

REPUBLIC OF KENYA

# SECTOR PLAN FOR HEALTH

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# STATEMENT BY THE CABINET SECRETARY THE NATIONAL TREASURY AND PLANNING

Kenya's long term development blue-print, Kenya Vision 2030, is in its third implementation phase under the Third Medium Term Plan (MTP III) 2018-2022. A total of 28 MTP III Sector Plans have concurrently been prepared through 25 MTP Working Groups and three (3) Thematic Working Groups. The Plans provide in detail policies, programmes and projects to be implemented in each sector for the period 2018-2022. The Plans also incorporate policies, programmes and projects necessary for the effective implementation of the "Big Four" initiatives namely: manufacturing and agro-processing; food and nutrition security; universal health coverage and affordable housing. Ongoing flagship projects and other priority programmes and projects carried forward from the previous Medium Term Plans will also be implemented. The Sector Plans have also mainstreamed key priorities outlined in the Manifesto of the Jubilee Government.

The MTP III and the Sector Plans have been prepared through a participatory and inclusive process involving representatives from the government, development partners, private sector, Civil Society, NGOs, organizations representing vulnerable groups, faith-based organizations and professional associations, among others and in line with the constitutional requirements.

The Sector Plans detail specific programmes and projects for implementation during the plan period, 2018-2022. The programmes and projects outlined in these plans will be implemented in close consultation and collaboration with county governments and in line with the Fourth Schedule of the Constitution. The Public Private Partnerships (PPPs) framework will be the vehicle through which the private sector will contribute to the implementation of programmes and projects highlighted in the plans.

The County Integrated Development Plans, County Spatial Plans and Ministries, Departments and Agencies (MDAs) Strategic Plans (2018-2022) will be aligned to the MTP III and the National Spatial Plan. Implementation of these plans will also be linked to the Results-Based Management Framework through Performance Contracts and Staff Performance Appraisal System.

A robust monitoring and evaluation framework will be put in place. In this regard, National Integrated Monitoring and Evaluation System (NIMES), County Integrated Monitoring and Evaluation System (CIMES) and the electronic Project Monitoring Information System (e-ProMIS) will be fully integrated with other governmental financial systems. This will ensure effective tracking of implementation of programmes and projects and also boost Public Investment Management.

In conclusion, I would like to appreciate the respective Cabinet Secretaries, Chief Administrative Secretaries, Principal Secretaries, staff in the MDAs and all those involved in the preparation of the Sector Plans for their valuable inputs. In addition, I commend staff from State Department for Planning led by Principal Secretary, Planning for the effective coordination of the MTP III preparation process.

Henry Rotich, EGH Cabinet Secretary

The National Treasury and Planning

#### **FOREWORD**

The Health Sector Plan for the Third Medium Term Plan (MTP III) 2018-2022 will continue the transformative agenda to attain its goal of *Equitable, Affordable and Quality Health Care of the Highest Standards* as outlined in the Kenya Vision 2030 and the Constitution that guarantees the highest attainable standard of health to all citizens. It will consolidate gains made during the implementation of policies, programmes and projects initiated during the MTP II. The Sector is critical for the implementation of "Big Four" Agenda especially on achieving universal health coverage by implementing programmes that increase health insurance coverage, increase access to quality healthcare services and offer financial protection to people when accessing healthcare.

The plan has also factored in goal no.3 of the Sustainable Development Goals (SDGs) and the aspiration of Africa Union Agenda 2063 towards positioning the country as a regional hub for medical tourism.

During MTP II, the Health Sector put in place structures that will support the continuation of the transformative agenda. Key among these is the enactment of the Health Act, 2017 and the finalization of the Sessional Paper No. 2 of 2017 on the Kenya Health Policy, 2014 – 2030. These two legal and policy documents provide a framework for institutionalizing the Constitution in the Health Sector and address the teething challenges such as management of health workers at both levels of Government. Further the consultative structures with the County Governments and other partners have already been firmed up, creating an environment for better coordination, better mobilization and alignment of resources as well as faster implementation of programmes and projects

During the MTP III period, restructuring of the Free Maternity Programme to Linda Mama; full operationalization of the Managed Equipment Service Project as well as its expansion to cover the remaining areas and the expansion of the Social Health Protection Programmes will be given priority. These projects will be complemented with projects and programs that strengthen the health physical infrastructure, enhance capacities for provision of specialized healthcare and strengthening programmes that address communicable health conditions and challenges posed by the emerging and increasing trend of non-communicable conditions.

The use of innovation and technology in provision of health services will be integrated in the implementation of all projects and programmes. In this regard, the Sector will implement programmes that targets training and capacity building of health workers and those supporting the implementation of the Community Strategy.

In order to forestall the recurrence of the health challenges such as disease outbreaks the Health Sector will strengthen measures to improve the coordination of players from various sectors in planning, preparedness and response to public health emergencies. The sector will therefore implement primary public healthcare programmes and building capacities of communities to play an active role in addressing disease outbreaks.

In order to successfully implement programmes and projects outlined in the Plan, the Sector will put in place measures to ensure better alignment and more value of available resources such as innovative financing mechanisms and deepening of performance based financing. In addition, the Sector will strengthen mechanisms to mobilize additional funding through promotion of Public Private Partnerships and expansion of the social health insurance mechanism.

Finally, it is important to note that the development of this Plan involved a wide range of stakeholders who have given valuable inputs towards identifying the priorities that needs to be implemented during the next five years. It is my expectation that in working together, the overall objectives of the MTP III will be achieved.

Pari :

Sicily K. Kariuki, EGH (Mrs) Cabinet Secretary Ministry of Health

#### **PREFACE**

The Government is committed to transform the health sector to provide equitable, affordable and quality health care of the highest standard to all Kenyans. This is demonstrated through the improvements in a number of health indicators achieved during the implementation of the various policies and programs outlined in the Medium Term Plan I and II such as child and maternal health, HIV/AIDs and increased access to health services.

The implementation of policies and programs outlined in the Third Medium Term Plan (MTP III) 2018 - 2022 will further support achievement of the sector's overall goal of Equitable, Affordable and Quality Health Care of the Highest Standard as enshrined in the Vision 2030 as well as the Sustainable Development Goals. Further, the Kenya Health Policy, 2014-2030 focusses on ensuring equity, people centered-ness, efficiency participatory approach, and social accountability in delivery of health care services.

The MTP III takes cognizance of the results achieved as well as the challenges experienced during MTP II. Given the institutional structures developed during the MTP II period to devolve health services, focus will shift to improved service delivery to ensure better health outcomes. The Sector plan will be monitored through the existing health sector monitoring and evaluation framework at both national and county levels to ensure that its overall objectives are achieved.

It is expected that the Sector Plan will serve as a major reference for all stakeholders in preparing their various strategies and plans so as to align their projects and programs and ensure mutual accountability for results. Efforts will be made to ensure that there is more collaboration in the planning, implementation and monitoring of policies and programs in line with the existing partnership coordination framework.

My acknowledgement goes to all stakeholders who contributed towards development of this plan. In particular, I applaud the Division of Policy and Planning for their tireless efforts in steering the process of developing this plan. I commend them for the efforts they made to ensure that there is adequate involvement and ownership by all stakeholders in spite the time and resource constraints. Efforts from officers who formed the core secretariat for the whole process are also commendable.

The development of the Sector Plan was made possible through the financial support of the World Health Organization to whom we are very grateful. The technical support and guidance from the National Treasury and Planning is also appreciated.

The successful implementation of this Plan will require the contribution and participation from all other stakeholders. I am confident that with all stakeholders rallying together, the implementation of this Plan will put Kenya health sector on a solid ground towards achieving Universal Health Coverage, Sustainable Development Goals and Africa Union Agenda 2063.

Peter K. Tum, OGW Principal Secretary Ministry of Health

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#### LIST OF ACRONYMS/ ABBREVIATIONS

**ACT** - Arthemether Combination Therapy

AfDB - African Development Bank

**ANC** - Ante Natal Care

ARI - Acute Respiratory Infection
ART - Anti Retroviral Therapy

ARV - Anti Retro Viral

**ASAL** - Arid and Semi-Arid Lands

AU - African Union

BMI - Body Mass Index

BSL - Bio-Safety Laboratory

CFR - Case Fatality Rate

**CHEW** - Community Health Extension Workers

CHV - Community Health Volunteers
CLTS - Community Led Total Sanitation

**CMNH** - Community Maternal and Newborn Health

**CPR** - Contraceptive Prevalence Rate

**CRWPF** - Central Radioactive Waste Processing and temporary storage Facility

CT Scan - Computed Tomography Scan

District Health Information System

**EAC** - East African Community

**ECHN** - Enrolled Community Health Nurse

**ENT** - Ear. Nose and Throat

EPI - Extended Program of Immunization
 ERP - Enterprise Resource Planning
 FAO - Food and Agricultural Organisation

**FP** - Family Planning

GDP - Gross Domestic Product

HDI - Human Development Index

HDU - High Dependency Unit

HISP - Health Insurance Subsidy Program
 HPT - Health Products and Technologies
 HRH - Human Resources for Health
 HTC - HIV Testing and Counselling

**HTS** - HIV Testing Services

IAEA - International Atomic Energy Agency

ICCM - Integrated Community Cases Management

ICU - Intensive Care Unit

IRS - Indoor Residual Spraying

JKIA - Jomo Kenyatta International AirportKASF - Kenya AIDS Strategic Framework

KCB - Kenya Commercial Bank
KCO - Kenya Country Office

**KDHS** - Kenya Demographic and Health Survey

KEMRI - Kenya Medical Research Institute
 KEMSA - Kenya Medical Supplies Authority
 KEPH - Kenya Essential Package for Health
 KHSSP - Kenya Health Sector Strategic Plan
 KMHFL - Kenya Master Health Facility List
 KMTC - Kenya Medical Training College

KNASA - Kenya National AIDS Spending Assessment

KNESWS - Kenya National Electronic Single Window System

KNH - Kenyatta National Hospital

LLIN - Long Lasting Insecticide Treated Nets

LMIS - Logistics Management Information System

MES - Managed Equipment Service

MHM - Menstrual Hygiene Management

MIS - Malaria Indicator Survey

**MOH** - Ministry of Health

MRI - Magnetic Resonance Imaging

MTP - Medium Term Plan
MTR - Mid Term Review

MTRH - Moi Teaching and Referral Hospital

NASCOP - National AIDS and STI Control Programme

NCI - Non-Communicable Diseases
NCI - National Cancer Institute
NHA - National Health Accounts

NHIF - National Hospital Insurance Fund

NPHI - National Public Health Institute

NQCL - National Quality Control Laboratory

**NSBDP** - Kenya National School-Based Deworming Programme

NSC - National Steering Committee

NTD - Neglected Tropical Diseases

OSH - Occupational Safety and Health

**00P** - Out of Pocket

OPD - Out Patient DepartmentPEP - Post Exposure Prophylaxis

PHC - Primary Health Care

**PHEOC** - Public Health Emergency Operations Centre

**PLHIV** - People Living with HIV/AIDS

PNC - Post Natal Care

**PPP** - Public Private Partnership

**PWSD** - Persons with Severe Disabilities

RMNCAH - Reproductive, Maternal, New Born, Child and Adolescent Health

SDGS - Sustainable Development Goals
UHC - Universal Health Coverage

**UNDP** - United Nations Development Programme

WASH - Water, Sanitation and HygieneWFP - World Food Programme

WHO - World Health Organisation

**WRA** - Women of the Reproductive Age

#### **EXCUTIVE SUMMARY**

The Vision 2030 identifies the health sector as essential to economic development and realization of fundamental human rights. Through the Vision, the sector aims at provision of an efficient, integrated and high quality affordable health care to all Kenyans by the year 2030. The Sector will be critical in the realization of the "Big Four" Agenda with particular focus on the achievement of Universal Health Coverage (UHC) by implementing programmes that increase health insurance coverage, increase access to quality healthcare services and offer financial protection to people when accessing healthcare.

The UHC will also be achieved through prioritized focus on key aspects of preventive care at community and household levels and decentralized national health-care system to all the counties. The sector lays significant emphasis on provision of a robust health infrastructure network around the country, improving quality of health service delivery to the highest standards for all Kenyans, through enhanced partnerships with the private sector; as well as providing access to those excluded from health care for financial or other reasons. Through this, Kenya remains on course in becoming the regional provider of choice for highly-specialized health care, thus opening Kenya to "medical tourism" to other neighboring nations.

During MTP II, the sector recorded remarkable progress in the achievement of key targets including reduction of Under Five Mortality from 74 per 1,000 live births in 2008 to 52 per 1,000 live births in 2014 and Infant Mortality from 52 per 1000 live births to 39 per 1000 live births in the same period (KDHS 2014). The neonatal mortality reported declined from 31 per 1,000 live births in 2008 to 22 per 1,000 live births in 2014 while Maternal Mortality Rate dropped quite substantially from 520 per 100,000 live births in 2008 to 362 per 100,000 live births in 2014 (KDHS 2014). Further, HIV infections among adult (15+) population declined from 88,622 in 2013 to 56,100 in 2016 and that of children from 12,940 to 4,900 over a similar period.

The Beyond Zero Campaign that advocates for zero preventable maternal deaths, zero child deaths and zero transmission of HIV from mother to child resulted in placing of mobile clinics in all the 47 counties to increase coverage of maternal, new born and child health (MNCH) services. With regard to Tuberculosis control, the uptake of antiretroviral therapy among TB/HIV co-infected patients increased from 80% in 2013/14 to 83% in 2015/16. In order to strengthen disease surveillance and outbreak response, the government established the Public Health Emergency Operations Centre (PHEOC) to develop, strengthen and maintain the capacity to respond effectively to public health emergencies.

During MTP III, the Sector will implement seven flagship projects which are both transformational and of high impact. These are: Social Health Protection; Medical Tourism; Health infrastructure; Community High Impact intervention; Digital Health; Human Resources; Improving Quality of Care/Patient and Health Worker Safety

The Government will expand social health protection by implementing schemes to cover harmonized benefit package to targeted populations. It will also implement programmes aimed at promoting Medical Tourism to market Kenya as a hub for specialized healthcare, to support training and retaining specialized health expertise, creating employment in specialized health care. In addition, the sector will adopt, key legal, institutional and policy reviews to improve on the efficacy of the heath care in Kenya.

#### 1. INTRODUCTION

The Kenya Vision 2030 identifies the health sector as an essential component to national development. One of the goals of the Vision is to improve the overall health outcomes and indicators of Kenyans by shifting focus from curative healthcare to preventive and promotive healthcare. The Sector Plan will continue with the transformative agenda towards achieving universal health coverage which is one of the "Big Four" government interventions and its goal of attaining the highest possible standards of health of all in line with the Constitution and the Vision 2030.

During MTP II, Health functions were devolved in accordance with Schedule 4 of the Constitution. The sector thus plays a key role in addressing issues of equity and social accountability in delivery of health care services. The sector sought to reduce health inequalities through: provision of a robust health infrastructure network; improving quality of health service delivery to the highest standards; and promotion of partnerships with the private sector. In addition, the Government will provide access to those excluded from health care due to financial constraints and pay special attention to the vulnerable groups. The Sector developed the Health Policy 2014-2030 to address health system building blocks namely: health financing, leadership, product and technologies, health work force, infrastructure, information and service delivery systems. This plan lays emphasis on the achievement of Sustainable Development Goals (SDGs) particularly the Goals 2, 3 and 6, and the AU Agenda 2063 (Aspiration 1 and Goal 3). The SDGs call for the strengthening of the capacity of all countries, particularly developing countries, for early warning, risk reduction, and management of national and global health risks.

This plan sets out the specific programmes and projects including flagship projects that the sector will invest in during the plan period. The Plan will also guide counties and other stakeholders in prioritizing and aligning their plans and strategies to national priorities.

# 2.0 SITUATION ANALYSIS

During MTP II, the Sector implemented various programmes and projects.

# 2.1. Key Performance Indicators in Health

Table 1 gives a summary of key performance indicators in the Sector during the period of 2013-2017.

Table 1: Key performance indicators in Health Sector (2013-2017)

Performance Indicator	Status	Status	Data Performance Targets			
	2012¹	2017 <sup>2</sup>	Source	2015	2017	2030
Infant Mortality per 1,000 live births	52	39	KDHS 2014	35	20	8
Under 5 Mortality per 1,000	74	52	KDHS 2014	50	35	16
Under One Fully Immunized Children (%)	84.3	79	DHI2 2016	82.6	90	100
Maternal Mortality per 100,000 live births	488	362	KDHS 2014	300	140	29
Prevalence of undernourished children	35	26	KDHS 2014	23	20	< 5
(Prevalence of stunting)						
% reduction in Malaria Prevalence in the total	9	8	MIS 2015	8	7	< 5
population annually						
Reduction in HIV/AIDS Prevalence rate	6.3	5.6	UNAIDS 2015	5.2	4.5	< 0.5
Increase in TB treatment cure rate	81	90	DHIS2	84	90	100
Reduction in TB incidence (per 100,000	272	266	DHIS2	200	150	> 100
population)						
Improvement in life expectancy (Yrs.)	60 (52)	63	WHO	62 (56)	65	80
Out of pocket (OOP) expenditure as a	76.9	78	PETs survey	70	60	< 20
percentage of private expenditure on health			2015			
Increase in Doctors (No.) per 10,000	1.7	2.3	MTR 2016	2.6	3.2	7
population			(to clarify with			
			the primary			
			source)			
Increase of Nurses (No.) per 10,000	15.3	23.0	MTR 2016	22.9	33.3	>228
population						
Increase in the proportion of health	5.4	4.7	NHA 2015	5.6	7	10
expenditure as a % of GDP						
% increased Research on vaccines and other	10	8	KEMRI	43	50	>70
diseases prevention measures for humans						
% Increase in access to specialized health	5	12		15	30	100
care in management of lifestyle diseases						
(Renal, Cancer, Diabetes and Cardiovascular						
Diseases						
Improvement on HDI rating (UNDP)	0.667	0.555	UNDP 2016	0.7	0.75	0.75
Increase in % of customer satisfaction	70	78.2	Survey 2016	78	85	>80
Improvement in Kenya's ranking on Global	118/148	114/140		90/148	65/148	Top 50
Competitiveness scoreboard on Health						

<sup>1</sup> KDHS 2008-2009

<sup>2</sup> KDHS 201

Table 1, above shows that the sector performed fairly well in a number of areas while there was mixed performance in others. There was notable progress in child and maternal health with major declines in mortality rates, improvement in nutrition status for children, and modest improvement of HIV/AIDS and malaria. The reduction of TB incidences and increased TB treatment cure rates also recorded improvement surpassing WHO targets. There was mixed performance on health financing with some of the indicators showing marginal improvements while others, like proportion of health expenditure as a percentage of GDP declined. The overall customer satisfaction index increased between 2012 and 2017 from 70% to 78.2%.

# 2.2. Performance of Key Programmes and Projects

#### 2.2.1. HIV and AIDS Control

Kenya recorded significant progress towards reducing HIV/AIDS by the year 2030. The HIV prevalence stood at 5.9% in 2015. New HIV infections among adult (15+) population declined from 88,622 (2013) to 56,100 (2016) and that of children from 12,940 (2013) to 4,900 (2016). The country recorded a 66% reduction in Mother to Child Transmission of HIV from 14% in 2013 to 6.3% in 2016¹. These gains were realized through high acceptability of Hemophilia Treatment Centers (HTS) in Ante Natal Care (ANC) and Ante Retro Viral (ARV) prophylaxis. However, new infections varied geographically, for instance, 65% of new infections were recorded in 9 counties (Turkana, Siaya, Bomet, Kisumu, Migori, Kisii, Nyamira, Homa Bay and Nakuru).

