementation of the NHSP and they draw their agenda from the Technical Working Group meeting feedback. This meeting is chaired by Permanent Secretary Administration and held quarterly and is attended by Cooperating Partners, Civil Society, Private Sector, Provincial Directors, MoH Senior Management and Line Ministries.

iii. Troika Meetings: These meetings are designed to keep the Partners updated on the pressing issues in the sector and at the same time provide an opportunity for CPs to bring any concerns to the attention of the Ministry. The Troika is chaired by the Permanent Secretary and attended by the Government, Lead CP and Co-Lead CP, Lead CSO and a third permanent member (WHO unless WHO is serving as Lead CP). It is the role of the Troika to represent the broader groups when deciding the agenda for the Policy meeting.

iv. Technical Working Group Meetings: The role of the TWGs is to monitor the implementation of programmes and ensure that the programmes are managed in order to achieve the intended results. If special opportunities/ difficulties arise regarding technical aspects to reach the results they should if possible be resolved at this level. The TWGs are chaired by the Permanent Secretary. These groups serve as a sounding board for the identification of gaps and brainstorm technical solutions in the various disciplines.

Furthermore, the IHP+ Principles, Paris and Busan Declaration obligates the CPs to align their interventions with the MoH priorities as specified in the NHSP. This coordination framework is in line with the Joint Assistance Strategy for Zambia and in harmony with the overall national planning framework. In order to broaden the scope of partnership in the sector, the Ministry signed a Memorandum of Understanding (MoU) with the Private Sector Alliance in 2021. This partnership seeks to strengthen and formalize collaboration with the private sector which has been missing for a long time.

5.2.6.1.4 Decentralisation Reforms

In actualizing the Decentralisation Policy, the Ministry has developed the Sector Devolution Plan (SDP) in line with the Constitution (Amendment) Act, No. 2 of 2016 under Article 147 and 148, which indicates the devolution of district health services to local authorities.

In the context of the Constitution (Amendment) Act No. 2 of 2016 and the National Decentralization Policy (NDP) of 2013, the Ministry will devolve district health services functions to local authorities. The NDP provides the framework within which the sector

devolution plan operates; it specifies devolution of functions and authorities with matching resources to local authorities. Under the devolved governance system, the central level is expected to provide policy, strategic guidelines, overall coordination of the sector programmes. To this effect, the SDP has outlined the district health services to be devolved to the Local Authorities.

5.2.6.1.5 Transparency and Accountability

In order to ensure efficiency and effectiveness in the delivery of health services, it is important to strengthen all systems of governance (oversight, transparency, accountability, integrity, and participation) across all six-health system building blocks, namely: health service delivery; health financing; health management information systems; medical products, vaccines and technologies; health workforce; and leadership and governance. Various laws and guidelines play an important role in ensuring that there is transparency and accountability in the utilisation of all resources for optimal results, including improving public health outcomes and strengthening the public health system.

The Zambia Public Procurement Authority (ZPPA), through the ZPPA Act No. 8 of 2020 and the Public Regulations of 2011, provide guidance in the procurement of goods and services. ZPPA has further introduced the use of electronic Government Procurement system (e-GP) to promote efficiency, transparency, value for money, competition and fairness in the procurement system, while the Public Finance Management Act of 2018 is meant to promote adherence to financial regulations. The public Audit Act of 2016 provides a framework for promoting efficiency, accountability, effectiveness and transparency of public funds and performance. The Anti-Corruption Act of 2012 provides for the prevention, detection, investigation, prosecution, and punishment of corrupt practices, and the development, implementation, and maintenance of anti-corruption strategies.

Promoting respect and adherence to these laws and guidelines, within the framework of the health sector, is important to ensure the quality, accessibility, availability, and acceptability of health care services.

5.2.6.1.6 Equity

Zambia has made strides in implementing interventions towards attaining the Universal Health Coverage (UHC). These are interventions meant to ensure that all Zambians have access to health care services regardless of their status in society, hence the slogan of 'Leaving No One Behind'. Some of the efforts include: the enactment of the National Health Insurance Act of 2018, reviews of the resource allocation formulae in the resource allocation for institutions, free primary health services, social cash transfers among others. However, despite all these efforts, there are huge disparities that still exist, ranging from gender to socioeconomic perspective.

5.2.6.2 Goal, Objectives and Strategic Interventions

The table below presents the goal, objectives and strategic interventions for the plan period.

Goal: To ensure a well-functioning health sector, to respond to the health needs of the Zambian People by 2026.

#	Objectives	Strategic Interventions
1.	To make available relevant policies and legislation for effective governance and management of the health sector by 2026.	1.1 Review and update the National Health Policy of 2013, as the overarching policy for the health sector. 1.2 Facilitate provision, repeal and enactment of appropriate legislation. 1.3 Enhance the level of compliance with government policies, laws, contracts, and procedures. 1.4 Implement accountable, efficient, and transparent management systems at all levels of the health sector. 1.5 Operationalize the health sector devolution plan for all primary health care services at district level. 1.6 Strengthen linkages between the NHSP and the sub sector and programme strategic plans and MTEF and annual plans, for effective implementation. 1.7 Enhance Corporate Governance Systems in the procurement process.
2.	To strengthen stakeholder coordination through SWAp Mechanisms by 2026.	2.1 Strengthen the SWAp structure mechanisms. 2.2 Improve coordination of health sector stakeholders (Private, public, CSOs, NGOs FBOs and DPs). 2.3 Improve inter-sector/Multi-sectoral coordination and integration.
3.	To strengthen equity mechanisms in the health sector by 2026.	3.1 Enhance transparency and allocation of funding modalities. 3.2 Strengthen the Results Based Financing mechanism. 3.3 Strengthen the overall management of health facilities (finance, human resource, logistics assets). 3.4 Develop and mainstream gender-responsive mechanisms and planning in the MOH.
4.	To implement accountable, efficient and transparent management systems at all levels of the health sector.	4.1 Build capacity of local authorities in planning and budgeting for primary health services 4.2 Operationalize the health sector devolution plan for all primary health care services at district level. 4.3 Build capacity in leadership and governance in the local authorities to implement PHC services. 4.4 Strengthen the district capacity through DHO and NHC to ensure improved coordination and accountability for decentralized services. 4.5 Develop measures to mainstream anti-corruption within the health systems, including a strategy and framework for anti-corruption, transparency and accountability in the health sector.

#	Objectives	Strategic Interventions
5.	To enhance the level of compliance with government policies, laws, contracts and procedures.	5.1 Strengthen compliance on financial controls on all transactions. 5.2 Update an inventory list of assets for the health sector. 5.3 Strengthen compliance in line with the Public Finance Act. 5.4 Strengthen compliance in line with the Public Procurement Act and other pieces of legislation. 5.5 Strengthen collaboration with other agencies and stakeholders on procurement.

6 IMPLEMENTATION ARRANGEMENTS

6.1 GOVERNANCE ARRANGEMENTS

Implementation of the NHSP will be a coordinated effort by the MoH, together with the various stakeholders, relevant line ministries/departments, other socio-economic sectors, the private sector, cooperating partners, Non-Governmental Organizations (NGOs, FBOs, CSOs and others). Overall coordination will rest with senior management of the MoH to ensure that all players support the same priorities and interventions. These will be defined by the MoH and other relevant ministries on the basis of Vision 2030, NDP and NHSP priorities.

