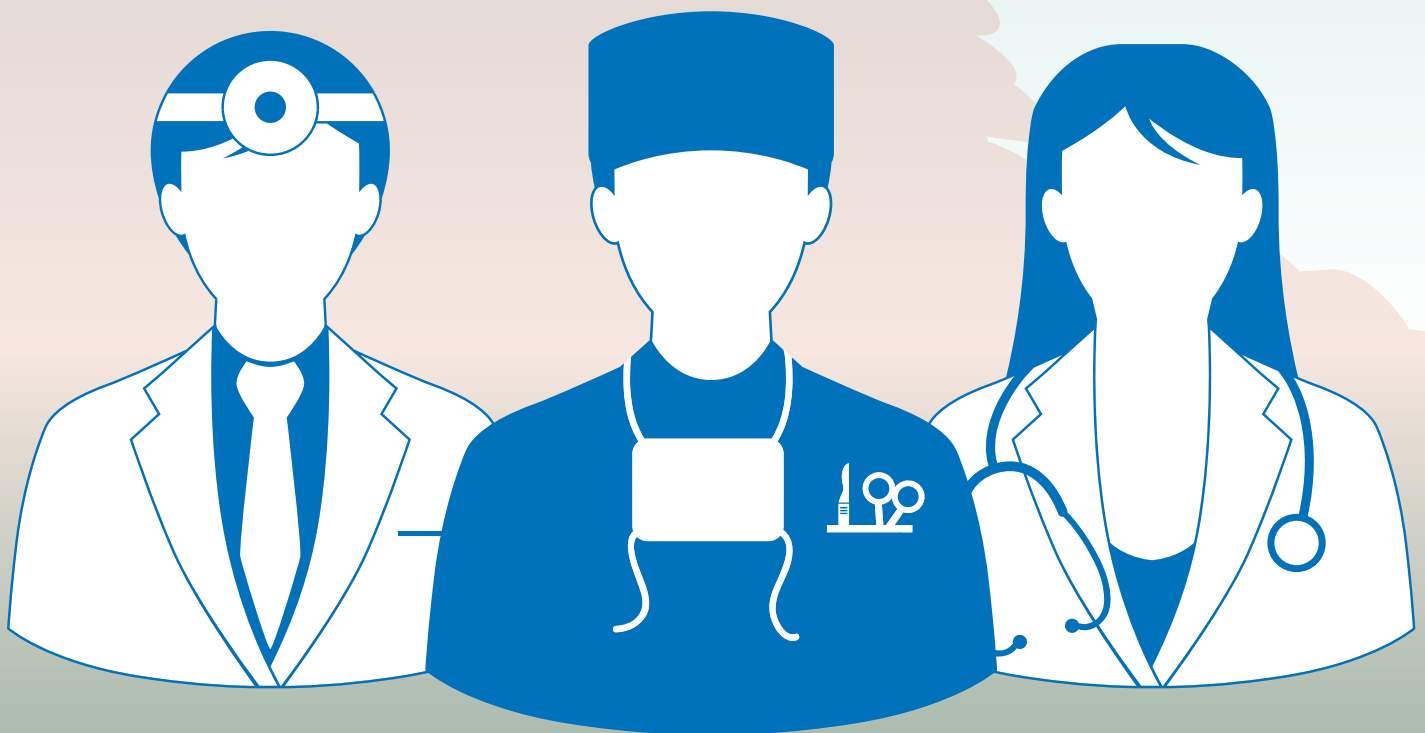




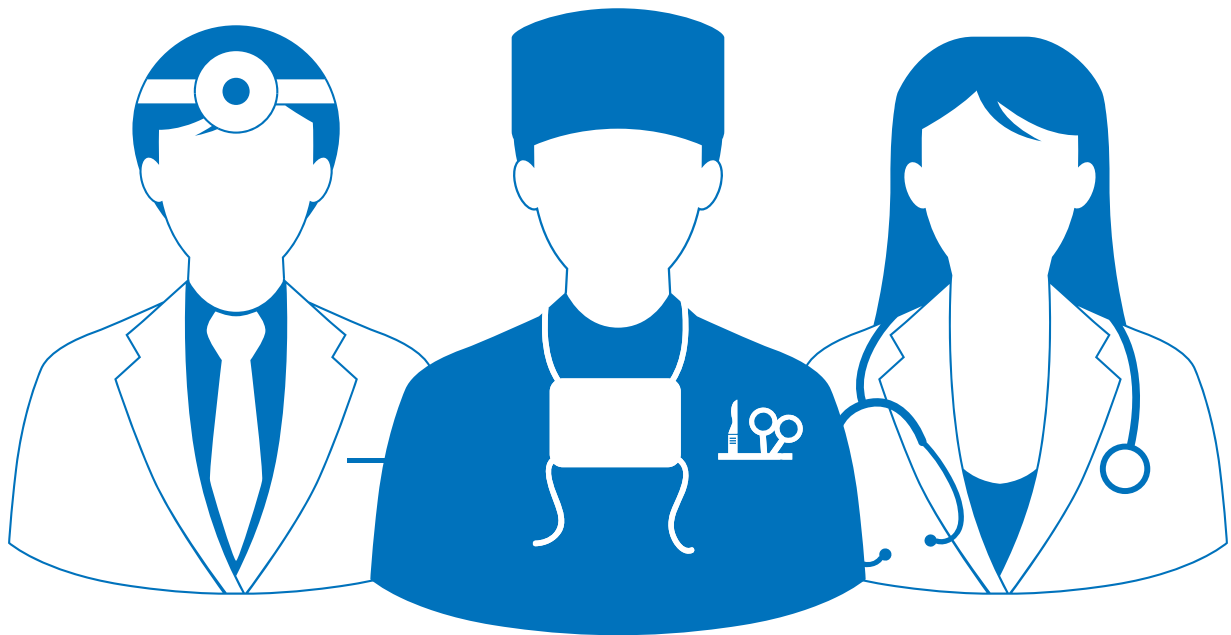
REPUBLIC OF KENYA  
MINISTRY OF HEALTH



# HEALTH SECTOR HUMAN RESOURCES STRATEGY 2014-2018



**REPUBLIC OF KENYA  
MINISTRY OF HEALTH**



## **HEALTH SECTOR**

# **HUMAN RESOURCES STRATEGY 2014-2018**

**December, 2014**

**Disclaimer: ANY PART OF THIS DOCUMENT** may be freely reviewed, quoted, reproduced or translated in full or in part, provided the source is acknowledged. It may not be sold or used in conjunction with commercial purposes or for profit.

**Health Sector Human Resources Strategy 2014 – 2018**

Published by: Ministry of Health

Afya House

Cathedral Road

PO Box 30016 00100

Nairobi, Kenya

Email: [ps@health.go.ke](mailto:ps@health.go.ke)

<http://www.health.go.ke>

*"This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID).*

*The views expressed in this document do not necessarily reflect the views of the United States Agency for International Development or the United States Government."*

# TABLE OF CONTENTS

<b>LIST OF TABLES</b> .....	<b>v</b>
<b>LIST OF FIGURES</b> .....	<b>vi</b>
<b>LIST OF ABBREVIATIONS</b> .....	<b>vii</b>
<b>FOREWORD</b> .....	<b>ix</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>x</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>xi</b>
<b>CHAPTER 1: INTRODUCTION</b> .....	<b>1</b>
1.1 Basic Socioeconomic Indicators .....	1
1.2 Disease Burden .....	2
1.2.1 Communicable Diseases.....	5
1.2.2 Non-Communicable Diseases (NCDs).....	6
1.2.3 Maternal Health .....	6
1.2.5 Lifestyle Diseases and Risk Health Factors .....	8
1.3 Purpose and objectives of human resources for health .....	8
1.4 Healthcare System and Structures.....	9
1.5 The Methodology of Developing the HRH Strategy .....	11
1.6 Guiding Principles.....	12
1.7 The Values and Principles of Public Service .....	12
<b>CHAPTER 2: POLICY CONTEXT</b> .....	<b>13</b>
2.1 The Kenya Vision 2030.....	13
2.2 The New Constitution and Devolution .....	13
2.3 Kenya Health Policy 2012-2030.....	14
2.4 Kenya Health Sector Strategic plan and Investment Plan (KHSSP III) 2013-2017 .....	15



<b>CHAPTER 3: THE CURRENT HUMAN RESOURCES FOR HEALTH.....</b>	<b>16</b>
3.1 Staffing in the Government and FBOs/NGOs Health Facilities.....	16
3.2 Staffing at KNH and MTRH.....	20
3.3 Staffing in Private Health Facilities.....	22
3.5 Attrition of Health Workers.....	30
3.6 Migration of Health Workers.....	30
<b>CHAPTER 4: HEALTH WORKFORCE PROJECTIONS AND GAPS.....</b>	<b>33</b>
4.1 Staff Projections and Gaps.....	33
4.2 Training Projections and Gaps.....	36
<b>CHAPTER 5: STRATEGIC DIRECTION .....</b>	<b>40</b>
5.1. Projected Outcomes.....	41
<b>CHAPTER 6: MONITORING AND EVALUATION PLAN.....</b>	<b>46</b>
<b>CHAPTER 7: IMPLEMENTATION PLAN.....</b>	<b>61</b>
<b>APPENDICES .....</b>	<b>62</b>
<b>APPENDIX 1: KENYA COUNTIES MAP.....</b>	<b>62</b>
<b>APPENDIX 2 A: POPULATION BY COUNTIES .....</b>	<b>63</b>
<b>APPENDIX 3: KENYA HRH COMMITMENTS .....</b>	<b>66</b>

## LIST OF TABLES

- Table 1: Population distribution by regions, 1969- 2012
- Table 2: Selected demographic indicators for Kenya, 1969-2009
- Table 3: Selected mortality rates indicators and targets for MDGs
- Table 4: Leading causes of deaths and DALY's in Kenya
- Table 5: Causes of death by region in 2012
- Table 6: Facility based maternal mortality per 100,000, 2012
- Table 7: Infant and child mortality
- Table 8: Distribution of health facilities by ownership and level of care
- Table 9: Distribution of health facilities by ownership: Major categories in 2013
- Table 10: Distribution of health facilities by type: Major categories in 2013
- Table 11: Human resource classification by gender
- Table 12: Medical personnel by region and ownership
- Table 13: Non-medical staff
- Table 14: Registered health personnel of essential cadres
- Table 15: Registered health personnel
- Table 16: Number of staff by level of care
- Table 17: Number of health worker at KNH according to cadres
- Table 18: Moi Teaching and Referral Hospital (MTRH)
- Table 19: Staff of CHAK Hospitals, December 2010
- Table 20: Staff of Muslim Health Secretariat Health Facilities
- Table 21: Summary of total permanent staff of Aga Khan University Hospitals, 2010
- Table 22: Permanent staff of Nairobi Hospital
- Table 23: KCCB personnel
- Table 24: KCCB distribution of health facilities by Diocese
- Table 25: Key Health Training Institutions and courses offered
- Table 26: Undergraduate and post graduate medical students by course 2008/09-2012/13
- Table 27: Number of Medical Officers graduating from University of Nairobi and Moi University
- Table 28: Number of Pharmacists and Dentists graduating from University of Nairobi
- Table 29: Medical specialists
- Table 30: Active Registered Medical Officers by institutions of training

Table 31: Middle level trainees in public medical training colleges

Table 32: Training gaps in Kenya Medical Training College 2008-2011

Table 33: Number of health workers in training

Table 34: Post-basic graduates from KMTC

Table 35: Nursing graduates from public and non-public institutions 2005-2010

Table 36: Attrition in MOH (MOMS & MOPHS) staff 2008-2012

Table 37: Staff establishment and exit out of the public sector

Table 38: Nurses external migration 2008 and 2009

Table 39: Projections of General Practitioners, Clinical Officers and Nurses, 2013-2030

Table 403: Projections for Oral/Dental Health cadres

Table 41: Projections for cadres in public health

Table 42: Projections for Medical Laboratory cadres

Table 43: Projections for Medical Engineering

Table 44: Projections for Medical Social work

Table 45: Summary: National HRH staffing needs

Table 46: Expected graduates by cadre, 2013-2018

Table 47: Training Requirements – 1

Table 48: Training Requirements-2

Table 49: Training Requirements – 3

Table 50: Training Requirements – 4

## LIST OF FIGURES

Figure 1: Projections of disease burden 2011 - 2030

Figure 2: KEPH Health Service Levels

Figure 3: Stocks and flows of the health workforce

Figure 4: Human Resources for Health Action Framework

## LIST OF ABBREVIATIONS

<b>AMREF</b>	African Medical Research Foundation
<b>ANC</b>	Antenatal Care
<b>ART</b>	Anti Retroviral Therapy
<b>A&amp;E</b>	Accident and Emergency
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>CDC</b>	Center for Disease Control and Prevention
<b>CHAK</b>	Christian Health Association of Kenya
<b>CHSP</b>	Community Health services personnel
<b>COC</b>	Clinical Officers Council
<b>DALYs</b>	Daily Adjusted Life Years
<b>DFID</b>	Department for International Development
<b>DMS</b>	Director of Medical Services
<b>ESP</b>	Economic Stimulus Program
<b>FBOs</b>	Faith-Based Organizations
<b>FP</b>	Family Planning
<b>GOVT</b>	Government
<b>HIS</b>	Health Information System
<b>HIV</b>	Human immuno deficiency virus
<b>HRH</b>	Human Resource for Health
<b>HRD</b>	Human Resources Development
<b>HRM</b>	Human Resources Management
<b>HRIS</b>	Human Resources Information System
<b>HW</b>	Health Worker
<b>ICC</b>	Inter-Agency Coordination Committee
<b>IMR</b>	Infant Mortality Rate
<b>IPTp</b>	Intermittent Preventive Treatment in pregnancy
<b>ITNs</b>	Insecticide Treated Nets
<b>JICA</b>	Japan International Cooperation Agency
<b>KAIS</b>	Kenya Aids Indicator Survey
<b>KCCB</b>	Kenya Conference of Catholic Bishops
<b>KeMU</b>	Kenya Methodist University
<b>KEMRI</b>	Kenya Medical Research Institute
<b>KEPH</b>	Kenya Essential Package for Health
<b>KEMSA</b>	Kenya Medical Supplies Agency
<b>KEPSA</b>	Kenya Private Sector Alliance
<b>KHSSP</b>	Kenya Health Sector Strategic and Investment Plan
<b>KMTC</b>	Kenya Medical Training College
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>KDHS</b>	Kenya Demographic and Health Survey
<b>KNH</b>	Kenyatta National Hospital

<b>KSHS</b>	Kenya Shillings
<b>L&amp;M</b>	Leadership and Management
<b>LLITNs</b>	Long Lasting Insecticide Treated Nets
<b>MDGs</b>	Millennium Development Goals
<b>MFL</b>	Master Facility List
<b>MMR</b>	Maternal Mortality Ratio
<b>MOH</b>	Ministry of Health
<b>MOMS</b>	Ministry of Medical Services
<b>MOPHS</b>	Ministry of Public Health and Sanitation
<b>MTPs</b>	Medium Term Plans
<b>MTC</b>	Medical Training College
<b>MTRH</b>	Moi Teaching and Referral Hospital
<b>NHRHSP</b>	National Human Resources for Health Strategic Plan
<b>NACC</b>	National Aids Control Council
<b>NASCOP</b>	National Aids and STD Control Programme
<b>NCDs</b>	Non Communicable Diseases
<b>NGOs</b>	Non-Governmental Organization
<b>NHIF</b>	National Hospital Insurance Fund
<b>NMR</b>	Neonatal Mortality Rate
<b>NCK</b>	Nursing Council of Kenya
<b>PAS</b>	Performance Appraisal System
<b>HTIs</b>	Health Training Institutions
<b>PHO</b>	Public Health Officer
<b>PMTCT</b>	Prevention of Mother to Child Transmission
<b>PPP</b>	Public private Partnership
<b>PSC</b>	Public Service Commission
<b>RH</b>	Reproductive Health
<b>TNAs</b>	Training Needs Assessments
<b>TB</b>	Tuberculosis
<b>TFR</b>	Total Fertility Rate
<b>TWG</b>	Technical Working Group
<b>U5MR</b>	Under 5 Mortality Rate
<b>UNICEF</b>	United Nations Children’s Fund
<b>USAID</b>	United States Agency for International Development
<b>WHA</b>	World Health Assembly
<b>WHO</b>	World Health Organization

## FOREWORD

The Government of Kenya is determined to improve access to and equity of quality essential health care services and to ensure that the health sector plays its role in the realization of Vision 2030, public service reforms and the Millennium Development Goals. We, however, recognize that it will be difficult to achieve these ambitious health milestones we have set, especially the achievement of Millennium Development Goals without improving the quality, quantity and distribution of the health workforce. Inadequate numbers of skilled human resource have had a negative impact on efforts to expand access and improve the quality of health services. This situation has been aggravated by the continued high prevalence of HIV/AIDS, tuberculosis and malaria, which remain the leading killer diseases in the country.

Kenya's health sector recognizes that human resources for health constraints are a critical ingredient hampering Kenya's health sector planning, service delivery and ultimately national health outcomes. Against this background, the sector has taken on the task of defining long-term strategies for addressing the constraints to human resource development and management so as to effectively improve health service delivery. Thus, this strategy presents an analysis of the current human resources situation in the country, the contextual factors, and some of the influences, key issues and constraints across the sector. To address these issues, the plan proposes a series of interlinked strategies to remedy the situation and improve the quality and efficiency of service delivery under the devolved system of government.

The core human resource challenges identified in the strategy cut across the sector. They span across virtually all the critical human resources areas, including policy and institutional arrangements, human resources planning, recruitment and placement, performance management and appraisal, reward and motivation, capacity building, and employee welfare. The plan proposes broad goals to address these challenges and modernize Kenya's human resources for health as a crucial element in the delivery of health services to the whole country, and particularly to areas that were hitherto underserved. In addition, the strategy incorporates the Country HRH Commitments as declared in the 3<sup>rd</sup> Global HRH Conference held in Brazil in November 2013, and strategies of its implementation.

While acknowledging the sector's long-standing human resource challenges, the Ministry of Health in collaboration with the 47 County Departments of Health is committed to providing effective leadership to facilitate the implementation of this strategy. This commitment aims to not only accelerate the achievement of the national health targets set by the Third National Health Sector Strategic Plan (NHSSP III) and the Millennium Development Goals, but also to realize Vision 2030. The County Departments of Health are therefore urged to identify with the Country HRH priorities for adoption and implementation through the County HRH Strategic Plans in line with devolved management of health workers.

We recognize that successful implementation of the strategy requires the concerted effort and commitment of a wide range of stakeholders in different health subsectors and others outside the health sector. In this regard, the National Ministry of Health and the County Health Departments will continue to provide stewardship in coordination of the sector and further strengthen future engagement processes. We strongly believe that, it is the sum total of all our efforts – big or small – that will contribute to better quality of life for our people and the reversal of the declining health status. The development of this strategy is highly welcome as it constitutes a significant addition to our HRH interventions. We are sure future editions will expand and improve on the information available in this issue, especially as the devolution of human resources for health takes shape in the country.



**Dr. Khadijah Kassachoon,**  
Principal Secretary  
Ministry of Health



**Dr. Maurice Peter Siminyu,**  
Chair of Council of County Health Executives  
County Executive Committee Member of  
Health - Busia County

## ACKNOWLEDGEMENTS

The Human Resources for Health (HRH) Strategy is the culmination of extensive consultation with the relevant stakeholders in the health sector. The Ministry of Health sincerely acknowledges the contribution and hard work of the many individuals and organizations that contributed to the development of the plan. In particular, we wish to acknowledge the valuable contribution of the Head of Directorate of Human Resources Management, for providing leadership and stewardship during the strategy development process; the Technical heads of departments of MOH for their invaluable contributions; The HRH Inter-Agency Coordination Committee (ICC) members for their insights that helped shape the strategy; the Non- Government Organizations (NGOs) in HRH ;, Faith-Based Organizations (FBOs); training institutions; regulatory bodies and professional medical associations for their contributions. Thanks also goes to the following individuals, who constituted a taskforce for development and refinement of the strategy; Dr. Janet Muriuki, Mathew Thuku, and Michael Ochieng of HRH Capacity Bridge Project; Dr Omar Ahmed of MSH; Dr Hazel Mumbo and Dr. Joyce Kinaro of Funzo Kenya; Mr. Watanabe of JICA; Ms. Rose Kirinya of CDC; Manasseh Mbocha, Shadrack Kimeu, Anne Mutua, Efumbi Waswa of MOH and Ms. Jeniffer Kiema of HRH- ICC for ably coordinating the activities of the Secretariat.

We also wish to appreciate the contributions of Dr. Maurice Siminyu, Chair of the Council of County Health Executives; Dr Ruth Muthama-Machakos County, Dr. Sammy Osore- Elgeyo Marakwet County, Ali Atemba-Busia County, Maryam Dahir-Mandera County, Leonard Opiyo Nakuru County, Perez Wawire-Clinical Officers Council, Mr. Maina Kimato, the Lead Consultant ably assisted by Mr. Domisiano Mwabu, both of whom worked tirelessly to ensure the document was completed in time; The staff of the Department of Human Resources Management Ministry of Health in collaboration with HRH Capacity Bridge Project for spearheading the coordination of the plan development process.

The health sector appreciates the financial and technical support provided by the United States Agency for International Development (USAID) through the HRH Capacity Bridge Project that is overseen by Peter Waithaka of USAID and lead by Mr. Meshack Ndolo for facilitating and supervising the development of the strategic plan. The Ministry also wishes to thank the World Health Organization (WHO) represented by Dr Humphrey Karamagi and Stephen Cheruiyot, for partly meeting the strategy development consultant's fees and taking part in the development of the plan. Further appreciation goes to all the other development partners, individuals and institutions that contributed and continues to contribute, towards the improvement of the health status of Kenyans and who joined us in our effort to formulate the most appropriate, feasible and cost-effective mix of strategies for improving the planning, management and development of human resources in the health sector. We are also indebted to individuals and organizations that supplied key human resources for health data and information, which informed our understanding of the HRH situation and helped in the development of the health workforce projections and strategies.



