

# HEALTH IN THE SDG ERA



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*Is Kenya on Track Towards Achievement of SDG 3? An analysis of Health Indicators in Kenya*

## FOREWORD

This report is a culmination of a study undertaken to assess whether Kenya is on track for the achievement of Sustainable Development Goal (SDG) 3 which aims at ensuring healthy lives and promoting well-being for all at all ages by 2030. The study focused on selected SDG 3 indicators that the country is currently implementing such as maternal health; child health; communicable and non-communicable diseases; health infrastructure; availability of basic amenities; human resources for health; financing healthcare; health insurance coverage; and traffic accidents among others.

The study findings show that Kenya has mixed performance in the selected indicators. For instance, the performance in maternal health shows that there has been an increase in deliveries in health facilities and maternal mortality rate was on the decline between 2016 and 2019. Antenatal coverage has improved over the years with statistics showing that the number of pregnant women who attended at least one Antenatal Care (ANC) visit increased from 44 percent in 2011 to 78 percent in 2020. The improved performance is attributed to interventions initiated by the Government, particularly the free maternity services which was introduced in 2013 and later transitioned to ‘Linda Mama Programme’ under the National Hospital Insurance Fund (NHIF) in 2016.

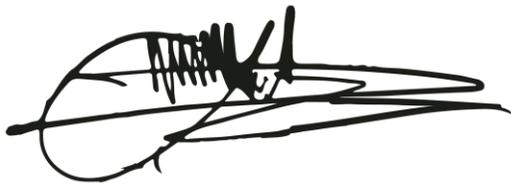
The child immunization coverage has been on the decline as Diphtheria Pertussis Tetanus (DPT) 3 vaccination administered to children aged between 12 and 24 months decreased by about 10 percentage points from 96.9 percent in 2011 to 86 percent in 2020. The downward trend in immunization coverage implies that the country may not be able to end preventable deaths of newborns and children under 5 years of age by 2030.

These mixed performance calls for concerted efforts by all stakeholders to enable Kenya to make meaningful progress in the health care system. For this reason, this report offers the following policy recommendations:

- ✚ Expanding “Linda Mama Programme” currently only in public health facilities to Faith Based Organizations and private healthcare providers at subsidized cost.
- ✚ Ministry of Health through community health workers to create awareness on the benefits of immunization in schools, places of worship and any other fora.

- ✚ Government to expand health insurance coverage by including the poor and unemployed people.
- ✚ Improve uptake of health insurance by introducing more flexible packages for NHIF and premiums to allow for wider coverage.
- ✚ Ensure all health facilities are NHIF accredited to increase utilization of the cover.
- ✚ Increase health facility density in counties with densities of below 2.3 percent through construction of level 2 facilities in the counties.

The detailed study findings contained in this report will inform Government health policy review and formulation of new policies in the Health sector. In addition, I trust that the report will be adequately disseminated to all Stakeholders to enable both private and public sector players make informed decisions on the various aspects of healthcare.



**Hon. (Amb.) Ukur Yatani, EGH**  
**Cabinet Secretary**  
**The National Treasury and Planning**

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**Saitoti Torome, CBS,  
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## ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
APR	Annual Progress Report
ART	Antiretroviral Therapy
ARVs	Antiretroviral
AU	African Union
CBHI	Community-Based Health Insurance
CEC	County Executive Committee
CEDAW	Convention on the Elimination of all forms of Discrimination against Women
COC	Certified Outpatient Coder
CoK	Constitution of Kenya
COVID-19	Corona Virus Disease 2019
CRC	Certified Risk Adjustment Coder
CS	Cesarean Section
CSS	Civil Servant Scheme
DHIS	District Health Information System
DPT	Diphtheria Pertussis Tetanus
ENTC	Ear, Nose and Throat Center
FBOs	Faith Based Organizations
FY	Financial Year
GoK	Government of Kenya
GNP	Gross National Product
HCW	Health Community Workers
HeP B	Hepatitis B

HIB	Haemophilus Influenzae type B
HISP	Health Insurance Subsidy Programme
HIV	Human Immunodeficiency Virus
HRH	Human Resources for Health
HW	Health Workers
ICU	Intensive Care Unit
IFC	International Finance Corporation
IFMIS	Integrated Financial Management Information Systems
IHRIS	Integrated Human Resource Information System
ITNs	Insecticide-Treated bed Nets
KDHS	Kenya Demographic and Health Survey
KEMRI	Kenya Medical Research Institute
KEMSA	Kenya Medical Supplies Agency
KenPHIA	Kenya Population Based HIV Impact Assessment
KES	Kenya Shilling
KHHEUS	Kenya Household Health Expenditure and Utilization Survey
KHIS	Kenya Health Information System
KHFA	Kenya Health Facility Assessment
KHSSP	Kenya Health Sector Strategic and Investment Plan
KHP	Kenya Health Policy
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KMPDB	Kenya Medical Practitioners and Dentists Board
KMTC	Kenya Medical Training College
KNBS	Kenya National Bureau of Statistics
KNH	Kenyatta National Hospital

LLINs	Long-lasting Insecticidal Nets
LLND	Laparoscopic Lymph Node Dissection
MDGs	Millennium Development Goals
MES	Managed Equipment System
MMR	Maternal Mortality Rate
MoH	Ministry of Health
MTP	Medium Term Plan
MTRH	Moi Teaching and Referral Hospital
NCDs	Non-Communicable Diseases
NCK	Nursing Council of Kenya
NGOs	Non-Governmental Organizations
NHIF	National Hospital Insurance Fund
NPHI	National Public Health Institute
NTD	Neglected Tropical Diseases
NTSA	National Transport and Safety Authority
NQCL	National Quality Control Laboratory
ODA	Official Development Assistance
OPD	Out Patient Department
OOP	Out of Pocket
PENTA	Pentavalent Vaccine
PMTCT	Prevention of Mother to Child Transmission
PPP	Public Private Partnerships
PWSD	Persons with Severe Disabilities
SARAM	Service Availability and Readiness Assessment Mapping
SDGs	Sustainable Development Goals

SHI	Social Health Insurance
TB	Tuberculosis
TGB	Total Government Budget
THE	Total Health Expenditure
TRIPS	Trade-Related Aspects of Intellectual Property Rights
TSR	Treatment Success Rate
UHC	Universal Health Coverage
UK	United Kingdom
UN	United Nations
UNCRC	United Nations Convention on the Rights of Children
UNGA	United Nations General Assembly
USD	United States Dollar
VNR	Voluntary National Report
WHO	World Health Organization
WRA	Women of Reproductive Age

## EXECUTIVE SUMMARY

According to the Millennium Development Goals Status Report 2016, Kenya did not achieve goals 4, 5 and 6 on reducing Child Mortality; improving maternal health and combating HIV/AIDS, malaria and other diseases. These goals were carried forward to Post-2015 Agenda, popularly known as the Agenda 2030. The Agenda 2030 and the Sustainable Development Goals (SDGs) succeeded the Millennium Development Goals (MDGs) and aim at achieving a better and more sustainable future for all. The SDGs are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs came into effect on 1st January 2016 and comprise of 17 goals with 169 targets designed to free the human race from hunger, poverty and oppression. The SDG 3 aims at ensuring healthy lives and promoting well-being for all at all ages.

The main objective of this study was to assess whether Kenya was on track towards the achievement of SDG 3 and UHC through analysis of health indicators. Specifically, the study sought to: Analyze the trend and current status of SDG No. 3 selected indicators in Kenya; relate the NHIF uptake trend with coverage of health services; and identify gaps to attainment of SDG 3 targets with a special focus on Target 8 on Universal Health Coverage of the Big Four Agenda.

The study reviewed several policies, legal and institutional frameworks within the health sector. These include, the African Union (AU) Agenda 2063- which is a strategic framework for the socio-economic transformation of the continent over the next 50 years. Goal 3 of the first aspiration of the AU Agenda 2063 on healthy and well-nourished citizens converges with the SDG number 3. The East African Community Vision 2050 seeks to promote economic transformation and development policies that support inclusive housing and social services; a safe and healthy living environment for all; affordable and sustainable transport, energy, water and sanitation. The Vision identifies improving access to health services as a critical enabler for achieving it.

Kenya is a signatory to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) which is an international human rights instrument adopted by the United Nations General Assembly in 1979. CEDAW aims at ending all discrimination against girls and women. In addition, the Country is signatory to the United Nations Convention on the

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Rights of Children (UNCRC) which is the most complete statement on children's rights ever produced and is the most widely-ratified international human rights treaty in history. It defines children as individuals below the age of 18, and sets out 54 articles which define their rights.

Chapter Four on the Bill of Rights, Part two (2) on the Economic and Social Rights, in Article 43 (1) (a) in the Constitution of Kenya states that every person has the right to the highest attainable standards of health, which includes the right to healthcare services, including reproductive health. The Kenya Vision 2030 aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment. The Vision is implemented through five-year Medium-Term Plans (MTPs). Currently, the Government is implementing the MTP III (2018-2022) whose theme is “Transforming lives: Advancing socio economic development through the Big Four”.

The Big Four Agenda is part of the national development agenda that gives priority to specific focus areas that are within the Kenya Vision 2030 to be implemented within the period 2018 - 2022. One of the Big Four initiatives is Universal Health Coverage. Target eight of SDG 3 aims at achieving Universal Health Coverage (UHC), including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all. Some of the indicators are; coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population) and Proportion of population with large household expenditures on health as a share of total household expenditure or income.

The Third MTP Health Sector Plan 2018-2022 outlines programmes and projects to be implemented in five years in order to attain Universal Health Coverage for all Kenyans. The Kenya Health Policy (KHP) 2014-2030 provides a platform for the implementation of the various policies and programmes in the Third MTP 2018-2022 across all the health system building blocks to lead to the achievement of Universal Health Coverage.

The study relied on a quantitative analysis of secondary data compiled by Kenya National Bureau of Statistics, the Ministry of Health and National Health Insurance Fund (NHIF) on a

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cross section of health indicators. The study undertook an analysis of indicators for Sustainable Development Goal (SDG) 3 in Kenya, to observe how the health sector has been performing and whether the country is on track towards the achievement of SDG 3 and particularly Universal Health Coverage (UHC). The focus was on maternal and child health indicators, selected communicable and non-communicable illnesses, human resources for health, availability of basic amenities, essential medicines and healthcare financing.

The study findings show that skilled deliveries at health facility increased from 51 percent in 2013/14 to 62.1 percent in 2015/16 before declining to 60.1 percent in 2017/18 and then increasing to 64.4 percent in 2018/19. The increase is attributed to interventions initiated by Government, particularly the free maternity services which was introduced in 2013 and later transitioned to Linda Mama Programme under the National Hospital Insurance Fund (NHIF) in 2016. The trends in antenatal visits are proportional to increase in deliveries at health facilities and are mainly as a result of implementation of Linda Mama programme in the country. There was a downward trend in the immunization of children from 96.9 percent in 2011 to 78.2 percent in 2019 and is attributed to the rampant health workers strikes.

Tuberculosis Treatment Success Rate (TSR) fluctuated between 85.6 percent in 2013 to a high of 89 percent in 2014 and 82.5 percent in 2018 against the WHO recommended rate of 85 percent. The trends further show malaria incidences per 100,000 population have been decreasing since 2014 from 225 to 182 in 2016 and further to 62 in 2017. Sleeping under insecticide-treated bed nets (ITNs) has been shown to reduce malaria illness, severe disease, and death due to malaria in endemic regions.

On the other hand, Non-Communicable Diseases are on the rise in the country against the SDGs commitment of reducing by one third premature mortality from non-communicable diseases through prevention and treatment. On health infrastructure, there is an almost equal distribution between publicly and privately owned health facilities, particularly at the lowest level of healthcare. However, 72 percent of all level 5 hospitals and 100 percent of level 6 health facilities are public. Generally, level 2 comprising of dispensaries forms the largest coverage of health facilities at 77 percent, implying higher primary care coverage.

The National Health Facility Density in 2018 stood at 2.3 per 10,000 people although there exist wide disparities across counties with Kisii County having the lowest Health Facility Density at 1.4 per 10,000 people. Nyeri County has the highest Health Facility Density at 4.3 per 10,000 people. The study also indicated that Kenya's readiness to provide infection control measures and diagnostic services declined over this period. The number of registered health personnel has been on the rise. The Doctor to population ratio was at 25 per 100,000 against the WHO recommended minimum of 36 doctors per 100,000 population while that of clinical officers to population was 46 per 100,000 in 2019.

The proportion of the Total National Government Expenditure on health to Total Government Expenditure rose from 5.3 percent in 2014/15 FY to 7.1 percent in 2019/20 FY. However, it is still lower than Abuja declaration of 15 percent. At the County level, there has been an increase from 20.2 percent in 2014/15 to 25.0 percent in 2017/18 before declining to 22.7 percent in 2018/19 and rose marginally to 23.7 percent in 2019/20. Donor contribution was 35 percent in 2009/10 and decreased to 23 percent in FY 2015/16 as a percentage of total Health expenditure.

Trends in health insurance coverage increased from 10 percent in 2013 to 19.9 in 2018. The increase is attributed to the Government's policy on universal healthcare. NHIF membership increased by 71 percent from 4.5 million in 2013/14 to 7.7 million in 2017/18. The membership from formal sector rose by 33 percent compared with a 39 percent rise in the informal sector.

The study offers recommendations based on various interventions. On healthcare financing, the Government to progressively increase healthcare financing towards the recommended 15 percent as per the Abuja declaration, strengthen health financing structures, pursue Public Private Partnerships (PPPs) to achieve UHC objectives and introduce supportive and flexible statutory and regulatory laws to support the health financing reforms and outcomes. Regarding health infrastructure, Counties should establish more health facilities especially at levels two (2) and three (3) to ensure access to healthcare by the population is guaranteed and fully implement the Community Health Strategy and Primary Health Strategy.

The Government to expand the health insurance coverage to rope in more poor people, improve uptake of health insurance by introducing more flexible packages for NHIF and premiums to allow for wider coverage, ensure all health facilities are NHIF accredited to increase utilization

of the cover and enhance sensitization and awareness on NHIF. Moreover, Counties should introduce schemes for the low income earners which provides for affiliation to informal workers, expands public subsidies to social health insurance systems, provides for integration of private health insurance and/or encourages compulsory universal participation.

In regard to health human resources, there is need to recruit and continuously train more health workers to ensure adequate staff in the sector. The country should also have a clear policy and guidelines on how to protect and compensate health workers including a specific medical policy given their exposure in the line of duty and avoid frequent strikes.

Government needs to strengthen governance in the health sector and Health Information Systems to ensure accurate, timely and relevant data is produced for tracking results on the health indicators as well as harmonizing reporting on SDG indicators with the health indicators to ensure clarity in reporting. Further, there is need to strengthen and support research in health especially on emerging diseases, TB, Malaria and other diseases as well as support evidence-based research that would inform full roll-out of UHC strategies.

In addition, health outcomes can be improved by exploring other initiatives, such as fumigation, with existing strategies; increasing distribution of mosquito nets and sensitization on their proper use and fully rolling out the malaria vaccine to cover populations at risk as well as civic education to reduce malaria incidences. Moreover, enhance awareness campaigns on benefits of immunization, HIV/AIDS, malaria and other diseases and healthy living to reduce incidences of Non-Communicable Diseases. There is also need to expand the “Linda mama programme” to cover not only public health facilities but to FBOs and private institutions (subsidize) and increase child age of coverage to 5 years. Lastly, there is need to enforce road safety measures to reduce road accident injuries/deaths and to fully implement the existing road safety strategies using a multi-agency approach.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

The Sustainable Development Goals (SDGs) succeeded the Millennium Development Goals (MDGs) and aim at achieving a better and more sustainable future for all. Sustainable Development Goals are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs, which came into effect on 1st January 2016, comprises 17 goals with 169 targets designed to free the human race from hunger, poverty and oppression. The SDG number three (3) aims at ensuring healthy lives and promoting wellbeing for all at all ages.

The African Union (AU) Agenda 2063 is a strategic framework for the socio-economic transformation of the continent over the next 50 years. It builds on, and seeks to accelerate the implementation of past, existing and new national, regional and continental initiatives for transformative, inclusive real growth with equity, rapid resilient and sustainable socio-economic development. One of the aspirations of Agenda 2063 is a prosperous Africa, based on inclusive growth and sustainable development. Among the goals of this aspiration is to achieve healthy and well-nourished citizens with the priority areas being health and nutrition. The AU Agenda 2063 goal on healthy and well-nourished citizens converges with the SDG number 3.

The East African Community Vision 2050 seeks to promote economic transformation and development policies that support inclusive housing and social services; a safe and healthy living environment for all; affordable and sustainable transport, energy, water and sanitation. The Vision identifies improving access to health services as a critical enabler for achieving it. The Vision aspires to achieve 100 percent access to health services from 74 percent in 2014. It also seeks to reduce HIV/AIDS prevalence rates from 4.4 percent in 2014 to 1.3 percent by 2050. Communicable diseases will be reduced from 12 percent to 2.2 percent within the Vision period. Other health targets include reducing Infant Mortality Rate from 71.4 per 1000 births to 36 per 1000 births, improving Life Expectancy at birth from 59.2 years in 2014 to 76.4 years by 2050 and reducing Maternal Mortality Rate from 469 per 100,000 births in 2014 to 69 per 100,000 births by 2050.