The overall planning process is guided by Policy and Planning Department of the MoH. Specific operational planning at program and health system levels in the entire health sector is done annually in line with the annual and Medium-Term Expenditure Framework (MTEF) planning cycle and NHSP priorities. District based planning will be done annually in bottom-up approach in line with set financial budget ceilings and the defined priorities in the NHSP. The District Health Unit is responsible for the development of annual district plans by Health Centres (HCs) and district hospitals that respond both to the District Strategies (DS).

6.2 MANAGEMENT FRAMEWORK

The NHSP will be implemented through the existing health sector governance and management framework. The national health system is more specifically described at Annex 3.

The Ministry of Health will take the overall responsibility for coordinating and ensuring successful implementation of the strategic plan. However, other key sector partners will also be involved in its implementation. The roles and responsibilities at each level are defined as follows:

6.2.1 MINISTRY OF HEALTH HEADQUARTERS

The Plan will be implemented and coordinated through the existing health sector organizational and management structures. The Ministry of Health Headquarters will take full responsibility for successful implementation of the Plan, through the formulation and implementation of successive Medium-Term Expenditure Framework (MTEF) rolling plans, annual action plans and budgets. It will also be responsible for policy leadership, regulation, management decision-making, standards setting and enforcement, and the overall coordination of implementation of this plan.

6.2.2 Provincial Health Offices

At Provincial level, the Provincial Health Offices (PHOs) will be responsible for implementation of the plan. PHOs represent the ministry's functional link to the lower level structures and will continue to be responsible for coordinating and supervising the implementation of the NHSP and technical support to all health service institutions, within their respective provinces.

6.2.3 District Health Offices (DHOs) and Hospitals

District Health and Hospital Management structures will be responsible for implementing the plan at district and health facility levels. Harmonisation of the district and hospital plans to match the aspirations of the NHSP 2022-26 will therefore be crucial for successful implementation. The District will ensure that the plan is implemented at community level, Health Posts (HPs), Health Centres (HCs), and district hospitals.

6.2.4 Statutory Institutions

There are two types of Statutory Institutions under the MoH structures, namely, the regulatory and service statutory institutions. The role of the regulatory statutory institutions will be to ensure that the relevant laws and regulations are developed and enforced, in order to ensure high standards of safety, ethics and professionalism in the health sector. On the other hand, the role of the service statutory will be to provide their respective services in support to the core health services.

6.2.5 Health Training Institutions (HTIs)

The training institutions will be responsible for the production of appropriately qualified health workers, for implementation of the plan.

6.3 PARTNERSHIP FRAMEWORK

The MOH will provide leadership in implementing the plan in line with the principles of partnership and collaboration embodied in the Sector Wide Approach (SWAp). The Sector Wide Approach (SWAp) will play an important role in ensuring efficient and effective governance, and mobilization and utilization of financial resources from the Government and Cooperating Partners (CPs). The IHP+ and the Memorandum of Understanding (MoU) between MOH and the Cooperating Partners (CPs) will guide the implementation of programmes in the health sector. However, there is need to harmonise the modalities of support and strengthen coordination of the partnerships, in line with the national and international guidelines and principles on ensuring aid effectiveness.

6.3.1 Role of Governent ine Ministries and Departments

Several other Government ministries and departments impact differently on the performance of the health sector, with some actively participating in health service delivery, others impact on the determinants of health, while others provide support to the health sector. Whilst several line Ministries and departments will contribute to the implementation of this Plan, the following institutions are critical in the implementation of this Plan: Ministry of Finance and National Planning (MoFNP), Ministry of Justice, Ministry of Local Government and Rural Development (MoLGRD) and its local authorities, Ministry of Agriculture (MoA), Ministry of Water Development and Sanitation, Ministry of Fisheries and Livestock (MoFL), Ministry of Green Economy and Environment (MGEE), Ministry of Education (MoE), Ministry of Community Development and Social Services (MCDSS), the Gender Division and the Zambia Statistical Agency (ZAMSTAT).

6.3.2 Role of the Local Authorities

The Local Government shall ensure the provision and management of health services including financial and human resources. It shall also ensure the coordination, accountability, implementation and management of health activities at decentralized level in order to improve service delivery, greater coverage of health services, improved quality, cost effectiveness and ownership.

6.3.3 Role of the Churches Health Association of Zambia (CHAZ) and Faith-Based Health Sector

The Churches Health Association of Zambia (CHAZ) is the largest partner to the Government in the health sector and is currently the second largest provider of health services to the general public, after MoH. CHAZ operations are strongly aligned to government support and systems, guided by the Memorandum of Understanding (MoU) signed with MoH. CHAZ facilities are supported by the Government with health workers, grants, medicines and medical supplies, and other inputs, and operate on similar terms as public health facilities. CHAZ will therefore play an important role in the implementation of the Plan, through their network of faith-based health facilities, which include hospitals, health centres and health posts, distributed throughout the country, with strong presence in rural areas. The Memorandum of Understanding (MOU) between MoH and CHAZ will be reviewed, updated and implemented.

6.3.4 Role of the Private Sector

The private sector is only partially involved in regular consultations with the MoH. The NHSP will reinforce this partnership through quarterly coordination meetings, where important issues of collaboration will be discussed, such as, regular submission of HMIS data, inspection and access to private sector facilities, adherence to regulations and quality assurance norms (accreditation), control of laboratories and selection and opening of new private health facilities in districts.

6.3.5 Role of the Cooperating Partners

Cooperating Partners provide technical and financial support to the entire health sector, with emphasis on institutional capacity development particularly in policy, governance and infrastructure, prevention and control of infectious diseases such as HIV, TB, malaria, COVID-19, cholera etc., health security (EPI and IDSR); health supply chain and health system strengthening in all the health system building blocks.

At central / policy level, CPs form part of the overarching Health Sector Consultative Group, this provides oversight on implementation of sector wide approach (SWAp) health actions in the entire health sector. Implementation of the deliberations of the Consultative Group is affected through Technical Working Groups (TWGs). The TWGs facilitate technical dialogue on policy and operational issues between the main stakeholders (national institutions, representatives of civil society and CPs) involved in different programmatic areas.

6.3.6 Role of Givil Society

The civil society, both local and international, will play an important role in the implementation of the Plan. Some CSOs are involved in the health promotion, provision of health services, training and capacity building, while others are involved in advocacy for health. MoH will work towards promoting stronger coordination and participation of the civil society in the health sector, through the Sector-wide Approach Structures (SWAp).

6.3.7 Role of the Communities

Much of the progress made in improving the health status of individuals depends on the existence of healthy environments and lifestyles. The government will work towards strengthening health promotion among the communities and strengthening community involvement and participation in the planning, management, implementation, and monitoring and evaluation of health services, to achieve higher impact. This will be achieved by strengthening the community participation structures, and transparency and accountability in the management of health services at community level.

6.3.8 Role of the Traditional and Alternative Health Services

Traditional health practitioners are organized under the Traditional Health Practitioners of Zambia (THOPAZ). Traditional health practitioners provide herbal and spiritual healing services within the communities. MOH will strengthen regulation, supervision, research and coordination of this sector, to ensure that they provide safe and evidence-based health services to the communities.