**Dr. Nicholas Muraguri**  
**Director of Medical Services**  
**Ministry of Health**

## EXECUTIVE SUMMARY

Human Resource for health is one of the core building blocks of a health system in any country. Global evidence points to a direct correlation between the size of a country's health workforce and its health outcomes. Over the last decade, Kenya's progress in improving the overall health status of its population has had mixed results. While life expectancy has gone up and interventions to address specific diseases including HIV/AIDs, Tuberculosis and Malaria have yielded positive results, much remains to be done.

Kenya is facing a great danger due to diseases/conditions belonging to mainly three domains, which are communicable diseases, non-communicable diseases/conditions and violence/injuries. These diseases/conditions continue to contribute to the high disease burden in the country, hence calling for more specialized human resources for health. The Constitution of Kenya 2010 devolved health services to the counties, which meant a complete change in the HRH structure and its management in the country.

The purpose of this strategy is to guide and provide a road map for HRH interventions for improved health service delivery. It builds on the successes and lessons learnt from the first National Human Resource for Health Strategic Plan.

The methodology of developing this HRH Strategy involved a desk review of various documents from the Ministry of Health and its agencies, especially in the divisions/departments of Health Information System (HIS), Human Resources/HRIS, Planning and Policy and Salaries. Additional literature and data were sought from other relevant institutions including government ministries, departments and agencies (MDAs), MOH partners who fall under HRH Inter-Agency Coordination Committee (ICC), the Kenya National Bureau of Statistics (KNBS), Internet and other sources. Key informant interviews and Focus Group Discussions (FGDs) were held with the Ministry of Health officials and stakeholders within ICC network. Two workshops were held with the all stakeholders to interrogate the preliminary findings by the Consultant. Several meetings were held thereafter with the Consultant, the TWG appointed by the ICC and the County Representatives to do further interrogation and fine-tune the draft.

The development of this strategy has been guided by the planning documents of Government of Kenya and the Ministry of Health which included Vision 2030, Constitution of Kenya 2010, Kenya Health Policy 2012-2030, and Kenya Health Sector Strategic and Investment Plan 2013-2017. The Guiding principles of this strategy include: Equity, Partnership and Collaboration, People-centered approaches, Innovation, Strong leadership and Accountability, Gender responsiveness and Rights-based approach.

The projected outcomes and strategic objectives for this strategy are as follows:

### **Outcome 1: Adequate and Equitably Distributed Health Workforce**

Strategic Objective 1.1: Strengthen recruitment of adequate numbers of health workforce with the right skills mix.

Strategic Objective 1.2: Equitable deployment and redeployment of the health workforce.

### **Outcome 2: Conducive Environment that Attracts and Retains Health Workforce**

Strategic Objective 2.1: Make work conditions more attractive

Strategic Objective 2.2: Make hard to reach and marginalized areas/stations more attractive

Strategic Objective 2.3: Make work place safe

Strategic Objective 2.4: Improve Staff wellness and welfare



**Outcome 3: Responsive Institutional Framework that Support Workforce Performance Management**

Strategic Objective 3.1: Improved Health Workforce Performance Management

**Outcome 4: Responsive HRD Systems and Practices**

Strategic Objective 4.1: Strengthened Human Resources Development Systems and Practices

Strategic Objective 4.2: Human Resource Master Plan Developed

**Outcome 5: Strengthened Human Resource Planning in HRD**

Strategic Objective 5.1: A Strong and decentralized HR planning and management

Strategic Objective 5.2: Strengthen ethics and values in HRH induction and practice

Strategic Objective 5.3: Develop HRH Communication Strategy

**Outcome 6: Adequate Financial Resources Mobilized to Support Investment in HRH**

Strategic Objective 6.1: Increase investment options for HRH

Strategic Objective 6.2: Reduced costs of HRH systems and processes

The implementation of this strategy falls under the leadership of the Principal Secretary Ministry of Health and Chief Officers of Health in the Counties in collaboration with Directorate of Public Service Management, Public Service Commission and County Public Service Boards and the Inter-Agency Coordination Committee of HRH at the National and County Levels. The implementation of this strategy will be guided by the indicators and targets set out in results framework. Annual action plans will be developed to guide the implementation of the strategy within the planning period.

The Directorate of Human Resources Management supported by Inter-Agency Coordination Committees (ICCs) will be entrusted with Monitoring and Evaluation of this strategy. An M&E Technical Working Group (TWG) consisting of 5-10 people will be appointed from the membership of ICCs to be in charge of M&E of this plan.

# CHAPTER 1: INTRODUCTION

Health with its socio-economic underpinnings remains one of the major global challenges and an important obstacle to human capital development. Important international milestones in the struggle for health include the Alma Ata Declaration on Primary Health Care, Roll Back Malaria, the Abuja and Maputo Declarations, Millennium Summit and many others. These milestones provided the platform for health sector planning and development in the country and as an international yardstick for which progress is assessed.

Human Resources for health are one of the core building blocks of a health system. Global evidence points to a direct correlation between the size of a country's health workforce and its health outcomes. In 2006, the World Health Organization (WHO) alerted the world of a shortfall of 4.3 million trained health workers, with the worst shortages being experienced in the poorest countries in Africa. The direct result of this is that millions of people die or are disabled every year. The WHO (2006) report says Kenya is one of the 57 countries in the world that face a severe health workforce crisis and is one amongst the 36 within sub-Saharan Africa.

Over the last decade, Kenya's progress in improving the overall health status of its population has been mixed. While life expectancy has gone up and interventions to address specific diseases including HIV/AIDs, Tuberculosis and Malaria have yielded positive results, much remains to be done. Geographic and gender disparities in health indicators persist and the country continues to face a significant threat from major communicable diseases and rapidly growing non-communicable diseases.

## 1.1 Basic Socioeconomic Indicators

The population of Kenya has been growing steadily from 10,942,705 people in 1969 to 38,610,097 people in 2009 as shown in Table 1. Projections for 2012 placed it at 42,387,216 an increase of about 3.8 million people in three years (Appendix 2). The Kenya 2013 Index report estimated the Kenya population to have reached 44,037,656. The increase in population has great implications for human resources for health as large population strain resources leading to ill health and other social evils. This calls for a vibrant health care system with adequate, skilled and well distributed human resources to deal with diseases and other ailments.

**Table 1: Population distribution by regions, 1969- 2012**

Census					
Province	1969	1979	1989	1999	2009
Nairobi	509,286	827,775	1,324,570	2,143,254	3,138,369
Central	1,675,647	2,345,883	3,111,255	3,724,159	4,383,743
Coast	944,082	1,324,794	1,825,034	2,487,264	3,325,307
Eastern	1,907,301	2,719,851	3,768,689	4,631,779	5,668,123
North Eastern	245,757	373,787	371,391	962,143	2,310,757
Nyanza	2,122,045	2,643,956	3,507,160	4,392,196	5,442,711
Rift Valley	2,210,289	3,240,402	4,917,551	6,987,036	10,006,805
Western	1,328,298	1,832,663	2,622,397	3,358,776	4,334,282
<b>Kenya</b>	<b>10,942,705</b>	<b>15,309,111</b>	<b>21,448,047</b>	<b>28,686,607</b>	<b>38,610,097</b>

Source: National HIS Annual Report 2012 (Draft).

Table 2 shows basic health indicators and compares them with the population growth based on the five censuses carried out in Kenya since 1969. According to the table, the total fertility rate (TFR)

decreased from 7.6 in 1969 to 4.6 in 2009 and was estimated at .8 in 2013. The Infant Mortality Rate (IMR) decreased to 66 per 1000 live births but rose again to 77.3 in 1999, declined to 52 in 2009 and to 42.2 in 2013. While these are good indicators for a country that is struggling with economic growth and to overcome disease burden, poverty and social evils, the population is increasing at an alarming rate of three percent per annum which is likely to reverse these significant gains.

**Table 2: Selected demographic indicators for Kenya, 1969, 1979, 1989, 1999 and 2009**

Indicator	1969	1979	1989	1999	2009
Population(millions)	10.9	16.2	23.2	28.7	38.6
Density (pop/km <sup>2</sup> )	19.0	27.0	37.0	49.0	67.7
Percent urban	9.9	15.1	18.1	19.4	21.0
Crude birth rate	50.0	54.0	48.0	41.3	34.8
Crude death rate	17.0	14.0	11.0	11.7	-
Inter-censual growth rate	3.3	3.8	3.4	2.9	2.8
Total fertility rate	7.6	7.8	6.7	5.0	4.6
Infant mortality rate (per 1000 births)	119	88	66	77.3	52.0
Life expectancy at birth	50	54	60	56.6	58.9

**Source: MOH HIS Annual Report 2012 (Draft)**

Table 3 shows selected mortality rates for 1990 to 2010 with their associated MDG targets. As indicated, most mortality indicators show much improvement in 2010 compared to 1990. For instance, neonatal mortality rate (NMR) declined from 31 percent in 1990 to 27 in 2010 and is expected to drop to 10 percent in 2015. Infant mortality rate (IMR) reduced from 64 per 1,000 in 1990 to 55 per 1,000 in 2010 and is expected to reduce further to 21 per 1,000 in 2015. The under-five mortality rates (U5MR) also dropped from 99 percent in 1990 to 85 in 2010 and is expected to drop to 33 percent in 2015. The other key indicator is the maternal mortality ratio (MMR) which dropped from 600 per 100,000 live births in 1990 to 358 per 100,000 live births in 2010.

**Table 3: Selected mortality rates indicators and targets for MDGs**

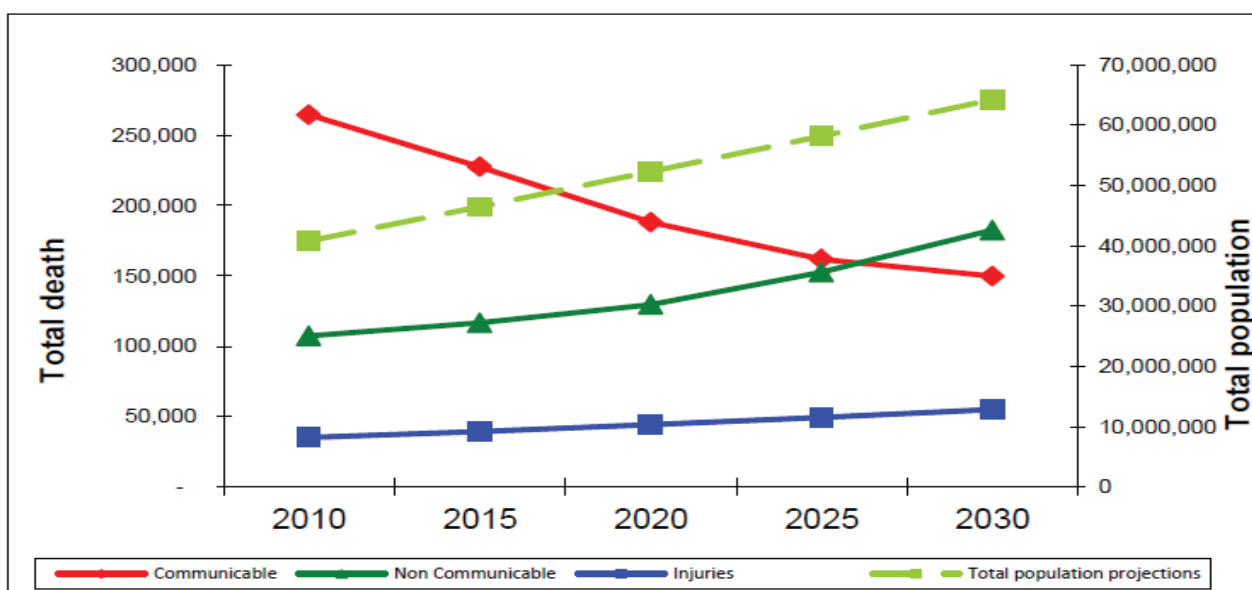
Mortality Rate/Year	1990	2005	2006	2007	2008	2009	2010	2015 MDG Target
Neonatal Mortality Rate (NMR)	31	30	30	29	29	28	27	10
Live Infant Mortality Rate (IMR)	64	61	60	59	57	56	55	21
Under Five Mortality Rate (U5MR)	99	98	95	92	89	87	85	33
Maternal Mortality Ratio (MMR)	600	409	399	388	378	368	358	150
Adult Male Mortality Rate (AMR)	-	435	423	410	400	390	380	-
Crude Death Rate (CDR)		12	12	12	11	11	-	-

**Source: WHO, World Bank Database (2012).**

## 1.2 Disease Burden

Three disease domains (communicable diseases, non communicable conditions and violence/injuries) continue to contribute to the high disease burden in the country. As shown in Figure 1, trends suggest non communicable conditions will continue to increase in the coming years, if not checked.<sup>1</sup>

<sup>1</sup> Health Sector Strategic and Investment Plan 2013-2017.



Source: Health Sector Strategic and Investment Plan 2013-2017.

Figure 1: Projections of disease burden 2011 - 2030

Table 4 shows the leading causes of death and Disability Adjusted Life Years (DALY) in the country. Among the three disease domains mentioned above, HIV/AIDS contributes about 19 percent making it the leading cause of death in the country. Other causes of death are the conditions arising during the peri-natal period (9 percent), lower respiratory infections (8.1 percent), tuberculosis (6.3 percent) and diarrhoea diseases (6 percent). Road accidents and violence contribute 1.9 percent and 1.6 percent respectively. On the other hand, HIV/AIDS is the leading cause of DALYs in the country followed by the conditions arising during the peri-natal period (10.7 percent), malaria (7.2 percent) and lower respiratory infections (7.1 percent).

Table 4: Leading causes of deaths and DALY's in Kenya<sup>2</sup>

Causes of death			Causes of DALY's		
Rank	Disease or injury	% total deaths	Rank	Disease or injury	% total DALYs
1	HIV/AIDS	29.3	1	HIV/AIDS	24.2
2	Conditions arising during the peri-natal period	9.0	2	Conditions arising during the peri-natal period	10.7
3	Lower respiratory infections	8.1	3	Malaria	7.2
4	Tuberculosis	6.3	4	Lower respiratory infections	7.1
5	Diarrheal diseases	6.0	5	Diarrheal diseases	6.0
6	Malaria	5.8	6	Tuberculosis	4.8
7	Cerebral-vascular disease	3.3	7	Road traffic accidents	2.0
8	Ischemic heart disease	2.8	8	Congenital anomalies	1.7
9	Road traffic accidents	1.9	9	Violence	1.6
10	Violence	1.6	10	Uni-polar depressive disorders	1.5

DALY's = Disability Adjusted Life Years.

Source: GOK 2010. Review of the Kenya Health Policy Framework, 1994 – 2010.

The Kenya Health Policy (2014-2030 estimates that communicable, non communicable and Violence/injuries will contribute to 290,000 deaths in 2030 (i.e. 5.4 deaths per 1,000 persons), down from 420,000 deaths in 2010 (i.e. 10.6 deaths per 1,000 deaths).<sup>3</sup> The Policy anticipates significant reduction in some conditions such as HIV/AIDS and Malaria, and the increase in other conditions such as cancers, cerebrovascular and ischaemic heart diseases.

<sup>2</sup> DALY's means Disability Adjusted Life Years – Time lost due to incapacity arising from ill health.

<sup>3</sup> Kenya Health Policy 2012-2013. Ministry of Health.

The top five causes of outpatient morbidity in Kenya are Malaria, Diseases of the Respiratory System (including pneumonia), Skin Diseases, diarrhea and accidents accounting for about 70 percent of total causes of morbidity. Malaria contributes about a third of total outpatient morbidity.<sup>4</sup> The incidence of malaria declined from 32.8 percent in 2008 to 24 percent in 2012, a reduction of 22.7 percent. However, the disease of the respiratory system (including pneumonia) continued to increase. For instance, in 2008 the incidence stood at 27.6 percent but increased to 34 percent in 2012, an increase of 18.8 percent. But the incidence of pneumonia in particular declined from 3.5 percent in 2008 to 2.9 in 2012. In 2011, the other disease of the respiratory system was the leading cause of morbidity for the under five years in all regions except Eastern, Nyanza and Western. In Eastern, Nyanza and Western, clinical malaria was the leading cause. Apart from Nyanza and Western regions, diseases of the respiratory system were the leading cause of morbidity for the over five years in 2011. The diseases of the skin (including ulcers) have continued to increase over the years. In 2008 the incidence was 7 percent declining slightly to 6.8 in 2011 but rose to 7.8 in 2012. The incidence of diarrhea also increased from 4.9 percent in 2008 to 5.3 percent in 2012, a change of 7.5 percent.<sup>5</sup>

In 2011 malaria was the leading cause of inpatient morbidity for the under five years as indicated by 6,896 cases. It was also the leading cause of morbidity for the over five years in which 7,074 people were infected. The second leading cause of inpatient morbidity in 2011 for both the under five and over five was intestinal infectious diseases in which 4,484 and 2,666 people were infected, respectively. The acute upper respiratory infection was the third leading cause of inpatient morbidity in 2011 for the under five as indicated by 3,589 cases. In the same year, HIV was the third leading cause of inpatient morbidity for over five years with 1,490 cases.<sup>6</sup>

As Table 5 indicates, pneumonia was the leading cause of death in 2012 leading to 19,011 fatalities with Central region leading with 4,680 cases. Malaria was the second with 18,746 cases, with Western leading with 5,872 cases. Cancer has been on the rise with statistics for 2012 showing that it caused death of 11,863 people and was the third leading killer in that year. As shown in the table, 173,912 people were reported to have died from various causes in 2012.<sup>7</sup>

**Table 5: Causes of Death by Region in 2012**

Cause of death	Nairobi	Central	Western	Coast	Nyanza	Eastern	North Rift	South Rift	North Eastern	Total
Tuberculosis	1190	1121	1133	787	1637	1632	714	909	113	9236
Cancer	1041	1993	1985	859	2092	1492	1044	1297	60	11863
Malaria	831	786	5872	1443	4520	2672	1310	1085	227	18746
Meningitis	694	556	373	322	849	377	286	490	21	3968
Anaemia	459	793	1329	1029	1288	833	522	606	72	6931
Heart disease	1438	615	390	278	854	1063	297	519	38	5492
Pneumonia	1971	4680	1964	1236	2383	2410	1385	2903	79	19011
AIDS	865	1310	1686	900	1579	869	1033	1171	23	9436
Road traffic accidents	797	721	243	432	707	536	357	620	44	4457
Other accidents	1156	534	325	366	405	432	394	509	10	4131
Other diseases	9390	11242	10667	7510	12980	12593	11872	3079	1308	80641
Total	19832	24351	25967	15162	29294	24909	19214	13188	1995	1739122

Source: Economic Survey, 2013.

<sup>4</sup> Republic of Kenya, Health Sector Working Group Report; Medium Term Expenditure Framework (MTEF), 2013-2015, 16. October 2012.

<sup>5</sup> Kenya National Bureau of Statistics, Economic Survey 2013 and Ministry of Health, Health Information System Annual Report 2012 (Draft).

<sup>6</sup> Ministry of Medical Services, Health Facts and Figures, 2012.

<sup>7</sup> Kenya National Bureau of Statistics. Economic Survey, 2013.

Below is a brief discussion of some of the major disease conditions which belong to the life threatening three disease domains (communicable, non communicable and accidents/injuries) and have implications on human resources for health.

### 1.2.1 Communicable Diseases

#### HIV/AIDS

The HIV/AIDS epidemic has evolved to become one of the biggest impediments to health and development since 1984 when the first case of HIV was identified in Kenya. Since the epidemic began, it has claimed the lives of 1.7 million people in the country. In 2011, an estimated 49,126 people died in the country due to HIV-related causes.<sup>8</sup>

HIV/AIDS is estimated to be the leading cause of death in the coming years accounting for about 30 percent of deaths. HIV/AIDS together with other infectious diseases such as Malaria, Lower respiratory infections and TB account for almost half of all DALYs in Kenya.<sup>9</sup>

HIV prevalence estimate varies widely across regions and counties, but estimates from the 2008/09 Kenya Demographic and Health Survey (KDHS) placed the prevalence rate at 6.3 percent, slightly lower than the KDHS 2003 of 6.7 percent.<sup>10</sup> The KAIS 2012 placed the prevalence at 5.6 percent. The survey reveals that the prevalence was highest among those aged between 45 and 54 years, and is slightly higher among urban than rural populations. Nyanza region registered the highest prevalence.

An estimated 1.6 million Kenyans were living with HIV as of December 2011 which represents nearly four-fold increase over the 400,000 people estimated to have been living with HIV in Kenya in 1990. As people living with HIV are living longer as a result of improved access to HIV treatment, it is anticipated that the total number of HIV-infected individuals in Kenya will continue to increase, approaching 1.8 million by 2015<sup>11</sup>. UNAIDS (2008) says Kenya has the third largest population of people living with HIV in sub-Saharan Africa and the highest national HIV prevalence of any country outside Southern Africa<sup>12</sup>. In 2011, approximately 6.2 percent of adult population became infected. Every year, about 0.5 percent of Kenyan adult population (or 1 out of 200) becomes newly infected<sup>13</sup>.

Statistics for 2012 show that there were a total of 707,455 HIV positive patients, 523,276 were currently on ARVs but 183,479 had not started on ARVs. The three leading counties HIV infections were Homa Bay, Kisumu and Siaya with 61,340, 60,127 and 48,944 HIV positive patients respectively. The three counties are located in Nyanza region. Despite the fact that the pace of new HIV infections have slowed in Kenya, the number of new infections remains high. Based on current trends, it is projected that the number of new HIV infections will continue their slow but steady decline, with 81,972 new infections among people over age 15 expected in 2013.<sup>11</sup>

#### Tuberculosis (TB)

Tuberculosis infections have been on the increase ever since the advent of HIV/AIDS in 1984. These infections are as a result mostly of opportunistic infections relating to immune system suppression due to HIV. In 2012, Nairobi (20,102), Nakuru (7,621), Mombasa (5,270), Homa Bay (4,365) and Migori (4,236) had the highest cases of TB recording. On the other hand, Lamu (222), Isiolo (434), Wajir (570), Tana River (572) and Taita Taveta (585) recorded the lowest number of cases. In total the country lost 5,866 due to TB, with the highest number being recorded in Nairobi (758), Siaya (520) and Kiambu (329). A total of 40,272 TB patients tested HIV positive with Nairobi being leading county with 6,230 cases.<sup>12</sup>

#### Malaria

Nearly 28 million Kenyans live in areas of malaria risk, majority being children under the age of 15 years. Investments in malaria control over the last five years have had impact on the overall morbidity

<sup>8</sup> Kenya Aids Epidemic Update 2012, NACC, Office of the President.