A breakdown of prevalence by background characteristics shows disparities in HIV prevalence by gender across all the counties. Females have a slightly higher prevalence of 6.3% compared to males 5.5% signifying that females are more vulnerable to HIV infection than men in the country (Kenya HIV Estimates 2015). The epidemic is geographically diverse, ranging from a high prevalence of 26 percent in Homa Bay County in Nyanza region to a low of approximately 0.4 percent in Wajir County in North Eastern region. The high burden of HIV and AIDS in Kenya accounts for an est+imated 29 per cent of annual adult deaths, 20 per cent of maternal mortality, and 15 percent of deaths of children under the age of five (Kenya HIV County Profiles, 2016).

Men who have sex with men, prisoners, sex workers and their clients, and injecting drug users accounts for a third of all new infections in Kenya. Due to high prevalence among this group - 29.3 per cent among sex workers, 18.2 per cent among men who have sex with men, and 18.2 per cent among injecting drug users - the government initiated a programme targeting them (Kenya HIV County Profiles, 2016). Kenya is among the four (4) HIV 'high burden' countries in Africa — with the number of People Living with HIV (PLHIV) estimated at 1.63 million by 2016.

Notably, 46 per cent of all new HIV infections are among young people aged 15-24 years with two thirds among girls and young women (UNICEF – KCO MTR Report, 2016). The number of new infections among children fell from 12,286 in 2013 to 6,613 in 2015. In 2015, there were a total of 133,455 adolescents aged 10-19 living with HIV in Kenya.

Kenya adopted the Global Fast Track Plan to End HIV and AIDS Epidemic (90-90-90 Strategy) and has rolled out the "Test & Treat HIV Guidelines" that will ensure that the People Living with HIV/AIDS (PLHIV) are enrolled on Anti-Retroviral therapy (ARVs), this is in line with the UHC under the WHO Guidelines. In accelerating application of new HIV prevention, treatment and care technologies, the country rolled-out a national HIV self-testing and scaled up use of Pre-Exposure Prophylaxis (PrEP) for prevention of HIV infection for those at high risk.

<sup>1</sup> Kenya HIV Estimates Report 2016 \*Preliminary Report

The country has made good progress in scaling up ART and achieved its target of putting 1 million people on ART by the end of 2016. The number of PLHIV under ART increased from 425,000 (2013) to 1.03 million (2016). Due to increased use of ARVs, the number of AIDS-related deaths reduced from 58,000 (2013) to 32,500 (2016) according to Kenya HIV Estimates 2016. The total AIDS spending increased by 24% from KSh.69.0 billion in 2013/14 to KSh.85.3 billion in 2015/16 with the highest spending being on care and treatment at 60% and prevention at only 14%. The government financial contribution (National and County) for the period under review according to the Kenya National AIDS Spending Assessment Survey (KNASAS) has increased by 29% from KSh.20.4 billion in 2013/14 to KSh.26.4 billion in 2015/16². The KNASAS 2017 shows that the government contributed 27% of all HIV expenditure by the end of 2016. The Kenya AIDS Strategic Framework (KASF) 2014/15-2018/19 proposes that the government contribution of HIV financing should reach 50 % by end of 2019. An actuarial survey in 2017 showed that it will cost KSh.42,000 per annum to cover PLHIV under NHIF through the National AIDS and STI Control Programme (NASCOP) for outpatient, HTC, ART, PrEP-PEP and co-infection prevention.

#### 2.2.2. Tuberculosis Control

The WHO estimates indicates that TB case detection rate in Kenya during 2010–2014 was high but stagnated at around 80%. This means that about 20% of the TB cases in Kenya were not detected each year during 2010–2014. In 2016 the TB treatment success rate was 90%, up from 88% in 2012/2013 with at least 83% in all counties. The trend for TB cure rate in Kenya was high and slowly increased from 85 per cent in 2012/13 to 90 per cent in 2016 with the number of cases declining from 120,000 to 80,000 cases.

Tuberculosis (TB) is a major public health problem. Kenya is currently among the 14 high TB burden and HIV co- infection and high drug resistant TB countries globally. There has been a notable decline in TB cases notifies over the years with 91,013 cases in 2013/14, 85,289 cases in 2014/15 and 78,394 cases in 2015/16. In 2015, TB cases notified among adolescents 10-19 years of age were 7,850. Testing for HIV in TB patients has remained relatively stagnant at 94%, which is above the global average of 48% and 76% for the African region. The TB prevalence survey conducted in 2017 showed that the burden of TB is higher than previously estimated, at 588/100,000; hence 40,000 cases were being missed annually. Uptake of antiretroviral therapy among TB/HIV co-infected patients has however greatly increased from 80% in 2013/14 to 83% in 2015/16

The Gene Xpert diagnostic machines for TB have been increased from 10 in 2013 to 146 leading to a 45 per cent increase in detection of drug resistant TB cases. Of the TB patients seen at the health facilities, 96% were tested for HIV in 2014 compared to 97% in 2015. In 2015, (99%) of all the HIV positive TB patients received co-trimoxazole prophylaxis and (96%) received life-long antiretroviral treatment

The number of patients in Kenya with resistance to anti-TB drugs increased annually from 266 cases in 2013 to 269 in 2014 and 368 in 2015. The increase could be attributed to a recent change in policy that included patients that are resistant to rifampicin. In 2015, Garissa county recorded the highest number of TB drug resistant cases (69), followed by Nairobi (62).

# 2.2.3. Neglected Tropical Diseases (NTDs)

The Health Sector launched the National Multi-Year Strategic Plan of Action for Control of Neglected Tropical Diseases (2011-2015) in November 2011in line with WHO recommended strategies for the prevention and control of NTDs. The strategic plan prioritized control of specific NTDs associated with

2 Kenya National AIDS Spending Assessment 'Draft' Report (KNASA) 2012/13 -2015/16 \*\* preliminary data

impoverished communities, with Soil-Transmitted Helminthiasis (STH), Schistosomiasis, Lymphatic Filariasis (LF), trachoma, leishmaniasis, and Cystic Echinococcosis (CE) being those of "great[est.] public health importance" (MOPHS, 2011).

Since 2012, the Sector through the Neglected Tropical Diseases Unit implemented the NTD control strategies, NTDs major mapping and the Kenya National School-Based Deworming Programme (NSBDP). The NSBDP resulted in 6.4 million school-age children being de-wormed in 2013/2014 (NSBDP, 2014). Mass treatment of LF was implemented in 23 endemic sub-counties on the Kenyan coast in 2015 and 2016 and 63% treatment coverage was achieved (KNSP for Control of NTDs, 2016). A leishmaniasis control guideline on diagnosis and management for Visceral Leishmaniasis (VL) was revised to incorporate combination therapy with Paromomycin and Sodium Stibogluconate (PSSG).

The Mass Drug Administration (MDA) for Trachoma which targeted 13,952,274 people achieved national coverage of 79.4% in 2015 (KNSP for Control of NTDs, 2016). The burden of visual impairment (including blindness) and ocular morbidity stands at about 22% - 9 million out of which 250,000 people are blindand require eye care services. Over 80 % of these cases are treatable or preventable with ophthalmic complications emerging to be among the leading of the Non Communicable diseases.

The NTDs Strategic Plan, 2011 – 2015, was reviewed in 2016 to enable the sector align the national NTDs targets to the global targets through the current NTDs Strategic Plan 2016-2020. The global goal targets accelerated or scaled up control/elimination and eradication of NTDs by 2020. Some of the key milestones in the country targets include: eradicating guinea worms by 2020; eliminating elephantiasis and trachoma by 2020; and based on country assessment, eliminating liver blindness by 2020 – otherwise certify the country as liver blindness free.

#### 2.2.4. Leprosy

Leprosy elimination as a public health problem is defined as a registered prevalence rate of less than 1 case per 10,000 persons. This rate was achieved in Kenya at the national level in 1989. However, there are still pockets of leprosy in some counties where late diagnosis and physical disability persist. The major challenges facing leprosy control in Kenya include a low index of detection by health workers, limited resource allocation, and social stigma. The incidence of leprosy shows geographical variations that may indicate important risk factors which are yet to be elucidated and whose recognition could be useful in control of the disease.

#### 2.2.5. Malaria Control

Malaria is still a major public health problem in Kenya and accounts for an estimated 18% of outpatient consultations and 6% of hospital admissions based on data from the Routine Health Information System. Malaria transmission and infection risk in Kenya is determined largely by altitude, rainfall patterns and temperature. The malaria prevalence therefore varies considerably by season and across geographic regions. About 70% of the population live in malaria risk areas, with the most vulnerable being children and pregnant women (Kenya Annual Malaria Report, 2013-2014, Ministry of Health).

During MTP II, tremendous efforts were made towards combating malaria with prevention and treatment interventions such as distribution of Long Lasting Insecticide Treated Nets (LLINs) with 1.7 million, 6.2 million, 7.3million and 4.7 million LLINs being distributed in FY 2013/14, 2014/15, 2015/16 and 2016/17 respectively. This translated to 63% of Households in Kenya owning at least one (1) LLIN with a range of 63%-82% in areas that were targeted (malaria endemic and epidemic areas) for mass net distributions. In addition, Vector Control -mainly use of LLINS and Indoor Residual Spraying (IRS) - in households, the

diagnosis-based treatment policy, and supply of the preventive medicine are likely to have also contributed to the low transmission. Currently, 84% of public health facilities have diagnostic capacity (Quality of care report 12, 2017).

Doses of Arthemether Combination Therapy (ACT) were distributed as follows: 8.4m in 2013/14, 11.4m in 2014/15, 14.6m in 2015/16, and 10.2m in 2016/17. An extra 2 million ACT doses was distributed to counties as part of El – Nino preparations in 2015/2016. The prevalence of malaria in children under 15 years fell from 11% in 2010 to 8% in 2015 due to these concerted efforts,

Malaria incidence reduced form 72 persons per 1,000 populations in 2015 to 61 persons per 1,000 populations in 2016. This reduction is attributed to the successful implementation of malaria interventions. The proportion of children under 5 years sleeping under mosquito net increased from 39% in 2010 to 56% in 2015, while the proportion of pregnant women sleeping under mosquito net increased from 36% in 2010 % to 58% in 2015. (KMIS 2010 and 2015). A Malaria Indicator Survey carried out in 2015 provided information on the performance of the key malaria control interventions as experienced by communities across the country.

# 2.2.6. Community Health Services

In 2014, the Ministry of Health revised and adopted Community Health Strategy for 2014-2019. The strategy has a focus on placing formally employed government workers and Community Health Extension Workers (CHEW) into communities and households as an extension of static health facilities. According to the strategy, five (5) CHEWS should serve a community unit supported by 10 Community Health Volunteers (CHVs).

During MTP II, major efforts were made in scaling up of community health services. Some counties (Turkana, Homabay, Siaya, Nyeri, Kakamega and Busia) have a network of community health resources that cover the whole population in the county while other counties are above 80% coverage rate. This progress is contributed to direct investments from county governments, NGO implementing partners, UN bodies, and advocacy from the national government.

In addition, 12 counties made specific budgetary allocations towards community health, where eight (8) hired CHEWs and five (5) provided kits to their CHVS. Further, three (3) counties are providing stipends to their CHVS and two (2) are contributing towards National Health Insurance Fund (NHIF) for their CHVs<sup>3</sup>. Counties that received less support had much weaker community health strategies. Studies have shown that with proper support and supervision, CHVS are able to diagnose, manage and treat pneumonia at the community level<sup>4</sup>.

# 2.2.7. Reproductive, Maternal, New Born, Child and Adolescent Health (RMNCAH)

There was notable progress towards RMNCAH activities, including political commitment and increased financing of interventions such as free maternal deliveries, family planning commodities, as well as integration of reproductive health and HIV services. Other interventions included strengthening community midwifery practice and helping traditional birth attendants to become advocates of safe motherhood. As a result, the proportion of Women of Reproductive Age (WRA) using contraceptives gradually improved from 40.7% in 2014/15 to 47.4% in 2015/16 before declining to 44.9% in 2016/17 as captured by routine data. In addition, the fourth ante-natal clinic coverage registered improvement from 51.7% in 2014/15 to 51.9% in2015/16 and 52.2% in 2016/17. This was matched by a remarkable improvement in births by

<sup>3</sup> Survey of Community Health Strategy Persons; Community Health Policy Review Meeting; Community Health Development Unit April 2016.

<sup>4</sup> Shaw, B.I; et al; Perceived Quality of Care of Community Health Worker and Facility-Based Health Worker Management of Pneumonia in Children Under 5 Years in Western Kenya: A Cross-Sectional Multidimensional Study;

skilled attendants in health facilities from 69% in 2013/14 to 77.4% in 2016/17 largely attributed to the implementation of the Free Maternity Services introduced on May 2013.

#### a) Maternal Health

The Country adopted the Global Strategy for Women, Children and Adolescents in 2015 that aims at eliminating maternal deaths, improving child survival and creating an enabling environment to achieve their full potential. Consequently, the RMNCAH investment framework was developed to act as a blue print for investing in reproductive health. Further, the Beyond Zero Campaign that advocates for zero preventable maternal deaths, zero child deaths and zero transmission of HIV from mother to child led to the placing of mobile clinics in all the 47 counties to increase coverage of Maternal, New Born and Child Health (MNCH) services.

The 2013 roll-out of Free Maternity Services program in all public health facilities led to doubling of the number of skilled deliveries from about 600,000 in 2012 to 1.2 million in 2017. To make the maternal health initiative more efficient and sustainable, the program was redesigned from the direct reimbursement mechanism that pays for number of deliveries reported, to a health insurance plan, branded as the "Linda Mama Program" being implemented by the National Hospital Insurance Fund (NHIF). The "Linda Mama Program" has an expanded package of benefits for pregnant women and their newborns for a period of one year. Under the scheme, both public and private health providers are contracted to provide services, with a target of about 80% of pregnant women and their newborns benefiting in the first year of implementation.

The proportion of pregnant mothers who sought ANC services and delivered in health facilities increased from 69% in 2013/14 to 77% in 2015/16, while that of women of reproductive age (WRA) receiving family planning commodities increased from 40% in 2013/14 to 47% in 2015/16. Further, the proportion of women delivering under a skilled provider increased from 43% to 61.8%, while the contraceptive prevalence rate (CPR) increased from 46% to 58% in the same period.

#### b) New Born Health

Globally, new born deaths accounted for approximately 45% of all Under-5 deaths in 2015 with prematurity (16% of Under-5 deaths), intrapartum-related complications, including birth asphyxia (11% of under-5 deaths), and sepsis (7%) cited as the leading causes of neonatal mortality (WHO-MCEE, 2015). Kenya's Under-5 mortality decreased by over 50% since 2003 while neonatal mortality decreased by approximately 33 %( KDHS 2014). The increased proportions of births attended by skilled health providers, health facility deliveries and post-natal care are cited as factors that lowered both neonatal mortality and child mortality. Kenya recognizes new born health as part of its 'unfinished agenda' of the MDGs and developed a three-year Maternal and Newborn Health Scale-Up Strategy 2015-2018 on Scaling Up Effective Interventions in Maternal and Newborn Health which aims at tackling the three leading causes of death in new borns. By addressing prematurity, birth asphyxia, and neonatal sepsis, over 80% of new born deaths can be averted, hence reducing the rate of Under-5 deaths.

#### c) Child Health

The KDHS 2014 shows that both infant and Under-5 mortality decreased, from 52 to 39 deaths per 1,000 live births and from 74 to 52 deaths per 1,000 between 2008/09 and 2014 respectively. Lower mortality trends are attributed to improvement in health outcomes arising from changes in health seeking behaviours for child illnesses; increased utilization of maternal health and postnatal care services for mothers and neonates; and deliveries by skilled health providers. Other reasons included intensified

immunization activities such as mass campaigns, early detection and case management of malaria as well as proper use of long lasting insecticide treated nets (LLITN) to avert malaria incidences.

However, the percentage of children fully vaccinated declining from 84.3% in 2012 to 79% in 2017 and while the prevalence of stunting improved from 35% to 26% in the same period (KDHS2014 & DHIS2). The KDHS 2014 shows that exclusive breastfeeding for 6 months increased to 61%, and there was remarkable reduction in all forms of malnutrition (stunting from 35 to 26, wasting from 7 to 4, underweight from 16 to 11 and overweight from 5 to 4 from 2012 to 2017). The leading causes of child morbidity and mortality on a global stage are as follows: acute respiratory infection (ARI) (18%); preterm birth complications (14%); diarrhea (11%); malaria (7%); HIV (2%) and other non-communicable diseases (18%) (WHO and UNICEF-CHERG, 2010).

# d) Adolescent Health

Adolescents aged 10-19 years in Kenya constitute a sizeable proportion of the population at 24%, approximately 9.2 million people. There is scarcity of data on the leading causes of morbidity and mortality among adolescents due to inadequate reporting of injuries and accidents, substance and drug abuse, mental health, and violence causes of death. According to KDHS 2014, AIDS is the leading cause of death and morbidity among adolescents and young people, with approximately 9,720 adolescents and young people dying of AIDS with approximately 29% of all new HIV infections being recorded among adolescents and youth. Coverage indicators for HIV prevention, care, and treatment are poor, with only 23.5% of adolescents knowing their HIV status.

Although the country's total fertility rate declined to 3.9 in 2014, there was no change in teenage pregnancy, with one in five adolescents in the 15-19 years' age group having started child bearing due to early sexual exposure, early marriage, high unmet need for contraception, and poor access to Family Planning (FP) services. There is need to prioritize reproductive health education and community sensitization in order to reverse the trend of adolescent pregnancy.

#### 2.2.8. Immunization

The proportion of fully immunized children according to DHIS2 declined from 83% in 2013/14 to 79% in 2015/16. According to the data, both penta3 and measles immunization coverage declined from 89% to 83% in the same period. Data by county from the DHIS further showed that 34 out of 47 counties had full immunization coverage levels in 2015/16. The government funds the Extended Program of Immunization (EPI) 100% by paying all costs for procurement of traditional vaccines (Oral Polio vaccines, Tetanus Toxoid, BCG and Measles) through an international agreement with UNICEF (Vaccine Independence Initiative). New Vaccines (Rota virus, Pneumococcal, Pentavalent and Yellow fever) are procured through an international Co-Financing agreement with GAVI, where the Government pays 10% of the vaccine cost, while GAVI pays the rest. The Government intends to gradually increase its allocation to fully support this procurement by the year 2022.

Further, the government will finance 100% of the costs of Non EPI Vaccines (Antirabies, Anti-snake venom, Hepatitis B for Health workers, Typhoid, Yellow Fever for travelers), procure cold chain equipment for vaccine storage and fully support the maintenance and operations of the National and nine (9) regional vaccine depots under the National Government.

Inactivated Polio Vaccine (IPV), Rota virus vaccines and measles rubella were introduced into the routine immunization. The Sector successfully switched from trivalent oral polio vaccine (tOPV) to bivalent oral

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polio vaccine (bOPV) during National Immunization Days, as part of the global Polio Endgame Strategy. A measles-rubella supplementary immunization activity targeting over 19million children was successfully concluded with more than 95% coverage and is expected to reduce the infant mortality rate.

