NATIONAL HEALTH STRATEGIC PLAN

NHSP 2018/19- 2022/23

(Draft Version)

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LIST OF ABBREVIATIONS

AfSBT	African Society for Blood Transfusion
AIDS	Acquired Immune Deficiency Syndrome
AJR	Annual Joint Review
ANC	Antenatal Care
ART	Anti-Retroviral Therapy
ARV	Antiretroviral
BCG	Bacillus Calmette-Guérin
BSIS	Blood Safety Information System
CA CX	Cervical Cancer
CDC	Centres for Disease Control and Prevention
CHAL	Christian Health Association of Lesotho
CHE	Council for Higher Education
DHIS	District Health Information System
DHMT	District Health Management Team
DHT	District Health Team
DHS	Demographic and Health Survey
DNA	Deoxyribonucleic Acid
EHP	Essential Health Package
EHSP	Essential Heath Services Package
EML	Essential Medicines List
EMR	Electronic Medical Records
EPI	Expanded Programme on Immunisation
FCTC	Framework Convention on Tobacco Control
FP	Family Planning
FSW	Female Sex Worker
FTE	Full-Time Equivalent
FY	Financial Year
GAVI	Global Alliance for Vaccines and Immunization
GoL	Government of Lesotho
HC	Health Centre
HCC	Health Centre Committee
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
iHRIS	Human Resource Information System
HR	Human Resource
HRH	Human Resources for Health
HTC	HIV Testing and Counselling
ICT	Information and Communication Technology
IFC	International Financial Corporation
IUD	Intrauterine Device
IAEA	International Atomic Energy Agency
LBTS	Lesotho Blood Transfusion Service
LDHS	Lesotho Demographic and Health Survey
LIS	Laboratory Information System
LPPA	Lesotho Planned Parenthood Association
LRCS	Lesotho Red Cross Society
MCA	Millennium Challenge Account
MDGs	Millennium Development Goals
MDR-TB	Multi Drug Resistant Tuberculosis

MDR	Multi Drug Resistant
MEAs	Multi-Lateral Environmental Agreements
MoH	Ministry of Health
MoLGC	Ministry of Local Government and Chieftainship Affairs
MPS	Ministry of Public Service
MSM	Men Sleeping with Men
MTCT	Mother to Child Transmission
M&E	Monitoring and Evaluation
NCDs	Non-Communicable Diseases
NDSO	National Drug Supply Organisation
NEPI	Nursing Education Partnership Initiative
NGOs	Non-Governmental Organisations
NHA	National Health Accounts
NHP	National Health Policy
NHSP	National Health Strategic Plan
NIP	National Immunisation Programme
NSDP	National Strategic Development Plan
NHTC	National Health Training College
NTP	National Tuberculosis Programme
OOP	Out-of-Pocket
OP	Outpatient
OPD	Outpatient Department
PCR	Polymerase Chain Reaction
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary Health Care
PIH	Partners in Health
PMTCT	Prevention of Mother to Child Transmission
PNC	Postnatal Care
PPP	Public-Private Partnership
QMH	Queen Memorial Hospital
REC/RED	Reach Every Child/Reach Every District
SABS	South Africa Blood Service
SDGs	Sustainable Development Goals
SDP	Service Delivery Point
SOP	Standard Operating Procedure
SI-TWG	Strategic Information Technical Working Group
STEPS	STEPwise Approach to Surveillance
STI	Sexually Transmitted Infection
SWOC	Strengths, Weaknesses Opportunities and Challenges
TAT	Turn-around-time
TB	Tuberculosis
TWG	Technical Working Group
UHC	Universal Health Coverage
UK	United Kingdom
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
US	United States
VHW	Village Health Worker
VNRD	Voluntary Non-Remunerated Donors
WHO	World Health Organisation

CHAPTER ONE: INTRODUCTION

1.1 Context of the National Health Strategic Plan

The National Health Strategic Plan (NHSP) extends the contents of the National Health Policy (NHP) and explains in more details how the objectives in the National Health Policy will be implemented in the next five years, the priorities, the expected results and how the results will be measured. The National Health Strategic Plan provides guidance for harmonisation and coordination in the implementation of programmes in the health sector. It is the basis for stakeholder dialogue on the priorities of the health sector and the basis for partners (both inter and intra sectoral) to prioritise their programmes and funding plans in the health sector.

1.2 Global and regional policy environment

The shared vision of this strategic plan is a global and regional vision that seeks to achieve Universal Health Coverage for all people of all ages. This strategy is therefore developed within the context of global health and was informed by the Sustainable Development Goals and has internalised the goals and targets of the SDGs for health. This strategy also reflects and has adopted other global and regional strategies and frameworks such as the Africa Union Agenda 2063, African Health Strategy 2016-2030, Southern African Development Community (SADC) Health Policy and Protocol on Health, the SADC Regional Indicative Strategic Development Plan, Ouagadougou Declaration on Primary Health Care and Health Systems, Paris Agreement on climate change (2015), Global Health Security, building a resilient health system, Global Strategy on Human Resources for Health (Workforce 2030), Engagement with non-state actors, Global Strategy for Women's, Children's and Adolescents' Health (2016-2030), Reducing HIV transmission by 2020, Elimination of Mother-to-Child transmission of HIV and syphilis, End TB Strategy, WHO Framework Convention on Tobacco Control and Global plan of action on violence.

1.3 National context

The Constitution (1993) promotes health gain as a social gain. Health Gain is concerned with health status, both in terms of increase in life expectancy and in terms of improvements in the quality of life. The National Health Strategic Plan articulates the aspirations in the Constitution, the Vision 2020 and the draft National Strategic Development Plan II (NSDP 2018/19-2022/23) that aim to achieve Universal Health Coverage (UHC) and improve access to quality health care. The NHSP takes into consideration various national programme policies and strategies. The plan will contribute towards the attainment of the following strategic objectives covered by the NSDP II:

- Strengthen Diseases Prevention Interventions
- Increase Access, Coverage and Effectiveness of Quality Health Care Service Delivery for All
- Sustain Health Care Services
- Embed a culture of high performance and retain health professionals
- Strengthen and scale up nutrition interventions
- Strengthen Nutrition Governance and Capacity Development

1.4 Development of the National Health Strategic Plan

The process of developing the National Health Strategic Plan was transparent and consultative. Various stakeholders were engaged at different stages of development. The process started with a review of the implementation of the previous NHP and NHSP. A detailed situation analysis was conducted through review of literature (annual reports, studies conducted, evaluation and survey reports over the period 2012 to 2015, The National Health Policy, (NHP 2011) and the National Health Strategic Plans (2013-2017)) and face to face interviews with key informants using structured questionnaires and group discussions. Face to face interviews using structured questionnaire and group discussions were held with directors, programme managers and heads of units at MoH, focal persons in the United Nation family, CHAL, NHTC, Ministries of Finance, Local Government and Chieftaincy, Public Service and Social Welfare. Meetings were also held with five districts. Further consultations were made with stakeholders to validate and finalize the document.

The zero draft of the NHSP was circulated to MoH for comments for two weeks. Based on the comments received, the first draft (draft 1) was developed and circulated to all stakeholders for review. The draft was presented and discussed with the technical team during the costing training workshop.

1.5 Outline of the National Health Strategic Plan

The first chapter explains the background for developing the National Health Strategic Plan. It summarises the basis for revising the previous national strategy, the factors influencing its contents and the processes which took place during the development of the national health strategy.

Chapter two summarises the socioeconomic background of the Kingdom of Lesotho, the structure and organisation of the health sector.

Analysis of the implementation of the previous national health strategy (NHSP 2013-17) is presented in chapter three. The performance of the health sector is presented using the Ouagadougou framework for Primary Health Care and Health Systems. The chapter concludes with key issues to be addressed by the health sector.

Chapter four covers the strategic direction of the health sector. It explains the guiding principles and core values of the health sector and ends with the objectives and strategies to be implemented over the five-year period.

Chapter five describes the processes and tools used in costing the national health strategic plan.

Chapter Six covers implementation arrangements, roles and responsibilities for implementing the plan.

Monitoring and evaluation of the strategic plan is explained in chapter seven.

CHAPTER TWO: BACKGROUND

2.1 Socio economic status of Lesotho

Lesotho is a mountainous, landlocked country surrounded by the Republic of South Africa. The country has four ecological zones (the lowlands, foothills, mountains and the Senqu River Valley). Winter temperatures in Lesotho sometimes reach as low as minus 18°C while in summer they reach up to 38°C. The mountainous topography and harsh winters present a challenge for access to basic services including health care services. The population of Lesotho is just over 2 million[1] people.

The governance system comprises of: the Executive, Legislature and the Judiciary. The government is a parliamentary constitutional monarchy. The King serves as head of state in a largely ceremonial role, while the Prime Minister serves as head of government. Executive powers are vested in an elected Prime Minister. The legislature comprises of two houses of parliament, the National Assembly and the Senate. The Parliament is responsible for passing all laws including health related laws. The Judiciary consists of the Court of Appeal, the High Court, Magistrates Courts and the Local Courts.

Administratively, Lesotho has ten districts. Each district has a District Council, Urban Council(s) and Community Councils. Maseru is the only district with a Municipal Council. Council members are composed of elected representatives, as provided for in the Local Government Act of 1997, which was last amended in 2004.

Lesotho is classified as a lower middle income country with a per capita income of US$1879 and ranks 161 out of 187 countries on the UN Human Development ranking (2015). High unemployment and widening inequalities (with a Gini Index of 0.52) have excluded most of the population from participation in economic development. The rural areas are home to majority of the poor and income distribution remains skewed in favour of the urban areas. Three quarters of the unemployed live in rural areas and include mostly the youth. Lesotho's economy is projected to grow at the rate of 2.6%[2], with growth mainly limited to urban areas, while rural communities remain impoverished. The main drivers of growth are the mining, construction and textile industries, as well as government services. Lesotho has one of the highest public spending rates at 63%[3]. The nation's high poverty and unemployment rate poses additional challenges to the economy.

2.2 Organization of the health sector

Health services in Lesotho are delivered at three levels, namely primary, secondary and tertiary levels. There are 290 health facilities as indicated in table 1.

1 Lesotho Factsheet of Health Statistics, Africa health Observatory, WHO (Regional Office for Africa), 2016
2 World Development Indicators, Washington, DC: World Bank. World Bank. 2015, http://data.worldbank.org
3 Lesotho: Overview." Washington, DC: World Bank. http://www.worldbank.org/en/country/lesotho/overview

Table 1 Grand Summary of Health Facilities

Proprietor	# of General Hospitals	# of Primary Hospitals	# of Health Centres	# of Filter Clinics	Total of Health Facilities
GOL	12	0	110	4	126
CHAL	8	0	61	0	69
LRCS	0	0	4	0	4
Private	1	4	86	0	91
Total	**21**	**4**	**261**	**4**	**290**

Source: Health Facility List: 2017

Forty-two percent (42%) of the health centres and 57% of the hospitals are owned by Government of Lesotho. Twenty three percent (23%) of the health centres and (38%) of the hospitals are owned by Christian Health Association of Lesotho (CHAL). The remaining facilities are privately owned. There is an extensive network of private surgeries, nurse clinics and pharmacies providing health care including the dispensing of medicines. About 90% of the private for profit health facilities are situated in the four large districts of Maseru, Berea, Mafeteng, and Leribe[4].

The Christian Health Association of Lesotho is the second largest provider of health services and the largest private-not-for-profit public health provider. CHAL plays a crucial role in providing health care services to at least 40 percent of the population, most of whom live in remote areas where coverage by government-owned facilities is relatively poor. There are non- governmental organizations (NGOs) which provide health services. These include: Lesotho Planned Parenthood Association (LPPA) which has nine clinics located in urban centres around Lesotho; Lesotho Red Cross Society (LRCS) which operates four clinics; Population Services International (PSI) which operates five Voluntary Counselling and Testing (VCT) centres[5]; Baylor's Paediatric Centre of Excellence[6] for providing paediatric HIV and AIDS management and other specialised NGO health service providers.

The Ministry of Health has a memorandum of understanding with CHAL and the Lesotho Red Cross Society (LRCS) for the provision of a defined Essential Health Service Package (EHP) to the population through their network of health centres and hospitals. The MoH also has 18 years public-private partnership agreement with Tsepong (PTY) Ltd for designing, financing, building operating and maintaining of the national referral hospital and three filter clinics. The Ministry of Health works together with Development Partners (Donors) (Global Fund, the United States Government, European Union, People's Republic of China, Gates Foundation, Gavi Vaccine Alliance, UNDP, UNAIDS, UNFPA, UNICEF, World Health Organization, World Bank and World Food Program, Vodafone Consortium), in the design, financing and delivery of health care services.

4 Ministry of Health and Social Welfare. (2010). Lesotho health system assessment 2010. Maseru: Ministry of Health and Social Welfare

5 Ministry of Health. (2009). National Reproductive Health Commodity Security Strategic Plan 2008-2012 for Lesotho. Maseru: Ministry of Health

6 Ministry of Health. (2009). National Reproductive Health Commodity Security Strategic Plan 2008-2012 for Lesotho. Maseru: Ministry of Health.

2.2.1 Primary level of health Care

The primary level of health care includes health centres, health posts and all community level initiatives including all staff working at this level. A village health workers (VHW) programme is in place in all districts for provision of community based health services and the VHWs are paid a monthly allowance by government. There is a network of more than 6,000 village health workers (VHWs) who work at the health posts. A Village Health Worker (VHW) serves about 40 households. There are also other categories of community-based health workers such as traditional birth attendants, community based condom distribution agents and water minders[7]. VHWs mainly provide promotive, preventive and rehabilitative care. VHWs also organize health education gatherings and immunization efforts within the communities they serve. The link between community and health centres provided by VHWs has remained informal despite their huge contribution. VHWs refer cases to health centres as the first point of professional care. Nurses midwives at health centres supervise and train VHWs. Health centres offer curative and preventative services, including immunizations, family planning, HIV/AIDS and TB treatment and deliveries. There is a health centre committee made up of representatives from the communities they serve (including chiefs and opinion leaders) with the head of the health centre being a member. Each of the Local Community Councils has a Social Services' Committee and the head of the health centre is a member in this committee.

2.2.2 Secondary level of health care

In each district, there is a district hospital which is a referral facility for all health centres in the district. There are two district hospitals in the outskirts of Maseru district however there is no district hospital in the urban area of Maseru hence the National referral Hospital also acts as a district hospital. However arrangements for construction of the new Maseru District Hospital started in FY 2015/16 and the project is expected to be completed in FY2020/21 although implementation has been delayed. Clients who go to the district hospitals to access services pay standardised user fees. All the district hospitals, in addition to offering specialized services, are still offering primary health care (PHC) services to the people living in towns that are in proximity to the hospital. And these people are not accessing free services as hospital services are paid for. District hospitals refer cases to the National Referral Hospital for further management.

2.2.3Tertiary level of health care

At tertiary level, there is only one National Referral Hospital which also refers patients to South Africa for quaternary care. There are two specialized hospitals namely Mohlomi Mental Hospital and Botŝabelo Leprosy Hospital which caters for leprosy and MDR-TB patients, while Senkatana offers other specialised health care like HIV and AIDS Management and reproductive cancer screening.

[7] Ministry of Health. (2012), National Tuberculosis and Leprosy strategic plan 2013-2017. Maseru: Ministry of Health

CHAPTER THREE: SITUATIONAL ANALYSIS

This section, assesses the performance of the previous NHSP 2012-17 to identify the health system's strengths, weaknesses, opportunities as well as challenges (SWOC) and identifies key issues and priorities for the next five years.

3.1 HEALTH OUTCOME PERFORMANCE

3.1.1 Health status

Life expectancy has improved from 42 years in 2009 to 47 years in 2014 (LDHS 2014). The 2016 Population and housing Census showed further improvement in life expectancy of 56 years. However this remains relatively low as compared to 71.4% global target. (WHO Global Health Observatory data 2015) The country shows positive results in the reduction of child mortality, maternal mortality and malnutrition although the results are still below global targets.

Table 2: Country performance on selected impact indicators

INDICATOR	COUNTRY STATUS			2023 NATIONAL TARGET
	2009	2014	2017	
Under five mortality	117 deaths per 1,000 live births	85 deaths per 1,000 live births	80 deaths per 1,000 live births	65 deaths per 1,000 live births
Infant mortality	91 deaths per 1,000 live births	59 deaths per 1,000 live births	53 deaths per 1,000 live births	24 deaths per 1,000 live births
Neonatal mortality	47 deaths per 1,000 live births	34 deaths per 1,000 live births	N/A	31 deaths per 1,000 live births
Malnutrition rate: -Stunting -Wasting	 39% 4%	 33% 3%	 N/A	 N/A
Maternal mortality	1,155 deaths per 100,000 live births	1,024 deaths per 100,000 live births	618 deaths per 100,000 live births	567 deaths per 100,000 live births

Source: LHDS, 2009 and 2014 & 2016 Population Housing Census

3.1.2 Health sector indicators

Table 3 shows the indicators for measuring the performance of the health sector over the period of implementation of draft NHSP 2012-17. There has been an increase in the number of people infected with HIV between 2009 and 2017 (AJR). Infection rates were higher in females than in males. Women aged between 15 and 49 years recorded the highest infection rate. And the percentage of eligible HIV positive persons receiving ARV has increased from 42% in 2014 to 64% in 2017.

Under reproductive health services, antenatal and postnatal care services improved between 2009 and 2014 as reported in the LDHS. More children were fully immunised

in 2017 (71%) compared to 68% in 2014. Performance of the indicators is presented in Table 3.

Table 3: Performance of the health sector indicators

INDICATOR	COUNTRY STATUS			2023 NATIONAL TARGET
	2009	2014	2017	
		HIV and Tuberculosis		
Percentage of women (15-24 years) who are HIV infected	10	13.1	11.1	7
Percentage of women (15-49 years) who are HIV infected	27	29.7	29.7	27
Percentage of men (15-24 years) who are HIV infected	4	6.0	3.4	4
Percentage of men (15-59 years) who are HIV infected	18	19.6	19.1	18
Percentage of HIV positive pregnant women who received complete course of ART	31	N/A	N/A	40
Percentage of HIV positive pregnant women who received ART for PMTCT	N/A	74	90.16	90 (HIV NSP,2013)
Proportion of HIV positive women, men and children that are receiving ARV in line with national guidelines	26	42	64	40
Percentage of people still alive 12 months after initiation of ARVs	74	82.7	N/A	80
TB treatment success rate (%)	72	70	76	74
Child Survival				
Percentage of children aged 12-23 months fully immunized	60	68	71	70
		Reproductive Health		
Percentage of women provided ANC by health professional	92	95	95	95
Percentage of women provided PNC within 48 hours	47	62	62	Data not available
		Water & Sanitation		
Population using improved drinking water source (%)	76.7	82.2	82.2	
Population using improved sanitation facilities (%)	25.1	50.9	46	
% of households with hand washing facility and soap and water	N/A	46	46	

		Quality Assurance		
Percentage of clients satisfied with services offered at hospitals and health centres	66 (AJR exit survey)	92	N/A	73
		Management		
Percentage of districts supported or supervised quarterly	No data	70 (AJR 2015/16)	N/A	50
		Finance		
Proportion of GoL budget allocated to the health sector	11%	11 (AJR, 2015/16)	12	15
Percentage of sector recurrent budget expended	82%	92 (AJR, 2015/16)	95	94
Percentage of sector capital budget expended	91%	39 (AJR, 2015/16)	62	96

3.2 HEALTH SYSTEM PERFORMANCE

This section is organised along the six health system blocks, taking into consideration the Ouagadougou Declaration on PHC, community ownership and participation which constitute the cornerstone of the Government Decentralisation Agenda.

3.2.1 HEALTH SERVICE DELIVERY

Health service delivery at all levels of care involves the implementation of the Lesotho Essential Health Service Package (ESP). The ESP as defined by WHO, is a set of the most cost-effective, affordable and acceptable interventions for addressing conditions, diseases, and associated factors that are responsible for the greater part of the disease burden of a community. It also involves the implementation of activities to strengthen the health system to deliver on the essential health service package. The Lesotho ESP is reflected in table 4.

Table 5: Lesotho Essential Service Package

1. ESSENTIAL PUBLIC HEALTH INTERVENTIONS
    a. Health Education and Promotion;
    b. Child Survival – Immunisation; Nutrition; Management of Common Childhood Illnesses;
    c. Environmental Health
2. COMMUNICABLE DISEASE CONTROL
    a. STI;
    b. HIV/AIDS;
    c. TB
3. SEXUAL AND REPRODUCTIVE HEALTH
    (ante-natal care; management of deliveries; post-natal care; family planning; adolescent health; cancer screening – cervix, breast and prostate)

4. ESSENTIAL CLINICAL SERVICES

a. Common illnesses (diabetes; hypertension; eye infections; skin disease)
b. Oral health;
c. Mental Health

Although the list excludes other health conditions, it does not mean that those services are eliminated from the services provided by GOL, but rather this list will constitute the priority interventions for public spending at the described levels of care.

To effectively implement these interventions at the national, district and community levels, the Ministry of Health has established and will continue to strengthen a comprehensive support system comprising the building blocks of health systems.

HIV and AIDS

The overarching goal of the HIV and AIDS programme is to achieve universal access to prevention, treatment and care for HIV and AIDS services for the people of Lesotho. In line with the UNAIDS strategy, the MoH strategy targets zero new infection and zero AIDS-related deaths and adopts the 90-90-90 strategy.

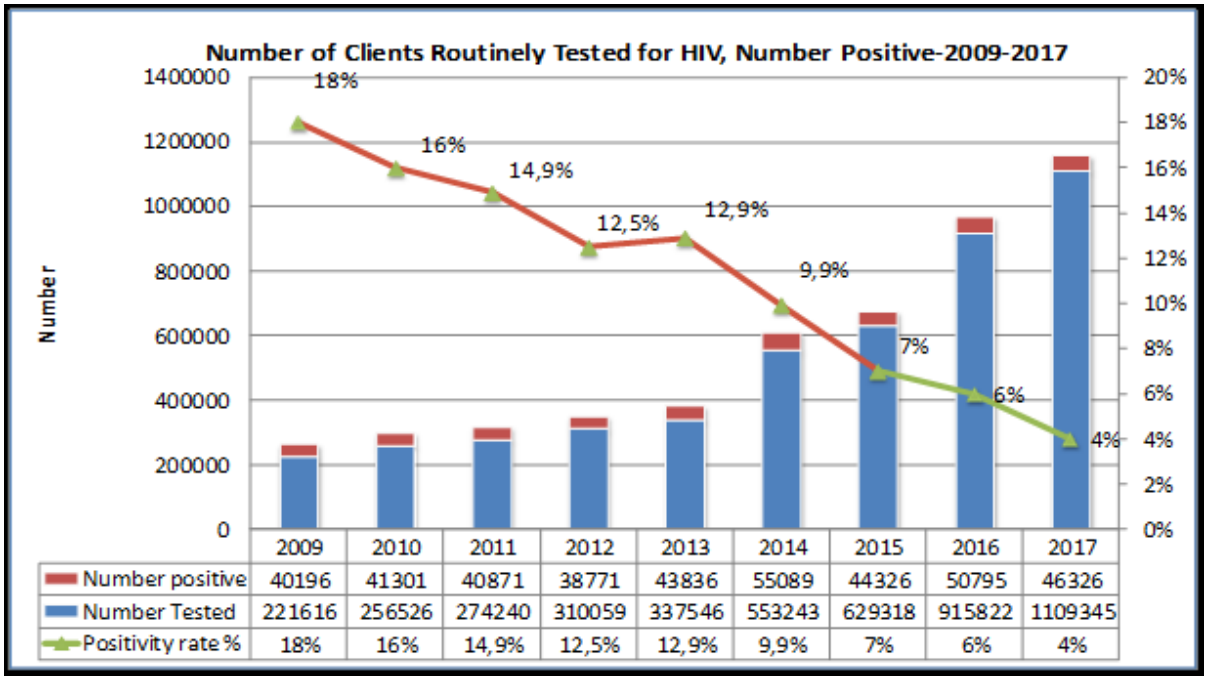
Lesotho is said to have a generalised HIV epidemic with 25% of adults aged between 15-49 years being HIV positive according to 2014 LDHS. In 2016, HIV prevalence was recorded to have slightly increased to 25.6% which corresponds to about 306,000 people aged 15-49 living with HIV. (LePHIA 2017) The prevalence rate is higher in women (30%) than in men (19 %). HIV prevalence in women is highest between the ages of 35 and 39 years at 46% and in men at 44%[8] between 40 and 44 years. Key populations with high HIV prevalence include female sex workers (FSWs), men sleeping with men (MSM), migrant and factory workers and transgender persons. HIV prevalence in key populations is higher than in the general population with prevalence of 72% among FSW, 43% among factory workers and 33% among MSM.

According to 2014 LDHS HIV incidence for adults aged 15-49, was 1.9 new infections per 100 persons-year (PY) of exposure and it was observed to be less in women (1.7 per 100 PY) than men at (2.1 per 100 PY). In 2016, HIV incidence among adults aged 15-59 was estimated to be 1.47. (LePHIA 2017). The number of new infections has declined from an estimated 18,870 new infections in 2007 to 14,706 in 2017. (Spectrum Estimates, 2018)

The MoH is currently providing HIV testing and counselling in 264 sites according to DHIS2. The number of people tested for HIV increased from 628,683 in 2015 to 1,109,345 in 2017 however HIV yield is declining even with the advent of Test and Treat. . The number of HIV positive clients increased from 44,326 to 50,795 in the years 2015 to 2016 respectively and a decline to 46326 was realised in 2017. (AJR 2017/18). .