<sup>9</sup> Health Sector Strategic and Investment Plan 2013-2017.

<sup>10</sup> Republic of Kenya, 2012. Health Sector Working Group Report. Medium Term Expenditure Framework 2012/13-2015/16.

<sup>11</sup> The Kenya Aids Epidemic Update 2012, Office of the President, National Control Council.

<sup>12</sup> Ministry of Health, Division of Health Information Systems.



and mortality that is due to malaria. Malaria Incident Survey 2010 shows that children aged between 5-14 years have the highest incidence of malaria at 13 percent. The prevalence in children below five years increased from 4 percent in 2007 to 8 percent in 2010. Malaria prevalence is nearly three times as high in rural areas (12 percent) as in urban areas (five percent). The lake zone has the highest prevalence of malaria overall (38 percent) while the prevalence in other areas is less than five percent.<sup>13</sup> The malaria endemic zones in the country are Coast, Nyanza (except Kisii, Gucha and Nyamira) and Western (except Mt. Elgon, Lugari and Likuyani).<sup>14</sup> In 2011 for instance, clinical malaria was the leading cause of morbidity in Nyanza Region and Western regions accounting for 31.3 and 32.1 percent respectively.<sup>15</sup>

Nationally clinical malaria accounts for up to 30 percent of outpatient attendance and 19 percent of the admissions to health facilities, and is a leading cause of death in children under five years. It is responsible for extensive mortality and morbidity, especially of children and it saps the vitality of the workforce and diverts resources needed for development of the country.<sup>16</sup>

### 1.2.2 Non-Communicable Diseases (NCDs)

There were 1,976,337 NCDs cases in 2012. Accidents were leading with 846,083 cases, followed by hypertension with 453,745 cases. Nairobi and Kiambu led all other counties in NCDs with 155,899 and 126,754 cases respectively.

### 1.2.3 Maternal Health

Nationally the average attendance for antenatal care (ANC 1) is (68.5 percent), ANC 4 (30.4 percent), IPTp2 were 19.8 percent in 2012. The attendance shows high and low attendance for ANC 1 and 4 respectively. ANC 1 attendance was highest in the following counties: Lamu (100.3 percent), Nyeri (96.3 percent), Mombasa (96.1 percent) and Taita Taveta (88.3 percent). The following counties had the lowest attendance: Laikipia (47 percent), Makueni (45.5 percent), Tharaka Nithi (45.6 percent), Machakos (41.7 percent) and Wajir (34.6 percent).<sup>18</sup>

Nationally in 2012 the new ANC clients were 1,132,926 out of which 1,094,617 were tested for HIV and 45,306 tested HIV positive. This shows a test rate of 96.6 percent and positivity rate of 4.1 percent. The majority of those tested positive were from Nairobi (7,907) followed by Kisumu (3,765) and Homa bay (3387) The counties with the least number of clients who tested negative were Mandera (10), Wajir (15) and Tana River (49) *ibid*.

Table 6 shows facility based mortality per 100,000 in 2012 was 135.3 cases. West Pokot reported the highest rate of 395.1 per 100,000 followed by Lamu (371.4 per 100,000) and Garissa (338.1 per 100,000). Nyamira, Muranga and Isiolo reported the lowest rate of 27.4, 39.3 and 47.4 per 100,000, respectively.

**Table 6: Facility based maternal mortality per 100,000, 2012**

County	Facility Maternal Mortality Ratio per 100,000
West Pokot	395.1
Lamu	371.4
Garissa	338.1
Uasin Gishu	306.1
Mombasa	304.3
Mandera	298.1
Samburu	294.6
Turkana	257.1
Taita Taveta	223.2
Marsabit	220.9

<sup>13</sup> MOPHS, KNBS & ICF Macro (2011). 2010 Kenya Malaria Indicator Survey.

<sup>14</sup> Ministry of Health, Health Information System Annual Report 2012 (Draft).

<sup>15</sup> *Ibid*.

<sup>16</sup> *Ibid*.

County	Facility Maternal Mortality Ratio per 100,000
Bomet	202.8
Busia	202.1
Bungoma	198.2
Baringo	195.4
Trans-Nzoia	193.8
Kilifi	188.9
Elgeyo-Marakwet	186.7
Makueni	186.1
Kitui	185.8
Narok	181.1
Kisumu	174.1
Kakamega	169.6
Kwale	155.4
Kajiado	149
Nyeri	132.8
Meru	123.6
Siaya	117.1
Migori	112.4
Wajir	109.3
Embu	107.8
Nakuru	107.7
Machakos	103.1
Vihiga	100
Homa Bay	97.1
Kiambu	94.8
Kirinyaga	93.2
Kericho	91.2
Tana River	88.8
Laikipia	73.4
Tharaka Nithi	66
Nandi	62.9
Kisii	62
Nyandarua	57.6
Nairobi	57.1
Isiolo	47.4
Muranga	39.3
Nyamira	27.4
Kenya	135.3

Source: MOH HIS Report 2012

### 1.2.4 Child Health

Since 1948 infant mortality has declined from 184 per 1,000 live births to 52 per 1,000 live births in 2009. The under five mortality has also declined from 219 per 1,000 live births to 74 per 1,000 live births in 2009 as shown in Table 7.

**Table 7: Infant and child mortality**

Year	Infant Mortality Rate (per 1,000 live births)	Under 5 Mortality Rate (per 1,000 live births)
1948	184	-
1962	126	219
1969	119	190
1979	104	157
1989	59	113



Year	Infant Mortality Rate (per 1,000 live births)	Under 5 Mortality Rate (per 1,000 live births)
1993	62	93
1998	74	112
2000	73	116
2003	77	115
2006	60	92
2008-09	52	74

**Source: Ministry of Medical Services, Health Facts and Figures, 2012.**

The common diseases against which immunization is given include tuberculosis, polio, tetanus, rubella, mumps, whooping cough, and diphtheria.<sup>17</sup> In 2008 North Eastern was leading with 89 percent coverage and the least was Rift Valley and Eastern (each with 64 percent). In 2009 Central was leading but North Eastern was the last by recording 67 percent coverage. In 2010 Nairobi and Central were the leading each recording 96 percent coverage. The least in that year was North Eastern with 57 percent. Central was leading in 2011 with 99 percent coverage with the least being Western. In 2012 Nyanza recorded 100 percent coverage with North Eastern recording 60 percent coverage.<sup>18</sup>

### 1.2.5 Lifestyle Diseases and Risk Health Factors

Lifestyle related diseases such as hypertension, diabetes, heart disease and cancers are increasing, hence posing a threat to the health care system in terms of diverting resources from basic health care services.<sup>19</sup> Kenyans also face a number of risk factors to health which include unsafe sex, suboptimal breastfeeding, alcohol and tobacco use, and substance abuse, obesity and physical inactivity, amongst others.

### 1.3 Purpose and Objectives of Human Resources For Health

Kenya's health care system faces critical human resources for health demands which are similar to the health systems in many African countries. Recognizing that human resource demands are an integral part of the challenges confronting the National Health System, the Kenya HRH Strategy is one of the steps the national and county governments in collaboration with partners are taking to strengthen the human resources for health in order to deliver quality health services more efficiently. There are myriads of challenges facing the Kenya's human resources for health which includes severe shortages of essential cadres, persistent inability to attract and retain health workers, poor and uneven remuneration among cadres, poor working conditions, inadequate or lack of essential tools and medical and non-medical supplies, the unequal distribution of staff, diminishing productivity among the health workforce, and poor leadership and governance etc. The purpose of this strategy is to guide and provide a road map for HRH interventions for improved health service delivery.

The first National HRH Plan for the period 2009-2012 was aimed at supporting the National Health Sector Strategic Plan II goal of reducing health inequities and reversing the decline in the key health indicators. This strategy builds on the success and lessons learnt from the first National Human Resource for Health Strategic Plan. It will be linked to the Kenya Health Policy 2014-2030 and Kenya Health Sector Strategic and Investment Plan 2013-2017. The constitution of Kenya 2010 has devolved health functions to the counties with the national government mandate being health policy formulation and coordination, capacity building and technical assistance to the counties and the national referral health facilities. This strategy takes cognizance of the changes brought about by the implementation of the constitution which has great implications for human resources for health.

<sup>17</sup> Immunization services in Kenya is based on an immunization schedule from the time when the mother is pregnant as TT has to be administered. Immediately after birth the newborn starts the vaccination by receiving BCG and OPV birth dose. The other antigens namely OPV, DPT/Hep/Hib and PCV are administered at 6weeks, 10 weeks and 14weeks. Measles and Yellow Fever (high risk areas) are administered at 9months. The schedule emphasizes that a child should receive all the doses within the first year of life to be fully immunized.

<sup>18</sup> KNBS, Economic Survey 2013.

<sup>19</sup> Ministry of Public Health and Sanitation Strategic Plan, 2008-2012.

The specific objectives of this strategy are as follows:

- Align the development of HRH Strategy to the Kenya Health Sector Strategic and Investment Plan 2013-2017, Public Service Commission Act 2012 and other evidence based HRH proposals, reports and assessments;
- Articulate future HRH investments areas, HRH coordination mechanism in the National HRH Strategic plan;
- Outline implementation framework for identified HRH priorities, budgetary estimates, resource mobilization plan, monitoring and evaluation plan and tools, and the implementation structures to support implementation of the identified priorities.

#### 1.4 Health Care System and Structures

Kenya has a wide range of health facilities operated by the Government, Faith-based Organizations (FBOs), Non-Governmental Organizations (NGOs), international organizations and private sector spread across the country totaling to 7,795. The government leads with ownership of health facilities with a total of 3,956 followed by private sector with 2,652 as shown in Table 8.<sup>20</sup>

Besides health facilities there are other accredited public and private institutions that offer advance medical training. The Kenya Medical Supplies Agency (KEMSA) procures and provides drugs, and other medical and non-medical supplies to all public health facilities. The National Hospital Insurance Fund (NHIF) finances or subsidizes medical bills for members and their dependants. Other public agencies include NACC and NASCOP (deals with prevention and treatment of HIV/AIDS).

There also exists numerous institutions in Kenya run by private sector, faith based organizations and NGOs that provide medical training and research. They include institutions such as medical training centres, universities (e.g. KeMU, Mount Kenya University, University of East Africa at Baraton), research centres such as Centre for Disease Control and Prevention (CDC), AMREF, etc.

**Table 8: Distribution of health facilities by ownership and level of care**

Key Health Infrastructure	Community	Primary Care facilities					County hospitals	National hospitals	Total
		Dispensaries	Health Centres	Medical Clinics	Maternity homes	Nursing homes			
Government		2954	682	35	1	0	268	16	3956
Faith Based		561	166	61	3	11	79		881
NGO's		200	24	73	4	5			306
Private		196	60	2,098	32	150	116		2652
Total		3911	932	2267	40	166	463	16	7795

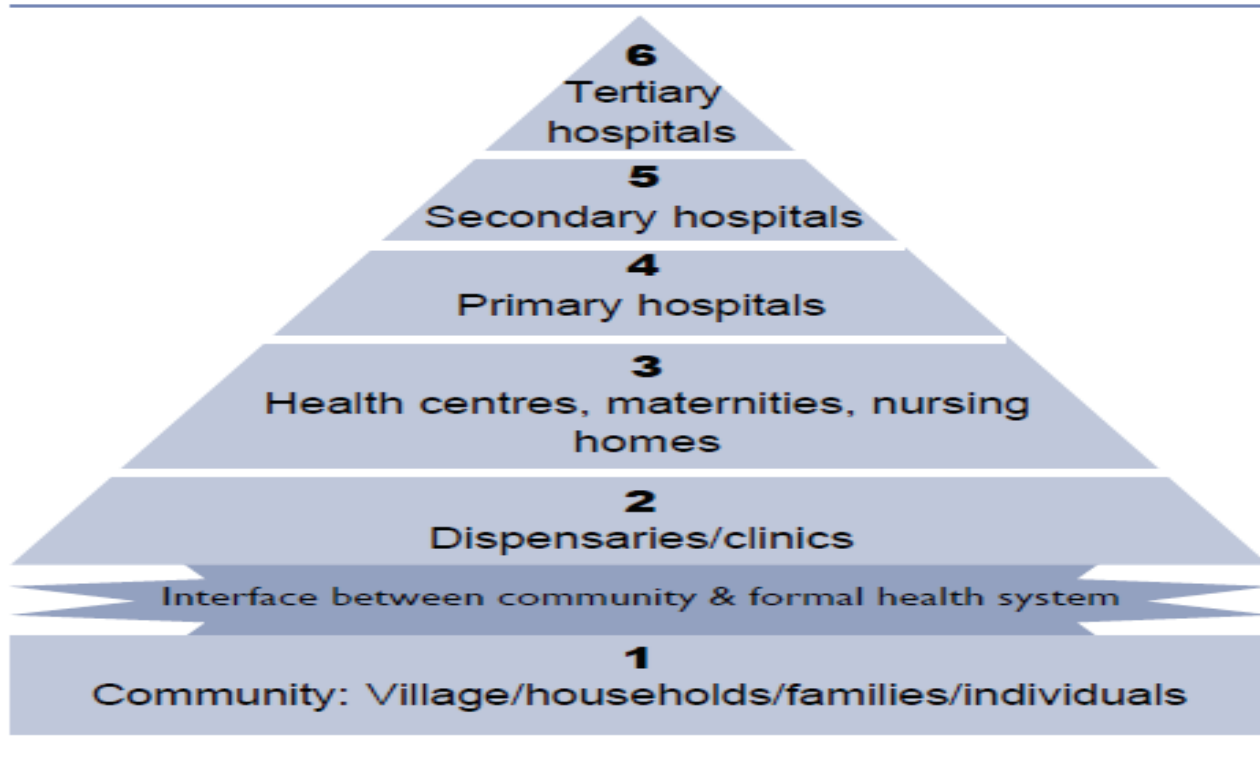
Source: KHSSP 2013-2017.

National Health Sector Strategic Plan II introduced the Kenya Essential Package for Health (KEPH) which defines six levels of preventive and curative services. KEPH categorizes health service delivery into level 1-6. Level 1 is the community, level 2 dispensaries, level 3 health centres, level 4 district hospitals, level 5 provincial hospitals and level 6 referrals as shown in Figure 2.<sup>21</sup>

<sup>20</sup> KHSSP 2013-2017.

<sup>21</sup> Ministry of Health, 2007, Reversing the Trends: The Second National Health Sector Strategic Plan of Kenya – The Kenya Essential Package for Health.

**Figure 2: KEPH Health Service Levels**



*Source: KHSSP 2005-2010*

As a result of the implementation of the constitution of Kenya 2010, health functions have been devolved to the county. In the structure, County Health Services are organized around three levels of care: Community, Primary care, and Referral services. Community level will focus on organizing appropriate demand for services, while (Primary Care and primary referral services) will focus on responding to this demand.

- The Community Health services comprise of all community based demand creation activities, organized around the Comprehensive Community Strategy defined by the Health Sector.
- The Primary care services will comprise of all dispensaries, health centers and nursing homes for public and non public providers. Their capacity will be upgraded, to ensure they can all provide appropriate demanded services.
- The Primary referral services will include all level four hospitals (district hospitals), which will be referred to as County Referral Hospitals. They will each be expected to provide specialized services, medical and their related infrastructure. The County referral system will comprise of ALL the County referral hospitals located in the County.
- Besides making policies, the Ministry of Health headquarters will be responsible for four referral hospitals (Kenyatta National Hospital Moi Teaching and Referral Hospital, Mathari Hospital and National Spinal Injury Hospital).

The KEPH interventions by cohorts are defined only for those specific to a given cohort, not for all KEPH interventions. The cross cutting interventions are not aligned to any cohort. Specific KEPH cohorts are:

1. Pregnancy and the newborn (up to 28 days): The health services specific to this age-cohort across all the Policy Objectives.
2. Childhood (29 days – 59 months): The health services specific to the early childhood period.
3. Children and Youth (5 – 19 years): The time of life between childhood, and maturity.

4. Adulthood (20 – 59 years): The economically productive period of life.
5. Elderly (60 years and above): The post – economically productive period of life.<sup>22</sup>

The distribution of health facilities shows that Ministry of Health account for 42.9 percent of the total health facilities in the country while private sector accounts for 37.8 percent and faith-based organizations 11.4 percent. NGOs accounts for 3.7 percent of facilities and others owned by other public institutions as shown in Table 9.<sup>23</sup>

**Table 9: Distribution of health facilities by ownership: Major Categories in 2013**

Owner Category	Number of Facilities	Proportion (%)
Ministry of Health	3,965	42.9
Other Public Institution	438	4.7
Faith Based Organization	1,053	11.4
Private Institutions and Private Practice	3,500	37.8
Non-Governmental Organizations	293	3.2
<b>Total:</b>	<b>9,249</b> Bottom of Form	<b>100</b>

**Source: Master Facility List/Health Information System (MFL/HIS)**

Table 10 shows distribution of health facilities by major categories in 2013. From a total of 9,249 health facilities, dispensaries are the leading accounting for 45.8 percent followed by medical clinics (31.8 percent) and health centers (10.9 percent). Maternity and nursing homes only constitute 2.5 percent of total health facilities in the country.

**Table 10: Distribution of Health Facilities by Type: Major categories in 2013**

Type	Number of facilities	Percent
Hospital	507	5.5
Health Centre	1,012	10.9
Maternity and Nursing Home	232	2.5
Medical Clinic	2,943	31.8
Dispensary	4,239	45.8
Other	316	3.4
<b>Total</b>	<b>9249</b>	<b>100</b>

**Source: Master Facility List /Health Information Systems (MFL/HIS)**

The Master Facility List/Health Information System (MFL/HIS) indicated that in 2013 there were a total of 9,249 health facilities, with 3 referral hospitals, 9 level 5 hospitals, 264 level 4 hospitals, and 231 other hospitals in 2013. There are 1,012 health centres, 186 nursing homes and 46 maternity homes. In addition, there are 2,943 medical clinics and 4,239 dispensaries which are the majority while the remaining number was made up of medical centres, eye clinic/centres, blood banks, dental clinic, etc.<sup>24</sup>

### 1.5 The Methodology of Developing the HRH Strategy

The process involved a desk review of documents from the Ministry of Health and its agencies. Additional literature and data were sought from other relevant institutions which included other government ministries, departments and agencies (MDAs), HRH ICC network, Kenya National

<sup>22</sup> MOMS & MOPHS, Kenya Health Policy 2012-2030.

<sup>23</sup> MOH HIS Annual Report 2012 (Draft).

<sup>24</sup> Ministry of Health. Master Facility List/Health Information Systems, 2013.

Bureau of Statistics (KNBS), Internet and other sources. Key Informant Interviews and Focus Group Discussions (FGDs) were held with the Ministry of Health officials, stakeholders within ICC network such as Capacity Kenya, Funzo Kenya Project, World Bank/IFC and DFID, JICA, WHO and also with other stakeholders such as KEPSSA/Kenya Healthcare Federation, Nursing Council of Kenya, Clinical Officers Council, Kenya Medical Association, CHAK, SUPKEM, etc. Two workshops, one in Lukenya Getaway and the other in Nairobi, were held to present the zero draft report developed by the Consultant and interrogate the findings contained in the draft.

### 1.6 Guiding Principles

Similar to the first HRH Strategic Plan, this Strategy is guided by a number of fundamental principles. These included:

- **Equity:** Equitable delivery of health services in all counties in Kenya through the deployment of adequate number of competent, well motivated and managed health staff.
- **Partnership and collaboration:** Building strong partnership with development partners, private sector, faith-based organizations (FBOs) and the community in order to build and strengthen the entire health workforce.
- **People-centred approaches:** The health sector recognizes health workers as the most important asset in the delivery of health care services.
- **Innovation:** Innovative approaches will be used in the training, recruitment, deployment and management of the health workforce.
- **Strong leadership and accountability:** There will be strong and accountable leadership at all levels to support HRH strengthening.
- **Gender responsiveness:** Gender responsive approaches will be adopted to ensure gender equity in the training, recruitment, deployment, development and management of the health workforce.
- **Rights-based approach:** The health sector will apply a rights-based approach. This will include commitment to the principles of equality, nondiscrimination, accountability, empowerment and participation. The health sector will safeguard the rights of employees living with disabilities. No employee will be discriminated against on the basis of known or assumed HIV status.

### 1.7 The Values and Principles of Public Service

- (a) High standards of professional ethics;
- (b) Efficient, effective and economic use of resource;
- (c) Responsive, prompt, effective, impartial and equitable provision of services;
- (d) Involvement of the people in the process of policy making;
- (e) Accountability for administrative acts;
- (f) Transparency and provision to the public of timely accurate information;
- (g) Subject to paragraphs (h) and (i), fair competition and merit as the basis of appointments and promotions;
- (h) Representation of Kenya's diverse communities; and affording adequate and equal opportunities for appointment, training and advancement, at all levels of the public service of:-
  - (i) men and women
  - (ii) the members of all ethnic groups
  - (iii) persons with disability.

## CHAPTER 2: POLICY CONTEXT

This strategy was developed within the policy framework of a number of key planning and legal documents of the Government of Kenya which included the Kenya Vision 2030 and the Constitution of Kenya 2010. It also abided by the health planning documents of Ministry of Health which included the Health Policy 2012-2030 and Kenya Health Sector Strategic and Investment Plan 2013-2017.

