

REPUBLIC OF LIBERIA



NATIONAL HEALTH POLICY 2022-2031



Republic of Liberia National Health Policy

2022

Foreword

Fellow Liberians, residents and partners, the launch of this National Health Policy (2022-2031) begins a new decade for health in Liberia. It is globally recognized that without a healthy population, no nation can develop and prosper. This is why the United Nations made the attainment of Universal Health Coverage (UHC) an integral part of the Sustainable Development Goals. We cannot make any significant progress on any of the other 16 goals without doing well in heath.



As we launch this new national health policy, our vision is to have a healthy population, with particular protections for the poor and vulnerable, for the attainment of equitable growth and for sustainable development, in line with the Pro-Poor Agenda for Prosperity and Development. We cannot grow our economy to achieve prosperity and development in the absence of a healthy population.

In this new policy, we are focusing on the attainment of UHC to ensure that everyone who needs health care can have it without enduring financial hardship. We intend to achieve this by putting the power and resources in the hand of the local community to take charge of their own health through the Primary Health Care approach that is heavily driven by decentralization. Citizens will also have the chance to contribute to their own health and meet government and partners halfway. This will start with the re-introduction of the Revolving Drugs Fund at the primary level, Cost Sharing at the secondary and tertiary levels in the short to medium term, and the creation of the National Health Insurance Scheme also in the medium to long term. All these will be instituted and regulated with the poor in mind so that no one endures financial hardship due to health expenditure. This means those who have the capacity will contribute and government and partners will help while those who are very poor and vulnerable are taken care of by government and partners. This is a move away from 'Universal Free Care' to 'Targeted Free Care'.

Additionally, this policy is being lunched when our global and national policy environments remain volatile as the result of constraints imposed by the COVID-19 pandemic. As such, this policy also places emphasis on health security amid ongoing uncertainty as we still fight COVID-19 and its aftermath. We need a stronger and resilient health system that can remain vibrant and effective under shocks. At the same time, we need an effective disease surveillance and early warning system as we move into an uncharted future and existential threats posed by emerging and re-emerging diseases underpinned by global climate change. Consequently, we are determined to transform the health sector into an effective, efficient and equitable system, which is sustainably financed for quality health services delivery as we move towards UHC and health security. We cannot achieve this alone as a sector. It is going to take the whole government, all partners and the Liberian people to achieve these ambitious milestones set out in this policy and the corresponding Strategic Plan.

Finally, I would like to thank the strong Leadership of H.E. President George M. Weah and the support of our development partners who continue to stand with us shoulder-to-shoulder. We are confident that together we can achieve the goal of this policy, which is improve the health and wellbeing of all in Liberia.

Wilhelmina S. Jallah, MD, MPH, CHES, FWACP Minister of Health

Acknowledgements

Thanks to the President of Liberia, H.E. George M. Weah for his passionate leadership and to the honorable Minister of Health, Dr. Wilhelmina S. Jallah, for

her stewardship of the health sector and to the MoH, and for steering the development of this policy.

his policy is a milestone that warrants celebration because it presents an opportunity and a clear framework for health system strengthening and health care quality improvement in Liberia that is sustainable for the next decade.

This policy emerged from a rigorous process that pulled in data from diverse sources and drew on lessons

learned from implementing the National Health Policy and Plan (2011-2021) and the Investment Plan for Building a Resilient Health system (2016-2021). It should be celebrated because it is a home-grown document built largely upon our own experiences with people who have actively participated in health system management here in Liberia. The process was facilitated by our former Minister of Health, Dr. Bernice T. Dahn, and supported by Dr. Angela Benson and Dr. Rose Jallah Macauley. It also benefitted from peer review by partner institutions with expertise in Liberia and abroad. I want to thank all of them for this wonderful job.

I want to extend sincere thanks and appreciation to all members of the senior management team of the MoH including deputy ministers, assistant ministers, directors, programme managers, technical staff, heads of health regulatory agencies and boards, health professional associations and health training institutions. Many thanks to the Chair of the House Committee on Health, Hon. Joseph Suwambi, the Chair of the Senate Committee on Health, Hon. Cllr. Augustine S. Chea, Hon. Olyee Collins, Deputy Minister of Internal Affairs, Hon. Taneh Brumson, Deputy Minister of Finance and Development Planning, Hon. Alton V. Kessely, Deputy Minister of Education, technicians from Ministry of Gender, Children and Social Protection; the National Commission on Disabilities, members of the disabled community and civil society organizations for their participation in the policy dialogue leading to the development of this policy and their immense contributions during the drafting and validation.

Sincere gratitude to our partners including the World Health Organization, the World Bank, USAID, UNICEF, UNFPA, GIZ, and Last Mile Health for their financial and technical contribution. Partners in Health Provided technical support to the drafting process.

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Policy and Planning, for outstanding leadership of the technical core team and his technical expertise in developing this policy.

Finally, as we launch this policy, I want to call on all partners to join the Government of Liberia to fully support the implementation of this policy, the corresponding Strategic Plan and the Essential Package of Health Services (EPHS_II), especially the prioritized EPHS Package for universal health coverage and to align our resources to improve the health and well-being of all in Liberia, especially poor and vulnerable populations.

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A. Vaifee Tulay, BSc., BPham, MSc. Deputy Minister for Policy, Planning and Monitoring and Evaluation

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Acronyms and abbreviations

ANC Antenatal Care

CBOs Community-Based Organizations

CHOs County Health Officers
CSOs Civil Society Organizations

DHIS District Health Information Software

DHS Demographic and Health Survey

EPHS Essential Package of Health Services

EPR Emergency and Preparedness and Response

GoL Government of Liberia

HIS Health Information System

HIES Household Income and Expenditure Survey

HIV Human Immunodeficiency Virus

LDHS Liberia Demographic and Health Survey

LHEF Liberia Health Equity Fund

LISGIS Liberia Institute for Statistics and Geo-Information Services

MCH Maternal and Child Health

MoH Ministry of Health

M&E Monitoring and Evaluation

NCD Non-Communicable Diseases

NGOs Non-Governmental Organization

NHPP National Health Policy and Plan

NTDs Neglected Tropical Diseases

PAPD Pro-Poor Agenda for Prosperity and Development

PNC Post-Natal Care

SDGs Sustainable Development Goals

TB Tuberculosis

US\$ United States Dollar

UNICEF United Nations Children Fund

UNFPA United Nations Population Funds

USAID United States Agency for International Development

WB World Bank

WHO World Health Organization

1. Introduction

1.1 Global and Regional Health Focus

This National Health Policy (NHP) builds on gains made in the previous National Health Policy and Plan (NHPP 2011-2021), the Investment Plan for Building a Resilient Health Delivery System (2015-2021) and the Essential Package of Health Services (EPHS) (2011-2021). It aims to accelerate progress towards universal health coverage (UHC) by improving access to safe and quality health services and to narrow the access gap for the most vulnerable populations. It provides health security and reduces health threats to the people of Liberia by reducing risks posed by epidemics and other events of public health significance. The National Health Policy is aligned with the Government of Liberia's (GoL) Vision to "Build more capable and trusted state institutions that will lead to a stable, resilient, and inclusive nation." The Government of Liberia's strategic priority areas are also aligned to the Africa Agenda 2063 and the Economic Community of West African States' Vision 2050. This Policy will guide the work of the Liberia health sector as envisioned in the Pro-Poor Agenda for Prosperity and Development (PAPD) 2018-2023 as well as the Vision 2030 Agenda. It capitalizes on gains made over the past ten years and seeks to maximize synergies across programs in an inclusive manner in order to reflect a more integrated and sustainable approach required for the achievement of the 2030 Agenda and the PAPD.

1.2 Health within the National Development Agenda

The launch of the Government of Liberia's PAPD opened a new page for public policy dialogue in Liberia and sets the stage for policy review across all sectors. It outlined new development priorities for the GoL. It also seeks to expand access to essential health services and, in doing so, to promote healthy and thriving lives and economic productivity. It outlined eight strategic targets aimed at:

- (1) reducing maternal mortality,
- (2) reducing under five mortality,
- (3) reducing under five malnutrition,
- (4) reducing malaria prevalence,
- (5) improving access to healthcare for rural population living beyond 5km radius to the nearest health facility,
- (6) increasing the number of outbreaks responded within 48 hours following notification,
- (7) reducing the number of public health facilities reporting stockout of essential medicines,
- (8) reducing out of pocket payment for health care.

The PAPD highlights critical challenges in the health sector and the shortcomings of the free health care policy.² It identifies strategic health priority interventions including

¹ GoL 2018. Pro-Poor Agenda for Prosperity and development. Page 30.

² Downie R. *The Road to Recovery, Rebuilding Liberia's Health System*. CSIS Global Health Policy Centre. [Online. Cited 2014 June 2]. Available at: http://csis.org/files/publication/120822_Downie_RoadtoRecovery_web.pdf .

improvement of health service delivery and infrastructure, and achievement of efficiency and sustainable financing for health by offering an alternative strategy focused on the Liberia Health Equity Fund (LHEF) and strengthening financial management systems.

Additionally, it highlights delivery of the EPHS and strengthening of partnerships in health care delivery.

1.3 Legal Framework Guiding Health Delivery

Liberia RISING 2030 (Agenda 2030) is Liberia's long-term vision of socio-economic transformation and development. The Agenda 2030 articulates precise goals and objectives and corresponding interventions that move Liberia closer toward structural economic transformation, prosperity and inclusive growth. Agenda 2030 sets out specific goals and objectives that Liberia must achieve over the years, moving towards a more prosperous and inclusive society and achievement of the SDGs including UHC by 2030. Agenda 2030 serves as the framework for the development of the PAPD, and hence the NHP.

An executive law in 1972 led to the establishment of the Ministry of Health and Social Welfare. The revision and amendment of this law in 2015 led to the establishment of the Ministry of Health (MoH). Its core mandate includes the formulation, implementation, monitoring and evaluation of health policies, plans and standards, and the delivery and coordination of decentralized medical care in health facilities, development of the health workforce and implementation of preventive and promotive health services.

The GoL and MoH developed the National Health Policy and Plan (NHPP-2011-2021) to guide health development, health systems strengthening and health service delivery. Following the Ebola Virus Disease (EVD) outbreak in 2014, an Investment Plan for Building a Resilient Health System (2016-2021) was developed to facilitate health system recovery and set it on the path to development. With expiration of the NHPP-2011-2021 and the Investment Plan, the MoH and partners developed a "Ten Year National Health Policy and a Five Year National Health Strategy" to guide the sector.

1.4 Policy Context

In line with the national rebuilding process that began in 2006 after the war, Liberia's health sector gradually shifted from emergency humanitarian relief to developing sustainable systems for health service delivery.

In the post-war period, the government recognized the need to improve the health status of its population and prioritized development of the health infrastructure to increase access to quality and affordable health care. The NHPP 2007 was introduced as the framework for rebuilding the health sector. This NHPP suspended fees for service and introduced free health care for primary and secondary level services, which is still in force today, although the NHPP 2011-21 called for affordable user fees

for certain services in addition to predictable donor support and potential mechanisms for risk pooling in financing health.³

The EPHS 2011-2021 served as the instrument that operationalized the NHPP 2011-2021. This EPHS set the pace for devolving management functions to county health teams and the rebuilding of health care delivery systems. Over the last 10 years of implementation, significant gains were made in terms of decentralized functions and building local health systems.

The EVD crisis in 2014-2016 eroded many gains. Some 10,678 people were infected, with 4,810 deaths, 375 health worker infections and 189 health worker deaths (CDC, WHO). Nationally, 8 percent of physicians, nurses and midwives died.⁴ Service delivery across routine services was interrupted, with decreased performance in malaria treatment, immunizations, antenatal and postnatal care, facility-based deliveries, and HIV and TB treatment. In the wake of the crisis, the Investment Plan for Building a Resilient Health Care Delivery (2015-2021) re-enforced the National Health Policy and Plan 2011-2021 after the health sector nearly collapsed from the shocks of the devastating EVD outbreak.

Similarly, the ongoing COVID-19 outbreak impacted the health systems negatively. As of December 2021, volumes of essential maternal, reproductive and child health services in Liberia are lower than expected based on pre-pandemic trends and seasonality. There are substantial disruptions in outpatient services (down by 17 per cent), family planning consultations (down by 36 per cent), PNC1 (down by 21 per cent), ANC1 (down by 19 per cent) and immunization⁵.

Priorities are based on the current health status of the population, the state of health service organization and utilization, and overall health system performance. Additional context can be found in the MoH Situation Analysis Report 2021 and policy priorities are elaborated below.

1.5 Policy priorities

Amid dwindling donor support to the health sector, coupled with the global economic shocks resulting from the COVID-19 pandemic that have impacted the Liberian economy, the need to prioritize is imperative. Therefore, this policy focuses on nationally set priorities on which all major stakeholders are required to concentrate their efforts and resources to achieve universal health coverage and health security with primary health care at the core to significantly improve the health of the population. Because the health needs of the population far exceed the available resources, the impact on efficiency and effectiveness must become the measures by which all interventions are assessed in order to ensure their maximum contribution to the development of the system.

The health sector can and must be more effective and efficient by:

³ MoH. National Health and Social Welfare Policy and Plan 2011-2011. Page 20.