[8] 2014 LDHS

Figure 1: HIV Testing services: 2009-2017



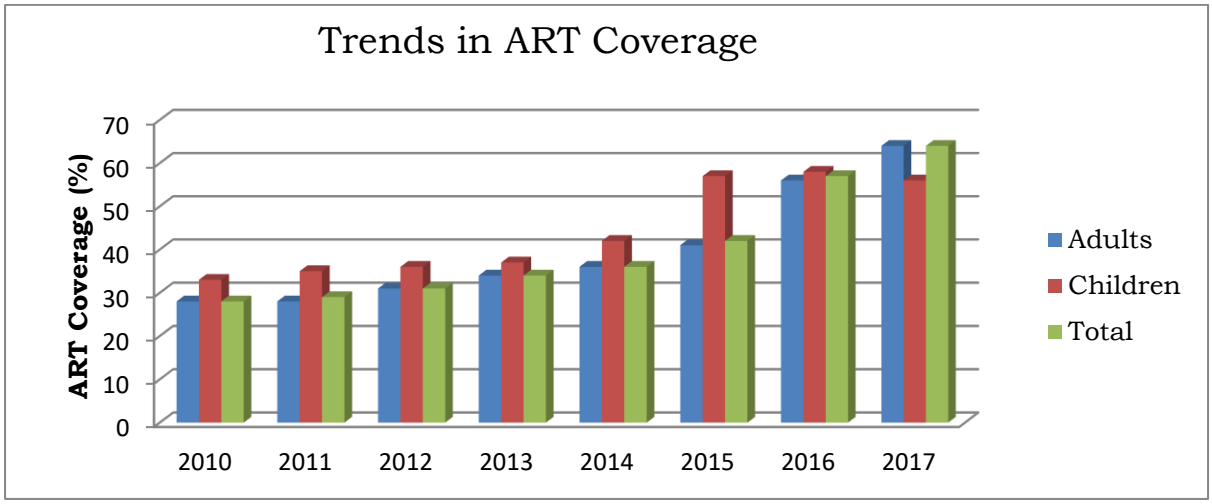
Voluntary Medical Male Circumcision (VMMC)

The VMMC program was adopted in 2012 as one of the preventive strategies for HIV and AIDS. The trends in VMMC show that since inception of the program the most circumcised age group was 10-14 years followed by 14-19 years. In 2016, 18,939 males for age group 10-14, were circumcised while 13,916 males for the same age group were circumcised in 2017.There has been a decline in the total number of males circumcised from 34,157 in 2016 to 25,150 in 2017 as reflected by the Annual Joint Review Report 2017/18.

Coverage of Antiretroviral Therapy (ART)

The current estimated HIV population in need of ART is about 297,000 adults and 13,000 children. There has been a gradual increase in ART coverage among adults and children since 2012. In 2015, the national coverage of ART was 42%. ART Coverage in the figure below was calculated using denominators from spectrum estimates. ART coverage of 64% was attained in 2017. (AJR 2017/18)

Figure 2: Trends in ART Coverage for Adults and Children, 2010 – 2017



The global policy for scaling up ARV, 90 90 90, test and treat was launched in 2016. The national target is to reach ART coverage of 80% in adults and 85% in children by 2020. This strategy will support efforts at increasing ART coverage and contribute to reducing new infections. During the roll out of test and treat strategy the sector will also seek to address the current challenges of loss to follow-up, low yield of HIV positive clients, high dropout rate and poor record keeping.

In 2015, 67% of HIV positive clients enrolled on ART received services at the health centre and 32% at the hospital level. Number of people enrolled on ART increased from 175,272 in 2016 to 201,758 in 2017. ART coverage was recorded to have increased to 64% in 2017 from 57% in 2016. (AJR 2017/18)Mortality among HIV positive clients enrolled on ART is highest at six months of enrolment in all districts ranging between 6% and 11% compared to other retention periods. National mortality rates for retention periods of 12, 24 and 36 months for HIV positive clients enrolled on ART are 8%, 2% and 2% respectively. AJR Report (2015)

Tuberculosis

Tuberculosis is among the top ten leading causes of morbidity and mortality and it is a major public health problem in the country. In Lesotho TB is among the prioritised diseases and consistently resources have been increased to the health sector to support the NTP. The National Tuberculosis Programme (NTP) strategic plan is aligned to the World Health Organisation Stop TB strategy and addresses the social determinants of health. Key components of the strategy include:

- Advocacy for increased resources to NTP,
- Improved infection control and prevention of transmission of TB at workplaces,
- Increased coverage of TB/HIV activities
- Engagement with all care providers and stakeholders,

- Community empowerment
- Promotion of TB research.

There has been a steady decline in TB prevalence rate since 2012. However, in 2015, the TB prevalence rate increased slightly from 648 to 671. In 2012 and 2013, deaths due to TB (excluding HIV) per 100,000 population remained at 55 and increased to 64 in 2014. The estimated TB mortality in 2016 was 49 deaths per 100,000 population. There has been an increase in mortality rate for HIV/TB from 223 2015 to 238 in 2016 per 100,000 population. TB case detection rate (CDR) declined from 52% in 2012 to 49% in 2014. TB incidence rate for Lesotho is high compared to regional and global rates, however there has been a decline in 2015 to 2016 from 788 to 724 per 100,000 population. According to 2015 TB Annual Report, TB treatment success rate was 69% in 2014. NTP Annual Report (2015).

Reproductive, Maternal, New-born, Child and Adolescent Health and Nutrition (RMNCAH & N)

RMNCAH and N services in Lesotho will build on past achievements and using lessons learned, putting in place effective interventions to address the identified gaps in the coverage, availability, access and quality of RMNCAH and N services that are holding back progress towards significant reduction of RMNCAH and N related morbidities and mortality. The Goal of the RMNCAH and N is to reduce by 50% RMNCAH and N related morbidity and mortality in all the target groups. To achieve this, the RMNCAH and N programs will pursue the defined strategic objectives to address the key bottlenecks in RMNCAH and N service delivery including the weaknesses in the health system capacity to support the implementation of RMNCAH and N interventions packages. The strategies and priority actions also take into consideration the contribution of other sectors and line ministries to improve RMNCAH and N health outcomes and the need to reach the vulnerable, marginalized and hard to reach populations.

Maternal and New-born Health

Lesotho's maternal mortality ratio is among the highest in the region. The Government of Lesotho had set a target to reduce maternal mortality to 300 deaths per 100,000 live births by 2015 but this was never achieved. The SDG target is at 70 deaths per 100,000 live births and the current target for MMR for Lesotho is still at 300 per 100,000 live births. Maternal Mortality Ratio (MMR) has decreased from 936 per 100,000 live births in 2006 to 618 per 100,000 in 2016.

Between 2009 and 2014, focused ANC (4 Visits) increased from 70% to 74% and immediate postnatal care increased from 53% to 60.9%, with facility delivery increasing from 58.7% to 77%. Delivery by skilled personnel has increased from 62% to 78%. (LDHS 2014) Although skilled delivery has increased, this has not translated into improved quality of maternal and new-born care services, hence high maternal and new-born deaths. This was further reflected by the EmONC assessment (2015) which indicated sepsis as the leading cause of maternal mortality in Lesotho.

Prevention of Mother to Child Transmission (PMTCT)
The primary goal for implementing PMTCT is to reduce new childhood HIV infections, provide treatment and reduce HIV related deaths in infants and mothers. Lesotho adopted Option B+ strategy in 2013. There are 198 facilities offering PMTCT services in Lesotho according to DHIS2.

In 2015, the coverage of effective antiretroviral treatment for preventing mother to child transmission of HIV was sustained at 74% from the year 2014 and the target is to attain 90% by 2021. The estimated MTCT rate at 6 weeks was 5.9% in 2015 and 5% and less is the target for the year 2021.

Family Planning
Overall fertility rates in Lesotho have declined from 3.5 in 2004 to 3.3 in 2009 and remained at 3.3 in 2014. (LDHS 2014) It is recorded to be one of the lowest in the sub-Saharan region, and it is still higher among the poorest and in rural areas. This may be associated with early marriage and childbearing which is a common phenomenon in these populations as well as the lesser educated therefore the need to focus on these areas and groups.

Family planning (FP) services are provided by all health facilities at all levels of care except for some facilities owned by some religious denominations. Provision of FP services has been integrated into sexual and reproductive health and HIV and AIDS services. Contraceptive Prevalence Rate (CPR) has increased from 47% in 2009 to 60% in 2014 while unmet need for family planning reduced from 23% to 18 % in the same years respectively. The main FP methods most utilised by the population are the pill, condom (male and female) and injectable. Among the main challenges faced by the Family Planning programme are low provider competence and unavailability of appropriate equipment for insertion of IUDs as well as stock-outs of FP commodities.

In 2014, a survey was conducted to assess availability of modern contraceptive methods and lifesaving medicines. The survey reported that condoms (both male and females), oral contraceptives, injectable and emergency contraceptives were available in 80% of health facilities. This study also found that each health facility experienced stock-out of at least one modern contraceptive at primary level service delivery points (SDPs) during the year.

Adolescent health services
The aim of adolescent health is to improve the health status of adolescents and young people. Adolescent pregnancy has been fluctuating at the rate of 25%, 41% and 19% (LDHS 2004, 2009 and 2014) respectively. Available data on adolescent health is not segregated and this poses challenges for coming up with appropriate interventions for age groups. Although policies and legal frameworks exists to enable implementation of adolescent health interventions, issues of coverage are a challenge due to limited resources both human and financial. Empowerment of gatekeepers is also a challenge as there are no current evidence based materials to build capacity of communities.

Gender Based Violence and Intimate Partner Violence

While gender issues are also within RMNCAH & N there are no up to date guiding documents for the health sector. Technical Committee has been established under the leadership of the Department of Gender in the Ministry of Gender, Youth, Sports and Recreation (MGYSR), the participation of the MoH in its activities has been limited. Increased collaboration between this Technical Committee, MoH and other stakeholders would enable synergistic behavioral Change Communication. According to the Lesotho Gender Based Violence Indicator Study conducted in 2013, more than half (52%) of women experienced, and 27% of men perpetrated, emotional Intimate Partner Violence (IPV) in their lifetime.

Intergraded Management of Childhood Illnesses (IMCI)

MoH has developed Child Survival Strategy in 2012 with an intention to improve provision of child health services and interventions at all levels of care. The Ministry therefore plans to develop a monitoring and evaluation plan towards achieving the child health related indicators. The goal of the IMCI M&E plan is to measure and track the impact of intergraded child health interventions, so as to accelerate reduction of child morbidity and mortality.

The Ministry has adopted WHO community IMCI guidelines and started implementing the guidelines in 2018 in five districts (Butha-Buthe, Mokhotlong, Maseru, Mafeteng & Mohales'Hoek).IMCI as an intervention, to reduce child morbidity and mortality has no data collection tools and hence no baseline data.

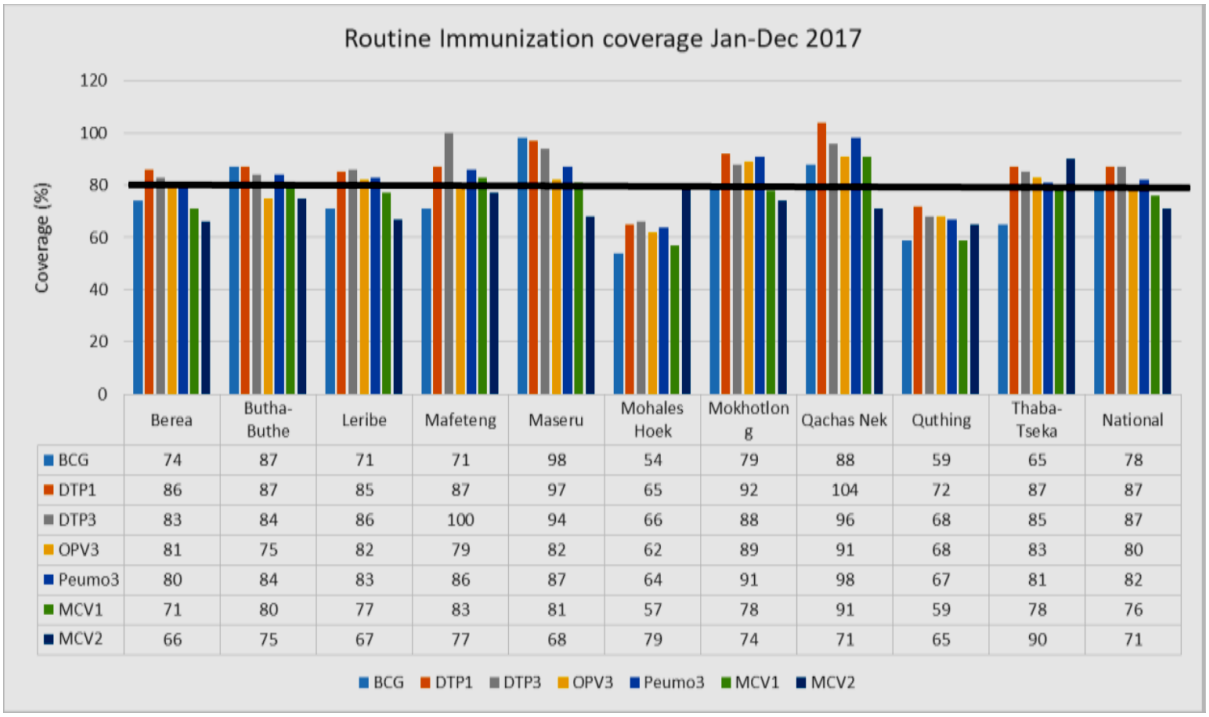
Expanded Programme on Immunization (EPI)

The national EPI programme aims to provide vaccines for vaccine preventable diseases namely tuberculosis, diphtheria, whooping cough, tetanus, polio, hepatitis B, measles, Haemophilus bacterial meningitis, pneumonia and tetanus toxoid.

Lesotho introduced rubella containing measles vaccine (MR) and Rotavirus in 2017 and is planning to reintroduce Human Papilloma Virus Vaccine for prevention of cervical cancer targeting females aged 9 to 13 years. Pneumococcal vaccine was introduced in the second half of 2015. At the end of December 2015, the coverage pneumococcal vaccine was 62%.

The 2014 LDHS reported that 68% of children under one year were fully immunized. According to routine data, third dose of pentavalent has remained relatively consistent and was 67% in 2015. Measles coverage was 60% in 2013 and by 2016 had increased to 66%. According to AJR 2017/18, most districts achieved 80% routine immunization coverage with the exception of Quthing and Mohales Hoek districts as depicted in the figure below.

Figure 3: Trends in National Immunisation Coverage Performance



	Berea	Butha-Buthe	Leribe	Mafeteng	Maseru	Mohales Hoek	Mokhotlong	Qachas Nek	Quthing	Thaba-Tseka	National
BCG	74	87	71	71	98	54	79	88	59	65	78
DTP1	86	87	85	87	97	65	92	104	72	87	87
DTP3	83	84	86	100	94	66	88	96	68	85	87
OPV3	81	75	82	79	82	62	89	91	68	83	80
Peumo3	80	84	83	86	87	64	91	98	67	81	82
MCV1	71	80	77	83	81	57	78	91	59	78	76
MCV2	66	75	67	77	68	79	74	71	65	90	71

The Demographic and Health Surveys conducted in 2004, 2009 and 2014 and the coverage survey done in 2013 showed coverage figures around 80% for all antigens, which are better than the administrative coverage but still lower than the 90% target at national level.

Factors contributing to low immunization performance include the following:

- Vaccine stock-out and poor vaccine management
- Low uptake of strategies proved to improve immunization service delivery such as the Reaching Every District/Child/Community approach
- Missed opportunities due to scheduling of immunisation services in some health facilities

Nutrition

In 2012, the vulnerability assessment report estimated that about 36% of the population will face food insecurity. The 2012 AJR also identified weak collaboration among nutrition partners, and on one hand between nutrition partners and the community, shortage of nutrition staff, stock-out of therapeutic commodities and the quality and completeness of nutrition data and reports as some of the challenges facing the programme. Stunting has reduced from 39% in 2009 to 33%, in 2014 while breastfeeding has remarkably increased and has surpassed the target for sub- Sahara Africa. The country has implemented many interventions to improve nutrition such as development of IMAM guidelines, however scaling up these interventions is a challenge. His Majesty King Letsie III has been nominated as the African Union champion for nutrition.

Non-Communicable Diseases
The National Multi-sectoral Integrated NCD strategic plan was developed and costed in 2014 and endorsed in 2015 to address issues of Non-Communicable diseases in Lesotho. However implementation of the strategic plan is affected by limited financial resources.

Cancer
The main illnesses contributing to the non-communicable disease burden are cardiovascular diseases, chronic obstructive pulmonary diseases (COPD), diabetes and cancer. In the WHO, Global Burden of Disease Estimates, cancer accounts for 17% of all global NCD deaths and 4% of all deaths in Lesotho. Lesotho had no cancer surveillance system and registry in 2012. Data recording tools for cancer had not been standardised and data on cancer cases were not readily available. The most common types of cancer cases seen at outpatient departments were cancer of the cervix, breast cancer, prostate cancer, cancer of the blood

Systems for cancer surveillance, recording and reporting have improved in the period 2013 to 2016. The percentage of district hospitals with functional cancer screening equipment increased from 6% in 2013 to 72% in 2016. The number of hospitals with functional cryotherapy machines also increased from one (1) in 2014 to twelve (12) in 2016.

Diabetes
In 2015 through 2017, diabetes was among the top causes of admissions and deaths in female adults. (AJR Report 2017/18) According to the STEP survey conducted in 2012, diabetes prevalence was 4%. This is an increase from the prevalence reported by the diabetes population survey conducted in 2001, in which diabetes prevalence was 1%.

Hypertension
Nationally there is no baseline information on hypertension, and the programm is intending to develop M&E framework which will facilitate the indicators to be reflected into the DHIS2.

Mental Health
Mental health services are provided in all health facilities and at the community level. The Government of Lesotho seeks to ensure universal access to mental health services by all who need it. The most common mental health illnesses seen at outpatient departments include epilepsy, mood disorders, psychosis, developmental and behavioural disorders, alcohol, drug and substance use disorders, dementia and HIV and AIDS neuropsychiatry disorders.

Shortages of psychiatrists and psychiatric nurses, social workers, occupational therapists and psychologists were the major priority gaps needed to be addressed under mental health programme. Though mental and psychiatric health service are being rendered at all levels of care the, mental health Act (1964) is no more addressing the current mental and psychiatric health issues such as forensic psychiatric. In 2012, the Act was reviewed and has not yet been approved.

A total number of patients seen in forensic unit at Mohlomi Hospital in 2017 was 47 males and 3 females. The common mental illnesses seen at outpatient department has been dominated by schizophrenia over 2015-2017 period. (AJR 2017)

Tobacco use

The Government of Lesotho has ratified the Framework Convention on Tobacco Control (FCTC). Though smoking is prohibited in all public places and government offices and premises, there is no legal basis for enforcement. The National Tobacco Policy and strategy are still in draft form and awaiting approval while the National Tobacco Control Bill has been submitted to parliament for enactment

Alcohol use

The Government of Lesotho has adopted the WHO global strategy for reducing the harmful use of alcohol, and in 2012 National Alcohol Policy was drafted but has not yet been approved. The main interventions for reducing the harmful use of alcohol are highlighted in the policy and they include, but are not limited to legislation, health promotion, counselling and treatment. The STEP survey of 2012 reported 31% of the population are consumers of alcohol with predominantly higher rates in men. Current drinkers were defined in the STEP study as those who consumed alcohol in the past 30 days. Between 2013 and 2015, alcohol was the most abused substance, followed by dagga and cocaine. The absence of a regulatory framework and policy on alcohol negatively affect the efforts to reduce the harmful use of alcohol.

Oral Health

The oral health programme seeks to ensure access to high quality, preventive, curative and rehabilitative oral health care services to all people living in Lesotho. Oral health care is provided as an integrated service in accordance with the principles of Primary Health Care.

Due to shortage of oral health personnel and challenges in infrastructure, oral health services in Lesotho are currently provided at national and district levels only. Limited services are offered at the health centre level where majority of the people in need of oral health services reside.

Dental caries was the most common dental problem at almost 80% seen at OPD followed by periodontal diseases at about 9%.Oral mucosal lesions and oral cancer were the least presented diseases at OPD for patients aged 12 years. About 67% of all procedures performed in the dental department were extractions while conservative treatment accounted for 5%. (AJR 2017/18)

There is no national baseline data to inform decision-making and policies except for the facility based data which does not truly reflect the prevalence of oral diseases in the country. The programme needs to conduct a national oral health survey to establish community baseline data for oral diseases and conditions. Many hospitals are currently in need of dental equipment and instruments. Lack of continuous maintenance of dental equipment and periodic stock-outs of oral health commodities are some of the priority challenges to be addressed to ensure continuous service delivery.

To address the human resource challenges, a three-year programme in dental therapy was started at the National Health Training College with an initial intake of ten (10) students in July 2016. Furthermore oral health programme facilitated the training of final year nursing students in 6 nursing training institutions as indicated by the 2017/18 Annual Joint Review.

Trauma and Injuries

The legislation with regard to road traffic accidents (RTA) is not addressing the current challenges, such as use of mobile while driving and child safety measure in a car. In order to reduce RTA multisectoral approach to coordinate all the efforts, and there are no facilities to manage pre-hospitalization and hospital capacity to handle trauma and injuries. Road accidents constitute the main direct cause associated with trauma and injuries. The main strategy being used to address the high levels of road accident is road safety campaigns.

In 2012, trauma was the 1st (16%) and 5th (6%) cause of admission in adult males and females respectively. In 2015, trauma remained the main cause of admission in adult males with 46 deaths (3.6%). Trauma as a cause of admission in adult females aged 13 years and above remained at 4% between 2012 and 2014. In 2015, trauma was not in the top ten causes of admission in adult females aged 13 years and above. Regarding the top ten causes of admission in children 12 years and below, trauma was 4% in 2014 and has remained at 4% in 2015. There has been a decline in the total number of admissions due to trauma in 2015 from 2,045 to 1,856 in 2016. The number of road traffic accidents and deaths reported by police in 2017 was 2130 and 320 respectively and deaths increased slightly from 318.

Environmental Health

The mandate of the environmental health is to provide technical and administrative support to ensure safe physical environment. The Environmental Health comprise of water, sanitation and hygiene, health care waste management, safe housing, occupational health and safety, food safety, pollution control and port health programmes. At the beginning of the period for the current strategic plan, there were challenges with lack of food testing equipment, lack of transport as well as low funding for environmental health in the national health budget.

The proportion of water sources that were safe for drinking increased from 31% in 2013 to 80% in 2016 and in 2017, seventy water sources had safe drinking water out of the 116 surveyed water sources. The percentage of health facilities with appropriate and functional waste disposal systems was 84% in 2016 while in 2017, out of 205 inspected health facilities 82 were using a 3 bin system. Sixty –three percent (63%) of all ports of entry had safe drinking water for travellers in 2016.

Clinical services

Clinical service has a number of department which for effective services delivery cut across primary health services though clinical by nature. The department under clinical services include mental health, Oral health, Pharmacy, Laboratory, Supply Chain Coordination Unit (SCCU) earlier discussed, and lastly nursing and midwifery. There

is a newly proposed service under clinical services that is renal dialysis. While x-ray imaging and ophthalmology are lacking.

Nursing and Midwifery Services

The nurses and midwives form the majority of health professionals and are found at all levels of health care. The department is mandated to provide **equitable, accessible**, **competency and evidence-based** nursing and midwifery care to all the people of Lesotho, in line with the policies of the Ministry of Health and the decentralization reforms. Nursing and midwifery profession can transform the way health actions are organized and how health care is delivered if regulated and well supported. The services offered provide a rallying point for inter- and intra-disciplinary health actions, which are at the core of the WHO Global strategic directions for strengthening nursing and midwifery 2016–2020. These global strategic directions further provide the framework for strengthening nursing and midwifery services to help countries achieve universal health coverage and the Sustainable Development Goals

Currently the department is not able to pursue its mandate as there is no database for the professionals, and the establishment list that governs the staffing of health facilities does not cater for the expanding services. This defeats the purpose of availability, accessibility, and quality of the nursing and midwifery workforce as stipulated in the WHO Global Strategic Directions for strengthening nursing and midwifery 2016–2020; as well as the World Health Assembly (WHA54.12) on strengthening nursing and midwifery capacity which can build resilience in communities to respond to diverse health conditions by having well trained specialized nurses and midwives distributed equitably to enable health service delivery.

There are achievements and challenges that need to be addressed through this strategic plan including increasing the number of professionals needed to deliver effective and efficient care; need for quality nursing and midwifery education and competent practitioners; making specialty more attractive, retention of the nursing and midwives across all levels of care, especially at rural health settings.

Outpatient Attendance

Outpatient (OP) attendance reflects availability, access to and use of health services. There was a reduction in Outpatient attendance between 2012 and 2015 from 0.7 in 2012 to 0.3 respectively[9]. The main cause of the reduction in the total OP attendance reported (AJR report 2012-2015), was due to incomplete reporting from districts and national hospitals. Some instances of the low reporting rates were due to the implementation of the Electronic Medical Records (EMR) software and shortage of human resources in most of the health facilities.