### 2.1 The Kenya Vision 2030

Kenya's overall development framework is guided by the Kenya Vision 2030, which is a long term policy that aims to create a "globally competitive and prosperous country with a high quality of life by 2030". The Vision aims at transforming Kenya into "a newly-industrialized, middle income country, providing a high quality of life to all its citizens in a clean and secure environment" as well as meeting the Millennium Development Goals (MDGs) by 2015.<sup>25</sup> Health is one of the components of delivering the Vision's Social Pillar given the role it plays of maintaining a healthy and skilled workforce necessary to drive the economy.

The objective of Vision 2030 in the health sector is to provide an equitable and affordable health care system of the highest possible quality. This will be achieved through three main strategies with the following flagship projects: revitalization of health infrastructure, strengthening health service delivery, and developing equitable financing mechanisms.<sup>26</sup> Vision 2030 is implemented through Medium Term Plans (MTPs) which specifies the development focus for the Government in a 5 year period.

### 2.2 The New Constitution and Devolution

Kenya has transitioned from eight administrative provinces to the 47 County Governments in a devolution taking shape under the new constitution. In the constitution, Kenya has two levels of government: the National Government and the County Governments. According to the constitution, the governments at the national and county levels are distinct and inter-dependent and should conduct their mutual relations on the basis of consultation and cooperation. Article 174 of the Constitution identifies the objects of devolved government as the promotion of democratic and accountable exercise of power; fostering of national unity by recognizing diversity; giving of powers of self-governance to the people and enhancing of the participation of the people in the exercise of the powers of the state and in making decisions affecting them; recognizing of the right of communities to manage their own affairs and to further their development; protection and promotion of the interests and rights of minorities and marginalized communities; promotion of social and economic development and the provision of proximate, easily accessible services throughout Kenya; ensuring of equitable sharing of national and local resources throughout Kenya; the facilitation of the decentralization of state organs, their functions and services from the capital of Kenya; and enhancement of checks and balances and the separation of powers.<sup>27</sup> An Act of Parliament has established a framework for consultation and co-operation between the national and county governments, and amongst county governments. The mechanisms established for health are the Sectoral Intergovernmental Forum and the Council of County Executives for Health.

According to the constitution, the functions of the county health services are to take care of the following:

- County health facilities and pharmacies
- Ambulance services;
- Promotion of primary health care;
- Licensing and control of undertakings that sell food to the public;

<sup>25</sup> Government of Kenya (2007). Kenya Vision 2030.

<sup>26</sup> Ibid.

<sup>27</sup> Government of Kenya (2010). The Constitution of Kenya 2010. Kenya Law Reports: Nairobi.



- Veterinary services (excluding regulation of the profession);
- Cemeteries, funeral parlours and crematoria; and
- Refuse removal, refuse dumps and solid waste disposal.

The Constitution of Kenya 2010 provides an overarching conducive legal framework for ensuring a more comprehensive and people driven health service delivery. It also seeks to ensure that a rights-based approach to health is adopted and applied in the delivery of health services. The Constitution provides that every person has the right to the highest attainable standard of health. It further outlines that a person shall not be denied emergency medical treatment and that the State shall provide appropriate social security to persons who are unable to support themselves and their dependants. It introduces a devolved system of government which would enhance access to services by all Kenyans, especially those in rural and hard to reach areas. The Constitution also singles out health care for specific groups such as children and persons living with disabilities. The underlying determinants of the right to health, such as adequate housing, food, clean safe water, social security and education, are also guaranteed in the Constitution.<sup>28</sup>

### 2.3 Kenya Health Policy 2012-2030

Kenya Health Policy is the primary policy document providing long term direction for health in the country during 2012 – 2030. The Policy outlines the intent of the country towards attaining the overall health aspirations of the people of Kenya. The Policy is informed by the Kenya's Vision 2030, the Constitution of Kenya 2010 and the global health commitments such as the MDGs.<sup>29</sup> The policy framework has as an overarching goal of 'attaining the highest possible health standards in a manner responsive to the population needs'. The policy aims to achieve this goal through supporting provision of equitable, affordable and quality health and related services at the highest attainable standards to all Kenyans. The Kenya Health Policy is focusing on Implementing a human rights based approach, and maximizing health contribution to overall country development.<sup>30</sup>

The health services objective for the Kenya Health Policy is to attain universal coverage with critical services that positively contribute to the realization of the overall policy goal. Six policy objectives are defined each with specific strategies to enable attainment of the policy objective.

- Eliminate communicable conditions: This it aims to achieve by forcing down the burden of communicable diseases, till they are not of major public health concern.
- Halt and reverse the rising burden of non communicable conditions. This it aims to achieve by ensuring clear strategies for implementation to address all the identified non communicable conditions in the country.
- Reduce the burden of violence and injuries. This it aims to achieve by directly putting in place strategies that address each of the causes of injuries and violence at the time.
- Provide essential health care. These shall be medical services that are affordable, equitable, accessible and responsive to client needs.
- Minimize exposure to health risk factors. This it aims to achieve by strengthening the health promoting interventions, which address risk factors to health, plus facilitating use of products and services that lead to healthy behaviors in the population.
- Strengthen collaboration with health related sectors. This it aims to achieve by adopting a 'Health in all Policies' approach, which ensures the Health Sector interacts with and influences design implementation and monitoring processes in all health related sector actions.<sup>31</sup>

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

<sup>30</sup> MOMS & MOPHS, Kenya Health Sector Strategic and Investment Plan 2013-2017.

<sup>31</sup> MOMS & MOPHS, Kenya Health Policy 2012-2017.

## 2.4 Kenya Health Sector Strategic plan and Investment Plan (KHSSP III) 2013-2017

KHSSP 2013-2017 places emphasis on implementing intervention, and prioritizing investments relating to maternal and newborn health.<sup>32</sup>

The innovations to facilitate attainment of the KHSSP III objectives include the following:

- Ensuring a comprehensive plan that brings together all the health and related services by all actors.
- Consolidation of all Sector Medium Term Plans into one plan. In the past, the health sector medium term focus was guided by the NHSSP II, Joint Program of Work, MTP 1, Ministry Strategies, and specific program strategic plans that were not necessarily all aligned to each other. KHSSP III now defines clearly the role of each planning tool, and how it contributes to the KHSSP III objectives.
- Redefinition of the service package (KEPH), to ensure it provides appropriate guidance to health investments and targeting of services.
- Incorporation of the environment within which the plan is being developed in the process of defining targets and interventions. As such, efforts towards implementing devolution and the right to health are an integral part of the plan implementation process, as opposed to the NHSSP II when the environmental issues were not adequately integrated into the plan.
- An M&E plan has been developed to guide follow up of implementation of the strategic objectives.<sup>33</sup>

This HRH strategy represents the 2nd Medium Term Plan of the Health Sector to support attainment of Kenya Vision 2030 with regard to HRH. One of main investment areas in the KHSSP III is investing in human resources. The plan is designed to address:

- Availability of appropriate and equitably distributed health workers.
- Attraction and retention of required health workers.
- Improving institutional and health worker performance
- Training, capacity building and development of health workforce.

<sup>32</sup> KHSSP 2013-2017.

<sup>33</sup> Ibid.



## CHAPTER 3: THE CURRENT HUMAN RESOURCES FOR HEALTH

Human resources for health (HRH) have long been recognized as the cornerstone of health sector to produce, deliver and manage services. The World Health Organization (WHO) defines the health workforce as “all the people engaged in actions whose primary intent is to enhance health.”<sup>34</sup> Inadequate staffing levels, lack of appropriate skills, poor staff attitude, low morale and weak supervision undermine the quality of public health services provided, especially at the rural health facilities.<sup>35</sup> The shortage of health workers compromises service delivery and eventually health and development of a nation. Kenya health sector has inadequate crucial health staff like doctors, nurses and diagnostic scientists. In addition there are regional disparities in the distribution of the existing health workers and the hard-to-reach get disadvantaged with less staff.<sup>36</sup> WHO recommends at least 23 doctors, nurses and midwives per 10,000 people. Kenya has one doctor, 12 nurses and midwives per 10,000 people.<sup>37</sup>

### 3.1 Staffing in the Government and FBOs/NGOs Health Facilities

According to Ministry of Health source, the government has 24 different cadres which include medical and non-medical personnel as shown in Appendix 2. Table 11 shows human resources classification by gender. Most cadres are dominated by men as shown in the table below. There are 110 male dentists against 103 females, 307 male pharmacists against (203) females. The majority of specialist medical practitioners are male (332) as compared to (87) female. However, there are more female nurses and midwives, (15,428) compared to male (4,943).

**Table 11: Human resource classification by gender**

Classification	Males	Females	Total
Clerical support workers	697	878	1575
Community health workers	34	14	48
Dental assistants and therapists	68	24	92
Dentists	110	103	213
Dieticians and nutritionists	46	181	227
Elementary occupations	1065	1158	2223
Environmental and occupational health and hygiene professionals	19	3	22
Environmental and occupational health inspectors and associates	1637	645	2282
Generalist medical practitioners	613	479	1092
Health management personnel	35	22	57
Health service managers	1491	551	2042
Life science professionals	29	12	41
Medical and dental prosthetic technicians	54	24	78
Medical and pathology laboratory technicians	1254	721	1975
Medical imaging and therapeutic equipment operators	203	83	286
Medical records and health information technicians	310	224	534
Non-health professionals not classified	145	53	198

<sup>34</sup> Everybody's business: strengthening health systems to improve health outcomes – WHO's framework for action. Geneva; World Health Organization, 2007 ([http://www.who.int/healthsystems/strategy/everybody's\\_business.pdf](http://www.who.int/healthsystems/strategy/everybody's_business.pdf), accessed 10 January 2009).

<sup>35</sup> MOPHS Strategic Plan 2008-2012.

<sup>36</sup> WHO (2006). Taking Stock: Task Shifting to Tackle Health Workers Shortage.

<sup>37</sup> Kenya Institute for Public Policy Research and Analysis (KIPPRA), 2012. Kenya Economic Report 2012.

Classification	Males	Females	Total
Non-health technicians and associate professionals not classified	355	92	447
Nursing and midwifery professionals	4943	15428	20371
Occupational Therapist	199	79	278
Other health service providers – interns	560	480	1040
-Clinical Officer	1935	1273	3208
Pharmaceutical technicians and assistants	265	130	395
Pharmacists	307	203	510
Physiotherapists	319	156	475
Physiotherapy technicians and assistants	84	173	257
Plant and machine operators and assemblers	845	143	988
Specialist medical practitioners	332	87	419
Support Service and sales workers	83	102	185
Trades workers	13	10	23
Total	18,050	23,531	41,581

**Source: MOH HIS Annual Report, 2012.**

According to the Annual Operational Plan 7 2011/2012, the government had a total of 1080 medical doctors and consultants while FBOs/NGOs had a total of 653. There were a total of 17075 nurses (including B.Sc. Nursing) in the government and 5832 in the FBOs/NGOs. During the same time, the government had 151 dentists while FBOs/NGOs had 61. The government had 277 pharmacists while FBOs/NGOs had 52. The greater number of health workers employed by the government and FBOs/NGOs were concentrated in Rift Valley (12,879), Central (8,752) and Nairobi (8,752). As shown in the table, the total for all the medical personnel is 58,532 as shown in Table 12.

**Table 12: Medical personnel by region and ownership**

Description	Nairobi		Eatern		Rift Valley		Nyanza		Western		Coast		North Eastern		Central		Natioanal		TOTAL
	GOK	FBO/NGO	GOK	FBO/NGO	GOK	FBO/NGO	GOK	FBO/NGO	GOK	FBO/NGO	GOK	FBO/NGO	GOK	FBO/NGO	GOK	FBO/NGO	GOK	FBO/NGO	
Consultants (MD)	159	154	45	4	109	15	38	18	24	8	40	3	7	0	55	49	477	251	728
Medical Officers	56	111	80	13	160	32	54	42	50	19	125	141	15	4	63	40	603	402	1005
Dentists	35	29	10	0	32	2	15	3	9	0	30	19	2	0	21	8	154	61	215
Dental Technologists	15	16	5	2	35	2	7	3	7	1	12	3	3	0	16	7	100	34	134
Community Oral Health Officers	7	0	19	1	42	4	10	1	10	1	15	4	0	0	12	8	115	19	134
Clinical Officer (Spec)	92	75	143	3	347	11	68	28	75	6	82	13	14	3	100	26	921	165	1086
Clinical Officers (Gen.)	87	50	130	23	333	95	237	70	102	47	157	40	50	4	150	60	1246	389	1635
BSN Nursing officers	1087	1078	20	7	406	48	130	16	2	2	205	28	1	0	220	94	2071	1273	3344
Registered Nurses	924	807	405	108	1207	317	769	264	394	114	846	98	160	11	393	443	5098	2162	7260
Enrolled Nurses	576	402	1313	482	2420	313	1347	387	1250	166	926	286	311	8	1763	353	9906	2397	12303
Public Health Officers	91	55	193	1	612	9	148	29	125	4	170	68	47	0	160	6	1546	172	1718
Public Health Technicians	37	20	320	6	665	10	174	15	148	3	101	3	49	0	264	2	1758	59	1817
Pharmacists	30	29	43	2	55	1	23	5	34	1	49	4	4	0	39	10	277	52	329
Pharm. Technologist	54	60	51	10	111	20	14	27	21	11	31	9	12	1	17	56	311	194	505
Lab. Technologist	154	146	180	18	316	54	148	73	121	19	152	42	34	2	134	53	1239	407	1646
Lab. Technician	58	56	68	105	177	39	90	71	73	27	106	38	9	4	152	72	733	412	1145
Orthopaedic technologists	15	10	33	1	26	0	11	9	10	3	15	9	2	0	16	8	128	40	168
Nutritionists	79	54	65	2	144	12	28	25	27	3	46	5	14	2	50	7	453	110	563
Radiographers	63	56	47	3	95	6	34	15	24	1	70	2	8	0	36	14	377	97	474
Physiotherapists	83	64	86	3	105	10	54	8	31	3	88	6	6	0	59	17	512	111	623
Occupational Therapists	45	38	42	1	75	1	20	1	22	0	36	3	3	0	36	8	279	52	331
Plaster Technicians	26	14	14	1	68	2	10	2	11	1	18	3	7	0	38	5	192	28	220
Health Record & Information Officers	69	64	135	0	88	5	24	8	15	1	44	5	4	1	30	7	409	91	500
Health Record & Information Technicians	51	49	66	2	64	4	18	6	18	6	62	15	4	0	60	22	343	104	447
Trained Community Health Workers	256	550	2461	0	3422	224	2506	15	3650	289	1054	13	334	75	2966	223	16649	1389	18038
Social health workers	32	27	21	5	66	1	6	12	304	1	9	0	1	0	10	9	449	55	504
community health extension workers	21	5	189	3	343	8	128	9	122	8	83	2	10	0	216	18	1112	53	1165
Medical engineering technologist	28	27	43	2	33	2	13	0	25	0	38	0	3	0	19	6	202	37	239
Medical engineering technicians	4	0	49	0	71	5	9	1	11	2	68	6	4	0	19	7	235	21	256
Total Medical	4234	4046	6276	808	11627	1252	6133	1163	6715	747	4678	868	1118	115	7114	1638	47895	10637	58532

Source: Annual Operational Plan 7 2011/2012

As shown in Table 13, in 2012, drivers, secretaries and patient attendants dominated the category of non-medical staff with 2,158, 1,796 and 1,902 people respectively. As the table shows, there was a deficit in each cadre of staff.

**Table 13: Non-Medical Staff**

Description	Expected	Available	Deficit/Surplus
Mortuary Attendants	455	258	264
Patient attendants/nurse aids	3549	1902	1463
Drivers	3611	2158	1719
Clerks	1708	671	997
Cleaners	1195	511	646
Security	745	365	403
Accountants	1860	271	1438
Health Administrative officer	1042	513	615
Cooks	1790	535	1102
Secretaries	3478	1796	2140
Others (specify) casuals	1062	673	434

Source: Annual Operational Plan 7 2011/2012

As shown in Table 14, the number of registered key health personnel increased from 76,881 in 2008 to 105,369 in 2012, an increase of 27 percent. However, the biggest increase is seen in certain cadres such as registered and enrolled nurses. Registered nurses increased from 14,073 in 2008 to 35,148 in 2012, an increase of about 60 percent while enrolled nurses decreased from 31,915 in 2008 to 26621 in 2012, a decrease of about 20 percent. Doctors increased from 6,623 in 2008 to 8,092 in 2012, an increase of 18 percent.

**Table 14: Registered health personnel of essential cadres**

Registered Health Personnel	2008	2009	2010	2011	2012
Doctors	6623	6800	7129	7549	8092
Dentists	974	859	898	930	985
Pharmacists	2860	2921	3097	2432	2532
Pharmaceutical Technologists	1815	1950	2233	4436	5236
BSC Nursing	657	863	988	1173	1532
Registered Nurses	14073	26988	29678	31719	35148
Enrolled Nurses	31915	34032	34282	24375	26621
Clinical Officers	5035	7816	8598	9793	11185
Public Health Officers	6960	7192	7429	7584	8069
Public Health Technicians	5969	5969	5969	5969	5969
<b>Total</b>	<b>76881</b>	<b>95390</b>	<b>100301</b>	<b>95960</b>	<b>105369</b>

Source: Economic Survey, 2013

The number of doctors per 100,000 rose from 17 in 2008 to 20 in 2012. The WHO recommended minimum is 20 per 100,000 people. On the other hand, the number of nurses rose from 122 in 2008 to 155 per 100,000 people in 2012. However, there are many doctors and nurses in administrative positions in both public and private sectors in addition to those who dropped out of the service through attrition. The table below shows some of the cadres.

**Table 15: Registered health personnel**

No. per 100,000 population	2008	2009	2010	2011	2012
Doctors	17	18	18	19	20
Dentists	3	2	2	2	2
Pharmacists	7	8	8	6	6
Pharmaceutical Technologists	5	5	6	11	13
BSC Nursing	2	2	2	3	4
Registered Nurses	37	70	75	80	86
Enrolled Nurses	83	88	86	62	65
Clinical Officers	13	20	22	25	28
Public Health Officers	18	19	19	19	20
Public Health Technicians	16	15	15	15	15

Source: Economic Survey, 2012

Table 16 shows the number of staff by level of care. There were a total of 68,185 health workers out of which 57,548 are government and 10,637 are faith-based. The distribution by level of care shows that there were a total of 14,207 health workers at the community level, and 13,555 at the primary care level, 12,361 at the county level and 7,772 at the national level. The distribution across the board shows there were 1,005 medical officers, 215 dentists, 7,260 registered nurses, 12,303 enrolled nurses, and 2,721 clinical officers (both general and specialized).

According to KHSSP 2013-2017, information on staff numbers in the private for profit facilities were not known, though the numbers were said to be higher than for those in the faith based facilities. Public sector has more than 6 times the staff numbers in the Faith based providers. Community Health Workers and enrolled nurses (focused on community based health services) account for over

half of the existing staff numbers. As shown in the table, the total health workers are about 17 per 10,000 people. Medical staff represents over 5 per 10,000 people. Their distribution is not equitable in many areas of the country leading to significant health workforce gaps.

**Table 16: Number of staff by level of care**

	Staff cadres	Numbers by level of care				Numbers by owner		Total	Total/ 10,000 populati on
		Community	Primary Care	County Hospital	National Hospitals	Public	Faith Based		
1	Specialists (Medical / Public Health)	-	1	149	327	477	251	728	0.18
2	Medical Officers	-	55	342	206	603	402	1,005	0.25
3	Dentists	-	7	79	68	154	61	215	0.05
4	Dental Technologists	-	1	50	49	100	34	134	0.03
5	Community Oral Health Officers	-	13	86	16	115	19	134	0.03
6	Clinical Officer (Spec)	-	65	583	273	921	165	1,086	0.27
7	Clinical Officers (Gen.)	-	332	770	144	1,246	389	1,635	0.41
8	BSN Nursing officers	1	58	323	1,689	2,071	1,273	3,344	0.84
9	Registered Nurses	5	1,192	2,122	1,779	5,098	2,162	7,260	1.82
10	Enrolled Nurses	18	4,840	3,797	1,251	9,906	2,397	12,303	3.08
11	Public Health Officers	149	930	384	83	1,546	172	1,718	0.43
12	Public Health Technicians	289	1,255	180	34	1,758	59	1,817	0.45
13	Pharmacists	-	27	170	80	277	52	329	0.08
14	Pharm. Technologist	-	49	154	108	311	194	505	0.13
15	Lab. Technologist	-	292	567	380	1,239	407	1,646	0.41
16	Lab. Technician	-	354	273	106	733	412	1,145	0.29
17	Orthopaedic technologists	-	8	72	48	128	40	168	0.04
18	Nutritionists	-	106	217	130	453	110	563	0.14
19	Radiographers	1	29	194	153	377	97	474	0.12
20	Physiotherapists	-	55	268	189	512	111	623	0.16
21	Occupational Therapists	-	20	149	110	279	52	331	0.08
22	Plaster Technicians	-	10	112	70	192	28	220	0.06
23	Health Record & Information Officers	-	110	164	135	409	91	500	0.13
24	Health Record & Information Technicians	-	63	175	105	343	104	447	0.11
25	Trained Community Health Workers	12,949	3,096	570	34	16,649	1,389	18,038	4.51
26	Social health workers	300	16	56	77	449	55	504	0.13
27	community health extension workers	483	512	107	10	1,112	53	1,165	0.29
28	Medical engineering technologist	12	10	113	67	202	37	239	0.06
29	Medical engineering technicians	-	49	135	51	235	21	256	0.06
30	Mortuary attendants	-	-	-	-	258	-	258	0.06
31	Patient attendants	-	-	-	-	1,902	-	1,902	0.48
32	Drivers	-	-	-	-	2,158	-	2,158	0.54
33	Clerks	-	-	-	-	671	-	671	0.17
34	Cleaners	-	-	-	-	511	-	511	0.13
35	Security	-	-	-	-	365	-	365	0.09
36	Accountants	-	-	-	-	271	-	271	0.07
37	Administrators	-	-	-	-	513	-	513	0.13
38	Cooks	-	-	-	-	535	-	535	0.13
39	Secretaries	-	-	-	-	1,796	-	1,796	0.45
40	Casuals	-	-	-	-	673	-	673	0.17
	<b>TOTAL</b>	<b>14,207</b>	<b>13,555</b>	<b>12,361</b>	<b>7,772</b>	<b>57,548</b>	<b>10,637</b>	<b>68,185</b>	<b>17.05</b>

Source: KHSSP 2013-2017.