The country faced challenges of increased number of unvaccinated children especially in underserved populations of urban informal settlements, nomadic, border populations and ares with security challenges -all basic vaccination coverage reduced from 79% (KDHS2008/9) to 77%(KDHS2014). Further, vaccine hesitancy was noted due to adverse publicity and religious reasons despite high levels of awareness of its benefits. Other challenges were ageing and inadequate cold chain equipments and knowledge gap among health workers and lower level managers.

#### 2.2.9. Nutrition

Kenya made significant progress in nutrition over the last five years by reducing national stunting rates from 35% in 2008/9 (KDHS) to 26% in 2014 (KDHS) and wasting rates from 7% to 4% during the same period. Among the determinants of under-nutrition, exclusive breastfeeding rates increased from 31% to 61% during the same period, directly contributing to reduction in infant and child mortality. By 2015, Kenya was the only country out of 74 countries assessed that was on course to achieve all five (5) World Health Assembly targets. However, these gains are not equitably distributed across the country, with large disparities still existing. Stunting ranges from 15% to 45% across counties, while wasting ranges from less than 1% to persistently high levels greater than 20% in many of the Arid and Semi-Arid Lands (ASAL) counties. For instance, rates of stunting are greater than 40% in eastern, coast, and informal settlements and affect mostly the 2 to 3 years' age group, at which point the impact is mostly irreversible. Adherence to the Minimum Acceptable Diet, a key complementary feeding-related determinant of undernutrition also declined from 38.5% in 2008 to 21% in 2014. In addition, these children are affected by micronutrient deficiencies, including Vitamin A and Iron.

The Under-Five children experienced high levels of under-nutrition (about 2 million stunted children), and numerous deprivations in health, water and sanitation, education, protection, and material well-being. In addition, several ASAL counties faced with severe drought, leading to doubling of the population in food security crisis and in need of humanitarian assistance from 1.3 million in August, 2016 to 2.6 million in February, 2017.

The 2015 Kenya STEPwise Survey report demonstrated increasing rates of non-communicable diseases in which nutrition played a key role. This indicates that Kenya is facing a double burden of malnutrition, where there is a significant number who are underweight while over a quarter of Kenyans are overweight/obese. Vitamin A, key for child development and growth, had a coverage increase of 41% during the period under review against the global target of 80%. Vitamin A plays a vital role in bone growth, reproduction, and boosting of immunity.

#### 2.2.10. Non-Communicable Diseases (NCDs)

Kenya is experiencing an epidemiological transition in its disease burden from infectious to non-communicable conditions resulting in a triple burden of disease (Communicable diseases, non-communicable diseases and injuries). NCDs are estimated to have an annual mortality rate of 182 per 100,000 populations and with 12,651 healthy years lost annually per 100,000 populations, (WHO Global Burden of Disease Study, 2013). Areas of focus have been: health promotion and health education; tobacco control; nutrition policy including promotion of healthy diets and physical activity; Cancer Control Policy; screening for treatable non-communicable diseases; violence and injury prevention; and strengthening of

the management infrastructure and systems for the NCDs.

On policy and coordination, the Cancer Control Act was enacted in 2012 that established the National Cancer Institute with a mandate to coordinate all activities on cancer care in Kenya including screening, diagnosis, prevention, treatment and research. The National Cancer Institute (NCI) board of trustees was inaugurated in February 2015. There is also a National Cancer Control Strategy 2017-2022 that guides implementation of cancer control activities in the country. The NCI still lacks organizational, infrastructural and human resource support to carry out its mandate.

In addition, cervical cancer screening coverage in the country among women of reproductive age was 117,000 against a target of 325,000. Cervical cancer screening rates are low throughout Kenya with only 1 in 7 (14.2%) women 25-49 years having ever been screened. Only Nairobi and Central Province had cervical cancer screening coverage higher than 20%.

According to STEPwise survey 2015/2016, 27 % of Kenyan adults are either overweight/obese while 23.8% of Kenyans are hypertensive. Further, of the adults aged between 18-69 years, 22.7% had a high blood pressure (systole>140 mm Hg or diastole>90 mm Hg) or were already on treatment for hypertension. The survey also showed that 17.5% of men and 38.4% of women were either overweight or obese, and 13.7% of women and 4.3% of men are obese. The prevalence of overweight (BMI 25.0-29.9 kg/m2) and obesity (BMI>=30) among adults 15-69 years in Kenya is high, especially among women. County differences in overweight and obesity among women were quite large, for instance 45% of women in counties in the central region and cities were overweight or obese compared to 15% in counties from the arid regions. High blood pressure (>=140/90 mm Hg) affected almost a quarter (23%) of the adults in Kenya with just under 20% diagnosed. Effective treatment coverage for hypertension was only 4%.

Prevalence of diabetes among adults 15-69 years was 1.9% but only 41% of the total population had been diagnosed while effective treatment coverage stood at 7%. On the prevalence of NCD risk factors, 13% of Kenyans reported one form of tobacco use, 19% were current drinkers of alcohol, 94% were consuming less than five servings of fruits and vegetables daily and 10.8% reported low levels of physical activity.

The Kenya National Strategy for Control and Prevention of NCDs, 2015-2020 was launched in 2015. Since the launch, the Sector partnered with pharmaceuticals to improve access to NCD medicines (AstraZeneca: HHA, and Access: Novartis), championed the implementation of the Tobacco Control Act (TCA) 2007 and awaits completion of the judicial process on the Tobacco Regulations 2014. It also partnered with the civil society - including International Institute for Legislative affairs and Diabetes Management and Information Centre (DMI) -to spearhead advocacy for NCDs

Some of the noted challenges on NCDs include opposition from industry players on risk factor control especially the tobacco industry, challenges in conducting population based screening for NCDs, poor surveillance systems for NCD especially on data collection, and little or no local research to provide information on various aspects of different NCDs in Kenya.

#### 2.2.11. Infectious Disease Surveillance and Outbreak Response

Since December 2015, Cholera outbreaks were experienced in 31 counties with 17,942 cases reported and 269 deaths accounting for a Case Fatality Rate (CFR) of 1.5%. In 2017 alone, 11 counties reported 924 cases with 9 deaths (CFR 1.0%). Kenya experienced outbreaks of other diseases including Chikungunya in Mandera (2016), Dengue fever at the Coast (2017), Whooping Cough in Dadaab refugee camp (2017)

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and Anthrax in Nakuru and Murang'a (2016). The country was also on high alert due to the Ebola Virus Disease outbreak in West Africa, 2013-2016.

The Sector established and operationalized the Public Health Emergency Operations Centre (PHEOC) to develop, strengthen and maintain the capacity to respond promptly and effectively to public health risks and public health emergencies. This is part of the global health security agenda which focuses on improving health globally through partnerships with Ministries of Health.

The PHEOC is instrumental in providing a link for effective communication, coordination and joint decision making during preparedness and effective response to public health emergencies between the two levels of government. Since its inception, the PHEOC has been involved in various outbreak investigations, in collaboration with other agencies and the affected counties.

One of the major drawbacks in disease surveillance and response is poor coordination between the national government teams and county outbreak investigation teams in some instances as well as non-timely responses due to financial and logistical constraints. The country is also at an increased risk of emerging epidemics and changing dynamics of previously recorded epidemics, for example, Ebola, Yellow Fever and Middle East Respiratory Syndrome Coronavirus (MERS-Cov). Another major challenge is insecurity in some parts of the country, which has in some instances, prevented deployment of response teams to some outbreak hotspots in the country.

# 2.2.12. Environmental Health and Climate change

The Environmental Sanitation and Hygiene Policy (2016-2030) and the Environmental Sanitation and Hygiene Strategic Framework (2016-2020) were launched in May, 2016 to improve management of health risk factors associated with water, sanitation and hygiene, food, points of entry, general and clinical waste, vectors and vermin, airborne pollution, and occupational hazards.

The Water, Sanitation and Hygiene (WASH) programme was implemented during the period under review although basic sanitation services are not yet accessible to the majority of the population with Open Defecation rates at about 14% with regional disparities. In addition, a real time monitoring and evaluation system was developed for use in monitoring rural sanitation and hygiene interventions in the country. The Community Led Total Sanitation (CLTS) was implemented in 37 counties which adopted strategies to realize an Open Defecation Free Kenya. A total of 69,250 villages were mapped across the country out of which 4,000 were certified as Open Defecation Free as at June 2017 in line with SDG 6.2.1 which aims at eradication of Open Defecation by 2020. An open defecation free road map was also developed to eradicate open defecation by the year 2020.

Development of the Menstrual Hygiene Management (MHM) Policy was initiated while 70 Trainer of Trainers (TOTs) on menstrual hygiene management were trained to build capacity of County Teams. A teacher's handbook on MHM was developed in collaboration with the Education Sector.

Measures have been put in place to ensure that the right to food of acceptable quality is realized with emphasis on safety of food from farm to fork. For instance, management and control of aflatoxin contamination along the maize value chain was improved. A Technical Cooperation Program (TCP) agreement signed with FAO was implemented. The TCP achievements included: development of a code of practice to reduce contamination of aflatoxins in maize; implementation of a coordination guide for aflatoxin control activities by various agencies; development of technical capacities of 250 county officers in departments responsible for health and agriculture allowing them to formulate adequate prevention

strategies; and design of a monitoring programme for aflatoxins contamination in maize. As a result, there were no reported outbreak of aflatoxicosis in the country during the review period under. Other achievements included: development of 3 self assessment guides on fish, french beans and snow peas, passion fruit; surveillance of fortified foods at the market level; and capacity building of the county government staff on the five keys to safer foods.

The National Health Care Waste Management strategic plan 2015 – 2020, the National Health Care Waste Management training manual and the National Health Care Waste Management on job training manual were launched during review period. This led to better coordination of services and actors, reduced wastage of resources, improved service delivery and improved labour productivity.

The e-portal for Port Health services was integrated with the Kenya National Electronic Single Window System (KNESWS) to facilitate issuance of electronic import and export health certificates at JKIA in Nairobi and Kilindini Port in Mombasa. In addition, there was an increase in the number of Points of Entry (POEs) from 3 to 8 and on-line processing of Import and Export Health Certificates. Further, 180 Port Health Services staff were trained on Kenya Trade-Net System. This resulted in improved trade facilitation along the northern corridor, reduced cost of doing business, and lower cost of goods and services to the consumers. However, staff shortage remains a challenge since the POEs are operated for 24 hours daily.

During the period, occupational health and safety committees were formed and trained in 10 pilot health facilities in line with Occupational Safety and Health Act 2017. The Occupational Safety and Health (OSH) guidelines were developed and 5,000 copies disseminated in county governments. Further, a risk assessment was conducted in 100 public health facilities and 100 TOTs were trained on OSH.

Kenya also domesticated the World Health Organization Regional Office for Africa (WHO AFRO) Plan for Public Health Adaptation to Climate Change in Africa Region (2012 -2016). The Sector developed the country's profile on climate change and health adaptation and implemented a pilot climate change adaptation project whereby the Kenya Malaria Early Warning system was developed.

#### 2.2.13. Radiation Protection

The phase I of the Central Radioactive Waste Processing and temporary storage Facility (CRWPF) which involves construction of the interim underground secure storage bunker with associated health physics and chemistry laboratories for waste processing facility was completed to hold solid and liquid radioactive materials. In addition, the facility houses a decommissioned teletherapy unit from Kenyatta National Hospital and a Category I security risk radioactive Cobalt-60.

#### 2.2.14. Specialized Spinal Injury Services

Spinal injury constitutes a significant disease burden in Kenya affecting males in the most economically productive age group mainly due to road traffic accidents that account for spinal cord injury (55%) followed by fall from heights (37%).

Spinal Cord Injuries (SCI) services are offered at Specialized Spinal Injury Service Hospital which is the only hospital in Eastern and Central Africa that offers rehabilitation services to the persons with spinal cord injuries. The hospital has 30 beds capacity with 100% occupancy rate. The Average length of stay is 6 months. The number of patients receiving rehabilitation services at the Specialized Spinal Injury Service Hospital increased from 111 in 2014/15 to 122 in 2015/16 against target of 200 and 250 patients respectively.

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#### 2.2.15. Specialized Mental Health Services

Psychiatric services have been expanding rather slowly in Kenya mainly due to inadequate number of trained staff, funds, inadequate physical health infrastructure to care for mental health cases and lack of data on mental health case prevalence. However, there have been efforts by the medical nursing schools to train students to meet the national manpower requirements. There are eight (8) psychiatric units established in Nakuru, Nyeri, Murang'a, Machakos, Kisumu, Kakamega, Mombasa and Kisii with some of the units lacking qualified psychiatrists to manage the units..

Mathari Referral Hospital remains a hub for psychiatric services providing specialized mental health care including drug rehabilitation services, integrated preventive and curative services, forensic services for legal purposes, offer training and conduct research in mental health. The hospital has a bed capacity of 700 but only 650 beds are available. In the last three (3) years 2013/14 -2015/16, the average daily inpatient was 730 patients and 266,551 patients annually, translating to 126% bed occupancy. The average annual outpatient workload for the last 3 years, 2013/14 -2015/16 was 64,842 patients. In 2015/16 alone 91,049 cases were reported, of which 85% were 5 years and older. During the review period a Mental Health Policy was developed.

#### 2.2.16. Health Infrastructure

The health care infrastructure experienced unprecedented expansion and improvements with an increase in the number of health facilities from just about 9,000 before devolution to 10,000, increasing the national average facility density from 1.9 to 2.2 health facilities per 10,000 population. About 80 % of these facilities are Levels 2 and 3 focussing on primary health care and include community health facilities, dispensaries and health centres. Levels 4 and 5 comprise secondary health facilities providing specialized services. Level 6 facilities are highly-specialized tertiary hospitals (referral hospitals) providing health care, teaching, training and research services. This classification is in accordance with the health norms and standards as enshrined in the Constitution of Kenya and governed by the established Infrastructure Norms and Standards as well as Clinical Guidelines.

During the review period, the Sector undertook the following infrastructure projects: constructed and equipped a Maternity block at Likoni Sub-County Hospital; constructed a 30 bed Maternity ward and Theatre at Ngong County Hospital; constructed 98 classrooms for the Kenya Medical Training College (KMTC), constructed Central Radioactive Waste Processing Facility (CRWPF); upgraded the Health facilities in the slum areas; initiated the construction of the East Africa's Centre of excellence for skills & tertiary Education; constructed the burns unit at Kenyatta National Hospital; and constructed Neuro-Surgery Centre at Moi Teaching and Referral Hospital.

In addition, the Sector completed equipping 98 public hospitals – four (4) National hospitals and two (2) in each of 47 Counties (94) - to improve access to specialized services countrywide under the Managed Equipment Service (MES) programme. The private sector equipment manufacturers were contracted to service equipments, train equipment users and biomedical engineers for seven years. The equipment under this programme were categorized into 7 Lots: Lot 1 Theatre, targeted 98 hospitals; Lot 2 surgical and CSSD targeted 98 hospitals; Lot 5 renal, targeted 49 hospitals; Lot 6 ICU, targeted former 11 national and provincial hospitals; and Lot 7 Radiology, targeted 86 hospitals in 2015/2016.

Further, the Sector upgraded health infrastructure in informal settlements in collaboration with the other stakeholders and the respective county governments aimed at enhancing quality of health services and improving access to the health facilities. In 2014/15 eleven (11) clinics were established in the Kibera

slum to provide basic primary health care services out of which eight are operational. In 2015/16, a feasibility survey and mapping was undertaken in 12 major towns to determine appropriate sites and number of clinics to be placed prior to the placement and procurement of 100 fully equipped portable clinics was undertaken and are ready for placement in the identified sites.

# 2.2.17. Health Products and Technologies (HPT)

Availability of safe, affordable, efficacious and quality health products and technologies is a key element of health care. The Kenya Medical Supplies Authority (KEMSA) order fill rate improved between 2013 and 2017 through use of Enterprise-wide Resource Planning (ERP) and Logistics Management Information System (LMIS) from 50% in 2013/14 to 60% in 2014/15 and 86% in 2015/2016. KEMSA also signed MOUs with all 47 county governments on supply of medicines and medical supplies.

Medical commodities order turnaround was boosted by the training of over 3,000 health facility workers on LMIS which helped KEMSA address challenges of in inaccuracy of quantity ordered, forecasting, reduced paper work and building a data bank where facilities quantify volumes of drugs they consume. As a result, the order turnaround time reduced from 12 days in 2013/14 to 10 days in 2014/15 and to 9 days in 2015/16.

Major programs that KEMSA is running in collaboration with its strategic partners are;

- A contract worth KSh65 billion on supply Chain Management of US Government products was awarded; HIV, Family Planning, Nutrition and Malaria Drugs, a contract worth KSh65 billion. This is a landmark in the US Government support to Kenya in the health Sector and is a major boost to Kenya's capacity to deliver healthcare to the most vulnerable.
- KEMSA also partnered with the Government of Japan and UNICEF to procure and distribute ready to Use Therapeutic Foods to marginalized areas. This partnership is targeted to reach over 60,000 children suffering from severe malnutrition in those areas. There is a partnership with World Food Programme (WFP) for the provision of Supply Chain Services to West Pokot and Baringo. This will involve warehousing and distribution of nutrition commodities to the two counties.

KEMSA lacks adequate and modern warehousing infrastructure and has therefore resorted to lease its central warehouse in Nairobi to meet growing capacity demands. KEMSA operates in four different warehouse locations within Nairobi. These multiple warehouse locations lead to fragmented and inefficient distribution chains.

There is increased commitment by the government to finance commodities. For example, it financed 70% of TB drugs and counties are progressively allocating additional resources for commodities.

Further, the National Quality Control Laboratory (NQCL) received the ISO 17025 accreditation and the WHO prequalification for the testing of medicines, vaccines, medical devices and other health products technologies. In its drive to improve capacity, the NQCL staff completed 3 PhDs and several postgraduate programmes. Besides, the NQCL put in place the Laboratory Integrated Information Management System for the laboratory and its users.

# 2.2.18. Health Financing

Government financing for health (national and county government allocations) increased over the review

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period. With the total expenditure increasing from KSh.94 billion in 2012/13 to KSh.144 billion in 2015/16 representing a 55% increase. Although there was a decline in allocation in 2013/14 (the first year of devolution), allocations increased in following years as the devolved system stabilized and health was prioritized. The total budget allocated by county governments to health increased from 13% of the total county budgets in 2013/14 to about 25% in 2015/16. On the other hand, the national budget increased from KSh.36 billion to KSh.60 billion between 2013/14 and 2016/17 — an increase of about 67%.

Kenya's Total Health Expenditure (THE) comprising of government, donor and private/household resources increased from Ksh.234 billion in 2012/2013 to KSh.345.7 billion in 2015/16, an increase of 176%. Health financing statistics further show that government was one of the major financiers of the healthcare, contributing 37% of THE in 2015/16, up from 32.1% in 2012/13. The private sector contributed 40% of the national THE in 2015/16, an increase from 32% in 2012/13, while the donor contribution declined to 23% of THE in 2015/16 from 25.5% in 2012/13.

The government allocation to health remained low at about 7 per cent of the total budget which is below the Abuja Agreement target of 15% —. Besides, household Out of Pocket Expenditure (OOPs) was a major source of financing for health services in Kenya accounting for 26% of Total Health Expenditure (THE) in 2015/16.