⁴ Evans, Goldstein, Papova. 2015. Health-care worker mortality and the legacy of the Ebola epidemic. Lancet Global Health.

⁵ GFF, World Bank and Development Research 2021. Monitoring Essential Health Services in time of COVID-19 in Liberia

- Improving access to high impact health services that are universal, affordable and responsive to the needs of the population with specific focus on primary health care.
- Increasing the utilization of services through the expansion of health facilities to under-served populations by improving the population's care-seeking behavior, the quality of care, the availability of essential drugs, and basic and advanced diagnostic equipment.
- Strengthening the capacity and competency of the existing workforce, producing additional healthcare workers with the right skills mix, recruiting and deploying according to service delivery needs, and retaining skilled providers where they are needed most.
- Sustaining the community health program to deliver health services to the vulnerable and under-served population based on a well-defined package of care.
- Implementing the international health regulation (IHR) 2005 to build the required core capacities to prevent, detect and respond to health emergencies utilizing the One Health platform.

At the same time, the health sector must become more efficient by:

- Allocating resources to counties and health facilities according to their population size, disease burden, workload and utilization, and other social determinants.
- Decentralizing health system management to the lower levels as their capacity are built;
- Cultivating the culture of data analysis and use for programming, planning and routine decision making.
- Improving the coordination of all efforts to support the delivery of quality affordable and universal health services, eliminating fragmentation, duplication and minimizing gaps;
- Creating a culture at all levels of the health system that values and endeavors to do more for the population within available resources.

1.6 National Health Policy Development Process

The development of this National Health Policy 2022-2031 was led by the minister of health through the Department of Policy, Planning and Monitoring and Evaluation. A steering committee was set up and chaired and co-chaired by the minister of health and deputy minister for policy planning and monitoring and evaluation to oversee the development of the policy and strategy. The WHO country representative served as an advisor. Other members of the steering committee included key partners and stakeholders. The steering committee set up a technical core team that was headed by the assistant Minister for policy and planning and co-chaired by the WHO's health systems strengthening advisor.

The MoH developed a concept note that laid out the processes to follow and building on the WHO policy and planning framework, which was adopted from the WHO toolkit for health sector planning. This concept note provided the MoH senior management team's vision and aspiration for the health sector, which is strongly rooted in the SDGs including UHC and it was based on the government's PAPD. It provided a clear framework for the policy and plan's development. The guidance document was presented to and endorsed by the health sector coordination committee. Following the endorsement, a series of steps were undertaken:

- Stakeholders were mobilized and thematic working groups (TWGs) were formed based on WHO building blocks (an extended model, with ten TWGs). The TWGs were made up of assistant ministers, directors, program managers, county health officers, regulatory authorities, health professional boards and associations, development partners including donors, NGOs, civil society actors and other government ministries and agencies. The TWGs met twice a week during the review and elaboration of the policy and strategic plan.
- The chair and secretary of these TWGs formed part of the core team and met once weekly to provide updates, give feedback and give support to the TWGs.
- Each TWG conducted desk reviews of major documents including the NHPP 2011-2021 based on their thematic areas under the supervision of the core team and local technical consultants provided by WHO.
- A rapid assessment was conducted in four counties to assess stakeholders' perspective at health facilities, districts, counties and community levels. The counties were selected purposefully to represent three strata, dominantly urban (Montserrado), semi-urban (Grand Bassa) and dominantly rural (Grand Gedeh and River Gee Counties). Key informant interviews were conducted to generate perspectives on the implementation of the previous health policy and plan and gather stakeholders' aspirations for the future.
- Health managers at all levels, including officers in charge of health facilities, and community health workers were interviewed. Service users including women, youth, local leaders, and people with a disability were interviewed. Donor partners, NGOs and civil society actors we interviewed either in person, via zoom or through self-administered online questionnaires.
- A three-day meeting was held with key partners and MoH technicians to analyze and consolidate the data. The thematic working groups identified key policy issues, their implications and policy recommendations.
- A health status (situation analysis) report was written to inform the drafting of the policy.
- A three-day policy dialogue was held in Buchanan, Grand Bassa county in September 2021, and brought together key policy makers including the Senate and Houses' Health Committee chairs, the deputy minister of finance and development planning for budget and development planning, the deputy minister of internal affairs for policy and planning, representatives of the civil service agency, the National Public Health Institute of Liberia among other government ministries and agencies. Donor Partners (including USAIDS) and

UN agencies (including WHO, UNICEF and UNFPA) participated in the policy dialogue. Findings from the situational assessment, their policy implications and policy recommendations generated during the TWGs were presented and formed the agenda for the dialogue.

- The new ten-year National Health Policy, five-year Strategic Plan and five-year EPHS were drafted by the technical consultants with the support of the TWGs.
 The documents were shared on an online platform for easy access and input from the stakeholders.
- A five-day validation meeting was held in Ganta, Nimba county in November 2021 which brought together a cross-section of national stakeholders to validate the document.

The review and planning process led to the development of two key national health sector documents: this ten-year policy and the five-year Strategic Plan/Roadmap for UHC and EPHS II, with core and complimentary packages developed for each level of the health system based on the available fiscal space.

2. Situational Analysis

2.1 Socio-economic Situation

According to the 2019 Human Development Index (HDI) report, Liberia is valued at 0.480 HDI (0-1), which puts the country in the low human development category and positions it at 175 out of 189 countries and territories. This rank is shared with Democratic Republic of the Congo and Guinea-Bissau. Between 2000 and 2019, Liberia's HDI value increased from 0.435 to 0.480, an increase of 10.3 per cent. Liberia's life expectancy at birth increased by 12.4 years from 51.7 years in 2000 to 64.1 years in 2019.

In Liberia, factors such as education, gender, household wealth, rural/urban status, and access to clean drinking water, electricity and sanitation facilities remain strong determinants of health, as reflected below.

While the national literacy rate stands at 65 per cent, it is highest among youth aged 15-19 (88 per cent) and lowest among those aged 65 years and above (17.5 per cent). In addition, gender, geography and wealth influence school attendance and educational attainment, with rural areas and poorer households attaining fewer years of education and experiencing lower school attendance rates compared to their urban and wealthier counterparts. Gender differences in educational attainment persist. Almost one-third (31 per cent) of women aged 15-49 in Liberia have no education compared with 13 per cent of men, with 41 per cent of girls having received no education compared with 29.6 per cent of boys, and fewer girls complete some (6.9 per cent) or all (5.3 per cent) of senior high school compared to boys (11.9 per cent and 8.3 per cent respectively). To underscore the gender education gap further, three-quarters of all men are literate compared to roughly half of all women in Liberia⁶.

Water, Electricity and Sanitation

As with education, access to sources of clean drinking water, electricity, and sanitation facilities vary based on household wealth and location (urban vs rural), with the poorest (54.1 per cent) and rural (68.9 per cent) households having less access to improved sources of drinking water compared to wealthier (98 per cent) and urban (95.3 per cent) households. Boreholes and hand pumps remain the primary source of drinking water, with anywhere from 31 per cent to 54 per cent of all Liberian households relying on them for drinking water.

Roughly one quarter (24 per cent) of all households have access to electricity, including just 4 per cent in rural areas versus 39 per cent in urban households. About 8.1 per cent of the population receives electricity from Liberia Electricity Corporation, with again an unequal urban/rural divide in access (15.5 per cent and 0.1 per cent, respectively). Use of generators for electricity follows a similar trend, with 14.2 per

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⁶ Liberia Demographic and Health Survey. 2019-2020.

cent of urban and 1.8 per cent of rural households relying on generators as the primary source of electricity.

On average, 46.5 per cent of Liberian households have access to an improved sanitation facility (compared to 28 per cent in 2007), broken down to 65.5 per cent of urban households and 21.1 per cent of rural households. For nearly two-thirds of rural households, no toilet facilities exist. Differences in access to sanitation facilities are also driven by wealth, where nearly nine out of ten of the wealthiest households have access to improved sanitation facilities versus just 8.7 per cent in the poorest wealth quintile.⁷

2.2 Maternal and Newborn Health

Despite strides being made, Liberia remained among countries with the highest maternal mortality ratio globally (742/100,000 live births) in 2019-2020. There was a 30 per cent decrease from 1,072 deaths per 100,000 live births in 2013 LDHS. Among the leading causes of maternal deaths reported via the Liberia 2020 Maternal and Neonatal Death Surveillance and Review were haemorrhage (41.6 per cent), sepsis (20.2 per cent) and eclampsia (17.2 per cent). Other factors include anaemia (3.9 per cent), ruptured uterus (3.0 per cent), abortion (3.0 per cent) and obstructed labour (2.6 per cent).

These factors highlight major challenges with the quality of the maternal care provided. The 2018 Service Availability and Readiness Assessment (SARA) findings revealed that only 2 per cent of the facilities assessed had all tracer items for the Comprehensive Emergency Obstetric Care (CeMOC) Service.

Neonatal Mortality rates have reportedly increased from 26 deaths per every 1,000 live births to 37 deaths per every 1,000 live births from 2013 to 2019-2020. Most of the newborn deaths are driven by preventable or treatable factors such as: birth asphyxia (56.6 per cent), neonatal sepsis (34.4 per cent), preterm labour (2 per cent), neonatal tetanus (1.3 per cent) and aspiration pneumonia (1.3 per cent).⁸

Institutional capacity for increasing access to high quality obstetric and newborn care remains a challenge. According to the 2018 SARA findings, Basic Emergency Newborn Obstetric Care service availability stood at 85 per cent while only 4 per cent of health facilities assessed offered comprehensive emergency newborn obstetric care service. Up to 33 per cent of facilities lacked capacity for newborn resuscitation.

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 $^{^{7}}$ Liberia Demographic and Health Survey. 2019-2020.

⁸ Maternal and Neonatal Death Surveillance and Review Report. 2020.

Figure 1: Leading Causes of Maternal Deaths, 2020

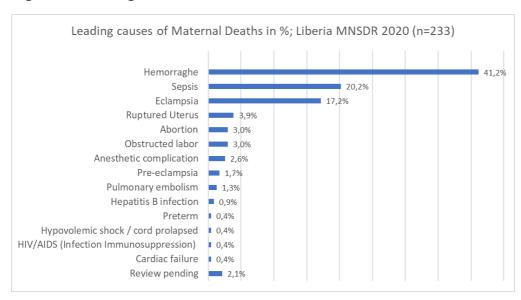
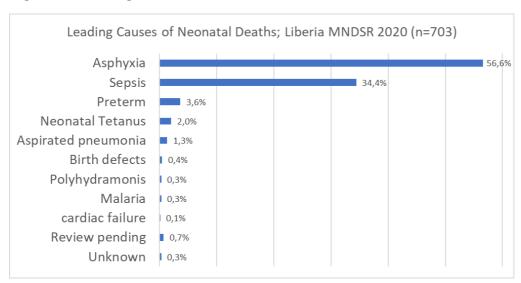


Figure 2: Leading Causes of Neonatal Deaths, 2020



Antenatal Care (ANC): to ensure better maternal and neonatal health outcomes, high-quality antenatal care is essential. The EPHS 2011-2021 defines a minimum of four ANC visits prior to delivery, with a minimum package of services during those visits. According to the 2019-2020 DHS survey, 87 per cent of women aged 15-49 years with a birth in the past five years reported attending at least four prenatal care visits and 71 per cent received the first prenatal care visit during their first trimester. A majority of women (97 per cent) received prenatal care from skilled providers. ANC (at least four visits) coverage has improved from 66 per cent (2007) to 78 per cent (2013) and 87 per cent in 2019/20.

Postpartum care: The EPHS 2011-2021 recommends that women attend at least two postpartum visits within six weeks of delivery, including a visit immediately following delivery and another visit within the first week of delivery. The percentage of women who received a postnatal check within two days of birth increased from 71 per cent in 2013 to 80 per cent in 2019-20 (LDHS).

Per the 2019-2020 LDHS, 76 per cent of newborns received a postnatal checkup within 48 hours of birth, and 18 per cent of newborns never received a postnatal check. Only 39 per cent of community deliveries received a postnatal care visit. The percentage of newborns with at least two signal functions performed during the two days after birth is higher in rural than urban areas (68 per cent versus 60 per cent).

2.3 Child Health

Liberia is among few African countries that achieved MDG 4 of reducing child mortality by 2015. Notwithstanding, the slow progress demonstrated in recent years (a 1 per cent reduction from 94 to 93 deaths per 1,000 live births) and the increase in infant mortality rate from 54 to 63/1,000 live births underscore the urgent need for progress if Liberia is to achieve its SDG target of reducing child mortality to less than 25 per 1,000 live births. The slow progress is due to the challenging service delivery context, health systems bottlenecks and the effect of epidemic and outbreaks in Liberia. Most of the childhood illnesses and deaths are due to preventable and treatable causes such as malaria, acute respiratory tract infections and diarrhoea. According to DHS 2019-2020, 25 per cent of children under five were assessed to have had fever, 16 per cent had diarrhoea and 4 per cent had acute respiratory infection (ARI) over the last five years.