Burden of disease

As shown in Table 3 below, the most common causes of OP attendance in the general population over the three year period were cough and cold followed by hypertension and other skin subcutaneous tissue disorder

[9] AJR Report, 2017/18,

Table 6: Trends in Top Ten Causes of Outpatient Attendance in 2015, 2016 & 2017

Disease	2015	2016	2017
Cough and Colds	42%	44%	47%
other skin subcutaneous tissue disorder	13%	13%	14%
Other Disorders of Musculoskeletal and Connective Tissue System	11%	12%	12%
Hypertenson	15%	12%	10%
Vaginal Discharge	4%	5%	5%
Diarrhoea without Blood	4%	5%	3%
Tonsillitis	4%	3%	3%
Conjunctivitis	2%	2%	2%
Gastroenteritis	2%	2%	2%
Urethritis and urethral discharge (Male)	2%	2%	2%
Total	**100%**	**100%**	**100%**

Hospital Admissions

In 2017 the top two causes of admission in children were pneumonia and diarrhoea diseases. The top three causes of admission in adult females were incomplete abortion, diabetes mellitus and threatened abortion while in adult males, head injury and pulmonary TB, pneumonia were the causes as shown in the table below.

Table 7 Top 4 causes of hospitalization by age group in Lesotho 2017/18

Rank	Children (0-5 years)	Adults	
		Adult females	Adult males
1	Pneumonia	Incomplete Abortion	Head Injury
2	Diarrhoeal & Gastroenteritis	Diabetes Mellitus	Pulmonary TB
3	Malnutrition	Threatened Abortion	Pneumonia
4	Convulsions	Diarrhoea	Diarrhoea and gastroenteritis

Source: AJR, 2017/18

Causes of Adult and Child Hospital Deaths

During the 2015-2017 period, it was observed that pulmonary TB, Pneumonia, AIDS, diarrhoea and gastroenteritis accounted for most deaths among men while in women AIDS, stroke, anaemia, diabetes mellitus and pulmonary TB contributed to most deaths.

However in children aged of 12 years and below, unspecified protein energy Malnutrition, Pneumonia and diarrhoea have been the top three causes of hospital deaths. (AJR 2017/18)

3.2.2 HEALTH WORK FORCE

The Ministry of Health is responsible for the recruitment, training and development, management and distribution of the health workforce. The human resource function includes training, skill development, remuneration and benefits administration, employ relations management, development of HR policies, strategies and systems including the maintenance of human resource information system.

Ministry of Health (MOH) had a total of 3912 established positions at 31st March, 2018 out of which 2,791 were filled. Therefore the existing vacancy was 1,121 (29%). The distribution of HRH is not equitable by level of care. About twenty percent (20%) of human resources for health is distributed to the primary level where 60% of the services are offered and yet the remaining 80% is deployed to the secondary and tertiary levels that offer 40% of the health services. This is due to the fact that MoH structure is still centralised.

The processes for recruitment of HRH take a long time to complete within the MoH before submission to Public Service Commission for consideration due to a new policy that directs MPS to approve all recruitments before the ministries start recruitment process. The MoH has been implementing a retention strategy since 2011 which has contributed in curbing a high attrition rate of health professionals.

The MoH continued to invest in building the capacity of Human Resources for Health (HRH) to improve quality and efficiency in health service delivery. In an attempt to address shortage of health professionals in Lesotho, the Ministry of Health in collaboration with the International Organization for Migration embarked on engaging Basotho health professionals in the diaspora through the sequenced short term return programme. A Technical Working Group (TWG) was established to mobilize health professionals from South Africa, UK and US with the assistance of Lesotho's missions in those countries.

As per the agreement signed by SADC Health Ministers in November 2016, in Swaziland, nationals of SADC countries pursuing medical studies in the region are expected upon completion of their studies to return to their countries of origin to undertake their internship.

The Nursing Education Partnership Initiative (NEPI) programme was established with the primary goal of scaling up nursing and midwifery education to address shortage of nurses and midwives. At the end of FY 2014/15, NEPI provided 77 students with scholarships to enrol in Nursing Education and Training in Lesotho. The MoH also developed the face-to-face midwifery competency-based curriculum, approved by the Lesotho Nursing Council and implemented in 2014, with five schools offering diploma (Maluti, NHTC, Roma and Scott Schools of Nursing) offering the midwifery competency-based curriculum.

There are inadequate facilities and specialists to respond to the demand for cancer diagnosis and treatment in Lesotho. The government, with support from International Atomic Energy Agency (IAEA), plans to establish a national cancer treatment centre to accommodate the required health technologies and specialized HRH to provide quality cancer care to Basotho cancer patients.

At the end of 2014 financial year, seven (7) Basotho nationals were admitted to study Postgraduate diploma in Physics, at the University of Free State. Out of the seven Basotho Nationals, 4 were selected to pursue Medical Physics in different institution and one completed the programme in 2018 while two nationals are yet to complete the programme. Preparations are in progress to enrol the last candidate. Ministry of Health in collaboration with IAEA is further training seven (7) Radiation Oncologists and eleven (11) Radiation Therapy technicians as part of HR planned to manage the Cancer Centre.

In 2014, performance management training for thirty (30) human resource practitioners was organised. The concept of performance management was planned to be introduced at all levels of management to improve performance within the sector. The Human Resources Information Management System (iHRIS) is an important tool used to manage staff data. However, it was observed that staff information in the iHRIS database was not updated due to high attrition of HR in the Human Resource Department of the Ministry of Health (staff trained to manage iHRIS). A payroll audit was conducted with the Ministry of Public Service, Ministry of Development Planning and Ministry of Finance.

In an effort to improve effective management of staff information, Ministry of Public Service in collaboration with Ministry of Finance introduced Human Resource Information System (Resource Link) which is currently being used to manage HR and payroll information across the public sector.

The MoH restructuring is yet to take place and is expected to create more managerial positions. Meanwhile, a request has been sent to the Ministry of Public Service (MPS) for establishing directorates for Quality Assurance, Supply Chain Coordinating Unit, Pharmacy, Cancer, Oral Health, Blood Transfusion and Bio-Medical Engineering and Dialysis unit.

3.2.3 HEALTH INFORMATION AND RESEARCH

Health information system seeks to generate timely, quality and relevant information for effective health care decision-making at all levels of the health system. The system covers five inter-linked key areas of data collection/generation, validation, analyses, dissemination and use of health information for decision-making. Quality information is not only essential for each of the six health system building blocks, but it is also important for policy development, governance, health research and human resource development.

Key legal instruments that govern and strengthen health information and research include the National Statistics Act (2001), Registration of Births and Deaths Act (1973) and National Health Information System Policy and Strategic plan (2013-17). The Bureau of Statistics delegates collection, processing, analysis and use of health data to the MoH. However, the MoH has a shortage of staff to fully perform functions of health information.

The country has a functional Health Information Management system (HMIS). The system is informed by both routine and non-routine information sources. The government with the support of its partners has over the years facilitated the

development and strengthening of the health information system at different levels of the health system. A major milestone has been the introduction of DHIS2 although there are still remaining steps to ensure proper functionality. This has improved accessing and sharing of health information within the sector, with health partners and related line Ministries.

Routine sources of Health Information

Routine health information is mostly generated from routine facility reporting and administrative systems. These include data sources such as; Health Management Information System (HMIS), Integrated Diseases Surveillance and Response (IDSR), the Integrated Human Resource Information System (IHRIS), Laboratory Information System (LIS), Integrated Financial Management Information System (IFMIS), Electronic Medical Records (EMR). However, the main source of routine health information is the facility based HMIS.

The HMIS was revised in 2015 and a new system, DHIS2, was identified as ideal for strengthening of HMIS initiative towards routine health data collection and use. The system was initially piloted in two districts and showed good performance results and later scaled up to the whole country. The DHIS2 has enhanced the capabilities in terms of integration of previously parallel data collection systems i.e. HIV/AIDS, TB and Nutrition. Moreover, the system has capabilities to capture different data elements, undertake various analysis and produce reports.

Electronic Medical Records (EMR)

This is an effort made to capture and store patient information consistent (completeness and accuracy) and accessible as needed. The services need well trained and motivated staff to compute patient data accordingly. EMR System was piloted in one district (Leribe) and later rolled out throughout the country, in 16 hospital OPDs. However, the implementation of the system was not successful and the EMR assessment has been commissioned to identify bottle necks.

Integrated Human Resource Information System (IHRIS)

The Ministry established Integrated Human Resource Information System (IHRIS) to enable human resource tracking across the health sector (public, private, health training institutions and regulatory bodies) but this was not implemented effectively The system was under the project supported by Irish Government and was operated by human resource on contract basis. Skilled HR on IHRIS was transferred to other ministries hence operations of the system remained non-functional. The Ministry therefore needs to revive IHRIS to inform the current and future HRH need.

Telemedicine

Ann assessment was undertaken to establish country readiness for telemedicine. The results were shared with the Ministry. The Ministry needs to implement the recommendations to improve care and management of patients at all levels of care.

Ehealth

WHO and ITU survey indicated that Lesotho's ICT development index ranked at 126th out of 155 surveyed countries globally, and 19th out of 45 countries in Africa. Mobile-cellular subscriptions were determined to be at 75.30% of the population, ranking Lesotho number 50 out of 143 countries globally, and number 29 out of 48 countries

in Africa (WHO, 2016). Internet users were determined to be at 4.6%, ranking the country number 123th out of 189 counties globally, and number 20th out of 50 countries in Africa (WHO, 2014). And this shows that it is possible to implement ehealth.

The mission of MoH through ehealth is to promote and deliver quality and efficient health services to all Basotho using sustainable and integrated ICT solutions. In 2016 the Ministry developed an e-health strategic plan to coordinate multiple E-health approaches with the focus on; Health Information System, telemedicine/telehealth, eLearning. mHealth, ePresence and social media lastly administration information system. In spite of these initiatives, there are still challenges with data management and real-time data, data quality and timeliness and data use to improve services, which calls for programm and department coordination and commitment.

Non-Routine Sources of Health Information

Non-routine sources of health information are informed by data generated from health surveys, surveillances, assessments and census. The MoH has been able to routinely undertake population based and household survey, antenatal sentinel surveillance as well as health system assessments. Lesotho Demographic and Health Survey (LDHS) has been a key non-routine source of health information over the years in Lesotho. The recent LHDS was conducted in 2014 and it was the third since the country started undertaking the health population based survey. Other sources of health information for non-routine sources include; Multiple Indicator Cluster Survey, HIV/AIDS cohort studies, annual joint reviews, program performance assessments, national housing and population census.

Monitoring and Evaluation

The Monitoring and evaluation function includes management of health information system, conducting population based surveys and research. The primary objective is to ensure availability of timely health information, analysis, interpretation, dissemination and use of the evidence in decision making.

The Ministry has a performance assessment and accountability framework, where district level reviews are held every quarter. These reviews are attended by programme managers from HQ, DHMTs and partners. At the national level an annual review is held and attended by MoH senior managers, programme officers, partners and representation from parliament, Civil Society, health training institutions and representation from districts. The performance reviews bring together all stakeholders (including providers, funding agencies and civil society) in a participatory way to present and discuss performance. The health sector has a set of agreed indicators for routine reporting.

The last four years, has seen reduction of district quarterly reviews. The percentage of districts conducting at least two quarterly reviews annually has reduced from 90% in 2012 to about 20% in 2015. None of the ten districts conducted more than two quality assessment meetings in the same period. Funding is one of the main reasons affecting the organisation of district quarterly performance review meetings.

Health Research
Lesotho is one of the countries with high disease burden. To better understand the drivers of the disease burden and incidences there is an urgent need to invest and promote research. The Health Research policy and Strategic plan are in place, however the policy which was developed and approved in 2007 was for a five-year period and it is now outdated. The research strategic plan which outlines various health research strategies including health research agenda, coordination, dissemination and financing is still valid and effective until 2018. The Ministry needs to review and update both of these health research guiding instruments.

The unit does undertake minimal monitoring of research activities commissioned, hence a need to strengthen the unit with human resource such that monitoring is intensified to ensure adherence to set standards and ethical issues. Financing for health research from government needs to be improved in line with health research priorities defined in the research agenda for 2013-2018. Partners who are interested in conducting health research should align to the research agenda and information gaps required by the MoH to meet its objectives. Unfortunately, operational research is weak at all levels, owing to lack of personnel, structures, systems and budgetary provisions.

3.2.4 ACCESS TO MEDICINES, MEDICAL DEVICES AND HEALTH TECHNOLOGIES

Access to medicines (including traditional medicines) and medical devices includes devices, medicines, vaccines, biological equipment, procedures and systems (including E-health applications, Electronic Medical Records and tele-medicine applications).

Pharmaceutical Services
Pharmaceutical services are intended to improve legislation, regulation and the policy for medicines and supplies and are expected to be provided at all levels of health care. There is a need for enabling environment based on law for enforcement through Medicines and Medical Devices Control Bill, from which the Medicines Regulatory body will be established. The body will facilitate conformity to the set standards of quality, safety, and efficacy of pharmaceuticals. There is also need for availability and rational use of essential medicines and supplies which are affordable through the therapeutics selection process. Drug Supply Manual and Pharmaceutical Standard Operating Procedures (SOPs) are in place to manage essential medicines in all health facilities. There are also standard treatment guidelines and essential medicines list for availability and rational use of medicines. Medicines Policy 2005 has laid the foundation for Pharmaceutical Services to achieve the stated criterions for pharmaceuticals to operate through the following pillars:

Legislation and regulation
Enactment of legislation will ensure that all medicines circulating in Lesotho conform to the agreed standards of quality and safety by establishing autonomous Medicines Regulatory Authority that will regulate, license and inspect health facilities. Medicine and Medical Device Control Bill that was drafted in 2008 is currently awaiting approval by the Parliament. Drugs of Abuse Act 2008 has been utilised for control of narcotics and psychotropic drugs since 2008 and the section for cultivation and extraction of

cannabis products for medicinal use and research purposes, started to be implemented in 2017. Regulations for Drugs of Abuse Act 2008 are currently being developed and the cannabis cultivation guidelines are in place.

Technical Working Group has been established to provide guidance on medicine regulation, harmonization of multiple ordering systems for medicines and the review of all procurement and supply chain manuals and guidelines.

Among the challenges facing the pharmaceutical sector, the following can be highlighted:

- Slow enactment process of Medicine and Medical Device Control Bill which has resulted in the absence of Medicine Regulatory Authority and poor regulation of medicines,
- Tackling rational use of drugs and antimicrobial resistance

Cannabis

In 2008, Lesotho developed a legal framework (Drugs of Abuse Act 2008), which provides exclusively for medical and or research purposes only. The regulations were developed in 2018 while the guidelines are yet to be developed. The Lesotho Narcotics Bureau gazette was published in 2017. Cannabis use like other narcotics and psychotropic, has to comply with other Treaty Obligations of the International Narcotics Control Board (INCB). Governments around the world have authorized the use of cannabis for medicinal purposes and such permission is under Single Convention on Narcotic Drugs of 1961 as amended by 1972 Protocol.

Researches undertaken by different countries have proven cannabis to be effective on a number of diseases including chronic pain, diabetes mellitus, epilepsy, Alzheimer's, cancer, and a lot more other conditions of which are linked to the endocannabinoid system within the human body. The consumption of cannabis regardless of quality or potency has been proven that it cannot induce fatal overdose, this is according to 1995 review prepared for World Health Organization (WHO).

In 2017, cannabis licensing was done on the first come first serve basis because since promulgation in 2008 nobody expressed interest in the industry. Licensing was done by Minister of Health based on the Drugs of Abuse Act 2008 and at that time there were no regulations. The Ministry of Health submitted application for approval of estimates for quota of cannabis to International Narcotics Control Board (INCB) in 2017 per Single Convention Treaty requirements. During the period June 2017-in June 2018, 30 licenses of different types were issued and quota approval report was received in January 2019. Lesotho was allocated the highest quota in African block of member states. In 2018 after the publishing of the cannabis regulations and communication with INCB, the process of licensing changed as it is stated under Section 6 of the regulations.

Types of cannabis licenses:

License for cultivation,
License for manufacturing,
License for testing,
Operator license,
License for research (clinical trials and seedbank),
License for transportation of cannabis and License to supply cannabis.

There are over 400 strains of cannabis and the popularity of individual strain is based on the legal framework of the country and the uses within the different jurisdiction's permitted Tetrahydrocannabinol (THC) content and other alkaloids.

Challenges:

- There is no structure for the Medicines Regulatory Agency that will implement the new industry by undertaking inspections, licensing, registration of medicines and many other regulatory functions
- No vehicles to undertake inspections
- There is no Medicines and Medical Device Control Act. Some medicines produced from cannabis are not narcotics or psychotropic and have to be registered through that legal document irrespective of source.

Laboratory Services

Laboratory Services forms an integral part of health service delivery and are indispensable to health services, not limited only to communicable diseases and non-communicable diseases but includes an extensive array of available tests to support diagnosis, care and treatment of all major diseases. The dramatically increasing demands on the Laboratory Services are illustrated by comparing the total laboratory investigations of 861,074 in 2009 with 952,578 in 2012 at the laboratories, which amounts to 10.6% increase and implies high testing demand.

Implementation of the HIV National Strategic Plan will lead to further increase of laboratory testing with patients on ART increasing from 114,175 in 2013 to 277,449 in 2018. In 2016, the laboratory experienced a dramatic testing demand with adoption of new 90-90-90 targets that lead to increase of 5,362 Viral Load tests in January to 13,203 Viral Load tests in September of the same year. Laboratory Services developed scale-up strategy and plan to address the increasing patient diagnosis and treatment monitoring demand. Laboratory analysers and four (4) viral load machines were installed at National reference laboratories and district laboratories. The equipment has helped improve monitoring of viral load for HIV positive clients on ART and early detection of HIV positive infants.

In order to address enhanced TB diagnosis, the laboratory service has placed 29 GeneXpert machines in the 19 laboratories and 3 TEBA sites. The diagnosis of TB patients using GeneXpert machines has increased tremendously from 9,822 in 2015 to 28,270 in 2016; with1,641 and 5286 of the tests which were found to have TB in 2015 and 2016 respectively. In 2017, Laboratory Services was able to perform a total of 39,705 Gene Xpert tests for diagnosis of TB. Out of these, 2,621 new TB cases were confirmed

Laboratory services provide screening services to assist in diagnosis of cancer to provide information necessary for its management. Massive cervical cancer screening programs were established throughout the country and there has been a dramatic increase in PAP smear tests illustrated by the increase in the number of PAP smear samples tested which amounts to 34.4% (2013-2014), 44.5% (2014-2015) and 30% (2015-2016) respectively. For other cancer conditions, tissue samples are taken and processed in the national reference laboratory for cancer diagnosis.
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Laboratory Services implemented Laboratory Information Systems (LIS) to improve referral network of laboratories and to capture indicators that inform policy on disease trends. Currently the Laboratory Information System has been installed and is functioning in 17 laboratories. A tracking tool has been deployed to interface with the LIS system, to track samples from health facilities to district and national reference laboratories and provide feedback to the health facilities.

Blood Transfusion Services

The goal of the Lesotho Blood Transfusion Service (LBTS) is to ensure the availability of quality blood and blood products to all health facilities. The functions of the LBTS include recruiting blood donors, collecting, screening and storing blood, as well as distributing blood and blood products to all health facilities. The performance of the LBTS is measured by the availability of blood and blood products. About 45% of LBTS staff are temporary and engaged on contract basis.

Estimated country blood requirements is 10,000 units of blood. In the year 2015, LBTS has been collecting about 8,000 units of blood of which 98% was collected from voluntary non-remunerated donors (VNRD) and 2% was contributed by family replacement donors. About 70% of blood units were collected from high school students until the year 2015. With the introduction of a new school policy in 2016, that requires a consent from parents/ guardian for their children to donate blood, units of blood collected declined to about 5,000 units. Currently units of blood donated by VNRD has decreased from 98% to 70%. This has resulted in families and friends being charged with a responsibility to donate blood for their patients which does not cater for emergencies.

There has been an improvement in the LBTS data reporting with the installation and implementation of the Blood Safety Information System (BSIS). The LBTS worked with a few quality assurance firms including Thistle QA, South Africa Blood Service (SABS) and the National Health Laboratory Service of South Africa to improve the quality of blood and blood services. The MoH is working with the Africa Society for Blood Transfusion (AfSBT) for the accreditation of the LBTS. At the beginning of 2017, LBTS was assessed using the Africa Society for Blood Transfusion (AfSBT) for Stepwise accreditation standards and was found to be at step 1 with some challenges to be corrected. The accreditation process was put on hold for the entire year of 2017 due to shortage of staff and absence of strong national regulatory environment required for blood services.

Another important issue that requires attention is the poor communication between the LBTS, the blood donation clinics and health facilities which has often resulted in the cancellation of blood donation campaigns.

Supply Chain Management of Health Commodities
The MOH has set up the Supply Chain Unit with the aim of improving access to and availability of all health commodities in Lesotho. Apart from improving availability the units mandated to streamline and coordinate all supply chain activities in the country from quantification, procurement, storage, distribution, inventory management, logistics management system, etc. Supply Chain Unit conducted Leadership Development Programme trainings to health care workers at DHMT and Health Facilities to improve leadership and decision-making skills in 2017. The programme was implemented through cluster system model which facilitated peer to peer learning and support. The cluster model improved supportive supervising and mentorship conducted by DHMTs. Also supply chain management trainings were conducted in order to capacitate staff with best practise in logistics at health facilities and district level.

Supply Chain Unit has developed and submitted its Monitoring and Evaluation plan to the MoH planning department. The M&E plan illustrates all supply chain indicators used to measure performance of the entire system including NDSO service level. The unit has also submitted their organogram to MOH Human resource office to facilitated establishment of the Supply Chain Management Directorate (SCMD) within public service however there is no progress to date.

MOH through Supply Chain Unit in 2016 established Supply Chain Technical Working Group with the subgroup which included Quantification subgroup to facilitate and coordinate procurement of all health commodities. The subgroup executes these process by developing annual forecasting and provide information to the programmes for budgeting at central level. To improve coordination and data analysis at district level the unit developed terms of reference in 2017 and facilitated establishment of District Supply Chain Technical Working Groups (DSCTWG) as a coordination mechanism.

Specific supply chain challenges identified;

- Lack of financial and human resources
- Resistance by some MOH programmes to let go supply chain activities
- Poor coordination and monitoring of partners supporting and involved in supply chain by MOH higher level
- SCMD not officially established
- Poor health commodities budgeting by MOH programmes
- Poor participation by MOH programmes in supply chain activities (e.g TWG meetings and quantification)

Central Medical Store National Drug Service Organization (NDSO)
To improve availability of all health commodities in all health facilities in Lesotho, The National Drug Supply Organisation (NDSO) has been mandated by the MoH to Procure, Store and Distribute health sector goods to GoI, CHAL and Private Owned health facilities[10].

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The procurement function covers all aspects of acquisition and delivery of goods and services, spanning the whole life cycle from identification of needs to the end of service delivery or the end of useful life and subsequent disposal of an asset. Procurement is based on quantification that is informed by needs and trends.

In 2017, forecasting spreadsheet was developed at district level to be used by health facilities for estimating annual needs for all health commodities. The same tool is used to consolidate different facilities needs at DHMT level in to the districts forecast for the financial year. Several trainings were conducted including training of trainers to the District Logistics Officers, District Pharmaceutical Officers and Laboratory Heads who in turn conducts stepdown training to the health facility staff in-charge of supply chain activities at the health facility.

The challenges in procurement of health commodities are the delays in payment of suppliers by NDSO due to lack of funds or delays in payments by Ministry of Health, poor contract management for laboratory equipment and placement of platforms and lengthy procurement procedures. All these results in stock outs and shortages at health facilities. In February 2018 stock outs rate was 4.8% which is below target of 5% and international targets of 10%. The commodities which contributed most to the achievement of 4.8% were; HIV -Viral load reagents, HIV -RUTF, HIV -Female condoms, HIV -First line RTK, HIV -Second line RTK and HIV -Tie-breakers RTK at health facility level.

Storage and Distribution

National Drug Supply Organization (NDSO) in 2015 adopted and implemented the last mile distribution policy as a way of integrating distribution of all health commodities in order to improve availability and access at Service Delivery Points. Among other innovations for improvement in the distribution system, NDSO implemented routes optimization and activity based costing through the support of USAID Global Health Supply Chain – Procurement and Supply Management Project (GHSC-PSM) by Chemonics. Also, NDSO procured a cold chain vehicle to improve and maintain cold chain system for commodities during delivery. NDSO is now at a position to warehouse and distribute vaccines and controls for laboratory products. In April 2018 NDSO implemented Warehouse Management System (WMS) for improvement of stock accuracy, picking and packing of health commodities which results in reduced warehouse operational costs.

National Drug Supply Organization (NDSO) has worked on storage organisation by improving racking and renting sub warehouse in Berea- TY as overflow for all donor funded commodities. Furthermore NDSO started the process of constructing a warehouse in Mafeteng district in FY 2017/18 and the project is expected to be completed in FY2019/20.