#### 2.2.19. Health Insurance Coverage

Social Health insurance is recognized in Kenya Vision 2030 as one of the pillars for achieving Universal Health Coverage. The Government promoted reforms in the National Hospital Insurance Fund (NHIF) making it one of the key drivers for achieving universal health coverage. The reforms included changing the management structure at NHIF to make the institution more effective and responsive to customer needs; reviewing the contributions of all members; expanding the benefit package to include out-patient cover for all members and new packages related to addressing non-communicable conditions and instituting strategies to enrol more members. It is estimated that NHIF contributed over 10% of all health expenditure in the country.

NHIF initiated effective recruitment strategies to ensure constant growth of members in both the formal and informal sectors. By the end of the 2016/17, total membership grew to 6.8 million which translates to an overall coverage of 17 million Kenyans (principal contributors and their dependants), implying that over 50% of Kenyans are covered by NHIF.

The increased membership has seen the Fund inject over KSh.33 billion in the Health Sector. NHIF is also playing a major role in Social Health Protection through the implementation of the insurance subsidy programme among the poor and vulnerable groups. In the 2016/17, NHIF with the support of the national Government and other partners provided insurance cover to 160,422 households under the Health Insurance Subsidy Programme (HISP) and 41,666 Older Persons and Persons With Severe Disabilities (OP & PWSD). Despite the efforts to create a single risk pool, fragmentation continued as evidenced by potential variation in the services received associated with heterogeneous provider quality and schemes within the Fund. Figure 1 below shows the trend of NHIF income and expenditures.

30,000 Trends in NHIF Income and Expenditure (KSh million) 28,000 26,000 24,000 22.000 20,000 18,000 16,000 14,000 12,000 10,000 8,000 6.000 4.000 2,000 0 2008/09 2009/10 2010/11 2011/12 2012/13 2013/14 2014/15 2015/16 Contributions net of benefits Receipts Benefits

Figure 1: Trends in NHIF Income and Expenditure (Kshs million)

From the above figure, NHIF financial inlays increased from KSh.5 billion in 2008/09 to KSh.27 billion in 2015/16. However, from 2012/13 to 2015/16 the contribution net of benefits remained constant despite the sharp rise in receipts resulting to the gap between the receipts and benefits widening over the last three years.

#### Cover for the Elderly and Persons With Severe Disability (E&PWSD)

The sector committed to cover all the Elderly and Persons With Severe Disabilities (E&PWSD) who were receiving cash transfer from the ministry responsible for social security services. The cover was offered to the beneficiaries through the NHIF under its premier Super-Cover initiative, and the beneficiaries were offered a full subsidy by the State for their premiums. The cover catered for the principal member, one spouse and up to five (5) dependents. Those persons whose households were receiving some form of health benefits through other State funded projects were not eligible for benefits.

Between 2014 and 2016, there were 231,000 households beneficiary of the insurance cover which reduced to a total of 41,666 households in 2016/17 in all counties due to the reduced funding and increased NHIF premiums (from Kshs. 300 to Kshs. 500 per member). The reduced number of beneficiaries was selected from the initial team based on poverty scores provided by the Ministry of Labour and Social Protection. Implementation of the programme was affected by delays in the identification and targeting of the beneficiaries.

The national Government and county Governments implemented major reforms to streamline human resources operations. This included devolution of 46,000 health workers from the national level to county level and digitization of personnel records. Guidelines addressing issues affecting health workers at both levels (HRH norms and standards) of the government were also developed. The Sector reviewed and completed nine (9) schemes of service and completed the Training Needs Assessment and Guidelines. The schemes of service were for Doctors, Pharmacists, Dental Officers, Medical Laboratory Personnel, Radiation Protection Officers, Inspector of Drugs, Pharmaceutical Personnel, Clinical Officers, and

Physiotherapy Personnel. The Sector also developed a draft rewards and sanctions framework and guidelines to enhance service performance in the health sector. In addition, the pay and benefits for all health workers were reviewed and enhanced.

Counties mobilized and recruited additional health workers (KHSSP MTR report, 2016). The WHO recommends a ratio of 21.7 doctors per 100,000 population and 228 nurses per 100,000 population. Kenya had 14 doctors per 100,000 population and only 42 nurses per 100,000 respectively in 2016. The health worker density target was 7 per 10,000 people and the achievement at midterm, 6 per 10,000. Kenya has therefore not been able to fill the approved positions in all the health facilities with the gap being wider in primary health facilities than tertiary care.

The Sector experienced recurring industrial unrest related to delayed promotions, payment of allowances, unpaid salaries, non-payment of school fees for those pursuing further education, non-remittance of NHIF deductions, and salary discrepancies especially between former local government and MoH staff.

Mathari National Teaching Referral Hospital and National Spinal Injury Referral Hospital, which are under National Government, experienced staff shortage due to staff turn-over. This led to acute staff shortage of all cadres, leading to overwork, burnout, unrests and reduced quality of service.

On middle level training, the Kenya Medical Training College (KMTC) increased the number of campuses from 28 across 28 counties in 2013 to 65 across 42 counties in 2017. This led to an increase in the student population from 19,000 in 2013 to 32,995 in 2017. A total of 800 needy students from ASAL counties and Vulnerable and Marginalized Groups (VMGs) were admitted to the college with progressive increase in access to training opportunities for persons with disabilities. Besides, KMTC graduated 8,000 health professionals in 2016 compared to 6,394 in 2013.

Despite the achievement, the college faced the following challenges: lack of recognition of health staff who have acquired post-basic qualifications in specialization courses by the Public Service Commission (a majority of staff prefer to pursue general degree courses instead of KMTC specialized courses); and lack of harmonized salary and allowances for the staff members seconded from the Ministry of Health and the County Governments and those employed by the college leading to low retention rates.

#### 2.2.20. Research and Innovation

The achievements on research and innovation included: launch of the KEMRI research complex in Mkuyuni - Kilifi county to strengthen clinical trials and research; HIV½ rapid testing kit KEMCOM and HEPCELL kit for Hepatitis B & C testing were produced and distributed; and Particle Agglutination (P.A) kit for the diagnosis of HIV and the HLA tissue typing techniques for kidney transplants were developed. The registered number of graduate students increased from 40 for masters and 18 for PhD students in the 2013/14 to 69 Masters and 25 PhD graduate students in 2014/15. In 2015/16, a total of 56 staff was enrolled for Masters training and 16 for PhD training.

The number of completed research projects increased from 6 in the 2013/14 to 10 in 2015/16.In addition, the Text IT' messaging platform was developed to improve early infant testing for HIV in Kenya as a strategy to deliver HIV-related information and encourage increased attendance for prevention programmes.

KEMRI, through its model production facility for the Production of Biomedical Products (the only one in East Africa) established the Quality Management Systems (QMSs) necessary for commercialization of products. These included: current Good Manufacturing Practices (cGMP), ISO 9001 (KEMRI-wide), ISO

13485 and ISO 17043. KEMRI also developed and commercialized various product lines including Rapid test kits for HIV and HBV; KEMrub Hand Sanitizer; TBCide disinfectant; KEMTAQ; HIV Proficiency testing panels and various culture media. By 2017, KEMRI was developing Rapid test kits for Rift Valley and Yellow fever under SATREPS project.

#### 2.2.21. Devolution

Devolution of health services enabled county governments to determine their health systems and include citizen priorities to make autonomous and quick decisions on resource mobilization, allocation and spending. This led to expansion and renovation of health infrastructure, equipping and furnishing health facilities, procurement of ambulances, and recruitment and retention of health workers.

In order to actualize devolution of health services, the sector developed the Functions Assignment Transfer Policy, 2013 to facilitate transfer of management of health functions, facilities, human resources and financial capital to the Counties. Subsequently, the sector developed policies and quidelines to anchor and standardize health care delivery, including the Kenya Health Policy 2014-2030, the Strategic Plan for Human Resources for Health, the Infrastructure Norms and Standards, Clinical Guidelines and the Kenya Quality Model for Health.

Besides, the 46,000 health workers devolved, counties, recruited an additional 21,000 health workers, increasing the health worker density from around 5 per 10,000 people in 2013 to 6 per 10,000 people in 2017. The Sector also continues to work with county governments through the Intergovernmental Forum in building capacity in service delivery across all health systems building blocks.

The commodities procured by county governments from KEMSA increased by over 50% in 2016 compared to 2013 resulting to a 25% increase in KEMSA sales from Ksh.4 billion in 2013 to Ksh.5 billion in 2016. Consequently, commodity security in health facilities improved with evidence of tracer medicines available in 85% of all Primary Health Care (PHC) facilities and 44% of hospitals.

#### 2.3. Progress of Flagship Projects and Programs in MTPII (2013-2017)

During MTP II (the sector implemented the following flagship projects;

#### 2.3.1. Scale up of Community Health High Impact Interventions

The overall goal of this flagship project was to reduce Maternal, New Born and Child Health (MNCH) mortality and morbidity by extending health services to communities and households. The Ministry collaborated with counties to employ and deploy adequate community health resource persons to deliver MNCH services at the community and household levels. These interventions include Community Maternal and Newborn Health (cMNH), Integrated Community Cases Management (iCCM) of common childhood diseases and Mother Infant Young Child Nutrition (MIYCN) among others.

The Sector launched a strategic plan geared towards the prevention and control of all neglected tropical diseases in Kenya. De-worming is key for optimal child development leading to better learning outcomes and productivity in children and a total of 13 million school going children were correctly dewormed across the country against annual target of 6 million.

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### 2.3.2. Free Maternity Services

The rolling out in 2013 of the Free Maternity Services program led to significant improvements in maternal health. Implementation of this programme faced various challenges including: delayed feedback by county governments on the numbers of cases attended to in order to facilitate reimbursements; the commingling of free maternity funds in some counties with other funds in the county revenue fund; and recurring industrial unrest by health workers.

During the plan period, the National Healthcare Referral Strategy was finalized and piloted in Turkana, Bungoma, Nakuru, Kilifi and Kirinyaga. Following the strategy's implementation, a total of 4,400 health care workers in 22 Counties were trained as well as 60 Trainer of Trainers.

# 2.3.3. Model Level 4 Hospitals

The goal of this flagship project was to improve access to comprehensive Kenya Essential Package for Health (KEPH) services by different constituents of the population. Specifically, the project is set to contribute towards acquisition of the requisite infrastructure and equipment for about 100 current Level 4 County hospitals to the accepted norms and standards.

The key components implemented under this project were the Managed Equipment Service (MES) programme and the Upgrading of the Health Facilities in Slum Areas that focused on improving health infrastructure at the primary, secondary and tertiary levels of healthcare. These efforts led to a reduction in waiting time for surgery; improved clinical outcomes; reduced referrals and increased efficiency in the healthcare system. Other benefits included: reduced equipment downtime that enables better use of staff time; improved training; increased hospital revenue; reduced cost to patients and enhanced quality of life.

#### 2.3.4. Universal Health Coverage

The Government initiated various projects and programmes targeting the poor and vulnerable groups that included: Health Insurance Subsidy Program (HISP), the Linda Mama Project (Formerly the Free Maternity Project) and the Health Insurance for the Elderly and Persons with Severe Disabilities (E&PWSD) Program.

## i) Health Insurance Subsidy Programme (HISP)

The HISP Project was initiated on April 2015 by the Ministry of Health with support from the Work Bank Group (WB, IFC) and the Japanese International Cooperation Agency (JICA). The main objective of the project was to increase prepaid health insurance coverage especially for the poor populations of the country. By 2017, the programme was scaled up from 25,525 to 160,422. NHIF received premiums for the program amounting to Ksh.481,265,000 and a total of 132,939 members registered. A total, Ksh.71,019,088 was paid out as benefits for HISP-OVC households, while NHIF paid out Ksh.15,333,913for outpatient and Ksh.55,685,175 for inpatient care.

The key challenges experienced during the programme implementation included: delays in identification and registration of beneficiaries from existing data systems; inadequate accredited health facilities in some of the areas where the beneficiaries are located — meaning that additional facilities had to be accredited and contracted to offer the services and hence delays in start of the programme; and lack of adequate funds to cover all the deserving cases in all the counties.

# ii) Cover for The Elderly and Persons With Severe Disability (E&PWSD)

Between 2014 and 2016, a total of 231,000 households were benefiting from the insurance cover. This number however been reduced to a total of 41,666 households in 2016/17 FY in all counties due to the reduced funding and increased NHIF premiums (from Ksh. 300 to Ksh. 500 per member/month). Delays in the identification and targeting of the beneficiaries affected implementation of the programme.

#### 2.3.5. Re-engineering Human Resource for Health

The Goal of this project was to establish a well-motivated Human resource for Health (HRH). In this regard, the Kenya Human Resource Strategy for Health and Health Workforce Norms and Standards were developed, launched and disseminated in 2014. Five (5) HRH schemes of services were reviewed and an incentive mechanism framework to attract and retain laboratory and orthopedic cadres was developed. A reward and sanction framework was developed and will be shared with the Counties.

#### 2.3.6. E-health Hubs in 58 Health Facilities

The Goal of this project was to Promote and facilitate use of ICT to improve Patient care. The use of e-health, e-medicine and e-specimen was meant to improve health services and leading to better health outcomes. During the plan period, the National E- health Policy was completed and 62 county health officials sensitized. Two (2) out of 58 E- health hubs were established at KNH and Machakos County Referral Hospitals. Through telemedicine, medical practitioners at Machakos hospital were capacitated to manage difficult cases through the remote assistance of specialists based at KNH. Piloting of Electronic Health Records modules were initiated at Machakos, Garissa, Kilifi, Bungoma, Baringo, Uasin Gishu and Turkana Counties. The challenges experienced included: poor ICT infrastructure, inadequate computers, inadequate digitizing and sharing of information and unavailability of clinical staff for teleconferencing.

# 2.3.7. Translation of Research into Policy and Practical Solutions

The overall goal was to improve access to and use of research evidence that is relevant, reliable, accessible and timely. During the review period, the National Research for Health Committee and National Health Research Secretariat were established and a road map developed based on findings from a baseline survey. Further, a web portal for research was established and training conducted on use of research evidence on policy for middle level managers. KEMRI developed 65 research protocols out of the 115 targeted and Diagnostic kits for HIV 1 and 2 and viral hepatitis through research. Similarly, a facility to undertake human DNA testing for paternity and forensic purposes was established.

# 2.3.8. Modernize Kenyatta National Hospital (KNH) and Moi Teaching and Referral Hospital (MTRH)

# i. Modernize Kenyatta National Hospital

The main goal of this project was to expand infrastructure at Kenyatta National Hospital. These included: construction of the Burns and Pediatric Centre; establishment of a 300-bed capacity private wing Hospital; improvement on the Information and Communication Technology (ICT) network in the institution; construction of 2,000 accommodation units and a shopping mall for staff; and other specialized health facilities.

Modernization of KNH and MTRH have faced various challenges that included: inadequate funding for implementation of the various projects initiated by the two hospitals; inadequate capacity to implement

PPP projects in the institutions; dependence on donors

#### a) Construction of Burns and Pediatric Centre

The project involve the construction of Burns Management Centre and Pediatric Emergency Centre. The Burns Center was designed to contain 82 general ward beds, 14 ICU beds and 6 HDU beds while the Pediatric Centre was designed to contain 82 general ward beds, 24 ICU and 6 High Dependency beds. The Arab Bank for Economic Development in Africa (BADEA), Saudi Fund for Development (SFD), Organization of Petroleum Exporting Countries (OPEC) and GOK gave an approval for international competitive bidding. The tender was however cancelled due to lack of counterpart funding from GOK.

# b) Establishment of 300 bed Private Hospital through PPP

The objective of the project was to attract clients capable of paying to generate revenue to support those who are not able to pay for health services at the main hospital. The Project Transaction advisor was appointed and the technical evaluation for the expression of interest (EOI) finalized. The evaluation report was submitted to the financier for consideration.

#### c) Construction of 2,000 accommodation units through PPP

The project involve expansion of the KNH staff estate by demolishing dilapidated staff houses and replacing them with modern apartments, construction of hostels, a training facility and a shopping complex. The objective of this project is to maximize use of space and generate funds to finance the operations of the Hospital to reduce reliance on the Exchequer. It is estimated to cost approximately Ksh.5 billion to be funded through PPP however no funds were allocated to this project in the financial year 2016/2017.

# d) Construction and equipping of a Cancer Centre of Excellence

The project involved the construction of a bunker and supply, installation and commissioning of a Linear Accelerator and the construction of the peripheral facilities to support the operations of the bunker. Under Phase I, acquisition of a 6MV Linear Accelerator and accessories, construction of bunker, and construction of Peripherals were completed while commissioning of equipment and treatment of patients were initiated.

#### e) Construction and Equipping of Surgical Day Care Centre

This project involved construction and equipping of the proposed surgical Day Care centre to house 26 beds, three theatres, endoscopy, administration area, and electrophysiology room and associated support facilities..

The construction of the frame structure of the centre and walling was completed while plastering, plumbing, electrical installation and finishing was 75% complete by June 2017..

#### f) Upgrade of KNH's Renal Unit

This project aims at upgrading the existing renal unit to provide adequate infrastructure to handle the surging number of renal patients in the country. The upgrade will accommodate a recovery room and two wards each containing six (6) beds for both genders and cloakrooms. The Design and Bills of Quantities and a fundraising strategy were developed and Government allocated KSh.200 Million for the upgrade.

#### g) Establishment of one Centre of Excellence (East Africa Kidney Institute)

The project is designed to offer specialized training and services in the East Africa region through African Development Bank (AfDB) funding. This project is collaboration between the Ministry of Health, Ministry of Education Science and Technology, Kenyatta National Hospital and the University of Nairobi, School of Health Sciences and will be housed within Kenyatta National Hospital (KNH) grounds.

The training Curricula was developed and a total of 108 health personnel trained on the three month preceptor courses. A total of 18 students were enlisted for postgraduate training on Nursing Nephrology and three (3) on masters degree courses in Urology. In addition, 7 candidates were under fellowship in Nephrology.

The first batch of equipment (comprising of theatre, dialysis, surgical and lab equipment) meant to strengthen KNH nephrology functions was procured and delivered. Development of the design for the institute was initiated through a consultancy.

# ii. Modernize Moi Teaching and Referral Hospital (MTRH)

This project aimed at increasing access to specialized clinical care at MTRH. The project was designed to construct and equip the Cancer Management Centre, equip ICU, Theatre and Emergency Department of Shoe4Africa Children Hospital.

# a) Shoe4Africa Children Hospital

The construction of Shoe4Africa Children's Hospital was funded by the Shoe4Africa Foundation and was completed in April 2016. However, the Hospital lacked adequate medical Equipment to enable it operate optimally. A List of the required equipment was approved for procurement.

#### b) Establishment of the Cancer & Chronic Disease Management Center

The construction of Chandaria Cancer and Chronic Disease Centre (CCCDC) was completed in May, 2016. In addition, the Magnetic Resonance Imaging (MRI) was installed near the facility to support the diagnostics for specialized treatment services.

#### c) Equipping the Renal Centre

The Renal Centre was fully equipped and operationalized through Management Equipment Service (MES) Programme and further equipped the Renal Unit with 5 Dialysis Machines.