Liberia adapted several cost-effective strategies including the Integrated Management of Childhood Illnesses (IMCI), the National Community Health Strategy and the Reach Every District-Reach Every Pregnant Woman (RED-REP) approach as strategies for delivering the EPHS for the management of childhood conditions. These strategies have expanded access to a range of integrated cost effective, lifesaving services and have accounted for some of the gains and successes in health outcomes. Notwithstanding our efforts aimed at improving child health indicators, performance have produced results for some indicators. But the immunization status of children remains poor, with 51 per cent of children assessed to have received all basic vaccines (down from 55 per cent as recorded in 2013 DHS) and 39 per cent with all age-appropriate vaccines.

The EPHS presumes that the service delivery environment complies with basic standards or requirements for service delivery. Access to a full range of EPHS services for the prevention and management of childhood illness is challenged by the lack of basic amenities, medicine and supplies in some facilities for effective service delivery. According to the 2018 SARA findings, 13 per cent of facilities (n=765) assessed did not offer all preventive and curative services for under five; 85 per cent of assessed staff were not trained in integrated management of newborn and childhood illnesses, 89 per cent were not trained in growth monitoring; only 53 per cent of facilities provides growth monitoring services; none of the 765 health facilities assessed had all tracer items available for the provision of child health preventive and curative care services, and 53 per cent had some form of tracer items for the child health preventive and curative care services.

Factors for the high risk of child mortality include the nutritional status of mothers and children. In Liberia, nearly one in every hundred children dies before reaching their fifth birthday.

Children's early years are at the core of their life chances. They are the "make or break" years when children are either provided with the opportunities to grow and thrive or they face adversity that negatively affects their bodies, minds and emotions for life.

2.4 Reproductive Health

Liberia's total fertility rate has decreased steadily over time, from 5.2 children in 2007 to 4.7 children in 2013 and 4.2 children in 2019-20. This declining fertility trend resonates with the steady increase in modern contraceptive prevalence from 19 per cent to 24 per cent (See Figure 3 below). The demand for family planning has increased over time, from 47 per cent in 2007 to 58 per cent in 2019-20; only 25 per cent of the demand for family planning is being satisfied while unmet need has also increased slightly (from 31 per cent in 2013 to 33 per cent in 2019-20).

Despite the increase in access to modern contraceptives (19 per cent to 24 per cent), The percentage of women aged 15 who have started childbearing increased from 3.8 per cent to 4 per cent. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality (LDHS 2019-2020).

Access to institutional based prenatal care services provided by a skilled provider have considerably increased from 79 per cent in 2017 to 98 per cent in 2019-2020 and about 87 per cent of mothers had at least four antenatal care visits by a skilled provider. Similarly, 80 per cent of births were conducted in a health facility, 84 per cent of which were delivered with the assistance of a skilled provider. This implies that an increasing number of mothers are likely to have access to basic life-saving interventions and services needed to protect the mother and unborn baby from adverse health outcomes.

Figure 3; Trends in use of modern and traditional contraceptive methods

2.5 Nutrition

Malnutrition remains a major public health concern in Liberia that is affecting mostly children aged under-five, pregnant and lactating women, adolescents, and people with specific ill-health and vulnerability.

The trend of malnutrition in Liberia, from 2000 to 2020, shows that significant progress has been made in reducing the levels of malnutrition. The prevalence of stunting among children aged under-five has shown a downward trend of a 15-point reduction, while wasting has reduced from 7.4 per cent to 3 per cent, and anemia has decreased from 79 per cent to 71 per cent. There has been no significant progress made in reducing overweight (4 per cent) among children aged under-five.

The Liberia Demographic and Health Survey 2019-20 results show that 30 per cent children aged under-five are stunted while 10 per cent are severely stunted. The stunting prevalence is classified as "very high" based on the WHO threshold of ≥30 per cent. Stunting rates are spatially distributed across the county with geographical variations. The prevalence of stunting is lower in the South-Central region (25 per cent) than in the other regions (33-34 per cent). Among the counties, the prevalence of stunting is highest in River Cess (41 per cent) and lowest in Montserrado (21 per cent) again indicating the urban rural disparities.

2.6 Communicable Diseases

Malaria is endemic in Liberia. The disease constitutes the highest morbidity of diseases of public health concern, representing 34 per cent and 48 per cent of all outpatient and inpatient cases. Children under the age of five years account for 35 per cent of all malaria cases and 34 per cent of in-patient laboratory-confirmed deaths in 2018. The national prevalence of malaria is at 45 per cent using Malaria Rapid Diagnostic Tests (mRDT). Overall malaria mortality has reduced by 59 per cent, from 172 per 100,000 persons in 2016 to 71 per 100,000 persons in 2019. Also, the incidence of malaria per 1,000 persons in the population fell by 37 per cent from 380 (2016) to 238 (2019), while the reduction in incidence in children under-five years of age was 40 per cent (from 1002 to 603 per 100,000 persons) over the same period.

With an estimated 35,000 persons living with HIV in Liberia and a national prevalence of 2.1 per cent, the HIV epidemic in Liberia is both generalized in the wider population at a low level and also concentrated among key populations. Women have a much higher HIV prevalence at 2.4 per cent compared with men (1.8 per cent). Presently 65 per cent of women aged 15 and above living with HIV are on antiretroviral therapy, compared with 37 per cent of men. The population is infected by both strains of the HIV virus (HIV1 and HIV2) with HIV prevalence being 2.1 per cent (1.9 per cent HIV-1: 0.3 per cent HIV-2) in the general population.

In 2020, the TB incidence in Liberia was estimated at 314/100,000 population, equivalent to 16,000 infections with notified TB cases (all cases, all forms) of 6990, where 59.4 per cent were men and 16 per cent children. There is a low case detection rate of 57.8 per cent. The incidence has shown an upward trajectory since 2015 with no tendency to decline. There were 3.9 per cent deaths due to TB in 2020 (MoH 2020 Annual Report).

The treatment success rate for new cases in 2020 (cases notified in 2019) was 71.4 per cent. Treatment success for retreatment cases was 75 per cent in 2020. Treatment success outcome varies by county: in 2020 Grand Kru reached (100 per cent) while Grand Cape Mounty showed a 48.8 per cent success rate, the lowest success rate. The same Grand Cape Mount showed the highest lost to follow-up rate at 33.9 per cent.

¹⁰ UNAIDS Spectrum Estimates. 2020.

⁹ Malaria Indicator Survey. 2016.

¹¹ Liberia Health Demographic Survey. 2013.

2.7 Non-Communicable Disease

Non-communicable diseases and injuries comprise a large share of Liberia's burden of disease. In 2016, it accounted for an estimated 37.9 per cent of the national burden from all causes and 43.4 per cent of all deaths. Although it is often believed that NCDs only affect older populations, over half (51.5 per cent) of the NCD disease burden and 69.8 per cent of injuries in Liberia occur before the age of 40.12

Additionally, the Rapid Assessment of Avoidable Blindness (RAAB) shows the prevalence of visual impairment, especially cataract blindness and uncorrected refractive errors, is on the increase. Approximately 4 per cent of people in Liberia is estimated to be legally blind and approximately 9 per cent have visual impairment. Cataracts constitute 60 per cent of all blindness. Overall, 72 per cent of all blindness is preventable.

According to the last population census conducted (post-war in 2008), Liberia has a disability prevalence of 3.17 per cent. Of the disabled population, the majority experience visual impairments (34 per cent), followed by mobility impairments (25 per cent), hearing impairments (11 per cent), communication impairments (4 per cent), and cognitive impairments (4 per cent). However, these figures are widely regarded to be a significant underestimation of disabilities in Liberia, considering that nearly one-third of the population fought in the civil wars, with countless more being impacted.

2.8 Neglected Tropical Diseases (NTDs)

There is high prevalence and overlap of onchocerciasis, lymphatic filariasis, schistosomiasis and soil-transmitted helminths in Liberia. Other NTDs requiring case management that are co-endemic are Buruli ulcer, yaws, rabies, leprosy and lymphatic filariasis manifestations to include hydrocele and lymphoedema. Guinea worm is eliminated but under surveillance.

Liberia has a comprehensive integrated case management program that has been piloted in five counties including Lofa, Nimba, Bong, Maryland and Bomi counties.

Onchocerciasis is prevalent in all 15 counties of Liberia with more than 1.1 million Liberians at risk. Between 2012 and 2019, annual mass drug administration (MDA) treatment percentages remained consistently above 80 per cent annually. The prevalence rate of Onchocerciasis ranges from the lowest at 0.7 per cent (Margibi county) to the highest at 11.9 per cent (River Cess County).

Lymphatic filariasis is prevalent in 13 of 15 counties with ongoing integrated MDA. Between 2012 to 2019, annual MDA with albendazole obtained treatment was coverage of not less than 80 per cent annually. The baseline in 2012 was at 6.23 per cent of microfilaremia and by 2019 microfilaremia had reduced to 4.3 per cent.

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¹² Global Burden of Disease, 2016.

Schistosomiasis is prevalent in 13 of the 15 counties with high prevalence in four counties that require annual MDA with praziquantel for school-age children and adults. However, the prevalence of Schistosomiasis haematobium has reduced over time, from 20.2 per cent to 9 per cent yet has stayed largely stable in recent years.

Mapping results for soil-transmitted helminths indicate prevalence in all fifteen 15 counties. The highest prevalence of 50-100 per cent is found in Maryland, Grand Kru, Sinoe and River Cess counties in the southeast.

2.9 Blood Transfusion Services

Similar to many sub-Saharan African countries, malaria-associated anaemia and obstetric haemorrhage are the most common indicators for transfusion therapy, and the shortage of blood supply contributes to high maternal and child mortality. Based on WHO estimates, Liberia needs 40,500 units of blood per year, however, currently only 10 per cent of the country's blood needs are being met through voluntary, non-paid donors.

2.10 Key Health Indicators

Table 1: Selected key health indicators

Indicators	2000	2007	2009	2013	2019/2 0
Life expectancy at birth (years)		57		61	65
Maternal mortality ratio per 100,000 live births	578	994		1,072	742
Neonatal mortality rate per 1,000 live births		32		27	37
Infant mortality rate per 1,000 live births	117	71	73	54	63
Under-five mortality rate per 1,000 live births	194	110	114	94	93
% children under five who are underweight	23%	19%		15%	11%
Stunting		39%		32%	30%
Fertility rate		5.2		4.7	4.2
% of children 12-23 months vaccinated (all antigens)	33%	39%		55%	51%
% of births attended by skilled personnel	51%	46%	46%	61%	84.4%

2.11 Gender Realities & Sexual and Gender-Based Violence (SGBV)

Women in Liberia experience unique challenges to their health and wellbeing, that extend beyond gaps in educational attainment, school attendance and literacy rates. Sixty percent of women aged 15-49 experience physical violence and nearly 10 per cent of women experience sexual violence from their spouse or intimate partner. Acceptance of gender-based violence has declined from 2007 (59 per cent of women, 30 per cent of men); however, 37 per cent of women (46 per cent rural, 32 per cent urban) and 25 per cent of men still agree that wife beating can be justified.¹³

In addition to spousal violence and attitudes about justified violence, the practice of female genital mutilation (FGM) persists in many parts of the country but varies widely per county. Overall, nearly 40 per cent of women aged 15-49 reported they have been circumcised, with a low of 2 per cent in River Gee and a high of 78 per cent in Gbarpolu. Additionally, according to the Social Cohesion and Reconciliation (SCORE) Index, Liberia scores 4.1/10 for endorsement of FGM, where a score of 0 represents complete absence of FGM and 10 indicates a strong and prevalent presence.¹⁴

2.12 Leadership and Governance

According to the Ministry of Health Act of 2015, the MoH shall be responsible for the formulation, implementation, monitoring and evaluation of health policies, plans and standards; delivery and coordination of decentralized medical care in public facilities; development of health manpower, and the prevention and promotion of health services including health interventions. The MoH central level organizational structure consists of the minister as the head of the ministry, and three deputy ministers, each heading one of three departments – Department of Health Services, Department of Policy, Planning and M&E, and Department for Administration. The ministry also has five divisions – Division of Curative Services, Division of Preventive Services, Division of Policy, and Planning, Division of Vital Statistics, and Division of General Administration – headed by assistant ministers. The act also provides for the Office of Financial Management, headed by the controller who is at the level of assistant minister.

At the county level, county health officers (CHO) head the different county health systems, and they ensure that the three departments at central levels are replicated at the county level, with respective cadres of staff providing supervision. Across Liberia, district health teams (DHTs) have varied composition with limited capacity to support service delivery at the district levels. Currently, there are 93 health districts in Liberia, with Margibi and Bomi having the lowest of four districts each while Sinoe has the highest of ten health districts. There is also no set of criteria or guidelines for the establishment of health districts in the counties.

Strengthening the management capacities at decentralized levels remains an investment priority of the sector. While interventions have been made to have these levels fully functional to provide health services for the local population and respond

¹³ Liberia Demographic Health Survey. 2019-2020

¹⁴ The SCORE Index. See: https://app.scoreforpeace.org/en/liberia/2021/1/map?row=tn-329-292.

to emerging public health emergencies, challenges still remain. These challenges include but are not limited to the following: weak coordination between programs and units, central MoH and partners, central MoH and CHTs, and CHTs and the other levels. The current MoH Decentralization Policy and Strategy needs revision to address bottlenecks faced in leadership and governance. While the Decentralized Governance and Management Operational Guidelines exists and defines the roles and responsibilities of county boards and standardizes their operational procedures, these boards are either nonfunctional or have limited support to conduct oversight for service delivery across the different levels.