Among challenges faced by NDSO are the following;

- Storage capacity due to poor procurement planning and cycle
- Poor coordination of donations to the country by MOH partners and other government ministries
- Increased distribution cost due to multiple deliveries caused prolonged process in purchasing of category B products (district budgeted and purchased commodities)

- Delays in submission of requisitions by DHMTs

Storage and inventory management at Health Facilities
Supply Chain Unit implemented last mile delivery of laboratory commodities in 2016 to the health centres in order improve point of care services as well as integrated storage and distribution system at this primary healthcare level. Furthermore in 2016 the unit piloted informed push strategy for streaming, reporting and requesting of all health commodities. Currently the system is working only with category A commodities (centrally procured commodities e.g. ARVs, TB, FP, Laboratory, etc). The system was roll out in mid-2017 to early 2018.

Through the use of District Logistics Officers (DLOs), supply chain performance at health facilities is being tracked and monitored on quarterly basis by conducting data quality assessment. The activity covers verification on the use of inventory management tools and good storage practices. The checklist is used with different indicators and tracer commodities from different MOH programme commodities.

Supply chain challenges at district and facility level
- Storage security and space at health facilities
- Lack of supply chain staff
- Poor inventory management leading to stock outs, shortages and wastage
- Lack of data due poor reporting
- Lack of data analysis for decision making at district level and facility level
- Inadequate supportive supervision and mentoring by district
- Poor requisition processing and verification by districts
- Failure to submit annual forecasts to Supply Chain Unit and NDSO by districts and their facilities

3.2.5 HEALTH FINANCING

Financial resources are scarce; therefore, governments and households inevitably should prioritize so as to distribute them in a functional manner. Health financing deals with sourcing, pooling and distribution of funds to cater for various aspects of the health systems, as well as the needs of the population. The government is committed to the Abuja Declaration of allocating at least 15% of government budget to the health sector. The objective of health financing is to ensure that people are protected from catastrophic health expenditure because of using health services and to ensure that resources are equitably allocated and used efficiently.

In 2012-2017, the MoH sought to develop and implement health policies and strategies on health financing, institutionalise National Health Accounts, strengthen financial management skills at all levels and establish a social health insurance scheme as well as revive the sector-wide approach within the health sector. However, these measures were not achieved over the past five years, hence need to be considered in the next strategic plan.

Out-of-pocket (OOP) expenditure, as a percentage of total health expenditure has been reducing since 2011. Out of Pocket (OOP) expenditure in 2011 was 15.6% and 14.4% in 2013. In 2015, government expenditure on health as a percentage of total

government expenditure was 11% from 14.4% in 2013. Ministry of Health abolished user fees at the primary level of care (Health Centres) and introduced standardized fees at secondary (hospital) level of care in 2008.[11] In the absence of further details on the OOP by districts and wealth quintile, the reduction in the percentage of OOP expenditure, two years after the abolishing of user fees at primary level seem to suggest that the policy did not increase OOP expenditure on health on households. However, some more analysis will be needed to identify possible effects on access due to the introduction of standardised fees at secondary level of care.

Though the nominal value of government total health expenditure on health increased, the rate of government allocation to health compared to GDP and per capita expenditure on health declined. Donors fund a significant proportion of the health capital budget. A robust health financing system needs to be in place to monitor equity in resource allocation and efficiency in the use of resources.

Table 4 indicates that per capita expenditure on health in US dollars reduced from $113 in 2011 to $98 in 2013. The percentage of government expenditure on health to total government expenditure between 2011 and 2013 remained the same at 14.5%. Government spending on health a percentage of Gross Domestic product reduced from 9.2% to 9.1% from 2011 and 2013. Other financing indicators that measures government financial commitment to the health sector reduced over the period 2011 and 2013.

Table 4 Health Financing Indicators – 2011-2013

Health Financing Indicators	2011	2012	2013
External resources for health as a percentage of total expenditure on health	26.3	30.2	35.1
General government expenditure on health as % of gross domestic product (GDP)	9.2	9.5	9.1
Total expenditure on health as a percentage of GDP	11.9	12.1	11.5
General government expenditure on health as a percentage of total health expenditure on health	77.5	78.6	79.1
General government expenditure on health as a percentage of total government expenditure	14.5	14.5	14.5
Out-of-pocket expenditure as a percentage of total expenditure on health (%)	15.6	14.8	14.4
Per capita government expenditure on health (US$)	113	108	98
Per capita total expenditure on health (US$)	146	138	123

Source: Lesotho Statistical Factsheet, Africa Health Observatory, WHO Africa Region, WHO, Geneva, 2016

3.2.6 LEADERSHIP AND GOVERNANCE

Leadership and governance describes the foundational role of government and the health Ministry within the health context and its relationship with actors and stakeholders who directly and indirectly impact upon health outcomes. Leadership and

[11] AJR report, 2012, p9

governance in health is a function of the Ministry of Health (MoH) which has the legal mandate to ensure equity in access to health care services. Governance for health includes formulation of national health policy and strategic plans; exerting of influence through regulation and advocacy; gathering and using information and accountability for achieving health outcomes.

Policy and legislation environment in the sector

The Ministry of Health in the last decade has had several challenges with the development, revision and approval of policies as well as enactment of legislations. There are several health bills and strategic documents (plans) in various stages of development. This resulted in lack of coordination of partners, fragmentation in the implementation of programmes and weakened accountability. Some contributing factors to the delays include: absence of a framework outlining the process to be followed for the approval of strategic documents; high staff turn-over at the senior level (policy and technical units) which affected consistent guidance on the required processes.

Restructuring of the Ministry of Health

There were delays in the reorganisation of the MoH which resulted in stalling the process of creating new managerial positions and filling existing managerial vacancies. Some managers have been in acting positions at MoH central level for a long time while others are deployed to positions that do not exist and without clear terms of reference and job descriptions; hence they are demotivated which affects their performance. The 2015/16 Annual Joint Review (AJR) report indicates that the current organisational structure is contributing to the slow pace of achievement of health outcomes.

Planning and Budgeting

The leadership in the Ministry provides consistent guidance to the programmes, districts and health facilities in preparing annual operational plans and annual budgets using both a bottom-up and top down approaches. All programmes and districts have annual operational plans and budgets. At health centre level, the proportion of health centres with costed annual operational plans was 16% in 2013, 55% in 2014 and 46% in 2015[12]. The percentage of health centres who know their budget has remained at 46% in those three years. There is a need to strengthen joint planning and budgeting process with development partners at central and district level. All programmes at central and district levels need to be informed of their share of the budget following its approval in order to reprioritise their activities.

Coordination and Public-Private Partnership

The MoH has two major Public-Private Partnership (PPP) arrangements in an effort to ensure private sector engagement in health care services provision. These includes the PPP Agreement with Tsepong (PTY) Ltd that designed, constructed, financed and is managing the national referral hospital and the three filter clinics as well as the headquarters office complex PPP project. However, the Ministry is unable to reap envisaged benefits of the arrangements due to the low capacity in terms of HR numbers and necessary contract management skills of the PPP Unit to manage such complex contracts.

[12] 2013, 2014, 2015 AJR

In 2012, the Ministry of Health, with support from International Financial Corporation (IFC), piloted a Health Care Waste Management PPP project in 15 health centres of Leribe, Berea and Maseru districts and 2 district hospitals (Berea and Maluti) in an effort to improve the occupational health and safety and national health care waste management practices. The project was to pilot the collection, transportation, treatment and disposal of health care waste from the selected health facilities.

The Government of Lesotho and the Millennium Challenge Corporation (MCC) funded a programme for renovation, expansion and construction of some of the 154 health facilities in the country. With support from International Finance Corporation (IFC), a Health Facilities Management PPP project was initiated but not implemented to ensure the sustainability of the refurbished facilities, improve the HCWM, Information, Technology and Communication (ICT) including connectivity in 165 health centres.

The MoH has a memorandum of understanding with Christian Health Association of Lesotho (CHAL), Lesotho Red Cross Society and selected private health care providers to provide health services. The arrangement with CHAL and LRCS is working well but there are areas that need improvement. The MoU with CHAL expired in 2013 while that of LRCS expired in 2015 and both need to be reviewed and updated to reflect the current situations. The subvention release is often delayed, resulting in disruption of services expected to be provided to the population. The challenge is that the Ministry still practice passive purchasing of health care services while most of the countries are moving towards strategic purchasing of health services.

There are currently more than twenty memoranda of understanding signed with different organisations for provision of healthcare services of which most are addressing HIV/AIDS and TB. The monitoring and coordination of the implementation of signed MOUs remains the challenge for the PPP unit and this is due to inadequate HR within the Unit and general poor coordination of health partners.

Decentralisation

The MoH is one of the pilot Ministries implementing the decentralisation policy. There has been considerable engagement with the Ministry of Local Government and Chieftainship Affairs (MoLGC) on the structures and functions for decentralised health units at the district level. Selected services to be decentralized have been gazetted. The District Health Management Teams (DHMTs) have been formed and are operational in all districts. Functions, responsibilities and reporting relationships between the decentralised health units and the central MoH have not been defined. Job positions and establishments are yet to be formally agreed.

The Health Centre Committees (HCCs) and Hospital Boards are in place though in government facilities the committees and boards do not have authority. The structures are also not clearly linked to the overall decentralisation reform.

3.3 STRENGTHS, WEAKNESSES, OPPORTUNITIES AND CHALLENGES (SWOC)

This section analysis the strength, weaknesses, opportunities and threats of the Health Sector.

Table 8: Strength Weaknesses Opportunities and Challenges

STRENGTHS	WEAKNESSES
• Availability of functional systems for joint review and accountability • Availability of a competent , trained health workforce • Commitment to government policy on decentralisation • Functional health information, monitoring and evaluation systems • Systems and capacity for Planning at national level • Tools, guidelines, policies, standards available • Strong PHC and Laboratory infrastructure • Access to quaternary care in outside Lesotho • Ehealth draft strategic plan • Draft health sector ICT policy • Consistent Government funding to the health sector • Abolishment of user fees at the primary health care level (Health Centers) •	• Slow pace of approving amendments to outdated policies, frameworks and protocols • Inadequate capacity to implement health system reforms • Inability of the health sector to influence other sectors to perform their roles that influence health Weak managerial capacity at district level • Low level of knowledge and awareness in eHealth and health informatics • Shortages of ICTs staff, particularly at district level • Uncoordinated and weak referrals system with impact on continuity of care • Lack of HR plan and slow recruitment process • Lack of integrated all-inclusive HR information system • Lack of partner coordination • No health care financing policy • Poor data quality • Low use of evidence in decision making and programme development • No defined resource allocation criteria for the districts • Uncoordinated management of transport and assets • Low health worker productivity because of poor health mainly linked to high HIV and AIDS prevalence[13] • Outdated Public Health Bill • Delay in renewal of MOUs • Some critical staff supported but donors which is not sustainable
OPPORTUNITIES	**CHALLENGES**

[13] NSDP 2012-17

• Availability of global and NGOs support to improve health Committed Development and implementing partners • Availability of national ICT platform • Government commitment to Public-Private Partnership • Government decentralisation policy and strategy • Impact of rapid demographic change with a large labour force and reducing dependency ratio[14] • Financial commitment for GoL domestic financing of the health budget • Health as a policy priority for government • Commitment to national policies and strategies • Public Private Partnership (PPP) initiatives of providing health care and other services • Renewal of MOU with implementing partners and civil society • Support from partners towards strengthening health information management • Increased demand for information by stakeholders • New Innovations in health technologies	• High HIV incidence and prevalence rate • Increasing burden of communicable and non-communicable diseases • The burden posed by HIV and AIDS as well as Tuberculosis • Sustainability of some proprietary ICT solutions • Worsening determinants of health and implications of climate change • Frequent staff attrition • Unavailability of Health Service Commission • Macroeconomic trends leading to increased fiscal pressure • Unavailability of task shifting and task sharing policy • Frequent change in leadership and administration • Unpredictable donor funding • Weak regulation of traditional and alternative health services •

3.4 KEY ISSUES AND HEALTH SECTOR PRIORITIES

3.4.1. KEY ISSUES

Health Service Delivery

- High burden due to TB/HIV/AIDS as evidenced by a high incidence and prevalence of TB/HIV and AIDS
- High mortality rates especially maternal mortality rate
- Increasing burden of NCDs
- Increasing number of admissions and deaths due to trauma and injuries
- Inadequate response to address high prevalence of alcohol, tobacco and substance abuse

[14] NSDP 2012-17

- Low coverage of key child health interventions including immunization, nutrition, and IMCI
- Increasing patient's populations and capacity needs due to ART scale up.
- Poor response on gender issues
- Constraints on service delivery and personnel for mental health, oral health, and cancer services
- Limited funding for environmental health and health promotion interventions.
- Quality of secondary and tertiary health services and non-institutionalization of quality improvement and mortality reviews
- Capacity to maintain and upgrade existing infrastructure and equipment as needed
- Weak systems for referrals between levels
- Limited health system capacity in preventing, detecting and responding to public health emergencies.

Health Workforce

- Weak performance management system
- Limited resources to expand the National Health Training College (NHTC) and other training institutions in the country to introduce more programmes to address current and future HR capacity gaps
- High attrition rate in the health sector
- Absence of a functional system for coordinating pre and in-service training programmes
- Inadequate human resource for health (relevance, quality & and numbers)
- Mismatch between the established posts and demand for HRH for all cadres at different levels
- Unavailability of HR plan and slow recruitment process
- Unavailability of task shifting and task sharing policy
- Some programmes in the MoH are not established
- Some key positions in MoH without substantive officers
- No comprehensive and all-inclusive HRH information system
- Absorption of donor recruited human resources for health
- Delays in implementing key strategies for retaining health workers
- Community Health Workers not being part of the formal human resources for health
- Unavailability of posting policy

Health Information and Research

Data Generation

- Proliferation of several data collection mechanisms that are not harmonised
- Weak patient level data collection system in the health sector
- No unique identifier for patients
- Weak mechanisms for monitoring the conduct of commissioned health research to ensure adherence to the guidelines
- Weak usage of new system health information system (DHIS2)
- Non-alignment of ehealth and health ICT solutions to eGovernment policies
- Low investment in eHealth in the health sector

- Uncoordinated eHealth interventions

Information validation
- Poor data quality and management

Information Analysis
- Inadequate systematic reviews on priority health topics (operational research) identified within the health sector
- Low level of technical capacity in eHealth in the health sector
- Low funding for health research
- Inadequate capacity to undertake programme performance monitoring and evaluation

Information Dissemination
- Inadequate capacity for Decreased number for districts to undertake quarterly performance reviews
- Inadequate capacity to conduct research dissemination forums

Information Utilization
- Inadequate use of health information for decision-making at all levels
- Weak national structures for health research
- Low level of technical capacity in health research
- Lack of operational research

Access to Medicines, Medical Devices and Health Technology
- Weakness in supply chain system leading to frequent stock out of essential medicines and other commodities at all levels.
- Inadequate capacity and skills of DHMTs and hospitals in procurement and supply chain management
- Absence of regulation and monitoring to tackle the problem of substandard and counterfeit medicines including monitoring of private pharmaceutical services.
- Inequitable distribution of high quality and affordable medical technologies, medicines, vaccines, diagnostics and other procedures to meet the needs of all Basotho
- Absence of medical regulatory authority
- Irrational prescription of medicines leading to increasing rate of antimicrobial resistance
- Inadequate supply and use of laboratory services to enhance service delivery
- Lack of joint efforts such as inspection of pharmaceutical manufacturing companies and assessment of dossiers with regional and international bodies as indicated by the protocols
- Lack of monitoring and regulation of traditional and complimentary medicines
- Procedural delays at central level that slows down procurement at district level

Health Financing

Resource Mobilization

- Proportion of capital expenditure funded by Donors is high and not sustainable.
- Resource allocation criteria need to be revised and used
- Macroeconomic trends leading to increased fiscal pressure
- Strong financial commitment for GoL domestic financing of the health budget but resources are not sufficient

Financial Risk Pooling

- Absence of National Health Accounts (NHA) to track the flow and use of financial resources in the health sector
- Absence of a health financing policy and strategy that will ensure attainment of financial risk protection and sustainability
- Challenges in implementing fiscal decentralization
- Low absorption of the capital budget
- Recurrent budget absorption high - but no correlation with outcomes and impact.
- Absence of a social health insurance burdens government to finance health services

Provider payment mechanism

- Partial implementation of result based financing initiatives for the health sector
- Absence of alternative financing mechanisms for purchasing of health services

Leadership and Governance

- Organisational restructuring of the MoH with no clear job descriptions at all levels
- Delays in the processes for the review and update of protocols and standards for programmes
- Slow process of reviewing and getting bills to be ratified into law
- Incomplete decentralisation processes and planning for organisational structure, functions and capacity building of the decentralised health departments
- Inadequate technical capacity of MoH staff to evaluate, negotiate and manage PPP proposals, projects and contract
- Weak sector collaboration coordination
- Outdated code of conduct/ framework to guide the management of MoH relationships with its stakeholders (Development Partners, NGOs and Private sector)
- Differences in the management of Village Health Workers by different providers.
- Non-functional health centre committees and hospital committees
- Some key positions in MoH without substantive officers
- Poor inter-sectoral collaboration in health development
- Poor fleet and asset management
- Need for national scale up of VHW program
- Inadequate capacity on programme evidence based planning and budgeting for all levels

3.4.2. HEALTH SECTOR PRIORITIES

- Tuberculosis and HIV &AIDS
- Non Communicable Diseases
- Maternal & Child Health and Nutrition
- Primary Health Care
- key populations & Vulnerable Groups

CHAPTER FOUR: HEALTH SECTOR STRATEGIC DIRECTION

This chapter will draw heavily on National Health Policy (NHP) 2019, giving strategic direction on strategic objectives and actions. NHP (2016) goal is to achieve Universal Health Coverage, including financial risk protection, access to quality essential health care services, safe, effective, quality and affordable essential medicines and vaccines for all people living in Lesotho by 2030. The overarching objectives being:

- To reduce morbidity, mortality and human suffering among the Basotho
- To reduce inequalities in access to health services
- To strengthen the pillars of the health system

4.1 VISION

By the year 2023, all people living in Lesotho shall have productive life, access to affordable and sustainable quality health services

4.2 MISSION STATEMENT

The Ministry of Health is committed to promote, prevent, cure, rehabilitate and control diseases at all levels with special focus on the primary health level; through well-developed health systems by competent health workers. Thus, contributing to the attainment of improved health status and quality of life with our stakeholders to ensure responsiveness to the health sector clientele' needs.

4.3 GOAL

To reduce morbidity and mortality and contribute to the attainment of improved health status among people of Lesotho.

NHSP will also espouse the core values and guiding principles as in the NHP (2016)

4.4 CORE VALUES AND GUIDING PRINCIPLES

4.4.1 Core Values

The following are key core values articulated in the Constitution of Lesotho, Vision 2020 and other International and Regional Conventions that guide the health sector policies:

1. Integrity
2. Responsiveness

3. Innovation
4. Public accountability
5. Commitment to high quality services

4.4.2 Guiding Principles

Political Commitment

The Government is committed to poverty reduction with emphasis on economic growth and social protection. This commitment will provide the critical guidance in priority-setting and resource allocation to the health sector. Commitment to this National Health Strategy will be required at all levels of political, civil and cultural leadership.

Primary Health Care Approach

In accordance with Alma Ata declaration of 1979 and the Ouagadougou Declaration 2008, the Government of Lesotho shall provide essential health care services that are universally accessible and affordable to all Basotho. Emphasis will continue to be placed on effective application of its principles and elements as well as Health Systems Strengthening.

Equity

In accordance with the Constitution of Lesotho, all Basotho shall have equal access to basic quality health care services. Particular attention shall be paid to resource distribution patterns in Lesotho to identify and accelerate the correction of any disparities. Special attention shall be given to the disadvantaged regions and underserved communities in the country. Services shall be community based taking into consideration special socio-cultural circumstances.

Affordability

The Essential Health Package shall be free of charge or highly subsidized. Other services shall be obtained for nominal but affordable fee. The fee structures for such services shall take into consideration the wide range (variation) abilities of Basotho to pay. Alternative options for health financing shall be explored.

Community Involvement

Communities shall be actively encouraged and supported to participate in decision-making and planning for health services. Through ownership of community projects, communities will be managers of sustainable primary health care programmes in their own areas.

Integrated Approach

This lays the ground for a common approach and for a common front to improve the quality of life. The health service provision will continue to approach health issues holistically such that treatment of diseases will be coupled with aspects of nutrition, hygiene and promotion of healthy lifestyles, mental health considerations, and

responding to climate change.

Sustainability

The ability for a service to continue into the future is referred to as sustainability. New and ongoing programmes will be subjected to sustainability assessment.

Efficiency of Resources Utilization

As much as possible, resources shall be allocated to the greatest benefit of the population. Cost-effective interventions would be prioritized.

Inter-sectoral Collaboration and Partnership

Government and non-state actors will be consulted and involved in implementation, monitoring and evaluation of health service provision using effective and efficient collaborative mechanisms.

Quality

Efforts will be made to ensure that all Basotho receive quality health care services. National norms and guidelines and standards of services shall be periodically reviewed, formulated and applied to ensure that good quality services are provided.

Gender Consideration

Gender sensitivity and responsiveness shall be applied in health service planning and implementation. Special consideration shall be accorded to females due to their culturally constructed lower status in the society and to their special role in reproduction. Wherever males are disadvantaged, special effort will be made to address the disparities.

Ethics and Human Rights

Health workers shall exhibit the highest level of integrity, confidentiality and trust in performing their work. They will observe ethical conduct guided by ethical guidelines, which will be enforced by professional councils/associations. Health service consumers and health workers shall be protected by legislation, specifying their rights and channels of appeal. Both providers and consumers of health services shall be oriented to human rights based approach in health.

4.5 STRATEGIC OBJECTIVES

The National Health Strategic Plan has six strategic objectives based on an integration of the nine priority areas contained in the Ouagadougou framework for Primary Health Care and the six WHO Health system building blocks. The six objectives cover health service delivery, human resource, health information and research, access to medicines, medical devices and health technologies, health financing, leadership and governance. Strategies for partnerships and community ownership and participation have been included under the objective for leadership and governance.

Strategic Objectives

1. To ensure equity in access to good quality health services at all levels of care.
2. To ensure availability of equitably distributed, well-trained and motivated health workforce to deliver effective health services
3. To improve ICT and eGovernance systems and infrastructure for timely, relevant, accurate and complete health information and health research development
4. To Increase access to quality and safe health technologies, including medical devices, laboratories, medicines, and vaccines
5. To ensure an equitable, efficient and sustainable health financing system that protects people from financial catastrophe and impoverishment because of using health services
6. To strengthen leadership and governance, partnerships and improve community ownership and participation

4.6 SPECIFIC OBJECTIVES AND STRATEGIES

1. Health Service Delivery

Specific Objective 1.1:

To ensure access to basic primary healthcare services that are safe, effective, well organized, people-centred, culturally appropriate and prioritised to support vulnerable populations.

Strategies

1.1.1Stregnthen the control, elimination and eradication of vaccine preventable diseases.
1.1.2 Provide universal access to disease prevention, diagnosis, treatment, care and support in line with the latest WHO guidelines.
1.1.3Promote access to safe, effective and acceptable sexual reproductive, maternal, new born, child, adolescent health and nutrition services.
1.1.4Improve facility and community based health care and support to vulnerable groups, including children and women.
1.1.5Implement a comprehensive communication strategy to improve health education and promotion services.
1.1.6Promote and collaborate with other stakeholders in the prevention, diagnosis, treatment and rehabilitation, palliative care of communicable and Non Communicable Diseases.
1.1.7Ensure control and elimination of neglected tropical diseases
1.1.8Develop guidelines for the partnership with traditional and allopathic practitioners in the context of Basotho culture.
1.1.9Ensure CHW programme is functional to deliver people centered services with linkages with other community based services
1.1.10Strengthen and sustain an integrated school health programme

Specific Objective 1.2:

To scale up coverage and equity in the provision of health services (promotive, preventive, curative and rehabilitative), strengthen and enforce referral system for continuum of care to achieve Universal Health Coverage.

Strategies

1.2.1 Provide quality, equitable, effective and efficient preventive, curative and, diagnostic, healthcare services for all.
1.2.2 Establish rehabilitative and palliative care services
1.2.3 Review Essential Health Package and ensure services are integrated at all levels of health care delivery including all social intervention programmes.
1.2.4 Ensure required standards of care are maintained in all health facilities.
1.2.5 Strengthen supportive supervision and mentorship at all levels of care.
1.2.6 Strengthen capacity for laboratory and diagnostic services.
1.2.7 Establish a cancer centre, strengthen and sustain cancer services.
1.2.8 Strengthen referral and linkages system to ensure continuum of care

Specific Objective 1.3:

To support all levels of health care and other relevant stakeholders in developing more resilient health systems to, prevent, detect, respond and ensure recovery from public health emergencies.

Strategies

1.3.1 Strengthen Public health emergency preparedness and response system at all levels (adopting evidence based solutions for preventing, detecting, mitigating and responding to manmade and natural hazards using the all hazards approach).
1.3.2 Promote safe and healthy environment: food safety, adequate safe drinking water, sanitation and hygiene (WASH), occupational health, port health pollution control, health care waste management, vector and rodent control and housing.
1.3.3 Strengthen port health services at points of entry to address IHR issues
1.3.4 Strengthen emergency communication system

Specific Objective 1.4:

To empower individuals, families and communities to play their role in prevention, treatment, care and support, rehabilitation, palliative care and promotion of health

Strategies

1.4.1 Support community dialogue and awareness campaigns on lifestyles and health outcomes.

1.4.2 Strengthen coordination and collaboration between service delivery areas and community-based organizations, NGOs and CSOs for health development.
1.4.3 Establish community based programmes with linkages to existing community based structures.