Kenya acknowledges that development is primarily about the people and therefore adopted a Human Rights-Based Approach to development. Chapter Four on the Bill of Rights, Part two (2) on the Economic and Social Rights, in Article 43 (1) (a) in the Constitution of Kenya states that every person has the right to the highest attainable standards of health, which includes the right to healthcare services, including reproductive health. The Constitution of Kenya also adopts a devolved system of Government where some functions including health are devolved to the counties together with their budget.

The Kenya Vision 2030 aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment. The Vision is implemented through successive five-year Medium-Term Plans (MTPs). Currently, the Government is implementing the MTP III (2018-2022) whose theme is “Transforming lives: Advancing socio economic development through the Big Four”. Kenya Vision 2030 social pillar emphasizes investment in the people of Kenya by providing an efficient integrated and high-quality affordable health care system as highlighted in the health sector.

The Big Four Agenda is part of the national development agenda that gives priority to specific focus areas that are within the Kenya Vision 2030 to be implemented in the period 2018 - 2022. The Big Four initiatives are: Enhancing manufacturing; Ensuring food and nutrition security; Universal health coverage and Affordable housing. SDG 3 target 8 is on achieving Universal Health Coverage (UHC), including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all. The indicators are; coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population) and Proportion of population with large household expenditures on health as a share of total household expenditure or income.

Under Universal Health Coverage the Government prioritizes reducing the cost and ensuring universal access to quality and affordable healthcare by 2022. The Government’s plan is to ensure that every Kenyan is covered under the National Hospital Insurance Fund (NHIF) medical

cover. The plan requires: A strong collaboration between NHIF and private sector insurance providers and a review of the rules governing private insurers, to lower the cost of cover; to protect both the Government and Kenyans from fraud and abuse; and to let private insurers invest more in providing medical cover.

The Third MTP Health Sector Plan 2018-2022 outlines programmes and projects to be implemented in five years in order to attain Universal Health Coverage for all Kenyans. The Kenya Health Policy (KHP) 2014-2030 provides a platform for the implementation of the various policies and programmes in the Third MTP 2018-2022 across all the health system building blocks to lead to the achievement of Universal Health Coverage.

The emergence of the Novel Corona Virus (COVID-19) at the end of 2019 posed a great challenge to the world. The first case of the virus in Kenya was announced on 13<sup>th</sup> March 2020. Since then, the threat posed by the pandemic has resulted in devastating social-economic effects both globally and locally slowing down most of the strategies and plans for the medium term. Particularly, national roll out of UHC as part of the Big Four Agenda was delayed. Further, quick response mechanisms were developed including policy formulation, guidelines, surveillance, testing, management and containment measures.

The social economic impact of the pandemic at household and macro levels include: Reallocation of financial resources from other deserving programmes in the health sector to contain the spread of COVID-19; loss of technical staff and man hours resulting from deaths and hospitalization; households expenditure on testing and treatment of the disease, purchase of sanitizers and other protective measures and outstretching of available infrastructure in health facilities especially beds, ICUs and ventilators.

In order to cushion the country from these challenges, the government proposed and started fast tracking key policies and programmes based on the MTP III through development of the Post COVID-19 Economic Recovery Strategy (ERS) 2020-2022. The ERS is designed to mitigate the adverse socio-economic effects of the pandemic, facilitate opening up of the economy and accelerate economic recovery and attainment of higher and sustained economic growth. It provides a road map for transition to the fourth MTP and a new development framework beyond

the Kenya Vision 2030. One of the key elements and main focus of the ERS is enhancement of budgetary allocations to strengthen health care systems.

## **1.2 Statement of the Problem**

At independence, poverty, ignorance and disease were identified as the three key challenges that needed to be tackled by the independence government. Almost six decades later, diseases still pose a challenge to Kenyans. Affordability, accessibility and availability of healthcare services remain an issue that requires focus by the Government. A large proportion of health seekers finance their healthcare costs directly from their pockets. According to (WHO, 2010), many individuals and households still depended on Out of Pocket (OOP) payments to pay for health services. Those with no insurance fear to seek medical attention and those who manage to go end up suffering financial impoverishment, Wang, Y., & Pwu, R. (2012). Therefore, medical charges are a hindrance to access of healthcare services. According to Millennium Development Goals Status Report 2016, Kenya did not achieve MDGs 4, 5 and 6 on: Reduce Child Mortality; Improve Maternal Health and Combat HIV/AIDS, malaria and other diseases. These were carried forward to SDG 3 on ensuring healthy lives and promoting wellbeing for all at all ages. The SDG 3 has targets to be achieved by 2030 with corresponding indicators. To promote a better understanding of the situation, there is need to assess and establish the trends to determine whether the country is on track towards achieving Universal Health Coverage and SDGs in Kenya. This study, therefore, sought to assess whether Kenya is on track towards the achievement of SDG 3 and UHC through analysis of various health indicators. The findings of this study will be critical in informing policy formulation and aid in reviewing policies at National and County levels as the country aspires to achieve Universal Health Care (UHC).

## **1.3 Objectives of the study**

The main objective of the study was to assess whether Kenya is on track towards the achievement of SDG 3 and UHC through analysis of health indicators. Specifically, the study sought to:

- i. Analyze the trend and current status of SDG 3 selected indicators in Kenya;
- ii. Relate the NHIF uptake trend with coverage of health services;

- iii. Identify gaps to attainment of SDG 3 with a special focus on Target 8 on Universal Health Coverage for the Big 4 Agenda ; and
- iv. Make policy recommendations for improving the health care system.

#### **1.4 Research Questions**

- i. How are the trends and status of SDG 3 indicators in Kenya?
- ii. How does NHIF uptake relate to health coverage in Kenya?
- iii. What are the gaps towards attainment of SDG 3 targets?
- iv. What policy recommendations are required for improving the health care system?

#### **1.5 Justification**

The Government in its development agenda, Vision 2030 and the Big Four Agenda recognizes the importance of investing in health care. This is in line with the Constitution of Kenya, Article 43 (1) (a) on economic and social rights that states; every person has the right to the highest attainable standards of health, which includes the right to health care services, including reproductive health care. To address challenges of UHC, the Government investment has focused on high impact interventions where the return to investment is high that include investment in maternal and child health, health diseases and conditions, investment in health human resources, health infrastructure, health products and technologies across the entire health system.

To this end, this paper sought to analyze selected health indicators on SDG 3 that Kenya reports on at the United Nations General Assembly and others which have high impact interventions and where the return to investment is high. The analysis sought to establish how their trends and uptake of NHIF insurance in the country shows likelihood of achieving SDG 3. The results from this study will facilitate policy review and formulation of an effective and efficient health care system by both public, private and development partners. The study also provides an opportunity for further research.

#### **1.6 Structure of the Report**

This report is organized in five chapters. Chapter one presents introduction which consists of the background, statement of the problem, objectives of the study, research questions and the

justification for the study. Chapter two presents policy, legal and institutional health framework and UHC implementation. Chapter three gives the methodology which was used for the data analysis. Chapter four presents the results and discussions while chapter five provides the conclusions and policy recommendations.

## CHAPTER TWO: POLICY, LEGAL AND INSTITUTIONAL HEALTH FRAMEWORK AND UHC IMPLEMENTATION

### 2.1 Introduction

This chapter presents the policies, legal and institutional framework in the health sector. It further describes the healthcare system and the reforms the Government has undertaken towards achievement of Universal Health Coverage and the experiences from other countries.

### 2.2 Policy Framework

The Sustainable Development Goals (SDGs) is a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity (UN 2015). The SDGs are aimed to be achieved by 2030 and have a number of targets which are implemented and monitored at the country level. SDG 3 aims to ensure healthy lives and promote wellbeing for all at all ages. Table 1-1 shows the targets and indicators espoused by SDG 3.

**Table 1- 1:** SDG 3 targets and indicators

<i><b>SDG</b></i>	<i><b>TARGET</b></i>	<i><b>INDICATORS</b></i>
Goal 3. Ensure healthy lives and promote well-being for all at all ages	3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	3.1.1 Maternal deaths per 100,000 live births 3.1.2 Proportion of births attended by skilled health personnel
	3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	3.2.1 Under-5 mortality rate (deaths per 1,000 live births) 3.2.2 Neonatal mortality rate (deaths per 1,000 live births)
	3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.	3.3.1 Number of new HIV infections per 1,000 uninfected population (by age group, sex and key populations) 3.3.2 Tuberculosis incidence per 1,000 persons per year 3.3.3 Malaria incident cases per

<b>SDG</b>	<b>TARGET</b>	<b>INDICATORS</b>
		1,000 persons per year 3.3.4 Number of people requiring interventions against neglected tropical diseases 3.3.5 Number of new hepatitis B infections per 100,000 population in a given year
	3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.4.1 Mortality of cardiovascular disease, cancer, diabetes or chronic respiratory disease 3.4.2 Suicide mortality rate
	3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.	3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders 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 litres of pure alcohol
	3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	3.6.1 Number of road traffic fatal injury deaths within 30 days, per 100,000 population (age-standardized)
	3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.1 Percentage of women of reproductive age (aged 15-49) who have their need for family planning satisfied with modern methods 3.7.2 Adolescent birth rate (aged 10-14; aged 15-19) per 1,000 women in that age group
	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines	3.8.1* Coverage of tracer interventions (e.g., child full immunization, antiretroviral therapy, tuberculosis treatment, hypertension treatment, skilled attendant at

<b>SDG</b>	<b>TARGET</b>	<b>INDICATORS</b>
	for all	birth, etc.) 3.8.2* Fraction of the population protected against catastrophic/impoverishing out-of-pocket health expenditure
	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1 Mortality rate attributed to household and ambient air pollution 3.9.2* Mortality rate attributed to hazardous chemicals, water and soil pollution and contamination
	3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older
	3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.	3.b.1 Proportion of the population with access to affordable medicines and vaccines on a sustainable basis 3.b.2 Total net official development assistance to the medical research and basic health sectors
	3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	3.c.1 Health worker density and distribution
	3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management	3.d.1 Percentage of attributes of 13 core capacities that have been attained at a specific

<b>SDG</b>	<b>TARGET</b>	<b>INDICATORS</b>
	of national and global health risks	point in time

*Source: UNGA, 2015*

In Africa, the African Union (AU) has spelt out the development blueprint and master plan for socio-economic development and economic growth for the continent by 2063 (AU, 2013). The Agenda 2063 contains seven aspirations and twenty goals which African members states strive to achieve. The first aspiration, “A *prosperous Africa based on inclusive growth and sustainable development*” has seven goals. Goal no. 3 attempts to achieve a healthy and well-nourished citizenry by expanding access to quality health care services, particularly for women and girls.

In April 2001, the African Union countries met and pledged through the Abuja Declaration to set a target of allocating at least 15% of their annual budget to improve the health sector and urged donor countries to scale up support. Development partners were also urged to fulfill the target of 0.7% of their Gross National Product (GNP) as Official Development Assistance (ODA) to developing countries. The proportion of Total Government Budget (TGB) allocation to health at both national and county levels increased during FYs 2017/18 and 2018/19, after stagnating at around 7 percent during FYs 2014/15–2016/17, reaching a high of 9.2 percent in FY 2018/19 (MOH, 2019).

Kenya Vision 2030, the country’s long term development blue print aims to transform Kenya into a newly-industrializing, middle income country providing a high quality of life to its citizens. The Vision is implemented through five-year successive medium-term plans. The First Medium Term Plan covered the Period 2008-2012 while the Second Medium Term Plan covered the period 2013-2017. The Government is currently implementing the Third MTP which covers the period 2018-2022. The Third Medium Term Plan 2018-2022 outlines policies, programmes and projects for implementation with particular focus on achieving the Governments “Big Four” Agenda. Key among them is the Universal Health Coverage.

The vision of the health sector is to ensure an equitable, affordable and quality health care to the highest standards for all and the goal is to develop a population that is healthy and productive and able to fully participate and contribute to other sectors of the economy. To improve the overall livelihoods of Kenyans, the Government has aimed at providing an efficient, integrated

*Is Kenya on Track Towards Achievement of SDG 3? An analysis of Health Indicators in Kenya*

and high-quality affordable health care system. The Government has been simultaneously implementing the multiple regional and international development commitments, ensuring all development plans are resilient and sustainable, inclusive and coherent at different levels to SDGs and Africa Agenda 2063. This is evident from the health targets in the MTP III which are to a larger extent coherent with SDG 3 targets.

The Kenya Health Policy (KPH) 2014-2030 brings together health interventions stipulated in the Constitution of Kenya and the Vision 2030. The goal of the policy is to attain the highest possible standard of health in a responsive manner. It also targets provision of primary healthcare which is the most efficient and cost-effective way to organize health system. The policy points to the fact that non-communicable diseases, injuries, and violence-related conditions will increasingly, in the foreseeable future, be the leading contributors to the high burden of disease in the country, even though communicable diseases will remain significant. The Policy has six objectives to pursue, namely: eliminate communicable diseases; halt and reverse the rising burden of non-communicable conditions and mental disorders in the country; reduce the burden of violence and injuries; provide essential health care; minimize exposure to health risk factors; and strengthen collaboration with private and other sectors that have an impact on health.

Kenya Health Sector Strategic and Investment Plan (KHSSP) 2018-2022 defines the medium-term focus, goal, mission, objectives and priorities of the health sector which will facilitate the attainment of the KHP objectives (MOH, 2018). It is not restricted to the actions of the Ministry of Health, but includes all actions of other state, non-state and external actors. It guides National and County Governments plus partners on the operational priorities that they need to focus on in addressing the health agenda in Kenya. The strategic plan has, as its goal, '*Attaining equitable, affordable, accessible and quality health care for all*'. This goal encompasses the focus of the health sector in the medium term, informed by the need to improve numbers of available services, scale up coverage of required services and reduce financial implications of accessing and using health services. The mission of the sector in the medium term is 'To build a progressive, responsive and sustainable health care system for accelerated attainment of highest standards of health to all Kenyans'. This mission is to be attained through focusing on the implementation of a broad-based health and related services that will impact on the health of

persons in Kenya. It places emphasis on implementing interventions and prioritizing investments relating to maternal and newborn health.

The Government is committed to the implementation of Universal Health Coverage (UHC) as one of the “Big Four” agenda. UHC is an integral part of the country’s efforts to attain the desired status of health as elaborated in the KHP 2014-2030. UHC will ensure that all Kenyans receive quality, promotive, preventive, curative and rehabilitative health services without suffering financial hardship. As such, the Government made a commitment to make sustained and progressive investments towards achieving the objectives of UHC which include: progressively increase the percentage of Kenyans with coverage for essential health services (100 percent coverage with health insurance); increase the percentage of Kenyans covered under prepaid health financing mechanisms such as health insurance, subsidies and direct Government funding to access health services; progressively expand the scope of the health benefit package accessible to all Kenyans; improve the quality of health services; protect Kenyans from catastrophic health expenditures, in particular the poor and the vulnerable groups; provide and retain health resources appropriate for the delivery of health services; and strengthen the leadership and governance within the health sector.

### **2.3 Legal Framework**

The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) is an international human rights instrument adopted by the United Nations General Assembly in 1979. It is an important agreement about equality between girls/women and boys/men. CEDAW aims at ending all discrimination against girls and women. The Convention requires party states to address all forms of gender-based discrimination, including facilitating equal access and control over resources in all spheres of life (socio-economic, cultural and political) as defined in the Convention. The Government provides status reports every four years. Article 12 of the convention states that *“1. Parties shall take all appropriate measures to eliminate discrimination against women in the field of health care in order to ensure, on a basis of equality of men and women, access to health care services, including those related to family planning. 2. Notwithstanding the provisions of paragraph 1 of this article, States Parties shall ensure to women appropriate services in connection with pregnancy, confinement and the post-natal*

*period, granting free services where necessary, as well as adequate nutrition during pregnancy and lactation”.*

In addition, the United Nations Convention on the Rights of Children (UNCRC) is the most complete statement on children’s rights ever produced and is the most widely-ratified international human rights treaty in history. It defines children as individuals below the age of 18, and sets out 54 articles which define their rights. All articles are considered equally important, and include considerations such as non-discrimination, freedoms of expression, thought and association, protection from violence and abuse, right to healthcare, education and social security, the right to play, and to protection from exploitation such as child labour and drug abuse. The UNCRC addresses the public budget directly in Article 4 which states: “with regard to economic, social, and cultural rights [of children], State Parties shall undertake such measures to the maximum extent of their available resources”.

The Constitution of Kenya (COK) provides the overarching legal framework to ensure a comprehensive rights-based approach to health services delivery. Article 43 of the Constitution provides that every person has a right to the highest attainable standard of health, which includes reproductive health rights. It further states that a person shall not be denied emergency medical treatment and that the State shall provide appropriate social security to persons who are unable to support themselves and their dependents. The Constitution further obligates the State and every State organ to observe, respect, protect, promote and fulfil the rights in the Constitution and to take legislative, policy and other measures, including setting of standards to achieve the progressive realization of the rights. State organs and public officers also have a constitutional obligation to address the needs of the vulnerable groups in society and to domesticate the provisions of any relevant international treaty and convention that Kenya has ratified. The State has a further constitutional obligation under Article 46 of the Constitution to protect consumer rights, including the protection of health, safety, and economic interests.

## **2.4 Institutional Framework**

The Constitution of Kenya provides for a devolved structure of Government. It takes into account the functional responsibilities between the two levels of Government (County and

National) with their respective accountability, reporting and management lines. The Fourth Schedule of the Constitution outlines the mandates of the National Government and County Governments.