The sector has made remarkable progress over the years in the development of policies, plans and strategies as well as protocols and guidelines. Assessments, however, reveal that these key sector documents are either not available at the local levels nor are they regularly referenced or adhered to, thus impeding performance.

The MoH shall collaborate with the National Public Health Institute of Liberia (NPHIL) and other stakeholders to address these public health challenges. Addressing the health needs of the population of Liberia requires coordination with the partner and donor community, United Nations agencies, regulatory bodies, professional health training institutions of Liberia and several other coordination mechanisms including such as the Country Coordination Mechanisms (CCM) and the Liberia Health Federation (LHF). This pluralistic approach contributes to strategic and operational planning and resource mobilization (financial and technical).

2.13 Legal and Regulatory Systems

The 1976 Public Health Law (Title 33) presents many limitations to the provision of health services in Liberia, which includes emergency treatment, discrimination, mental health, nutrition, regulation of marketing of products for infants and young children, zoonotic diseases, non-communicable diseases, antimicrobial resistance, clinical trials, and complementary and alternative medicine. In reference to these challenges, the GoL has made efforts to promote and achieve high standards of public health as a fundamental human right for the Liberian population through the revision of the existing Public Health Law that is currently before the national legislature for enactment. When enacted, the new Public health Law is expected address these challenges.

2.14 Health Workforce

Table 3: Core health workers density per 10,000 population 2018

A 2014 analysis of the workforce by the MoH demonstrated that at the then rate of production, Liberia would never meet the workforce target articulated in the national human resources policy and plan 2011-2021, which sets the minimum facility level staffing. Over a decade later, skilled health workers (MDs, PAs, RNs, CMs, RMs) is still very limited, at 12 skilled health workers per 10,000 population. This is far from

the WHO recommendation of 23 skilled health workers per 10,000 population and the new projection for universal health coverage at 54.5 per 10,000 population.

The investment plan to build a resilient health care delivery system sets as one of its key priorities a "Fit for Purpose Health Workforce" as an investment intervention to address gaps in the workforce.

2.15 Health Infrastructure

In 2006, health care access was very low, with over 40 per cent estimated as living more than an hour by foot away from a health facility. By 2011, 69 per cent of the population lived within a 5km radius of health facilities; this number increased to 71 per cent in 2020. While current data on geographical access is not available, early indicators suggest that the number of health facilities have increased, with existing structures improved, expanded in the last decade. However, the projections made in the 2011-2021 NHPP were not met in 2021.

2.16 Health Financing

Macro-fiscal conditions remain constrained amidst an uncertain economy due to the COVID-19 pandemic. Economic output is set to expand by 3.3 per cent in 2021 and rise to an average of 4.4 per cent during 2022-2023 as economic activities pick up.

There has been an almost fourfold increase in total health expenditure from US\$100m in 2007-2008 to US\$392.8m in 2018-2019. This increase is still much less than the estimated cost per capita in terms of requirements for implementation of the previous National Health Sector Policy and Plan (US\$1,250,126,322 or \$296 per person), and benchmark estimates for delivering an essential package for UHC (US\$112). Despite government spending (> 10% of its total budget) on health, about 80 per cent of this goes to human resources and emoluments. There has also been a declining pattern of donor resources post-2015, which threatens sustainability for some programs and seems to have led to an increase in direct household out-of-pocket payments.

Liberia's health financing is characterized by fragmentation of multiple resource pools representing government and donor resources with un-pooled resources from out-of-pocket household payments. Government tax funding through the budget is currently the primary resource pool following the closure of the 2008 -2019 Health Sector Pool Fund. The GoL is exploring establishing the Liberia Health Equity Fund (LHEF) for income and risk pooling.

The market structure for purchasing reflects fragmentation in resource pools. The market structure comprises the public sector, with implementing partners and households purchasing directly through out-of-pocket payments. The public sector represents the largest pool of prepaid funds, mainly through budget allocation to MoH programs and semi-autonomous entities. In a bid to move towards strategic purchasing with provider payment driven by information on health needs, Performance-Based Financing (PBF) pilot schemes provide evidence to inform future scale-up plans.

Substantial efforts are made within the Liberian health sector towards establishing a Medium-Term Expenditure Framework (MTEF) and more comprehensive and timely reporting. Budget formulation and implementation is a line item that makes it

challenging to track GoL's adherence to spending requirements towards priority program's and support alignment with sector priorities.

2.17 Pharmaceutical, Procurement and Supply Chain

A strong and effective supply chain management system is crucial for effective health service delivery. In an effort to deliver the highest quality of health services and ensure that health services are readily accessible and dispensed on an equitable basis, the GoL has demonstrated its commitment to the improvement of commodity availability to support the delivery of quality health services to the population of the country. Therefore, the MoH in 2010 developed a 10-year strategy, named the Supply Chain Masterplan, and articulated three core objectives:

- 1) One system, integrated from top to bottom and harmonized across multiple distribution streams, for all health products and ensuring a single chain of accountability,
- 2) Ensure products availability, and
- 3) Reduces the burden on healthcare workers at the lowest levels.

The strategy has since been reviewed in 2015.

Notwithstanding the strategy, performance of the supply chain has lagged expectations in many areas. Perennial stock out of essential medicines and medical supplies, limited fiscal space for procurement, poor inventory management and accountability systems, unsustainable distribution channels and modalities, limited or lack of high quality and comprehensive data to inform the critical system decision-making process, and weak infrastructure and pilferage are some risk factors for community insecurity at the point of service delivery. Despite these challenges in the public sector, private pharmacies are flourishing with uncontrolled cross-border trafficking. Informal drugs peddlers (black baggers) are everywhere and are the main source if not the only source of medicines in rural communities when clinics are out of medicines. Pharmacovigilance and quality monitoring of drugs and medical products are uncertain and exacerbate the situation. Central and county-level warehousing and distribution have experienced some significant investment over the years but remain inadequate while funding for procurement of pharmaceuticals products is limited.

According to the 2019-2020 DHS findings, 51 percent of women cited stock out or the lack of essential medicines at public health facilities as a barrier to care. In an effort to strengthen the supply chain system, a supply chain system diagnosis was conducted with the aim of identifying performance gaps and help to design transformative solutions that will contribute to the long-term goal of universal availability of health products at the point of service through sustainable and high performing supply chains. Recommendations resulting from the findings of the diagnosis informed the development of the Supply Chain Transformative Plan.

The 2010 Liberia Medicines and Health Products Regulatory Authority (LMHRA) Act established the legal framework for a new era of pharmaceutical management in Liberia. However, pharmaceutical regulations that should accompany the LMHRA Act need to be established and enforced on drug imports and pharmacies. The 2001 National Drug Policy, the 2017 Essential Medicines List, the National Formulary and the Standard Treatment Guidelines (2017) are all under revision to align them to the new EPHS 2022-2026.

2.18 Monitoring & Evaluation, Health Information System and Research

At the core of the quest to deliver high quality, responsive and effective health services is the need for emphasis on development and sustenance of a robust information management, monitoring, evaluation, research accountability and learning system. In 2009, the MoH embarked on a move to decentralize its monitoring and evaluation system, establishing M&E structures across the fifteen counties. This move by the health sector has improved timeliness and completeness of reporting and has enhanced capacities for supervision and data use at subnational levels. Notwithstanding, high staff attrition have deepened the human resource capacity gap within the M&E system.

The MoH, in collaboration with partners and Stakeholders, developed a Health Sector Monitoring & Evaluation Plan (2017-2021), a National Health Information System Strategic Plan (2016-2021), and a Health Research Policy. These policies and plans need to be revised and realigned to this national health policy (2022-2031) and the new health strategic plan (2022-2026).

2.19 Epidemic Preparedness and Response

The EVD outbreak in 2014 exposed the fragility of the entire health system and demonstrated that epidemic preparedness and response activities were at a bare minimum. There were very few infrastructure capacities to isolate patients with infectious diseases. But since the EVD outbreak, capacities have been gradually built and the resilience of the health system to the current COVID-19 pandemic is testimony to improved infectious diseases preparedness and response. Early detection and timely response to disease outbreaks have improved as seen in figure 4 below:



Figure 4: Detection and response to disease outbreaks in Liberia (IDSR 2017-2020)

The country continues to make progress in outbreak detection and response. MoH, NPHIL, and partners are now detecting and responding to disease outbreaks within less than 48 hours, which is in line with International Health Regulations (IHR 2005)

standards for reporting and far above the pre-Ebola era. Between 2018 and 2020, a total of 94 outbreaks were detected and responded to within 48 hours, with no major disruption to normal economic activities in the country. All 15 counties are now reporting an average of more than 90 per cent completeness and timeliness of health facility reporting, which is more than the WHO accepted standard of 80 per cent. Regular outbreak response simulation exercises were conducted in some counties and at national levels. These real time simulations helped the response system to identify and address critical gaps within the health system. For example, national level epidemic preparedness and response and COVID-19 meetings were held regularly during the outbreak with all partners to discuss the state of epidemic readiness and the COVID-19 response.

Also, in order to strengthen the capacity of counties in early detection and investigation, 283 disease intelligence surveillance officers have been trained in field epidemiology and are now deployed in major hospitals and health centres, and in all health districts across the 15 counties and at the national levels.

Surveillance data/information have been enhanced and data are now collected via both health facility and the community with regular reporting and immediate notification systematically covering all 93 health districts in the country. Electronic surveillance platforms have been piloted in a few counties and there are plans to expand to all counties. All designated ports of entry (PoEs) have developed PoE public health emergency contingency plans for events caused by biological hazards and other public health threats coming through the borders. There are also functional emergency operation centres and rapid response teams in all 15 counties and the national level, and the National Action Plan for Health Security (NAPHS) has been developed and launched with a recent mid-term review conducted.

The public health laboratory capacity for diagnosis has also improved tremendously. It is now able to test 11 priority diseases (including bacterial meningitis, Buruli ulcers and EVD) and for the first time since the EVD outbreak, Lassa fever can be tested at the National Reference Laboratory.

Despite progress, the emergency preparedness and response system still faces significant challenges at national and county levels. The recent midterm evaluation of the NAPHS indicate the lack of operational funds for surveillance activities in counties, lack of supervision for integrated disease surveillance and response (IDSR) activities, and attrition of the public health work force, including surveillance officers.

All priority disease testing can only be done at the National Reference Laboratory. The four designated regional laboratories have not been fully established and do not have capacity to do testing for IDSR priority diseases. There are frequent stock outs of specimen collection kits and reagents across the country particularly in hard to reach areas. There is no in country capacity for gene sequencing of priority diseases.

2.20 Challenges

Despite impressive gains in overall health system management and in health services delivery since the beginning of 2006, Liberia continues to face significant challenges in improving health care services, especially reproductive, maternal, neonatal, child and adolescent health and nutrition (RMNCAH&N) outcomes, as well as other health-

related SDG outcomes. Efforts towards achieving universal health coverage will facilitate the achievement of the other health (SDG3) targets by 2030. The 2022-2031 NHP shall set primary health care as the foundation of the health system and a model for improving health care delivery.

2.21 Emerging Policy Issues and Recommendations

The health sector review process included a series of consultations, assessments and policy dialogues where the following priorities, issues and recommendations were identified.

Topic	Issue	Recommendation
Sustainable Health Financing	Experience from implementing UHC shows that it is not sustainable and has not been effective in achieving desired health outcomes. GoL health budget stagnated over the years, with the health sector heavily reliant on declining donor funds. The resource pools are plagued with fragmentation, duplication, and overlap across programs leading to high, direct, out-of-pocket payments, low pre-payment and weak private sector engagement.	Implement revolving drug fund (RDF) and cost-sharing at public health facilities and pass the Liberia Health Equity Fund (LHFE) into law. Strengthen regulation and integration of the private sector (Public-Private Partnerships (PPP). Ensure a clear mapping of donor support and joint planning to reduce fragmentation, duplication, and overlap in the use of the available resources. Strengthen administrative mechanisms to monitor price and quality of care in both the public and private sectors.