6.4 COORDINATION MECHANISMS

With stakeholders outside the MoH, the following structures have been established to ensure the involvement of all parties:

6.4.1 SWAp in the context of NDP and NHSP

Government's Aid Policy drives all development assistance in Zambia. SWAp (Sector-wide approach) hinges on the National Development Plan (NDP) to ensure that actions in the health sector have more sustainable impacts by integrating and fundamentally incorporating them into the national development programs.

The provincial and district level equivalent of SWAp is the integrated meetings where issues are discussed and multi-sectoral collaborative interventions are designed and monitored. The Provincial and District Health Offices (PHOs and DHOs) coordinate the different actors of the health sector. They also clarify and allocate the tasks of the different actors, and ensures an adequate integration of the multidimensional determinants of the health status of the population.

6.4.2 Health Sector Working Group (HSWG)

At sector level, there is the HSWG, constituted of representatives of MoH and affiliated institutions, Cooperating Partners (CPs), Private Sector and civil society. It meets quarterly

under the chairmanship of the Permanent Secretary. The goals of the HSWG are to improve coordination of activities and harmonization of procedures of both GRZ and CPs in order to

7 MONITORING AND EVALUATION FRAMEWORK

Assessing the progress and performance of the NHSP will be undertaken through a country led Monitoring and Evaluation forum with: strengthened structures and coordination mechanisms; a selected set of key performance indicators with defined baselines and targets; strengthened information systems; strengthening the upcoming frameworks to integrate transparency and accountability in health systems; strengthened capacity for data collection, management and analysis and; well-articulated mechanisms for review and action.

Overall coordination of monitoring and evaluation is the responsibility of the Ministry of Health. All stakeholders will be involved at all levels to monitor and evaluate the NHSP. A monitoring and evaluation plan addressing the objectives of the NHSP will be used to monitor its implementation. The Monitoring and evaluation logical framework and indicator performance tables will provide details on selected indicators to be monitored. The selected indicators take into consideration SDG commitments, country priorities and regional reporting obligations.

Monitoring of the implementation of this plan will largely be based on the established and new health information systems for routine, periodical and ad hoc collection and reporting of health information. These will include: the systems coordinated by MoH, such as the Health Management Information System (HMIS), IDSR, HFC, HRIS, eLMIS; and other important information systems augmenting the HMIS that are coordinated by other government departments and line ministries, such as the Zambia Demographic and Health Surveys (ZDHS), the Living Conditions Monitoring Surveys (LCMS), National Census of Population and Housing, systems collecting vital statistics on births, citizenship and deaths, AND the IFMIS.

The NHSP 2022-2026 will undergo two (2) evaluations, namely, a Mid-term Review (MTR), after the first 2.5 years of implementation and a final review at the end of the duration. The final evaluation will form part (situation analysis) of the process of development of the next NHSPS. Other annual and/or interim reviews may be considered and undertaken through the SWAPs. The terms of reference, timing and composition of evaluators will be jointly agreed with the sector stakeholders, through the SWAPs coordination structures.

7.1 HEALTH INFORMATION MANAGEMENT SYSTEM

The HMIS define the desired configuration of the data management architecture needed in the program–in terms of numbers and types of cadres, infrastructure and other capacities needed at each level for effective data generation and intelligence generation.

7.2 DATA AND STATISTICS

The research and information system will be strengthened to provide policy relevant evidence and good quality data in a timely manner. The system capacity will be enhanced at all the levels beginning with data collection, analysis and synthesis of data, efficiency and equity analysis, and economic evaluations, to inform value-for-money decisions.

Efforts to improve the demand for data and information use will entail a review of dissemination mechanisms, away from traditional approaches to what is referred to as "effective dissemination" to stimulate dialogue and actions based on evidence. In this regard innovative approaches will be employed, such as: audience tailored dissemination, use of policy briefs, production of statistical bulletins, engaging the media to disseminate evidence and evidence sharing at community level, through existing community structures including data producers.

In addition, capacity in evidence-based planning will be built at all levels.

8 COSTING AND FINANCING OF THE NHSP

8.1 COSTING OVERVIEW AND ASSUMPTIONS

The Strategic Plan was costed based on Output-Based Budgeting (OBB) projections and the guidelines used for the 2022-2024 Medium Term Expenditure Framework (MTEF). The ingredient approach was used to identify the specific inputs needed to carry out each intervention and the targets set in consultation with the programme focal point persons.

The costing exercise involved estimating the resource requirements for all priority areas, which included: (1) health service delivery programmes; (2) drugs, medical supplies, and commodities; (3) systems costs, such as human resources for health, health financing, infrastructure and equipment, health information and research, and leadership and governance.

The following were the main assumption on which the costing and the gap analysis were based:

i. Output-Based Budgeting (OBB) Medium Term Expenditure Framework (MTEF) guidelines and projections.

ii. Year-on-year inflation: Based on the 2022-2024 MTEF planning guidelines, i.e. 15.5% for 2022; 11.9% for 2023; and 11.9% for 2024. 2025 and 2026 were estimated at 8% and 6%, respectively.

Kwacha exchange rates – Based on the 2022 – 2024 MTEF planning guidelines, as follows: ZMW 19.70 for 2022; ZMW 19.90 for 2023; and ZMW 20.00 for 2024. 2025 and 2026 were projected at ZMW 21.10 and ZMW 20.20, respectively.

iii. Government funding: Based on MTEF projections.

iv. Cooperating Partners' contribution: Projections were based on their recent submission, for 2022 to 2024. Projection for 2025 and 2026 were estimated, based on 2024.

The table below, presents a summary of the costing by programme area.

SUMMARY - COSTING BY PROGRAMME — ZMW '000

#	Description	2022	2023	2024	2025	2026	TOTAL	%
1	Primary Health Care (PHC)	8,629,764	10,760,233	10,953,152	11,996,521	15,861,297	58,200,968	36.8
1.1	Health Promotion & Education, Social Determinants, and Community Health	8,040	10,409	8,893	9,323	10,199	46,864	0.0
1.3	Reproductive, Maternal, Neonatal, Child and Adolescent Health and Nutrition (RMNCAN)	2,546,441	4,185,933	4,126,910	4,581,423	8,013,958	23,454,665	14.8
1.4	Communicable Diseases	5,238,584	5,629,864	5,781,800	6,303,641	6,656,765	29,610,653	18.7
1.5	Non-Communicable Diseases	796,498	887,467	984,353	1,046,284	1,122,479	4,837,081	3.1
1.6	Other Public Health Priorities	40,201	46,561	51,196	55,850	57,897	251,704	0.2
2	Clinical Care & Diagnostic Services	456,289	541,030	401,756	302,837	306,242	2,008,154	1.3
3	Integrated Health Support Systems	14,640,275	17,572,530	19,760,213	21,937,417	24,228,953	98,139,389	62.0
	Grand Total	23,726,327	28,873,794	31,115,122	34,236,775	40,396,493	158,348,510	100.0
	Grand Total (USD '000 Equivalent)	1,204,382	1,450,944	1,555,756	1,703,322	1,999,826	7,914,231	100.0

KEY ASSUMPTIONS:

Inflation (Year-on-year)	15.5%	11.9%	9.9%	8.0%	6.0%
Exchange Rate (US$ 1 = ZMW	19.70	19.90	20.00	20.10	20.20

The total cost of the Strategic Plan for the five (5) years duration is estimated at ZMW 158.3 Billion (equivalent to US$ 7.9 Billion). Approximately 48.0% of this amount will go towards financing of health service delivery programmes and interventions, while 52.0% will go towards strengthening integrated health systems, particularly human resource for health, medicines and medical supplies, and infrastructure and equipment, to support the planned scaling up of service delivery.