### 3.2 Staffing at KNH and MTRH

#### 3.2.1 Kenyatta National Hospital (KNH)

Kenyatta National Hospital is the first and largest referral and teaching hospital in Kenya. According to the Report on health workforce mapping at KNH, 2013, the hospital had a total of 4,293 staff. The nurses were the leading cadre with 1557 (36.3%), followed by the support staff and clerical staff at 992(23.1%) and at 299 (7%) respectively.

**Table 17: Number of health workers at KNH according to cadres**

	Frequency	Percent
Nurses	1,557	36.3
Support staff	992	23.1
Clerical staff	299	7.0

	Frequency	Percent
Doctors	155	3.6
Laboratory technologists	138	3.2
Health Information	116	2.7
Artisans	116	2.7
Accounts & Administration	85	2.0
CSSD/ Theatre assistants	76	1.8
Security staff	75	1.8
Porters	68	1.6
Clinical Officers	64	1.5
Physiotherapy	63	1.5
Radiographers	47	1.1
Pharmaceutical technologists	42	1.0
Occupational therapy	35	0.8
Nutrition	32	0.8
Orthopaedic technicians	31	0.7
Procurement officers	29	0.7
Social workers	24	0.6
Public health officers	22	0.5
Dentists	21	0.5
Medical engineering	19	0.4
Mortuary/ Farewell home	17	0.4
Dental technicians	14	0.3
Pharmacists	12	0.3
Other	144	3.4
<b>Total</b>	<b>4,293</b>	<b>100.0</b>

**Source: Report on Health Workforce Mapping at KNH, June 2013**

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

Moi Teaching and Referral Hospital (MTRH) is the second largest referral and teaching hospital in Kenya and by 2010 it had staff numbering 3,066 against the required 2,910. In 2010 the vacancy rate stood at -5, meaning that the hospital did succeed in significantly reducing vacancy rates. However, vacancies still existed in some essential cadres such as nurses (21 percent) and laboratory technicians (5 percent) as shown in Table 18.

**Table 18: Moi Teaching and Referral Hospital (MTRH)**

Cadre	Required	Available 2008	Available 2010	% Increase between 2008 and 2010	2010 Vacancy Rates (%)
Medical officers and specialists	92	51	117	129	(27)
Dentists	6	5	6	20	-
Pharmacists	4	4	9	125	(125)
Nurses	916	664	728	10	21
Clinical Officers	78	65	112	72	(44)
Lab Techs	153	133	145	9	5
Pharm technologists	35	37	73	97	(109)
Radiographers	30	30	29	(3)	3
Nutrition officers	59	42	50	19	15
Physiotherapists	65	34	42	24	35
Occupational Therapist	62	13	38	192	39
Medical records Officers	56	45	49	9	13
Public health Officers / techs	29	25	26	4	10
Others*	1,326	1,201	1,642	37	(24)
<b>Total</b>	<b>2,911</b>	<b>2,349</b>	<b>3,066</b>	<b>31</b>	<b>(5)</b>

Source: National HRH Annual Report 2010.

\*Includes staff from various functions such as admin, finance, supplies, engineering, security and subordinate staff.

### 3.3 HRH in Private and FBO Facilities

#### 3.3.1 Christian Health Association of Kenya (CHAK) Hospitals

In 2010 the health facilities under the Christian Health Association of Kenya (CHAK) had a total of 2,056 staff including 135 doctors, 995 nurses and 575 allied health staff as shown in Table 19. The nurses were the leading cadre. The CHAK health facilities where the information was obtained included 18 hospitals, 30 health centres and 45 dispensaries.<sup>38</sup>

**Table 19: Staff of CHAK Hospitals, December 2010**

Cadre	Number of Staff
Doctors	135
Nurses	995
Allied Health Staff	575
Admin and support Staff	351
<b>Total</b>	<b>2,056</b>

Source: MOH & MOPHS, HRH Annual Report 2010.

#### 3.3.2 Muslim Health Secretariat Health Facilities

The 18 health facilities under the auspices of the Muslim Health Secretariat employed a total of 148 staff including 9 doctors, 38 nurses and 22 allied health staff as of 2010. Administration and support staff dominated the establishment with 79 staff followed distantly by nurses with 38 staff (Table 20).

<sup>38</sup> MOH National HRH Annual Report, 2010.

**Table 20: Staff of Muslim Health Secretariat Health Facilities**

Cadre	Number of Staff
Doctors	9
Nurses	38
Allied Health Staff	22
Admin and support Staff	79
<b>Total</b>	<b>148</b>

Source: National HRH Annual Report, 2010.

### 3.3.3 Aga Khan University Hospitals (Nairobi, Mombasa and Kisumu)

The total staff at Aga Khan University Hospital in Nairobi stood at 1,509 in 2010, an increase of 10 percent from 1,367 in 2008. There was a remarkable increase in all cadres at the facility including those at the faculty, but the biggest increase was from the faculty (39 percent and doctors (27 percent) as shown in Table 21.

**Table 21: Summary of total staff of Aga Khan University Hospitals, 2010 (Permanent)**

Cadre	Nairobi	Mombasa	Kisumu	Total
Doctors	66	16	20	102
Faculty*	57	-	-	57
Nurses	378	118	100	596
Allied Health Staff	207	44	39	290
Admin and Support Staff	801	158	100	1,059
<b>Total</b>	<b>1,509</b>	<b>336</b>	<b>259</b>	<b>2,104</b>

Source: HRH Annual Report 2010.

### 3.3.4 Nairobi Hospital

Nairobi Hospital is one of the largest and well equipped private health facilities in Kenya. In 2010 it had a total of 1,161 permanent staff including 33 doctors, 497 nurses and 161 allied health staff as shown in Table 22.

**Table 22: Permanent Staff of Nairobi Hospital**

Cadre	Number of Staff
Doctors	33
Nurses	497
Allied Health Staff	161
Admin and support Staff	470
<b>Total</b>	<b>1,161</b>

Source: HRH Annual Report 2010.

### 3.3.5 Kenya Conference of Catholic Bishops (KCCB)

The Kenya Conference of Catholic Bishops (KCCB) currently runs 438 health facilities across the country. In 2014 KCCB had a staff compliment of 9323; 2750 (29.5%) of whom were Nurses; 36 Dentists (4%); and 429 Doctors. This represented a 167% growth on the 2011 compliment (Table 23).

**Table 23: KCCB Personnel**

	2011	2012	2013	2014
Doctors	317	419	425	429
Dentists	32	42	38	36
Nurses	1646	2084	2715	2750
RCO's	417	638	764	888
Pharmacists	615	719	728	830



	2011	2012	2013	2014
Lab Tech	329	336	343	455
Admin	103	293	398	398
Nutritionists	36	58	112	103
HTC's	14	42	79	102
Data Clerks	27	38	39	64
Support Staff	673	1224	1598	1598
<b>Sub – total</b>	<b>4209</b>	<b>5893</b>	<b>7239</b>	<b>7653</b>
Others				
Oral health officers	18	29	30	34
Radiographers	27	31	42	42
Physiotherapists	4	15	18	18
Occupational therapists	12	8	7	21
Orthopedic technicians	6	5	4	4
<b>Total- Nairobi</b>	<b>67</b>	<b>88</b>	<b>101</b>	<b>119</b>
<b>Other Diocese</b>	<b>1305</b>	<b>1381</b>	<b>1436</b>	<b>1551</b>
<b>Sub- total</b>	<b>1372</b>	<b>1469</b>	<b>1537</b>	<b>1670</b>
<b>GRAND TOTAL</b>	<b>5581</b>	<b>7362</b>	<b>8776</b>	<b>9323</b>

Source: KCCB 2014

Of 438 health facilities: 61 are Hospitals; 313 Dispensaries; 81 Health centers; and 2 Clinics. The highest number of health facilities are in Nairobi (59) followed by Meru (33), and Machakos (32) respectively. KCCB runs two clinics: at Garissa and Kitale. Nairobi had the highest number of dispensaries (52), followed by Machakos (28) and Lodwar (23) respectively (Table 24).

Table 24: KCCB Distribution of health facilities by Diocese

Diocese	Hospitals	Dispensaries	Health Centres	Clinics	Total
Bungoma	2	3	2	-	7
Eldoret	3	14	9	-	26
Embu	2	9	-	-	11
Garissa	-	7	2	1	10
Homa Bay	2	8	13	-	23
Isiolo	-	6	-	--	6
Kakamega	2	6	5	-	13
Kericho	1	4	2	-	7
Kisii	2	9	4	-	15
Kisumu	3	5	6	-	14
Kitale	2	7	-	1	10
Kitui	2	9	-	-	11
Lodwar	1	23	2	-	26
Machakos	3	28	1	-	32
Malindi	-	6	1	-	7
Maralal	1	7	2	-	10
Marsabit	2	6	2	-	10
Meru	7	21	5	-	33
Mombasa	-	12	2	-	14
Muranga	3	17	3	-	23
Nairobi	17	52	9	-	59

Diocese	Hospitals	Dispensaries	Health Centres	Clinics	Total
<b>Nakuru</b>	1	15	6	-	<b>22</b>
<b>Ngong</b>	2	11	5	-	<b>18</b>
<b>Nyahururu</b>	1	15	-	-	<b>16</b>
<b>Nyeri</b>	2	13	-	-	<b>15</b>
<b>Totals</b>	<b>61</b>	<b>313</b>	<b>81</b>	<b>2</b>	<b>438</b>

Source: KCCB 2014

### 3.4 Medical Training

#### 3.4.1 Institutions Offering Pre-service Training

Institutions offering health related training have increased tremendously. These institutions are owned by the government, FBOs/NGOs and private sector, and consist of universities (offering diplomas, and graduate and post graduate courses) and middle level colleges (offering certificate and diplomas). However, the annual output of health workforce has risen steadily in recent years due to the rapid growth of health training institutions.

There are four medical training institutions for Medical Officers in Kenya. They include Nairobi, Moi, Kenyatta and Egerton Universities. The medical degree course takes a total of six academic years and one year of internship. The University of Nairobi is the sole training institution for dentists. The dental degrees take five academic years plus one-year of internship. On the other hand there are 70 institutions accredited by the Nursing Council of Kenya (NCK) to train nurses, out of which 68 are actively training enrolled, registered and bachelor's degree cadre of nurses. Enrolled nurses earn a certificate in two years of study, registered nurses a diploma over a period of three years, and Bachelor of Science in Nursing (BScN) takes four years, with an additional year of internship. Currently, the NCK has approved 6 institutions to teach enrolled nursing, 53 institutions to teach registered nursing, and 9 to offer BScN across Kenya. There are 33 public nurse training institutions, out of which 23 are Medical Training Colleges (MTCs).

Training institutions for Clinical Officers, registered and accredited by the Clinical Officers Council (COC) are 35 as at June 2014. Kenya Medical Training Colleges (KMTCs) which are government sponsored are nineteen (19) institutions accounting for 54.3% of Clinical Officers training institutions in the country. Others include four (4) government sponsored, seven (7) private colleges and five (5) faith-based institutions. Training is both at degree (Bachelor of Science in Clinical Medicine and Surgery) and diploma level in Clinical Medicine and surgery which requires them to undergo four years and three years of schooling respectively plus one year internship. In 2010, Mt. Kenya University was the first to offer the degree programme. Egerton University, JKUAT, Great Lakes and Uzima University have started following suit. So far one hundred and seventeen (117) graduates have been trained.

Some of the training institutions such as Mt. Kenya University are set to start offering specialized medical training at degree level. Mt. Kenya University has been offering other medical and health related courses (e.g. Bachelors in Clinical Medicine).

There are 25 institutions approved by the Kenya Medical Laboratory Technicians and Technologist Board (KMLTTB) to train laboratory technicians and technologists in the country. Laboratory technicians earn a certificate after two years of training, and technologists earn a diploma in three years and a degree after four years of training. Six of these training institutions offer certificate and diploma programs, fourteen offer only diplomas and five offer degrees.

Table 25 shows the key health training institutions in Kenya and the pre-service courses they offered as of 2010. As shown in the table, nurses cut across all training institutions with University of Nairobi, Kenya University, Moi University and Egerton University training doctors.

**Table 25: Key Health Training Institutions and Courses Offered**

Health Training Institution	Cadre Trained
Kenya Medical Training College (KMTC)	See Annex 1 for courses offered
University of Nairobi Medical School	Doctors, Dentists, Nurses, Medical Specialists and Pharmacists
Moi University Medical School	Doctors and Nurses, medical specialists
Kenyatta University	Doctors, Pharmacists, Nursing, MOPH Records and Information Management, Medical Laboratory Sciences and Health Services Management
Egerton University Medical School	Doctors, Pharmacists and Clinical Officers
Kenya Methodist University (KeMU)	Nurses and Clinical Officers
Great Lakes University of Kisumu (GLUK)	Nurses, Clinical Officers and MPH
FBO Pre-Service Schools, e.g. PCEA Tumu Tumu and Kendu Adventist	Nurses, Clinical Officers and Lab Technologists
Aga Khan University Hospital	Nurses and Medical Specialists
Nairobi Hospital	Nurses
University of E. Africa at Baraton	Nurses

**Source: MOH National HR Annual Report 2010.**

### 3.4.2 Training Output at Graduate and Postgraduate Level

Table 26 shows the undergraduate medical students by course for the academic years 2008/09 – 2012/2013. As shown in the table, enrollment rose from 4,009 in 2008/09 academic year to 7,513 in 2012/2013 academic year, translating to an increase of about 47 percent. The course with most enrolment was medicine & surgery which had an enrollment of 2,095 students in 2008/09 rising to 3,170 in 2012/13, an increase of about 34 percent. Postgraduate enrollment was 695 students in 2008/09 academic before rising to 1,334 in 2010/2011 and declining to 818 in 2012/13. Between 2008/09 and 2012/13 postgraduate enrolment declined by 11 percent.

**Table 26: Undergraduate and post graduate medical students by course 2008/09-2012/13**

Undergraduate	2008/09	2009/10	2010/11	2011/12	2012/13
Medicine & Surgery	2095	2220	2391	2472	3170
BSc (Nursing)	904	916	1667	1932	2149
Dental Surgery	116	199	194	218	268
Environmental Health	207	226	519	540	1080
Pharmacy	335	360	486	298	466
BSc (Biochemistry)	352	373	1056	501	380
<b>Sub-total</b>	4,009	4,294	6,313	5,961	7,513
Postgraduate students	695	583	1334	585	618
<b>Grand Total</b>	4,704	4,877	7,647	6,546	8,131

**Source: Economic Survey, 2013.**

The National HRH Annual Report 2010 show that an average of 360 doctors graduate annually from the Kenyan universities. As shown in the table, the number of doctors graduating from University of Nairobi rose from 230 in 2006 to 274 in 2009. The number of graduates was at its peak in 2007 when 332 doctors graduated from the same university. Moi University has witnessed a steady rise in the number of graduating doctors. In 2006 the number stood at 32 but rose to 86 in 2009. The number of doctors who graduated from University of Nairobi and Moi University between 2006 and 2009 totalled to 1,344 (Table 27).

**Table 27: Number of doctors graduating from University of Nairobi and Moi University**

Year	Nairobi University	Moi University	Total
2006	230	32	262
2007	332	45	377
2008	277	68	345
2009	274	86	360
<b>Total</b>	<b>1,113</b>	<b>231</b>	<b>1,344</b>

Source: MOH National HRH Annual Report 2010.

As Table 28 shows, the number of pharmacists and dentists who graduated from University of Nairobi rose from 58 in 2006 to 67 in 2010, an increase of about 13 percent. However, the largest number (77) graduated in 2007. On the other hand, the number of dentists who graduated from the same university has continued to show an erratic trend. The number graduating in 2006 was 28 before increasing to 33 and 36 in 2008 and 2009 respectively. However, the number dropped to 25 in 2010. No statistics were available for 2011 and 2012.

**Table 28: Number of Pharmacists and Dentists graduating from University of Nairobi**

Year	Number of Graduates	
	Pharmacists	Dentists
2006	58	28
2007	78	33
2008	77	36
2009	61	30
2010	67	25
<b>Total</b>	<b>341</b>	<b>152</b>

Source: MOH National HRH Annual Report 2010.

University of Nairobi is the premier institution in Kenya offering specialized training of medical personnel and has continued to produce specialists in various cadres at the graduate level as shown in Table 29.

**Table 29: Medical specialists**

Cadre	2007	2008	2009	2010
Master of Pharmacy	1	7	15	9
Msc. Nursing	4	5	9	7
MPH	7	10	2	13
Masters in Anaesthesia	8	8	8	10
Masters in Obstetrics and Gynaecology	24	11	14	16
Masters in General Surgery	15	5	12	3
Masters in Internal Medicine	14	18	23	4
Masters in Psychiatry	3	2	3	2
Masters in Ophthalmology	6	12	12	5
Masters in ENT	8	3	6	3
Masters in Paediatrics	8	7	13	
Masters in Diagnostic Imaging and Radiation Medicine	7	5	15	1
Msc. In Medical Microbiology	3	3	1	
Msc. in Clinical Psychology	3	16	1	5
Msc. in Pathology		5	3	7
Masters in Dentistry - Maxillofacial Surgery	3	1	3	2
Masters in Dentistry - Paediatric Dentistry	2	1	3	1
Masters in Dentistry - Prosthodontics				3
Masters in Dentistry - Periodontology				1

Source: MOH National HRH Annual Report 2010.

The HRH Report 2010 indicates that majority of registered active doctors were trained at University of Nairobi (about 69 percent) and to a lesser extent, Moi University (8 percent). Even if current statistics were available, the two institutions were the main source of registered doctors in Kenya. However, there are many who have graduated from other universities across the world as shown in Table 30.

**Table 30: Active Registered Doctors by College of Training**

College	%
University of Nairobi	68.6
Moi University	8.0
Makerere University	3.0
University of Mumbai (University of Bombay)	1.2
Gujarat University	0.9
Peoples Friendship University of Russia (Patrice Lumumba Peoples Friendship University)	0.8
University Of Punjab	0.8
Saurashtra University	0.6
University of Mysore	0.5
Nizhny Novgorod State Medical Academy	0.4
University of Dar es Salaam	0.4
University of Poona	0.4
University of London	0.3
Others	14.4

Source: MOH National HRH Annual Report 2010.

### 3.4.3 Training Output in Middle Level Public Colleges

As Table 31 shows, middle level medical training colleges have continued to produce graduates at certificate, diploma and higher diploma levels. The total trainees in the middle level public colleges rose from 6,090 in 2008 to 7,606 in 2012, an increase of almost 20 percent. The majority of trainees were taking diploma followed by certificate courses.

**Table 31: Middle level trainees in public medical training colleges**

Level of training	2008	2009	2010	2011	2012
Certificate	570	437	903	1,178	1,303
Diploma	5,088	4899	5,231	4,238	5,713
Higher diploma	432	379	337	724	589
<b>Total</b>	<b>6,090</b>	<b>5715</b>	<b>6,471</b>	<b>6,140</b>	<b>7,606</b>

Source: Economic Survey, 2013

Table 32 shows that there was a great demand for health training courses offered at the KMTC, with demand outstripping the supply in all the four years as shown in the table. In 2011 for instance, out of 24,574 qualified applicants, only 6,125 were enrolled. There was significant number of qualified but not successful in being enrolled, which totalled to 18,449.

**Table 32: Training gaps in Kenya Medical Training College 2008-2011**

Year	2008	2009	2010	2011
Enrolled applicants	4,080	4,623	5,418	6,125
Qualified applicants	21,617	20,000	18,294	24,574
Qualified but not successful in being enrolled	17,537	15,347	12,876	18,449

Source: Database of Kenya Medical Training College, Nairobi (2011).

Table 33 shows that the number of some key health personnel is reducing by a big percentage. For instance, during the period 2008/9 and 2009/10, doctors reduced by 23 percent, pharmaceutical technologists by 59 percent, clinical officers by 29 percent and public health officers by 52 percent. However, registered nurses increased by about 8 percent, BSc Nursing by about 12 percent and dentists by 31 percent. With devolution of health services to the counties, discontent within the

medical fraternity is growing with key health personnel opting to leave the public service for greener pastures in private/not-for-profit sectors or quit as practitioners altogether. This has a lot of implications for human resources for health.<sup>39</sup>

**Table 33: Number of health workers in training**

Personnel	2008/09	2009/10	Percentage change
Doctors	3172	2437	-23.17
Dentists	152	199	30.92
Pharmacists	339	349	2.95
Pharmaceutical Technologists	509	207	-59.33
BSc Nursing	731	818	11.9
Registered Nurses	1847	1989	7.69
Clinical Officers	1509	1076	-28.69
Public Health Officers	666	322	51.65

Source: Kiambati et al. (2013).

The Kenya Medical Training College (KMTTC) has continued to offer a number of post-basic specialization courses for diploma holders for various health professionals as shown in Table 34, with the majority of graduates being dental technologists.

**Table 34: Post-basic graduates from KMTTC**

PROGRAMME	2005	2006	2007	2008	2009
Higher Diploma in Medical Education	3	5	3	58	24
Higher Diploma in Critical Care Nursing				19	23
Dental Technologists	44	26	30	28	21
Higher Diploma in Public Health Education & Promotion	19	19	22	27	21
Higher Diploma in Microbiology	8	9	4	11	20
Higher Diploma Psychiatric Nursing	19	21	19	20	17
Higher Diploma in Peri-operative nursing	-	-	-	7	16
Higher Diploma in Medical Imaging Sciences-Ultrasound		12	13	16	16
Higher Diploma in Occupational Health & Safety	12	10	10	8	14
Higher Diploma in Haematology	7	10	7	6	10
Clinical Medicine -(Paediatrics	20	14	22	12	8
Clinical Medicine -Reproductive Health	11	12	13	9	6
Clinical Medicine - ENT	8	11	9	0	6
Higher Diploma in Food Science and Inspection	11	7	5	10	6
Higher Diploma in Blood Transfusion	8	10	8	9	5
Higher Diploma in Clinical Chemistry	5	10	6	3	4
Higher Diploma in Parasitology/Entomology	5	8	5	4	4
Higher Diploma in Community Health Nursing	24	23	18	17	0

Source: MOH National HRH Annual Report 2010.