Topic	Issue	Recommendation
Quality of Health Services and safety	The quality of health services along all of its dimensions (i.e., safety, timeliness, efficiency, effectiveness, equity, people-centred care and integration) in Liberia has been described as being suboptimal and inadequate. There is also unclear oversight and fragmentation with respect to quality approaches and their overall impact on care outcomes and patient experience. Anecdotally, poor-quality and unsafe care continues to lead to loss of lives, disabilities and reduced productivity. There had been a number of initiatives to improve the quality-of-care outcomes which led to the creation of the Quality Management Unit, and the development and launch of the Liberia National Health Quality Strategy 2017-2021.	Facilitate the institutionalization of the culture and practice of quality across all levels of the health system. Further ensure that the provision of care is devoid of all forms of harm to the patients and the healthcare providers. Design and implement interventions to improve all the quality dimensions (effective, safe, peoplecentred, timely, equitable, integrated and efficiency). Develop a comprehensive patient safety program and operationalize quality management teams at all levels of the health system.
Human Resources for Health	Quality, quantity and skill mix needed. Deployment (there are few qualified health professionals, especially in rural areas), compensation and performance management are some of the issues identified. Health workers are demotivated due to pay disparity between and among different cadres of workers, with mid-level health workers mostly affected, and poor staff welfare management (e.g., poor staff housing). The HR process for study leave and staff transfer is not systemic, resulting in self-transfers without approval and high	Increase quantity and skill mix of health workers, develop and implement pay grades, and improve health worker compensation equitably. Ensure integration of HR systems between MoH, civil service finance ministry and local governance to fill in for absent management of health workers. Decentralized recruitment and some critical HR management function to reduce the high demand for urban transfer. Keep job openings at hospitals and urban facilities only for staff who are working in rural

Topic	Issue	Recommendation	
	absenteeism without repercussions.	areas and hard to reach counties and have serve there for a requisites number of years and desirous of transferring. Transfer shall be done gradually from rural, to semi-urban, urban, easy-to-reach counties and so on	
Sustainable Community Health Services and Engagement	Current community health program is heavily donor dependent, partner driven and unsustainable. There is a need for more government ownership and sustainable financing.	Design strategies for sustaining community health services and community engagement. Ensure community ownership and stronger facility linkage and management through the OICs	
Epidemic Preparedness and Response	With the increasing hash reality of climate change, there is emergence and reemergence of diseases and other conditions that pose a threat to human health and security. The continuous outbreak of epidemics in Liberia, crowned by the COVID-19 pandemic, tell us more about what is to be expected in the future. The need to strengthen early warning systems and interventions cannot be overstated.	Build Capacity for emergency preparedness and response (NPHIL, MoH and partners). Strengthen existing capacity for EPR. Improve diagnostic and isolation facilities for infectious diseases outbreaks.	
Decentralization of health system management	The overall decentralized governance system and county and district health teams are not yet at full capacity to manage the health system.	Decentralization of the health system management should be done incrementally in line with the GoL decentralization policy. Implement the new MoH organogram as defined by decentralization. Strengthen the District and facilities to	

Topic	Issue	Recommendation
		take on more management roles and ensure they have the capacities to manage resources at their levels. Properly positions the country, district and facility management teams so they are impacted negatively by shock that might come from reorganization as the result of the implementation of the national local government and decentralization Acts and programs.

3. Policy Framework

This new ten-year policy reflects Liberia's commitment to advancing UHC, fulfilling SDG 3 and upholding Pro-Poor Agenda for Prosperity and Development (PAPD) targets.

3.1 Mission

The mission of the MoH is to transform the health sector into an effective, efficient and equitable system for delivery of quality health services towards attainment of UHC.

3.2 Vision

The National Health Policy's vision is to have a healthy population, with particular protections for the poor and vulnerable, for the attainment of equitable growth and sustainable development.

3.3 Goal

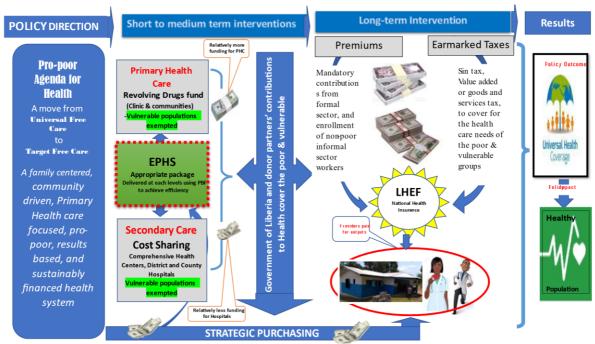
To Improve the health and wellbeing of all people in Liberia.

3.4 Policy Objectives

- 1. Strengthen governance, leadership and management at all levels of the health care delivery system and devolve management responsibilities, resources and authority to lower levels in line with the Local Government Law and National Policy on Decentralization and Local Governance
- 2. Ensure the availability and retention of a **highly-skilled and well-motivated health workforce** for the sector, including strengthening pre-service health education systems and absorption and retention to close workforce gaps.
- 3. Improve access to and utilization of quality essential health services at all levels of care to all persons, regardless of gender or social status through standardized, integrated and sustainably financed health programs, with focus on primary health caere including community health, quality essential medicines and vaccines, and diagnostics,
- 4. Ensure that **health security** is guaranteed through national frameworks aligned with **International Health Regulations 2005**.

3.5 Conceptual Framework

Figure 5: Policy conceptual framework



Adapted from G. P. Jacobs Policy Review Presentation (April 2021)

This conceptual framework depicts the health policy and how it will be sustainably financed to achieve UHC. It outlines the policy and strategic interventions, implementation and financing modalities of the EPHS II and prioritized package for UHC at the primary, secondary and tertiary levels of care in the short, medium and long-term targeting of the entire population, with specific focus on the poor and other vulnerable groups to achieve universal UHC and other SDG 3 targets. Key health financing reform strategies include the harmonization and roll out of performance-based financing mechanisms, the revolving drug fund, cost sharing and the Liberia Health Equity Fund. These and other efforts are envisaged to improve strategic purchasing for improved health service delivery and utilization towards UHC and other SDG 3 targets.

3.6 Guiding Principles and Values

- a) **Health as a human right:** Access to quality health care is a basic human right and is a precondition for individual and societal development.
- a) Equity: All people in Liberia shall have person-centred care and equal access across the life course to effective healthcare services without discrimination.
- b) **Quality of Care and safety:** The delivery of quality services that meet the seven quality dimensions (i.e., safety, timeliness, efficiency, effectiveness, equity, people-centred care, and integration) is fundamental to improving the health and wellbeing of the population. Decision-making will be predicated on doing the right thing, in the right way, at the right time and

- making the best use of the resources available in order to satisfy patients and ensure their safety.
- c) Gender Sensitivity and Responsiveness: Concerted efforts will be made by the MoH to understand the role gender plays in health and health care, and to design responsive systems that ensure services are accessible, available and acceptable to all Liberians, regardless of gender or social status. Particular emphasis is placed on involving women, girls and other socially marginalized group in the planning, design and implementation of health care programming so they are not socially excluded from accessing and utilizing health care.
- d) Efficiency: Allocative and technical efficiency will be pursued by all actors always in the public health sector to ensure that available resources deployed attain the highest possible outputs. Resources will be allocated to various layers and levels of the health sector based on need demonstrated by evidence and share amount will be based on a combination of epidemiological, social, demographic, economic and geographic variables. Efforts will be exerted to ensure that duplication, wastage and abuse are eliminated.
- e) Accountability and transparency: Adequate political, financial and administrative mechanisms are needed from the government and all stakeholders to ensure that decision-makers are accountable for the transparent use of health resources including physical assets, commodities and time among others. These mechanisms must encompass the whole sector, enabling the public to know how decisions are taken, how resources are allocated and how results are achieved. To this effect, all resources, internal and external, public and private shall be judiciously monitored, accounted for and transparently reported on. The monitoring system will be designed to enable stakeholders to verify adherence to laws and regulations and to the primary health care principles underpinning this policy.
- f) Family and People-Centred care: The health care delivery system shall seek to promote health programs targeting families to prevent and control illnesses. Programming should benefit families, communities, individuals not just one disease or condition or patient. In the case of illness or other health conditions, the family shall have the necessary support system and tools necessary to be resilient to regain their health status and remain economically stable.
- g) Inclusive and coordinated partnership: The MoH is committed to forming multi-sectoral partnerships to ensure that health is represented in all policies. The multi-sectoral approach used for development of this NHP will continue during implementation and partners will be mobilized according to their comparative advantages to ensure better coordination, harmonization, and alignment.

h) **Ownership and leadership:** The MoH will ensure that the county and district health teams and partners will align their operational strategies and plans with the national health policy and strategy to ensure implementation of this policy by all partners.

4. Policy Aspirations and Statements

4.1 Health Service Delivery

The 2007-2011 and 2011-2021 NHPP set primary health care as the foundation of the health system and a model for improving health care delivery. The policy for 2022-2031 will continue on that path with increased efforts to strengthen primary health care and target improvements in areas that will provide physical access to health services, quality of care across the seven quality dimensions (safety, timeliness, efficiency, effectiveness, equity, people-centred care, and integration), and health facility readiness. In addition, improvements in secondary health care delivery and the capacity of the national referral network and pathway will be strengthen up to tertiary level. The Jackson F. Doe hospital shall be upgraded incrementally to become the second national referral hospital next to John F. Kennedy to serve people in that part of the country, including those from counties in the south-east who are geographically closer to Jackson F. Doe.

Some county hospitals will be upgraded with enhanced capacities including critical specialist and laboratory capacities to serve as regional hospitals to take referrals from nearby counties. J.J. Dossen Hospital in Harper will take referrals from Grand Kru and River Gee counties in addition to Maryland county. The Bassa Government Hospital will take referrals from River Cess and Sinoe in addition to Grand Bassa county. While Bomi Government Hospital will serve Gbarpolu and Grand Cape Mount in addition to Bomi county. Margibi will refer to J.F.K and Grand Gedeh will refer to Jackson R. Doe due to their proximity to these tertiary hospitals.

The MoH shall employ a community-driven, primary health care approach. Strengthening service delivery is crucial to the achievement of UHC and other SDG 3 targets. Service provision or delivery is an immediate output of inputs into the health systems, such as the health workforce, essential medicines and supplies, and financing. Increased inputs should lead to improved service delivery, better health outcomes and enhanced wellbeing.

A family-centred health care delivery shall be the cornerstone for promoting good health-seeking behaviour to prevent illness and promote a healthy nation. It is believed that the best way to meet a person's needs is within their families and that the most effective way to ensure safety, permanency and well-being is to provide services that engage, involve, strengthen and support families and communities.

Building on previous service delivery packages (Basic Package of Health Services (BPHS) and EPHS), the MoH shall design and implement a new service delivery package (EPHS-II), adopting the life course approach to serve different population groups with specific activities to improve equity for specific populations, including women, children, adolescents, disabled, the aged and the rural population. Special attention shall be paid to the growing population of young people with drug abuse problems. The EPHS-II shall prioritize services that reflect the disease burden and health conditions affecting the country. It shall include all elements of the essential packages (both primary and secondary) of health services (reproductive, maternal, newborn and child, adolescent health, health and nutrition, communicable diseases, mental health and emergency care as well as non-communicable diseases, neglected tropical diseases, environmental and occupational health, school health, eye health

and prison health, rehabilitation). The package shall be developed, prioritized and implemented incrementally base on the available fiscal space. It shall give priority to interventions with the highest impact on disease burden, cost effective, impact the poor and vulnerable populations and push the country towards obtaining UHC.

To address the growing burden of drug and substance abuse amongst young people, the MoH shall design an integrated service of detoxification and medical management of withdrawal syndromes for young people on drugs. The MoH shall collaborate with the Gender Ministry for rehabilitation and reintegration services for such young people. The MoH shall collaborate with the Ministry of Youth and Sports, the Ministry of Education and the Ministry of Gender to establish prevention and awareness services and policies regarding substance abuse.

The effect of the EVD outbreak on Liberia's health sector and the experience of responding to the global COVID-19 pandemic has brought to the forefront a need to further strengthen Liberia's care delivery system. Now, Liberia runs a two-pronged approach to health care delivery. The MoH has general oversight for routine health care while outbreak and epidemic preparedness is delivered through the National Public Health Institute of Liberia. The MoH shall work with key stakeholders to revisit the act, creating the NPHIL to make it more efficient and responsive in supporting the MoH to prevent and respond to outbreaks.

4.2 Community Health Services and Engagement

The MoH shall revise the community health services policy and strategy and shall



define the different cadres of community health workers. The community health system shall be linked to and managed by primary health facilities. It shall provide detailed terms of reference (TORs) and explore the development of career pathways for each cadre. It shall pursue sustainable and affordable remuneration for community health workers and its financing will be aligned to the national health financing strategy.

The MoH shall ensure coordination and collaboration with NPHIL and other partners to enhance the integrated disease surveillance response and the One Health platform at the community level. An integrated and standardized community health-training package shall be developed to incorporate basic components of animal health training

materials that are essential and life-saving for equitable community/**primary** healthcare interventions and epidemic surveillance to mitigate potential health risks.

4.3 Sustainable Health Financing

The overall goal is to ensure the availability of sustained resources to implement the National Health Policy and Plan and reforms towards UHC.

Several interventions, including cost-sharing mechanisms, revolving drug fund, the Liberia Health Equity Fund/social health insurance, and other innovative financing mechanisms to increase resource mobilization for UHC are previewed in the next ten years. Implementing all financing reforms stipulated in this policy will require strong capacities in designing, implementing, and managing the reforms outlined herein while ensuring a precise mapping of current donor support and using the information to ensure more harmonization and alignment.

The MoH shall employed performance-based financing (PBF) and other strategic purchasing mechanisms to pay for health care services to achieve effectiveness and efficiency.

4.3.1Mobilization of Resources

The primary rationale for planning interventions for resource mobilization is to address the funding shortfalls for the health sector, limited pre-payments, and probable catastrophic health expenditures due to heavy reliance on out-of-pocket payments. Strategic orientations for resource mobilization shall promote the revolving drug fund at primary care facilities and cost-sharing at hospital levels in the short term while preparing for pre-payment mechanisms in the medium to long term. To sustain the gains and experiences in emergency preparedness from managing EVDand COVID-19, the GoL shall create and maintain an emergency fund for response to epidemics and outbreaks. National health accounts will monitor the pattern and contribution (expenditures) of the different financing resources.