#### d) Construction and Expansion of General ICU and Neurosurgery Centre

The construction and expansion of General ICU and Neurosurgery Centre was completed at by May 2017. Procurement of some of the Neurosurgical Equipment was initiated while the General ICU will be equipped through the Managed Equipment Services (MES) Programme.

# 2.4. Flagships Under Public Private Partnerships (PPP)

#### 2.4.1. Health and Medical Tourism

The overall goal of Health and Medical Tourism project is to position the Country as a destination for specialized health and medical services. A draft Medical Tourism Strategy was developed and a broad based stakeholder Steering Committee established. The main challenge in the implementation of the project revolved around lack of specific funding for the project.

# 2.4.2. Locally Derived Natural Health Products

The goal of this project is to develop capacity for enhanced uptake of locally derived and certified natural health products into the national healthcare. The cross-sectoral Natural Products Industry (NPI) initiative seeks to create capacity for value addition to alternative and complimentary medicines through product development and up-scaling to enable mainstreaming into the national healthcare system, as envisaged in the Health Act, 2017.

During the review period, a road map was developed and a proposal of mapping of stakeholders was completed. In addition, guidelines for regulation and registration of natural health products of acceptable standards and varying processes were developed and gazetted in 2013.

# 2.5. Policy, Legal and Institutional Reforms

In order to ensure efficiency and effectiveness in the provision of quality health services, necessary policy, legal and institutional framework were been developed.

#### 2.5.1. Policy reforms

The following policies strategies and frameworks were developed during the plan period:

- a) Sessional Paper No. 2 of 2017 on the Kenya Health Policy 2014-2030;
- b) Kenya National Health Sector Strategic Plan 2014 2018. A midterm review was also undertaken:
- c) Draft Health Financing Strategy:
- d) Health Internship Policy;
- e) Draft Medical Tourism Strategy;
- f) Health Sector Disaster Risk Management Strategic Plan, 2014-2018;
- g) Norms and Standards for Ambulances:
- h) Draft National Food and Nutrition Security Policy Implementation Framework;
- i) National Nutrition Action Plan 2012-2017 reviewed;
- i) Community Health Policy;
- k) Draft Kenya Health Certification Framework for E-health solutions;
- l) HRH strategy 2014-2018;
- m) Kenya Standards and Guidelines for Mobile Health systems;
- n) Task Sharing Policy 2017-2030;
- o) Kenya Environmental Sanitation and Hygiene Policy 2016-2030;
- p) Kenya Environmental Sanitation strategic Framework 2016-2020;
- q) Open Defecation Free Campaign road map 2016-2020;
- r) Draft Kenya Menstrual Hygiene Management Policy; and

s) Draft Kenya Menstrual Hygiene Management Strategy.

# 2.5.2. Legal Reforms

The following legal reforms were put in place during the plan period:

- a) The Health Act 2017;
- b) Draft Food and Nutrition Security Bill 2014;
- c) Draft Food and Drug Authority Bill;
- d) Breast Milk Substitutes Control Act Regulations 2012;
- e) Breast feeding at the work place regulations;
- f) The Kenya Medical Supplies Authority Act 2013; and
- g) Draft Environmental Health and Sanitation Bill 2017.

#### 2.5.3. Institutional reforms

During the MTP II period, KEMSA was established as an Authority in order to respond to changing needs in a devolved system of Government. Before then, the institution existed as an agency.

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# 3.0 EMERGING ISSUES, CHALLENGES AND LESSONS LEARNT

During the MTP II period, the Sector experienced the following emerging issues, challenges and lessons learnt as well as cross cutting issues:

# 3.1. Emerging Issues

- Emergence of drug resistant strains of TB;
- Emergence of other diseases e.g. Ebola, Bird flu and Dengue fever;
- Increased industrial unrest emanating from devolution of human resource function;
- Lack of decentralized trade unions for health workers; and
- Emergence of co-morbidities between these NCDs and HIV.

# 3.2. Challenges

The following are the challenges experienced in various thematic areas in the Sector:

#### 3.2.1. Communicable Conditions

a) High new HIV/AIDS infections among adolescents and the youth.

#### 3.2.3. Non-Communicable Conditions

- a) Pressure on the health system as a result of an increase in Non-communicable diseases (NCDs) such as hypertension, heart disease, diabetes and cancer;
- b) Emerge of co-morbidities between these NCDs and HIV;
- c) Inadequate interventions at primary care and community level targeting NCD related conditions:
- d) An increase in road traffic related morbidities and mortalities; and
- e) Poor surveillance systems for NCDs.

#### 3.2.3. Maternal and Child Health and Nutrition

- a) Inadequate emergency services for delivery, under-utilization of existing antenatal services and inadequate skills and competences of health workers;
- b) Scarcity of data on the leading causes of morbidity and mortality particularly on mental health, drugs and substance abuse, injuries and accidents, violence among others to inform decision making in the sector; and
- c) Food insecurity and particularly during drought.

#### 3.2.3. Human Resources for Health

- a) Skewed distribution of skilled health workers with some areas of the country facing significant gaps;
- b) Increased and recurring industrial unrest;
- Inadequate trained personnel, including specialists and sub-specialists due to limited financial resources:
- d) Vertical coordination of programs;
- e) Lack of policy on internship programme; and
- f) An ageing health workforce that poses a challenge on succession management.

# 3.2.5. Health care Financing

a) Low health insurance coverage in the country, especially in the informal sector, and the elderly;

- b) High cost of health services;
- c) Inadequate funding for the health sector;
- d) Health programmes remain heavily donor dependent;
- e) High out of pocket and catastrophic expenditure;
- f) Fragmentation in funding arrangements leading to high administrative costs; and
- Lack of sustainable financing for health, especially chronic conditions such as cancer, diabetes and HIV.

### 3.2.6. Health Products and Technologies (HPT)

 a) Inadequate budgetary provision for the procurement and distribution of supplies to public health facilities.

### 3.2.7. Health Infrastructure

- a) Inadequate infrastructure and skewed distribution of available infrastructure within the sector with a strong bias towards the urban areas;
- b) Obsolete health equipment that require replacement with modern ones; and
- c) The delayed identification of land in the informal settlements where to place the health clinics.

### 3.2.8. Leadership and governance

- a) Weak multi-sectoral coordination in the sector at both levels of government;
- b) Weak adherence to set standards and regulations contributing to counterfeit drugs entering the Kenyan market; and
- c) Weak regulation and coordination of conventional and traditional medicine.

### 3.2.9. Health Research and Development

- a) Inadequate coordination of the various organizations conducting health research in the country coupled with limited accountability:
- b) Inadequate funding for research at national and county levels;
- c) Inadequate raw materials for research due to depletion of natural forests and poor methods of harvesting medicinal plants; and
- d) Lack of legislation to govern the production/use of natural products and clinical practice.

### 3.2.10. Climate Change

a) Inadequate integration of Population, Health and Environment to mitigate effects of climate change.

### 3.2.11. Humanitarian Emergencies

 Increased consequential impacts of natural disasters on human health in terms of food and nutrition, water and sanitation, increased vulnerability and risk to HIV, TB and other communicable diseases.

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### 3.2.12. Migration Health:

a) Movement across borders creates results in increased transmission of diseases from one point to another and inability to access basic health care services

### 3.3. Lessons Learnt

- A multi-sectoral approach is essential for successful implementation of the health sector programmes and projects;
- b) Innovative mechanisms are necessary for sustainable financing of health services;
- c) Effective surveillance and Cross-border collaboration and partnership is critical in prevention and management of infectious and communicable diseases;
- d) Leadership, Management and Governance need to be strengthened;
- e) Effective surveillance and response mechanisms is critical in management of infectious and other communicable diseases; and
- f) Strengthened cross border collaboration and partnerships is critical in prevention and management of infectious and communicable diseases such as Ebola.

### 3.4. Cross Cutting issues

- a) Environment and Climate Change
- b) **Water, Hygiene and Sanitation:** Adoption of a multi-stakeholder approach in ensuring access to safe water and adequate hygiene and sanitation practices for the whole population.
- c) **Gender and Youth Mainstreaming:** Inclusion of men, women and youth in the management and implementation of sector issues.
- d) **Disability mainstreaming:** Encouraging participation and representation of people with disabilities in all programmes and projects of the sector.
- e) **Mainstreaming alcohol, drugs and substance abuse:** Adoption of the Combination Prevention Approach which is a mix of behavioral, structural and biomedical interventions targeting specific populations based on their needs to optimally mitigate acquisition and abuse.
- f) Mainstreaming Sustainable Development Goals (SDGs): Requiring both the state and non-state actors to mainstream Sustainable Development Goals into all their policies, programmes and projects.
- g) Mainstreaming Health in all Policies across all sectors to address the social determinants of health to ensure that public policies and decisions that are made in all sectors and at different levels of government have a positive impact on population health and health equity.
- h) **HIV Mainstreaming:** Though HIV is a key issue in healthcare management, it has linkages with all other sectors hence needs to be taken to consideration in planning.

### 4.0 PROGRAMMES AND PROJECTS FOR 2018-2022

The overall objective of the Sector is to accelerate the attainment of Universal health Coverage through:

- (i) Enhancing efficiency in provision of health care services;
- (ii) Improving availability of essential health services;
- (iii) Ensuring equity in access of essential health services; and
- (iv) Enhancing the human resource capacity for health service provision.

To achieve this objective, the Sector will implement various programmes and projects as follows:

## 4.1. Flagship Programmes and Projects

The Sector will implement seven flagship projects which are transformational, high impact and instrumental in addressing the challenges experienced in the previous Plan period. These include:

- Social Health Protection
- Medical Tourism
- 3. Health infrastructure
- 4. Community Health High Impact intervention
- 5. Digital Health
- 6. Human Resources
- 7. Improving Quality of Care/Patient and Health Worker Safety

# 4.1.1 Social Health Protection Programme

The objective of the programme is to enhance social health protection to the targeted populations by expanding schemes to cover a harmonized benefit package. This programme will also contribute towards the reduction of the out-of-pocket expenditures and catastrophic health expenditures. To achieve universal health coverage, the Government intends to increase the proportion of the population covered through the health insurance from 36 per cent in 2017 to 100 per cent in 2022.

The National Hospital Insurance Fund (NHIF) will be instrumental in ensuring that all persons requiring healthcare are not hindered from accessing the services. This includes: the vulnerable groups such as the poor/indigents; the elderly who are 70 years and above; persons with severe disabilities and those in the informal sector. This programme will involve the review of the NHIF Act 1998 to provide for mandatory insurance cover for all persons including retirees and increasing employer contribution as well as a medical support kitty for non-NHIF members. It will also involve the Linda Mama project which offers free maternity services to women and their infants (up to six months) in public and faith based health facilities.

The flagship will entail implementation of six key projects namely:

a) Health Insurance project for Elderly People and Persons with Severe Disabilities (PWSDs): This is an ongoing project that targeting people who are seventy years and above, and PWSDs. This will increase access to health care for the elderly from 42,000 in 2017 to 1.7 million in 2022 and 5,000 PWSDs in order to prevent them from the risk of falling into poverty due to the out-of-pocket expenditure at the point of service delivery. This will be undertaken in collaboration with the Labour and Social Sector in identifying and registering the beneficiaries.

- b) Informal Sector Health Insurance Coverage: This project aims at increasing the number of people in the informal sector who are enrolled with NHIF from 3 million in 2017 to 12 million in 2022.
- c) Health Insurance Subsidy Programme (HISP) for the Orphans and the Poor: The main objective of the project is to increase prepaid health insurance coverage especially for the poor populations in the country with special focus on orphan headed households and other vulnerable groups. The programme will scale up coverage from 181,000 members in 2017 to 1.5 million by 2022.
- d) Elimination of user fees in public primary health care facilities: The project is to enable people access primary healthcare in public dispensaries and health centres free of charge. The National Government will continue extending conditional grants to county governments to compensate all primary healthcare facilities to provide free services which will be complemented by additional support from partners for operations.
- e) Medical Insurance Cover for Civil Servants Retirees: This will involve the introduction of a medical cover for all civil servants who have retired.
- f) The Linda Mama Project: The purpose of this project is to increase utilization of health facilities by providing free maternal deliveries, free ante-natal and post-natal services for mother and child up to six months in public health facilities to cover 1.6 Million mothers and babies. The project will continue being scaled up to include the not-for-profit and other private health facilities.

The above efforts will be complemented by resource mobilization that will include introducing earmarked taxes and other innovative financing mechanisms. Other reforms at NHIF will include the introduction of segregated multi-tiered packages to suit different interests and increase coverage.

### 4.1.2 Medical Tourism

Kenya is keen to tap into the global multi-billion medical and health tourism business valued at about \$100 billion annually. India alone takes about \$1.1 billion of this business every year. The East Africa Community (EAC) on the other hand loses up to \$150 million annually for medical treatment abroad, with about 100,000 patients going to India alone from the region. Although Kenya receives about 3,000 to 5,000 foreigners seeking medical care every year, as many as 10,000 go out of the country and spend approximately Ksh.7 to — Ksh.10 billion worth of healthcare services. Besides, medical tourism is one of the fastest growing industries in the EAC region, expanding at about 15 per cent per annum.

The objective of the Medical Tourism project is to market Kenya as a destination hub for specialized healthcare services, appealing to both internal clients as well as attracting regional and international clients. The project will earn the country foreign exchange, creates employment in specialized areas, support the training and retaining of specialized health personnel, and create other multiplier effects to the economy.

This is expected to stimulate and enhance growth of Kenyan medical exports to African and other international markets through improved high quality and affordable health care. This flagship project will include implementation of the following key components namely:

- Establishment of East Africa Kidney Centre of Excellence; a)
- Establishment of two Trauma Centres in Makindu and Ronga: b)
- C) Establishment of 10 new referral hospitals;
- d) Development of a national strategy on Medical Tourism;
- e) Establishment and modernization of the four national referral health facilities (MTRH, KNH, Mathari and Spinal Injury hospitals) as modern centres of excellence to provide specialized services in oncology, mental health and Non-Communicable Diseases among others;
- f) Development of Communication & Marketing Strategy to promote health tourism products; and
- Promote and attract investments in medical tourism to market Kenya as a hub for specialized q) health care.

### 4.1.3 Health Infrastructure

Health infrastructure is key in the delivery of quality health services. The prograamme will involve following key components:

- a) Expansion and Completion of Managed Equipment Services (MES): The project is operational in two hospitals in each county and in four national referral hospitals. However, the project will be expanded to cover 120 hospitals in underserved areas by 2022. In addition, the project will focus on capacity building for human resources, installation of Health ICT infrastructure, Laboratory, Oxygen systems, Oncology and TB resistant facilities.
- Establishment of Cancer Centers: The government with support from partners and through PPPs will establish cancer care management centers in Nakuru, Mombasa, Nyeri and Kisii as well as at KNH and MTRH. This will improve response to the increasing NCD menace in the country.
- National Commodities Storage Center: KEMSA will construct a customized C) warehouse and distribution center at Embakasi to optimize and strengthen the supply chain for multiple health commodities.
- d) Establishment of 100 Primary Healthcare Facilities: These will provide basic essential primary health services including screening for NCDs and appropriate referrals. In addition, mobile units will be provided for community outreach services.
- e) Infrastructure at the Kenya Medical Training College (KMTC): This project will entail: construction of new campuses in Mandera, Taita-Taveta, Voi and Lamu; refurbishment/ construction of buildings in Garissa campus; construction of halls of residence at 65 KMTC campuses through Public-Private partnership; establishment of 10 centers of excellence in training through construction and expansion of the physical facilities; and provision of state of the art equipment for specialized training and services through Public-Private partnership.
- Establishment of Regional Cold Chains for Drugs and Vaccines: This will ensure availability of safe and high quality drugs in the country.
- Construction and Equipping of Multi-Specialty Moi Teaching and Referral Hospital: The q) Government will construct, equip and furnish a 4,000 Bed Multi-Specialty Moi Teaching & Referral Hospital in Eldoret. The first phase with 2,000 Beds will be completed by 2020 while the second phase will be delivered by 2023.
- Construction and Equipping of an Ultra-Modern Laboratory Complex for the National Quality h) Control Laboratory: This will promote best practices for quality control of medicines and other health product technologies in Kenya and the Sub Sahara Africa Region.

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- i) Construction of State of the Art Research Laboratories: These laboratories will be constructed in Kirinyaga, Uasin-Gishu and Marsabit counties
- j) Establishment of the Police Hospital: This will entail construction and equipping of a hospital to provide health services to the police.

### 4.1.4 Community Health High Impact Interventions

The programme aims at countrywide scaling up of high impact interventions at the community level to empower communities to take charge of their own health. This is because Community Health interventions are highly cost-effective and increase utilization, coverage and equity of health services, especially for the poor who are less likely to use facility-based care. The Government in partnership with stakeholders will support the use of well trained, motivated and equipped Community Health Workers to increase uptake and utilization of services in malaria treatment, HIV, nutrition, vaccinations, ANC visits. It will also enhance the use of skilled birth attendants to save lives of women and children. Community Health Workers will also be used to expand access to UHC by supporting enrollment of members to the NHIF. The specific interventions to be implemented will include:

- Roll out of the National Integrated Community Case Management (iCCM) to high disease burden and ASAL areas where access to services is low;
- b) Strengthening of community health units including capacity building and increasing funding to the Community Health Volunteers (CHV) operations;
- c) Scale-up of WASH and nutrition interventions at community level;
- d) Use Community Health Workers to scale up health insurance coverage;
- Strengthening of Community Health Workers to Deliver Healthcare by scaling up community health workers as front line primary healthcare workers;
- f) Strengthen Community Maternal and New Born Health through the implementation of the Community Maternal and Newborn (cMNH) health package;
- g) Community health promotion to improve community interventions through concrete and effective community action in planning, prioritization and implementation:
- Control of NCDs at Community Level through creation of awareness and health education about risk factors and health promotion activities as well as appropriate referral services and linkages; and
- Increase the number of health facilities at the community level, including mobile health services in order to ensure access to a fully equipped health centre within 5 miles of a homestead.

### 4.1.5 Digital Health

To expedite the development of the healthcare industry, there is need to digitize services and adopt technologies such as e-health, m-health, telemedicine and space technologies by leveraging on the improved ICT infrastructure and mobile penetration rates, which stands at over 80%. These technologies and applications have potential to transform health care delivery system and empower consumers to play an active role in their care and define what services are important to them. They can also help health care providers, insurers, and others analyze a growing body of data to identify unmet needs and measure treatment outcomes to better tailor patient interventions.

Measures will be undertaken to improve the uptake of digital health through the following key components:

- Digitization of health facilities: including instalment of the electronic health information a) system (EHR) to capture patients' data at the health facilities level and enhance digital communication between facilities (Healthcare ICT).
- b) Integration of Mobile Health (m-Health) Services Technology to improve health system performance.
- Enhancement of District Health Information System (DHIS2), RMNCAH and HIV Situation C) Rooms and Kenya Master Health Facility List (KMHFL); in order to function optimally and increase uptake as well as utilization of health information.
- d) Installation of Enterprise-wide Resource Planning System at KMTC
- Enhance the online Community Led Total Sanitation monitoring platform in all 47 counties capturing sanitation data from the village level to function optimally as part of the Ending Open Defection in Kenya Initiative.
- f) Promote the Use of Space Technologies to improve the provision of health products and services.
- g) Provision of internet enabled communication in all hospitals to enable medical personnel to seek expert guidance and support from specialists across the country and abroad.