The projected top five (5) areas of expenditure will include: Essential medicines, medical supplies and vaccines (29.7%) of the total cost; Communicable Diseases (18.7%); Reproductive Maternal, Child and Adolescent Health and Nutrition (RMNCAH-N), estimated at 14.8%; Health workforce (13.2%); and Infrastructure, Equipment and Transport (11.0%). Detailed costings are presented after the funding gap analysis after this table.

8.2 FUNDING SOURCES AND GAPS ANALYSIS

A financing gap analysis was carried out, in order to establish additional funding needed for implementation of this plan, over the next 5 years. The table below presents a summarised gap analysis.

Funding Gaps Analysis

#	Description	2022	2023	2024	2025	2026	TOTAL	% of Cost
1	FUNDING SOURCES:							
	1.1. GRZ Funding - MTEF	10,554,379	14,680,723	17,245,458	18,625,094	19,742,600	80,848,254	51%
	1.2 Cooperating Partners,	14,269,787	12,550,603	7,630,194	7,694,239	7,732,518	49,877,341	31%
2	Total Funding	24,824,166	27,231,326	24,875,652	26,319,333	27,475,119	130,725,596	83%
3	LESS: COSTS	23,726,327	28,873,794	31,115,122	34,236,775	40,396,493	158,348,510	
4	SURPLUS/(GAP)	(1,097,839)	(1,642,468)	(6,239,470)	(7,917,442)	(12,921,374)	(27,622,915)	(17%)
5	*As % of Needs*	*(5%)*	*(6%)*	*(20%)*	*(23%)*	*(32%)*	*(17%)*	
6	*SURPLUS / (GAP) US$ '000 EQUIV.*	*(55,728)*	*(82,536)*	*(311,973)*	*(393,903)*	*(639,672)*	*(1,372,356)*	

The above analysis estimates a total funding gap of approximately ZMW 27.6 Billion (equivalent to US$ 1.3 Billion) or 17% of the total cost of implementing the plan (financing needs). It is assumed that this gap would be met through the following potential sources of additional funding:

i. Possibility of increase in Government funding to the health sector

The 2021 estimates indicate that Government funding to the health sector represented 8.1% of the national budget. Zambia is a signatory to the Abuja Declaration on health, which recommends 15% of the national budget as governments' funding to health. the Ministry of Health will actively engage the Ministry of Finance and National Planning (MoFNP), to advocate for increase in the government allocations to health to achieve the Abuja target.

It is estimated that if Government funding to health increases to 12% of the national budget, the funding gap would reduce to about 2% of the cost of the plan (funding needs). It is further estimated that if the Abuja target could be achieved, the sector would register a 22% surplus.

ii. Expected improvements in the coverage and performance of the National Health Insurance Authority (NHIMA)

As reported under Health Care Financing, NHIMA was established in 2018. As of December, 2021, there were 1,277,960 members registered under this scheme. During the course of this plan, the Government is expecting NHIMA to grow its membership and performance, to become one of the major sources of health financing in Zambia. This is notwithstanding the fact that NHIMA administratively falls under the Ministry of Labour and Social Security (MoLSS). Such improvements would lead to increased contribution of NHIMA to health sector financing.

iii. Potential savings through performance improvements and prudent management of resources at all levels of the health sector

The Ministry is committed to ensuring continuous improvements in the standards of quality and cost efficiency at all levels, through implementation of proven performance assessment and improvement measures. This is expected to lead to savings, which would contribute to reducing the financing gap.

iv. Possible increase in support from the Cooperating Partners

In Zambia, external support from the Cooperating Partners is a major source of health financing. Based on the projections/estimates shared with the Ministry, the estimated support for the Plan period is at US$ 2.5 Billion. The Ministry will actively engage and work closely with the sector partners, to advocate for additional support, stronger alignment and coordination.

8.3 DETAILED COSTING AND PROJECTED SOURCES OF FUNDING

The detailed costings, by programme area, and projected sources of financing for this NHSP are provided at Annex 2.

ANNEXES

Annex 1: Results Chain / M&E pFramework for NHSP 2022-202

[A Detailed Results Framework presenting the Expected Results Chain and Indicators at Impact, Outcome and Output Levels is Presented in a Separate Annex]

Annex 2: Costing and Sources of Financing

ZMW '000

Annex 2.1: Cost Estimates/Projections

A) Summary – Costing by Programme Area

ZMW '000

#	Description	2022	2023	2024	2025	2026	TOTAL	%
1	Primary Health Care (PHC)	8,629,764	10,760,233	10,953,152	11,996,521	15,861,297	58,200,968	36.8%
1.1	Health Promotion & Education, Social Determinants, and Community Health	8,040	10,409	8,893	9,323	10,199	46,864	0.0%
1.3	Reproductive, Maternal, Neonatal, Child and Adolescent Health and Nutrition (RMNCAN)	2,546,441	4,185,933	4,126,910	4,581,423	8,013,958	23,454,665	14.8%
1.4	Communicable Diseases	5,238,584	5,629,864	5,781,800	6,303,641	6,656,765	29,610,653	18.7%
1.5	Non-Communicable Diseases	796,498	887,467	984,353	1,046,284	1,122,479	4,837,081	3.1%
1.6	Other Public Health Priorities	40,201	46,561	51,196	55,850	57,897	251,704	0.2%
2	Clinical Care & Diagnostic Services	456,289	541,030	401,756	302,837	306,242	2,008,154	1.3%
3	Integrated Health Support Systems	14,640,275	17,572,530	19,760,213	21,937,417	24,228,953	98,139,389	62.0%
	Grand Total	23,726,327	28,873,794	31,115,122	34,236,775	40,396,493	158,348,510	100.0%
	Grand Total (USD '000 Equivalent)	1,204,382	1,450,944	1,555,756	1,703,322	1,999,826	7,914,231	100.0%

KEY ASSUMPTIONS:

Inflation (Year-on-year)	15.5%	11.9%	9.9%	8.0%	6.0%
Exchange Rate (US$ 1 = ZMW	19.70	19.90	20.00	20.10	20.20