### **2.4.1 National Government**

In regard to health, the functions of the National Government include developing nationwide health policies and operating tertiary and national referral hospitals,<sup>1</sup> capacity building and technical assistance to counties. The National Government functions are further elaborated in the Executive Order no. 1 of June 2018, which outlines the core mandates of the Ministry of Health as shown below:

- Medical Services Policy
- Health Policy and Standards Management
- Training of Health Personnel
- Pharmacy and Medicines Control
- National Health Referral Services
- National Medical Laboratories Services
- Registration of Doctors and Para-medicals
- Care Policy
- Radiation Control and Protection
- HIV/AIDs Management
- Public Health and Sanitation Policy Management
- Nutrition Policy
- Immunization Policy and Management
- Reproductive Health Policy
- Preventive, Promotive and Curative Health Services
- Health Education Management
- Health Inspection and other Public Health Services
- Quarantine Administration

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<sup>1</sup> They constitute the national referral system for healthcare delivery, given the national nature of their functions (training, internship and specialized care).

- Food Safety and Inspection
- Preventive Health Programmes

### ***Semi-Autonomous Government Agencies (SAGAs) in the Ministry of Health***

The Ministry of Health has twelve (12) Semi-Autonomous Government Agencies (SAGAs) which complements the Ministry in discharging its core functions through specialized health service delivery; medical research and training; procurement and distribution of drugs; and financing through health insurance. These SAGAs are the following:

#### ***Kenyatta National Hospital (KNH)***

Kenyatta National Hospital (KNH) is a State Corporation established through Legal Notice No. 109 of 6<sup>th</sup> April 1987 with the following mandate:

- To receive patients on referral from other hospitals or institutions within or outside Kenya for specialized health care;
- To provide facilities for medical education for the University of Nairobi and for research either directly or through other co-operating health institutions;
- To provide facilities for education and training in nursing and other health and allied institutions; and
- To participate, as a national referral hospital, in national health planning.

#### ***Moi Teaching and Referral Hospital (MTRH)***

Moi Teaching and Referral Hospital (MTRH) is a State Corporation established through Legal Notice No. 78 of 12<sup>th</sup> June 1998 under the State Corporations Act (CAP 446). It is a Level 6B National Referral Hospital located in Eldoret town, Uasin Gishu County, in the North Rift region of Western Kenya. MTRH is the training facility for Moi University College of Health Sciences, Kenya Medical Training College (KMTC) Eldoret Campus and University of Eastern Africa Baraton.

#### ***Kenya Medical Training College (KMTC)***

The Kenya Medical Training College (KMTC) is a State Corporation under the Ministry of Health entrusted with the role of training of the various health disciplines in the health sector, to serve the East African Region and beyond. The College became a State Corporation through an

Act of Parliament in 1990 vide Cap 261 of the laws of Kenya and the name Kenya Medical Training College (KMTTC) adopted as a unifying title for the institution.

***Kenya Medical Supplies Authority (KEMSA)***

Kenya Medical Supplies Authority was established under the Kenya Medical Supplies Authority Act No. 20 of 25th January 2013 as a successor to the Kenya Medical Supplies Agency, established under Legal Notice No. 17 of 3rd February 2000. The Authority 's mandate is to be the medical logistics provider with the responsibility of supplying quality and affordable essential medical commodities to health facilities in Kenya through an efficient medical supply chain management system.

***Kenya Medical Research Institute (KEMRI)***

The Kenya Medical Research Institute (KEMRI) is a State Corporation established in 1979 under the Science and Technology (Repealed) Act, Cap 250 Laws of Kenya and as currently established and accredited to continue to operate as such under the Science, Technology and Innovation Act, 2013 as the national body responsible for carrying out research for human health in Kenya.

***National Hospital Insurance Fund (NHIF)***

National Hospital Insurance Fund was established in 1966 under Cap 255 of the Laws of Kenya as a department under the Ministry of Health. The original Act was revised and currently, the Fund derives its mandate from the NHIF Act No. 9 of 1998. The transformation of NHIF from a department of the Ministry of Health to a State Corporation was aimed at improving effectiveness and efficiency. The Fund's core mandate is to provide medical insurance cover to all its members and their declared dependents (spouse and children).

### ***Kenyatta University Teaching Referral and Research Hospital (KUTRRH)***

Kenyatta University Teaching, Referral and Research Hospital was established as a state corporation under the State Corporations Act Cap 446 through a Legal Notice No.4 of 2019. The Hospital is an ultra-modern 650-bed state-of-the-art Hospital sitting on 100 acres of land along the northern bypass road in Nairobi County. It is providing tertiary (highly specialized) health care services as a referral facility for level 4 and 5 facilities in the region, thereby helping decongest Kenyatta National Hospital (KNH) and surrounding County Government Hospitals. The Hospital mandate is drawn from the Legal Notice No. 4 and is in line with other national level 6 hospitals in the country.

### ***Kenya Nuclear Regulatory Authority (KENRA)***

The Kenya Nuclear Regulatory Authority (KENRA) is a State Corporation, established on 10th January 2020, by the Nuclear Regulatory Act, 2019.

### ***The National AIDS Control Council (NACC)***

The National AIDS Control Council (NACC) was established under Section 3 of the State Corporations Act by the National AIDS Control Council Order, 1999 published vide Legal Notice No. 170 of 1999. Under circular number OP/CAB.2/21/2A/LII/43 dated November 23, 2004.

### ***National Cancer Institute of Kenya***

The National Cancer Institute of Kenya (NCI Kenya) is a statutory body created under the Cancer Prevention and Control Act (No. 15 of 2012). The overall mandate of the NCI Kenya is to coordinate and centralize all activities, resources and information related to cancer prevention and control in Kenya.

### ***Mathari National Teaching and Referral hospital***

Mathari National, Teaching and Referral hospital was established as a State Corporation under the State Corporations Act Cap 446 through a Legal Notice No.165 of 2020.

### ***Kenya Medical Practitioners and Dentists Council***

The Kenya Medical Practitioners and Dentists Council is established under Section 3 of the Medical Practitioners and Dentists Act Cap 253 of the Laws of Kenya. The mandate of the Council is to regulate the practice of medicine, dentistry and health institutions in the country. This Act was enacted by Parliament in 1977.

## **2.4.2 Councils and Regulatory Bodies**

### ***Clinical Officers Council (COC)***

The Clinical Officers Council was established under the Clinical Officers Act, Cap 260. The Act was assented on August 24, 1988, commenced on July 31, 1989, and was last revised in 2017.

### ***Kenya Medical Laboratory Technicians and Technologists Board (KMLTTB)***

The Medical Laboratory Technicians and Technologists Act was assented on January 6, 2000 and commenced on December 22, 2000. The mandate of KMLTTB is to provide for training, registration and licensing of medical laboratory technicians and technologists.

### ***Nursing Council of Kenya (NCK)***

This Nursing Council of Kenya was established under the Nurses Act, Cap 257 of the Laws of Kenya. The Council is mandated to make provision for the training, registration, enrolment, and licensing of nurses and nursing institutions, regulate their conduct, to ensure their maximum participation in the health care of the community, and for connected purposes.

### ***Kenya Nutritionists and Dieticians Institute (KNDI)***

The Kenya Nutritionists and Dieticians Institute (KNDI) was established to provide for training, registration, and licensing of nutritionists and dieticians; to provide for the registration of the standards and practice of the profession; to ensure their effective participation in matters relating to nutrition, dietetics; and for related purposes under the Nutritionists & Dieticians Act No. 18 of 2007.

### ***Public Health Officers and Technicians Council***

The Public Health Officers and Public Health Technician's Council was established under Public Health Officers Act of Parliament (January 14, 2013).

The mandate of the Council is to; make provision for the training, registration; and licensing of public health officers and public health technicians; regulate their practice, provide for the establishment, powers, and functions of the Public Health Officers and Public Health Technicians Council, and for connected purposes.

### ***Pharmacy and Poisons Board (PPB)***

The Pharmacy and Poisons Board (PPB) was established under Cap 244, of the Pharmacy and Poisons Act 1957 and last revised in 2009. The mandate of the Board is to: make provision for the control of the profession of pharmacy and the trade in drugs and poisons; regulate and register pharmacists; authorize pharmacists to sell medicines and related products; and for remedial measures in cases of violation of professional conduct and discipline.

### ***Tobacco Control Board (TCB)***

Tobacco Control Board was established under Section 5 of Tobacco Control Act 2007. It consists of 16 board members from various Government Ministries and private sector.

### ***National Quality Control Laboratory (NQCL)***

The National Quality Control Laboratory (NQCL) is a body corporate established under Cap 244 of the Pharmacy and Poisons Act. The mandate of NQCL is to perform chemical, biological, biochemical, physiological and pharmacological analysis and evaluate other pharmaceutical drugs and medicinal substances manufactured both locally and imported.

### ***Physiotherapists Council of Kenya***

The Physiotherapist Council of Kenya was established under the Physiotherapist Act no. 20 of 2014 to regulate the training, registration, and licensing of physiotherapists in Kenya.

### ***Health Records and Information Managers Board***

Health Records and Information Managers Board was established under section 7 of the Health Records and Information Managers Act, 2016 (No. 15 of 2016) and amendments provided for in the Health Laws (Amendment) Act, 2019. The Board is mandated to regulate training, registration, licensing and practice of Health Records and Information Managers.

### ***The Kenya Health Professions Oversight Authority (Part VI, Section 45(1) of the Health Act 2017)***

The Kenya Health Professions Oversight Authority is a corporate body created by part VI of the Health Act no. 21 of 2017 to provide oversight role of the regulatory boards and councils, with the mandate of providing oversight in training, registration and licensing of health professionals; coordinate joint health inspections; receive and facilitate resolution of complaints and arbitrate disputes and conflicts; monitor execution of respective mandates and functions of health regulatory bodies. In order to execute its mandate, the Authority works closely with statutory regulatory Boards and Councils, Health professionals' associations and other stakeholders.

### ***Counsellors and Psychologist Board***

The Counsellors and Psychologist Board is established under part 2 of the Counsellors and Psychologist Board Act, 2014 (No. 14 of 2014). The Act provides for the training, registration, licensing, practice and standards of Counsellors and Psychologists.

### ***The Kenya Health Human Resource Advisory Council***

The Kenya Health Human Resource Advisory Council is established under the Health Act 2017 to review policy, and establish uniform norms and standards on management of interns and medical specialists, inter-Governmental transfers (county to county and between the two levels of the two Governments), welfare and scheme of service for health professionals and maintenance of a master register for all health practitioners in the County.

## **2.4.3 County Governments**

County Governments are responsible for County health services, including in particular-county health facilities and pharmacies, ambulance services, promotion of primary health care, licensing and controlling sale of food in public places, veterinary services (excluding regulation of the profession), cemeteries, funeral parlors and crematoria, refuse removal, and refuse dumps and solid waste disposal.

## **2.5 The Health Care System**

The Health sector comprises the public system and the private sector, which includes private for-profit, NGO, and FBO facilities. Health services are provided through a network of health

facilities countrywide, with the public sector system accounting for about 51 percent of these facilities. The public health system consists of six levels of hierarchy: level 1, Community health services; level 2, Dispensaries and clinics; level 3, Health centers and maternity and nursing homes; level 4, Sub-county hospitals and medium sized private hospitals; level 5, County Referral Hospitals and large private hospitals; and level 6, National Referral Hospitals. Public health facilities are managed by facility committees while Government oversight is provided for private facilities, through regulation by regulatory agencies.

### **2.5.1 The Role of County Governments in UHC Implementation**

Universal Health Coverage calls for a holistic system approach to improving health system performance. Health system strengthening involves investments in inputs in an integrated and systematic way, but also reforming the architecture that determine how different parts of the health system operate and interact to meet priority health needs through people-centered integrated services which is a key means to achieve UHC.

Decentralization is argued to promote community participation, accountability, technical efficiency and equity in the management of resources. In 2010, Kenya inaugurated a constitution that introduced 47 semi-autonomous County Governments, with substantial transfer of responsibility for health service delivery from the central Government to the counties. A devolved health system should bring services closer to the people, improve allocative efficiency, promote transparency, accountability and put citizens at the drivers' seat to determine their health agenda.

The devolved Government system in Kenya has significantly increased county level decision-space for health service management. However, to optimize on the benefits of this increased autonomy, it requires targeted interventions to provide essential and quality health services in the counties. These considerations should always be central when designing health sector decentralization policies. It is on this background that there are established in respect of each hospital a Hospital Management Committee at the County level.

### **2.5.2 Hospital Management Committee Membership**

The total membership of the Committee is nine members who are appointed by the Governor.

The Committee consists of:

- A chairperson appointed by the Governor from three nominees recommended by the CEC member for Health and Sanitation from among the nine nominated committee members.
- The person in charge of the hospital who shall be the secretary to the Committee
- Ward administrator or town administrator depending on where the hospital is situated
- Business community representative nominated by the Chamber of Commerce
- A person nominated by a registered professional group within the hospital area of jurisdiction.

The following are persons who shall be residents of the area of jurisdiction, nominated by the respective groups/persons through the nomination coordination committee

- One person who shall have knowledge and experience in finance and administration matters nominated by the CEC member for health and sanitation
- One person nominated by women groups
- One person nominated by the Faith Based Organization
- One youth nominated by recognized youth groups
- One person with disability nominated by a recognized group
- The area Member of County assembly where the hospital is situated will be a co-opted member of the committee.

Functions of the Hospital Management Committee include:

- To supervise and control the administration of the funds allocated to the specific hospital.
- To open and operate a bank account at a bank to be approved by the CEC member for the time being responsible for County Treasury
- To prepare specific hospital work plans based on the estimated expenditure
- To cause to be kept basic books of accounts and records of accounts of income, expenditure, assets and liabilities of the hospital as prescribed by the officer administering the fund.
- To prepare and submit certified periodical financial and performance reports as prescribed; and
- To cause to be kept a permanent record of all its deliberations

### 2.5.3 Reforms Undertaken by the NHIF

In efforts to enhance the NHIF’s capacity to deliver the promise of UHC to Kenyans, the Government is introducing several reforms. The reforms are linked and aimed at the objective of increasing population coverage with the NHIF to increase access to quality health care services while offering protection from the adverse effects of Out-of-Pocket payments.

**Figure 1: NHIF Registration Process**



*Source: NHIF*

#### 2.5.3.1 Civil Servants Scheme

In 2012, the NHIF introduced an insurance scheme for formal sector Government workers (civil servants) and their dependents known as the Civil Servants Scheme (CSS). Under the CSS, the Kenyan Government remits the medical allowances, previously paid directly to civil servants, to the NHIF as premium contributions. Funds for the CSS are managed separately from other NHIF funds, and beneficiaries enjoy a wider benefit package, including comprehensive outpatient and inpatient services accessed through contracted health care providers. Since the inception of CSS,

civil servants have successfully negotiated for expansion of the benefit package to include treatment abroad, land ambulance and airlifting services. Civil servants and their dependents are capitated to their preferred health care provider at a rate of 1,500 Kenya shillings (15 USD) per annum for public facilities, and 2,850 KES (28.5 USD) for private facilities. The different rates account for supply-side subsidies received by public facilities from the Government through annual budgetary allocations. Approximately 600,000 civil servants and their dependents are registered under this scheme.

### **2.5.3.2 Stepwise Quality Improvement System**

In 2013, the NHIF, with financial support from the International Finance Corporation (IFC) and technical support from the PharmAccess Foundation, introduced the SafeCare quality improvement system. SafeCare aims to support basic health care providers in resource-restricted settings to go through stepwise structured improvement programs to deliver safe and quality-secured care to their patients according to internationally recognized standards. This differs from traditional quality assurance mechanisms that have a dichotomous approach to quality standards and hence allows small, poorly resourced health care facilities to implement a quality improvement plan with the goal of meeting the required standards for accreditation and contracting by the NHIF to provide health care services.

### **2.5.3.3 The Health Insurance Subsidy for the Poor Program (HISP)**

In April 2014, the Kenyan Government launched the HISP pilot program—a comprehensive, fully subsidized, health insurance program for selected poor orphans and vulnerable children—benefiting from the Government’s Cash Transfer Program. The HISP pilot targeted 23,000 households (approximately 142,000 individuals) across the country for two years, with plans to progressively scale up coverage to the poorest 10 percentage of the population. These households were selected from the poverty list of orphans and vulnerable children developed and maintained by the Ministry of Labor, Social Security and Services. Those on the list were targeted using a combination of proxy means and community verification. In August 2016, the HISP program was scaled up to approximately 170,000 households (approximately 600,000 individuals). HISP beneficiaries receive comprehensive services from contracted public and private healthcare providers. At the time of its launch, the NHIF did not cover outpatient services, with the

exception of the CSS. However, to provide adequate financial risk protection, an outpatient package was specifically designed for the HISP beneficiaries. Although the HISP benefit package was much narrower than that of the civil servants, the capitation rate payable to contracted providers remained the same.

#### **2.5.3.4 Revision of Monthly Contribution Rates and Expansion of the Benefit Package**

In April 2015, the NHIF increased contribution rates for its national scheme members, to account for increased cost of service provision and to expand the benefit package. The monthly contributions for the lowest paid formal employee increased by 400 percent and rates for the highest earners increased by 431 percent. Contribution rates for the informal sector increased by 213 percent. This increase was accompanied by expansion of the benefit package to include outpatient services and a range of what the NHIF labels special packages that include chronic diseases, surgical care, chemotherapy, renal dialysis, kidney transplant, and magnetic resonance imaging and computed tomography scans. Compared to the CSS, contracted public providers receive a lower annual capitation rate of 1,200 KES for public providers and 1,400 KES for private providers. Additionally, facilities are reimbursed separately for the special packages.