Specific Objectives 1.5:

To ensure standards for construction and maintenance of health infrastructure and equipment are available and enforced.

Strategies

1.5.1Define/adapt, sustain and disseminate standards for equipment, and for construction and maintenance of infrastructure
1.5.2Strengthen supervision for construction and maintenance of infrastructure and equipment

2. Health Workforce

Specific Objective 2.1:

To scale up availability and strengthen performance of the health workforce for improved service delivery

Strategies

2.1.1Support health professional bodies in legislations and regulations that govern the conduct of health professionals.
2.1.2Review and implement HRH retention strategy Review, update, cost and implement HRH strategic plan
2.1.3Implement performance management system
2.1.4Advocate for establish Heath Service Commission
2.1.5Develop and implement a task shifting and task sharing policy
2.1.6Advocate for improvement of health curricular in higher learning institutions to address current and future HRH capacity gaps
2.1.7Implement a coordinated pre and in-service training programme at all levels
2.1.8Timely absorption of donor supported health workforce (prioritised) into the government establishment – mindful of an already high government wage bill
2.1.9Develop guidelines and procedures for engagement of HRH in partner supported programmes
2.1.10 Support higher education institutions to provide quality and relevant health professionals for enhanced health service delivery.

Specific Objective 2.2
To ensure equitable deployment and redistribution of quality health workforce across the country
Strategies

2.2.1Development and implementation of posting and redistribution policy and guidelines
2.2.2Strengthen HR database that provides evidence on allocation and distribution of staff
2.2.3Maintenance of appropriate skill mix of health workers with competencies relevant to the needs of the population

3. Health Information and Research

Specific Objective 3.1:

To ensure a robust and integrated health information system for, evidence-based planning and resource allocation at all levels of the health system

Strategies

3.1.1Ensure availability of quality health information.
3.1.2Strengthen the governance and stewardship of the ministry towards health management information system
3.1.3Maintain data warehouse that captures all sources of health data and generate national approved data for use by all stakeholders
3.1.4Establish business intelligence solution for recording, consolidation, analysis, reporting and publication of all health data.
3.1.5Review and implement national dictionary of health indicators
3.1.6Build capacity of the health sector to effectively generate, manage, disseminate and utilise health information at all levels of the sector for program management and development
3.1.7Strengthen monitoring and evaluation together with surveillance system for the health sector
3.1.8Enhance the coordination and planning of surveys within the health sector
3.1.9Institutionalize routine data quality assessments (RDQA) and periodic data audits for DHIS2 information

Specific Objective 3.2:

To leverage eHealth to promote and deliver quality and efficient health services to all Basotho using sustainable and integrated ICT solutions

Strategies

3.2.1 Ensure availability of quality HIS solutions and safe guard the security of health data and information
3.2.2Establish and support national eHealth steering committee and Technical Working Group
3.2.3Align eHealth and ICT solutions and strategies to national eGovernment policies and national eHealth strategy
3.2.4Establish a system for standardization of ICT hardware and software
3.2.5Develop a system and various web based outlets to enable targeted health information to be conveyed to health workers and general public

3.2.6Improve the quality, safety and efficiency of clinical practices by giving health care workers increased access to consumer health information, clinical evidence and clinical support tools
3.2.7Use ICT as a strategic tool at all levels in the health sector so that resources are utilised more efficiently and effectively
3.2.8Support health work force capacity building by utilising cost effective technology

Specific Objective 3.3:

To strengthen National Health Research Systems (NHRS) for generation, dissemination and utilization of research in addressing the health needs of the population

Strategies

3.3.1Strengthen National Health Research System (NHRS) to ensure good governance of research processes.
3.3.2Build capacity for high quality research and mobilize resources for financing research based upon Algiers Declaration on Health research.
3.3.3Support partnerships between international, regional and local research institutions for sharing evidence and harnessing research capacity.
3.3.4Ensure functionality of documentation centre to preserve knowledge on traditional and western medicine to inform future studies on efficacy and safety medicines.
3.3.5Strengthen the governance structures for health research (National Research Ethics Committee and institutional Review Board) for ethical clearance of proposals and scientific trials.
3.3.6Generate in-depth data on health status through research and surveys.
3.3.7Promote the utilization of research findings for policy and programme formulation

4. Medical Products, Vaccines and Health Technologies

Specific Objective 4.1:

To increase access to quality and safe and efficacious technologies including affordable medicines, medical and rehabilitative devices, laboratory services, traditional and alternative medicines, vaccines, procedures and systems

Strategies

4.1.1 Advocate for enactment of medicines and medical devices control bill that establishes national medicines regulatory authority
4.1.2 Strengthen rational use of medicines to curb the problem of antimicrobial resistance and irrational use of medicines.
4.1.3 Review and update the national medicines policy and essential medicines list & standard treatment guidelines biannually.
4.1.4 Strengthen Pharmaceutical Services and implement the National Medicines Policy.

4.1.5 Promote local production of medicines that comply with Good Manufacturing Practices and are in line with local, regional and international standards.
4.1.6Support studies to monitor drug resistance.
4.1.7Adapt standards on health technologies, equipment and vaccines
4.1.8Strengthen and expand the provision of quality medical imaging and radiation therapy
4.1.9Establish pharmacovigilance and medicine information centre
4.1.10Establish pharmaceutical laboratory
4.1.11Decentralise TB laboratory services in 13 health centres.
4.1.12Implement typing of drugs resistance isolates for epidemiological purposes
4.1.13Strengthen quality of testing in line with national and international standards.

Specific Objective 4.2:

To ensure health products are available and are of the right quality, right quantity, at the right price, at the right place and at the right time

Strategies

4.2.1Support the establishment of relevant structures for supply chain management and strengthen capacity at all levels.
4.2.2Strengthen capacity in supply chain and procurement management at district level and below.
4.2.3Support quality and proper handling of health products throughout the supply chain.
4.2.4Ensure effective tendering and procurement processes and contract management.
4.2.5Strengthen quantification and forecasting of medicines, health commodities, medical equipment and devices.

5. Health Financing

Specific Objectives 5.1:

Ensure Equitable, efficient and sustainable health financing system that protects people from financial catastrophe and impoverishment due to use of health services

Strategies

5.1.1Develop and implement a health financing policy and strategy that will ensure sustainability and financial risk protection.
5.1.2Strengthen health financing monitoring through institutionalization of National Health Accounts (NHA)
5.1.3Implement health decentralization policy on financial decentralization
5.1.4Develop and implement a comprehensive resource allocation formula.
5.1.5Institutionalise strategic purchasing of health care services including results based financing.

5.1.6Strengthen absorptive capacity of capital budget
5.1.7Update and cost essential health package
5.1.8Explore other health financing mechanisms for purchase of health services

6. Leadership and Governance

Specific Objective 6.1

To provide strategic direction for health development through transparent and accountable governance.

Strategies

6.1.1Establish and strengthen a multi-disciplinary participatory coordination mechanisms at district and national level for developing, updating and monitoring of the National Health Policy, related policies, guidelines, National Health Strategic Plan, other strategies and operational plans.
6.1.2Advocate for timely approval of all policies and outstanding bills.
6.1.3Ensure health legislations, standards, regulatory frameworks are revised, well disseminated and enforced.
6.1.4Support the systematic and participatory assessment, documentation and feedback on the health sector performance.
6.1.5 Advocate for establishment of health service commission to ensure compliance to regulations and guidelines

Specific Objective 6.2

To ensure a functional decentralised health system, consistent with the National Decentralisation policy

Strategies

6.2.1Support the devolution of the health system according to defined functions as part of the national decentralisation policy.
6.2.2Ensure adequate allocation of resources to district level and support budget management and autonomy of health budget by DHMTs.
6.2.3Provide technical guidance, relevant guidelines and tools as well as building capacity to ensure functional DHMTs within local government structures.
6.2.4Establish a mechanism of coordinating decentralization and monitoring process of decentralization at district and central level
6.2.5Provide technical capacity to central level to offer guidance and support to DHMTs on decentralised health systems

Specific Objective 6.3

To ensure alignment and harmonization of health sector partner resources and activities with government systems within a coordinated framework that support integrated planning, budgeting, monitoring and evaluation

Strategies

6.3.1 Strengthen Partner Coordination
6.3.2 Create and institutionalize platforms for partners to participate in planning and monitoring of health services delivery at all levels of the health system.
6.3.3 Establish a functional PPP unit for contractual management of health PPPs and outsourced/purchased health care services.

Objective 6.4

To strengthen inter-sectoral collaboration in health development.

Strategies

6.4.1 Strengthen linkages and collaboration with other line ministries for integration of health issues into their sectoral policies to address social determinants of health
6.4.2Revive and operationalise comprehensive communication strategy to drive social mobilization and stakeholder participation.
6.4.3Provide leadership and advocate for mainstreaming health to ensure "health in all policies" approach in national policy discussions across relevant sectors.
6.4.4Support the use of health impact assessments (HIA) as a tool to measure potential public health impacts of plans, projects, and policies that fall outside of traditional public health areas, including transportation, land use, and energy, bringing these considerations to the decision making process in an effort to achieve health in all policies.

CHAPTER FIVE: COST AND FINANCING OF THE NHSP

5.1 NHSP 2019–2023 Budget and Costing

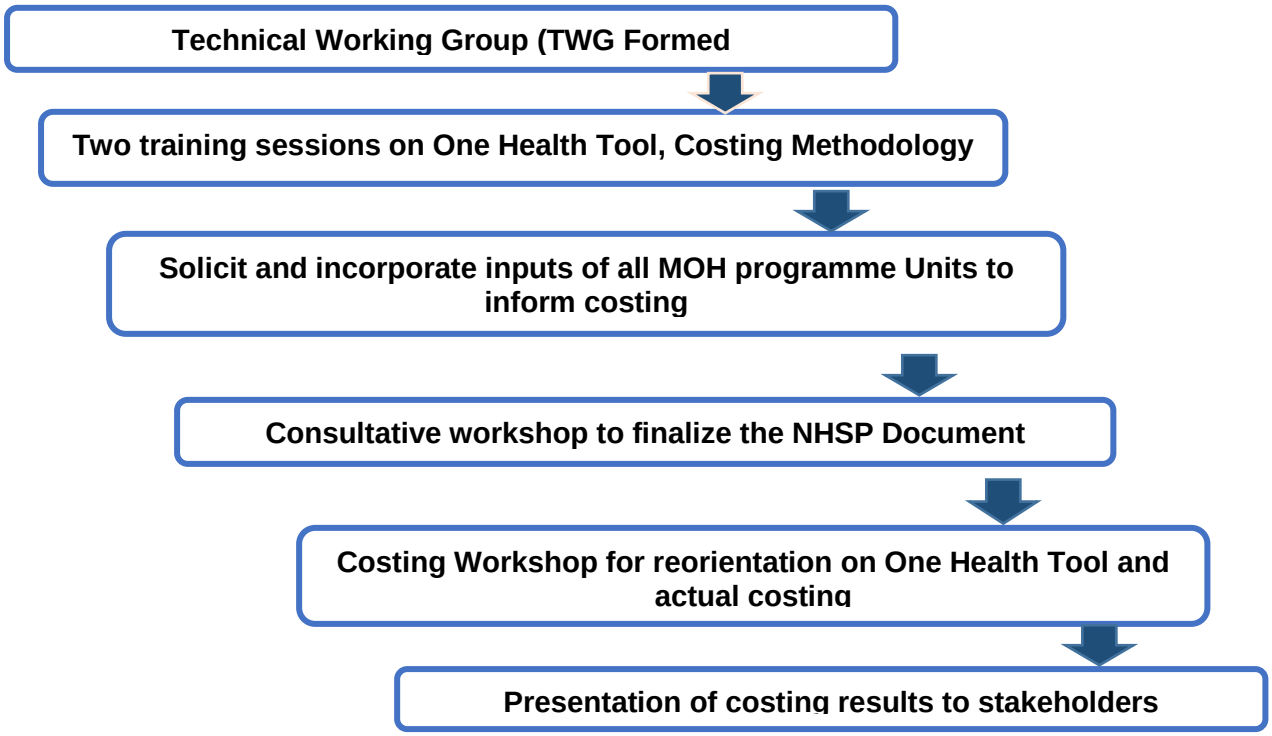
Lesotho National Health Strategic Plan (NHSP) 2018/19 – 2022/23 cost estimates and resources available for its implementation are vital preconditions to ensure realistic levels of ambition for the strategy. This will leverage the prioritization of planned investments and the design of appropriate measures to finance the emerging resource gaps. This section outlines the methodology used in costing the NHSP, and the estimates of available resource commitments within the country over the strategy period.

5.2 Costing Methodology

A bottom-up costing approach was adopted; cost projections are based on specific coverage targets and planned strategic actions. The total cost indicated in this strategic plan is the aggregate costs of health system inputs and programme management activities carried out for both central and district levels country wide. Additional cost estimates for delivering health services to achieve the desired coverage and impact targets are also discussed.

In order to facilitate the cost projections and ensure consistency, One Health Tool (OHT) version 4.757 was used. One Health Tool is a unified costing template that estimates the overall cost of delivering the package of health services identified in the strategic plan. The costing exercise was done through a consultative and iterative process of data collection, target setting and quality assurance to ensure alignment with the National Health Policy (2019), Draft National Strategic Development Plan (NSDPII), Sustainable Development Goals (SDGs), and other global targets, validation and harmonization to ensure accuracy of estimates.

Figure 4: NHSP Costing Process



Cost inputs were generated for the following health services and health system strengthening costs (direct and management costs) in order to guide overall costing of the National Health Strategic Plan (NHSP).

Table 9: Cost Inputs Components for NHSP Costing

Health Services Component	**HSS Component**
• HIV/AIDS • TB • RMNCAH&N • Non Communicable Diseases • Neglected Tropical Diseases • Health Education and Promotion • International Health Regulations • Environmental Health and WASH • Immunization	• HR(Admin and Service Delivery) • Logistics • Infrastructure including blood safety and laboratories • Governance • Health Financing • Health Information System (HIS)
Health Service Management Costs	**HSS Management Costs**
• Specific HR(donor supported staff) • Training • Annual Planning • Data Collection • Policy, Strategy and guidelines development and implementation	• Specific HR(donor supported staff) • Training • Annual Planning • Data Collection • Policy, Strategy and guideline development and implementation

Impact estimates are also presented in addition to total cost of the strategic plan for three different cost scenarios. Three policy scenarios have been modelled for costs and impact to guide stakeholders in arriving at the more cost-effective investment pathway for improving the nation's health status, with the limited available resources. The cost outputs for the three scenarios have been organized by programme area and health system building block. Additional outputs for programme management costs are also presented.

5.3 Overview of Costing Assumptions and Data Sources

A more detailed description of each of the three policy scenarios is discussed in the next section. The following assumptions were considered in arriving at the total cost. Where data was not available, assumptions have been made based on available studies.

5.3.1 Costing Assumptions

1. Population estimates of 2,484,914 for the costing is based on 2015 UN - World Population Prospects.

2. The US$ rate to local currency of US$1 to LSL14.51

3. The Baseline year for the costing of the NHSP for Impact Modeling and actual costing was set at 2018 while 2019 remains the first year of implementation of the Health Strategy.

4. HSS Baselines data for Infrastructure and HR provided by the MOH but scaled up in line with the two policy scenario

5. Health System cost for HR was projected based on the estimates, likewise the following Inputs for mortality analyses across programmes were derived: RMNCAH +N (LDHS2014), HIV (UNAIDS 2017).

6. Logistics cost for distribution of Medicine and Supplies was estimated as share of the total cost of purchase and distribution to the last mile.

7. The baseline ranged from 2014 to 2018, as available data ranged from that period.
8. The population estimates for the three policy scenarios, as well as projections were based on 2016 census data. Where there is no data altogether, 5% has been used as a placeholder until data is provided.

9. Pneumonia 26.8% - proxy taken from antibiotics taken for fever.

10. TB diagnosis LPA – 1st line drugs - this is 100% because the programme implementation exceeds coverage.

11. Second line ART - 5% - does not change with the different scenarios.

12. Management of Severe and Acute Malnutrition (SAM) – 70% - UNICEF report.

13. Breastfeeding – 65.4% - proportion of breastfed children against number of children (59 months and below).

14. For mental health/ developmental disorders, the Sub-Saharan African estimates were used for the denominators (Africans in general have some similarities when it comes to mental health. There is a strong need to undertake studies on mental health and NCDs in particular to assess and inform data/coverage

5.3.2 Data Sources

1. Baseline mortality ratios for maternal, neo-natal and under-five were obtained from LDHS 2014, 2016 National Census and EMoNC 2015. In

response to the challenge of accessing service coverage, baseline from routine health statistics (DHIS2), survey data from LDHS 2014, Annual Joint Review AJR – 2017/18 were applied.

a. HIV/AIDS coverage estimates were obtained from LePHIA 2016 report, LDHS 2014 and DHIS2.
b. RMNCAH&N strategy document
c. TB - Annual TB report 2017
d. NCDs - Global road safety status report (2018) and STEPs SURVEY

2. The coverage baselines of the scenarios in this Plan were derived mainly from population based surveys such as LDHS 2014, 2016 national census and LePHIA 2016.

3. For the dedicated programmes with existing strategies and funding such as HIV and TB, efforts were made to align the intervention targets of the Plan with those of the programme strategies.

4. It was assumed that the services modelled for NHSP would be delivered at both public and private facilities.

5. There was general paucity of data for estimating costs for medicines and supply. Unit costs for each medicine was derived from the retail sales price list for the National Drug Supply Organization.

6. HRH investment is crucial for delivering the health service targets. HR data for Human Resources costs were used as estimates for the baseline policy scenario. However, existing capacities of skilled staff (i.e. Doctors, Nurses, and Nurse Midwives) were scaled-up to meet the demand of the scaled NHSP scenarios.

7. Government estimates for the resource analysis were derived from the 2018/19 & 2019/20 budget.

5.4 Limitations of the costing exercise

i. While community and health facility input data is available through DHIS2, some service coverage data is still not readily available.

ii. Unlike service statistics, availability of HSS data to guide the scenario modeling process was somehow limited.

iii. Lack of service coverage baselines was noted across a number of the health programme areas, particularly NCDs and NTDs.

iv. Data on resource commitments from development partners for financial sustainability analysis was not readily available during the costing exercise.

v. Close to half of the health budget goes to procurement of outsourced health services, therefore MOH does not have full control on implementation.

vi. The current wage bill is high, placing limitations on any further hiring to fill vacant positions and create new positions to keep up with growing services.

vii. The current staffing pattern in place is outdated.

viii. Costing undertaken at national level providing summary for all levels. In future costing exercises should be disaggregated to district level.

5.5 Overview of NHSP Costing Scenarios

Impact and cost estimates for the NHSP were modelled for the period 2019-2023 in line with the national commitment towards the attainment of global targets by 2030, such as mortality targets for maternal, new-born, and under-fives; HIV and TB targets and other communicable and non-communicable diseases.

With the 2023 mortality ratio agreed upon, coverage parameters for high impact health services were iteratively scaled until the desired targets to yield the mortality ratios were achieved. Guided by this approach, three NHSP Policy Scenarios have been modelled with estimated costs of responding to the causes of mortality, and the overall cost of implementing the strategic plan. The three scenarios are as follows:

1. **Baseline** – with no coverage scale up
2. **Moderate Scenario** – scale up of high impact services and health system investments e.g. Human resources and capacitation for improve quality of services
3. **Aggressive Scenario** – scale up of essential services optimally towards attaining universal coverage

5.5.1 Baseline Scenario

The coverage profile for this scenario was modelled as “baseline,” however measures were put in place to sustain the quality of existing health services through targeted allocation of programme management funds. Health System Strengthening (HSS) investments under this scenario were limited to recurrent expenditure required to maintain functionality of the health system without expansion in scale. This includes but is not limited to funding for maintenance of health infrastructure, payment of salaries for the existing staff establishment and relevant logistics funding to maintain service delivery. In summary, this scenario was modelled to demonstrate impact and missed opportunities of sustaining the current trend in service delivery.

There were no changes in health service coverage between base and target year across all health service areas. To ensure continuous service delivery, programme management costs were estimated even though coverage was not scaled up.

5.5.2 Moderate Scenario

The moderate scenario intended at reducing mortality and improving the overall quality of life, by implementing government's primary health care agenda and increasing access to the service package at all levels of care. The NHSP identifies inequitable coverage of services, inadequate capacity to implement health system reforms, shortages of strategic staff, particularly at district level, uncoordinated and weak referrals system, lack of a health care financing policy and low use of evidence and information in decision making and programme development as some of the key factors contributing to sub-optimal healthcare services and high mortality.

Under the moderate scenario, the largest proportion of costs is allocated to the HIV/AIDS response (overall 50.5%), to decrease the high burden due to TB/HIV/AIDS as evidenced by a high incidence and prevalence of these diseases. In the case of Non Communicable Diseases (NCDs), there is need for increased advocacy and communication to influence behavioral change among other things, hence the cost allocation of 15.4% under the moderate scenario. Mortality rates are still high, especially maternal mortality rates, therefore there is need to increase scale up of RMNCAH+N services across the country.

Coverage of interventions were scaled up using moderate interpolate profile to achieve the following mortality outcomes:

- **MMR** reduction from **618/100,000** to **567.4/100,000** Live Births representing **8%** reduction towards the attainment of global target.
- **NMR** reduction from **34/1,000** to **31/1,000** Live Births representing a **9%** reduction towards the attainment of global target.
- **U-5MR** reduction from **80/1,000** to **65/1,000** Live Births representing a **19%** reduction towards the attainment of global target.

- Allocations were provided to ensure availability of adequate skilled human resource and increased investment for Medicines, supplies and logistics management
- Programme Management Cost was set at 7% of the total cost of plan.

5.5.3 Aggressive Scenario

The aggressive scenario assumed an optimal scale up of the coverage of health interventions using front loaded interpolate profile towards the attainment of

Universal Health Coverage with incorporation of the primary health care agenda modelled in the moderate scenario.

Funds were also allocated to strengthen the referral systems including the capacity of the secondary and tertiary health facilities to support referral process. Coverage of all health interventions were scaled optimally using a frontloaded interpolate profile to yield the following mortality outcomes.

- **MMR** reduction from **618/100,000** to **540.6/100,000** Live Births representing a **12.5%** reduction towards the attainment of global target
- **NMR** reduction from **34/1,000** to **30/1,000** Live Births representing a **12%** reduction towards the attainment of global target
- **U-5MR** reduction from **80/1,000** to **63/1,000** Live Births representing a **21%** reduction towards the attainment of global target

- Allocation was provided for the availability of adequate skilled human resource and increased investment for drugs and logistics management
- All investment for programme management were incorporated as planned.