B) Detailed Costing by Programme Area

#	Description	2022	2023	2024	2025	2026	TOTAL	%
1	Primary Health Care (PHC)							
1.1	Health Promotion & Education, Social Determinants, and Community Health							
1.1.1	Health Promotion & Education, and Social Determinants	6,978	8,863	7,194	7,913	8,704	39,652	0.0%
1.1.2	Community Health	1,062	1,546	1,700	1,410	1,495	7,212	0.0%
	Sub Total	8,040	10,409	8,893	9,323	10,199	46,864	0.0%
1.2	Reproductive, Maternal, Neonatal, Child and Adolescent Health and Nutrition (RMNCAN)							
1.2.1	Reproductive and Maternal Health	1,497,102	2,812,932	2,879,302	3,228,724	6,199,665	16,617,725	10.5%
1.2.2	Neonatal Health	221,807	243,987	268,386	295,225	324,747	1,354,151	0.9%
1.2.3	Child Health and Development	42,967	298,688	51,990	57,189	397,553	848,388	0.5%
1.2.4	Adolescent Health	515,573	538,503	609,891	662,312	719,435	3,045,714	1.9%
1.2.5	Nutrition	268,993	291,823	317,342	337,973	372,557	1,588,687	1.0%
	Sub Total	2,546,441	4,185,933	4,126,910	4,581,423	8,013,958	23,454,665	14.8%
1.3	Communicable Diseases							
1.3.1	Malaria	699,153	876,912	809,866	874,747	837,131	4,097,809	2.6%
1.3.2	HIV/AIDS and STIs	3,485,738	3,987,403	4,477,617	4,938,925	5,344,545	22,234,228	14.0%
1.3.3	TB & Leprosy	1,053,694	765,549	494,316	489,968	475,088	3,278,616	2.1%
	Sub Total	5,238,584	5,629,864	5,781,800	6,303,641	6,656,765	29,610,653	18.7%
1.4	Non-Communicable Diseases							
1.4.1	Non Communicable Diseases - General	55,970	59,199	71,631	65,119	78,794	330,713	0.2%
1.4.2	Cancer Control	720,413	806,142	885,950	956,826	1,014,235	4,383,565	2.8%
1.4.3	Mental Health	20,115	22,126	26,773	24,339	29,450	122,802	0.1%
	Sub Total	796,498	887,467	984,353	1,046,284	1,122,479	4,837,081	3.1%

#	Description	2022	2023	2024	2025	2026	TOTAL	%
1.5	Other Public Health Priorities							
1.5.1	Environmental Health	23,094	25,403	27,944	30,738	33,812	140,991	0.1%
1.5.2	Epidemic Control and Surveilance	6,371	9,143	10,048	10,852	8,969	45,384	0.0%
1.5.3	Neglected Tropical Diseases	10,737	12,014	13,204	14,260	15,116	65,330	0.0%
	Sub Total	40,201	46,561	51,196	55,850	57,897	251,704	0.2%
	Sub-Total (PHC)	8,629,764	10,760,233	10,953,152	11,996,521	15,861,297	58,200,968	36.8%
2	Clinical Care & Diagnostic Services							
2.1	Clinical Care Services	100,813	269,303	101,619	64,895	68,156	604,787	0.4%
2.2	Blood Transfusion Services	46,480	61,283	68,706	54,931	59,157	290,556	0.2%
2.3	Diagnostic Services (Lab & Imaging Services)	144,777	74,765	39,469	42,758	46,047	347,817	0.2%
2.4	Rehabilitative Services	66,923	17,800	64,624	12,029	12,954	174,330	0.1%
2.5	Nursing Services	97,296	117,879	127,338	128,223	119,927	590,663	0.4%
	Sub Total	456,289	541,030	401,756	302,837	306,242	2,008,154	1.3%
3	Integrated Health Support Systems							
7.1	Human Resources	5,691,625	5,757,768	5,825,126	5,893,745	5,963,672	29,131,935	18.4%
7.2	Essential Medicines & medical Supplies	5,990,583	7,826,801	9,342,495	10,978,164	12,685,012	46,823,055	29.6%
7.2	Medical Infrastructure, Equipment and Transport	2,176,753	3,116,207	3,635,611	4,030,460	4,479,798	17,438,830	11.0%
7.3	Health Information, Health Research and Innovation	58,532.13	64,385.34	70,823.88	77,906.26	85,696.89	357,344	0.2%
7.4	Health Care Financing	716,800	802,099	881,507	952,028	1,009,149	4,361,583	2.8%
7.5	Leadership & Governance	5,981	5,270	4,649	5,114	5,626	26,641	0.0%
	Sub Total	14,640,275	17,572,530	19,760,213	21,937,417	24,228,953	98,139,389	62.0%
	Grand Total (ZMW' 000)	23,726,327	28,873,794	31,115,122	34,236,775	40,396,493	158,348,510	100%
	Grand Total (US$ '000) Equiv.	1,204,382	1,450,944	1,555,756	1,703,322	1,999,826	7,914,231	0%

Inflation (Year-on-year)	15.5%	11.9%	9.9%	8.0%	6.0%
Exchange Rate (US$ 1 = ZMW)	19.70	19.90	20.00	20.10	20.20

Annex 2.2: Sources of Funding

A) Government (GRZ) Funding Projections ZMW' 000

#	Description	2022 Budget	2023 MTEF	2024 MTEF	2025 MTEF	2026 EST	Total
1.	GRZ Overall National Budget						
	Personal Emoluments Expenditure	37,735,065	46,341,122	53,108,395	166,899,144	176,913,093	480,996,819
	Non-Personal Emoluments Expenditure	124,847,457	124,263,416	154,536,244	166,899,144	176,913,093	747,459,354
	Total	162,582,522	170,604,538	207,644,640	333,798,288	353,826,185	1,228,456,173
2.	GRZ Funding to the Health Sector - Scenarios						
2.1	SCENARIO 1: Government Funding to the Health Sector based on MTEF Projections						
	Personal Emoluments Expenditure	5,507,087	7,688,573	8,961,710	9,678,647	10,259,365	42,095,382
	Non-Personal Emoluments Expenditure	5,047,292	6,992,149	8,283,748	8,946,448	9,483,235	38,752,872
	Total	10,554,379	14,680,723	17,245,458	18,625,094	19,742,600	80,848,254
	As % of the national budget (%)	6%	9%	8%	6%	6%	7%
2.2	SCENARIO 2: Government Funding to the Health Sectors, based on 12% of the Naional Budget						0
	GRZ Total funding to Health – Based on 12% of National Budget	19,509,903	20,472,545	24,917,357	40,055,795	42,459,142	147,414,741
	Total	19,509,903	20,472,545	24,917,357	40,055,795	42,459,142	147,414,741
	As % of the national budget (%)	12%	12%	12%	12%	12%	12%
1.2.3	SCENARIO 3: Health Sector Government Funding, based on 15% of the Naional Budget (Abuja Declaration Target)						0
3.1	GRZ Total Funding to Health – Based on Abuja target (15 % of National Budget)	24,387,378	25,590,681	31,146,696	50,069,743	53,073,928	184,268,426
	Total	24,387,378	25,590,681	31,146,696	50,069,743	53,073,928	184,268,426
	As % of the national budget (%)	15%	15%	15%	15%	15%	15%

B) Cooperating Partners (CPs) Funding - Aggregated Commitments/Estimates USD (EQUIV.)