Data from Nursing Council of Kenya shows that public training institutions train the highest number of nurses in the country. As shown in the Table 35, these institutions have continued to generate 60 percent and over of graduates. Although FBOs training institutions were the second in the number of nurses trained, the number went down considerably from 23.9 percent in 2008 to 16.6 percent in 2009 and lowest to 2.9 in 2010. Institutions outside Kenya continued to generate the lowest number of graduates, which has remained less than 1 percent of graduates registered in the country every year.

<sup>39</sup> Kiambati, Harrison, Caroline Kiio and John Towett. World Health Organization (WHO). November 2013 Understanding the Labour Market of Human Resources for Health in Kenya.

**Table 35: Nursing graduates from public and non-public institutions 2005-2010**

Year of registration	Total graduates	Public institutions %	Private institutions %	Institution outside Kenya %	Mission institutions	Other institutions
2005	1676	60.0	4.9	0.8	30.2	4.1
2006	2333	66.4	4.8	0.5	26.0	2.3
2007	2515	65.1	5.9	0.2	27.0	1.8
2008	2792	70.3	4.2	0.3	23.9	1.4
2009	3872	75.8	3.9	0.5	16.6	3.1
2010	2940	73.4	4.1	0.5	2.9	2.9

Source: Annual Report of Nursing Council of Kenya (2010).<sup>40</sup>

### 3.5 Attrition of Health Workers

There were a total of 262 attritions in 2012 as compared to 1,850 in 2008, a reduction of 31 percent. Majority of attritions in 2008 were due to illness (1,399) and in 2008-2012 they were mainly due to expiry of contract (1,091). As shown in the Table 36, death has also been claiming a sizable number of health workers. The analysis of five year period (2008-2012) shows that death the cause of attrition of 780 health workers.

**Table 36: Attrition in MOH (MOMS & MOPHS) staff 2008-2012**

Reasons	2008	2009	2010	2011	2012	Total
Illness	1399	37	2	2		1440
Retire on public interest	4	3	3	1		11
Transfer of service	15	46	26	37	18	142
Expiry of contract	203	222	276	308	82	1091
Death	165	195	170	172	78	780
Resignation	2	2		12	3	19
Reassignment	6			245		251
Dismissal	34	37	36			107
Retirement	15	99	101		80	295
Abscondment	7	3	101	180	1	292
Other				3		3
<b>Total</b>	<b>1850</b>	<b>644</b>	<b>715</b>	<b>960</b>	<b>262</b>	<b>4431</b>

Source: Capacity Project/MOH HRIS, August 2013.

### 3.6 Migration of Health Workers

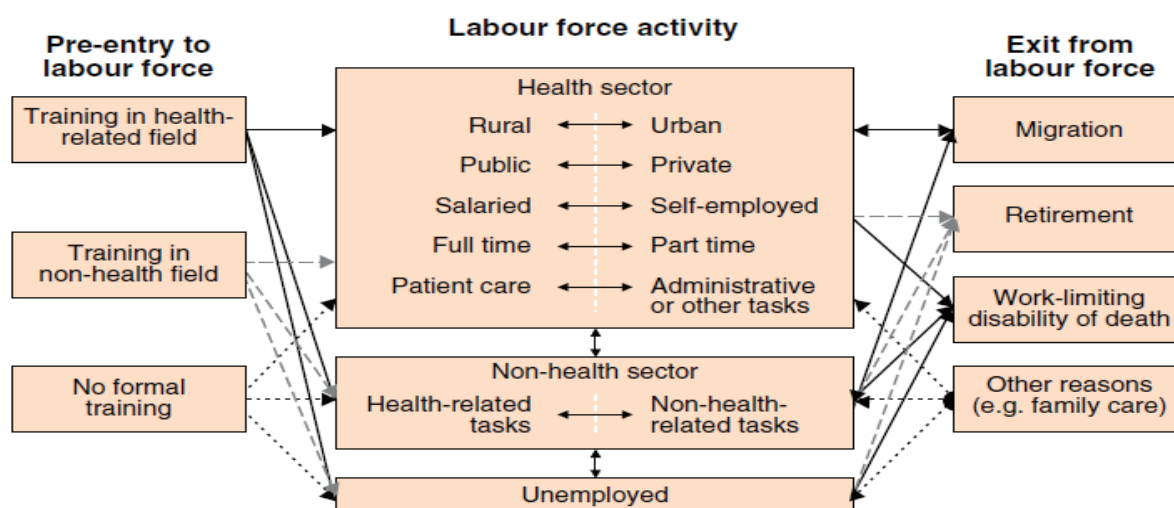
Figure 3 illustrates the flow of health workforce – all the way from pre-entry to entry and exit into labour market. As shown in the figure, migration of health workers can take place within the health sector itself (e.g. from rural to urban and vice versa or public to private and vice versa) or exit completely from health sector into non-health sector or completely from labour force. However as shown by the double arrows, those who migrate from the health sector can always trace their way back. However those who leave the sector through retirement or disability do not find their way back.<sup>41</sup>

<sup>40</sup> Also see Kiambati, Harrison, Caroline Kiio and John Towett.. World Health Organization (WHO). November 2013 Understanding the Labour Market of Human Resources for Health in Kenya.

<sup>41</sup> See: Handbook on monitoring and evaluation of human resources for health (2009). WHO, World Bank and USAID.



**Figure 3: Stocks and flows of the health workforce**



Source: Handbook on monitoring and evaluation of human resources for health (2009). WHO, World Bank and USAID.

As Table 37 shows, there were many health professionals in the key cadre leaving public service between 2005 and 2009 for various reasons. Majority of those who left the public service were the enrolled nurses numbering 1,964 followed by medical doctors numbering 972. With devolution of health services to the counties, a lot of internal migrations (within the public service and health sector) and external migrations (out of public service and health sector and vice versa) are expected.

**Table 37: Staff establishment and exit out of the public sector**

MOH staffing trends 2005–2009			
Designation	Recruitment	Exits <sup>a</sup>	Difference <sup>b</sup>
Medical officers	1678	972	706
Clinical officers	845	356	489
Enrolled Nurse	2406	1964	442
Nursing Officer	1101	461	640
Medical Lab Technologist / Technicians	381	185	196

<sup>a</sup> The share of staff recruited between 2005 – 2009 that exited the public sector due to normal attrition, resignation and internal and external migration.

<sup>b</sup> Total recruited staff minus share of total recruited staff that exited the public sector.

Source: Kiambati et al (2013).<sup>42</sup>

Table 38 shows that the number of nurses verified to work outside Kenya continued to decline, with the number reducing from 491 in 2008 to 336 in 2009. USA has remained the single largest destination for Kenyan nurses. England attracted 158 nurses in 2008 but the number declined to 6 in 2009. Australia attracted 36 nurses in 2008 but number increased to 40 in 2009.

<sup>42</sup> Kiambati, Harrison, Caroline Kii and John Towett.. World Health Organization (WHO). November 2013 Understanding the Labour Market of Human Resources for Health in Kenya.

**Table 38: Nurses external migration 2008 and 2009**

Destination country	2008	2009
Italy	-	1
Ghana	-	1
Uganda	6	2
South Africa	4	2
Dubai	-	3
Tanzania	4	5
Botswana	7	5
England	158	6
Ireland	6	7
New Zealand	9	8
Namibia	-	16
Canada	6	40
Australia	36	40
USA	255	200
<b>Total</b>	<b>491</b>	<b>336</b>

Source: Annual Report of the Nursing Council of Kenya (2009).<sup>43</sup>

<sup>43</sup> Also see Kiambati, Harrisson, Caroline Kiio and John Towett.. World Health Organization (WHO). November 2013 Understanding the Labour Market of Human Resources for Health in Kenya.

# CHAPTER 4: HEALTH WORKFORCE PROJECTIONS AND GAPS

## 4.1 Staff Projections and Gaps

Table 39 shows the projections for general practitioners, clinical officers and nurses for the period 2013-2030. Based on these projections, it will be a challenge to fill the staffing gaps for general practitioners and nurses by 2030. However, by 2025 there will be more than enough clinical officers in the market to meet the demand.

**Table 39: Projections of General Practitioners, Clinical Officers and Nurses, 2013-2030**

Cadre		2013	2015	2020	2025	2030
General Practitioners	Active	3,443	4,148	6,051	8,117	10,310
	Norm	7,551	7,939	9,038	10,275	11,682
	Gap	4,108	3,801	2,987	2,159	1,372
Clinical Officers	Active	7,043	9,656	16,021	22,658	29,438
	Norm	15,447	16,261	18,488	21,019	23,898
	Gap	8,404	6,696	2,466	-1,638	-5,541
Nurses	Active	34,381	38,911	54,564	73,666	97,157
	Norm	75,407	79,379	90,249	102,607	116,658
	Gap	41,026	40,468	35,685	28,941	19,501

Source: MOH, USAID and Funzo Kenya, September 24, 2013.<sup>44</sup>

According to the data received from the Oral/Dental Health Division of Ministry of Health, there are 100 dental specialists and 339 dental officers in-post in the public sector. However, the requirements are 1,340 and 7,400 dental specialists and dental officers, respectively. Projections show that only 100 will be required in 2013/14 but none in subsequent years of the planning period. The dental technologists in-post are 93 but 7,936 are required. The projections indicate that in 2013/14, 93 will be required, rising to 293 in 2017/18. The number in-post for community oral health officers is 111 while the required number is 11,920. The projections for the next five years are shown in Table 40. Going with these projections, gap in oral/dental health cadres will not be filled in the planning period.

**Table 40: Projections for Oral/Dental Health Cadres**

Division of Oral/Dental Health				Projections				
Cadre	Required	In- Post	Variance	2013/14	2014/15	2015/16	2016/17	2017/18
Dental Specialists	1,340	100	1,240	50	150	250	350	500
Dental Officers	7,400	339	7,061	339	389	439	489	539
Dental Technologists	7,936	93	7,843	93	143	193	243	293
Community Oral Health Officers	11,920	111	11,809	111	181	251	321	391

Source: Ministry of Health, Oral/Dental Health Division. September, 2013.

The data from Community Health Services unit indicate that there are 2,100 community health personnel working in Community Health Units. The total number required is 46,470 leading to a shortfall of 44,370. In order to bridge this gap within the next five years, the unit would hire about 9,000 personnel per annum to cover the shortfall by the planperiod.

<sup>44</sup> MOH, USAID and Funzo Kenya. Health Workforce Forecast Kenya. A Reference Report, V1.0, September 24, 2013.

As shown in Table 41, there are a total of 3,356 public health workers in the public sector. The required number in public sector is 25,933, which leaves a huge gap of 21,707 people. The projections by the Division of Environmental Health in the Ministry of Health are shown in Table 43. Based on these projections, the cadre gaps in the public health will not be filled in the planning period. As shown in the table, in the next four years the Division forecasts to hire 1050 PHTs, 1873 PHOs (Diploma) and 178 PHOs (Graduate) who will not be enough to fill the shortfall of 21,797 workers. Also shown in the table is the forecasting using 5 percent in-post.

**Table 41: Projections for cadres in public health**

Cadre	Norm	In post	Gap	2014	2015	2016	2017	2020	2025	2030
PHT s	15444	<b>3356</b>	13138	<b>3523</b>	<b>3699</b>	<b>3883</b>	<b>2802</b>	<b>4077</b>	<b>4281</b>	<b>4495</b>
PHOs (Diploma)	8989	<b>1797</b>	7192	<b>1886</b>	<b>1980</b>	<b>2079</b>	<b>2182</b>	<b>2991</b>	<b>3105</b>	<b>3260</b>
PHO (Graduate)	1500	<b>178</b>	1377	<b>186</b>	<b>195</b>	<b>178</b>	<b>204</b>	<b>214</b>	<b>224</b>	<b>235</b>
Total	<b>25933</b>	<b>5331</b>	<b>21707</b>	<b>5595</b>	<b>5874</b>	<b>6140</b>	<b>5188</b>	<b>7282</b>	<b>7610</b>	<b>7990</b>

*Source: Division of Environmental Health, Ministry of Health. September, 2013.*

As Table 42 shows, there are no graduate laboratory technologists in the public sector. However, the staffing norm is 3,196 leaving a gap of the same which the Division of Medical Laboratory forecasts to fill by 2030. There are 2,067 medical laboratory technologists (diploma) but the requirement is 13,678 in public sector, this leaves a gap of 11,647. The division also forecasts to fill this gap by 2030. During the plan period, the gaps existing in the two cadres will not be filled.

**Table 42: Projections for Medical Laboratory cadres**

	Cadre	Norm	In-post	Gap	2014	2015	2016	2017	2020	2025	2030	Total
1	Graduate Medical Lab. Technologists	3196	0	3196	188	188	188	188	564	564	564	<b>3196</b>
2	Diploma Medical Lab. Technologists	13678	2067	11647	685	685	685	685	2055	3425	3425	<b>13678</b>
	<b>Total</b>	<b>16874</b>	<b>2067</b>	<b>14843</b>	<b>873</b>	<b>873</b>	<b>873</b>	<b>873</b>	<b>2619</b>	<b>3989</b>	<b>3989</b>	<b>16874</b>

*Source: MOH, Division of Laboratory and Blood Transfusion Unit, September 2013.*

The staffing norms requires public sector to have 1,187 medical engineering technologists but there are 169 in-post with a gap of 1,018. In addition there are 167 medical engineering technicians against 847 required by the staffing norms – leaving a gap of 680. The projections are as shown in the Table 43. According to these projections, the gaps in medical engineering will be filled and exceeded during the planning period.

**Table 43: Projections for Medical Engineering**

Cadre	Norm	In-post	Gap	2014	2015	2016	2017	2020	2025	2030
Medical Engineering Technologist	1187	169	1018	350	450	600	750	1000	1500	3000
Medical Engineering Technician	847	167	680	300	550	650	850	850	850	850

*Source: MOH, Division of Medical Engineering, September 2013. .*

The staffing norm of medical social work is 1,153 people, with just 100 in-post which leaves a gap of 1,053. The Division of Medical Social Work in the Ministry of Health projects to fill this gap by 2017 as shown in Table 44.

**Table 44: Projections for Medical Social work**

Norm	In-post	Gap	2014	2015	2016	2017
1,153	100	1053	200	240	280	333

Source: MOH Division of Social Work, September 2013.

A summary of the current (2014) National HRH staffing needs by cadres is presented in Table 45.

**Table 45: Summary: National HRH staffing needs**

STAFF CATEGORY	Sub categories	Standard workload	Category Allowance Factor	Individual Allowance Factor	Calculated Staff Requirement	Final staff requirement
Dental staff	Community Oral Health Officers	817	1.12	690	1,604	<b>1,604</b>
	Dental assistant	-	1.20	-	-	<b>1,924</b>
	Dental general practitioner	493	1.82	66	962	<b>962</b>
	Dental specialist	175	2.05	-	359	<b>359</b>
Laboratory staff	Laboratory assistant	-	<b>1.36</b>	-	-	<b>11,137</b>
	Laboratory technician	4,107	1.36	-	5,569	<b>5,569</b>
	Laboratory technologist	1,085	1.36	-	1,471	<b>1,471</b>
Medical practitioners	Nutritionist	1,322	1.72	60	2,335	<b>2,335</b>
	Clinical Officer	9,188	1.72	471	16,278	<b>16,278</b>
	Medical Officer	7,650	1.70	121	13,141	<b>13,141</b>
Midwives	Enrolled Midwife	-	<b>2.05</b>	-	-	<b>0</b>
	Registered Midwife	5,847	2.19	493	13,308	<b>13,308</b>
Non surgical specialists	Emergency / trauma specialist	4	1.93	-	8	<b>572</b>
	Physician / internal medicine	601	1.82	452	1,544	<b>1,544</b>
	Psychiatrists	5	1.82	452	461	<b>461</b>
Surgical specialists	ENT	-	1.82	452	452	<b>452</b>
	General surgeon	264	1.82	467	947	<b>947</b>
	Obstetrics / Gynaecology	73	1.82	452	585	<b>585</b>
	Ophthalmologist	47	1.82	467	552	<b>552</b>
	Orthopedician	15	1.82	467	495	<b>495</b>
	Pediatrician	30	1.82	452	506	<b>506</b>
	Orthopedic technician	-	1.20	-	-	<b>831</b>
	Orthopedic technologist	299	1.20	56	416	<b>416</b>
Nurses	Plaster technician	-	1.20	-	-	<b>0</b>
	Nurse assistant	-	1.27	-	-	<b>0</b>
	Enrolled nurse	17,360	1.27	1,529	23,574	<b>23,574</b>
	Registered nurse	2,085	2.05	7,059	11,335	<b>11,335</b>
	BSN nurse	-	9.41	467	467	<b>467</b>
Pharmacy staff	specialised nurse	1,110	2.54	121	2,939	<b>2,939</b>
	Dispenser	-	1.22	-	-	<b>0</b>
	Pharmacy technologist	2,543	1.22	-	3,106	<b>3,106</b>
Radiology staff	Pharmacist	3	2.05	719	724	<b>724</b>
	Radiology assistant	-	1.30	-	-	<b>1,505</b>
	X-ray technician	-	1.30	-	-	<b>0</b>
	Radiographer	579	1.30	-	753	<b>753</b>
	Radiologist	0	2.35	575	576	<b>576</b>

STAFF CATEGORY	Sub categories	Standard workload	Category Allowance Factor	Individual Allowance Factor	Calculated Staff Requirement	Final staff requirement
Environmental health staff	Public Health Officers	3,359	1.12	471	4,229	<b>4,229</b>
	Public Health Technicians	2,046	1.30	0	2,662	<b>2,662</b>
Community staff	Trained Community Health Worker	87,149	1.22	14,444	120,886	<b>120,886</b>
	Social Health Worker	1,470	1.58	1,200	3,528	<b>3,528</b>
Rehabilitation specialists	Occupational Therapists	537	1.20	58	704	<b>704</b>
	Physiotherapists	994	1.72	58	1,768	<b>1,768</b>
Management staff	Health Records and Information Officer	2,048	1.76	471	4,071	<b>4,071</b>
	Health Records and Information Technician	-	1.76	-	-	<b>0</b>
	Medical engineering technologist	202	1.12	187	413	<b>413</b>
	Medical engineering technician	-	1.12	-	-	<b>825</b>
Administrative staff	Drivers	125	1.10	-	<b>137</b>	<b>7,252</b>
	Clerks	-	1.03	-	-	<b>8,661</b>
	Cleaners	-	1.06	-	-	<b>11,890</b>
	Security	-	1.06	56	56	<b>9,718</b>
	Accountants	-	1.03	-	-	<b>3,846</b>
	Administrators	-	1.06	-	-	<b>4,330</b>
	Cooks	-	1.03	-	-	<b>6,503</b>
	Secretaries	-	1.03	-	-	<b>3,362</b>
General support staff	Casuals	2,529	1.03	-	2,593	2,593
	Mortuary attendants	-	1.06	-	-	<b>749</b>
	Patient attendants	-	1.06	-	-	<b>7,858</b>

Source: HRH & Health Infrastructure: Norms & Standards, 2013

## 4.2 Training Projections and Gaps

### 4.2.1 Training Needs

As Table 46 shows, dentist graduates are expected to grow by 57 percent while physiotherapists by 30 percent and laboratory technologists by 29 percent. During the same period, health records information officers will grow by 27 percent. The only anticipated negative growth will be from Pharmaceutical Technologists (-3 percent). According to Kenya Nutritionists & Dieticians Institute (KNDI) there were 2612 registered Nutritionists (1284 degree, 1126 diplomas, and 202 certificates) in the sector by April 2014. The Institute had approved and awarded Interim licenses to 20 Training institutions (Universities, Colleges, and Training Institutes). The institutions were expected to graduate about 900 this year (2014) and growing by more than 1,000 graduates per year for the next 4 years.

**Table 46: Expected graduates by cadre, 2013-2018**

	2013	2014	2015	2016	2017	2018	Growth
Clinical officers	1,564	1,629	1,693	1,757	1,822	1,886	4%
Dentists	71	97	123	148	164	173	57%
General Practitioners	517	543	569	594	620	646	5%
HRIO	812	985	1,158	1,216	1,277	1,341	27%
Laboratory Technologists	1,113	1,362	1,610	1,691	1,775	1,864	29%

	2013	2014	2015	2016	2017	2018	Growth
Nurses	3,768	4,207	4,645	5,084	5,338	5,605	13%
Nutritionists*	2,155	2,612	3,512	4,512	5,612	6,812	316%
Pharm. Technologists	743	686	629	629	629	629	-3%
Pharmacists	105	109	114	123	123	128	5%
Physiotherapists	110	135	161	186	195	205	30%

Source: MOH, USAID and Funzo Kenya, 2013.<sup>45\*\*KNDI</sup>

#### 4.2.2 Critical Training Requirements

Table 47 shows the first training requirement of the Ministry of Health. The number in-post as well as that which is required by the sector is shown in the table. In order to train 22 oncologists (General) at a rate of eight that are critically needed to be trained per annum, it will take about three years. On the other hand to train 22 renal physicians at a rate of 4 that are critically needed to be trained per annum, it will require about five years. Similarly to train 22 renal physicians at rate of 4 that are needed to be trained annually, it will require about five years. As the table shows, there is critical shortage of some specialists namely: oncologists – General (0 in-posts), renal pediatricians (two in-post), renal pediatrician (one in-post) and family doctors (seven in-post).