5.6 DETAILED ANALYSIS OF THE COSTS OF SCALE UP SCENARIOS

Table 10: Total Costs Estimates for the NHSP 2019-2023 across the three Scenarios in billions (LSL)

Total Cost of Lesotho NHSP 2019 -2023 by Scenarios, in Billions (LSL)								
Policy Scenarios	**Coverage increase Across Scenarios**	**2019**	**2020**	**2021**	**2022**	**2023**	**TOTAL**	**Mean Cost Per Capita**
Baseline Scale Scenario	0%	1,798	1,798	1,806	1,728	1,720	**8.747**	1,180 ($ 81)
Moderate Scale-up Scenario	25.7%	1,882	2,202	2,457	2,557	2,798	**11.897**	1,612 ($ 111)
Aggressive Scale-up Scenario	33.4%	2,272	2,725	2,971	3,028	3,248	**14.243**	1,935 ($ 133)

Table 11: Detailed breakdown of NHSP programme costs for the moderate scenario

Summary costs by Programme area of Lesotho NHSP 2019 - 2023 Moderate Scale-up Scenario, in Billions (LSL)	% of Total Cost

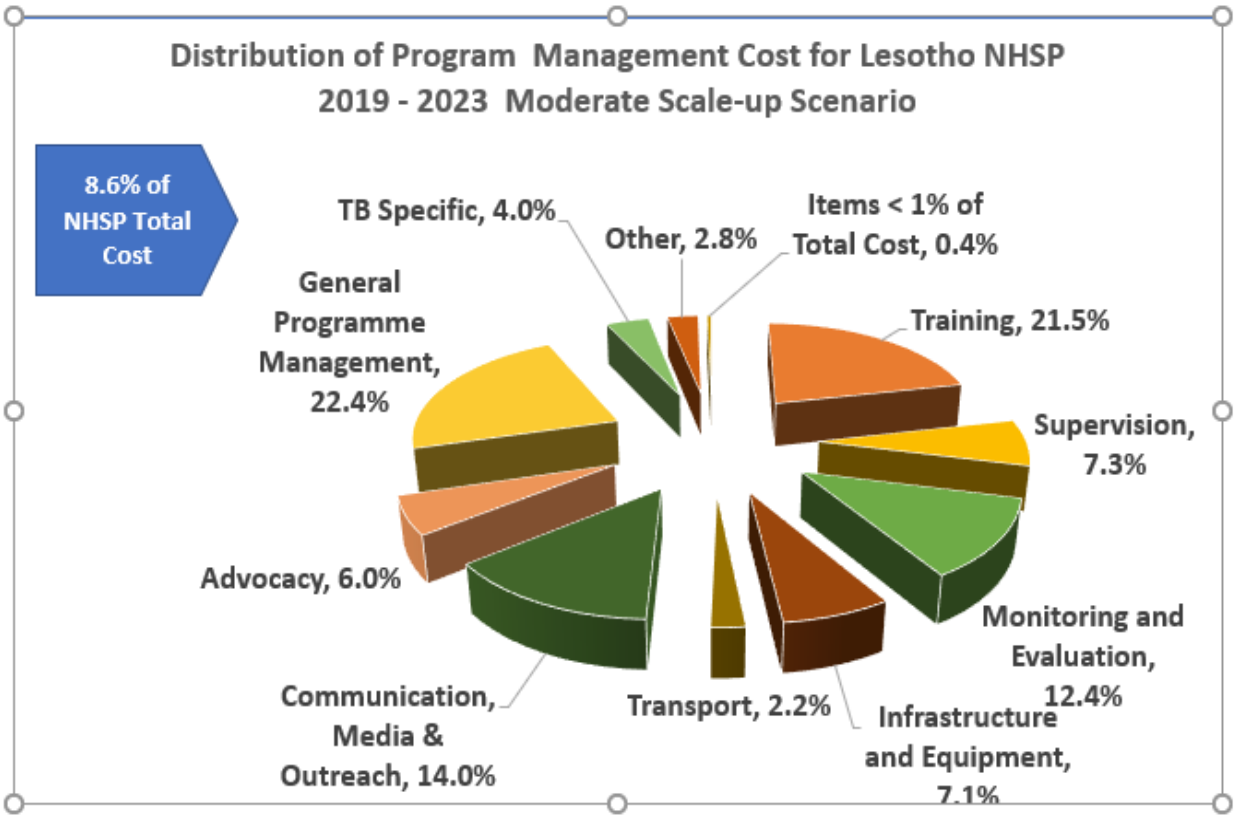
NHSP 2019-2023 Programme Areas	2019	2020	2021	2022	2023	Total	
Maternal/newborn and reproductive health	277	308	322	319	331	1,558	**13.1%**
Child health	95	103	110	105	107	520	**4.4%**
Immunization	21	25	55	23	23	147	**1.2%**
TB	88	103	109	120	128	547	**4.6%**
HIV/AIDS	1,098	1,148	1,212	1,246	1,301	6,004	**50.5%**
Nutrition	40	97	102	99	122	460	**3.9%**
Environmental Health and WASH	46	51	59	54	59	270	**2.3%**
Non-communicable diseases	169	267	369	458	570	1,833	**15.4%**
Mental, neurological, and substance use disorders	21	32	43	52	60	209	**1.8%**
Adolescent health	24	36	47	59	70	238	**2.0%**
IHR International Health Regulation (Public Health Emergencies)	1.00	32	29	23	26	110	**0.9%**
NHSP Total Cost	**1.882**	**2.202**	**2.457**	**2.557**	**2.798**	**11.897**	

Effective programme management is vital for quality health service provision, therefore management costs have been separated and are illustrated in the table below

Table 12: Detailed breakdown of NHSP HSS costs for the moderate scenario

Summary HSS Costs of Lesotho NHSP 2019 - 2023 Moderate Scale-up Scenario, in Billions (LSL)							
HSS Cost Categories	2019	2020	2021	2022	2023	Total	% of Total Cost
Programme Activity Costs	119	239	251	189	221	1,019	**8.6%**
Human Resources	508	570	659	689	757	3,183	**26.8%**
Infrastructure	10	11	12	12	12	57	**0.5%**
Logistics	307	323	372	421	472	1,895	**15.9%**
Medicines, commodities, and supplies	928	1,018	1,111	1,206	1,303	5,567	**46.8%**
Health Financing	0	6	17	0	0	24	**0.2%**
Health Information Systems	9	29	33	35	31	138	**1.2%**
Governance	1	5	2	5	2	15	**0.1%**
NHSP Total Cost	**1.882**	**2.202**	**2.457**	**2.557**	**2.798**	**11.897**	

Figure 5: Distribution of Programme Management Costs for Moderate Scenario



The top four categories for programme management with a large share of costs are the General programme management, Training, Communication media and Monitoring & Evaluation (M&E). M&E cost implementation will strengthen the health information system to improve data quality. Similarly, bottlenecks in the capacity of health workers have been identified, hence the significant cost of training activities.

Table 13: Detailed breakdown of NHSP programme costs for the aggressive scenario

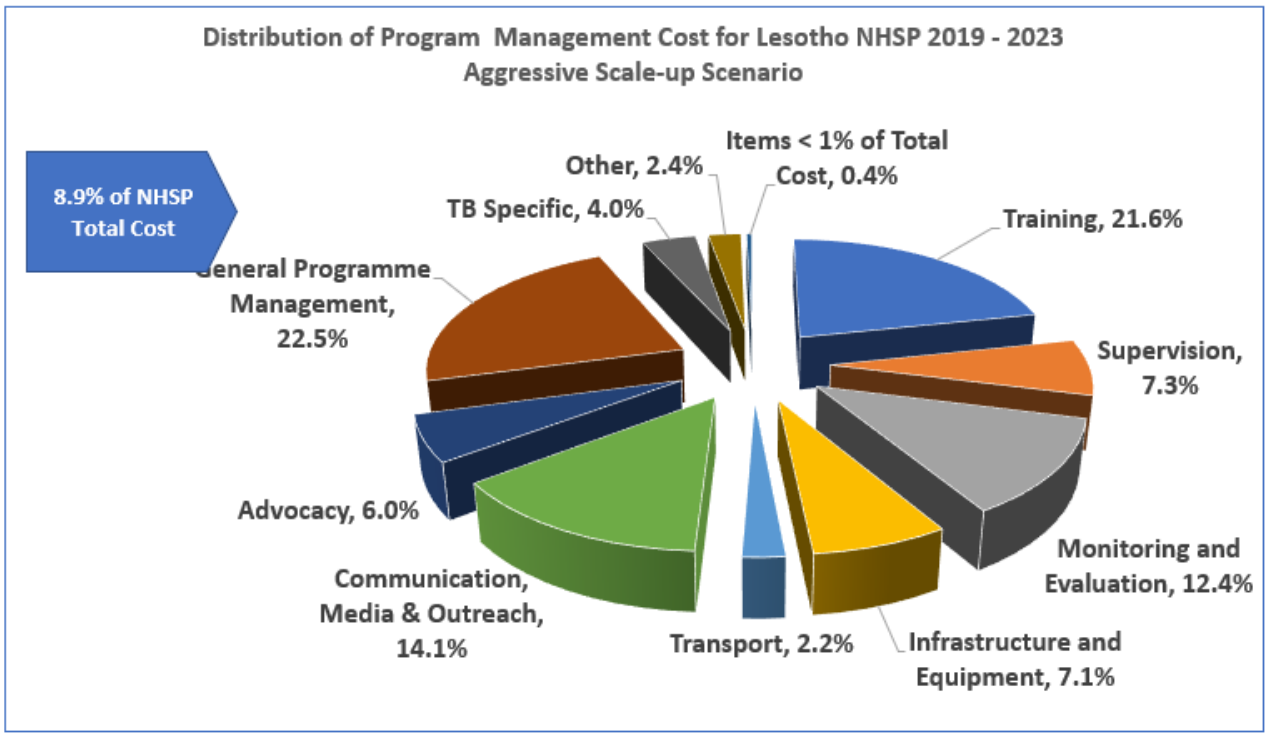
Summary costs by Programme area of Lesotho NHSP 2019 - 2023 Aggressive Scale-up Scenario ,in Billions (LSL)							
NHSP 2019-2023 Programme Areas	2019	2020	2021	2022	2023	Total	% of Total Cost

Maternal/newborn and reproductive health	306	344	351	346	360	1,706	**12.0%**
Child health	101	110	114	106	107	538	**3.8%**
Immunization	25	30	61	26	26	169	**1.2%**
TB	114	133	135	142	145	668	**4.7%**
HIV/AIDS	1,124	1,206	1,278	1,321	1,388	6,317	**44.4%**
Nutrition	45	123	130	124	152	573	**4.0%**
Environmental Health and WASH	51	58	66	62	69	306	**2.1%**
Non-communicable diseases	427	572	672	732	818	3,221	**22.6%**
Mental, neurological, and substance use disorders	37	51	61	66	71	285	**2.0%**
Adolescent health	43	57	67	75	80	321	**2.3%**
IHR International Health Regulation (Public Health Emergencies)	1	40	36	28	32	138	**1.0%**
NHSP Total Cost	**2.272**	**2.725**	**2.971**	**3.028**	**3.248**	**14.243**	

Table 14: Detailed breakdown of NHSP HSS costs for the aggressive scenario

Summary HSS Costs of Lesotho NHSP 2019 - 2023 Aggressive Scale-up Scenario, in Billions (LSL)							**% of Total Cost**
HSS Cost Categories	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**	
Programme Activity Costs	149	299	308	236	276	1,268	**8.9%**
Human Resources	484	540	638	657	714	3,033	**21.3%**
Infrastructure	11	12	13	13	13	62	**0.4%**
Logistics	556	618	683	705	765	3,327	**23.4%**
Medicines, commodities, and supplies	1,061	1,190	1,285	1,365	1,436	6,338	**44.5%**
Health Financing	0	21	0	0	0	22	**0.2%**
Health Information Systems	9	36	42	45	41	172	**1.2%**
Governance	1	8	3	8	4	23	**0.2%**
NHSP Total Cost	**2.270**	**2.730**	**2.970**	**3.030**	**3.250**	**14.250**	

Figure 6: Distribution of programme management costs

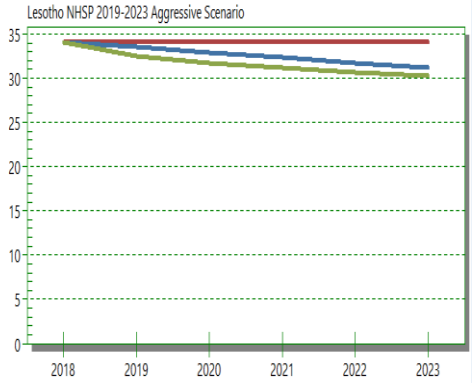


5.7 Impact of the Scale up Scenarios

The three policy scenario was estimated based on the required HSS capacity especially for skilled providers. The existing HSS capacity may not be sufficient to deliver on the proposed health service targets of the plan. Likewise, the anticipated mortality gains of the strategies are less likely to be realized within the current structure. The graphs below illustrates the potential impact of the three scenarios across different programmes.

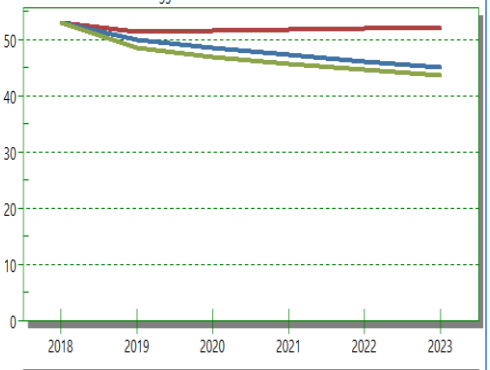
Figure 7: The impact of scaling modelled on selected RMNCAH+N and HIV/AIDS, indicators

Neonatal mortality rate (deaths per 1,000 live births)



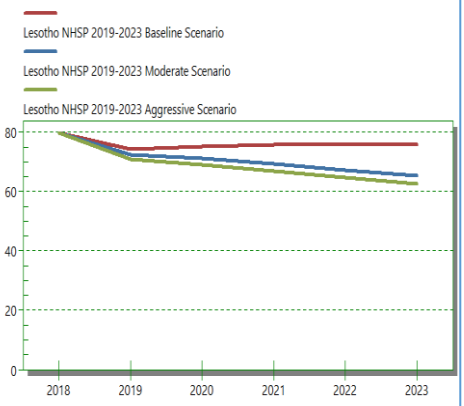
	2018	2019	2020	2021	2022	2023
Lesotho NHSP 2019-2023 Baseline Scenario	34	34	34	34	34	34
Lesotho NHSP 2019-2023 Moderate Scenario	34	34	33	32	32	31
Lesotho NHSP 2019-2023 Aggressive Scenario	34	33	32	31	31	30

Infant mortality rate (deaths per 1,000 live births)



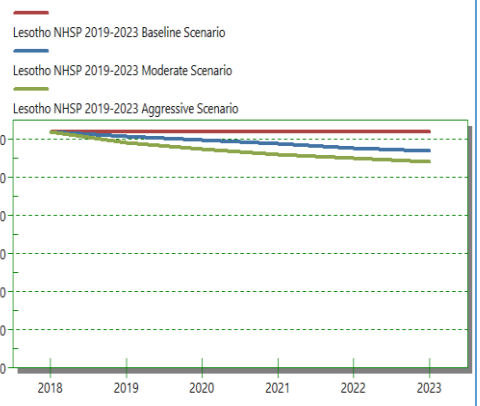
	2018	2019	2020	2021	2022	2023
Lesotho NHSP 2019-2023 Baseline Scenario	53	51	52	52	52	52
Lesotho NHSP 2019-2023 Moderate Scenario	53	50	48	47	46	45
Lesotho NHSP 2019-2023 Aggressive Scenario	53	49	47	46	45	44

Under five mortality rate (deaths per 1,000 live births)



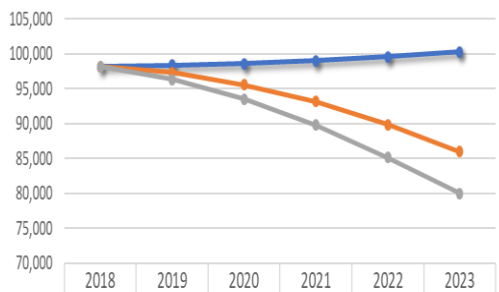
	2018	2019	2020	2021	2022	2023
Lesotho NHSP 2019-2023 Baseline Scenario	80	74	75	76	76	76
Lesotho NHSP 2019-2023 Moderate Scenario	80	73	71	69	67	65
Lesotho NHSP 2019-2023 Aggressive Scenario	80	71	69	67	65	63

Maternal mortality ratio (deaths per 100,000 live births)



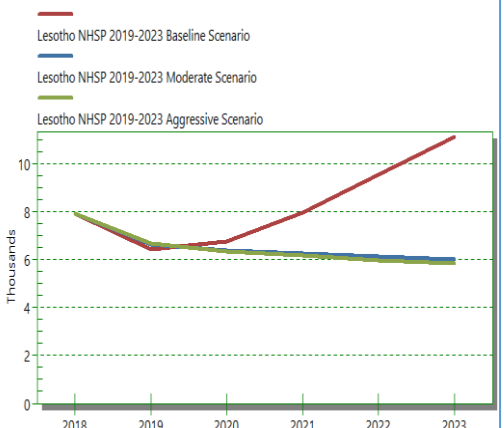
	2018	2019	2020	2021	2022	2023
Lesotho NHSP 2019-2023 Baseline Scenario	618.00	618.17	618.56	618.93	619.33	619.74
Lesotho NHSP 2019-2023 Moderate Scenario	618.00	607.02	596.65	586.57	576.82	567.38
Lesotho NHSP 2019-2023 Aggressive Scenario	618.00	589.26	572.51	559.89	549.53	540.61

Number of stunted children (Total (0-59 months))

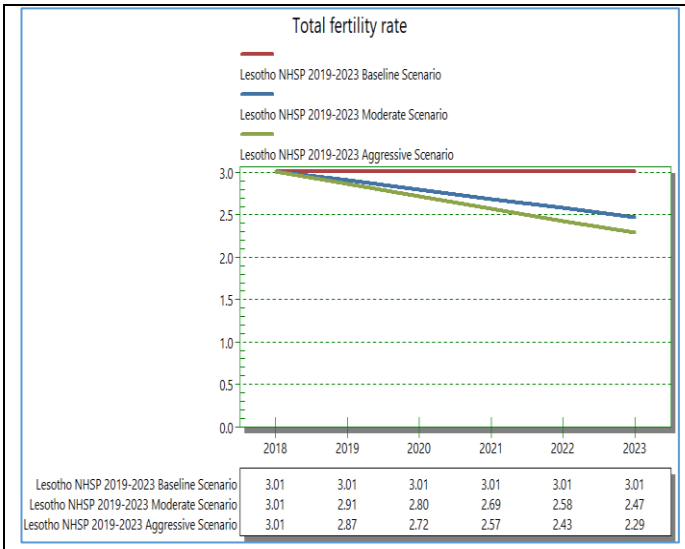


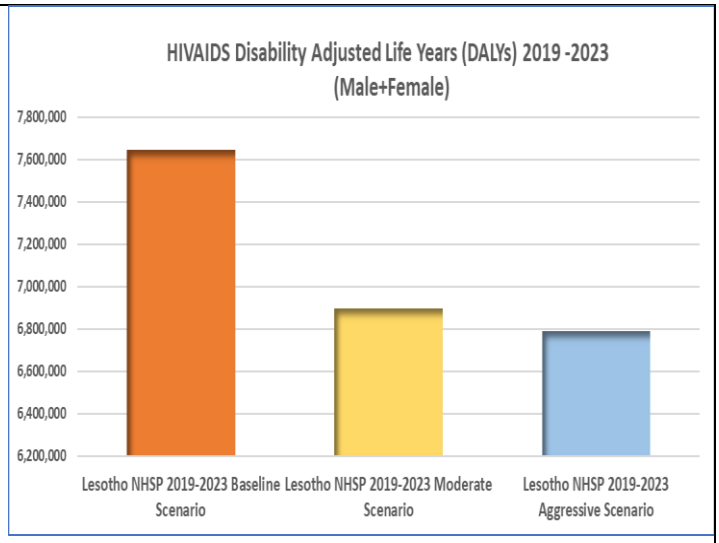
	2018	2019	2020	2021	2022	2023
Lesotho NHSP 2019-2023 Baseline Scenario	98,173	98,369	98,575	99,010	99,569	100,317
Lesotho NHSP 2019-2023 Moderate Scenario	98,173	97,319	95,604	93,156	89,879	86,006
Lesotho NHSP 2019-2023 Aggressive Scenario	98,173	96,348	93,531	89,828	85,166	79,979

AIDS deaths



	2018	2019	2020	2021	2022	2023
Lesotho NHSP 2019-2023 Baseline Scenario	7.93	6.44	6.74	7.96	9.54	11.13
Lesotho NHSP 2019-2023 Moderate Scenario	7.93	6.64	6.37	6.24	6.12	5.99
Lesotho NHSP 2019-2023 Aggressive Scenario	7.93	6.66	6.36	6.16	5.99	5.82



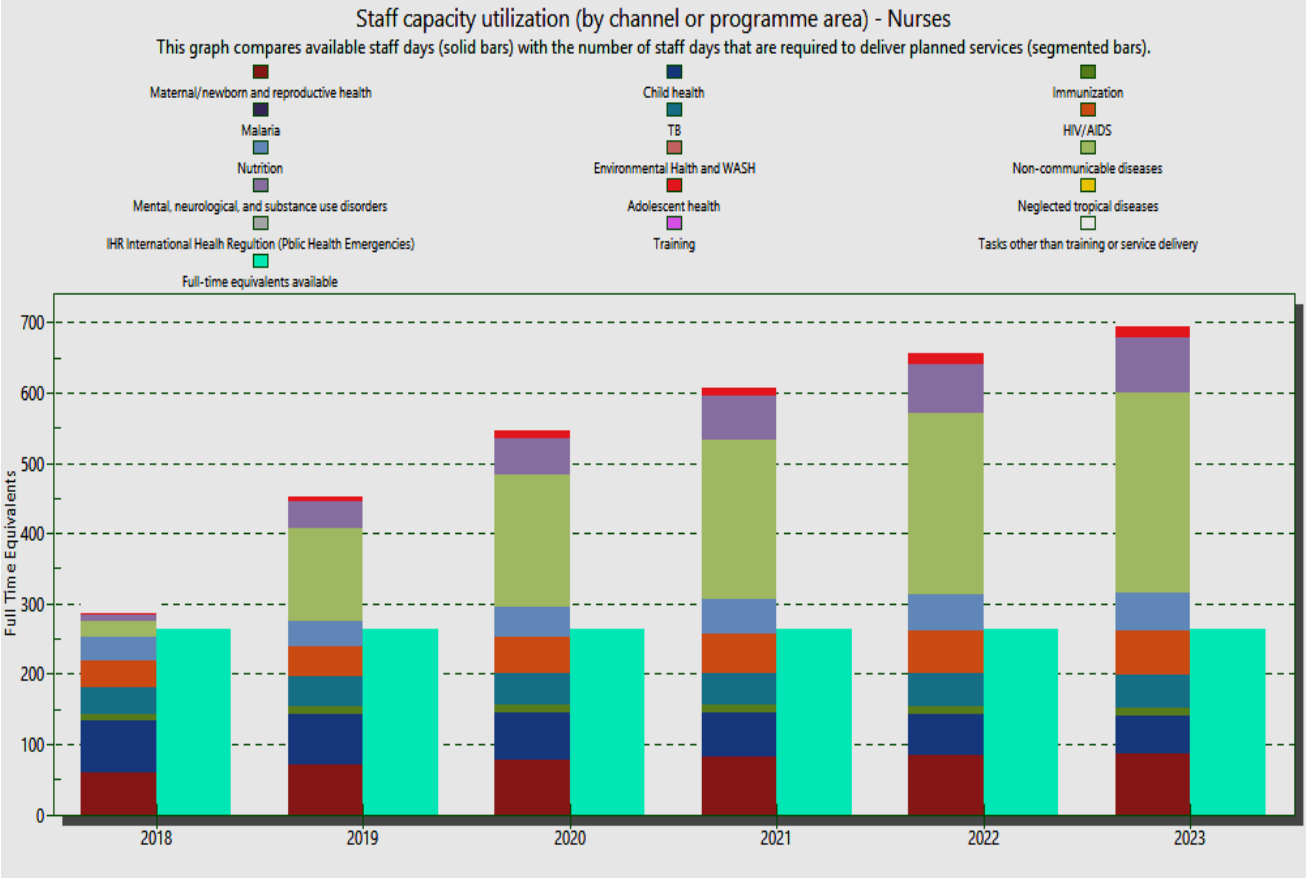


5.8 Health System Capacity/Utilization Analysis

It is important to highlight the limitations of implementing the strategy with existing Health systems capacity although the total NHSP costs were based on the required capacity of the health systems. While it is desirable for the NHSP goals to target ambitious service coverages, it is pertinent to ensure that Health systems capacities (particularly skilled care providers and infrastructure) are sufficient to deliver on these targets. Effective and comprehensive implementation of the strategy will not be possible if the critical HSS gaps are not addressed. Likewise, the anticipated mortality gains of the strategies are less likely to be realized within the current structure. To this end, existing HR was costed against the projected HSS capacity utilization for the NHSP scenarios.

For HR, the key assumption considered in the analysis is the average daily work-time of skilled frontline providers (doctors, nurses, and midwives); this was set at 8 hours per working day, 240 days annually. Available staff time for the specified staff types was compared against the proposed staff time required for service delivery for each of the NHSP scenario.

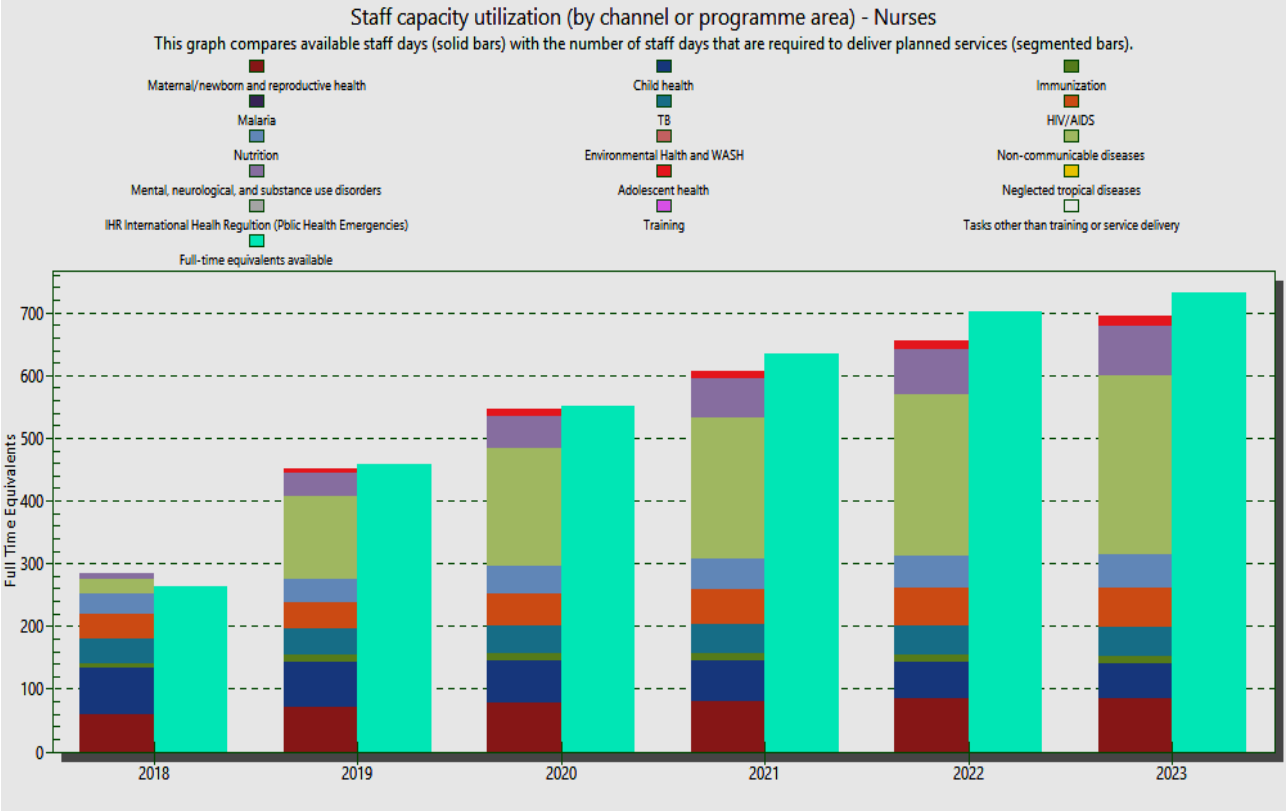
Figure 8: Capacity Utilization Analysis for Nurses under the Moderate Scenario



No HR–Scale up & Total Cost LSL 11,231

Figure 9: Capacity Utilizatio (6 % increase in cost) the Moderate Scenario (HR-Scaled up)

HR–Scaled up & Total Cost LSL 11,897



However, it should be noted that not all health services provided through the Health System were modelled using the One Health tool. For example, a large share of health workers' time, may be spent on addressing conditions that are not specified within the projections, e.g. ear infection and general injuries were not modelled. As a result, the staff time needs captured in the graph above underestimates the gap and should be considered as the minimum requirement. Therefore, it is important to recognize the contributions of the private sector to service delivery and attainment of the NHSP goals.