#	Source / Cooperating PartnerDonor	2022 ACM 21	2023 ACM 22	2024 ACM 22	2025 ACM 22	2026 Estimate	Total
1	BMZ / German Cooperation (Incl. KfW/GIZ)	5,324,000	6,438,388	4,810,555	4,810,555	4,810,555	26,194,053
2	UK Gvt (FCDO,UKHSA)	4,823,920	3,000,000	3,000,000	3,000,000	3,000,000	16,823,920
3	European Union (EU)	27,929,247	55,800,000	-	-	-	83,729,247
4	GAVI	37,058,877	35,277,283	13,451,213	12,299,178	12,299,178	110,385,729
5	Global Fund	133,841,905	118,497,505	-	-	-	252,339,410
6	Japan / JICA	13,873,751	1,335,177	960,526	735,135	735,135	17,639,724
7	Sweden	16,679,757	10,034,797	11,468,340	8,601,255	8,601,255	55,385,404
8	UN Agencies (IMO, UNICEF, WHO)	488,223	5,937,400	6,084,086	6,416,822	6,416,822	25,343,353
9	US Government	458,565,000	308,593,000	314,035,000	319,235,000	319,235,000	1,719,663,000
10	World Bank	25,770,000	85,770,000	27,700,000	27,700,000	27,700,000	194,640,000
11	ELMA	1,079,000	-				1,079,000
12	Joint Funding	15,000,000	-				15,000,000
	TOTAL (USD EQUIVaALENT)	724,354,680	630,683,550	381,509,720	382,797,945	382,797,945	2,502,143,840
	Exchange Rate 1USD = ZMW	19.70	19.90	20.00	20.10	20.20	
	TOTAL (ZMW' 000 EQUIV .)	14,269,787	12,550,603	7,630,194	7,694,239	7,732,518	49,877,341

Inflation (Year-on-year)	15.5%	11.9%	9.9%	8.0%	6.0%	
Exchange e (US$ 1 = ZMW)	19.70	19.90	20.00	20.10	20.20	

Annex 2.3: Key Assumptions

3	ASSUMPTIONS:
1	Government Funding to Health Sector:
	OPTION 1 - Low Level: GRZ Funding based on MTEF Projctions
	OPTION 2 - Medium Level: GRZ Funding based on 12% of the National Budget.
	OPTION 3 - High Level: GRZ Funding to the health sector based on the Abuja Declaration Target of atleast 15% of the national budget.
2	Support from Cooperating - Partners (CPs): Projections based on their recent submission.
3.	MTEF projected Inflation and Exchange Rates: Based on the MYEF 2022-2024 Planning Guidelines.

Annex 3: The Zambian Health Service System

The Zambian Health Service Delivery System

The National Health Care Package (NHCP) 2012 defines the health care systems in Zambia with the following structure:

1. Community Health Services

Community Based Volunteers (CBVs) provide essential health care to individuals and families in communities. Some key elements of community health service include; health promotion, the use of Rapid Diagnostic Test (RDT) for malaria, home based care for HIV, diabetes and kidney disease; growth monitoring and immunization of children; screening of cancer, diabetes, hypertension; hospice and home-based care. The CBVs are responsible for follow up and monitoring of adherence to treatment for chronic ailments

2. Health Posts

Health Posts are located within a community and shall be staffed by Midwives, Nurses, Environmental Health Officers, Public Health Nurses and Community Health Assistants. Health Posts catchment area covers 500 households (3500 people) in rural areas and 1000 households (7000 people) in the urban areas. Health Posts are the first level of patient contact with health care providers and provide promotive and preventive services, limited diagnostic like microscope and a haemocue and rehabilitative services. The curative services include the treatment of: uncomplicated malaria, acute diarrheal diseases, upper respiratory tract infections, provision of first aid.

The main activities at Health Post level are predominantly health promotion and disease prevention. However, some limited curative services are provided, too, with complicated cases being referred to the next level of care.

3. Rural and Urban Health Centres

There are two types of health centres in Zambia namely, Rural Health Centres that are intended to serve a population of up to 10,000 people and Urban Health Centres that are intended to serve a catchment population of 30,000 to 50,000 people.

Rural Health Centres shall be staffed by 1 Midwife, 1 Nurse, Environmental Health Personnel, 1 Clinical Officer and 1 Public Health Nurse. Urban Health Centres are staffed by Medical Doctor, Medical Licentiate, Pharmacy Personnel, Laboratory Personnel, Physiotherapy Personnel, Environmental Health Personnel, Dental Personnel, Clinical Officer, Midwife, Nurse, Public Health Nurse and Nutrition Personnel.

Primary health care services offered include: antenatal, postnatal and neonatal care, family planning; routine Expanded Program of Immunisation (EPI); growth monitoring; management of childhood diseases; treatment of malaria and TB, including DOTS; ART and VCT; communicable and non-communicable diseases, environmental, water and sanitation, school health and nutrition, and epidemic preparedness non communicable diseases surveillance

and screening; treatment of minor injuries, surgeries, environmental health, infant incubator and ultrasound scan.

4. Mini Hospitals

During the 2017-2021 NHSP, Mini hospitals served a catchment population of between 50,000 to 80,000 and was staffed by Medical doctor, Medical Licentiate, Pharmacy Personnel, Laboratory Personnel, Physiotherapy Personnel, Environmental Health Personnel, Dental Personnel, Clinical Officer, Midwife, Nurse, Public Health Nurse and Nutrition Personnel.

Mini Hospitals intended to provide minor surgical, obstetrics and gynaecological and diagnostic services. They also provided for ART and VCT; and outpatient services.

Mini hospitals will be reclassified as rural and urban health centres in line with the new policy direction.

5. First Level Hospitals

First level referral hospitals are found in most districts and are intended to serve a catchment population of between 80,000 and 200,000 and shall be staffed by Medical Doctor, Medical Licentiate, Pharmacy Personnel, Laboratory Personnel, Physiotherapy Personnel, Environmental Health Personnel, Dental Personnel, Clinical Officer, Midwife, Nurse, Radiology Personnel, Specialist Nurses and Nutrition Personnel. Services offered include: primary health care services, medical, surgical, obstetric and diagnostic services with High Dependency Unit. The clinical services provided at level 1 support mini hospital and health centre referrals. This level is also the entry point for curative and rehabilitative services provided at the secondary and tertiary levels of care.

6. Second Level Hospitals

General or Level 2 hospitals are intended to serve catchment areas ranging from 200,000 to 800,000 people and shall be staffed by Specialist Doctors, Medical Doctor, Medical Licentiate, Pharmacy Personnel, Laboratory Personnel, Physiotherapy Personnel, Environmental Health Personnel, Dental Personnel, Clinical Officer, Midwife, Nurse, Radiology Personnel, Specialist Nurses and Nutrition Personnel. Services provided include; internal medicine, general surgery, paediatrics, obstetrics and gynaecology, dental, psychiatry and intensive care units. These hospitals also act as referral centres for first level hospitals, including the provision of technical support to referring facilities. Most of the general hospitals have training institutions on-site, most frequently nursing institutions, and serve as a training centre during student clinical attachments.

7. Third Level Hospitals

Level 3 facilities, or Central Hospitals, are designed to serve a catchment population of 800,000 and above and shall be staffed by Medical Doctor, Medical Licentiate, Pharmacy Personnel, Laboratory Personnel, Physiotherapy Personnel, Environmental Health Personnel, Dental Personnel, Clinical Officer, Midwife, Nurse, Radiology Personnel, Specialist Nurses and Nutrition Personnel. Services provided include: internal medicine, general surgery,

paediatrics, obstetrics and gynaecology, dental, psychiatry and intensive care units (ICU). Level three hospitals have one MRI scan and provide technical support to level two hospitals.