### 4.1.6 **Human Resource for Health**

The project entails capacity building of health workers to increase the skills pool in the health sector and improve the health outcomes. The project will address capacity gaps within the specialized and sub-specialized areas and also reduce shortages in the health workforce especially the ASAL areas. The number of health workers will be increased from 40,500 health workers at the beginning of the Plan period to 63,000 by 2022.

The key components of this flagship project will include:

- a) Training of Enrolled Community Health Nurses (ECHN) for students drawn mainly from the ASAL counties,
- Training of the Specialized and Sub-specialized Health Workers in sub-specialization area b) such as geriatrics to cater for the aging population, bio-medical sciences and NCDs. In addition, schemes of services for new cadres such as Emergency Medical Technicians, Morticians, and Medical Physicists will be developed.
- Capacity building for County Public Health Officers on Food and WASH interventions as part of the process to prevent and control cholera outbreaks.
- Establishment of the Kenya Institute of Health Systems Management for the training of d) health managers.
- e) Recruitment of additional health workers

### 4.1.7 Improving Quality of Care/Patients and Health Workers Safety

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This will be implemented at all levels of healthcare to ensure provision of quality services and safety of the environment in which services are provided.

The main components of the project include:

- a) Building capacity of the counties to improve the quality of healthcare Services using Kenya Quality Model of Health (KQMH) and its operationalization with 5S-CQI (KAIZEN)-TQM Approach;
- b) Development of Quality Improvement (QI) governance structures at Counties and medical

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- institutions:
- c) Quality of Care and Performance Improvement through benchmarking, rating and recognition award approach;
- d) Providing a safe environment for patients, health workers and their families; and
- e) Monitoring and evaluation of the service delivery.

### 4.2. Other Priority Projects

### 4.2.1. Malaria, HIV and TB

Communicable diseases accounts for the highest proportion of disease burden in the country, with the leading causes related to HIV/AIDS, malaria and TB. Kenya has a commitment to fast track the ending of AIDS as a public health threat by 2030. This includes significantly reducing new infections, eliminating stigma and discrimination and attaining the 90-90-90 treatment targets. Young people (15-24) are a priority population since they are the most affected by the HIV epidemic, contributing to 46% of new HIV infections in 2016. In addition, in an effort to end paediatric AIDS, there is a commitment to seek validation of pre-elimination of mother to child transmission of HIV and Syphilis by 2021.

The co-infection of HIV/AIDS and TB coupled with the emergence of drug resistant strains of TB pose a serious problem to the sector. Despite great strides in tuberculosis and malaria control, it is estimated that 19% of TB cases still remain undetected. Malaria has also remained a serious health problem. The main objective of this programme is to bring these conditions under control through a multi-sectoral and partnership approach.

### 4.2.2. Immunization Program

Kenya has made good progress in improving immunization coverage. This has been made possible through concerted efforts of both local and international agencies to increase the Expanded Programme on Immunization (EPI) coverage. However, challenges remain with the country facing an increase in the number of unvaccinated children especially in underserved populations of urban informal settlements, nomadic, border populations and security challenged areas.

Additional challenges include vaccine hesitancy due to a wide range of reasons such as adverse publicity & religious reasons, despite high levels of awareness of its benefits. In this regard, the Immunization Programme will be strengthened and continued during the Plan period. The HPV vaccine for girl's age between 9-13 years will be introduced into the routine immunization schedule.

Other measures will also include ensuring adequacy and continuous availability of traditional vaccines (BCG, Oral Polio vaccines, Tetanus Toxoid, Measles); new vaccines (Rota virus, Pneumococcal, Pentavalent and Yellow fever) with GoK paying 10% of the vaccine cost and finally non EPI Vaccines (Antirabies, Antisnake venom, Hepatitis, Typhoid).

### 4.2.3. Scaling up Nutrition Program

Kenya has made progress in reducing stunting rates in the population. However, high levels still persist with significant disparities across counties and among urban poor populations. The objective of this priority project is to reduce and control stunting rates through scaling up of high impact nutrition interventions including management of severely and moderately malnourished children, promoting and facilitating food

fortification of widely consumed foods, and promoting school nutrition and feeding program. Further, given the multi-sectoral nature of nutrition, the program will establish high-level nutrition multi-stakeholders platforms (MSPs) and scale up interventions in counties and at national levels. It will also regularly track nutrition resources allocation and expenditures.

### 4.2.4. Geriatric and Pediatric Facilities

During the Plan period, the Sector will:

- (i) Invest in Neonatal & Pediatric Newborn units and ICUs to further reduce newborn, infant and under-five mortality; and
- (ii) Undertake an analysis to assess the feasibility of developing separate specialized sections within the health facilities to cater for the older persons, including developing staff skills to provide the services. This is aimed at reducing mortality rates for this vulnerable category of the population.

### 4.2.5. Reproductive, Maternal, Newborn, Child and Adolescent Health

The aim of this program is to accelerate the achievement of the benefits associated with the demographic dividend. The key activities will include:

- (i) Establishment and promotion of integrated adolescent and youth friendly health services;
- (ii) Provision of universal access to family planning services;
- (iii) Scaling up the promotion and implementation of policies, community engagement strategies and behavioral change measures to enhance the reproductive rights of women and adolescent girls and their access to sexual and reproductive health education, information and services;
- (iv) Promotion of policies and programmes to improve child survival;
- (v) Creation of an enabling environment by empowering communities and strengthening the role of men in improving access to sexual reproductive health and reproductive rights services; and
- (vi) Fostering inter-sectoral action for health at all levels (state and non-state) for the improvement in reproductive, maternal, newborn, child and adolescent health.

### 4.2.6. Strengthening Health Interventions in Ending Drought Emergencies

This programme will consist of the following strategic interventions:

- (i) Integration of emerging technologies and other alternative interventions in the provision of health services in nomadic areas, including disaster risk management in community Health;
- (ii) Increasing the number of appropriately trained professionals for ASAL Counties through affirmative action in enrolment at KMTC;
- (iii) Putting in place an effective referral system in ASAL;
- (iv) Protection and promotion of the rights of people with special needs in the ASALs; and
- (v) Promotion of Public-Private Partnerships in ASAL interventions.

### 4.2.7. Building Capacity and Utilizing Natural Product Research, Innovation and Development

During the Plan period, the sector will:

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- (i) Promote use of safe and effective traditional/herbal medicine;
- (ii) Increase knowledge, attitude and practices on traditional/herbal medicine;
- (iii) Provide/influence policies on traditional/herbal medicine; and
- (iv) Increase alternative sources of health care through use of scientifically evidenced traditional/ herbal medicine.

### 4.2.8. Non-Communicable Diseases

Key activities under this programme will include:

- (i) Enhancing health care worker capacity on NCDs;
- (ii) Ensuring availability of essential medicines and technologies for management of NCDs;
- (iii) Improving the NCD health information systems;
- (iv) Strengthening screening of NCDs; and
- (v) Integration of NCD services into primary health facilities

## 4.2.9. Strengthen the Kenya National Blood Transfusion Service

The main activities are:

- Expansion of infrastructure in Nairobi blood transfusion centre and establishment of regional blood centres; and
- (ii) Strengthening of the human resources capacity

### 4.2.10. Forensic Medicine Referral Centre and Centre of Excellence

The objective of this project is to provide for a centre of excellence for the forensic medical practice, training and research in forensic medicine within the country and in the Eastern Africa region. The main components of the project will be:

- (i) Construction and equipping of the forensic Centre; and
- (ii) Training and research in forensic medicine.

### 4.2.11. Establishment of the National Public Health Institute

The Sector will invest in disease surveillance, monitoring and response systems that are able to detect, deter and contain pandemics that are of a national risk. Towards this end, the sector will establish the National Public Health Institute to coordinate public health surveillance, outbreak investigation, and assessment and control of risks and threats to public health as a sustainable approach towards controlling and managing epidemics.

### 4.2.12. Modernize National Public Health Laboratory

The aim of this project is to strengthen laboratory services to address health security challenges and threats including antimicrobial resistance, HIV and TB drug resistance and disease outbreaks. This will be undertaken through expanding and sustaining infrastructural and human resource capacity at National Public Health Laboratory. In this regard, the sector will:

- (i) Establish and sustain Sequencing Centre;
- (ii) Establish and sustain Equipment Calibration Centre;
- (iii) Establish and sustain specialized diagnostic testing for BSL3 organisms to support laboratory based surveillance; and
- (iv) Expand and sustain Medical Laboratory Quality Assurance Centre.

## 5.0 POLICY, LEGAL AND INSTITUTIONAL REFORMS

In order to ensure efficiency and effectiveness in the provision of quality health services delivery the necessary policies, legal and institutional frameworks will be developed during the Plan period.

### 5.1. Policy Reforms

The national government continues to discharge its mandate of providing policies to guide the quality health services in the sector. The following policies and strategies will be developed and implemented:

- (i) Implement Sessional Paper No. 2 of 2017 on the Kenya Health Policy 2014-2030 Kenya National Health Sector Strategic Plan 2018 2025;
- (ii) Finalize and implement the Health Financing Strategy;
- (iii) Finalize and implement the Health Internship Policy;
- (iv) Medical Tourism Strategy will be finalized;
- (v) Review of the Referral Strategy to align it with the Constitution;
- (vi) Review of the Health Sector Disaster Risk Management Strategic Plan, 2014-2018;
- (vii) Implementation of Norms and Standards for Ambulances;
- (viii) Development of Emergency Medical Care Policy;
- (ix) Implementation of the Pharmaceutical Policy;
- (x) Implementation of the National Food and Nutrition Security Policy 2012 and the National Nutrition Plan of Action:
- (xi) Implementation of the Community Health Policy:
- (xii) Finalization of the of the Kenya Health Certification Framework for e-health solutions;
- (xiii) Review of the HRH Strategy 2014-2018;
- (xiv) Implementation of Kenya Standards and Guidelines for mobile health systems;
- (xv) Implementation of Task Sharing Policy 2017-2030;
- (xvi) Implementation of Kenya Environmental Sanitation and Hygiene Policy 2016-2030;
- (xvii) Implementation of Kenya Environmental Sanitation Strategic Framework 2016-2020;
- (xviii) Scaling up Open Defecation Free Campaign road map 2016-2020;
- (xix) Finalization of Kenya Menstrual Hygiene Management Policy; and
- (xx) Finalization of Kenya Menstrual Hygiene Management Strategy.

# 5.2. Legal reforms

The following legal reforms will be undertaken to give full effect to article 43 of the Constitution.

- (i) Review the NHIF Act, 1998 to provide for mandatory insurance cover for all including retirees and also increase employer contribution as well as a medical support kitty for non-NHIF members:
- (ii) Implementation of Health Act, 2017;
- (iii) Finalization of the Food and Nutrition Security Bill and enactment of the Act;
- (iv) Finalization of the Food and Drug Authority Bill;
- (v) Development of the National Public Health Institute (NPHI) Bill;
- (vi) Finalization of the Environmental Health and Sanitation Bill 2017;
- (vii) Finalization of the Environmental Health and Sanitation Bill 2017:
- (viii) Implementation of the Breast Milk Substitutes (Regulation and Control) Act (2012);
- (ix) Implementation of the Breast feeding at the work place regulations;

- (x) Lobby for the review of the Retirement Benefits Authority Act and the Insurance Regulatory Authority Act to provide for scale up of private health insurance;
- (xi) Legislation on the process of accreditation and licensing of health facilities

### 5.3. Institutional Reforms

The following institutional reforms will be undertaken:

- a) Develop and implement effective partnership framework for health service delivery. This will promote delivery of efficient, cost effective and equitable health services;
- b) Establish the National Council of Health and Nutrition for ASAL;
- c) Establish the Kenya Institute of Health Systems Management to train health managers;
- d) Institutionalize the regulatory framework for the control of health products, research and technology;
- e) Operationalize the Health Act by establishing the following offices/bodies:
  - Office of director general for health.
  - Office of the technical director for health at county level,
  - Kenya human resource advisory council,
  - Kenya health professional oversight authority,
  - Single regulatory body for health products and technologies,
  - Kenya blood transfusion service,
  - Kenya research for health committee,
  - Kenya health sector intergovernmental consultative forum among others.

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# **ANNEX I: IMPLEMENTATION MATRIX**

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame	Source of		Indicative	Indicative Budget (Kshs Millions)	ths Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
Social Health Protection Project	ction Project											
The Linda Mama Programme	To increase utilization of health facilities for deliveries	1.2 million women and under 1 year children reached	No of beneficiaries	MoH, NHIF	2018-022	GoK, JICA	26,111	4,298	4,298	5,315	6,100	6100
Health Insurance Subsidy Programme (HISP) for the poor	To increase prepaid health insurance coverage for the poor	1.3 million Households accessing public subsidies	260,000 beneficiaries per year	MoH, NHIF	2018-2022	GoK, WB	5,800	389	750	1,250	2,000	3,000
Health Insurance for the elderly & PWSD	To provide medical cover for elderly & PWSD	About 1,040,000 people access medical care	No of people registered & accessing healthcare	MoH/NHIF/MLSS	2018-2022	GoK	20,700	3,200	3,500	4,000	4,500	5,500
Elimination of User Fees	To enable people access primary healthcare	All people access medical care at primary level facilities without paying	No of people accessing healthcare in PHC Facilities	MoH Counties	2018 -2022	GoK	5,000	006	006	006	1,100	1,200
Informal Health Insurance Coverage	To increase utilization of health insurance cover	12 million informal workers benefitted	No. of people benefiting	NHIF, MoH	2018-2022	GoK/ Partners/ Contributions	4,300	800	800	200	700	200
Formal sector medical insurance (retirees)	To increase utilization of health insurance cover	Retired workers benefitted	No. of retired workers benefitted	NHIF, MOH	2018-2022	Member contributions	N/A	N/A	N/A	N/A	N/A	N/A
Medical Tourism Project	oject											
Development of a national strategy on Medical Tourism	To Market Kenya as a destination hub for medical tourism	National strategy on Medical Tourism	Strategy	МОН	2018-2019	GoK	10	10	0	0	0	0
Establishment of the East Africa Kidney Institute (CoE for skills and tertiary education	To build capacity in specialized renal care within the EAC region	East Africa Kidney Institute established and operationalize Ed	Operational Institute	MOH/KMTC/ UON/MoE	2022/23	ADB/GOK	4,500	1,950	360	06	500	200
Establishment of Trauma Centres at Makindu and Rongai	Improve emergency care and treatment	Trauma centres established	Two Trauma Centres	МоН	2018-22	GoK Partners (BADEA)	1,450	50	20	350	200	200
Establishment of 10 new referral national hospitals	To provide specialized care and training	10 new national hospitals established	No of new hospitals established	МоН	2018-2022	GoK	50,000	To be mobilized				

Expected Output Indi	<u>la</u>	Indicators	Implementing	Time Frame	Source of		Indicativ	Indicative Budget (Kshs Millions)	shs Millions)	l - l	
			Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
		Strategy in place	MOH	2018 -2020	GoK	10	2	2	0	0	0
Markeung Strategy											
Staff houses and No of Sta wards modernized houses	No on	No of Staff houses	МоН	2018-2022	GoK	361	61	20	20	100	100
and	and	and wards modernized MoH									
A wall at the hospital No of constructed & Beds	No of Reds	No of Orthopedic	MoH	2018-2022	GoK	100				20	50
	% Hos	& Hospital wall									
of care of patient constructed management by reducing hospital stay	constr	ncted									
Bunker; Bunker	Bunker		MOH	2018-2022	GoK	3,500	220	220	220	1,500	2,000
			KNH		Merali						
Peripheral facilities; Linear /	Linear,	Linear Accelerator			Red Cross						
Periphera	Periphe	ral			Partners						
facilities	facilities										
300 Bed Capacity Hospital	Hospital		HNX	2018-2022	GoK	3,500	200	1,000	1,000	008	200
<u>-</u>											
Three (3) floor Palliative Care	Palliative	Care	KNH	2018-2021	GoK	150	20	100			
	Centre				American						
	Mall				cancer society						
Conference facility					Partners						
Mall											
recovery room Centre Two wards with six No. of a	Centre No. of a	Centre No. of accessing	MOH KNH	2018-2021	GoK Partners	200	51	51	51	48	
	the Ce	ntre									
Cloakrooms											

	2022/23	20		006					
s)	2021/22	180	1	2,000	2,000				
shs Million	2020/21	42	1	20	2,000				200
Indicative Budget (Kshs Millions)	2019/20	42	200	20	1,000	70		20	
Indicativ	2018/19	37	700	1			20	50	
	Total	360	1,200	3,000	5,000	02	20	100	200
Source of	Funds	MERALI Gok Partners	GOK	GoK BADEA	GoK PPP	KNH & Partners	GoK KNH	GoK KNH	GoK KNH PPP
Time Frame		2018-2020	2018-2021	2018-2021	2019-2022	2019 -	2018-2019	2018-2020	2021-2022
Implementing	Agency(s)	KNH	KNH	KNH	MoH KNH	KNH	MoH	HNX	KNH
Indicators		Operational Centre	Hospital established	Care Centre for children	No of accommodation units completed	Operational renovated kitchen	Operational waste treatment microwave	Completed wall	Operational modern parking site
Expected Output		26 bed capacity Centre; Four main theatres Two minor theatres endoscopy unit administration area Electro-physiology room	Dedicated specialized mother and Child hospital.	cancer care centre to for 128 in-patients; New born care and kangaroo unit	2000 accommodation units Shopping complex Training facilities	Renovation of kitchen Floor and wall Modern kitchen equipment	Micro wave equipment Perimeter wall Access road	Enhanced security at KNH	Parking site Street lights Modern parking
Objective Objective		To equip the surgical daycare with modern up-to date equipment.	To improve pediatric and maternal health intensive care units and complementary services.	Facilitate reorganization of services to create disease- specific centers	Provide boarding facilities within convenient reach for staff, students and lecturers	To improve on food quality and service.	To treat volumes of medical waste in a safe and environmental	Concrete security wall around KNH premises with a modern gate	Official parking area for KNH Staff
Programme/	Project	Day Care Surgical	Mother and Child Hospital at KNH	700 bed Children's Hospital at KNH	2000 accommodation units, training and shopping complex	Renovation of the main kitchen	Microwave waste processor	Boundary wall and modern security gate	Parking site