Figure 10: Capacity Utilization Analysis for Nurses under the Aggressive Scenario

No HR –Scale up & Total Cost: LSL 13,749

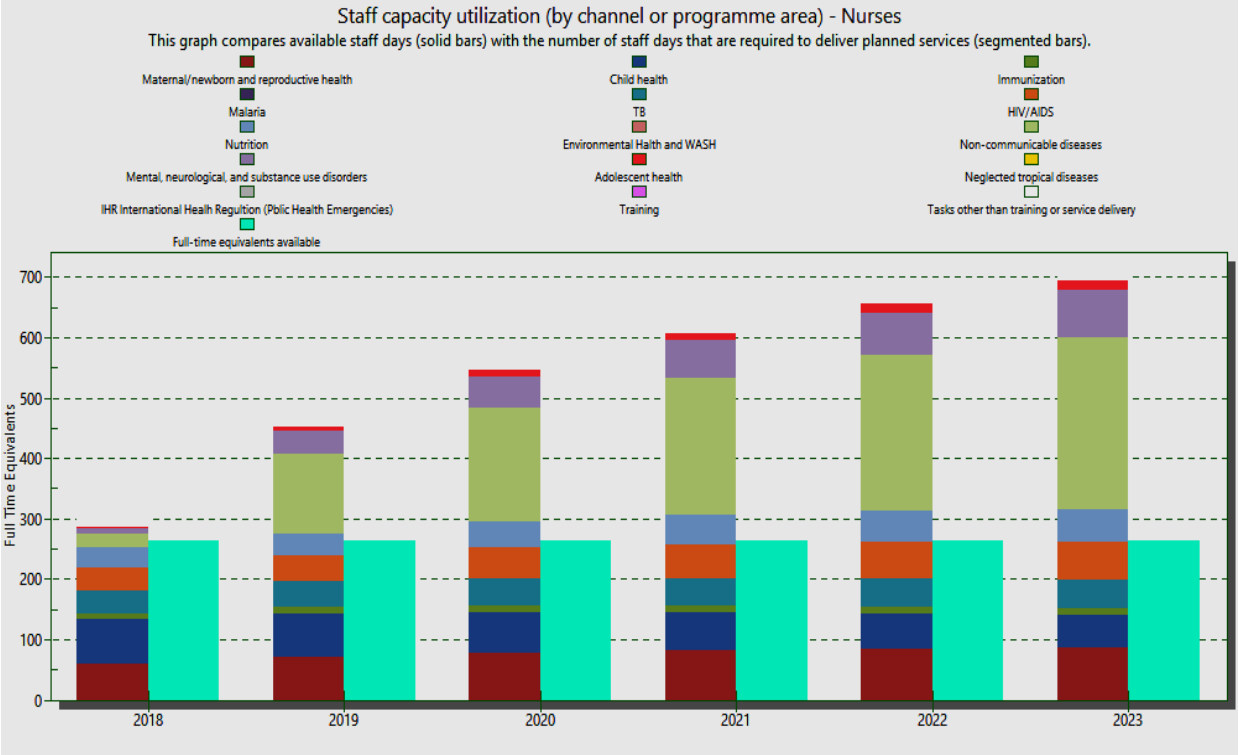
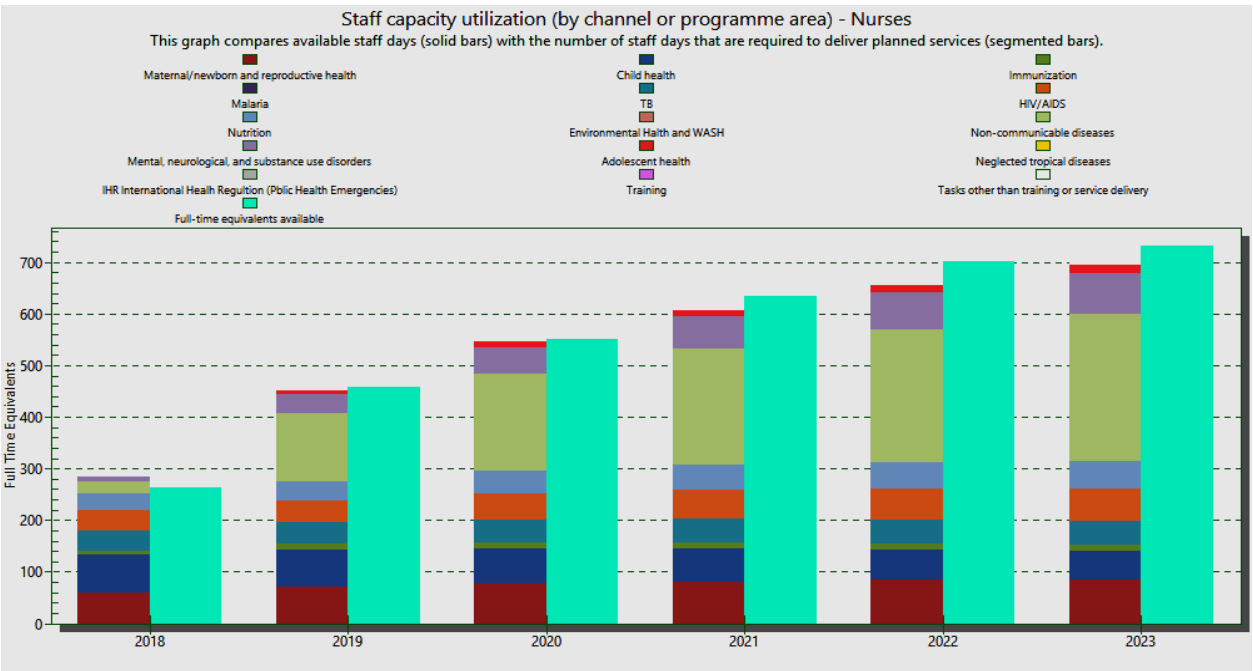


Figure 11: Capacity Utilization Analysis for Nurses under the Aggressive Scenario (HR-Scaled up)



HR –Scaled up & Total Cost: LSL 14,247

5.9 Sustainability Analysis

(4 % increase in cost)

Ministry of Health ranks second in the share of the budget allocation from Government after the Ministry of Education. Although Lesotho has not met the 15% target of Abuja Declaration, the Government of Lesotho is committed to and strives

to meet this target and this is evidenced by budget allocations to health as a percentage of total budget in the previous years. The highest budget allocation of 14% was reached previously in financial years 2010/11, 2011/12 & 2013/14 and since then, budget allocations as a percentage of the national budget have been declining. (AJR 2017/18)

In FY 2017/18, the total budget allocation to Health was approximately M2, 239 billion which represents 12% of the total government budget. Though the 2019/20 health budget was slightly higher at approximately M2, 433.5 billion, this was a lower percentage (11%) of total budget. Health care is funded by government, development partners with a much smaller proportion funded by the private sector and households (Out of pocket expenditure).

Advocacy to increase GoL Health Expenditure to 15% (as per Abuja protocol) is needed more than ever. Optimizing development partner assistance and engaging the private and informal sectors will be essential to NHSP funding. Some ideas for funding increase include:

- Increase the health budget as a proportion of the total government expenditure.
- Implementing a more efficient and cost-effective resource allocation formula for health services.
- Engaging the private sector.
- Explore other health financing mechanisms e.g. social health insurance.
- Review structure of existing user fees.
- Coordination of donor funding to reduce duplication and improve allocative efficiency.
- Review/update of provider payment formula.

Health Sector funding landscape was last determined in FY 2014/15 thorough a resource mapping exercise. During costing of the NHSP, information on the current funding landscape was not available as mentioned in the limitations hence the difficulty to determine the funding gap. However the funding landscape and resource gap shall be undertaken as a separate exercise to properly analyze the funding sustainability for implementing the NHSP.

5.10 Conclusions and Recommendations

- Of the three policy scenario generated for NHSP 2019 -2023; Aggressive Scenario was the highest with a Total Cost (TC) of LSL 14.247 M, followed

by Moderate and Baseline scenarios with LSL 11,897 M and LSL 8,747M respectively.

- The Mean Per Capita cost across the three scenarios was calculated at $133, $111 and $81 for Aggressive, High impact and Baseline scenarios respectively.
- Similar trends were observed in the outputted result of impact indicators for Maternal and Child Health across the three scenarios.
- While the baseline scenario remained relatively unchanged across the duration of the plan, for moderate scenario, MMR, NMR and U-5MR decreased by 8%, 9% and 19% respectively. While Aggressive scenario modeled reduction in MMR, NMR and U-5MR to 12.5%, 12% and 21% respectively
- Across the three scenarios, Investments in human resource, and medicines for treatment, specifically HIV drugs, were the key drivers of the NHSP cost.

5.10.1 Next Steps:

The Moderate Scenario was recommended to be applied in implementing the NHSP2019/23 over a five year period. The scenario when fully funded is expected to yield health impact as reflected in section 5.5.2 As the government commits to implementing the NHSP, it is important to ensure adherence to the resource mobilization assumptions of the recommended funding option. The following principles will ensure that the NHSP is effectively implemented at all levels:

- MOH is expected to decide on the NHSP Scenario that aligns with the health policy thrust of the government. Additional information on benefits for each scenario have been provided to guide the consensus process in adopting the most cost effective investment option.
- With the selection of the appropriate financing pathway, MOH may needs to consider a financial sustainability analysis of the adopted Cost Scenario.
- Establishing the funding gaps of the strategy against all available commitment; both domestic and otherwise remains crucial to the success of this process.
- Finally, as MOH proceeds to implement the Strategy, it is vital to ensure that all interventions identified and costed per program are continuously

tracked, monitored and regularly updated during the entire NHSP period.

- Development partner support and funding must be aligned to the NHSP and its priorities in order to reduce duplication and improve allocative efficiency.
- A robust M&E framework must be in place to ensure regular tracking and updating of all the interventions and their targets throughout the NHSP implementation.
- It is important to develop and implement Value for Money (VfM) framework along with the M&E Framework to guide efficient and effective use of resources for the NHSP.
- Regular health facility and inventory assessments in both private and public sectors are essential to identify NHSP implementation bottlenecks and to generate much needed data to guide allocation of human resources, infrastructure and logistics.

CHAPTER SIX: IMPLEMENTATION ARRANGEMENT

The implementation of NHSP shall be led by the MoH and will be guided by the process of implementation by the National Health Policy, thematic policies, the Public Health Order No. 12 of 1970 (public health law that will be prevailing) and the Local Government Act 1994. At all levels of the health care system, annual operational plans shall be developed as a way of implementing the NHSP. These plans shall be based on their strategic objectives as outlined in the NHSP and guided by indicated budget ceilings. Aggregation of these plans with central level plans shall constitute annual rolling plans projected on three year MTEFs. Government, development partners and other partners' resources shall be directed to support implementation of this NHSP.

At community level the community councils shall ensure that there is local participation and involvement in addition to providing support to advocacy for specific health interventions. Involvement of civil society, individuals, and households shall be a key feature for interventions that appeal for behaviour change, modifications in local cultural norms and traditions. Key partners such as CHAL and LRCS and other implementing partners shall carry out implementation obligations based on agreements established under the PPP mechanism with due regard to periodic reviews and updates of these agreements.

This strategy will be used to guide programmes who will be revising or developing new strategic plans. The vision and goals of the NHSP 2019-23 will remain the same for all strategic plans of any national or subnational organisation of the Ministry of Health and its stakeholders. Where it becomes necessary for a new vision, goal or objectives to be developed for any planning document in the health sector, it should refer to the NHP 2016 and the NHSP 2019-23

The starting point for the annual planning process for programmes, stakeholders and partners shall be the use of the objectives and strategies in this document as the guide for their activities. There shall be a monitoring and evaluation framework (separate document), that describes in details the relationship between the NHSP 2019-23, the Monitoring and evaluation and the annual plans.

CHAPTER SEVEN: MONITORING & EVALUATION

This section provides direction on performance monitoring and evaluation of the implementation of NHSP 2019-23. Annex A is the comprehensive implementation plan which provides the tool for monitoring the performance of the NHSP 2019-23. Annex B, will be used to monitor the contribution of the NHSP 2019-23 to the national goals and vision of the health sector. Monitoring and evaluation of NHSP will be guided by the health sector Monitoring and Evaluation framework which contains a set of indicators that respond to the goals of the NHSP.

Performance monitoring and review processes

At all levels performance review reports will be produced outlining the performance against strategic objectives in this plan. This will be useful for documenting lessons learnt during the implementation of the strategic plan. Moreover, the reports shall provide an update on the progress of the result indicators as described in the second column of the Implementation plan in annex A of this strategy.

Annual Joint Review

This is a process where the health sector documents progress and results against the implementation of the annual operational plan using sector key performance indicators and targets set in the strategic plan. The annual report is a comprehensive analytic report following the Ouagadougou framework in analysing the performance of the health sector. The annual operational plans form a basis for the annual joint review report. Over and above the annual report is informed by programme reports, districts quarterly reports, physical and financial reports, disseminated research reports, health sector surveys and assessments. The annual report is produced by the M&E unit at national level in collaboration with the strategic information technical working group. A section in the Annual Joint Review (AJR) report will be devoted to a narrative report of the performance of the NHSP 2019-23. The report will be presented and shared with all the stakeholders at the annual conference convened by the MoH.

There are three levels of monitoring indicators that have been included in the NHSP. The first, is the high-level indicators that will be used to measure the goals of the NHSP. These are the goal targets. The goal targets are measured as percentages as either prevalence or incidence and represent final outcomes from implementation of activities. The second level of indicators are the results indicators found in the implementation plan. These are descriptive and are indented to describe the final outcomes. Results indicators will be used to describe the extent of implementation of the strategies. The third level of indicators are the outputs. The outputs are a direct result of implementing the strategies. Outputs will be used to access implementation of the strategies at national level for programmes and directorates' level. Most of the data and information required for reporting in the indicators are generated routinely in the annual reports. Measuring the outcome indicators will be complemented by periodic surveys and studies such as the Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), Maternal Mortality Survey. These surveys help evaluate the health status of the population and are conducted between 3-5 years intervals.

NHSP Evaluations

Evaluations will be undertaken to determine the extent to which the objectives of this strategic plan are met. Two evaluations will be undertaken during the implementation of the NHSP, a mid-term evaluation, after 2.5 years and a final evaluation at the end of the plan. The trends across different indicator domains -inputs/processes, outputs, outcomes, impacts will be formed and the results of the evaluations will be presented to the MoH and its stakeholders

Mid-Term Evaluation

The purpose of the mid-term evaluation will be to evaluate/review the progress of implementation, identify and propose adjustment to the NHSP as required. The Mid Term evaluation specific objectives will include:

(1) Assess progress in meeting the NHSP targets and to make recommendations for their adjustment if necessary
(2) Review appropriateness of the outputs relative to inputs, processes and desired outcomes
(3) Review the costing and financing mechanism of the NHSP

Mid-term evaluation will entail mixed method approach whereby, extensive review of documents including routine reports and recent studies in the sector, commissioning of in-depth studies, collection and analysis of data and in interviews with selected key stakeholders may be undertaken. The mid-term evaluation will be a participatory process whereby all the stakeholders within the health sector will be involved. The analysis will focus on the entire health sector against planned impact but will also include assessment across the NHSP core indicators.

End Term Evaluation

The End Term evaluation will be undertaken mid 2023 such that the findings and recommendations will be used to inform formulation of the next strategic plan. The evaluation analysis will still focus on the entire health sector against planned impact like the mid-term evaluation using the sector core performance indicators. The evaluation will determine attribution question such as, what made the difference as well as policies and resource flows. The end term evaluation objectives will among others (but not limited to) include:

(1) Relevance: Did the NHSP address priority problems faced by target areas?
(2) Efficiency: Were inputs used in the best possible way to maximize outcomes?
(3) Effectiveness: Have planned NHSP outputs lead to desired outcomes?
(4) Impact: What has NHSP contributed towards bigger national plans such NSDP goals

The Strategic Information Technical Working Group (SITWG) will be responsible for overall oversight of M&E activities. The functional linkages with the MoH will be through the M&E unit in the department of Health Planning and Statistics (HPSD). The M&E unit within HPSD will be responsible for the day to day implementation and coordination of the M&E activities to monitor the NHSP 2019-23.

Annex A: Implementation Plan

Strategies	Results Indicators (RIs)	Responsible Department
Specific Objective 1.1 To ensure access to basic primary healthcare services that are safe, effective, well organized, people-centred, culturally appropriate and prioritised to support vulnerable populations		
1.1.1 Strengthen the control, elimination and eradication of vaccine preventable diseases.	Access to primary healthcare services improved % of children fully immunized	EPI, HIV, Mental Health
1.1.2 Provide universal access to disease prevention, diagnosis, treatment, care and support in line with the latest WHO guidelines.	Per capita outpatient utilization rate % of operational health posts % of functional health posts by 2022	RMNCAH, PMTCT, HIV, Oral Health, NTP, Nursing Directorate, Lesotho Nursing Council
1.1.3Promote access to safe, effective and acceptable sexual reproductive, maternal, new born, child, adolescent health and nutrition services. .	% of deliveries conducted at the health facility % of pregnant women attending at least 4 ANC visits % of facilities providing treatment using IMCI guidelines % of facilities providing BEMONC % of children >1 fully immunized % of facilities providing CEMONC Contraceptive use rate % of new-born breast feed within one hour of birth	RMNCAH, Nutrition, FP
1.1.4Improve facility and community based health care and support to vulnerable groups, including children and women.	Quality of health care services improved % of VHW with improved knowledge and skills in nutritional care and support to vulnerable groups % of children under 5 weighed by the VHWs % of children under 5 weight at the health facility % of children < 5 receiving vitamin A supplement % of children < 5 receiving supplements	RMNCAH PMTCT NCDs NTLP
1.1.5Implement a comprehensive communication strategy to improve health education and promotion services.	The population is more informed about their health Evidence of lifestyle changes	Oral Health Mental Health NCDs HED
1.1.6Promote and collaborate with other stakeholders in the prevention, diagnosis, treatment and rehabilitation, palliative care of communicable and Non Communicable Diseases		Mental Health PS Health Oral Health NCDs HED Lab

Strategies	Results Indicators (RIs)	Responsible Department
1.1.7Ensure control and elimination of neglected tropical diseases	Increased attention to emergency preparedness and response Improved surveillance system and epidemic and emergency response % of districts with capacity to identify and report the incidence of neglected tropical diseases	PMTCT Oral Health
1.1.8Develop guidelines for the partnership with traditional and allopathic practitioners in the context of Basotho culture. .	Availability of guiding tools for partnerships with traditional practitioners All parties abiding by partnership guidelines by 2022	Mental Health Oral Health NCDs NTLP MOHW
1.1.9Ensure CHW programme is functional to deliver people centered services with linkages with other community based services	Functional VHW programme with linkages with other community based services Availability of reviewed VHW policy Availability of supervision tools to all the VHW % of VHW's committees that hold their scheduled monthly meetings	Mental Health Oral Health LBTS
1.1.10Strengthen and sustain an integrated school health programme	Integrated school health programme strengthened	Mental Health Oral Health LBTS
Specific Objective 1.2: To scale up coverage and equity in the provision of health services (promotive, preventive, curative and rehabilitative), strengthen and enforce referral system for continuum of care to achieve Universal Health Coverage.		
1.2.1 Provide quality, equitable, effective and efficient preventive, curative and, diagnostic, healthcare services for all.	Implementation of quality monitoring tools for use of care protocols Bed occupancy rate % of facilities reaching 90% patient and provider satisfaction by 2022	Oral Health NTLP LBTS
1.2.2 Establish rehabilitative and palliative care services	Rehabilitative and palliative care services established % of out of the country referrals	Oral Helath NCDs
1.2.3 Review Essential Health Package and ensure services are integrated at all levels of health care delivery including all social intervention programmes.	Services provided across all levels of the health care includes specialized care services	RMNCAH
1.2.4 Ensure required standards of care are maintained in all health facilities.	% of health facilities utilising care protocols and guidelines	NTP QA
1.2.5 Strengthen supportive supervision and mentorship at all levels of care.	Supportive supervision and mentorship strengthened at all levels % of comprehensive supportive supervision undertaken by central to the district level % of comprehensive supportive supervision undertaken by the DHMT to the health facilities % of districts mentored by the central level % of health center's mentored by the DHMT	HIV RMNCAH Oral Health NCDs NTLP QA FP

Strategies	Results Indicators (RIs)	Responsible Department
1.2.6 Strengthen capacity for laboratory and diagnostic services.	Capacity for laboratory and diagnostic services strengthened Turnaround time of diagnostic tests performed by the laboratory	NTLP Lab
1.2.7 Establish a cancer centre, strengthen and sustain cancer services.	Cancer centre established % of out of the country referrals of cancer patients	NCDs Lab
1.2.8 Strengthen referral and linkages system to ensure continuum of care	Referral system across all levels of health care strengthened Improved management of patients across all levels National referral guidelines developed % of facilities referring patients according to guidelines	PMTCT NCDs Lab
Specific Objective 1.3: To support all levels of health care and other relevant stakeholders in developing more resilient health systems to, prevent, detect, respond and ensure recovery from public health emergencies.		
1.3.1 Strengthen Public health emergency preparedness and response system at all levels (adopting evidence based solutions for preventing, detecting, mitigating and responding to manmade and natural hazards using the all hazards approach).	Public health emergency preparedness and response strengthened at all levels Increased attention to emergency preparedness and response % of districts with public health emergency preparedness and response plans % of districts with functioning public health emergency preparedness and response system % of districts with capacity to detect and respond to public health emergencies	Lab IHR
1.3.2 Promote safe and healthy environment: food safety, adequate safe drinking water, sanitation and hygiene (WASH), occupational health, port health pollution control, health care waste management, vector and rodent control and housing.	% of districts with mapped pollution sources % of premises inspected for occupational health and safety compliance % of health facilities with proper health care waste system-3 bin system % of health facilities with functioning incinerator % of households with latrines % of households with waste disposal system % of households practising hand-washing hygiene	Environmental Health Oral Health
1.3.3 Strengthen port health services at points of entry to address IHR issues	Port health services strengthened at points of entry Surveillance data collection system strengthened and implemented at all points of entry	Environmental Health IHR
1.3.4 Strengthen emergency communication system	Emergency communication system strengthened % of emergency reported using the system	IHR
Specific Objective 1.4: To empower individuals, families and communities to play their role in prevention, treatment, care and support, rehabilitation, palliative care and promotion of health		

Strategies	Results Indicators (RIs)	Responsible Department
1.4.1 Support community dialogue and awareness campaigns on lifestyles and health outcomes.	Improved community awareness on health issues Change in lifestyle behaviours of the community	HED NCDs FP
1.4.2 Strengthen coordination and collaboration between service delivery areas and community-based organizations, NGOs and CSOs for health development.	Coordination and collaboration between service delivery areas and community based organizations strengthened Community structures functioning in line with national community strategy % of monthly meetings held between the health centre and existing community structures	FP
1.4.3 Establish community based programmes with linkages to existing community based structures.	Level of linkages of health delivery structures with community reviewed and assessed Community based programmes with linkages to community leaders and other community based structures established Community VHW's policy reviewed and updated VHWs strategic plan reviewed and updated % of districts with functioning community based programmes with linkages to community leaders	LBTS, Family Health
Specific Objectives 1.5: To ensure standards for construction and maintenance of health infrastructure and equipment are available and enforced.		
1.5.1Define/adapt, sustain and disseminate standards for equipment, and for construction and maintenance of infrastructure	Standards for equipment and maintenance of infrastructure adopted and disseminated % of facilities undertaking quality improvement assessments using adapted standards for equipment and infrastructure	EMU
1.5.2Strengthen supervision for construction and maintenance of infrastructure and equipment.	Sustainable maintenance systems for proper upkeep of health facilities, health infrastructure and equipment established Monitoring plan for the implementation of preventative maintenance developed % of districts with health facility preventive maintenance plan developed by 2022	EMU QA
Specific Objective 2.1: To scale up availability and strengthen performance of the health workforce for improved service delivery		
2.1.1Support health professional bodies in legislations and regulations that govern the conduct of health professionals.	New health cadre courses introduced in Health Training Institutions Vacancy rate Staff establishment list reviewed	HR
2.1.2 Review and implement HRH retention strategy Review, update, cost and implement HRH strategic plan	Availability of reviewed HR retention strategy Full implementation of retention strategic plan by 2023	HR