8. Specialized Hospitals

Specialized Hospitals or Level 4 facilities provide specialized health care services and training and research. Specialized hospitals shall be staffed by Specialist Doctors, Medical Doctor, Pharmacy Personnel, Physiotherapy Personnel, Radiology Personnel, Laboratory Personnel, Environmental Health Personnel, Nutrition Personnel, Specialized Nurses and Nurses.

Currently, there are eight facilities in Zambia offering specialized services and these are: Cancer Diseases Hospital (CDH), Chainama Hills Hospital (CHH), Arthur Davison Hospital (ADH), Kitwe Eye Hospital, University Teaching Hospital (UTH) – Eye, UTH – Women and Newborn, UTH – Children Hospital and National Heart Hospital.

Level 4 facilities are also the country's major training centres with affiliation to university schools of medicine. The specialized hospitals provide clinical attachment and mentorship for different health care workers. Level 4 facilities are expected to be centres of excellence in provision of specialized health care services.

9. Statutory Institutions

In the course of ensuring an adequate regulatory, policy and legislative environment in the provision of health services, the Ministry is supported by various statutory institutions, which include service and regulatory institutions as follows.

9.1 Service Statutory Institutions

i. Zambia National Blood Transfusion Service

The Zambia National Blood Transfusion Services (ZNBTS) was established under Statutory Instrument 147 of 1997 and is mandated to spearhead the coordination and implementation of the National Blood Safety Strategy.

ii. Zambia Flying Doctors service

Zambia Flying Doctors service was established under the Zambia Flying Doctors Service Act of 1967 and is mandated to undertake the provision of local medical evacuations and outreach in remote and hard to reach areas.

iii. The National Food Laboratory (NFL)

The National Food Laboratory (NFL) is governed by the Food Safety Act No. 7 of and its mandate is to protect the public against health hazards and fraud in the manufacture sale and use of food.

iv. National Food and Nutrition Commission

The Commission was established under the National Food and Nutrition Commission Act of 1967 is an advisory body to the Government on matters to do

with food and nutrition; and is mandated to promote and oversee nutrition activities focusing on vulnerable groups such as children and women.

v. Tropical Disease Research Centre

The Tropical Diseases Research Centre is a National Health Research Institution established by Act of Parliament No. 31 of 1982 and is mandated to conduct research and training in Tropical Diseases and other diseases of national health importance such as HIV/AIDS and Tuberculosis and other Opportunistic infections. The mandate is to conduct epidemiological and clinical research.

vi. Zambia Medicines and Medical Supplies Agency

Zambia Medicines and Medical Supplies Agency (former Zambia Medical Stores Limited) is governed by the Zambia Medicines and Medical Supplies Agency Act of 2019. Its mandate is to provide reliable, effective, efficient and sustainable pharmaceutical and medical supply chain services for health care delivery.

vii. National HIV/AIDS/STI/TB Council

The National HIV/AIDS/STI/TB Council Act No: 10 of 2002 established the National HIV/AIDS/STI/TB Council which provides coordinated leadership to stakeholders through decentralized multi-sectoral response to the HIV and AIDS pandemic in the nation.

viii. National Health Research Authority

The National Health Research Authority was established by the Health Research Act No: 2 of 2013 and its mandate is to provide a regulatory framework for the development, regulation, financing, coordination of health research to ensure the development of consistent health research standards and guidelines for ethically sound health research in Zambia.

ix. Zambia National Public Health Institute/ Africa

The Zambia National Public Health Institute was established by the Zambia National Public Health Act No: 19 of 2020 is mandated to efficiently prevent disease transmission, conduct disease detection and surveillance, and ensure preparedness capacity and efficient response to health threats and outbreaks.

x. National Health Insurance Management Authority

The Authority was created under Health Insurance Act of 2018 and is mandated to implement the National Health Insurance Scheme and this include registration of members, accreditation of health care providers, management of the National Health Insurance Fund, communicating to key stakeholders and receiving and processing claims from accredited health care providers. However, the Authority was moved to Ministry of Labour and Social Security in 2021.

9.2 Regulatory Statutory Institutions

i. Radiation Protection Authority

Annex 4: Country's Legal Framework Guiding the Health Sector

THE LEGAL FRAMEWORK GUIDING THE HEALTH SECTOR IN ZAMBIA

The health sector is guided by the National Health Policy 2013 which provides overall direction, and the policy is due for review. Other policies developed include the National Alcohol Policy, Laboratory Policy and Reproductive Health Policy.

Despite the Health Policy being in place to guide health sector programming, the health sector has been operating without an overall National Health Services Act following the repeal of the National Health Services Act of 1995 which was repealed in 2006. In this regard, the Ministry has prioritized the revision of the National Health Services Act.

There are, however, pieces of legislation which have been enacted in the past five years which include the National Health Insurance Act of 2018, Mental Health Act of 2019, Zambia Medicines and Medical Supplies Agency Act (ZAMMSA) of 2019, Food and Nutrition Act of 2020,The Health Professions Amendment Act 26 of 2021, Zambia National Public Health Institute Act of 2020, Nurses and Midwives Act of 2019 and Food Safety Act of 2019 and the Tropical Diseases Research Centre (Amendment) Act of 2021. Furthermore, the following Statutory Instruments are in existence:

a) Instrument No. 21 of 2020 - The Public Health (Notifiable Infectious Disease) (Declaration) Notice, 2020 to declare COVID-19 a notifiable infectious disease.

b) Statutory Instrument No. 22 of 2020 - The Public Health (Infected Areas) (Coronavirus Disease 2019)

c) Regulations, 2020 to provide measures to suppress and control the spread of the COVID-19.

d) Statutory Instrument No. 24 of 2020 – The National Health Research (Bio-Banking) Regulations, 2020 to provide for powers to designate specific research institutions and sites as Bio-Bank and also to provide for the issuance of licenses to such research institutions and sites for storage of biological materials.

e) Statutory Instrument No. 25 of 2020 – The National Health Research (Registration and Accreditation) Regulations, 2020 to provide for the registration and accreditation of health researchers and health research ethics committees

f) Statutory Instrument No.62 of 2020 to amend regulation 9, of statutory instrument No 22 The Public Health (Infected Areas) (Corona Virus Disease 2019) Regulations, 2020.

g) The Public Health Act, The Public Health (Infected Areas) Corona Virus disease of 2019) (Amendment) Regulations, 2020 to amend regulation 9, of statutory instrument No 22 The Public Health (Infected Areas) (Corona Virus Disease 2019) Regulations, 2020.