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame	Source of		Indicative	Indicative Budget (Kshs Millions)	ths Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
Administration office block.	To construct Administration office complex	Office administration complex	Operational office complex	KNH	2021-2023	GoK PPP	1,000			200	200	
Equipping and Expansion of ICU and HDU at MTRH	To offer highly specialized management of critically ill patients	Fully equipped ICU and HDU	Operational ICU and HDU	MTRH	2018-19	GoK	80	22	22	22	16	
Construction and Equipping of Bio- Safety Laboratory (BSL 2) and Isolation Centre/ Warris at MTBH	To provide state of the art disease diagnosis	Bio-Safety Laboratory (BSL 2) Isolation Centre/ Wards	Bio-Safety Laboratory (BSL 2) Isolation Centre/ Wards	MTRH	2018-2020	World Bank	200	100	100	1		
Construction and Equipping of MTRH Rehabilitation Complex	To provide highly specialized rehabilitation programmes to clients	Rehabilitation Complex	Operational Rehabilitation Complex	MTRH	2019-2021	GoK	150		100	50	1	
Overhaul of MTRH Water and Sewerage System	To enhance effective Water and Sewerage management System	Effective Water and Sewerage System	Sewerage System	MTRH	2020 - 2022	GoK MTRH	180	1	1	06	06	1
Installation of PV Panels and utilization of Solar Power at MTRH	To enhance efficiency in Energy Management	Operational solar power system	solar power	MTRH	2018	GoK MTRH	100	100	1	1		1
Construction of Pediatric Oncology Centre at MTRH	To provide highly specialized services in Pediatric Oncology	Pediatric Oncology Centre	Pediatric Oncology Centre	MTRH	2018	GoK	150	150	1		1	1
Construction of Records Management Centre at MTRH	To offer effective records Management in the Hospital	Records Management Centre	Operational Records Management Centre	MTRH	2018-2020	GoK	150	100	20	1	1	1
Construction and Equipping of ENT Centre at MTRH	To provide specialized ENT Services	Fully Equipped ENT Centre	Operational ENT Centre	MTRH	2018	GoK	300	300	1	1	1	1
Equipping of MTRH Radiotherapy Unit	To provide treatment to Cancer Patients	Radiotherapy Unit	Radiotherapy Unit	MTRH	2018-2019	GoK/ Partners	1,000	220	403	403		1
Establishment of Cardiac Catheterization	To provide specialized care to Cardiac Patients	Cardiac Catheterization Laboratory	Operational Cardiac Catheterization	MTRH	2018-2019	GoK	200	20	150		1	
Laboratory at MTRH			Laboratory									

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame	Source of		Indicative	Indicative Budget (Kshs Millions)	shs Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
Equipping of Dialysis Centre at MTRH	To provide specialized care to Patients with Kidney allments	Dialysis Centre	Operational Dialysis Centre	MTRH	2018	GoK	80	80	1		-	1
Expansion of Multi-Calibration Laboratory at MTRH	To provide state of art centre in Calibration of Medical Equipment	Multi-Calibration Laboratory	Operational Multi-Calibration Laboratory	МТВН	2018	GoK	09	40	20		1	
Completion of Private Wing II OPD at MTRH	To provide all Outpatient services to Private/Corporate Clients under one roof	Private Wing II OPD	Operational Private Wing II	MTRH	2018- 2022	GoK	40	30	10		1	
Construction of a Burns Unit at MTRH	To provide care and treatment to Burns Patients	Burns Unit	Operational Burns Unit	MTRH	2018-2020	GoK	100	10	06	1		1
Installation of 1.5 T MRI	To provide state of the art Diagnosis for effective interventions	1.5 T MRI installed	Operational 1.5 T MRI	MTRH	2018	GoK	120	120				1
Installation of 64-Slice CT Scan	To provide state of the art Diagnosis for effective interventions	64-Slice CT Scan	Operational 64-Slice CT Scan	MTRH	2018	GoK	65	65				
Modernization of Medical Equipment	To continually modernize medical equipment in the Hospital to keep pace with changing technology	Modernized Equipment	No of Modernized equipment	MTRH	2018-2022	GoK	2,500	200	200	500	500	500
Construction of Theatre Changing Rooms	To provide conducive environment for Healthcare Workers in Theatre	Theatre Changing Rooms constructed	No. of Theatre Changing Rooms	MTRH	2018	GoK	5	5				
Construction of Organ Transplantation Centre	To provide highly specialized services in Organ Transplantation	Organ Transplantation Centre	Operational Organ Transplantation Centre	MTRH	2018-2020	GoK	300	200	100	1	1	
Construction of Orthopedic& Trauma Care Centre	To provide highly specialized services in Orthopedic and Trauma	Orthopedic & Trauma Care Centre	Orthopedic & Trauma Care Centre	MTRH	2018-2020	GoK	200	100	100	1	1	
Construction of Open Heart Surgery Unit	To provide highly specialized services in Open Heart Surgeries	Open Heart Surgery Unit	Open Heart Surgery Unit	MTRH	2018-2019	GoK	300	200	100	1	1	1

Programme/	Objective Objective	Expected Output	Indicators	Implementing	Time Frame	Source of		Indicative	Budget (K	Indicative Budget (Kshs Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
Open Heart Surgery Unit Neurosurgery Unit	To provide highly specialized services in Neuro Surgeries	Neurosurgery Unit	Neurosurgery Unit	MTRH	2018	GoK	300	300	1			
Health Infrastructure Project	re Project											
Expansion and Completion of	To improve access to quality health care	Additional components in the	Operational Equipment and	MoH, Counties	2018	GoK	48,400	9,400	9,500	9,500	10,000	10,000
Medical Equipment Services project (MES)	services	MES project provided and the project expanded into 10	components									
		more areas										
Establishment of		Four Cancer Centers		GoK	2017	GoK, Partners	13,400	400	2,500	2,500	4,000	4,000
Cancer Centers		established			-2022							
Construction	to optimize and	Complete National	National	KEMSA	2018 - 2020	Global Fund,	2,999	1,048	94	94	880	883
of National	strengthen the supply	Commodities Storage	Commodities			GOK						
Commodities	chain for multiple	center	Storage center									
Storage center	health commodities											
Establishment of	To provide basic	Primary Healthcare	No. of Primary	MoH	2018 -2022	GoK	10,000	2,000	2,000	2,000	2,000	2,000
Primary Healthcare	essential primary	Facilities Establish	Healthcare	Counties								
Facilities at	health services		Facilities									
community Level												
Construction of	To offer medical	Functional colleges	No. of colleges	KMTC	2018 -2021	PPP	1,239	13	13	13	009	009
new KMTCs in	training	and centers of	constructed									
Mandera, Taveta,		excellence										
Voi and Lamu												
Establish Regional	To ensure availability	New Cold Chains	No. of New	MoH	2018-2022	GoK	13,650	3,300	1,950	3,750	2,250	2,400
Cold Storage	of safe and high	established	Cold Chains			Donors						
Chains for Drugs	quality drugs		established									
and Vaccines												
Construction and Equipping of	To improve response to the increasing	Functional Multi- Specialty MTRH	Operational Multi- Specialty MTRH	GoK	2018 -2022	GoK, Loan	20,000	Government Guaranteed				
Multi-Specialty	NCDs							Loan				
Moi Teaching and												
Referral Hospital												

	2022/23		300			700		1,600	∞	23	200	
	2021/22	1,000	300			200		1,600	∞	23	765	
shs Millions)	2020/21	2,000	300			200		1,600	∞	23	765	
Indicative Budget (Kshs Millions)	2019/20	2,000	300	1379		700		1,600	∞	23	765	
Indicative	2018/19	1,000	300	7,035		700		1,600	∞	23	765	
	Total	0000'9	1,500	8,414		3,500		8,000	40	115	3,820	
Source of	Funds	GoK, Private Sector Donation	Partners Partners	MoH Chinse Government	-	GoK Partners		GoK Partners	GoK Partners	GoK Partners		Partners
Time Frame		2018-2022	2018-22	2018-2020		2017 -2022		2017 -2022	2017 -2022	2017 -2022	2017 -2022	
Implementing	Agency(s)	Мон	Мон	MoH Counties		MOH Partners		MOH Partners	MOH Partners	MOH Partners	MOH	Partners
Indicators		Ultra-modern laboratory complex	Infrastructure facilities improved and No of staff trained	No. of Scanners installed in hospitals		No of CHEWs trained		Number of functional Community Health Units established	No of CHVs equipped with kits	No of CHUs reporting	No of Community	Units supported
Expected Output		An ultra-modern laboratory complex for NQCL established	The infrastructure and human resource capacity at the NPHLs strengthened	Morbidity and mortality from NCDs reduced	ions Project	Trained CHEWS to improve Quality	iCCM services and community level (5000)	Number of functional Community Health Units increased (4000)	Equipped CHVs with kits (4000)	Improved data reporting at Community level	Effective nutrition	interventions at the community level
Objective Objective		To ensure quality and affordable health products and technologies	To strengthen laboratory services to be able to deal with health security challenges and threats	To offer early diagnosis and reverse trend of morbidity and mortality from NCDs	Community Health High Impact Interventi	Increase health outcomes through	community led high impact interventions	to empower communities to take charge of their own health	•	•	To reduce and control	stunting rates
Programme/	Project	Construction of an Ultra-Modern Laboratory Complex for the NQCL in Nairobi	Construction of State of the Art Research Laboratories in Kirinyaga, Uasin - Gishu and Marsabit	Computed Tomography (CT) Scanners	Community Healti	National Integrated Community Case	Management (iCCM)	Strengthen community health units			Scale-up Nutrition	Intervention at community level

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame	Source of		Indicativ	Indicative Budget (Kshs Millions)	shs Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2020/21 2021/22 2022/23	2022/23
Digital Health Flagship Project	ngship Project											
Digitization of health facilities	To transform the health care delivery system through digital health	250 Public Health facilities digitized	Digitized Public Health facilities	GoK	2018	GoK/ Development Partners	5,000	1,000	1,000	1,000	1,000	1,000
Use of Regulated Mobile health services technology	To improve health system performance	Robust Health platform in place	Robust Health platform	GoK	2018	GoK/ Development Partners	200	40	40	40	40	40
Enhance the Capacity of DHIS 2 and KMHFL to function optimally	To optimize the functionality of the national reporting systems	Enhanced DHIS 2 and KMHFL systems	Enhanced and operational DHIS 2 and KMHFL systems	GoK, UoN, WHO, UNICEF, USAID	2018 - 2022	GoK/ Development Partners	200	100	100	100	100	100
Installation of ERP System at KMTC	To automate KMTC systems	ERP system in place and operational	Operational system automated	KMTC	2017-2019	GoK	100	40	40	20	0	0
Human Resource for Heatlh	or Heatlh											
Training of Enrolled Community Health Nurses (ECHN)	To increase the skills pool in the health sector to improve the health outcomes	1200 Enrolled Community Health Nurses (ECHN) trained	No, of Enrolled Community Health Nurses trained	KMTC	2016-2021	GoK, WB	1,051	296	305	150	150	150
Training of the specialized and sub-specialized health workers		Specialized and subspecialized health workers trained	Number of specialized and sub-specialized health workers	MoH, KMTC, Counties	2018-2022	GoK Partners	1,500	300	300	300	300	300
Improving Quality o	Improving Quality of Care/Patients and Health Workers Safety	alth Workers Safety										
Improving Care of Patients	To ensure provision of high quality health	Quality health standards	No. of health facilities adopting	MoH Counties	2018-2023	GoK Partners	200	100	100	100	100	100
	services	mainstreamed in all health facilities	Quality health standards									

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame	Source of		Indicative	Indicative Budget (Kshs Millions)	hs Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
Other Priority Projects	cts										,	
Malaria, HIV and TB Program	To reduce Malaria, HIV and TB incidents	New HIV infections reduced by 75% (as in the KASF) AIDS related mortality reduced by 25%	% reduction in New HIV infections	MoH, Development Partners	2018-2022	GoK G. Fund, USG/PEPFAR CHAI UNAIDS	32,300	6,400	0,900	6,800	6,100	6,100
		Malaria Prevalence reduced	% reduction in Malaria Prevalence	MoH, Partners	2018-2022	UNODC GoK G. Fund USG/PMI	0,900	1,200	1,200	1,200	3,200	3,100
		TB prevalence reduced	% reduction in TB prevalence	MoH Partners	2018-2022	GoK G. Fund USG	10,200	2,000	2,900	2,800	1,300	1,200
Immunization Program	To reduce prevalence of vaccine preventable illnesses by increasing immunization coverage countrywide	Increase Pentavalent 3 coverage at the national level (Penta 3) from 82% (2017) to 88% in 2019; Increase Measles containing vaccine (first dose) coverage at the national level (MCV1) from 82% (2017) to 88% (2019) Increase Percentage of Counties with Penta3 coverage greater than 80% from 55% in 2019 Proportion of immunizing health facilities in the 47 counties reporting zero stock-outs for nationally available vaccines (Pentavalent)	% increase Pentavalent 3 coverage % increase Measles containing vaccine (first dose) coverage No. of Counties covered No. of Health facilities reporting zero stock-outs	MOH, Partners	2018-2022	GAM	6,310	1,050	1,050	1,290	1,395	1,525

Programme/	Objective Objective	Expected Output	Indicators	Implementing	Time Frame	Source of		Indicative	Indicative Budget (Kshs Millions)	shs Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
		From 85% to 95% in										
Scaling up Nutrition Program	n Program	2										
Stunting Reduction	Reduction in stunting rates	Reduce Stunting from 11% to 5 %	% reduction in Stunting	MoH Partners	2018-2022	GoK Development	5,780	860	096	096	1,500	1,500
Food supplements for Infants	Cushion infants against effects of	Food supplements supplied	No. of beneficiaries	MoH	2018-22	Partners MoH, Counties	1,572	324	324	324	300	300
Geriatric and Pediatric Facilities	urougint To reducing mortality rates for this vulnerable	Capacity of health workers and facilities build to handle geriatric and pediatric conditions	No of staff and facilities supported	MoH Counties	2018 -22	MoH Counties Partners	1,500	300	300	300	300	300
Reproductive, maternal, newborn, child and adolescent health	To accelerate the achievement of benefits associated with the demographic dividend.	A healthy, productive and youthful population		MoH Counties	2018-2022	GoK Development Partners	17,000	3,400	3,400	3,400	3,400	3,400
Strengthening Health Interventions in Ending Drought Emergencies	To strengthen Health interventions in drought prone areas	Uninterrupted health services in drought affected populations	No of Counties with integrated drought management systems	MoH Counties	2018-2022	MoH Counties	25,430	6,120	5,150	4,930	4,830	4,400
Building Capacity and Utilizing Natural Product Research, Innovation and Development	To promote research and utilization of natural products	Natural products mainstreamed in the treatment regimes	No of treatment regimens mainstreaming Natural products	Мон	2018-22	Gok	250	50	20	20	50	20
Control of Non- Communicable Diseases	Enhance the capacity of health workers and facilities to handle NCDs	No of staff and facilities supported in capacity building	No of staff trained No of facilities supported with equipment	MoH Counties	2018-22	MoH Counties Partners	1000	200	200	200	200	200

Programme/	Objective Objective	Expected Output	Indicators	Implementing Time Frame Source of	Time Frame	Source of		Indicative	Indicative Budget (Kshs Millions)	shs Millions)		
Project				Agency(s)		Funds	Total	2018/19	2019/20	2020/21	2021/22	2022/23
Strengthen the	To strengthen blood	Regional blood	No of operational	MoH	2018-22	MoH	863	154	154	154	200	200
Kenya National	transfusion services	centres established	regional blood	Counties		Counties						
Blood Transfusion			centres			Partners						
Service												
Modernize the	To strengthen control	Public Health	No of Public	MoH	2018-2022	MoH	4,730	1,300	1,340	790	800	200
National Public	of health security	Laboratories	Health	Counties		Counties						
Health Laboratory	threats	renovated, equipped	Laboratories			Partners						
		and staffed	renovated									
			equipped and									
			staffed									
Forensic Medicine	To provide a centre	Forensic centre	An equipped	MoH	2018-2022	GoK	000'9		100	2,000	2,000	1,900
Referral Centre	of excellence for	constructed	forensic Centre									
and Centre of	the forensic medical											
Excellence	practice, training and											
	research in country											
	and in the EA region.											
Establishment of	To strengthen the	Legal and Institutional	Legal or	MoH	2018-22	GoK	200	20	50	100	100	200
the National Public	country's capacity	framework for the	institutional									
Health Institute	in handling disease	establishment of the	framework									
	outbreaks and control	NPHI in place										

# **ANNEX II: MONITORING AND EVALUATION MATRIX**

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
Project				Agency(s)		2018/19	2019/20	2020/21	2021/22	2022/23
Social Health Protection Project	ction Project									
The Linda Mama Programme	To increase utilization of health facilities for deliveries	1.3 million women and under 1 year children reached	No of beneficiaries	MoH, NHIF	2018-022	1,230,000	1.260,000	1,300,000	1,330,000	1,365,000
Health Insurance	To increase prepaid health	Poor Households accessing	No. of beneficiaries per	MoH, NHIF	2018-2022	350,000	725,000	1,025,000	1,225,000	1,500,000
Subsidy	insurance coverage for	healthcare	year							
Programme (HISP)	the poor									
for the poor										
Health Insurance for the elderly & PWSD	To provide medical cover for elderly & PWSD	Old people have access to medical care	No of people registered & accessing healthcare	MoH/NHIF/MLSS	2018-2022	1,040,000	1,640,00	1,694,000	1,740,000	1,790,000
Elimination of User	To enable people access	All people access medical	Amount of conditional	MoH	2018 -2022	006	006	006	1,100	1,200
Fees	primary healthcare	care at primary level facilities without paying	grants disbursed (Kshs Millions)	Counties						
Informal Health	Increase health insurance	12 million informal sector	No. of people registered	MoH/NHIF/	2018-2022	4,700,000	000'009'9	9,232,000	12,000,000	12,100,000
Insurance	coverage among informal	workers access quality	for health insurance	Counties/						
Coverage	sector workers	medical care		Private sector						
Formal sector medical insurance	Expand health insurance coverage among formal	All formal sector workers access quality medical care	No of people registered for health insurance	MoH/NHIF	2018-2022	3,800,000	3,925,000	4,054,000	4,188,000	4,326,000
(retirees)	sector workers	-								
Medical Tourism Project	oject									
Development of a	To Market Kenya as	National strategy on Medical	Strategy	MOH	2018-2019		-			
national strategy on	a destination hub for	Tourism								
Medical Iourism										
Establishment of the East Africa Kidney	To build capacity in specialized renal care	East Africa Kidney Institute established and	Percentage of completion	MOH/KMTC/UON/ MoE	2018/19 – 2022/23	10	30	09	80	100
Institute (CoE for	within the EAC region	operationalized								
skills and tertiary										
education										
Establish of Trauma	Improve emergency care	Trauma centres established	Two Trauma Centres	MoH	2018-22				-	-
Centres at Makindu	and treatment									
and Rongai										
Establishment of 10 new referral	To provide specialized care and training	10 new national hospitals established	No of new hospitals established	МоН	2018-2022		2	2	೮	m
national hospitals										

Programme/	0bjective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
Project				Agency(s)		2018/19	2019/20	2020/21	2021/22	2022/23
Development of Communication & Marketing Strategy to promote Medical Tourism	To enhance marketing of medical tourism products	Medical Tourism Communication & Marketing Strategy	Strategy in place	МОН	2018 -2020			-		
Modernize Wards & Staff house-	To establish conducive environment for patients	Staff houses and wards modernized	No of wards modernized	МоН	2018-2022	5	-	<del></del>	-	-
Mathari Teaching & Referral Hospital	staff		Proportion of equipment added	МоН	2018-2022	10%	10%	10%	10%	10%
Construct a Wall & Procure Equipment at National Spinal Injury Hospital	Improve security and patient management	A wall at the hospital constructed & Improved quality of care of patient management by reducing hospital stay	No of Orthopedic Beds purchased & Hospital wall constructed	Мон	2018-2022				15	15
Construction and Equipping of Cancer Center at KNH	To alleviate accommodation challenges for patients receiving chemotherapy or radiotherapy	Bunker Linear Accelerator Peripheral facilities	% completion	MOH KNH	2018-2022	10	40	09	80	100
Construction of a 300 bed private Hospital at KNH	To serve as a subsidiary to the main hospital and generating revenue.	300 Bed Capacity Private Hospital	% completion	MOH KNH	2018-2022	2	10	40	02	100
"Hope Centre" - Palliative Care Centre at KNH	To alleviate accommodation challenges for patients receiving chemotherapy or radiotherapy	Three (3) floor accommodation building Conference facility Mall	% completion	KNH	2018-2021		30	50	100	
Upgrade of the KNH Renal Centre	To provide adequate infrastructure to handle the surging number of patients with kidney disease.	recovery room Two wards with six (6) beds Cloakrooms	% completion	MOH KNH	2018-2021		40	70	100	
Day Care Surgical Centre at KNH	To equip the surgical daycare with modern upto date equipment.	26 bed capacity Centre Four main theatres Two minor theatres endoscopy unit administration area Electro-physiology room	Operational Centre	KNH	2018-2020	40	09	20	80	100