#### **2.5.3.5 The Upward Revision of Provider Reimbursement Rates (2016)**

In March 2016, the NHIF increased the inpatient reimbursement rates following negotiations with health providers, as a means to reduce the proportion of direct costs payable by its members for inpatient care. For example, reimbursement for a normal delivery increased from 6,000 KES to 10,000 KES, and the daily rebate for inpatient care in a public facility doubled, from 600 KES to 1,200 KES. Though health providers expressed their dissatisfaction with the lower capitation rates, they agreed to provide outpatient services if the NHIF increased inpatient and special package reimbursement rates.

### **2.6 Experiences of UHC from other countries**

Kenya's commitment to achieve UHC can benefit from the experiences of other countries including Japan, Thailand, Chile, and Singapore. Health care in Japan is provided free for Japanese citizens, expatriates and foreigners by the Government. Japan's public healthcare system is known as Social Health Insurance (SHI). SHI applies to everyone who is employed full

time with/at medium or large companies. Approximately 5 percent of salaries are deducted to pay for SHI, a cost matched by employers. Medical treatment in Japan is provided through Universal Health Care. This system is available to all citizens, as well as non-Japanese citizens staying in Japan for more than a year. The system puts a high priority on preventative health care. It also offers free screening tests for certain illnesses as well as superb pre-natal programs. The standard of medical treatment in Japan is extremely high. People born in Japan have the longest life expectancy in the world (World Health Statistics, 2020). Due to technology advancement and state of the art equipment, the Country health facilities are one of the leading in the world. Hospitals are required by law to be run as non-profit and to be managed by physicians. Profit run health service organizations are forbidden from owning or operating hospitals or clinics, and are required to be operated by physicians.

Thailand achieved 98 percent health insurance coverage for its 68 million population between 2001 and 2011. Thailand piloted UHC in six provinces in the first year then rolled out nationally thereafter. Thailand's Government finances about 75 percent of the health insurance scheme that enables people to access health care without suffering financial hardships. Thailand achieved UHC through several interventions including the use of health system reforms supported by sustained economic development which is a necessary complement of achieving UHC. The Country also put in place supportive and flexible statutory and regulatory laws to support the health financing reforms and outcomes.

In Chile, the Government introduced new regulations and a new law in 2005 that established a list of 56 priority health problems that both the public and private insurance sectors were obliged to cover. This was to prevent the public sector from being overburdened.

In Singapore and the United Kingdom for instance, the Governments have set up income and capital-based support schemes (or the “means” tested low-income schemes) that take care of the poor. In a related vein, these schemes can be supported by innovations to expand safety nets by opening affiliation to informal workers, providing or expanding public subsidies to social health insurance systems to enroll the poor (such is done in Makueni County), integration of private health insurance, and/or compulsory universal participation. An important caveat is that the proposed innovations may have their unique shortcomings and may require careful design before

their adoption – hence the need for an all-embracing piloting scheme. In addition, there is need for evidence-based research that would inform the full UHC rollout strategies.

Countries such as Singapore and UK that have reported significant progress in UHC have attributed their success to committed leadership and citizen's buy-in. The Singaporean Government was able to roll-out UHC because it took into consideration the wishes of the public hence gaining support and approval to make changes in the health sector.

Besides achieving UHC and efficient financing of health, health outcomes can be improved significantly by supportive and synergistic investments in related sectors such as water and sanitation. As an example, Chile though poorer than the developed countries, scores well in terms of health indicators. Its infant and maternal mortality are among the lowest in Latin America. Average life expectancy in 2009 was 79 years, up from just over 60 years in the early 1970s. These achievements are attributed to among others: Investments in public goods such as education, child health control, sanitation, water and sewerage investments.

In Africa, Algeria, Botswana and Rwanda provide Universal Health Coverage. Algeria's National Medical Insurance Scheme provides cover to 90 percent of the population. A network of hospitals, clinics, and dispensaries provide treatment for the population, with the Social Security system funding health services, although many people must still cover part of their costs due to the rates paid by the Social Security system which has remained unchanged since 1987. Under the public health insurance system, vulnerable populations such as the poor, children, and the elderly, are entitled to free healthcare, while wealthier citizens are required to partially pay for their healthcare according to a sliding scale.

Botswana also provides universal healthcare to all its citizens through a public healthcare system. About 98 percent of medical health facilities are run by the State, while the remainder is run by the private sector. Healthcare is delivered through a decentralized model with primary healthcare being the pillar of the delivery system. It is through these structures that a complement of preventive, promotive and rehabilitative health services as well as treatment and care of common problems are provided for. The Government has standardized fees to be paid for general check-up at USD \$0.5. However, for children under five years and adults over 65 year's general check-

ups are free. The Government pays for the treatment of patients referred abroad for medical procedures.

Rwanda has significantly advanced Universal Health Coverage with its Community-Based Health Insurance (CBHI) program which was developed in 2003. Overall, Rwanda has seen incredible uptake in its insurance program; coverage expanded from less than 7 percent of the CBHI target population in 2003 to 74 percent in 2013. In this program, funds are used to help subsidize care for the citizens and clinic functionality. This allows citizens to access care and pay for services based on a tiered premium system according to socio-economic standing. This type of coverage is further enabled by the Rwandan governance structures put in place. The central government agencies are responsible for policy formulation and regulation while the district is responsible for local planning and coordination of the delivery of public services. As such, funding for health care delivery and health systems is decentralized at the district level to ensure targeted programming that fits the needs of each individual community. Health centers are given financial autonomy to plan activities according to their needs and the needs of the community, which is beneficial in increasing access to care. More than 85 percent of the population seeks health services at the public primary health center level in Rwanda.

In Kenya, the implementation of Universal Health Coverage was done through a phased approach whereby four counties participated in a pilot with a view to using the lessons learnt in eventual scale up to the whole country. The pilot specifically involved 100 percent provision of health insurance premiums subsidy to all uninsured vulnerable households in the informal sector in the four (4) pilot counties for a period of one-year (12) months. Identification of the vulnerable households eligible for subsidy was done through a targeting process supported by the Ministry of Labour and Social Protection. These Counties were Nyeri, Machakos, Kisumu and Isiolo. The participation of the two levels of Government in the pilot was guided by the functions of National and County Governments in Kenya as enshrined in the Constitution.

The selection of the four Counties was informed by their unique and varied characteristics as they offer a comprehensive test to meeting the health goals stipulated in the Health Sector Plans and Medium-Term Plans. Nyeri has high prevalence of non-communicable disease such as hypertension, diabetes and cancer. Machakos is prone to road traffic accidents, Isiolo ranks

among the 15 counties with a high maternal mortality rate and a nomadic population while Kisumu has a high prevalence of communicable diseases such as HIV/AIDS and malaria.

The Government is currently putting in the foundational architecture for UHC by strengthening the health system through providing inputs namely human resource for health, medicines, commodities and basic equipment. The emphasis for these inputs is the primary health delivery points (community level, dispensary and health centres). Further, the Government intends to move to output financing through Social Health Insurance which will be implemented by the National Health Insurance Fund (NHIF). The NHIF will undergo reforms which will transform it into a strategic purchaser of a defined health package which will be reviewed regularly to ensure it's responsive to the needs of Kenyans.

The Counties have been allocated drawing rights for medicines and supplies. Kenya Medical Supplies Authority will be purchasing the medical supplies and commodities for the UHC. The Government is also exploring the avenues to reduce prices of the medicines and commodities through standardizing equipment so as to gain from economies of scale realized during bulk purchasing.

The Government is seeking ways to strengthen inter- governmental relations between National and County governments since this is a joint venture. The commitment is reflected in the inter-governmental participatory agreements of which 42 have been signed. To ensure that funds reach the facilities, both levels of government are advocating for the retention of funds at the health facility level by exploring the amendment of the Public Finance Management Act.

## CHAPTER THREE: METHODOLOGY

### 3.1 Introduction

The study undertook an analysis of indicators for Sustainable Development Goal (SDG) 3 in Kenya, to observe how the health sector has been performing and whether the country is on track towards the achievement of SDG 3 and particularly Universal Health Coverage (UHC). The aim was to identify gaps in achieving SDGs 3 in comparison with the national development planning specifically targeting UHC under the Big Four Agenda for Kenya and actions required for the country to simultaneously implement the multiple regional and international development commitments hence, ensuring all development plans are resilient and sustainable, inclusive, and coherent at different levels to SDGs.

### 3.2 Design

The study relied on analysis of qualitative and quantitative secondary data compiled by Kenya National Bureau of Statistics and the Ministry of Health and National Health Insurance Fund (NHIF) on a cross section of health indicators.

**Table 3- 1: SDG 3 Indicators**

Target not captured	Target captured	Indicator	Sub-indicators/outcomes	Unit	Source of data	
	1	Maternal Health	Skilled deliveries in health facilities	%		
			Pregnant women attending 4 or more antenatal visits	%		
	2	Child Health (immunization - PENTA 3)	DPT3	%		
			Hib3	%		
			Hiv3	%		
	3	Diseases and Conditions (Big 3 communicable diseases)	TB Treatment Success Rate (TSR)	Ratio		
			Malaria	burden (OPD);	Number	
				LLINS distributed to Pregnant Women/<1-year old	%	
			HIV	Adults and children accessing ARVs;	Number	
		Elimination of mother-to-child transmissions (ePMTCT)		%		
	4	Diseases and Conditions – NCD	Hypertension- Incidence Rate per 100,000 population	Ratio		
			Diabetes- Incidence Rate per 100,000 population	Ratio		
		Service	OPD service utilization /per capita utilization	%		

Target not captured	Target captured	Indicator	Sub-indicators/outcomes	Unit	Source of data
		Utilization			
5		Strengthen the Prevention and Treatment of Substance Abuse	Harmful use of alcohol	Ratio	
	6	Accidents	Road Traffic Accident injuries	Number	
7		Access to Sexual & Reproductive Health	Adolescent birth rate (age 10-14 years)	Number	
8		Achieve Universal Health Coverage	Essential health service coverage Proportion of population with large household expenditure	Ratio	
9		Reduce Death from Pollution	Mortality rate attributed to unsafe water Mortality rate attributed to air pollution	Ratio	
		Inputs Human Resources	Doctors per100,000 population	Ratio	
			Clinical Officers per100,000 population	Ratio	
			Nurses per 100,000 population	Ratio	
			HRH per10,000 Population	Ratio	
		Inputs Infrastructure	Health Facility Density / 10,000 population	Ratio	
			Availability of Basic Amenities	%	
		Health Products and Technologies	Availability of Health Facilities with Tracer Medicines	%	
		Financing	Trends in total allocation vs Expenditure	%	
			Total Allocations and Expenditures by source (GoK/NGOs/Private Sector).	%	
		Insurance	Households/People enrolled into NHIF	Number/%	
			Population covered by Health Insurance	%	
			OOP Expenditures / Total Health Expenditures	%	
		COVID19 Epidemic	Reported infections	Number	
			Recoveries	Number	
			Deaths	Number	

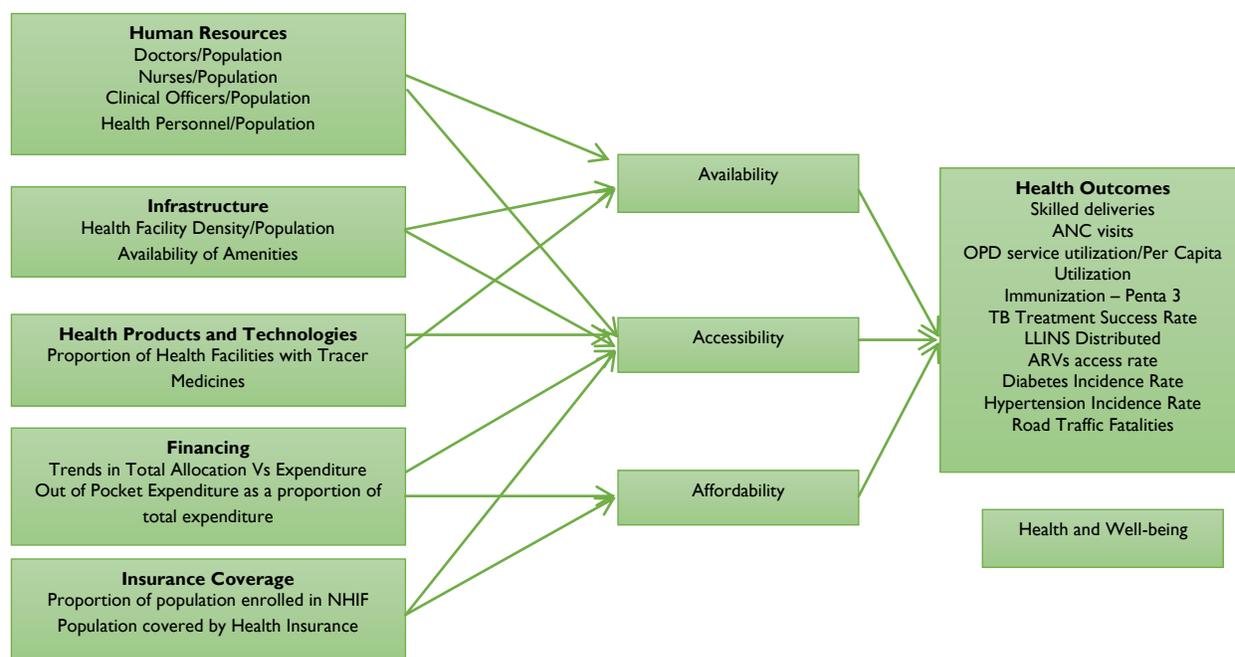
*Source: Author's Compilation*

### 3.3 Measurement and Conceptual Framework

The trends derived from the analysis depicts availability, accessibility and affordability of health care, while the health outcomes show the extent of these variables against the targets set for the achievement of SDG 3. Affordability – Financing of health care services and the existence of social support networks (access to insurance/social insurance) are linked to better health. Accessibility and availability of health services - Access and use of services that prevent and

treat diseases influence health outcomes. Adequate essential human resources in health facilities and existence of appropriate health infrastructure are key factors in accessing health services. Physical environment (i.e., safe water and clean air, healthy workplaces, and electricity connection) are critical.

**Figure 3- 1: Conceptual Framework**



*Source: Author's Compilation*

### 3.4 Data Sources, Analysis and presentation

The study examined the feasibility and applicability of the proposed indicators using three focus criteria: Data availability - to what extent do existing data sources permit estimation of the indicator? Data quality - are the available data of sufficient quality to produce meaningful, consistent and reliable results? Validity - to what extent does the indicator adequately measure availability, accessibility and affordability or service coverage? The study relied on, among other data sources, 2008 and 2014 KDHS data, various Economic Surveys and routine data collected by the Ministry of Health from time to time. Additional data was obtained from the National Health Insurance Fund (NHIF) on uptake of the social health insurance.

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Data analysis focused on the following: Patterns of change in an indicator over time – for example whether usage of a service has increased or decreased over time, and if it has, how quickly or slowly the increase or decrease has occurred; comparing one time period to another time period – for example, evaluating the impact of Linda Mama programme by comparing Maternal Mortality Rate (MMR) before and after its introduction; comparing one geographical area or population to another – for example, health facility density by county; and making future projections.

The data was analyzed using MS Excel. Results have been presented in tables and trend charts. The study results are presented using graphical plots displaying the observed data over time, with comments on average percentage change and in-depth interpretation of the trends observed. Outcomes, relationship and correlations were then discussed.

### **3.5 Limitations**

The study relied on secondary sources of data on the indicators for the study. Some of the sources might have been overtaken by events such as KDHS 2008 and 2014 and may not provide accurate data on the status of some of the indicators. There was also a general limitation on availability of data for some of the indicators. The study could have collected data from selected counties or regions to ascertain the performance of the indicators.

## CHAPTER FOUR: RESULTS AND DISCUSSIONS

### 4.1 Introduction

This chapter contains an analysis of selected indicators for Sustainable Development Goal 3 and those that relate to Universal Health Coverage in Kenya. The trends in performance of these indicators determine the wellbeing of the health sector. These indicators are: Maternal Health Indicators; Child Health Indicators; Health Diseases and Conditions; Health Infrastructure and Financing of Healthcare.

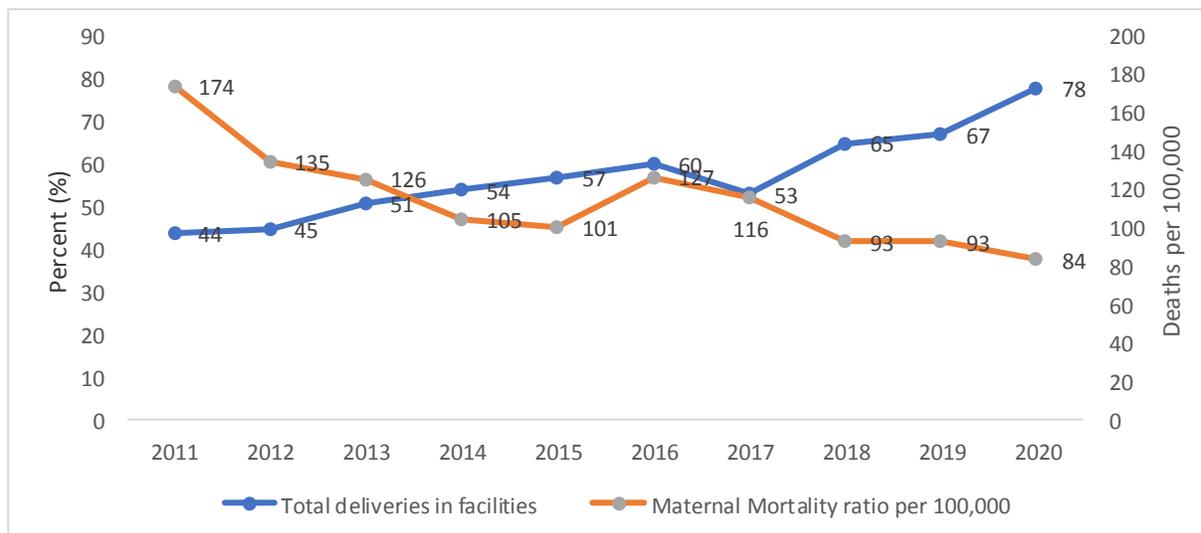
### 4.2 Maternal Health Indicators

The analysis considered three maternal health indicators; percentage of skilled deliveries at health facilities, percentage of pregnant women attending antenatal care and facility maternal mortality per 100,000 live births.