Strategies	Results Indicators (RIs)	Responsible Department
2.1.3 Implement performance management system		HR, Nursing Directorate
2.1.4 Advocate for establish Heath Service Commission		PS Health office
2.1.5 Develop and implement a task shifting and task sharing policy		HR
2.1.6 Advocate for improvement of health curricular in higher learning institutions to address current and future HRH capacity gaps		HR NHTC
2.1.7Implement a coordinated pre and in-service training programme at all levels		HR
2.1.8Timely absorption of donor supported health workforce (prioritised) into the government establishment – mindful of an already high government wage bill		PS Health Office
2.1.9Develop guidelines and procedures for engagement of HRH in partner supported programmes		HR
2.1.10 Support higher education institutions to provide quality and relevant health professionals for enhanced health service delivery.		HR NHTC
Specific Objective 2.2: To ensure equitable deployment and redistribution of quality health workforce across the country Strategies		
2.2.1Development and implementation of posting and redistribution policy and guidelines		HR
2.2.2Strengthen HR database that provides evidence on allocation and distribution of staff		HR
2.2.3Maintenance of appropriate skill mix of health workers with competencies relevant to the needs of the population		HR Nursing Directorate
Specific Objective 3.1: To ensure a robust and integrated health information system for, evidence-based planning and resource allocation at all levels of the health system		
3.1.1 Ensure availability of quality health information.	% of districts in which Routine Data Quality Assessment (RDQA) is conducted % of public facilities (GOL, Red Cross, CHAL) health facilities reporting according to existing HMIS norms % of private for profit health facilities reporting according to the existing HMIS norms	HMIS FP Lab
3.1.2 Strengthen the governance and stewardship of the ministry towards health management information system	Governance and stewardship of the ministry towards health management information system strengthened	HMIS
3.1.3 Maintain data warehouse that captures all sources of health data and generate national approved data for use by all stakeholders		ICT

Strategies	Results Indicators (RIs)	Responsible Department
3.1.4 Establish business intelligence solution for recording, consolidation, analysis, reporting and publication of all health data.		HMIS ICT
3.1.5 Review and implement national dictionary of health indicators	Availability of updated national indicator dictionary	M&E
3.1.6 Build capacity of the health sector to effectively generate, manage, disseminate and utilise health information at all levels of the sector for program management and development	Improved skills and knowledge of health professionals in generation, management, dissemination and utilization of health information at all levels of the sector % of districts developing annual operational plans using the district information % of districts undertaking Routine Data Quality Assessments (RDQA) quarterly % of districts undertaking quarterly performance reviews Evidence base National Health Policy formulated	HMIS
3.1.7 Strengthen monitoring and evaluation together with surveillance system for the health sector	Monitoring and evaluation and surveillance system of the health sector strengthened % of annual performance review undertaken Health sector strategic plan midterm and end term evaluation conducted	M&E
3.1.8 Enhance the coordination and planning of surveys within the health sector	Coordination and planning of M&E activities within the health sector enhanced % of quarterly SI TWG meetings conducted % of monthly M&E TWG meetings conducted % of surveys conducted	HMIS M&E
3.1.9 Institutionalize routine data quality assessments (RDQA) and periodic data audits for DHIS2 information	% of districts undertaking quarterly RDQA % of bi-annual data audits conducted	HMIS
Specific Objective 3.2: To leverage eHealth to promote and deliver quality and efficient health services to all Basotho using sustainable and integrated ICT solutions		
3.2.1 Ensure availability of quality HIS solutions and safe guard the security of health data and information		
3.2.2Establish and support national eHealth steering committee and Technical Working Group	National eHealth steering committee and TWG established % of quarterly eHealth steering committee meeting conducted % of monthly eHealth TWG meetings conducted	ICT
3.2.3Align eHealth and ICT solutions and strategies to national eGovernment policies and national eHealth strategy		ICT
3.2.4Establish a system for standardization of ICT hardware and software	System for standardization of ICT hardware and software established	ICT

Strategies	Results Indicators (RIs)	Responsible Department
3.2.5Develop a system and various web based outlets to enable targeted health information to be conveyed to health workers and general public		ICT
3.2.6 Improve the quality, safety and efficiency of clinical practices by giving health care workers increased access to consumer health information, clinical evidence and clinical support tools		Clinical Services ICT
3.2.7 Use ICT as a strategic tool at all levels in the health sector so that resources are utilised more efficiently and effectively		Nursing Directorate
3.2.8 Support health work force capacity building by utilising cost effective technology		ICT Lab
Specific Objective 3.3: To strengthen National Health Research Systems (NHRS) for generation, dissemination and utilization of research in addressing the health needs of the population		
3.3.1 Strengthen National Health Research System (NHRS) to ensure good governance of research processes.	National Health Research System strengthened	Research FP
3.3.2 Build capacity for high quality research and mobilize resources for financing research based upon Algiers Declaration on Health research.		Research Nursing Directorate
3.3.3 Support partnerships between international, regional and local research institutions for sharing evidence and harnessing research capacity.	% of research fora undertaken	Nursing Directorate Research
3.3.4 Ensure functionality of documentation centre to preserve knowledge on traditional and western medicine to inform future studies on efficacy and safety medicines.	Documentation centre functioning accordingly	Research
3.3.5 Strengthen the governance structures for health research (National Research Ethics Committee and institutional Review Board) for ethical clearance of proposals and scientific trials.	Functionality of the Independent Research Ethics Committee	Research
3.3.6 Generate in-depth data on health status through research and surveys.		Research
3.3.7Promote the utilization of research findings for policy and programme formulation	% of districts trained in use of data for research	Research
Specific Objective 4.1: To increase access to quality and safe and efficacious technologies including affordable medicines, medical and rehabilitative devices, laboratory services, traditional and alternative medicines, vaccines, procedures and systems		
4.1.1 Advocate for enactment of medicines and medical devices control bill that establishes national medicines regulatory authority	Improved procurement and Supply Chain Management System National medicines regulatory authority in place	Pharmacy

Strategies	Results Indicators (RIs)	Responsible Department
4.1.2 Strengthen rational use of medicines to curb the problem of antimicrobial resistance and irrational use of medicines.	Improved regulatory environment for medicines and pharmaceuticals	Pharmacy
4.1.3 Review and update the national medicines policy and essential medicines list & standard treatment guidelines biannually.	Improved disposal of health care waste	Pharmacy
4.1.4 Strengthen Pharmaceutical Services and implement the National Medicines Policy.	Pharmaceutical services strengthened National medicines policy implemented	Pharmacy
4.1.5 Promote local production of medicines that comply with Good Manufacturing Practices and are in line with local, regional and international standards.		Pharmacy
4.1.6Support studies to monitor drug resistance	Antimicrobial resistance studies given priority	Pharmacy
4.1.7Adapt standards on health technologies, equipment and vaccines	Standards on health technology, equipment including vaccines adapted Risk of disease outbreaks reduced	Pharmacy
4.1.8Strengthen and expand the provision of quality medical imaging and radiation therapy	Provision of quality medical imaging and radiation therapy strengthened	Pharmacy
4.1.9 Establish pharmacovigilance and medicine information centre	Pharmacovigilance and medicine information centre established	Pharmacy
4.1.10 Establish pharmaceutical laboratory	Pharmaceutical laboratory established	Pharmacy
4.1.11Decentralise TB laboratory services in 13 health centres	TB laboratory services decentralized in 13 health centres % of health centres providing TB laboratory services by 2022	Lab
4.1.12Implement typing of drugs resistance isolates for epidemiological purposes		Lab
4.1.13Strengthen quality of testing in line with national and international standards..		Pharmacy
Specific Objective 4.2: To ensure health products are available and are of the right quality, right quantity, at the right price, at the right place and at the right time		
4.2.1Support the establishment of relevant structures for supply chain management and strengthen capacity at all levels.		SCCU
4.2.2Strengthen capacity in supply chain and procurement management at district level and below.	Capacity in supply chain and procurement management at district level and below strengthened	SCCU
4.2.3Support quality and proper handling of health products throughout the supply chain.		SCCU
4.2.4Ensure effective tendering and procurement processes and contract management.		SCCU
4.2.5Strengthen quantification and forecasting of medicines, health commodities, medical equipment and devices.		SCCU

Strategies	Results Indicators (RIs)	Responsible Department
Specific Objectives 5.1: Ensure Equitable, efficient and sustainable health financing system that protects people from financial catastrophe and impoverishment due to use of health services		
5.1.1Develop and implement a health financing policy and strategy that will ensure sustainability and financial risk protection.	Health financing policy and strategy in place Information available on sources and use of funds	HPSD Finance
5.1.2Strengthen health financing monitoring through institutionalization of National Health Accounts (NHA)	Focused financing of health sector priorities NHA reports produced on annual basis Annual dissemination of NHA reports to public	HPSD Finance
5.1.3Implement health decentralization policy on financial decentralization	Improved allocation of financial resources to the district Budget allocated towards Health centre's as cost centre's	Finance
5.1.4Develop and implement a comprehensive resource allocation formula.	Comprehensive resource allocation formula developed Improved allocation and disbursement of funds	Finance
5.1.5Institutionalise strategic purchasing of health care services including results based financing.		HPSD
5.1.6Strengthen absorptive capacity of capital budget		HPSD
5.1.7Update and cost essential health package		HPSD
5.1.8Explore other health financing mechanisms for purchase of health services		HPSD PPP
Specific Objective 6.1: To provide strategic direction for health development through transparent and accountable governance.		
6.1.1Establish and strengthen a multi-disciplinary participatory coordination mechanisms at district and national level for developing, updating and monitoring of the National Health Policy, related policies, guidelines, National Health Strategic Plan, other strategies and operational plans.	Establishment of a coordinating committee to oversee development and updating of National Health Policy and plans Strong regulatory environment Availability of National Health policy Availability of national health strategic plan 2023-28 Availability of Annual operational plan	HPSD Finance
6.1.2Advocate for timely approval of all policies and outstanding bills.		Legal
6.1.3Ensure health legislations, standards, regulatory frameworks are revised, well disseminated and enforced.		Legal
6.1.4Support the systematic and participatory assessment, documentation and feedback on the health sector performance.	Strong partnership arrangement with all stakeholders	M&E
6.1.5 Advocate for establishment of health service commission to ensure compliance to regulations and guidelines		DGHS Office

Strategies	Results Indicators (RIs)	Responsible Department
Specific Objective 6.2: To ensure a functional decentralised health system, consistent with the National Decentralisation policy		
6.2.1Support the devolution of the health system according to defined functions as part of the national decentralisation policy.	Strong institutional systems and structures	DGHS Office
6.2.2Ensure adequate allocation of resources to district level and support budget management and autonomy of health budget by DHMTs.	District resource allocation criterion formula established by 2020 % of districts allocated resources according to funding formula (needs)	Finance DGHS Office Admin
6.2.3Provide technical guidance, relevant guidelines and tools as well as building capacity to ensure functional DHMTs within local government structures.		DGHS Office Admin
6.2.4Establish a mechanism of coordinating decentralization and monitoring process of decentralization at district and central level		HPSD
6.2.5Provide technical capacity to central level to offer guidance and support to DHMTs on decentralised health systems		DGHS Office
Specific Objective 6.3: To ensure alignment and harmonization of health sector partner resources and activities with government systems within a coordinated framework that support integrated planning, budgeting, monitoring and evaluation		
6.3.1 Strengthen Partner Coordination	Mechanisms for resource coordination i.e. (Joint Funding Agreement, SWAp, Multi-donor budget support) established	HPSD
6.3.2 Create and institutionalize platforms for partners to participate in planning and monitoring of health services delivery at all levels of the health system.	Budget and planning forums (TWGs) established	HPSD DGHS Office
6.3.3 Establish a functional PPP unit for contractual management of health PPPs and outsourced/purchased health care services.	Improved and efficient PPP system in place Health sector PPP guidelines developed % of PPP positions filled by 2020	PPP Admin
Objective 6.4: To strengthen inter-sectoral collaboration in health development.		
6.4.1 Strengthen linkages and collaboration with other line ministries for integration of health issues into their sectoral policies to address social determinants of health	Inter-ministerial committee established with all relevant stakeholders % of quarterly inter-ministerial committee meetings held	HPSD
6.4.2Revive and operationalise comprehensive communication strategy to drive social mobilization and stakeholder participation.	Comprehensive communication strategy developed	HED
6.4.3Provide leadership and advocate for mainstreaming health to ensure "health in all policies" approach in national policy discussions across relevant sectors.		
6.4.4Support the use of health impact assessments (HIA) as a tool to measure potential public health impacts of plans, projects, and policies that fall outside of traditional public health areas, including		HPSD

Strategies	Results Indicators (RIs)	Responsible Department
transportation, land use, and energy, bringing these considerations to the decision making process in an effort to achieve health in all policies.		

Annex B: Indicators for Measuring the NHSP

	Indicator	2019	2020	2021	2022	2023
1	Maternal mortality ratio					
2	proportion of births attended by skilled health personnel					
3	Under-five mortality rate					
4	Infant mortality rate.					
5	Under-five mortality rate					
6	Neonatal mortality rate					
7	Number of new HIV infections					
8	Tuberculosis incidence					
9	Tuberculosis deaths					
10	Increase in access to interventions against neglected tropical diseases					
11	Reduction in mortality attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease					
12	Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders					
13	Deaths due to trauma and road traffic injuries					

	Indicator	2019	2020	2021	2022	2023
14	Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods					
15	Adolescent birth rate					
16	Mortality rate attributed to household and ambient air pollution					
17	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)					
18	Proportion of the population with access to affordable medicines and vaccines on a sustainable basis					
19	Health worker density					
20	Capacity for International Health Regulations (IHR) and health emergency preparedness					

Annex C: Health indicators (Menu of health Indicators to be included in the M&E Framework for review)

Programme Area	Description	Result Chain
Child Health	Infant mortality rate.	Impact
Maternal Health	Institutional maternal mortality ratio	Impact
MMR	Maternal mortality ratio (per 100 000 live births)	Impact
Adolescent	Adolescent fertility rate (per 1000 girls aged 15-19 years)	Outcome
Adolescent	Percentage of pregnant Adolescent girls (9-13) attending at least four ANC visits	Outcome
Adult Mortality	Adult mortality rate (probability of dying between 15 and 60 years per 1000 population)	Outcome
Child Health	Children aged <5 years with ARI symptoms receiving antibiotics (%)	Outcome
Child Health	Children aged <5 years with ARI symptoms taken to a health facility (%)	Outcome
Child Health	Children aged <5 years with diarrhoea receiving oral rehydration therapy (%)	Outcome
Child Health	Children aged 6-59 months who received vitamin A supplementation (%)	Outcome
Child Health	Children with diarrhoea receiving oral rehydration solution (ORS)	Outcome
Child Health	Deaths in children aged <5 years, by cause	Outcome
Child Health	Deaths in children aged <5 years, by cause (per 1 000 live births)	Outcome
Child Health	Incidence of low birth weight among newborns	Outcome
Child Health	Neonates protected at birth against neonatal tetanus (%)	outcome
Child Health	Vitamin A supplementation coverage	Outcome
Delivery	Birth registration coverage	Outcome
Delivery	Births attended by skilled health personnel (%)	Outcome
Delivery	Births by caesarean section (%)	Outcome
Environmental Health	Percentage of health facilities with functional means of Medical Waste Disposal System in line with national guidelines. (functional incinerator as proxy)	Outcome
Environmental Health	Population using improved drinking-water sources (%)	Outcome
Environmental Health	Population using improved sanitation facilities (%)	Outcome
Environmental Health	Population using modern fuels for cooking/heating/lighting	Outcome
Environmental Health	Population using safely managed drinking-water services	Outcome
Environmental Health	Population using safely managed sanitation services	Outcome
Environmental Health	Population using solid fuels	Outcome
Environmental Health	Proportion of water sources with safe drinking water	Outcome

Programme Area	Description	Result Chain
EPI	Diphtheria tetanus toxoid and pertussis (DTP3) immunization coverage among 1-year-olds (%)	Outcome
EPI	Hepatitis B (HepB3) immunization coverage among 1-year-olds (%)	Outcome
EPI	Hepatitis B incidence per 100,000 population	Outcome
EPI	Hib (Hib3) immunization coverage among 1-year-olds (%)	Outcome
EPI	Immunization coverage rate by vaccine for each vaccine in the national schedule	Outcome
EPI	Measles (MCV) immunization coverage among 1-year-olds (%)	Outcome
Family Planning	Contraceptive prevalence rate	Outcome
Family Planning	Demand for family planning satisfied with modern methods	Outcome
Family Planning	Prevalence of condom use by adults (aged 15-49 years) during higher-risk sex (%)	Outcome
Family Planning	Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	outcome
Family Planning	Unmet need for family planning (%)	Outcome
Health Financing	External resources for health as a percentage of total expenditure on health	Outcome
Health Financing	Externally sourced funding (% of current expenditure on health)	Outcome
Health Financing	General government expenditure on health as a percentage of total expenditure on health	Outcome
Health Financing	General government expenditure on health as a percentage of total government expenditure	Outcome
Health Financing	Out-of-pocket expenditure as a percentage of private expenditure on health	Outcome
Health Financing	Per capita government expenditure on health at average exchange rate (US$)	Outcome
Health Financing	Per capita total expenditure on health at average exchange rate (US$)	Outcome
Health Financing	Private expenditure on health as a percentage of total expenditure on health	Outcome
Health Financing	Total capital expenditure on health (% current + capital expenditure on health)	outcome
Health Financing	Total expenditure on health as a percentage of gross domestic product	outcome
Health Financing	Total official flows for medical research and basic heath sectors	Outcome
Health Technology	Density of hospitals (per 100 000 population)	Outcome
Health Technology	Hospital beds (per 10 000 population)	Outcome

Programme Area	Description	Result Chain
Health Technology	New cases of IHR-notifiable diseases and other notifiable diseases	outcome
Health Technology	Percentage of Districts with Updated Emergency Preparedness and Response Plan	Outcome
HIV and AIDS	Antiretroviral therapy (ART) coverage	Outcome
HIV and AIDS	ART retention rate	Outcome
HIV and AIDS	Deaths due to HIV/AIDS (per 100 000 population)	Outcome
HIV and AIDS	HIV incidence rate	Outcome
HIV and AIDS	HIV prevalence rate	Outcome
HIV and AIDS	HIV test results for registered new and relapse TB patients	Outcome
HIV and AIDS	HIV viral load suppression	Outcome
HIV and AIDS	HIV-positive new and relapse TB patients on ART during	Outcome
HIV and AIDS	People living with HIV who have been diagnosed	Outcome
HIV and AIDS	Population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS (%)	Outcome
HIV and AIDS	Prevention of mother-to-child transmission	Outcome
HMIS	Completeness of reporting by facilities	Outcome
HMIS	Completeness of weekly IDSR reports	Outcome
HMIS	Proportion of village health workers who submitted their reports to the health facility on a monthly basis	outcome
HMIS	Timeliness of IDSR weekly reports	outcome
Human Resource	Density of community health workers (per 10 000 population)	Outcome
Human Resource	Density of dentists (per 10 000 population)	Outcome
Human Resource	Density of environment and public health workers (per 10 000 population)	Outcome
Human Resource	Density of nursing and midwifery personnel (per 10 000 population)	Outcome
Human Resource	Density of pharmacists (per 10 000 population)	Outcome
Human Resource	Density of physicians (per 10 000 population)	Outcome
Human Resource	Total number of active Village Health workers	outcome
Management	Percentage of health centres holding at least 80% of planned board/committee meetings	Outcome
Management	Percentage of health centres with functional committees/boards	Outcome
Maternal Health	Antenatal care coverage - at least four visits (%)	Outcome
Maternal Health	Antenatal care coverage - at least one visit (%)	Outcome
maternal health	Exclusive breastfeeding under 6 months (%)	Outcome
Maternal Health	Obstetric and gynaecological admissions owing to abortion	Outcome
Maternal Health	Perioperative mortality rate	Outcome

Programme Area	Description	Result Chain
Maternal Health	Postnatal care visit within two days of childbirth (%)	Outcome
Maternal Health	Postpartum care coverage	Outcome
Maternal Health	Stillbirth rate	outcome
Maternal Health	Total fertility rate	outcome
Medicines	Availability of essential medicines and commodities	Outcome
Medicines	Availability of STGs and EML in facilities	Outcome
Medicines	Proportion of the population with access to affordable medicines and vaccines on a sustainable basis	outcome
Mental Health	Coverage of services for severe mental health disorders	Outcome
Mental Health	Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	Outcome
Mortality	Mortality rate attributed to household and ambient air pollution	outcome
Mortality	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	outcome
NCDs	Cancer incidence, by type of cancer	Outcome
NCDs	Cervical cancer screening	Outcome
NCDs	Coverage of preventive chemotherapy for selected neglected tropical diseases	Outcome
NCDs	Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	Outcome
NCDs	Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases	Outcome
NCDs	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	outcome
NCDs	Number of deaths attributed to cancer. Age group 30 - 70	Outcome
NCDs	Number of deaths attributed to cardiovascular disease. Age group 30 - 70	Outcome
NCDs	Number of deaths attributed to chronic respiratory disease. Age group 30 - 70	outcome
NCDs	Number of deaths attributed to diabetes. Age group 30 - 70	outcome
NCDs	Prevalence of current tobacco use among adolescents aged 13-15 years (%)	Outcome
NCDs	Prevalence of raised fasting blood glucose	Outcome
NCDs	Raised blood pressure among adults	outcome

Programme Area	Description	Result Chain
NCDs	Tobacco use among persons aged 18+ years	outcome
NCDs	Total alcohol per capita (age 15+ years) consumption	outcome
NTDs	Suicide mortality rate	outcome
NTDs	Suicide rate	outcome
Nutrition	Anaemia prevalence in children	Outcome
Nutrition	Anaemia prevalence in women of reproductive age	Outcome
Nutrition	Children aged <5 years' overweight (%)	Outcome
Nutrition	Children aged <5 years stunted (%)	Outcome
Nutrition	Children aged <5 years underweight (%)	Outcome
Nutrition	Children aged <5 years wasted (%)	Outcome
Nutrition	Overweight and obesity in adults *(Also: adolescents)*	Outcome
RTI	Death rate due to road traffic injuries	Outcome
RTI	Mortality rate from road traffic injuries	outcome
STIs	Sexually transmitted infections (STIs) incidence rate	outcome
TB	Estimated deaths due to tuberculosis, excluding HIV (per 100 000 population)	Outcome
TB	Estimated prevalence of tuberculosis (per 100 000 population)	Outcome
TB	Notified cases of tuberculosis	outcome
TB	Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases	outcome
TB	TB case detection rate	outcome
TB	TB Case Notification	outcome
TB	TB Incidence Rate	outcome
TB	TB mortality rate	outcome
TB	TB patients with results for drug susceptibility testing	outcome
TB	TB prevalence rate	outcome
TB	TB preventive therapy for HIV-positive people newly enrolled in HIV care	outcome
TB	TB treatment success rate	outcome
TB	Treatment success rate for new pulmonary smear-positive tuberculosis cases	Outcome
TB	Tuberculosis case detection rate for new smear-positive cases (%)	Outcome
TB	Tuberculosis deaths per 100,000 population	outcome
Environmental Health	Proportion of local government councils with proper liquid waste management systems	output

Programme Area	Description	Result Chain
Environmental Health	Proportion of local government councils with proper solid waste management systems	output
EPI	Number of girls (9-13) vaccinated for HPV	Output
EPI	Number of reported cases of measles	Output
EPI	Number of reported cases of mumps	Output
EPI	Number of reported cases of neonatal tetanus	Output
EPI	Number of reported cases of pertussis	Output
EPI	Number of reported cases of poliomyelitis	Output
EPI	Number of reported cases of rubella	Output
EPI	Number of reported cases of total tetanus	Output
EPI	Number of reported cases of yellow fever	Output
EPI	Number of suspected meningitis cases reported	Output
Family Planning	Number of Facilities providing FP Services	Output
Family Planning	Number of Facilities reporting FP stock out for more than 7 days (by Commodity)	Output
Family Planning	Number of Facilities reporting FP stock out for more than 7 days (by Commodity) - Condoms	Output
Family Planning	Number of Facilities reporting FP stock out for more than 7 days (by Commodity) - Implants	Output
Family Planning	Number of Facilities reporting FP stock out for more than 7 days (by Commodity) - Injectable	Output
Family Planning	Number of Facilities reporting FP stock out for more than 7 days (by Commodity) - Pills	Output
Health Financing	Number of people covered by health insurance or a public health system per 1,000 population	output
Health Technology	International Health Regulations (IHR) core capacity index	Output
Health Technology	Proportion of facilities with functional medical equipment	output
Health Technology	Proportion of facilities with functional refrigerators	output
HIV and AIDS	Number of HIV positive clients	Output
Human Resource	Number of Graduants	Output
maternal health	Maternal death reviews	Output
Maternal Health	Proportion of births attended by skilled health personnel	output
NTDs	Number of people requiring interventions against neglected tropical diseases	Output

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