Programme/	Objective Objective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
Project				Agency(s)		2018/19	2019/20	2020/21	2021/22	2022/23
Mother and Child Hospital at KNH	To improve pediatric and maternal health intensive care units and complementary services.	Dedicated specialized mother and Child hospital.	% of works of the specialized hospital completed	KNH	2018-2021	40	70	100		
700 bed Children's Hospital at KNH	Facilitate reorganization of services to create disease- specific centers	cancer care centre to for 128 in-patients; New born care and kangaroo unit	% of works for the Care Centre for children completed	KNH	2018-2021		30	50	70	100
2000 accommodation units, training and shopping complex	Provide boarding facilities within convenient reach for staff, students and lecturers	2000 accommodation units Shopping complex Training facilities	% of accommodation units completed	MoH KNH	2019-2022		5	20	09	100
Renovation of the main kitchen	To improve on food quality and service.	Renovation of kitchen Floor and wall Modern kitchen equipment	% of works of the renovated kitchen	KNH	2019 – 2019 -2021		30	100		
Microwave waste processor	To treat volumes of medical waste in a safe and environmental	Micro wave equipment Perimeter wall Access road	Operational waste treatment microwave	MoH KNH	2018-2019	100				
Boundary wall and modern security gate	Concrete security wall around KNH premises with a modern gate	Enhanced security at KNH	% of completed wall	KNH	2018-2020	10	50	100		
Parking site	Official parking area for KNH Staff	Parking site Street lights Modern parking management equipment	% of modern parking site constructed	KNH	2021-2022			80	100	
Administration office block.	To construct Administration office complex	Office administration complex	% of work completed of the office complex	KNH	2021-2023			20	50	100
Equipping and Expansion of ICU and HDU at MTRH	To offer highly specialized management of critically ill patients	Fully equipped ICU and HDU	% completion of ICU and HDU	MTRH	2018-19	30	09	80	100	
Construction and Equipping of Bio- Safety Laboratory (BSL 2) and Isolation Centre/ Wards at MTRH	To provide state of the art disease diagnosis	Bio-Safety Laboratory (BSL 2) Isolation Centre/Wards	% completion of Bio- Safety Laboratory (BSL 2) Isolation Centre/Wards	MTRH	2018-2020	20	100			

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
Project				Agency(s)		2018/19	2019/20	2020/21	2021/22	2022/23
Construction and	To provide highly	Rehabilitation Complex	% Completion of	MTRH	2019-2021		50	100		
Equipping of MTRH	specialized rehabilitation		Rehabilitation Complex							
Rehabilitation Complex	programmes to clients									
Overhaul of	To enhance effective	Effective Water and	Sewerade System	MTRH	2020 - 2022				20%	20%
MTRH Water and	Water and Sewerage	Sewerade System								!
Sewerage System	management System									
Installation of	To enhance efficiency in	Operational solar power	% Completion in	MTRH	2018	80	100			
PV Panels and	Energy Management	system	Installation of PV Panels							
utilization of Solar			and utilization of Solar							
Power at MTRH			Power at MTRH							
Construction of	To provide highly	Pediatric Oncology Centre	% Completion of	MTRH	2018	80	100		ı	1
Pediatric Oncology	specialized services in		Pediatric Oncology							
Centre at MTRH	Pediatric Oncology		Centre							
Construction	To offer effective records	Records Management	% Completion in	MTRH	2018-2020		%09	100%		-
of Records	Management in the	Centre	construction of Records							
Management Centre	Hospital		Management Centre							
at MTRH										
Construction and	To provide specialized	Fully Equipped ENT Centre	% Completion of ENT	MTRH	2018	20%	100%		1	
Equipping of ENT	ENT Services		Centre							
Centre at MTRH										
Equipping of MTRH	To provide treatment to	Radiotherapy Unit	% of equipping	MTRH	2018-2019	20	80	100		
Radiotherapy Unit	Cancer Patients									
Establishment	To provide specialized	Cardiac Catheterization	% of completed	MTRH	2018-2019	20%	100%		ı	ı
of Cardiac	care to Cardiac Patients	Laboratory	work on the Cardiac							
Catheterization			Catheterization							
Laboratory at MTRH			Laboratory							
Equipping of	To provide specialized	Dialysis Centre	% of equipment	MTRH	2018	20	100%			
Dialysis Centre at	care to Patients with		procured and							
MTRH	Kidney ailments		commissioned							
Expansion of	To provide state of art	Multi-Calibration Laboratory	% of work on the Multi-	MTRH	2018	40	80	100		
Multi-Calibration	centre in Calibration of		Calibration Laboratory							
Laboratory at MTRH	Medical Equipment		completed							
Completion of	To provide all Outpatient	Private Wing II OPD	% of completion of	MTRH	2018-2022	30	09	100		
Private Wing II OPD	services to Private/		Private Wing II					1		
at MTRH	Corporate Clients under									
	one roof									

Programme/	Objective Objective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
Project				Agency(s)		2018/19	2019/20	2020/21	2021/22	2022/23
Construction of a Burns Unit at MTRH	To provide care and treatment to Burns Patients	Burns Unit	% Completion of Burns Unit	MTRH	2018-2020	40	80	100		
Installation of 3.0 T MRI	To provide state of the art Diagnosis for effective interventions	3.0 T MRI installed	Acquisition of 3.0T MRI	MTRH	2018	-				
Installation of 64-Slice CT Scan	To provide state of the art Diagnosis for effective interventions	64-Slice CT Scan	Acquisition and Operational 64-Slice CT Scan	MTRH	2018	-				
Modernization of Medical Equipment	To continually modernize medical equipment in the Hospital to keep pace with changing technology	Modernized Equipment	No of Modernized equipment	MTRH	2018-2022	10	10	10	10	10
Construction of Theatre Changing Rooms	To provide conducive environment for Healthcare Workers in Theatre	Theatre Changing Rooms constructed	No. of Theatre Changing Rooms completed	MTRH	2018	-				1
Construction of Organ Transplantation Centre	To provide highly specialized services in Organ Transplantation	Organ Transplantation Centre	% completion of Organ Transplantation Centre	MTRH	2018-2020		50	100		1
Construction of Orthopedic& Trauma Care Centre	To provide highly specialized services in Orthopedic and Trauma	Orthopedic & Trauma Care Centre	% Completion of Orthopedic & Trauma Care Centre	MTRH	2018-2020		20	100	1	1
Construction and Equipping of Open Heart Surgery Unit	To provide highly specialized services in Open Heart Surgeries	Open Heart Surgery Unit	% of completion on the Open Heart Surgery Unit	MTRH	2018- 2019	09	100		1	ı
Construction and Equipping of Neurosurgery Unit	To provide highly specialized services in Neuro Surgeries	Neurosurgery Unit	% of work completed at the Neurosurgery Unit	MTRH	2018	100				
Health Infrastructure Project	e Project									
Expansion and Completion of Medical Equipment Services project	To improve access to quality health care services	100 data centers equipped with HOT equipment	100 data centers constructed and equipped with HCIT equipment	МоН	2018 -2022			21	09	19
(MES)		24 Health Facilities equipped through the Expanded Managed Equipment Service.	An additional 28 theatres added to 19 hospitals	МОН	2018-2020	24	24			

Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
Project				Agency(s)	•	2018/19	2019/20	2020/21	2021/22	2022/23
			24 hospitals equipped with CSSD equipment	МОН	2018-2020	12	12			
			11 new dialysis centers established	МОН	2018-2019	11				
			3 I.C.U centers established	МОН	2018-2019	က				
Establishment of	To improve access to	Cancer Centers established	No of cancer centres	GoK	2017 -2022		-	-	-	-
Cancer Centers	cancer services		established							
Construction	To optimize and	Complete National	Proportion (%) of	KEMSA	2018 -2020	10	30	20	70	100
of National	strengthen the supply	Commodities Storage center	National Commodities							
Storage center	cnain for multiple nealth commodities		storage center constructed							
Construction of	To offer medical training	Functional colleges and	No. of colleges	KMTC	2018 -2021		-	-	-	-
new KMTCs in		centers of excellence	constructed							
Mandera, Taveta, Voi										
and Lamn										
Establish Regional	To ensure availability of	New Cold Chains established	No. of New Cold Chains	MoH	2018-2022	6	17	30	38	47
Cold Storage Chains	safe and high quality		established							
for Drugs and Vaccines	drugs									
Construction	To improve response to	Functional Multi-Specialty	% of Completion of the	GoK	2018 -2022		20	20	100	
and Equipping of	the increasing NCDs	MTRH - Phase 1 of 2000	Multi-Specialty MTRH							
Multi-Specialty		speq	– Ph. 1							
Moi Teaching and Referral Hospital										
Construction of	To ensure quality	An ultra-modern laboratory	% of Ultra-modern	MoH	2018-2022		10	30	70	100
an Ultra-Modern	and affordable	complex for NQCL	laboratory complex done							
Laboratory Complex	health products and	established								
for the NQCL in Nairobi	technologies									
Construction of halls	To provide	Halls of residence	No of halls of residence	KMTC	2018 -2022	2	4	4	3	2
of residence for	accommodation services	constructed in 15 campuses	completed							
students with inbuilt	within campus premises	with inbuilt								
training facilities in	with training facilities to	training facilities								
15 campuses	support training									

Programme/	Objective Objective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
Project				Agency(s)		2018/19	2019/20	2020/21	2021/22	2022/23
Construction	To strengthen laboratory	The infrastructure and	% of Infrastructure	MoH	2018-22	20	30	50	20	100
of State of the	services to be able to	human resource capacity at	facilities improved and							
Art Research	deal with health security	the NPHLs strengthened	No of staff trained							
Laboratories	challenges and threats									
Computed	To offer early diagnosis	Morbidity and mortality from	No. of Scanners installed	MoH	2018-2020	37				
Tomography (CT)	and reverse trend of	NCDs reduced	in hospitals	Counties						
Scanners	morbidity and mortality									
	from NCDs									
Community High Imp	Community High Impact Interventions Project									
National Integrated	Increase health outcomes	Trained CHEWS to improve	No of CHEWs trained	MOH	2017 -2022	1,000	1,000	1,000	1,000	1,000
Community Case	through community led	Quality iCCM services and		Counties						
Management (iCCM)	high impact interventions	community level (5000)		Partners						
Strengthen	Empower communities	Number of functional	Number of functional	MOH	2017 -2022	800	800	800	800	800
community health	to take charge of their	Community Health Units	Community Health Units	Counties						
nnits	own health, establishing	increased (4000)	established	Partners						
	new community units.	Train CHEWs (5,000)	No of CHEWS trained	MoH	2018-2022	1,000	1,000	1,000	1,000	1,000
	and increasing the			Counties						
	7 - 41 - 41 - 41			Farmers						
	tunctionality of existing	Equip CHVs with kits	No of CHVs equipped	MoH	2017 -2022	2,000	2,000	2,000	2,000	2,000
	ones.	(10,000)	with kits	Counties						
				Partners						
		Train CHVs for UHC	No of CHVs trained on	MoH	2018-2022	20,000	20,000	20,000	20,000	20,000
		implementation (100,000)	OHC	Counties						
				Parmers						
		Improved data reporting at	Percentage of	MoH	2018-2022	25%	%59	75%	82%	%06
		Community level	Community Health Units	Counties						
			reporting	Partners						
Scale up Maternal		Increased demand for ANC,	No of CHEWs trained	MoH	2018-2022	1,000	1,000	1,000	1,000	1,000
and Child Health		skilled delivery, and Family		Counties						
Interventions at		Planning Services; Increase		Partners						
Community Level		demand for HIV testing	No of CHVs trained	MoH	2018-2022	10,000	10,000	10,000	10,000	10,000
5		during pregnancy. IPT for		Counties						
		malaria during pregnancy		Partners						
Scale-up Nutrition	To reduce and control	To increase the number of	No of Hospitals	MoH	2018 - 2022	47	47	47	47	47
Intervention at	macro and micronutrient	hospitals that have an in-	implementing the	Counties						
county level	deficiencies	patient feeding systems that	standardized in patient	Partners						
		meet the standards	feeding program							

health Project health To transform the health School meals and nutrition programs health To transform the health Care delivery system through digital health To improve health system digitized functionality of the Tro optimize the Enhanced DHIS 2 and functionality of the Enhanced DHIS 2 and functionality of the Enhanced DHIS 2 and functionality of the Enhanced DHIS 2 and MMFL systems  To optimize the Enhanced DHIS 2 and Enhanced DHIS 2 and functionality of the Enhanced DHIS 2 and MMFL systems  To improve the specialized operational operational trained outcomes the skills by the Health Nurses (ECHIN) to improve the specialized Specialized and subservices ship of high quality health facilities specialized health workers strained outcomes trained services trained facilities services and TB incidents HIV Infections reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality reduced by 25% (as in the KASP) AIDS related mortality and all health at the aid and all health and	Programme/	Objective	Expected Output	Indicators	Implementing	Time Frame			Yearly Targets		
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ealth Flagship Project  In of health To transform the health agulated trough digital health agulated to performance technology  To optimize the recent operations of the health agulated to another system of DHIS 2 and another to another system performance to DHIS 2 and another trained another systems of ERP To automate KMTC ERP system in place and systems of ERP To automate KMTC ERP system in place and systems of ERP To automate KMTC ERP system in place and outcomes the skills for health workers specialized and substance of the shall so the specialized Specialized health workers shalls for health workers specialized health workers stated and skills for health workers specialized health services and TB incidents and TB provision Duality Perelections reduced and TB incidents and TB prevalence reduced ERB prevalence and ERB prevalence reduced ERB prevalence ERB prevalence ERB prevalence reduced ERB prevalence ERB			To increase the number	No of schools	МоН	2018-2022	30	30	30	30	30
ealth Flagship Project  or of health To transform the health agulated through digital health agulated through digital health performance technology  the Trough digital health place and through digital health performance bechnology  To optimize the performance blace Enhanced DHIS 2 and for DHIS functionality of the Enhanced DHIS 2 and place and systems  If EMTC systems  Assource for Health sector Health Nurses (ECHN)  CHN)  To automate KMTC ERP system in place and outcomes and performance health sector Health Nurses (ECHN)  CHN)  To automate RMTC Italined operational trained outcomes systems  In improve the specialized Specialized health workers stated and skills for health workers specialized health workers stated of high quality health sector and trained outcomes skills for health workers Safety  To ensure provision Quality health standards of high quality health sectored by 75% (as in the KASF)  ADS related mortality and TB incidents by 75% (as in the KASF)  ABlaria Prevalence reduced and TB incidents  TB prevalence reduced  TB prevalence reduced			of schools that Implement	implementing the school	Counties						
eatth Flagship Project  or of health   To transform the health   Public Heath facilities   In or of health   To transform the health   Public Heath facilities   In or of health   To transform the health   Public Heath facilities   In optimize the   In optimize the   In optimize the   In outcomate KMTC   ERP system   Public Health platform in place   In outcomate KMTC   ERP system   Planth Nurses (ECHN)   In outcomes the skills   To automate RMTC   Italied   In outcomes   In outcomes   Italied   In outcomes   In outcomes   In outcomes   Italied   Italied   In outcomes   Italied			School meals and nutrition	meals and nutrition	Partners						
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the control of the co		sare delivery system	dialitized	Health facilities	100	7707	0	0	0	0	0,7
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Persource for Health  7 Emolled To increase the skills 1200 Enrolled Community pool in the health sector Health Nurses (ECHN)  10 Indicesses the skills 1200 Enrolled Community pool in the health sector Health Nurses (ECHN)  10 Indicesses the specialized To increase the sector Health Nurses (ECHN)  10 Indicesses the sector Health Nurses (ECHN)  11 Indicesses the sector Health Nurses (ECHN)  12 Indicesses the sector Health Nurses (ECHN)  13 Indicesses the sector Health Nurses (ECHN)  14 Indicesses the sector Health Nurses (ECHN)  15 Indicesses the sector Health Nurses (ECHN)  16 Indicesses the sector Health Nurses (ECHN)  17 Indicesses the sector Health Nurses (ECHN)  18 Indicesses the sector Health Nurses (ECHN)  19 Indicesses the sector Health Nurses (ECHN)  10 Indicesses the sector Health Nurses (ECHN)  10 Indicesses the sector Health Nurses (ECHN)  11 Indicesses the sector Health Nurses (ECHN)  12 Indicesses the sector Health Nurses (ECHN)  13 Indicesses the sector Health Nurses (ECHN)  14 Indicesses the sector Health Nurses (ECHN)  15 Indicesses the sector Health Nurses (ECHN)  16 Indicesses the sector Health Nurses (ECHN)  17 Indicesses the sector Health Nurses (ECHN)  18 Indicesses the sector Health Nurses (ECHN)  18 Indicesses the sector Health Nurses (ECHN)  19 Indicesses the sector Health Nurses (ECHN)  10 Indicesses the sector Health Nurses (ECHN)  11 Indicesses the sector Health Nurses (ECHN)  12 Indicesses the sector Health Nurses (ECHN)  13 Indicesses the sector Health Nurses (ECHN)  14 Indicesses the sector Health Nurses (ECHN)  15 Indicesses the sector Health Nurses (ECHN)  16 Indicesses the sector Health Nurses (ECHN)  17 Indicesses the sector Health Nurses (ECHN)  18 Indicesses the sector Health Nurses (ECHN)  18 Indicesses the sector Health Nurses (ECHN)  18 Indic		ystems	operational	automated in 45							
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Outcomes  outcomes  of the Improve the specialized Specialized and sub- shells  and skills for health workers specialized health workers isalized  outcomes  specialized health workers trained  outlify of Care/Patients and Health workers Safety  guallity of Care/Patients and Health workers Safety  Guallity of Care/Patients and Health mainstreamed in all health services  for high quality health mainstreamed in all health services  for high quality health facilities  for high quality health mainstreamed in all health services  and TB incidents  ADS related mortality reduced by 25%  Malaria Prevalence reduced  TB prevalence reduced		bool in the health sector	Health Nurses (ECHN)	Community Health Nurses							
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indiced and the control of the contr		kills for health workers	specialized health workers	and sub-specialized	Counties						
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peor		and TB incidents	by 75% (as in the KASF)	infections	Development						
peor			AIDS related mortality		Partners						
peol			reduced by 25%		:	0000					
			Malaria Prevalence reduced	% of Malaria Prevalence	MoH,	2018-2022	4	4	4	က	က
				in children under 5 yrs. of age	Partners						
brevale			TB prevalence reduced	% reduction in TB	MoH	2018-2022	2	4	4	3	
				prevalence	Partners						