4.3.2 Mechanisms for Pooling Resources and Health Risk Sharing

The GoL shall legislate the Liberia Health Equity Fund, providing the legal framework for creating a national pooling mechanism and reinstitute the health sector pool fund as a strategic intervention to reduce fragmentation of resources and risk pools. Effective pooling will target public and external resources, with the view to providing the same essential package of health services in an integrated and coordinated manner that promotes the achievement of income and risk cross-subsidizations.

4.3.3 Strategic Purchasing of Defined Health Benefit Package

There are multiple purchasers of health care services in Liberia, namely: public sector (16 per cent) and donors (27 per cent) while individual purchasing by households through direct OOP payments represent 53 per cent and health insurer purchasing contributing about 4 per cent. These purchasing arrangements do not have the necessary incentives to encourage equity, efficiency, and quality services as there is a limited provider-purchaser split. To achieve strategic purchasing, MoH shall

¹⁵ National Health Accounts. Fiscal year 2018-2019.

implement interventions aimed at addressing these challenges. The desired direction of the government is to reprioritize the EPHS by designing a cost-effective benefits package that will harmonize the provider's payment mechanism while scaling up performance-based financing as a strategic purchasing mechanism for the LHEF but also for the term leading to the LHEF.

4.4 Health Workforce

Human resources is the cornerstone of any health system since no health system can function without a sufficient number of motivated and qualified health workers. Persistent shortages of adequately trained health professionals pose a major challenge to scaling up the availability and quality of some cadres of the workforce. There is inequitable distribution as a result of urban migration, unregulated transfer, demotivation, and salary disparities leading to poor performance. These challenges are fuelled by a highly centralized HR management system without an effective HR information system.

The Investment Plan for Building a Resilient Health System 2015-2021 prioritized a "Fit for Purpose Health Workforce". The MoH shall continue to use evidence and needs-based health workforce planning, management and development to continue to build the workforce capacity. It shall strengthen the production of the workforce with the right skill mix by improving the quality of pre-service education, strengthening follow up of accreditation programs (which has been weak due to limited regulatory capacity), and improve coordination of in-service training to ensure that it meets competency development needs. In addition, it shall address fragmentation of training caused by vertical programs by better harmonization and integrated planning.

Liberia needs 44.5 skilled health workers (MDs, RNs, CMs, PAs) per 10,000 population to get on track for UHC attainment. Currently, the country is at 12.8 per 10,000 populations. 16

To address this shortage of health workers, the MoH shall continue to work with accredited training institutions, regulatory authorities, GoL and partners to support training institutions to train more health workers as well as increase absorption and retention of trained personnel in the public and private sectors. This policy shall pay special attention to the cadres of health workers that are in acute shortage such as midwives, laboratory technicians/technologists, nurse anaesthetists, physician specialists, specialized nurses, dental professionals and other cadres that might be identified in the HR policy and plan.

The MoH shall fully roll out performance management systems at all levels and provide monetary and or non-monetary incentives for high performers and sanction low performers. The MoH shall continue to build staff capacity. It shall establish a clear roadmap for the introduction of new cadres in the workforce including specialized providers.

The MoH shall strengthen HR governance and establish robust recruitment, retention and management systems, including a biometric system, and deployment and transfer guidelines. To improve recruitment and deployment processes, the MoH shall

 $^{^{16}}$ National Health Observatory Report. September 2021.

decentralize recruitment and deployment of health workers to CHT as outlined in the recruitment and onboarding policy and deployment and transfer guidelines. Transfer of health workers shall be regulated and based on availability of a position with salary before a transfer is affected. Newly recruited health workers shall be deployed to rural and hard to reach places. HR information systems shall be strengthened to support HR planning, development, management, classification and reclassification, and supervision across the various ministries (civil service agency, MoH and Ministry of Finance and Development Planning). HR capacity in leadership, planning and budgeting shall be developed at the different levels of care. To address the inequitable distribution of health workers, MoH shall consider redeployment of available health workers based on evidence of needs or workload at each health facility.

The MoH shall work with various professional boards to institutionalize continuous professional development (CPD) for all cadres of health workers to ensure patient safety.

The health training institutions including the medical school shall explore innovative means to mobilize resources including the introduction of fees as well as institute student loan programs. Scholarship policies shall be instituted to promote excellence and competitiveness and address the cadres most in need, including geographical needs. Fees payment will increase revenue for the institutions which will in turn improve investment and quality of training.

The MoH shall support integrated and standardized community health worker training of the various types to provide a package of essential life-saving primary health care services and epidemic surveillance within communities and to households on an equitable basis, thus increasing access to life-saving services, mitigating potential health risks and addressing the gaps for inadequate numbers of professionals.

4.5 Health Infrastructure

4.5.1 Health facilities

Increasing access to standardized health facilities is integral to delivering health services equitably, efficiently and effectively. The quality of the health facility structure, the effectiveness and durability of the systems forming the structure, its environment, internal and external, and spaciousness is indispensable for optimizing utilization of services.

Efforts shall be made to implement health infrastructure standards and ensure that new construction of health facilities meets the standard or prototype. Regulatory capacity in this area shall be built in order to reduce political interferences. An infrastructure repair and maintenance plan shall be developed in line with the PAPD. An investment and review in infrastructure shall be prioritized areas such as:

- construction of health facilities and staff housing in geographically disadvantaged areas.
- improvement of infection prevention and control by ensuring access to a safe water supply, sanitation facilities, safe waste management, incinerators and electricity in existing facilities.

• renovation/ refurbishment of dilapidated and makeshift health facilities and upgrading of facilities in line with MoH infrastructure standards.

The overarching priority shall continue to emphasize expansion of access to priority services by optimizing facility distribution and catchment population and utilization. In densely populated urban areas, a few larger facilities will serve large populations living near the facility. In sparsely populated rural areas, many small facilities and non-permanent service delivery points (SDPs) will provide services to rural communities. Where a privately-owned facility is providing services to the catchment population, formal partnership may be used to meet service delivery needs where there is no public facility.

4.5.2 Information and Communication Technologies

In terms of information and communication technologies (ICT) for health, all levels of the health system shall be provided with the systems and equipment necessary to complete their duties, including personal computing devices (computers, tablets, phones), high-speed networks, software applications, and other ICT architecture and platforms for e-services. ICT standards will be set to promote the integration and interoperability of various information sub-systems in the health system and beyond, to achieve efficiency and effectiveness in investments across the health system.

The ICT Unit has the oversight responsibility for ICT management. It will ensure that all technology used is safe, secure, and properly utilized through training, maintenance and renewal. This includes the utilization of proper asset management systems, helpdesk services, data security mechanisms, cybersecurity planning, and frameworks for ethical use.

To effectively implement this plan, building ICT capacity at all levels of the health system requires further investment, and should be integrated into both pre- and inservice training. This includes skills such as network maintenance, system administration, software engineering, and development operations.

4.5.3 Healthcare Technology

Medical equipment has become an important component of modern health services. The current trend indicates that medical equipment and devices are increasingly being deployed in health facilities to increase diagnostic and treatment capabilities. Medical technological equipment and devices for the prevention, diagnosis and treatment of illnesses and diseases as well as in patient rehabilitation are crucial for quality service delivery. All technology used shall be safe, secure and properly utilized in alignment with the existing guidelines.



Basic equipment shall be standardized through the EPHS and by implementing the MoH healthcare technology management framework. A resource mobilization strategy shall be developed to support healthcare technology management activities. Additionally, tracking and accountability of biomedical equipment and monitoring of healthcare technology management interventions shall be improved.

4.6 Medicine, Vaccines, Diagnostics and Health Supplies

The MoH has restructured the Supply Chain Management Unit (SCMU), the Central Medicine Stores (CMS) and Pharmacy Division into the Pharmaceutical Services Section (PSS), with responsibility for leadership, governance and oversight for Liberia's procurement and supply chain management of medicines and medical products in the health sector.

Public sector commodities flow through the CMS, formerly the National Drug Service (NDS) ,to end-users through an integrated distribution network. It is an end-to-end delivery system that extends as a single chain from the procurement of pharmaceuticals and medical equipment by both MoH and partners to the end-users. The system is heavily centralized, plagued with many systemic and operational challenges, and has not performed optimally, thus resulting in a huge number of expired medicines and persistent stock out of essential medicines in public facilities. There are also lingering issues of the legal status of CMS and whether or not to outsource the supply chain system partially or in full. The supply chain system needs to be reformed and strengthened at all levels, with decentralization of some procurement and supply functions to ensure optimal performance and uninterrupted supply of medicines.

The MoH shall strengthen the capacity of the newly restructured PSS to provide leadership, governance and implementation oversight for procurement and supply chain management in the health sector. The PSS shall revise the supply chain master plan, pharmaceutical policy and other relevant documents to guide implementation of supply chain interventions. The essential medicines list, essential diagnostic list, the National Formulary and standard treatment guidelines shall be revised to reflect the new service delivery package as needed and shall be the basis for procurement of essential drugs and medical supplies. Efforts will be made to strengthen capacity for procurement and supply chain management at the decentralized levels to ensure ownership and improved performance of the system at those levels.

Availability of quality medicines and medical supplies shall be ensured through the public procurement system, and support shall be given to implement the logistics management information system (LMIS) fully, ensuring quality data will be collected. To facilitate effective supply chain management, the LMHRA shall be supported and strengthened to perform its core functions. Innovative interventions and partnerships shall be explored to ensure affordable and uninterrupted availability of medicines. These new innovations include: (1) the Revolving Drugs Fund (RDF), the local pharmaceutical framework mechanism (local-decentralized procurement), (2) publicprivate partnership in hospitals and, (3) local production. Policies on prescription and dispensing practices shall be developed and enforced to guide rational use of medicines. Health facilities shall be allowed to procure their medicines, and medical supplies from Liberia Medicine and Health Products Regulatory Authority (LMHRA)qualified registered pharmaceutical premises to fill supply gaps and prevent stockout. The MoH shall strengthen capacity at all county depots to store, manage and distribute medicines and health products according to MoH standards, including decentralization of procurement, as appropriate.

An effective business model will be adopted through public-private partnerships, informed by a cost-benefit analysis, to make the CMS more viable and self-sustaining.

The Liberia Medicine and Health Regulatory Authority (LMHRA) regulates and enforces pharmaceutical regulations as per the LMHRA Act of 2010. The 2010 act needs revision to align with the African Union Model Law on Medical Products Regulation that seeks to strengthen and harmonize regulatory systems in Africa as well as improve trade and access to quality-assured medicines in the region. The MoH shall work with the LMHRA and key stakeholders to revise the LMHRA Act of 2010 to align with the African Union Model Law on Medical Products Regulation. The LMHRA shall be strengthened to enforce regulations on medicines and health products (including products of herbal, traditional and ayurvedic origin) in Liberia.

The capacity to enforce national donation guidelines and quality assurance of donated products will be strengthened. All products under development shall receive ethical approval from the ethics board and clinical trials for said products shall be regulated by the LMHRA.

In line with the "One Health" concept, the MoH shall revise and implement the national laboratory system policy and strategic plan, which will strengthen the laboratory system in Liberia. This will ensure the development of a sustainable system of laboratory services in line with international standards. Diagnostic procedures in health facilities shall be standardized and implemented accordingly as part of the surveillance system, including antimicrobial resistance testing.

As part of the Global Health Security Agenda (GHA) to combat Anti-Microbial Resistance, <u>Antimicrobial Stewardship (AMS) Programming</u> and efforts to reduce AMR shall be strengthened at all levels. This will include AMR surveillance, roll out of AMS, <u>improving rational prescribing and use of antimicrobial medicines in public and private facilities.</u>

4.7 Leadership, management and Governance

MoH has the legal mandate for the formulation, implementation, monitoring and evaluation of health policies, plans and standards and is therefore responsible for regulating the health system's leadership and governance structure. The leadership and governance structure at the different levels of care are shown in the annex as an organogram for the MoH.

The MoH shall ensure coordination, leadership and integration between units and programs, as well as inter-sectoral dialogue with other government ministries and agencies, and collaboration between donors and the partner community, regulatory bodies and professional institutions in order to promote the effective use of human and financial resources. Governance structures include the health sector coordination committees, health coordination committees, and technical working groups. A summary of central-level governance structures including membership and terms of reference can be found in the Decentralized Governance and Management Operational Guidelines, which may be revised to reflect the realities presented by this policy. The MoH shall ensure continuous collaboration with the Ministry of Internal Affairs through the Liberia Decentralization Support Program (LDSP) and the Governance Commission (GC) in the implementation of the decentralization and local governance reforms. The MOH will ensure that the community has a role in the governance and management streture of the health system to ensure their ownership and active participation in the health care delivery system to build trust and facilitate uptake in health care service utilization.



The MoH shall seek to become a small and efficient entity that focuses on its core functions of policy formulation, national planning, setting standards, building capacities, mobilizing resources and conducting supervision, monitoring and evaluation. It shall bring together related units and programs create to consolidated sections to achieve synergy, easy integration and to narrow the span of control for effective management and better health outcomes.

The MoH shall pursue autonomy for health facilities incrementally so they can manage their own resources and it shall ensure capacity at decentralized levels is strengthened to ensure OICs and district managers have the requisite skill set to effectively manage the health facilities at their levels.