#### 4.2.1 Skilled Deliveries and Facility Maternal Mortality

Figure 4-1 shows that skilled deliveries at health facility increased from 44 percent in 2011 to 60 percent in 2016 before declining to 53 percent in 2017. The deliveries then increased from 65 percent in 2018 to 78 percent in 2020. The increasing trend is attributed to interventions initiated by Government, particularly the free maternity services which was introduced in 2013 and later transitioned to *Linda Mama programme* under the National Hospital Insurance Fund (NHIF) in 2016. While there was a decrease in facility maternal mortality from a high of 174 deaths per 100,000 live births in 2011 to 101 deaths per 100,000 live births in 2015, the mortality rate increased in 2016 and 2017 to 127 and 116 deaths per 100,000 live births respectively. Thereafter, a decline in facility maternal mortality was registered at 78 deaths per 100,000 live births in 2020. This could be attributed to the continued implementation of the free maternal policy in Kenya and the few strikes experienced that year. The observed low skilled deliveries and high facility maternal mortality in 2017 could be linked to occasional health worker strikes in the country implying that the country needs to address supply side factors in the health sector.

**Figure 4- 1: Trends in Health Facility Skilled Delivery and Facility Maternal Mortality Rate**

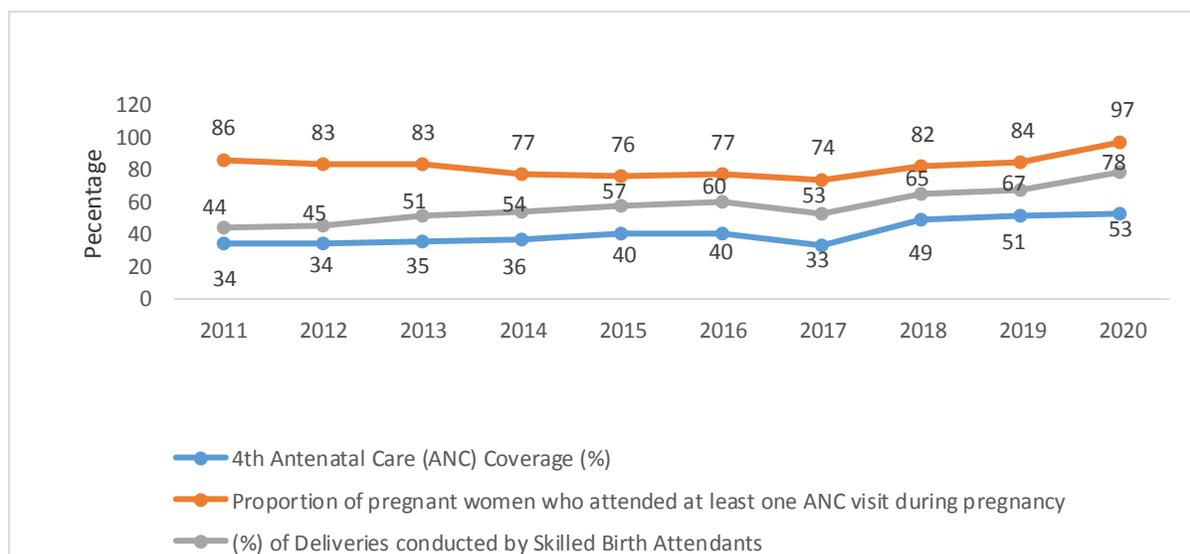


*Source: KHIS, 2021*

#### 4.2.2 Antenatal Care Coverage

Figure 4-2 indicates that antenatal coverage has improved over the years with statistics showing that the number of pregnant women who attended at least one ANC visit increased from 44 percent in 2011 to 78 percent in 2020. The number of pregnant women who had attended at least four antenatal visits, as recommended by World Health Organization (WHO), increased from 34 percent in 2011 to 53 percent in 2020. The trends in antenatal visits are proportional to increase in deliveries at health facilities and are mainly as a result of implementation of Linda Mama Programme in the country.

**Figure 4- 2: Trends in Antenatal Care Coverage**

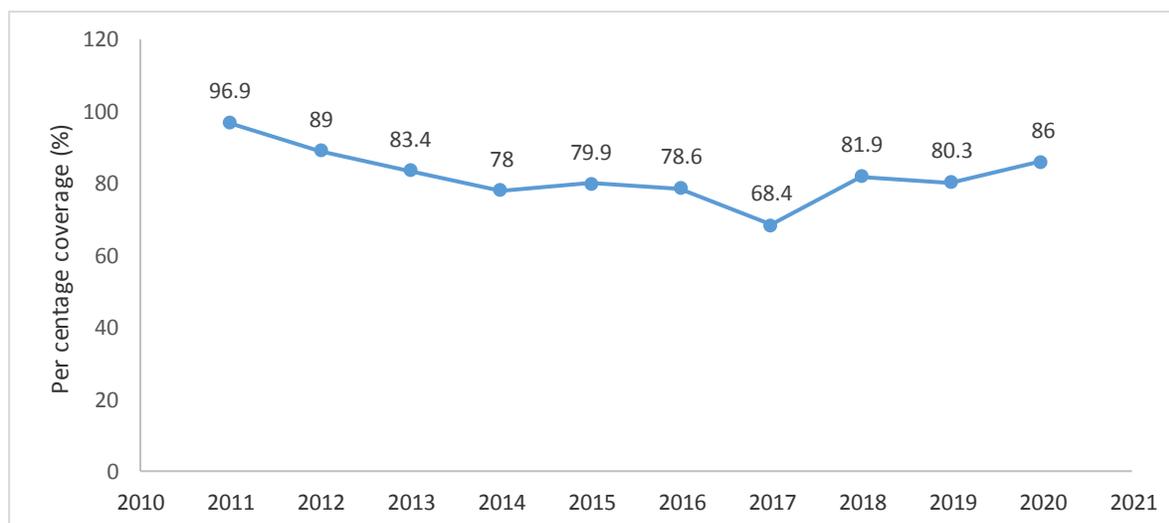


*Source: KHIS, 2021*

### 4.3 Child Health Indicators: Child Immunization Coverage

Child immunization coverage as indicated by Diphtheria Pertussis Tetanus (DPT) 3 vaccination administered to children aged between 12 and 24 months decreased by about 10 percentage points from 96.9 percent in 2011 to 86 percent in 2020 as presented in Figure 4-3. The downward trend in immunization coverage is observed between 2011 and 2014. The lowest immunization coverage was recorded in 2017 at 68.4 percent which was attributed to the longest health worker strike in the country.

**Figure 4- 3: Trends in DPT3/Hep3+HiB3 (Penta 3) Coverage**



Source: KHIS, 2021.

## 4.4 Health Diseases and Conditions

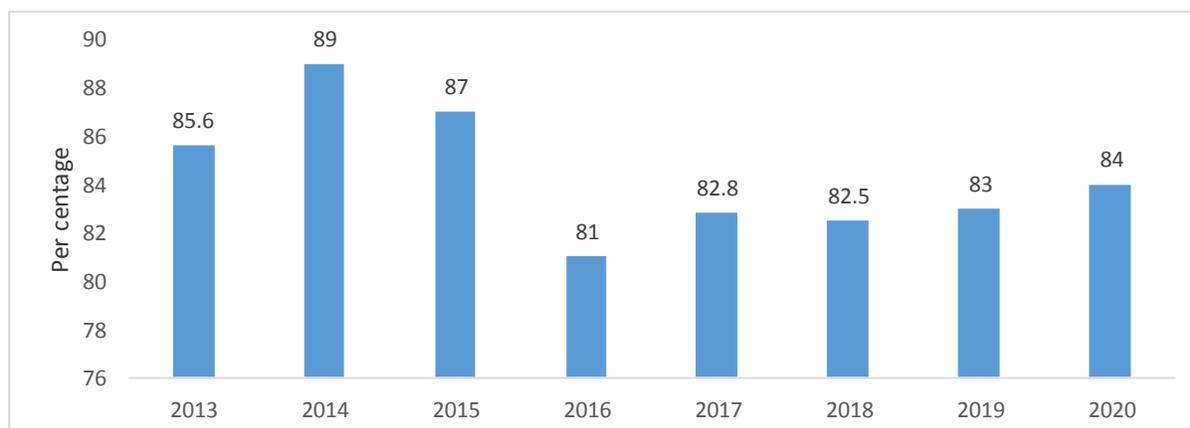
### 4.4.1 Communicable Conditions

#### Tuberculosis

According to WHO, Tuberculosis Treatment Success Rate (TSR) is the percentage of all new tuberculosis cases (or new and relapse cases for some countries) registered under the National Tuberculosis Control Programme in a given year that successfully completed treatment, with or without bacteriological evidence of success. The WHO recommends a TSR of 85 percent.

Figure 4-4 shows that the TRS has fluctuated between 85.6 percent in 2013 to a high of 89 percent in 2014 and 84 percent in 2020. The TSR above 85 percent between 2013 and 2015 is an indicator that the National Tuberculosis Control Programme was effective. The obvious benefit of this successful treatment of infectious cases of TB is the prevention of spread of the infection. However, between 2016 and 2020, TB TSR consistently remained below the WHO recommended rate of 85 percent. This could be attributed to resistance to the current treatment regime.

**Figure 4- 4: TB-Treatment Success Rate**

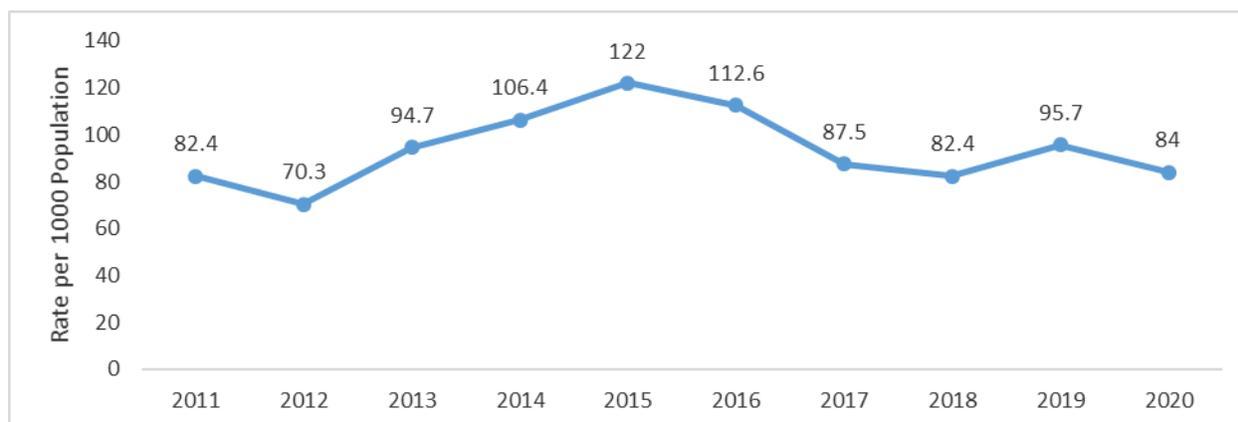


*Source: KHIS, 2021*

### **Malaria**

Malaria incidences per 100,000 population was on an upward trend from 82.4 in 2011 to 122 in 2015 but decreased onwards from 84 in 2020 as shown in Figure 4-5. The trend could be linked to continued distribution of Insecticide-Treated bed Nets (ITNs) in the country, a strategy that has been shown to reduce malaria illness, severe disease, and death due to malaria in endemic regions. Kenya launched its malaria vaccine on 13<sup>th</sup> September, 2019 in Homa Bay County. The vaccination programme was piloted in eight counties namely Homa bay, Kisumu, Migori, Siaya, Busia, Bungoma, Vihiga and Kakamega Counties. In 2020, about 82,000 Kenyan children in these pilot counties received their first dose of the vaccine (UNICEF, 2020).

**Figure 4- 5: Trends on Malaria Incidence Rates**

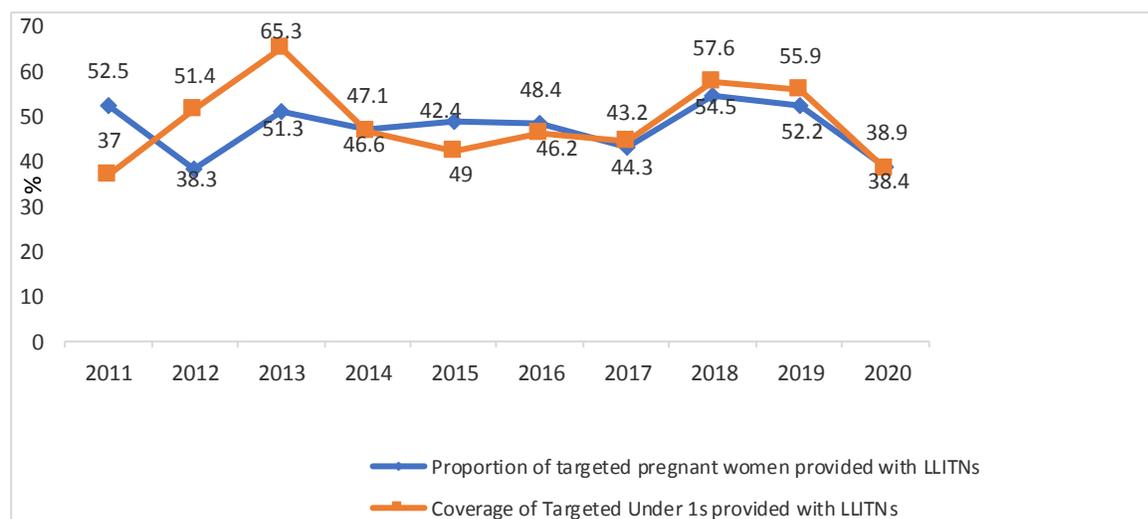


*Source: KHIS, 2021*

## Long-Lasting Insecticidal Nets

The distribution of Long-Lasting Insecticidal Nets (LLINs) has become a key strategy for malaria prevention in sub-Saharan Africa. Figure 4-6 indicates that the proportion of pregnant women provided with LLITNs decreased from 53 percent in 2011 to 38 percent in 2012 and increased to 51 percent in 2013. This then declined to 43 percent in 2017 before increasing to 55 percent in 2018 and declining further to 38 percent in 2020. A similar pattern is observed for children under one year. Trends in distribution of LLINs in Kenya have largely been inconsistent.

**Figure 4- 6: Trends in LLIN distribution**



*Source: KHIS, 2020*

## HIV/AIDS

According to the Kenya Population Based HIV Impact Assessment (KenPHIA) Report 2018, Kenya's national HIV prevalence rates among adults stood at 4.9 percent with a prevalence of 4.7 percent and 5.0 percent in urban and rural areas respectively. The situation across counties varies with counties in Nyanza region exhibiting higher prevalence rates and those in the Northern region having lower prevalence rates, some below 1 percent. Homa Bay, Kisumu and Siaya emerge top with prevalence rates of 19.6 percent, 17.5 percent and 15.3 percent respectively. On the other hand, nine counties exhibited prevalence rates lower than 2.0 percent.

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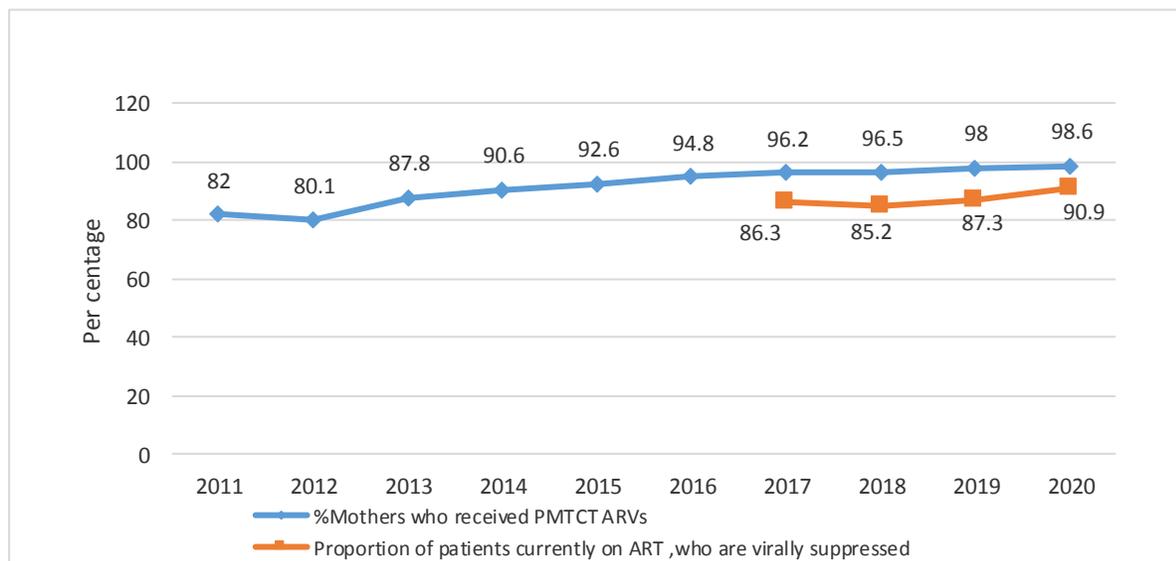
These include Garissa with less than 1.0 percent, Wajir and Mandera both with 0.2 percent, Tana River and Kiambu both with 1.1 percent each. Others include Marsabit with 1.2 percent, West Pokot at 1.3 percent, Baringo at 1.8 percent and Samburu at 1.9 percent.