**Table 47: The First Training Requirements**

Specialist	In Post	No. required	Critical no. need to be trained per year	Years needed to train required number*
Anesthetists	25	88	15	5.9
Obst./Gynecologists	73	300	15	20.0
General Surgeons	83	300	16	18.8
Family Physicians	7	540	20	27.0
ENT Surgeons	24	51	4	12.8
Eye Specialists	20	62	4	15.5
Psychiatrists	21	91	6	15.2
Oncologists – General	0	22	8	2.8
Pathologists	14	60	4	15.0
Radiologists	16	41	5	8.2
Renal Physicians	2	22	4	5.5
Renal Pediatricians	1	22	4	5.5

Source: Director of Medical Services, Ministry of Health, November 5, 2011.

Table 48 shows the second training requirement of the Ministry of Health. In order to train 113 dermatologists and 42 cardiothoracic surgeons it will require about 10 years each at a rate of four for each cadre that are critically need to be trained per annum. To train 22 critical care physicians at a rate of 5 that are critically needed to be trained per annum, it will require about four years. On the other hand, to train 22 cardiologists at a rate of four that are critically needed to be trained per annum, it will require about five years. As shown in the table, there is acute lack of cardiologists (only two in-post), critical care physicians (none in-post), dermatologists (one in-post) and Cardiothoracic Surgeons (only 3 in-post).

<sup>45</sup> Ministry of Health, USAID and Funzo Kenya. Health Workforce Forecast Kenya. A Reference Report. V1.0, September 24, 2013.



**Table 48: The Second Training Requirements**

Specialists	In Post	No. Required	Critical no. to be trained per year	Years needed to train required number*
Cardiologists	2	22	4	5.5
Critical Care Physicians	0	22	5	4.4
General Physicians	33	113	10	11.3
Dermatologists	1	40	4	10.0
Orthopedic Surgeons	6	40	5	8.0
Cardiothoracic Surgeons	3	42	4	10.5

**Source: Director of Medical Services, Ministry of Health, November 5, 2011.**

Table 49 shows training requirement number three of the Ministry of Health. To train 259 Clinical Officers – Ophthalmology at a rate of 50 critically needed to be trained per annum, it will require about 26 years while to train 244 Clinical Officers – ENT at a rate 10 per critically needed to be trained per annum, it will require about 24 years. While there is staff in-post for this category of cadres, the number falls short of the requirement for the Ministry of Health.

**Table 49: The Third Training Requirements**

Specialist	In Post	No. Required	Critical No. Need to Be Trained Per Year	Years needed to train required number*
RCO Anesthetists	202	414	50	8.28
Clinical Officers – ENT	76	244	10	24.4
Clinical Officer – Ophthalmology	91	259	10	25.9
Clinical Officer – Pediatrics	146	293	20	14.6
Clinical Officer – RH	23	191	10	19.1
Clinical Officer – Lung & Skin	166	336	20	16.8

**Source: Director of Medical Services, Ministry of Health, November 5, 2011.**

Table 50 shows the fourth training requirement number four of the Ministry of Health. In this category most of the courses take a year to complete. The estimate to be trained in 5 years planning period is shown in the table for various cadres.

**Table 50: The Fourth Training Requirements**

Competency	Duration	Critical Need to be Trained Per Year	Number to be trained in 5 years*
Pediatric Nursing	1 year	20	100
Neonatal Nursing	1 year	10	50
Theatre Nursing	1 year	30	150
Renal Nursing	1 year	20	100
Psychiatric Nursing	1 year	30	150
Anesthetic Nursing	1 year	15	75
A&E Nursing	1 year	20	100
Critical Care Nursing	1 year	20	100
Upgrading (C to D)	2 <sup>1</sup> / <sub>2</sub>	60	120

Competency	Duration	Critical Need to be Trained Per Year	Number to be trained in 5 years*
Upgrading (to degree)	4 years	20	20
Oncology Nursing	1 year	4	20
Short courses (skills based)	1 to 4 weeks	200	No estimate
<b>Total</b>		<b>468</b>	-

**Source: Director of Medical Services, Ministry of Health, November 5, 2011.**

## CHAPTER 5: STRATEGIC DIRECTION

The second HRH strategic Plan for the period 2013-2017 linked to the Kenya Health Sector Strategic Plan III (KHSSP III) that is currently under finalization. This plan is envisioned to articulate the HRH strategic dimensions in the light of the devolved system of health management and work towards supporting the goal of KHSSP III.

This strategic plan's vision is to, have a globally competitive, healthy and productive nation. Its goal is to, 'accelerate attainment of health impact goals' as defined in the Health Policy while the mission of this strategic plan is "To deliberately build progressive, responsive and sustainable technologically-driven, evidence-based and client-centred health system for accelerated attainment of highest standard of health to all Kenyans". This sector aims to attain its overall objectives through focusing on a broad base of health and related services that will impact on health of persons in Kenya. It places main emphasis on implementing interventions, and prioritizing investments relating to maternal and newborn health, as it is the major impact area for which progress was not attained in the previous strategic plan. It is designed to provide information on:

- a) The scope of Health and related services the sector intends to focus on as outlined in the Kenya Essential Package for Health, KEPH
- b) The investments required to provide the above-mentioned services as outlined across the 7 investment areas for health
- c) How the sector will monitor and guide attainment of the above

Guiding this strategic direction is the HRH action framework shown in Figure 4.<sup>46</sup> This framework advocates for a comprehensive approach to national HRH planning and implementation. The framework addresses key HRH components: policy, finance, education, partnerships, leadership and HRH management systems. These components in turn informed the projected outcomes proposed by this strategic plan. The HRH strategic plan is also specifically guided by the overall mission of the health sector which is **'to promote and provide quality curative, preventive, promotive, rehabilitative and palliative health care services to all Kenyans.'**

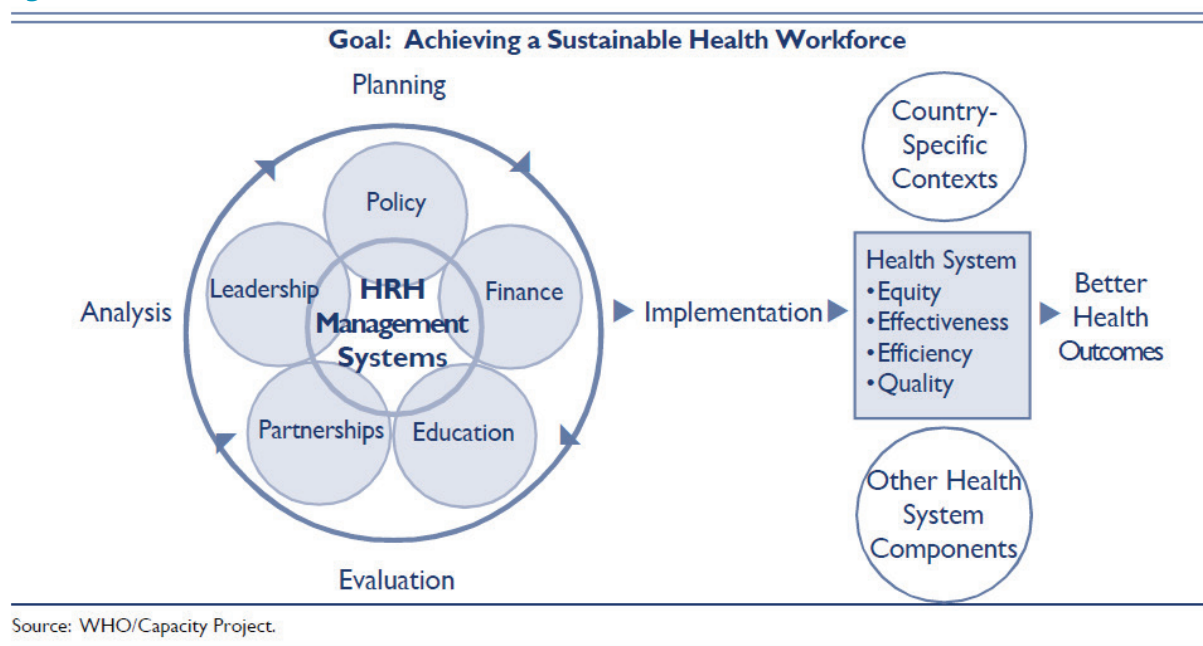
In order to contribute to the goals of this strategic plan, strategic objectives and strategies are formulated around the following six projected outcomes:

- Adequate and equitably distributed health workers
- Sector Jobs made attractive and retention of health workers
- Strengthened institutional framework and improved health workers performance.
- Strengthened human resources development systems and practices.
- Strengthened human resources planning and management at all levels,
- Adequate financial resources mobilized to support investments in HRH

It is envisaged that a detailed operational plan including annual HRH plans will be developed to support the implementation of this strategic plan.

<sup>46</sup> Human Resources for Health Strategic Plan 2009-2012.

**Figure 4: Human Resources for Health Action Framework**



## 5.1. PROJECTED OUTCOMES

### OUTCOME 1: ADEQUATE AND EQUITABLY DISTRIBUTED HEALTH WORKFORCE

The Human Resource distribution remains skewed overall, with some areas of the country facing significant gaps while others have optimum/surplus numbers. With establishment of Counties, the National government should prioritize the establishment of a minimum number of health workers in each facility, based on the expected services as defined in the KEPH. Adequacy encompasses numbers, skills mix, competence, and attitudes of the health workers required to deliver on the health goals. This, the sector will achieve through objectives and strategies presented below and further detailed in a Results Matrix in Chapter 6:

#### Strategic Objective 1.1: Strengthen Recruitment of Adequate Numbers of Health Workforce with the Right Skills Mix

In order to address existing gaps and a need to keep up with a growing population, social economic developments, and increasing disease burden, the sector will need to recruit and deploy 60,000 new staff across all cadres during the plan period. This will be implemented as under:

- Review existing recruitment policies and procedures/guidelines and disseminate at all levels
- Review and implement the establishments and staffing norms for facility and community levels
- Recruit adequate health workers to support facility and community level health services in line with the constitution requirements
- Recruit Health HR officers to support at county and its high volume facilities

#### Strategic Objective 1.2: Equitable Deployment and Redeployment of the Health Workforce

The Community Strategy aims at empowering the communities to take an active part in their own health care, especially in basic preventative services. The following strategies are proposed to support the objective.

- Develop and implement a deployment policy
- Establish a robust integrated human resource information system (iHRIS) including staff returns at both national and county levels
- Redeploy staff according to needs, workload and skills as per the staffing norms and constitution requirements

- Second /Deploy health workers to support FBOs as per need
- Lobby development partners to support recruitment and deployment of additional health workers at all levels
- Initiate biannual stakeholders forum to support harmonization of terms and conditions for engagement of contracted health workers

## **OUTCOME 2: CONDUCIVE ENVIRONMENT THAT ATTRACTS AND RETAINS HEALTH WORKFORCE**

The management of the health sector under a devolved system necessitates new institutional and management arrangements. The Counties need to create an environment where health facilities located in hardship areas do not continue to suffer staff shortages. This will require the design of attractive packages to attract and retain HWs. Extra funding may be necessary for such packages which may be sought from the Equalization Fund as provided for in Article 204 (2) of the Kenyan Constitution. The following objectives and strategies are expected to contribute to the achievement of this outcome:

### **Strategic Objective 2.1: Make Work Conditions more Attractive**

The following strategies are proposed in support of the above objective:

- Develop an incentive policy for attraction and retention of health workers
- Strengthen and review Human Resources Management supportive supervision tools & guidelines
- Establish resource centers and recreation facilities - link to Public Private partnership for HRH financing (ref. Outcome 6)
- Develop and review schemes of service for Health Workers including CHSP
- Advocate for provision of social amenities for health workers
- Design and develop secure location for personnel records at the Counties
- Train staff at Counties to handle records
- Transfer appropriate records to the Counties

### **Strategic Objective 2.2: Make Rural and Hard-to-reach Stations more Attractive**

- Provide competitive and attractive retention package
- Use innovative communication approaches in hard to reach areas

### **Strategic Objective 2.3: Make Work Place Safe**

- Develop and implement Occupational safety and health (OSH) policies and guidelines

### **Strategic Objective 2.4: Improve Staff Wellness and Welfare**

- Develop schemes for staff wellness and welfare
- Update all personnel records to feed into pension schemes and other benefit schemes
- Develop gender sensitive and responsive policy
- Lobby for provision of social amenities for health workers- (link to Public Private partnership & multi-sector engagement for HRH financing) -ref. Outcome 6.

## **OUTCOME 3: RESPONSIVE INSTITUTIONAL FRAMEWORKS THAT SUPPORT WORKFORCE PERFORMANCE MANAGEMENT**

To improve and sustain the workforce performance and productivity will require the creation and maintenance of an enabling working environment. Such environment supports a worker's supervision, motivation, learning and continuous professional development, and reduces chances of injury, and exposure to communicable and non-communicable diseases. It equips the worker with the right

tools and ensures the provision of water, sanitation, electricity, medical equipment, drugs, and surgical and other supplies to facilitate service delivery.

### **Strategic Objective 3.1: Improved Health Workforce Performance Management**

The following strategies are proposed to support the objective.

- Establish Kenya Institute of Health System Management (KIHSM) to harmonize leadership, management, HRM and governance for improvement of performance
- Facilitating the implementation of a comprehensive induction training program, with specific milestones for all leaders.
- Develop Policy Guidelines on performance management for implementation of rewards and sanctions.
- Develop performance management tools and guideline for innovation, target setting, monitoring and evaluation of performance
- Provide linkage of individual performance to training, promotion and license and re-licensure
- Provide linkage of individual performance to training, promotion and license and re-licensure
- Integrate the use of ICT to strengthen performance evaluation process.
- Provide a mechanism for supportive supervision for implementation of performance management cycle.

### **OUTCOME 4: RESPONSIVE HRD SYSTEMS & PRACTICES**

The fast changing nature of the HRH environment makes it necessary to provide all health workers- from new hires to existing ones, with the capacity to cope with changes in processes, technology and expanded responsibilities. The purposeful development of capacity involves the diagnosis of the specific needs, the establishment of a clear objectives and the delivery of programs to improve service delivery.

### **Strategic Objective 4.1: Strengthened Human Resources Development Systems and Practices**

The following strategies are expected to achieve this strategic objective:

- Provide policies and guidelines on the human resource development of the health workforce.
- Review and adopt the national training Policy to respond to the devolved system of government and emerging health challenges.
- Develop a policy on demand driven CPD and e-learning modules that are cost effective for re-licensure.
- Develop mechanism of ensuring that In-service training is based on the training needs assessment and are institution based for cost effectiveness.
- Identify and develop cross cadre CPDs that are institutionalized
- Develop a mechanism that ensures courses are based on the identified national training needs assessment (TNA ), example midwifery, oncology, anesthetist, cancer screening, etc.
- Develop a mechanism linking the ministry of health and ministry of education in the review and harmonization of curriculums to respond to emerging issues
- Develop a framework to harmonize entry criteria to health related courses.
- Develop a cost effective mechanism to harmonize the inspection of training institutions by regulatory bodies.
- Develop a harmonized internship programs for orientation of health workers trained in and outside the country.

## **Strategic Objective 4.2: Human Resource Master Plan Developed**

The following strategies are expected to achieve this objective:

- Develop goals, objectives, core values and guiding principles
- Develop a forecasting policy to guide planning
- Identify the roles of stakeholders' i.e. training institutions, regulatory bodies, private, NGO , FBOs and development partners.
- Coordinate implementation of training plans
- Develop a monitoring and evaluation framework to guide implementation
- Develop strategies for raising training funds and scholarships and loans e.g. Afya Elimu.
- Develop guidelines for clinical placement
- Re-classify cadres to separate staff working in management and clinical providers
- Professionalized management staff with a scheme of service so that they can also specialize
- Develop platforms to share best practices in training and regulation.

## **OUTCOME 5: STRENGTHENED HUMAN RESOURCE PLANNING AND MANAGEMENT IN HRH**

Planning has been identified as major weaknesses in the entire health sector. The situation has been particularly grim in the public and FBO subsectors, where HRM systems and practices have stagnated following years of under-investment and a serious shortage of skilled HR practitioners. The few professional HR staffs are deployed at the central level and in the referral hospitals. The HR function at regional and facility level is carried out by health administrators and clerical staff, many of whom have additional duties to perform.

## **Strategic Objective 5.1: A Strong and Decentralized HR Planning and Management**

The following strategies are expected to achieve this strategic objective:

- Develop decentralizing structures for HRH functions including reporting lines at the National and County levels
- Develop a regular HR planning and budgeting tools in line with Government review cycle
- Develop professional code of conduct for HR guidelines
- Development of guidelines for management of career progression of the health workforce
- Adoption of current existing national HRH policies and guidelines for implementation by the Counties including schemes of service and HRH norms and standards amongst others
- Review and Development of additional HRH policies and guidelines that address county HRH needs e.g. schemes of services that do not recognize cadres (to be lead by national government)
- Strengthen county administrative services capacity for health workforce management through training and orientation of existing HRH policies and guidelines amongst others
- Establish HRH coordination structures at county level for linkages of partners, public, private and faith based sector for HRH planning and management
- Strengthen intergovernmental coordination on HRH issues between national and county and between counties
- Strengthen the utilization of HRH data (from human resource information system) for county leadership decision making

## **Strategic Objective 5.2: Strengthen Ethics and Values in HRH Induction and Practice**

- Review existing induction manual and implement a mandatory induction program for all health workers



- Management of health workers career progression alongside acquisition of ethics and appropriate tailor made managerial skills

### **Strategic Objective 5.3: Develop HRH Communication strategy**

- Establish a HRH communication strategy within the health workforce including HRH service charter, frequently asked questions, HRH standard Operating Procedures, helpdesk amongst others

### **OUTCOME 6: ADEQUATE FINANCIAL RESOURCES MOBILIZED TO SUPPORT INVESTMENTS IN HRH**

The 64th World Health Assembly (WHA) held in Geneva, Switzerland in May 2011, urged member states through Resolution WHA 64.6 to prioritize, in the context of global economic conditions, public sector spending on health as appropriate, to ensure that sufficient financial resources are available for the implementation of policies and strategies to scale-up and retain the health workforce particularly in developing countries. They also urged member states to recognize it as an investment in the health of the population that contributes to social and economic development to ensure sustainable financing of HRH include being cognizant of the economic performance of the country; the competing development/poverty reduction programs and projects and not just the rise in the cost of living and inflation; and remuneration obtained in other countries or private sector institutions.

### **Strategic Objective 6.1: Increase Investment Options for HRH**

Health expenditures in sub-Saharan Africa (including in Kenya) are expected to grow rapidly with the private sector expected to make a significant contribution to investments needed to meet this demand. The private sector can effectively complement public sector efforts to help alleviate the absolute shortage of health workers; the distributional imbalance of health workers between rural and urban areas; and the training imbalance of workers, which is heavily skewed towards professional cadres. The private sector in Kenya owns 70 percent of health worker (HW) training institutions.

It was noted, however, that the private sector produces less than 30 percent of HWs, but this investment is expected to grow given the increase in growth and number of private Universities offering HW education. The following strategies are proposed to strengthen collaboration and increase HRH resources:

- Review current practices and explore investment options;
- Develop and disseminate harmonized resource mobilization strategy for HRH investment;
- Develop a framework for private sector training institutions to access public sector institutions for internships and clinical placement;
- Establish a high level multi - sectoral investment stakeholders forums
- Establish HRH public private partnership (PPP) framework for National and County level with well defined instruments of engagement

### **Strategic Objective 6.2: Reduced Costs of HRH Systems and Processes**

The following strategy is proposed to reduce costs of HRH:

- Develop a HRH cost reduction strategy to minimize wastage and improve efficiency

## CHAPTER 6: MONITORING AND EVALUATION PLAN

The Inter-Agency Coordination Committees (ICCs) will be entrusted with monitoring and Evaluation of this strategy. An M&E Technical Working Group (TWG) consisting of 5-10 people will be appointed from the membership of ICCs to be in charge of M&E of this plan.

The TWGs will convene their meetings on quarterly basis. During their first meeting, they will define roles of partners and develop an M &E work plan for ICC approval. The TWG's main role will be to mobilize relevant authorities to collect the data and/or other required information. The data and other information received by the TWG will be collated, analyzed, and synthesized into a report(s) to be presented to the HRH ICCs' forums for discussion and approval.

At the national level, the TWG will collaborate with the directors and HR departments of the national referrals and other national institutions (e.g. training institutions, regulators and relevant government agencies) who will mobilize collection of the necessary data and/or information. At the county level the TWG will collaborate with the County Chief Officers of Health and the respective Human Resource departments who will also mobilize collection of the necessary data and/or information.

After receiving the data and information from all the sources and analyzing it, the TWGs will come up with quarterly progress reports and annual M&E reports. The quarterly and annual reports, and inputs gathered from ICC forums will all be used to improve the design, implementation and reporting of the entire M&E system. At the end of the strategy in 2018, final evaluation will be conducted and findings shared at the ICC forums. Development partners will be requested to fund the ICC meetings which will be hosted to share various reports.

### M&E FRAMEWORK

This section presents the objectives, strategies, indicators and targets for achieving the five intended outcomes of this strategy. The tables also include timelines and budget for each strategic objective. The framework also shows who will be responsible for each activity objective.