4.8 Regulatory Bodies and Professional Health Training Institutions

Strengthening the healthcare delivery system requires an inter-sectoral approach. The MoH thus recognizes the role of regulatory bodies and professional training institutions in the protection of the health and wellbeing of the population. These regulatory authorities are established with clear mandates through appropriate national legislations. The MoH shall collaborate with the health regulatory bodies and coordinate with the National Commission on Higher Education (NCHE) and

professional health training institutions across the country to ensure compliance to minimum quality standards.

4.9 Decentralization

Guided by the Liberia National Policy on Decentralization and Local Governance and the 2018 Local Government Act, the MoH shall continue to transfer decision making incrementally to the county leadership and closer to the front lines of care delivery. County health teams will be transformed into health departments and placed under each county administration. Therefore, the de-concentration of MoH management responsibilities and the building of systems at the county level shall adapt to the county administrative structure in an incremental and pragmatic way to ensure health service delivery is not hindered by additional layers of bureaucracy.

The MoH will continue to empower communities to strengthen participation, accountability and ownership of public health facilities. County health teams, hospitals, comprehensive health centres, and district health teams will have governing boards; and primary health facilities shall have the Health Facility Development Committee (HFDC). The governance structures shall have strong community and civil society representation to serve as the voices and eyes of service users to ensure quality and equity. There shall be community health committees (CHCs) at the community level to oversee and support the community health workers. The MoH Decentralization Policy and the National Community Health Services Policy shall provide detailed reference on composition, standard operational procedures and means of sustainability of these boards and community structures. The Board of Jackson F. Doe Hospital will be similar to that of John F. Kennedy Hospital since it will be upgraded to become the second national referral hospital in Liberia.

4.10 Partnerships

Delivering high quality health care across the seven quality dimensions as described in this policy will require the buy in of all stakeholders working in the health sector, including faith-based organizations, non-governmental organizations, private health providers, and donor agencies.

The private health sector in Liberia shall complement the GoL's efforts to provide health care for its citizens and bridge significant gaps that exist in the health sector. The MoH therefore shall explore innovative care delivery programs and financing strategies by leveraging public-private partnerships where advantageous. Areas for investment opportunities (including diagnostic laboratories and imaging facilities, medical equipment, medical waste management, emergency response and ambulance services, advance life support and monitoring systems, multidisciplinary cancer treatment centres, services for maintenance and repairs of medical equipment, rehabilitation and physiotherapy services etc.) shall be explored. The availability of these services will no doubt improve quality of care and access for the population and people will no longer have to travel to other countries for diagnostics and treatment.

There are experiences of fruitful collaborations between government and faith-based organizations, particularly churches where the faith-based institutions manage public facilities (e.g., Star-of-Sea, a GoL facility managed by the Catholic health secretariat). On the other hand, GoL provides support for faith-based clinics and hospitals to provide services for the catchment communities (Phebe, Curran Hospital). With the

introduction of cost sharing mechanisms and the revolving drugs fund, the MoH shall explore further collaborations with faith-based institutions to manage public health facilities and expand access to quality health care.

Concession companies in Liberia shall extend health services to people in their affected communities under their cooperate social responsibility mandate. Where there are public facilities in the concession areas, companies shall support and strengthen those public facilities to provide services for their employees and residents.

4.11 HMIS, Research and M&E

The lack of coordinated support for research is a challenge, thus making research fragmented and uncoordinated and the lack of dedicated funds limits the possibilities to monitor protocols and ensure ethical compliance.

The MoH shall invest in building research capacity and providing research-related career pathways for individuals returning with advanced degrees in science and public health.

Furthermore, the lack of support for data quality limits the analysis and utilization of routinely collected information. Efforts shall be made to harness opportunities for improving data collection and management. Particularly, the MoH shall assess the current pilot of the electronic laboratory information system (LIS) as well as the laboratory information management system at the NPHIL and Jackson F Doe Hospital and plan to use results to boost the laboratory system. Current efforts to define a standard for digital communications across all health information systems (HIS) and deploy interoperable systems that promote sustainable, integrated information and communication infrastructure shall be elevated.

4.12 National Laboratory System

The national laboratory system and services remain a key priority for the MoH. Laboratory capacity building has been of increasing priority, particularly following the EVD outbreak. The EVD outbreak negatively impacted the provision of laboratory services at both regional and national levels. It highlighted significant gaps in the structure of the laboratory network. Diagnostic capacity gaps include limited trained personnel, stock outs of reagents and lack of functional equipment. Out of the all laboratory employees in the country, 62.7 per cent are laboratory aides and 13.5 per cent are laboratory assistants. Furthermore, the 2018 SARA findings indicated the low availability and capacity of diagnostics services for patients seeking health care in Liberian health facilities. For example, only 29 per cent of facilities are able to perform cross matching for blood transfusion, test for hemoglobin (18 per cent), test for parasites in stool (22 per cent) and check for malaria (70 per cent).

A Five-Year Strategic Plan for the National Health Laboratory System of Liberia 2019–2024 was designed to respond to gaps in diagnostic capacity for both clinical and public health laboratories. Efforts have been made to develop a single laboratory system that simultaneously strengthens clinical and public health laboratory capacity. A phased approach of gradually increasing services to meet the public health needs was recommended. Key policy priorities are to 1) strengthen and expand a

comprehensive and integrated public health diagnostic system and 2) ensure quality clinical laboratory and diagnostics services at all level of care.

4.13 Bio-Medical Technology

The policy direction is to ensure the availability of functional and utilized biomedical equipment in all health facilities and institutions. The MoH shall strengthen the capacity of biomedical equipment and technology (BMETs) and workshops. A system for management, operations and maintenance of health equipment will be improved. Focus will be made on training, strengthening coordination including public private partnership, advocacy, and resource mobilization and monitoring for BMETs.

4.14 Cross Cutting Issues

4.14.1 Health promotion and communication

Health promotion

Utilization of health services in Liberia is low especially in public facilities. The country did not reach the national target of two visits per capita per year during the implementation of the National Health Policy and Plan (2011-2021). To change these dynamics, the MoH shall prioritize health promotion for social and behavioural change by equipping the population with needed information and knowledge on preventive, curative and palliative health services.

The MoH shall review and update the National Health Promotion Strategy (2016-2021) to align with this policy and the new national strategy. Other relevant ministries and agencies shall be engaged to implement health promotion in the policies.

Communication

The MoH shall develop a communication strategy to ensure the public is informed about developments in the health sector. The focus of this strategy shall be on public relations and media engagements. This communication strategy shall ensure the empowerment of local government officials and community leaders to disseminate information pertaining to health development in the country involving other sectors.

4.14.2 Water, Sanitation & Hygiene

The GoL has created the National Water Sanitation and Hygiene (WASH) Commission with the mandate to regulate and coordinate all WASH actors nationwide. The MoH shall collaborate with the WASH Commission, National Public Health Institute of Liberia (NPHIL) and other stakeholders to ensure safe water, control water-borne diseases and other public health problems linked to WASH. Focus shall be on WASH in health facilities to improve infection prevention and control (IPC).

4.14.3 Quality and Safety

The MoH and partners shall ensure QA/QC measures at all levels of the health systems. The Quality Management Unit (QMU) was established to provide strategic directions and define the overall programmatic direction for quality leadership, management, and implementation in the MoH. The QMU will spearhead all MoH efforts in collaboration with other GoL institutions, boards and councils, such as the

LMHRA, LMDC, LMNB, NPHIL to address and/or improve quality of care and patient safety.

As a country, we appreciate the fact that, improving access to care without paying the necessary attention to quality and safety will not lead to the attainment of UHC and other desired health outcomes for the population. In view of this, improving the quality and patient safety situation in Liberia will involve designing and implementation of quality improvement interventions across the building blocks of the health system. This will facilitate and improve access to and utilization of quality essential health services. These interventions will cover and focus on the seven quality dimensions i.e., safety, equity, efficient, effective, timely, people-centred and integrated.

As a policy thrust, the MoH shall commit to support and ensure the institutionalization of the culture and practice of quality across the health system through the effective implementation of the National Quality and Patient Safety Strategy 2022-2026 and all processes that will lead to UHC and improved health outcomes. The MoH shall further ensure that the provision of healthcare is devoid of avoidable harm across all the levels of the health system. Accreditation of private as well as public facilities shall be strengthened during this policy. A strong accountability framework shall be put into play to deter wilfull and careless ethical transgression. This should include internal, national multidisaplinary boards and International peet review machanisms to review and investigget and publish ethical bridge in the public and private health institution to promote quality and protect the public against harm.

5. Institutional Framework for Implementation

5.1 Management Framework

The implementation of this policy will be through two, five-year National Health Strategic Plans and Essential Packages of Health Services from 2022-2026 and from 2027-2031. The county health teams will develop their individual annual operational plans in line with this policy, the strategic plan and the EPHS. These operational plans shall be developed jointly with partners and shall use a bottom-up approach to allow inputs from all stakeholders within the counties. All partners' activities shall be reflected in the central and county plans. The county health teams shall be responsible for the implementation of their plans with oversight from the central MoH. Management capacities should be built at the district and facility levels to facilitate further devolution of management functions and resources closer to where services are delivery. Facilities shall be given autonomy as their capacities increase.

5.2 Partnership Framework

Delivering high quality health care as described in this policy and plan will require an all-of-sector approach, including faith-based organizations, non-governmental organizations, private health providers, and donor agencies. The MoH continues to emphasize accountability, transparency, efficiency and effectiveness including value for money in building and maintaining partnerships with these organizations, and various ways to formalize these partnerships, such as memorandum of understanding and more formal contracts.

For contracting-in and the contracting-out, the MoH shall increasingly adopt a strategy of performance-based financing, in which payment is directly tied to results, more effectively aligning incentives for all parties involved. Lessons learned through early the USAID Fixed Amount Reimbursement Agreement (FARA) and World Bank investments in performance—based financing initiatives shall be incorporated into the planning, which includes:

- Building capacity among local health authorities and health facility leadership to ensure successful implementation of their workplans.
- Clearly defining the roles and responsibilities, especially as related to supervision, from the beginning of the new PBF Program.
- Ensuring access to complete, accurate and timely data and strengthening data systems.
- Timely accommodate for challenges outside of the scope of contracts, such as infrastructure or supply chains.

The private health sector in Liberia shall complement the GoL's efforts to provide healthcare for its citizens and bridge significant gaps that exist in the health sector in line with the MoH private sector engagement strategy.

5.3 Governance Framework

Ensuring alignment and strategic collaboration between stakeholders in the health sector will be paramount to achieving the objectives outlined in this document. Mechanisms to foster coordination between the government, donors, and not-for-profit and private for-profit organizations include: health sector coordinating committee,

health coordinating committee, and technical working groups among others. These mechanisms should be replicated at both the national and county levels.

Key areas for effective coordination between stakeholders include:

- Strengthening and unifying information systems, and making reliable data easily accessible to all interested parties through data sharing agreements.
- Developing common annual and multi-year planning cycles that include inputs from and allocates responsibilities to all stakeholders.
- Rationalizing interventions.
- Establishing appropriate venues for regular discussion at the central and county levels, where participants can harmonize their activities in a structured way.

5.4 Health Financing Framework

Using the results from the health financing system diagnosis and the health financing progress matrix, this section summarizes key recommendations informed by the contextual evidence that are important for Liberia to make further progress towards achieving UHC.

Revenue Generation:

- a) The MoH shall mobilize additional resources with plans to progressively increase reliance on compulsory funding sources. There is a need for advocacy to ensure that any revenue growth and increase in GDP are matched with increases in domestic resources for health. The country shall remain dependent on donors in the medium term. However, there is need for a clear mapping of current donor support, areas of support and estimation of costs of transition to inform government planning processes and efforts for harmonization/alignment. The national health accounts (NHA) will monitor pattern of contribution (expenditures) of the different financing resources.
- a) At the primary health care level, the MoH in the short term shall plan and implement a Revolving Drugs Funds with exemptions for the vulnerable population. The MoH shall establish systems for local control and retention of revenue for pharmaceutical availability, including reliable supply of low cost essential medicines. It shall ensure the community is involved in each stage of the planning and implementation process to ensure acceptability, credibility and accountability. Policies shall be developed to ensure access to services, fee collection mechanisms as well as establishing the fees. Government and donors shall subsidize this to ensure cost recovery. Measures shall be put in place to ensure financial performance, pharmaceutical availability and rational medicine use.
- b) The MoH shall strengthen and scale performance-based financing at the primary care level. PBF is a financing mechanism that gives healthcare providers (facilities or health workers) financial payments based on the achievement of predetermined targets, goals or outputs after

being verified for quality.¹⁸ Improvement of the accessibility and affordability of health services and the quality of care are key goals of the health sector.

- c) In the medium to long term, the MoH shall introduce a national health insurance scheme, the Liberia Health Equity Fund (LHEF) an insurance scheme meant to reduce increasingly catastrophic health expenditure and improve sustainability of revenue collection while also increasing quality of healthcare accessed by the population. The proposed revenue resources shall be equitable (pro-poor). The MoH recognizes mandatory prepayment as a key mechanism to reduce direct out-of-pocket payments at the point of delivery and to enable pooling of risk among the population. The scheme is meant to be mainly tax based. The sector will build structures and institutional capacity for its roll out and implementation at the national and county levels.
- d) The MoH and MFDP shall implement an emergency response fund for response to epidemics and outbreaks.
- e) Improve the predictability and stability of flows of public funds to health providers. The MoH will work with the MFDP to implement a medium term fiscal and expenditure framework informed by the Health Sector Policy and Strategic Plan. The framework shall include medium-term projections of donor resources for on budget resources. It shall move towards ensuring donor resources are captured on-budget (through working with MFDP to address donor PFM concerns around transparency and accountability). The MoH shall routinely monitor timeliness in the flow of public funds (upstream engagement with MFDP) to improve budget execution and undertake routine expenditure reviews.