Further, 96.0 percent of HIV positive adults who knew their status, were on ART treatment while 93.2 percent of HIV positive children were on ART. On HIV status knowledge, 79.5 percent of adults (15-64 years), 82.7 percent of women and 72.6 percent men who tested HIV positive had known their status. HIV positive children (0-14 years) had their status known.

In December 2013, the UNAIDS Programme Coordinating Board called on UNAIDS to support country and region-led efforts to establish new targets for HIV treatment scaled-up beyond 2015 with the aim of nothing less than the end of the AIDS epidemic by 2030. The stakeholder consultations set new targets to be achieved by 2020: 90 percent of all people living with HIV will know their HIV status; 90 percent of all people with diagnosed HIV infection will receive sustained ART treatment and 90 percent of all people receiving ART will have viral suppression. Figure 4-7 indicates that the proportion of mothers receiving PMTCT ARVs was on an upward trend from 82 percent in 2011 to 99 percent in 2020. The proportion of patients currently on ART who are virally suppressed increased from 85 percent in 2017 to the current figure of 91 percent in the year 2020.

**Figure 4- 7: Trends in ARV**

Coverage

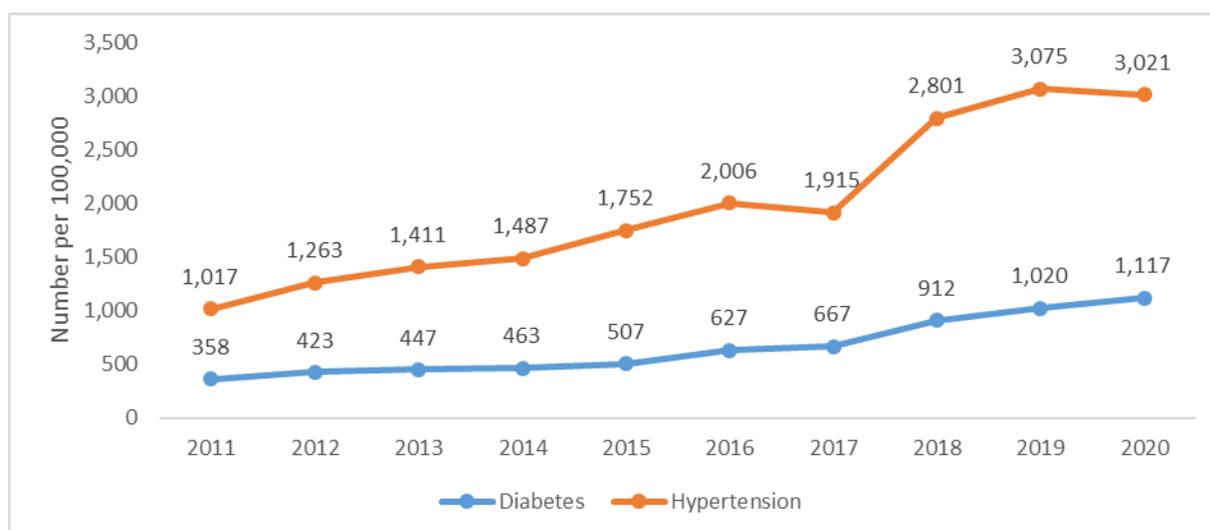


*Source: KHIS, 2021*

#### **4.4.2 Non-communicable Conditions**

The analysis points to an increasing trend in Non-Communicable Diseases in the country. Figure 4-8 shows that diabetes increased from 1017 per 100,000 in 2011 to 3021 per 100,000 persons in 2020. Hypertension increased from 358 per 100,000 in 2011 to 1117 per 100,000 in 2020. This goes against the SDGs target of reducing by one third premature mortality from Non-Communicable Diseases through prevention and treatment.

**Figure 4- 8: Trends in Diabetes and Hypertension Diseases from 2011-2020**



*Source: KHIS, 2021*

## 4.5 Health Infrastructure

### *Health infrastructure*

Health facilities in the country are either publicly owned, privately owned or are owned by Faith Based Organizations (FBOs) and Non-Governmental Organizations (NGOs) (see Table 4-1). There is an almost equal distribution between publicly and privately owned health facilities, particularly at the lowest level of healthcare. However, the pattern changes at higher levels of healthcare with the figures indicating that 62 percent of level 5 hospitals and 100 percent of level 6 are publicly owned. Generally, level 2 comprising of dispensaries forms the largest coverage of health facilities at 77 percent, implying higher primary care coverage.

**Table 4- 1: Health Facilities in Kenya by Ownership and Level**

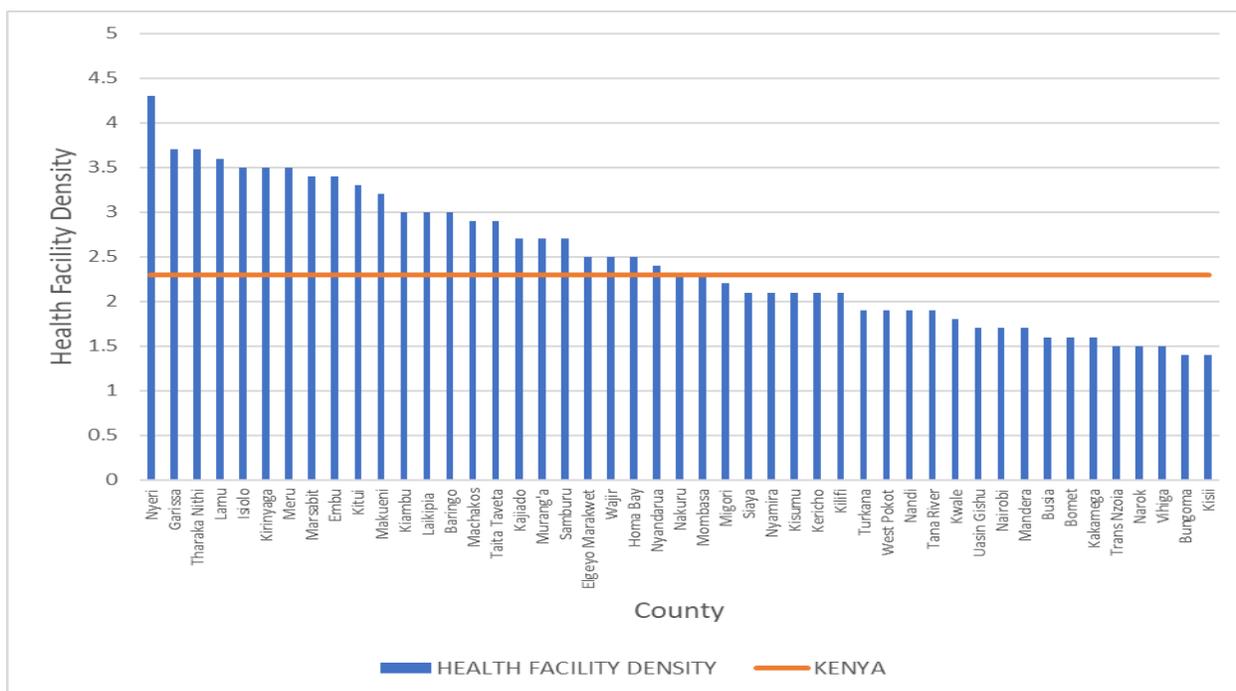
Level of care	Public	FBOs	NGO	Private	Total
Level 2	4,590	716	305	4,123	9,734
Level 3	1,075	205	61	935	2,276
Level 4	354	107	13	366	840
Level 5	13	3	-	5	21
Level 6	6	-	-	-	6
Kenya	6,038	1,031	379	5,430	12,878

*Source: KHIS, 2020*

## Health Facility Density

Health facility density is the number of health facilities per population of 10,000. Figure 4-9 shows that national health facility density in 2018 stood at 2.3 per 10,000 people, although some disparities were noted across counties. About half of the counties are below the national average with Kisii County having the lowest health facility density at 1.4 per 10,000 people. Nyeri County has the highest health facility density at 4.3 per 10,000 people. There is need to increase facilities in the low-density counties.

**Figure 4- 9: Health Facility Density (Per 10,000 people), Kenya**



*Source: KHIS, 2019*

## Out Patient Department (OPD) service utilization/per capita utilization.

Figure 4-10 shows the number of visits to health facilities increased from 1 visit per capita per year reported in 2011 to 1.4 visits per capita per year in 2020 translating to a 40 percent increase over the period. While there has been an increasing trend in outpatient per capita utilization in the country, occasional health worker strikes have had a negative impact on utilization of healthcare as indicated by a 30 percent drop in the number of visits per capita per year from 1.4

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in 2016 to 1.1 in 2017. In addition, utilization of healthcare was observed to have declined from 1.6 visits per capita per year in 2019 to 1.4 visits per capita per year in 2020, which could be attributed to the COVID-19 pandemic and the related health worker’s strike.

**Figure 4- 10: Outpatient Per Capita Utilization**

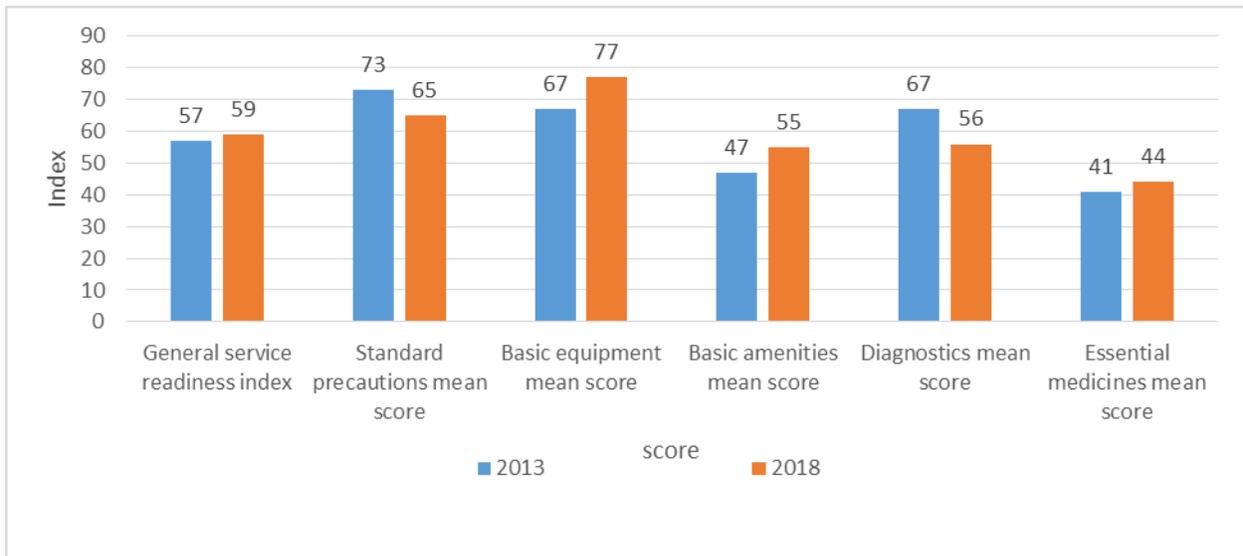


*Source: DHIS2*

### **Availability of Basic Amenities**

General Service Readiness refers to the overall capacity of health facilities to provide general health services. Readiness is defined as the availability of components required to provide services in the following five domains: basic amenities; basic equipment; standard precautions for infection prevention; diagnostic capacity; and essential medicines. Figure 4-11 shows that the General Service Readiness Index registered a modest improvement from 57 percent in 2013 to 59 percent in 2018. Basic equipment, basic amenities and essential drug mean scores increased from 67 to 77 percent, 47 to 55 percent and 41 to 44 percent, respectively, between 2013 and 2018. The country reported a drop in standard precautions mean score from 73 percent in 2013 to 65 percent in 2018 and in diagnostic mean score from 67 percent in 2013 to 56 percent in 2018. This implies that the country’s readiness to provide infection control measures and diagnostic services declined over this period raising the need to enhance availability of basic amenities.

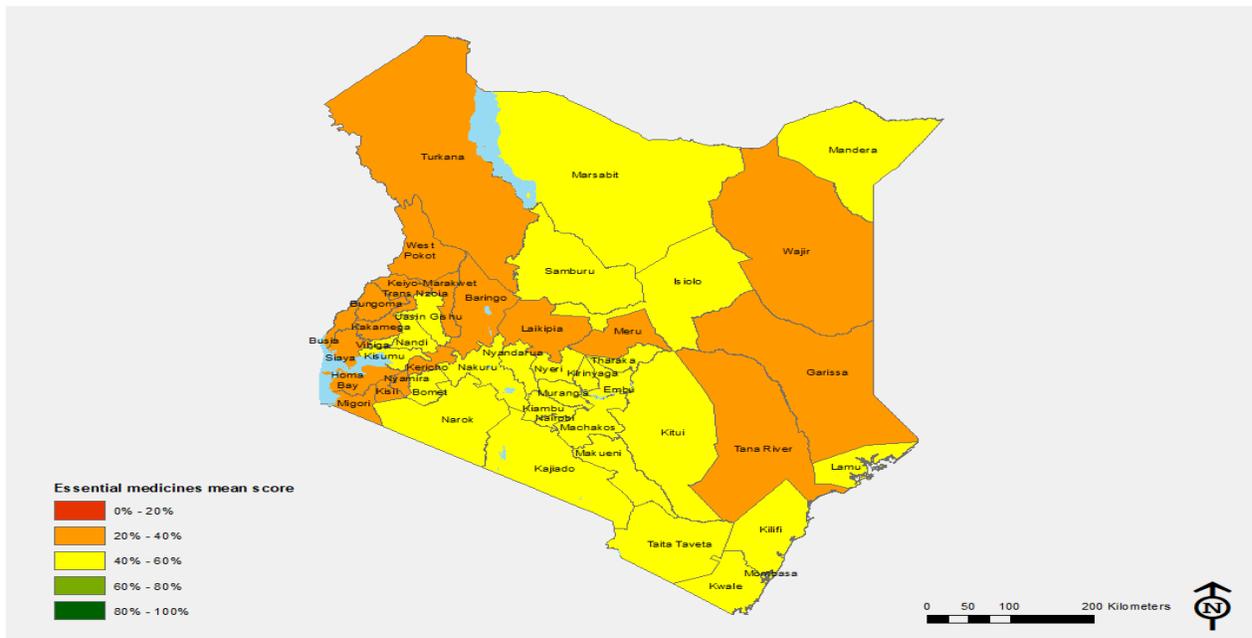
**Figure 4- 11: Health Facility General Service Readiness Indicators**



*Source: SARAM (2013) and KHFA (2018)*

While there was an increase in availability of essential medicines mean score, disparities were observed across the counties with most of them registering an average mean score of between 40 and 60 percent (see Figure 4-12).

**Figure 4- 12: Availability of Tracer Medicines Displayed by County**



*Source: KHFA, 2018*

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## 4.6 Human Resources for Health

According to the Economic Survey, 2020, the number of registered health personnel has been on the rise with the largest increase favouring registered nurses at 58,247 and enrolled nurses at 28,822 in 2019. The same report also shows that the number of registered health personnel per 100,000 population rose for all cadres between the years 2015 to 2019. The ratio of registered nurses to 100,000 population stood at 122 against the WHO recommended 356 nurses per 100,000 population in 2019. The Doctor to population ratio was at 25 per 100,000 against the WHO recommended minimum of 36 doctors per 100,000 population while that of clinical officers to population was 46 per 100,000. The lowest ratio was for Nutrition and Dietetics Technicians at a low of 2 per 100,000 population in 2019. Table 4-2 shows that, provisional figures for doctors and dentists in 2019 stood at 12,090 and 1,288 respectively.

According to KMPDB, a paltry 4,000 doctors, 47,000 nurses (NCK) and 6,659 (as per IHRIS) clinical officers were active as at June 2018 in the public health sector.