Annex 5: The National Priority Interventions

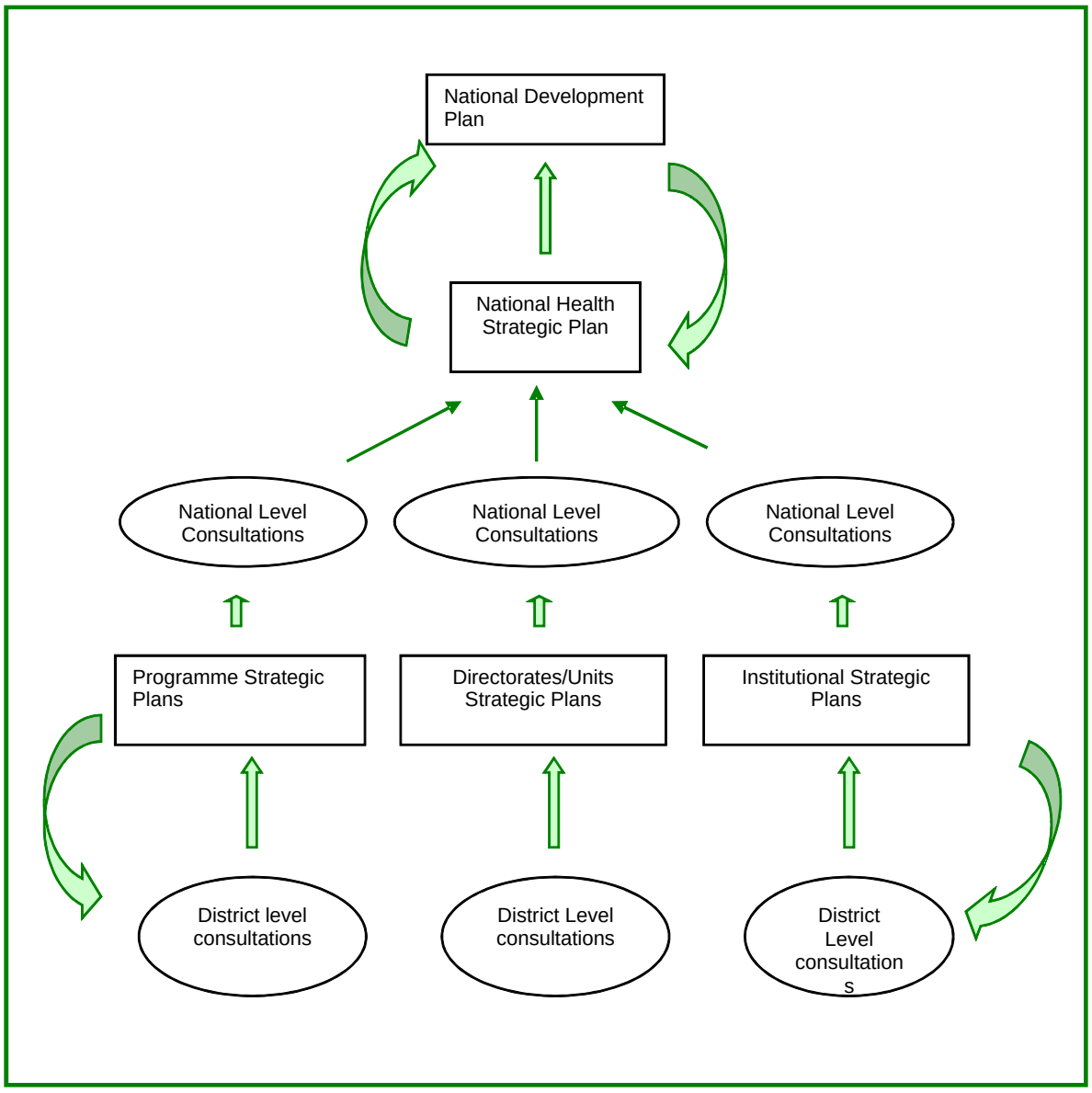
#	Priority	Description
1.	Universal Health Coverage	UHC, is top of the global health agenda and has been adopted as part of the SDGs. All people have access to the health services they need, when and where they need them, without financial hardship-it includes full range of essential health services, from health promotion to prevention, treatment, rehabilitation and palliative care.
2.	Integrated People Centred Health Services	Putting people and communities, not diseases, at the centre of health system, and empowering people to take charge of their own health rather than being passive recipients of service - creating an enabling environment which is supported by empowering and engaging people; strengthening governance, transparency, accountability, and participation; coordina ting services within and across sector; and reorienting the model of care.
3	Health and Healthy Lifestyle Promotion and Social Determinants of Health	Strengthen the linkage between health promotion with social determinants through technical cooperation fo r the development of public policies, the creation of healthy environments, the promotion of processes for community empowerment and the promotion of the equity perspective in the health service. The government shall be guided by the health promotion strategy to promote healthy lifestyle.
4.	Outbreak, Epidemic and Crisis Surveillance, Control and response	The WHO defines an epidemic as “the occurrence in a community or region of cases of an illness, specific health-related behaviour, or other health-related events clearly in excess of normal expectancy.” A pandemic is defined by the WHO as “an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people.” Organizational preparedness to manage a disease outbreak or any sanitary/health crisis includes emergency response, business continuity, crisis management, and crisis communications. As they monitor the progress of emerging pandemics or epidemics, businesses should review, exercise, and update or otherwise adjust their response plans, including crisis management, crisis communications, and business continuity plans.

5.	Health Workforce	The Zambian government is committed to improving the availability of quality but affordable health care for the Zambian people. However, severe shortages of human capital in the health system have persisted for over twenty years -denying millions of people access to basic as well as specialist care. To address the workforce shortage and bottlenecks to available, quality care, the government will focus on training, recruitment, and deployment of skilled human resources for all, including hard to reach communities.[20] The government will uphold transparency whilst assuring decent working and accountability in the recruitment and management of health workers living conditions.[21]
6.	Health Financing	Pivotal to attaining UHC is the design and implementation of innovative, predictable and sustainable mechanisms to finance health care in a challenging and changing environment. Health Care Financing strategy is premised on the guiding principles of equity, efficiency, transparency, accountability, effective partnerships and evidence-based decision making.[22]
7.	Infrastructure Development and Medical Equipment	The infrastructure development will be guided by the health infrastructure investment plan that will speak to the needs' assessment on health infrastructure development. Equally, the Medical equipment shall be guided by the needs' assessment on medical equipment, and upholding procurement standards will reduce wastage and losses.
8.	Essential Medicines and Vaccines	The Zambia Medicines and Medical Supplies Agency No. 9 of 2019 shall provide legal framework for provision of Essential Medicines and Medical Supplies. The provision of health services depends largely on access to and availability of quality and affordable essential medicines for all. In order to improve the accessibility and quality the MOH will be guided by the ZAMMSA and ZAMRA act mandated to procure, manage, storage, distribute the medicines to the final destination while assuring maximum level of quality and safety.

[20] National Human Resources for health Strategic plan 2018-2024.a
[21] National Human Resources for health Strategic plan 2018-2024.a
[22] Health Financing Strategy: 2017-2027, Towards UHC for Zambia.

9.	Leadership and Governance	This entails the provision of strategic direction and development of and appropriate policies and plans that involve effective oversight, regulation, essential partnerships and integrate all the building blocks of the health system to achieve the desired results. Leadership and governance also deal with the interrelationships, roles, and activities of the various agencies in the production, distribution, and consumption of health services. The organizational structures governing these processes are also considered in dealing with leadership and governance issues

Annex 6: Zambia – Health Sector Planning Framework



Source: Ministry of Health, Zambia

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