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¹⁸ Borghi et al. 2015; Janssen et al. 2015; Rudasingwa et al. 2015

6. Monitoring and Evaluation

6.1 Health Management Information System

The MoH shall adapt a national health information monitoring, evaluation, and research (HMER) policy and plan and maintain a simple, harmonized and easily understandable information system for tracking health sector performance. The HMER will collect, collate and manage data in ways that will allow stakeholders to study/evaluate how resources are distributed across the different levels of care and in the counties. This will encourage and inform future policy discussion about equity, efficiency and adherence to universal health care and health security. The HMER Section needs to be strengthen with coordination among the three units heightened. The HMER shall clarify roles and responsibilities for each units and the appropriate capacities built in each unit based on their roles. M&E and research functions with national program should be implemented under the HMER supervision to ensure alignment and avoid duplications. The Assistant Minister for Statistics shall satisfy all financial requested related to HIS, M&E and research from all program and unites in the MOH to achieve this.

6.2 Data and Statistics

The national HMER will consist of various sub-systems specially designed for data collection, processing and reporting. The information will be used to improve services through better planning and management at all levels. This will draw upon the following: 1. The integrated Financial Management Information System. 2. The Human Resource Information System. 3. Physical Assets and Management Information system. 4. The Health Management Information System.

Vital statistics registration such as births and deaths, shall be improved and integrated into the current DHIS2 platform to complement health information system statistics/data to inform decision making, planning and budgeting.

6.3 Performance Review

The MoH shall conduct continuous monitoring of the health system and/or sector performance through field visits/supervision and quarterly/annual review meetings. The MoH shall commission periodic program and health sector evaluation and reviews to learn lessons, document best practices, share knowledge and determine progress towards national and international targets and goals.

The MoH shall endeavor to improve data quality, dissemination, and use of information in support of health services and health system functions at all levels through capacity development, data improvement planning, staff motivation programs and an improved work environment.

References

- 1. Agenda 2063, The Africa We Want, Africa Union Commission. 2015.
- 2. Downie R. *The Road to Recovery, Rebuilding Liberia's Health System.* CSIS Global Health Policy Centre. [Online. Accessed June 2 2014]. Available at: http://csis.org/files/publication/120822 Downie RoadtoRecovery web.pdf.
- 3. Economic Community of West African States' Vision 2050.
- 4. Evans, Goldstein, Papova. 2015. Health-care worker mortality and the legacy of the Ebola epidemic. Lancet Global Health.
- 5. Global Action Plan for SDG 3.
- 6. Global Burden of Disease. 2016.
- 7. Global compact for progress towards Universal Health Coverage 2030. International Health Partnership .
- 8. Government of Liberia and United Nations Sustainable Development Cooperation Framework (UNSDCF). 2020-2024.
- 1. Government of Liberia Pro-Poor Agenda for Prosperity and Development (PAPD). 2018.
- 2. Government of Liberia Vision 2030 Agenda.
- 3. Liberia Demographic and Health Survey (LDHS). 2019-2020.
- 4. Liberia Health Demographic and health Survey. 2013.
- 5. Ministry of Health Essential Package of Health Services. 2011-2021.
- 6. Ministry of Health TB Annual Report 2020.
- 7. Ministry of Health, Health Investment Plan for Building a Resilient Health Delivery System. 2015-2021.
- 8. Ministry of Health, Health Research Policy.
- 9. Ministry of Health, Health Sector Monitoring & Evaluation Plan. 2017-2021.
- 10. Ministry of Health Malaria Indicator Survey. 2016.
- 11. Ministry of Health, Maternal and Neonatal Death Surveillance and Review Report. 2020.
- 12. Ministry of Health, National Health Account Report. 2018-2019.
- 13. Ministry of Health, National Health Information System Strategic Plan. 2016-2021.
- 14. Ministry of Health National Health Policy and Plan. 2011-2021.
- 15. Ministry of Health Service Availability and Readiness Assessment (SARA) report. 2016.
- 16. Ministry of Health Service Availability and Readiness Assessment (SARA) report. 2018.
- 17. Social Cohesion and Reconciliation (SCORE) Index Link.
- 18. Schmets G, Rajan D, Kadandale S, editors. Strategizing national health in the 21st century: a handbook. Geneva. World Health Organization. 2016.
- 19. UNAIDS Spectrum Estimates. 2020.
- 20. United Nations Sustainable Development Goals 2030
- 21. World Health Organization, Action Framework for Health Systems Strengthening towards Universal Health Coverage.
- 22. World Health Organization. 2016a. *Global Strategy on Human Resources for Health: Workforce 2030.*
- 23. World Health Organization. International Health Regulations 2005.
- 24. World Health Organization. Global Reference List of 100 Core Health Indicators. 2018. (plus health-related SDGs)

Annexes A: Health Sector Monitoring and Evaluation Framework (indicators, baselines, and targets)

Indicators table

No	Indicator Group	Indicator	Baseli ne	Year	Source	Target 2026	Target 2031
1	Croup	3.1.1 Maternal mortality ratio	742	2019- 2020	LDHS	520	220
2		3.1.2 Proportion of births attended by skilled health personnel	0.84	2019- 2020	LDHS	0.9	0.95
3		3.2.1 Under-five mortality rate	93	2019- 2020	LDHS	70	25
4		3.2.2 Neonatal mortality rate	37	2019- 2020	LDHS	27	17
5		3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	TBD	TBD	TBD	TBD	TBD
6		3.3.2 Tuberculosis incidence per 1,000 population	3.14	2020	World Bank Data	3.0	2.7
7		3.3.3 Malaria incidence per 1,000 population	188.45	2021	MoH Service Statistics	118.5	72.5
8		3.3.4 Hepatitis B incidence per 100,000 population	2365	2019	GBD	2152	1,980
9	Indicators associate d with SDG 3	3.3.5 Number of people requiring interventions against neglected tropical diseases	2,960,000	2016	Mass Treatment Coverage for NTDs, Liberia (2016)	2,486,400	2,188,032
10		3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	0.18	2019	World bank Data (Trending Economics)	0.13	0.10
11		3.4.2 Suicide mortality rate per 100,000 population	4.5	2019	WHO Globah Health Observatory data	4.23	3.86
12		3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	TBD		The Liberia NCD & Injuries (NCDI) Poverty Commission Report	ТВА	ТВА
13		3.5.2 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 liters of pure alcohol	0.13	2016	Global Status Report on Alcohol and Health, 2018	0.1	0.1
14		3.6.1 Death rate due to road traffic injuries per 100,000 population	10.5	2019	IHME-GBD	9.0	7.0
15		3.7.1 Proportion of women aged 15-49 years who have their needs for family planning satisfied with modern methods	0.25	2019- 2020	LDHS	0.4	0.5
16		3.7.2 Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	0.25	2019- 2020	LDHS	0.20	0.10
17		3.8.1 Coverage of essential health services (UHC coverage index)	42	2019	Index Mundi	65	85
18		3.8.2 Number of people covered by health insurance or a public health system per 1,000 population	*112	2019- 2020	LDHS	115	125

No	Indicator Group	Indicator	Baseli ne	Year	Source	Target 2026	Target 2031	
19		3.9.1 Mortality rate attributed to household and ambient air pollution	170	2016	WHO - Global Health Observatory	165	140	
20		3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	41.5	2016	WHO-Global Health Observatory	29	18	
21		3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older	0.082	2020	World Bank Data	0.062	0.046	
22		3.b.1 Proportion of the population with access to affordable medicines and vaccines on a sustainable basis	0.37	2022	HHFA 2022	0.63	0.90	
23		3.b.2 Total net official development assistance to medical research and basic health sectors measure in US Dollars	\$62.94 m	2019	Our Data Our World	\$ 64.79	\$ 66.08	
24		3.c.1 Health worker density and distribution per 10,000 population	11.8	2016	Liberia Health Workforce Census	16	25	
25		3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness	36	2021	Global Health Security Index Report (2021)	38.6	48.2	
Indicators monitoring Liberia's goal of improved health status								
	(Th	ese indicators are not conclusive of th	e health sector	and should b	e measured every	5 years)		
26		Infant mortality rate (per 1,000 live births)	63	2019-20	LDHS	45	30	
27		Crude death rate (per 1,000 population)	7.3	2020	UN*	5	0	
28		Life expectancy at birth (years)	65	2019	UNDP-HDR	70	80	
29	Indicators	Fertility rate (average children per woman)	4.2	2019-20	LDHS	3	3	
30	monitoring	AIDS related mortality rate	45	2021	World Data Atlas	17.9	4.5	
31	Liberia's goal of	Malaria mortality rate (age adjusted mortality rate per 100,000)	52.62	2020	WHO	42.1	21.0	
32	improved health	TB mortality rate (age adjusted deaths per 100,000 people)	8.89	2020	WHO	6.6	5.3	
33	status	Malaria parasite prevalence (mRDTs or microscopy) among children 6-59months	45%	2016	MIS	25%	15%	
34		HIV prevalence rate	1.1%	2021	World Data Atlas	1.1%	1.0%	
35		New cases of IHR-notifiable diseases and other notifiable diseases per year	TBD	TBD	TBD	TBD	TBD	
Indicators monitoring Health System's goals (health systems performance to be monitored every 1-3 years, are specific for the health system)								
36		Out-of-pocket expenditures on health (as % of total health spending)	54%	2019	World Data Atlas	40%	30%	
37	indicators monitoring Health financings	Proportion of the population with impoverishing health expenditure	37%	FY 2019/202 0	NHA	33%	28%	
38		Per capita health expenditure	\$16.90	2019-20	MFDP	\$20	\$30	
39		Public expenditure in health as % of total public expenditure	14%	2021-22	MFDP	15%	17%	
40		Total current expenditure on health as % of gross domestic product	8.5%	2019	World Bank Data	12%	15%	
41		% of population living within 5 km from the nearest health facility	71%	2013	LDHS	85%	85%	

No	Indicator Group	Indicator	Baseli ne	Year	Source	Target 2026	Target 2031
42	Indicators monitoring access to health	Health Facility density (# of health facilities per 10,000 population	1.9	2016	HRH Census, Liberia	2	2
43		Hospital bed density	1.2	2022	HHFS	2	3.5
44		% of facilities with no stock-out of tracer drugs during the period	35%	2018	SARA	90%	90%
45		Percentage of children under age 5 whose births were registered at the time of the survey.	66%	2019- 2020	LDHS	75%	80%
46		Completeness of death registration with cause-of-death information (%)	TBD	TBD	TBD	45%	60%
47		Perioperative mortality rate	7.4%	2015	Surgical Care in Liberia and Implications for Capacity Building	2	0.5
48		ART retention rate	47%	Mar-22	Liberia adherence and loss-to-follow-up in HIV and AIDS care and treatment	65%	90%
49		Health Service Readiness Index	56%	2018	SARA	80%	95%
		ators monitoring Health System Per			<u> </u>		
(Thes	se indicators are to	be monitored annually with focus on to be used also at the			their performance	e. Most should	
50		OPD consultations per inhabitant per year	0.76	2020	HMIS	2	4
51		% of pregnant women that	87%	2019-20	LDHS	90%	90%
52		Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	Girls (10- 14): 4 Women (15-19): 128	2019- 2020	LDHS	Girls: 2; Adolescents: 100	Girls: 0.5; Adolescent s: 60
53		Modern Contraceptive Prevalence rate among all women (mCPR)	24%	2019-20	LDHS	30%	35%
54		Proportion of infants fully immunized	51%	2019-20	LDHS	75%	85%
55	Indicators	% of children under 1yr who received DPT3/penta-3 vaccination	69%	2019-20	LDHS	90%	95%
56		% of pregnant women provided 3rd dose of IPT for malaria	40%	2019-20	LDHS	80%	90%
57	monitoring Health	Proportion of population who slept under ITN the night before survey	39%	2019- 2020	LDHS	65%	85%
58	System Performan	Malaria parasite prevalence (mRDTs or microscopy) among children 6-59months	45%	2016	LMIS	20%	10%
59	ce (Service coverage/ utilization)	Mental health incidence rate	75.42	2022	HMIS	169.2	141
60		Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	TBD	TBD	TBD	TBD	TBD
61		% of health facilities providing NCDs services	30%	2018	SARA	50%	90%
62		Coverage for mental disorders services	44%	2022	HHFA	55%	79%
63		% of health facilities providing NTDs services	31%	2018	SARA	50%	95%
64		TB treatment success rate	78%	2020	HMIS	85%	85%
65		% of children under 5 who are stunted	30%	2019-20	LDHS	25%	20
66		Incidence of low birth weight among new born	17.3%	2022	HMIS	14%	10.0%
67		Anemia prevalence in children	71%	2019- 2020	LDHS	63.9%	55.4%
68		Anemia prevalence in women of reproductive age	44.5%	2019- 2020	LDHS	37.8%	30.3%