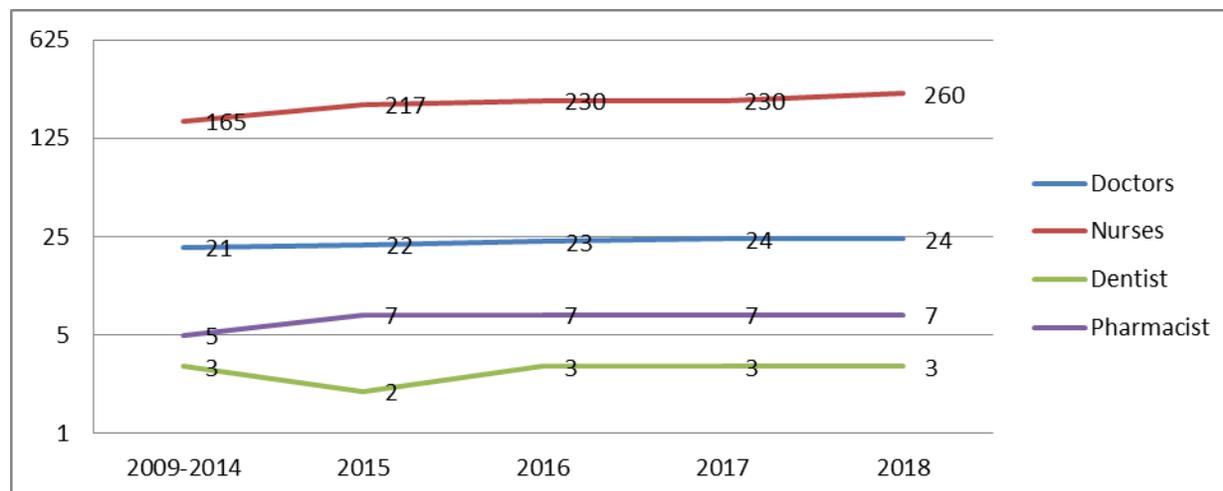
**Table 4- 2: Registered Health Personnel by cadre from 2015 to 2019**

Category	2015	2016	2017	2018	2019*
Doctors	9,202	10377	10922	11647	12090
Dentists	1098	1156	1211	1257	1288
Pharmacists	2994	3169	3373	3512	3825
Pharmaceutical Technologists	7895	8673	9358	10126	10815
Clinical Officers	15397	17093	18776	20392	21801
Public Health Officers	-	1684	3064	3506	4390
Public Health Technicians	-	348	717	1029	1328
Laboratory Technicians	4230	6651	10603	11688	13144
Laboratory technologists	1363	1734	3065	3622	3886
BSC Nurses	2904	4002	4819	5961	7242
Registered Nurses	41178	47480	51420	57564	58247
Enrolled Nurses	22305	22820	23068	23783	28822
Nutritionists and Dieticians	1691	1853	2106	3066	3573
Nutrition and Dietetic Technologists	2066	2608	3122	4430	5284
Nutrition and Dietetic Technicians	378	500	619	813	927

*Source: Economic Survey, 2020.*

\*Provisional  
 - Data not available

**Figure 4- 13: Health Personnel Density per 100,000**



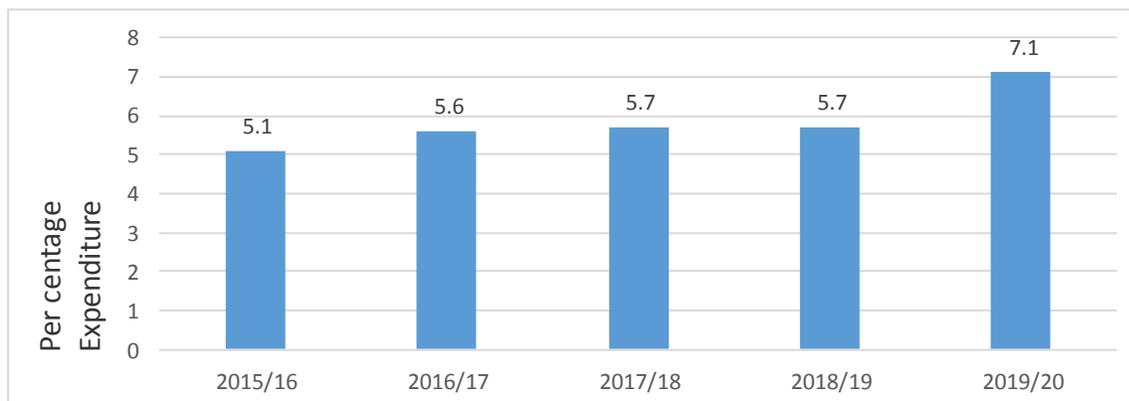
*Source: Economic survey, 2020*

## 4.7 Financing Healthcare

### National Government Expenditure on Health

The Total National Government Expenditure on health as a proportion of Total Government Expenditure shows an increasing trend from 5.3 percent in 2014/15 FY to 7.1 percent in 2019/20 FY (see Figure 4-14). The increase in 2019/20 FY expenditure is attributed to investment in the prevention and treatment of COVID-19. Despite the gradual increase in Government’s budgetary allocation, it has remained low relative to global commitments like the Abuja declaration (2001) of 15 percent allocation of the total Government budget to health raising the need to revise the allocation to health upwards.

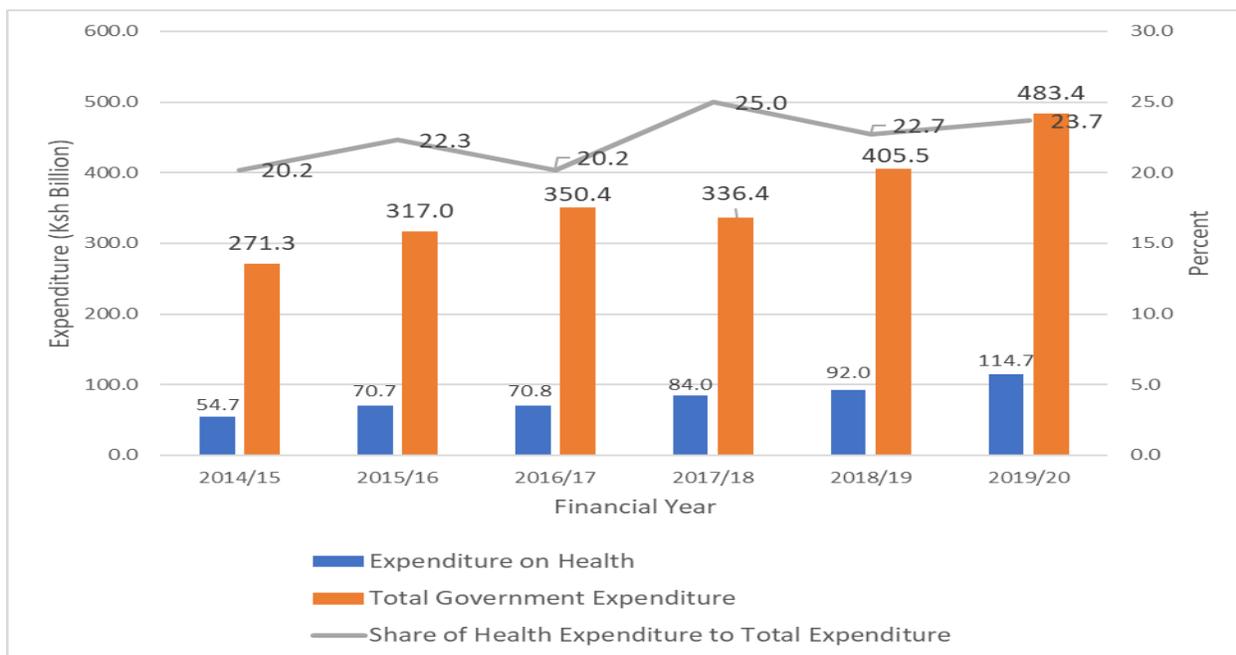
**Figure 4- 14: Total Government Expenditure on Health as % of Total Government Expenditure**



*Source: Economic Survey, 2020*

Figure 4-15 illustrates County Government Expenditure on health versus the Total Expenditure for the period 2014/15 to 2019/20. The trends show an increase from 20.2 percent in 2014/15 to 25 percent in 2017/18 before declining to 22.7 percent in 2018/19 and marginally rising to 23.7 percent in 2019/20. The County Governments need to progressively increase allocation to the health sector.

**Figure 4- 15: County Governments Expenditure, 2014/15-2019/20**



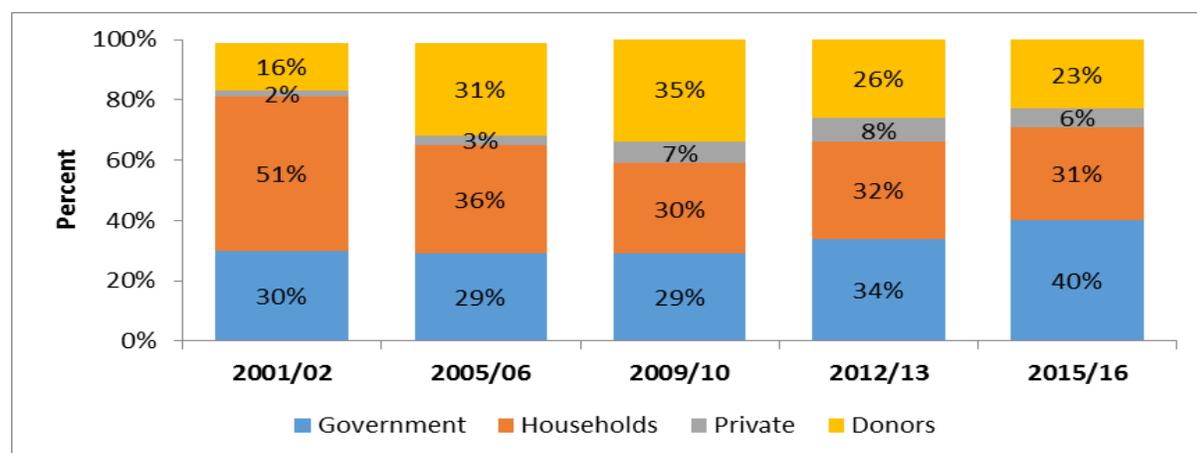
*Is Kenya on Track Towards Achievement of SDG 3? An analysis of Health Indicators in Kenya*

*Source: Economic Survey, 2020.*

### Revenue Sources for Health Expenditure

Revenues for financing healthcare are from three major sources: The Government, households, and donors as shown in Figure 4-16. While household’s contributions to health expenditures remained relatively stable at an average of 31 percent between 2009/10 and 2015/16, the Government’s investment in health increased from 29 percent in 2009/10 to 40 percent in 2015/16. The increase was associated with Government’s investment in new initiatives including introduction of new mechanisms of financing and reducing financial burden of the poor and vulnerable groups. Donor contribution was 35 percent in 2009/10 of Total Health Expenditure (THE) but decreased to 23 percent in FY 2015/16.

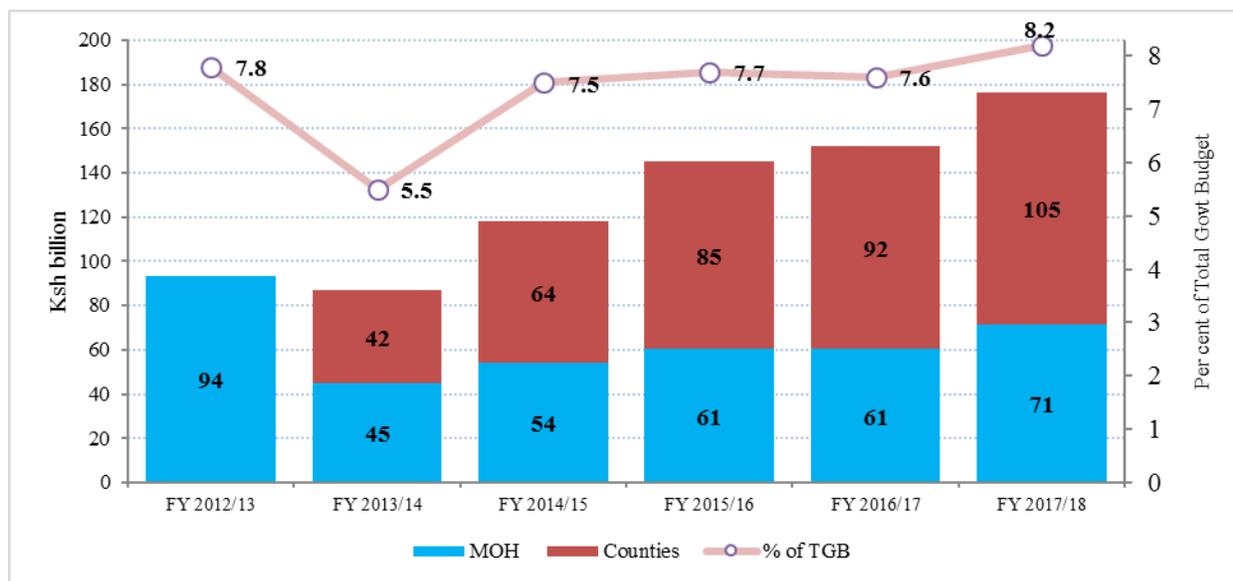
**Figure 4- 16: Sources of Total Health Expenditures**



*Source: National Health Accounts, 2015/16*

Figure 4-17 shows the trends in pre- and post-devolution budget allocation to health. The budget allocation to health decreased from 7.8 percent in 2012/13 financial year (pre-devolution period) to 5.5 percent at the beginning of the roll out of devolution in 2013/14. Thereafter, the budget allocation increased to 7.7 percent, 7.6 percent and 8.2 percent in 2015/16, 2016/17 and 2017/18 financial years respectively.

**Figure 4- 17: Trends in Pre- and Post-Devolution Budget Allocation to Health**

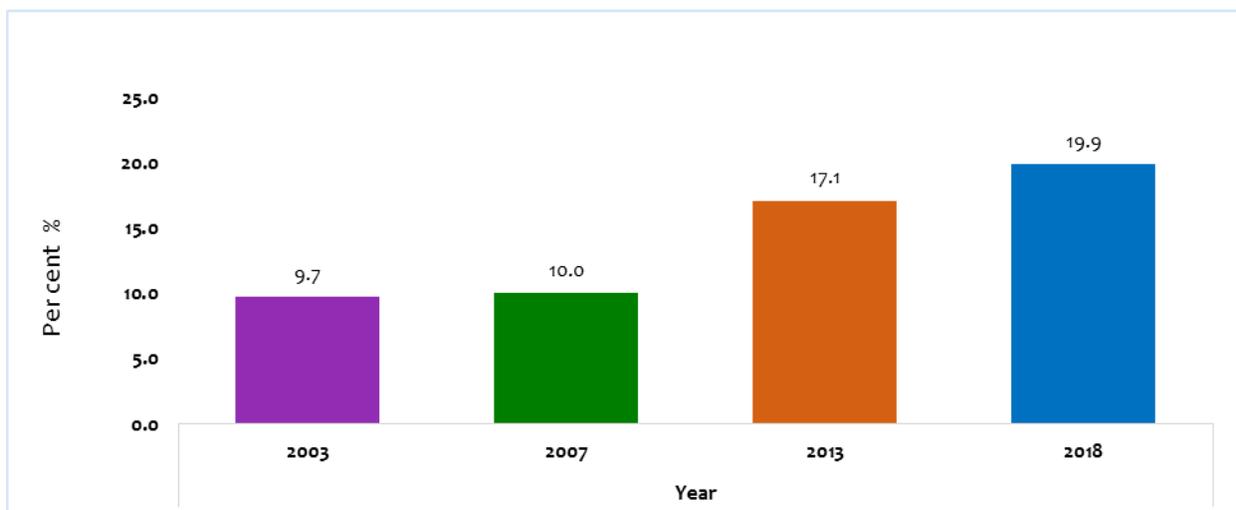


*Source: Annual Performance Report (APR), 2019*

### **Health Insurance Coverage**

Figure 4-18 shows that health insurance coverage increased from 10 percent in 2007 to 19.9 percent in 2018. The increase is associated with the Government’s policy on Universal Healthcare Coverage which has led to a general increase in the uptake of National Health Insurance Fund.

**Figure 4- 18: Trends in Health Insurance Coverage**



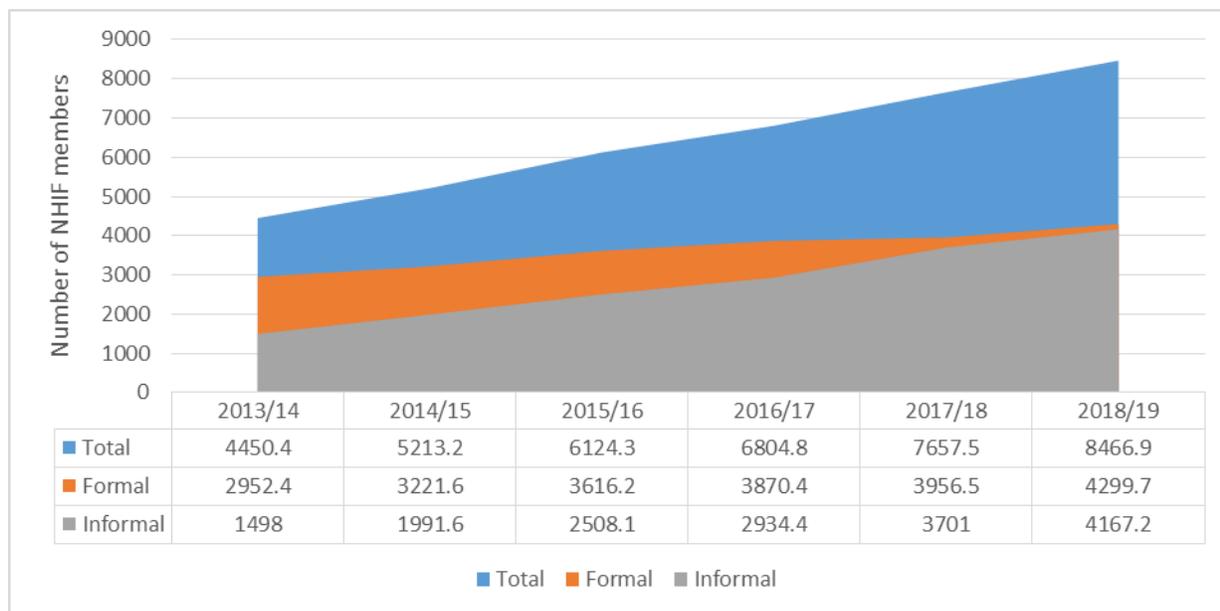
*Source: KHHEUS, 2018*

### **National Hospital Insurance Fund**

National Hospital Insurance Fund (NHIF) membership increased by 71 percent from 4.5 million in 2013/14 FY to 8.5 million in 2018/19 FY as shown in Figure 4-19. The formal sector membership rose by 46 percent from 2952 to 4299 thousand members compared with a 178 percent rise in the informal sector membership from 1498 to 4167 thousand members. This significant rise followed an aggressive sensitization among Kenyans using all media including vernacular radio stations, on the benefits of the NHIF cover, while ensuring that the members notice the difference between having a health cover and out of pocket settlement of hospital bills. Additionally, the cover was made affordable to the majority of the population and payable in easy monthly installments, substantially making premium payment manageable and attractive to low-income informal sector citizenry compared to private insurance covers whose premiums must be paid in full at the onset of the annual contract. In addition, ease of registration and monthly payments using mobile money like *MPESA*, ease of access to widely distributed offices at the county and sub-county level as well as testimonials from patients that if it was not for the NHIF cover, they would not have been able to pay their bills served as an attraction to new members. The Government also covers 70-year-old and above under the *supaCover*, whose enrolment is through the Chief's offices, which has greatly improved universal health coverage given the greater need for health care among the elderly. NHIF was also made a statutory

requirement for the employed to become contributors, and hence the significant 46 percent formal membership growth.

**Figure 4- 19: Number of Active NHIF Members (thousands)**

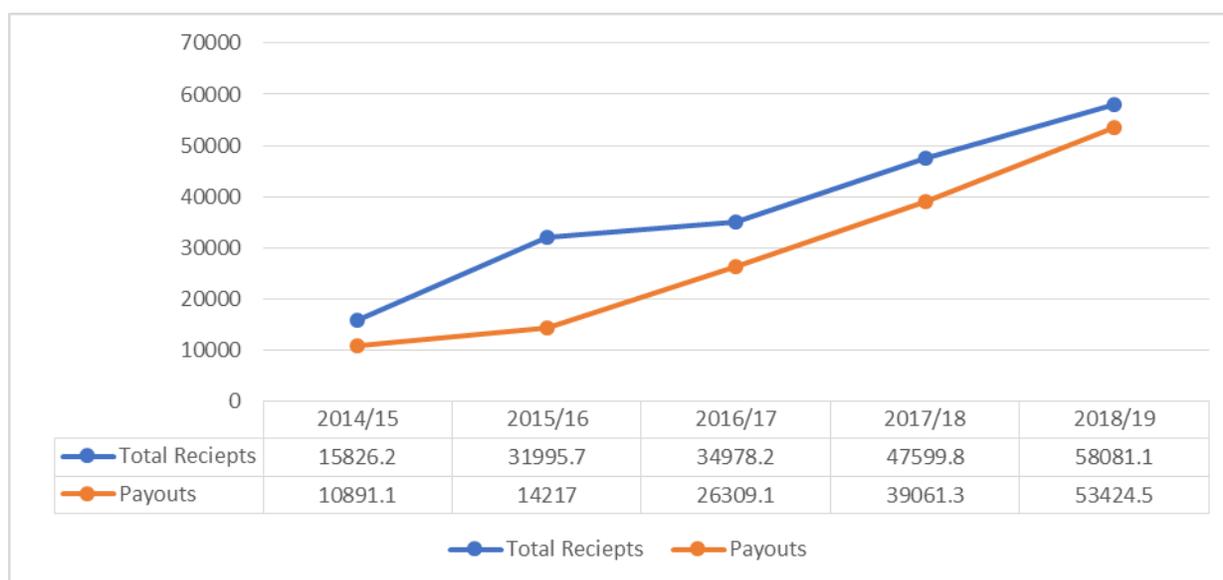


*Source: Economic Survey, 2020*

Analysis on NHIF receipts and claims indicate that there is a narrowing gap between receipts and payouts indicating that the rate of growth in payouts is higher than the rate of growth of receipts. Figure 4-20 indicates that the total NHIF receipts grew by 102.2 percent in 2015/16, 9.3 percent in 2016/17, 36.1 percent in 2017/18 and 22.0 percent 2018/19 while payouts increased by 30.5 percent in 2015/16, 85.5 percent in 2016/17, 48.5 percent in 2017/18 and 36.8 percent in 2018/19. Overall, receipts grew by 267 percent from 2014/15 to 2018/19 while payouts grew by 391 percent during the same period. This is a worrying trend as it implies that healthcare financing through NHIF will become unsustainable as the two converge and payouts exceed receipts.

There are various possibilities explaining the convergence between receipts and payouts. One, new members may be claiming immediately after the mandatory waiting period indicating a pre-existing condition as the motive for enrollment. Second, there is also a possibility of fraudulent claims. This raises the need to investigate the motive for membership, tighten the systems to prevent corrupt claims and enhance membership to ensure receipts exceed payouts for sustainability.

**Figure 4- 20: Total NHIF Receipts and Payouts/Claims**

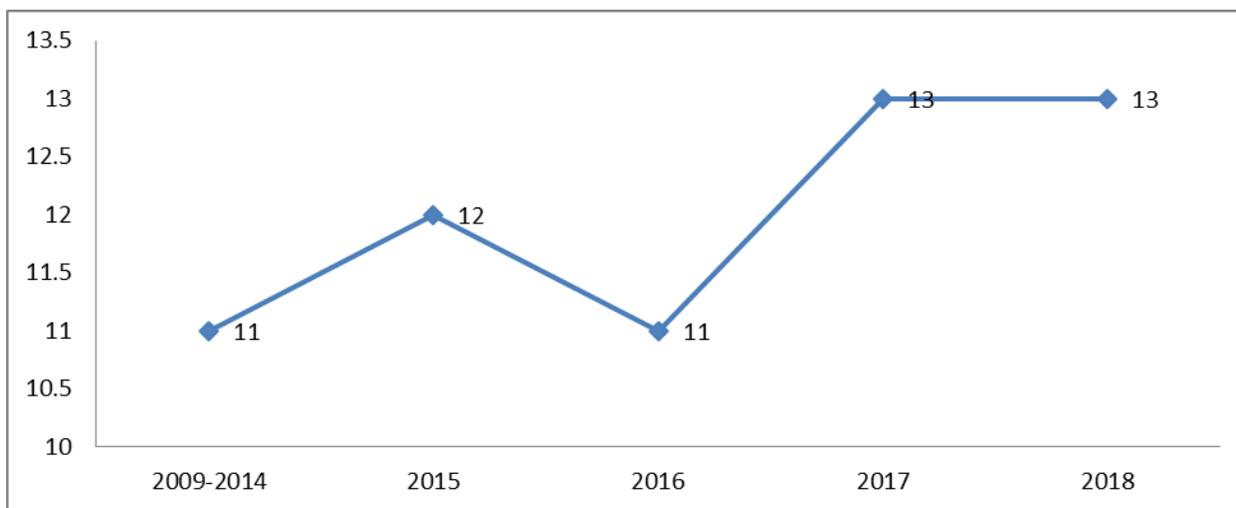


*Source: Economic Survey, 2020*

#### 4.8 Traffic Accidents

Figure 4-21 shows that the death rate due to traffic injuries per 100,000 population increased from 11 deaths per 100,000 population in 2014 to 12 deaths per 100,000 population in 2015. There was then a decrease to 11 deaths per 100,000 in 2016 and increase to 13 deaths per 100,000 in 2017 and 2018. This is attributed to increasing motor vehicle and motor cycle accidents and increase in number of passengers involved in each of the accidents.

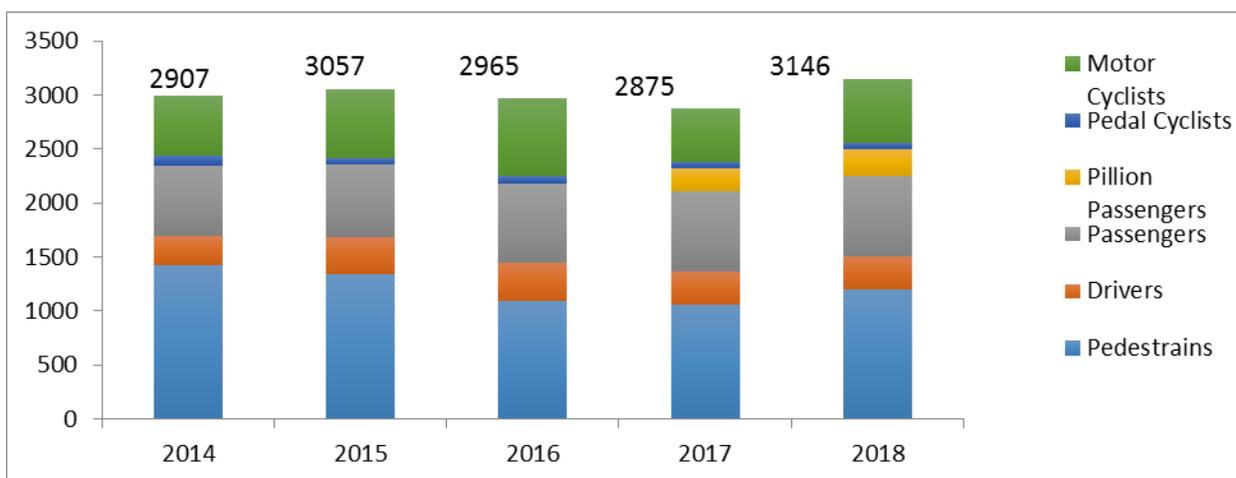
**Figure 4-21: Death Rate due to Road Traffic Injuries per 100,000 Population**



*Source: KHIS, 2021*

The number of road traffic deaths has been on a general increase since 2014 as shown in Figure 4-22. Majority of deaths recorded were of pedestrians, passengers and motor cyclists. It is further observed that there is emergence and rise in deaths by pillion passengers (the person(s) who travels in the seat behind the rider of a motorcycle) from 2017. This could be as a result of non-adherence of safety measures by the motorcyclists and/or passengers and, lack of enforcement by the Government agencies. To reverse these rising trends, there is need to ensure safety measures are strictly observed and enforced.

**Figure 4- 22: Death Rate due to Road Traffic Injuries by Type**



*Source: NTSA, 2018*

## CHAPTER FIVE: CONCLUSIONS AND POLICY RECOMMENDATIONS

### 5.1 Conclusions

The study sought to examine the trends in selected health and healthcare indicators in Kenya. The analysis further assessed the achievement of these indicators in relation to selected SDG 3 targets. The focus was on maternal and child health indicators, selected communicable and non-communicable illnesses, human resources for health, availability of basic amenities, essential medicines and healthcare financing.

Results of the study point to a general improvement in health and healthcare indicators. Maternal health indicators were on an upward trend with the analysis indicating a reduction in facility maternal mortality between 2011 and 2020. Both antenatal coverage (at least 1 visit and at least four visits) and skilled deliveries at health facilities show an upward trend during the review period. The improvement is largely associated with various interventions initiated by the Government, particularly the free maternity services which was introduced in 2013 and later transitioned to *Linda Mama Programme* under the National Hospital Insurance Fund (NHIF) in 2016.

Child health immunization coverage has been on a downward trend between 2011 and 2020. This has an implication on prevention of common childhood illnesses and child mortality which in turn affects achievement of SDG target of reducing under- five child mortality to 25 per 1000 live births.

From the study, the maternal and child health indicators worsened in the year 2017. This is the year that the Country experienced the longest health worker strike spanning over two months. This implies that occasional strikes have an effect on health indicators especially in situations where there are no arrangements for provision of emergency services.

Considering some selected communicable illnesses, the Country has made some strides in reducing the incidence of malaria illness. This was associated with concerted campaigns on the need to sleep under Insecticide-Treated bed Nets (ITNs) and distribution of these nets to pregnant women and children below the age of one year. There were improvements in registered

TB Treatment Success Rates (TSR) in the Country from 2013 to 2015. However, from 2016 to 2020 the reported success rate was below the WHO recommended rate of 85 percent.

In terms of non-communicable diseases, the results indicate that both diabetes and hypertension are on an increasing trend. The implication of this is that the country is not likely to achieve the SDG target of reducing mortality resulting from Non-Communicable Diseases by a third by 2030.

The number of road traffic deaths has been on a general increase since 2014 with majority of deaths recorded among pedestrians, passengers and motor cyclists. It is further observed that there is emergence and sudden rise in deaths by pillion passengers (the person(s) who travels in the seat behind the rider of a motorcycle) from 2017. This could be as a result of non-adherence to safety measures by the motorcyclists and/or passengers and, lack of enforcement by the Government agencies.

The total Government expenditure on health as a percentage of total Government expenditure shows an increasing trend. Despite this, the Government's budgetary allocation to health has remained low relative to global commitments like the Abuja declaration of 15 percent allocation of the total Government allocation to health. While there was a decrease in the health budget allocation at the beginning of the roll-out of devolution in the Country in 2013, the budget allocation is on an upward trend both at the National and County levels. On the demand side, the National Hospital Insurance Fund (NHIF) membership increased by 71 percent between 2013/14 and 2017/18 with a general increase in payouts and receipts during the period.

The results of the study further indicate that there are variations in health infrastructure across the country. Health facility density varied widely across the counties with slightly over half of the counties reporting a health facility density above the national average of 2.3 facilities per 10,000 population. The General Service Readiness Index registered a modest improvement between 2013 and 2018. While this was the case, the country's readiness to provide infection control measures and diagnostic services declined over this period. In addition, wide disparities were registered in availability of essential medicines across the country.

The analysis on health human resource shows that the doctor and nurse per 100,000 population currently stands at 24 doctors and 260 nurses respectively compared to WHO recommended minimum staffing level of 36 doctors and 356 nurses in 2018. Kenya has a HWs to population ratio of 13 per 10,000 against WHO's recommended 23 per 10,000.

## **5.2 Policy Recommendations**

The study offers the following recommendations:

### ***Healthcare Financing***

- ✚ The Government to progressively increase healthcare financing towards the recommended 15 percent as per the Abuja declaration.
- ✚ Government to strengthen health financing structures.
- ✚ Pursue Public Private Partnerships (PPPs) to achieve UHC objectives.
- ✚ Introduce supportive and flexible statutory and regulatory laws to support the health financing reforms and outcomes.

### ***Health Infrastructure***

- ✚ Counties to establish more health facilities especially at levels two (2) and three (3) to ensure access to healthcare by the population is guaranteed.
- ✚ Full implementation of the Community Health Strategy and Primary Health Strategy.

### ***Health Insurance Coverage***

- ✚ Government to expand health insurance coverage to rope in more poor people.
- ✚ Improve uptake of health insurance by introducing more flexible packages for NHIF and premiums to allow for wider coverage.
- ✚ Ensure all health facilities are NHIF accredited to increase utilization of the cover.
- ✚ Enhance sensitization and awareness on NHIF.
- ✚ Counties to introduce schemes for the low income earners which provides for affiliation to informal workers, expands public subsidies to social health insurance systems, provides for integration of private health insurance and/or encourages compulsory universal participation.

### ***Health Human Resources***

- ✚ Recruit and continuously train more health workers to ensure adequate staff in the sector.
- ✚ The country should have a clear policy and guidelines on how to protect and compensate health workers including a specific medical policy given their exposure in the line of duty and avoid frequent strikes.

### ***Health Products and Technologies***

- ✚ There is need for strategic procurement and distribution of drugs and other medical supplies.

### ***Health Systems and Governance***

- ✚ The Government needs to strengthen governance in the health sector.
- ✚ Strengthening of the Health Information systems to ensure accurate, timely and relevant data is produced for tracking of results on the health indicators.
- ✚ Harmonize reporting on SDG indicators with the health indicators to ensure clarity in reporting.

### ***Research and Development***

- ✚ Strengthen and support research in health especially on emerging diseases, TB, Malaria and other diseases.
- ✚ Support evidence-based research that would inform full rollout of UHC strategies

### ***Health Outcomes***

- ✚ Malaria reduction by exploring other initiatives such as fumigation with existing strategies.
- ✚ Civic education and enforcement through local administration and community health volunteers on roles of the community in health.
- ✚ Increase distribution of mosquito nets and sensitization on their proper use.
- ✚ Fully roll out the Malaria vaccine to cover populations at risk.

- ✚ Awareness campaigns on healthy living to reduce incidences of Non-Communicable Diseases.
- ✚ Expand “Linda mama programme” to cover not only public health facilities but to FBOs and private institutions (subsidize) and increase child age of coverage to 5 years;
- ✚ Ministry of Health, schools and community health workers to create awareness on the benefits of immunization, HIV/AIDS, malaria and other diseases.
- ✚ Enhance supportive and synergistic community investments in related sectors such as economic empowerment, water, sanitation and hygiene.
- ✚ Enforce road safety measures to reduce traffic injuries/deaths.
- ✚ Fully implement the existing road safety strategies using a multi-agency approach.

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