## OUTCOME 1: ADEQUATE AND EQUITABLY DISTRIBUTED HEALTH WORKFORCE

Strategy	Indicator	Activity	Target/Time	Responsibility	Annual Budget (Million Kshs)					Budget (Millions Kshs)
					2013/14	2014/15	2015/16	2016/17	2017/18	
<b>Strategic Objective 1.1: Strengthen recruitment of adequate numbers of health workforce with the right skills mix</b>										
Review existing recruitment policies and procedures/ guidelines and disseminate at all levels	Number of existing recruitment policies and procedures/ guidelines reviewed and disseminated for all levels	<input type="checkbox"/> Review policies and Guidelines for recruitment of HW <input type="checkbox"/> Disseminate policies and Guidelines at all levels	1 Recruitment policy reviewed/developed and disseminated to countries / by December 2015	National & County Govts	0.161	0.161				0.32
Review and implement establishments and staffing norms for facility and community levels	Number of staffing norms and establishments reviewed and implemented	<input type="checkbox"/> Review staffing norms <input type="checkbox"/> Review staff establishments	- Staffing norms and establishment developed by June 2016 - Staffing norms and establishment implemented by June 2018	National & County Govts	1.0	1.0	1.0	1.0	1.0	5.00
Recruit adequate health workers to support facility and community level health services in line with the constitution requirements	Number of health workers recruited to support facility and community level health services in line with constitution requirements	<input type="checkbox"/> Recruit health workers to support facility and community level health at least 12,000 per year. <input type="checkbox"/> Recruit 10,000 CHSP per year	60,000 health workers recruited by end of December 2017	National & County Govts	223.073	223.073	223.073	223.073	223.073	1,115.37
Recruit Health HR officers to support at county and its high volume facilities	Number of health HR officers recruited to support county and high volume health facilities	<input type="checkbox"/> Recruit at least 60 HR officers per year to support county and high volume health facilities.	300 health HR officers Recruited by December 2017	National & County Govts	5.76	5.76	5.76	5.76	5.76	28.80

Strategic Objectives 1.2: Equitable deployment and redeployment of the health workforce										
Develop and implement a deployment policy	Deployment policy developed and implemented	<input type="checkbox"/> Develop deployment policy for the health sector	Deployment policy developed by June 2015 and implemented by June 2016	National & County Govts	1.0	0.606				1.61
Establish an integrated human resource information system (iHRIS) including staff returns at both national and county levels	An integrated human resource information system established including staff returns at both national and county levels	<input type="checkbox"/> Disseminate deployment policy for health sector		National & County Govts	2.0	1.5				3.50
		<input type="checkbox"/> Establish and implement a integrated human resource information system including staff returns at both national and county levels	Integrated HRIS established at national and county levels by December 2014	National & County Govts	1.336	0.336	0.336	0.336	0.336	2.68
Redeploy staff according to needs, workload, and skills as per the staffing norms and constitution requirements	Number of staff redeployed according to needs and skills as per the staffing norms and constitution requirements	<input type="checkbox"/> Establish HR data linkage with DHIS and regulatory bodies for iHRIS and staff returns		National & County Govts	1.0	1.0				2.00
		<input type="checkbox"/> Automated personnel records	Personnel records automated by December 2017	National & County Govts	29.0	29.0	29.0	29.0	29.0	145.00
Redeploy staff according to needs, workload, and skills as per the staffing norms and constitution requirements	Develop guidelines sharing of specialists among counties	<input type="checkbox"/> Redeploy staff according to needs and skills as per the staffing norms and constitution requirements	Staff redeployed according to staffing norms by December 2017	National & County Govts	0	0	0	0	0	0
		<input type="checkbox"/> Develop guidelines on sharing of specialists among counties	Guidelines on sharing of specialists among counties developed by December 2015	National & County Govts	0.606,	0.50	0.50	0.50	0.50	1.61
Redeploy staff according to needs, workload, and skills as per the staffing norms and constitution requirements	Disseminate guidelines on sharing of specialists among counties	<input type="checkbox"/> Disseminate guidelines on sharing of specialists among counties	Guidelines on sharing of specialists among counties disseminated by December 2016	National & County Govts	1.50	1.50	0.50	0.50	0.50	3.50

Lobby development partners to support recruitment and deployment of additional health workers at all levels	Number of development partners supporting recruitment and deployment of additional health workers at all levels	<input type="checkbox"/> Conduct advocacy meetings <input type="checkbox"/> Develop MOU's on support-	Inventory of partners supporting additional health workers developed by December 2014	National & County Govts	0.25	0.25	0.25	0.25	0.25	0.25	1.25
	Number of additional health workers recruited and deployed through lobbying from developmental partners	<input type="checkbox"/> Recruit and deploy additional health workers through partners	Number of staff supported through partnership with dev partners by December 2017	National & County Govts	0.25	0.25	0.25	0.25	0.25	0.25	1.25
	MOU's on partnerships with FBO's put in place for supply of health workforce	<input type="checkbox"/> Develop MOU's on partnerships with FBO's for supply of health workforce	Develop and put in place MOU's on partnerships with FBO's for supply of health workforce by December 2014	National & County Govts	0	0	0	0	0	0	
	Number of contracted health workers absorbed by GOK after expiry of their contracts	<input type="checkbox"/> Develop strategies to absorb contracted health- workers after expiry of Partner support period	proportion of health workers absorbed after expiry of their contracts by December 2017	National & County Govts	84,800	84,800	84,800	84,800	84,800	84,800	424,00
	Number of stake holders forums	<input type="checkbox"/> Hold stake holders forums twice a year	10 stakeholders forums held by June 2018	National and County Govts	1.40	1.40	1.40	1.40	1.40	1.40	7.00
Initiate a stakeholders forums to support harmonization of terms & conditions for engagement of contracted health workers											

**OUTCOME TWO: CONDUCTIVE ENVIRONMENT THAT ATTRACTS AND RETAINS HEALTH WORKFORCE**

Strategy	Indicator	ACTIVITY	Target/TIME	RESPONSIBLE	Annual Budget (Million Kshs)				Budget (Kshs Million)	
					2013/14	2014/15	2015/16	2016/17		2017/18
<b>Strategic Objectives 2.1: Make work conditions more attractive</b>										
Develop an incentive policy for attraction and retention of health workers	An incentive policy for attraction and retention of health workers developed and implemented	<input type="checkbox"/> Develop and implement an incentive policy for attraction and retention of health workers <input type="checkbox"/> Disseminate incentive policy for attraction and retention of health workers	Incentive policy for attraction and retention of health workers established by December 2015	National & County Govts	2.0	2.0	2.0			6.00
Review and strengthen HRM supportive supervision tools & guidelines	HRM supportive supervision tool and guidelines reviewed and strengthened	Review guidelines for Human resources management Review supportive supervision tools for Human resources management	HRM Supportive supervision tools and guidelines reviewed and implemented by December 2015	National & County Govts	2.0	2.0	2.0			6.00
Establish resource centers and recreation facilities	Number of Learning resource centers and recreation facilities established	<input type="checkbox"/> Establish learning resource centers and recreation facilities	resource centers and recreation facilities established by December 2017	National & County Govts	44.66	44.66	44.66	44.66	44.66	223.30
Develop and review schemes of service for Health workers including CHSP	<input type="checkbox"/> Number of existing schemes of service reviewed <input type="checkbox"/> Number of new schemes of service developed	<input type="checkbox"/> Review existing schemes of service for Health workers including CHSP <input type="checkbox"/> Develop new schemes of service for Health workers	Number of existing schemes of service including CHSP reviewed by December 2017 Schemes of service developed for all cadres by December 2017	National Govt	3.0	3.0	3.0	3.0	3.0	15.0

Improve personnel records and filing systems at all levels	Proportion of personal files that comply with the minimum required standard documents as per checklist	<input type="checkbox"/>	Review and updating personal files against standardized checklist before transferring to the county.	All staff personal files reviewed and updated by December 2014	National Govt	0	0	0	0	0
	Number of hospitals with personnel filing system	<input type="checkbox"/>	Establish personnel filing system in all hospitals	Personnel filing system established in all hospitals by December 2017	National Govt	1.0	1.0	1.0	1.0	5.0
<b>Strategic Objectives 2.2: Make rural and hard to reach stations more attractive</b>										
Provide competitive and attractive retention package	Competitive and attractive retention packages developed and disseminated	<input type="checkbox"/>	Develop competitive attraction and retention packages Disseminate the developed packages Implement the developed packages	competitive attraction and retention package developed by December 2015	National & County Govts	2.50	2.00	2.00	2.00	6.50
Use innovative communication approaches in hard to reach areas	Number of innovative communication approaches used in hard to reach areas	<input type="checkbox"/>	Establish innovative communication approaches in hard to reach areas	communication approaches in hard to reach areas through use of innovation by December 2017	National & County Govts	4.63	4.63	4.63	4.63	23.15



<b>Strategic Objectives 2.3: Make work place safe</b>									
Develop and implement occupational safety and health (OSH) policies and guidelines	Occupational Safety and Health (OSH) policies and guidelines developed and implemented	<input type="checkbox"/> Develop Occupational Safety and Health (OSH) policies and guidelines	Occupational Safety and Health (OSH) policies developed by December 2014	National & County Govts	0.50	0.50			1.0
		<input type="checkbox"/> Disseminate Occupational Safety and Health (OSH) policies and guidelines	Occupational Safety and Health (OSH) policies and guidelines disseminated by June 2015	National & County Govts	2.5	2.50			5.00
		<input type="checkbox"/> Implement Occupational Safety and Health (OSH) policies and guidelines	Occupational Safety and Health (OSH) policies and guidelines implemented by December 2016	National & County Govts	0	0			0
<b>Strategic Objectives 2.4: Improve Staff wellness and welfare</b>									
Develop schemes for staff wellness and welfare	Number of schemes for staff wellness and welfare developed	<input type="checkbox"/> Develop schemes for staff wellness and welfare <input type="checkbox"/> Disseminate schemes for staff wellness and welfare	schemes for staff wellness developed and disseminated by December 2015	National & County Govts	2.6	2.0			4.60
Develop gender sensitive and responsive policy	A gender sensitive and responsive policy developed	<input type="checkbox"/> Develop Gender sensitive policy <input type="checkbox"/> Disseminate policy	Gender sensitive policy developed and disseminated by December 2015	National & County Govts	2.6	2.0			4.60
Advocate for provision of social amenities for health workers	Number of Counties providing social amenities for health workers	<input type="checkbox"/> Provide social amenities for health workforce	All counties providing social amenities by December 2018	National & County Govts	1.0	1.0	1.0	0.50	4.00
Design and develop secure location for the Counties	Number of Counties with secure locations for personnel records	<input type="checkbox"/> Provide physical infrastructure	All counties have secure locations by March 2015	National & County Govts	1.0	1.0			2.0
Train staff at Counties to handle records	Number of staff trained	<input type="checkbox"/> Train staff in managing records	All county trained by December 2014	National & County Govts	1.0	1.0			2.0
Transfer appropriate records to the in a secure manner to counties	Number of Counties with all their records	<input type="checkbox"/> Transfer records securely to counties	All counties have their records by June 2014	National & County Govts	1.0	1.0			2.0

**OUTCOME 3: RESPONSIVE INSTITUTIONAL FRAMEWORKS THAT SUPPORT WORKFORCE PERFORMANCE MANAGEMENT**

Strategy	Indicator	Activity	Target/Time	Responsibility	Annual Budget (Million Kshs)					Total Budget Million Kshs)
					2013/14	2014/15	2015/16	2016/17	2017/18	
<b>Strategic Objective 3.1: Improved Health Workforce Performance Management</b>										
Establish Kenya Institute of Health System Management (KIHSM) to harmonize leadership, management, HRM and governance for improvement of performance	A harmonized programs on leadership, governance and management Establish the Institute	<input type="checkbox"/> Desk Review of the documents <input type="checkbox"/> Share findings with relevant stakeholders. <input type="checkbox"/> incorporate feedback and finalize Approval and gazette <input type="checkbox"/> Appoint multi stakeholders advisory committee. <input type="checkbox"/> Dissemination for implementation <input type="checkbox"/> Launch of KIHSM	Program document developed by June 2014  Institute of Health Systems Management Established by June 2015	National Govt	1.00	1.00	1.00	1.00		3.00
Develop Policy Guidelines on performance management for implementation of rewards and sanctions.	Policy guidelines	<input type="checkbox"/> Desk review of existing policies. <input type="checkbox"/> Draft policy document <input type="checkbox"/> Workshop with stakeholders <input type="checkbox"/> Integration of feedback into the document. <input type="checkbox"/> Validation workshop of the policy <input type="checkbox"/> Approval & Dissemination	Policy guidelines developed by June 2015	National Govt	2.00	2.00	2.00			6.00
Develop performance management tools and guideline for target setting, monitoring and evaluation of performance	Tools and guidelines	<input type="checkbox"/> Desk review of existing document <input type="checkbox"/> Development of draft tools and guidelines <input type="checkbox"/> Share the tools with stakeholders <input type="checkbox"/> Incorporate feedback <input type="checkbox"/> Disseminate and implement	Tools and guidelines developed by June 2016	National Govt	2.00	2.00	1.50			5.50

Provide linkage of individual performance to training, promotion and re-licensure	Data base at HRD showing linkages to licensure and re-licensure with regulating bodies and training institution	<input type="checkbox"/> Hold a stakeholders forum to discuss linkages, performance, promotion and license and re-licensure. <input type="checkbox"/> Training of staff managing data <input type="checkbox"/> Customize the existing tools to capture relevant data from public, private and FBO training institutions and link to regulatory bodies and HRD(MOH) <input type="checkbox"/> Trial runs and feedback	Data based linked by December, 2015	National & County Govts	5.00	5.00	5.00	5.00	15.00
Integrate the use of ICT to strengthen performance evaluation process including induction.	On line completion and submission of appraisal form	<input type="checkbox"/> Take stock of existing ICT systems. <input type="checkbox"/> Share the findings and gaps with relevant stakeholders <input type="checkbox"/> Identify and procure the relevant ICT system. <input type="checkbox"/> Train relevant staff and users <input type="checkbox"/> Implementation	On line submission process established by December 2016.	National & County Govts	1.50	1.50	1.50	4.50	
Provide a mechanism for supportive supervision for implementation of performance management cycle.	Established mechanism for performance management cycle	<input type="checkbox"/> Review the existing mechanisms <input type="checkbox"/> Develop a guiding document <input type="checkbox"/> Share the document <input type="checkbox"/> Incorporate feedback <input type="checkbox"/> Validate, Finalize and disseminate the document for implementation	Performance Management Mechanism established by Dec, 2016	National & County Govts	2.00	2.00	1.50	5.50	

**OUTCOME 4: RESPONSIVE HRD SYSTEMS AND PRACTICES**

Strategy	Indicator	Activity	Target/Time	Responsibility	Annual Budget (Kshs)				Total Budget (Kshs)
					2013/14	2014/15	2015/16	2016/17	
<b>Strategic Objective 4.1: Strengthened Human Resources Development Systems and Practices</b>									
Provide policies and guidelines on the human resource development of the health workforce.	HRD Policies & Guidelines developed	<input type="checkbox"/> 2 workshops to review, validate and finalize <input type="checkbox"/> Approval and dissemination	Policies developed and dissemination by Dec, 2015	National & County Govts	4.00	3.00			7.00

Review and adopt the national training Policy to respond to the devolved system of government and emerging health challenges.	Kenya Training policy developed	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing training policy.</li> <li><input type="checkbox"/> Draft training policy document</li> <li><input type="checkbox"/> Workshop with stakeholders on the policy document.</li> <li><input type="checkbox"/> Integration of feedback into the document.</li> <li><input type="checkbox"/> Validation workshop of the policy</li> <li><input type="checkbox"/> Approval for use</li> <li><input type="checkbox"/> Dissemination</li> </ul>	Training policy developed and implemented by Dec. 2015	National Govts	2.00	2.00	2.00	1.50	5.50
Develop a policy on demand driven CPD and e-learning modules that are cost effective for re-licensure.	CPD policy and e-learning modules developed for re-licensure	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing policy.</li> <li><input type="checkbox"/> Draft policy document</li> <li><input type="checkbox"/> Workshop with stakeholders on the policy document.</li> <li><input type="checkbox"/> Integration of feedback into the document.</li> <li><input type="checkbox"/> Validation workshop of the policy</li> <li><input type="checkbox"/> Approval for use</li> <li><input type="checkbox"/> Dissemination</li> </ul>	CPD policy on e-learning modules developed and disseminated for re-licensure by Dec2015	National & county Govts	3.00	2.50	2.50	5.50	
Develop mechanism of ensuring that in-service training is based on the training needs assessment and are institution based for cost effectiveness	A framework based on national training needs developed	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing mechanisms.</li> <li><input type="checkbox"/> Develop a guiding document</li> <li><input type="checkbox"/> Share document.</li> <li><input type="checkbox"/> Incorporate of feedback into the document.</li> <li><input type="checkbox"/> Validate and, disseminate</li> </ul>	A framework based on national training needs developed and disseminated	National and county Govts	3.00	3.00	3.00	6.00	
Identify and develop cross cadre CPDs that are institutionalized	Institutionalized cross cadre CPDs	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing guidelines.</li> <li><input type="checkbox"/> Draft policy document</li> <li><input type="checkbox"/> Share document.</li> <li><input type="checkbox"/> Incorporate of feedback into the document.</li> <li><input type="checkbox"/> Validate and, disseminate</li> </ul>	Cross cadre CPDs institutionalized by Dec. 2014	National & County Govts	4.00	4.00	4.00	12.00	
Develop a mechanism that ensures courses are based on the identified national training needs assessment (TNA ), example midwifery, oncology, anesthetist, cancer screening, etc.	Established and institutionalized TNA based in-service training	<ul style="list-style-type: none"> <li><input type="checkbox"/> Conduct a Training Needs Assessment</li> <li><input type="checkbox"/> Review existing curricula in reference to country training needs.</li> <li><input type="checkbox"/> Develop a framework to ensure courses are based on NTNA:</li> <li><input type="checkbox"/> 2 workshop to develop and validate the framework document</li> <li><input type="checkbox"/> Approval</li> <li><input type="checkbox"/> Dissemination</li> </ul>	Institutionalized TNA based in-service training by Dec. 2014	National & County Govts	1.71	1.50	1.50	3.21	

Develop a mechanism linking the ministry of health and ministry of education in the review and harmonization of curriculums to respond to emerging issues	A platform to review and harmonize curricula in place	<input type="checkbox"/> Stakeholders meeting to discuss formation of the forum <input type="checkbox"/> Formation of a coordinating committee on curriculum <input type="checkbox"/> Regularize annual meetings to review emerging issues	A frame work developed and implemented by Dec. 2015	National & County Govts	4.00	4.00	4.00	2.00	2.00	10.00
Develop a framework to harmonize entry criteria to health related courses.	Entry criteria framework for health related courses developed	<input type="checkbox"/> Stakeholders meeting to discuss entry criteria <input type="checkbox"/> Workshop to develop a harmonized entry criteria-Approval <input type="checkbox"/> Dissemination	Harmonized internship orientation program established by June, 2016	National & County Govts	2.00	2.00	2.00	1.00	1.00	6.00
Develop a cost effective mechanism to harmonize the inspection of training institutions by regulatory bodies.	A harmonized Inspection Plan of training institutions	<input type="checkbox"/> Stakeholders meeting to discuss inspection of training institutions <input type="checkbox"/> Workshop to develop harmonized inspection guidelines <input type="checkbox"/> Approval and Dissemination	Harmonized inspections mechanism established by Dec. 2016	National & County Govts	1.50	1.50	1.50	1.50	1.00	5.50
Develop a harmonized internship programs for orientation of health workers trained in and outside the country.	Induction Manual developed and disseminated	<input type="checkbox"/> Review the existing internship program documents <input type="checkbox"/> Develop a guiding document <input type="checkbox"/> Share the document <input type="checkbox"/> Incorporate feedback <input type="checkbox"/> Validate, Finalize and disseminate the document for implementation	Induction Manual reviewed, disseminated and implemented by December 2015	National and County Govts	0.16	0.16	0.16	0.16	0.16	0.32

**Strategic Objective 4.2: Human Resource Master Plan Developed to guide Training.**

Develop goals, objectives, core values and guiding principles	Goals, objectives, core values and guiding principles	<ul style="list-style-type: none"> <li><input type="checkbox"/> Stakeholders workshop to develop strategic objectives for the HRD master plan</li> <li><input type="checkbox"/> Dissemination</li> </ul>	Human Resource Master plan developed and implemented by December 2015	National and County Govts	2.50	2.00	2.00	2.00	6.50
Develop a forecasting policy to guide planning	Forecasting policy	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing policies and guidelines on forecasting.</li> <li><input type="checkbox"/> Dissemination.</li> </ul>		National and County Govt	2.50	2.50	1.00	1.00	8.50
Identify the roles of stakeholders' i.e. training institutions, regulatory bodies, private, NGO and FBOs and development partners.	Roles of stakeholders	<ul style="list-style-type: none"> <li><input type="checkbox"/> Stakeholders workshop to identify roles of different stakeholders and integrate in the master plan</li> <li><input type="checkbox"/> Dissemination</li> </ul>		National Government	2.50	2.50			5.00
Coordination of implementation of training plans	Established coordination and Implementation schedule	<ul style="list-style-type: none"> <li><input type="checkbox"/> Constitute a coordinating committee</li> <li><input type="checkbox"/> Hold quarterly coordinating meetings</li> </ul>		National and County Govts	1.00	1.00	0.50	0.50	3.00
Develop a monitoring and evaluation framework to guide implementation.	M &E framework	<ul style="list-style-type: none"> <li><input type="checkbox"/> Stakeholders' workshop to develop an M &amp; E framework and integrate in the master plan.</li> <li><input type="checkbox"/> Dissemination.</li> </ul>		National and County Govts	1.00	1.00			2.00
Develop strategies for raising training funds and scholarships and loans e.g. Afya Elimu.	Plan for raising training funds	<ul style="list-style-type: none"> <li><input type="checkbox"/> Stakeholders workshop to develop strategies for fund raising and integrate in the master plan</li> </ul>		National government	1.00	0.50	0.50	0.50	2.00
Develop guidelines for clinical placement	Clinical placement guidelines	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing policies and guidelines on forecasting.</li> <li><input type="checkbox"/> Dissemination.</li> </ul>		National Govts	0.50	0.50			1.00
Re-classify cadres to separate staff working in management and clinical providers.	Re-classification of cadres	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing cadres.</li> <li><input type="checkbox"/> Dissemination.</li> </ul>			0.50	0.50			1.00
Professionalized management staff with a scheme of service so that they can also specialize.	Scheme of service for management staff in place	<ul style="list-style-type: none"> <li><input type="checkbox"/> Desk review of existing schemes</li> <li><input type="checkbox"/> Dissemination.</li> </ul>		National Govt	0.50	0.50	0.50	0.50	2.00
Develop platforms to share best practices in training and regulation.	A platform for sharing best practices	<ul style="list-style-type: none"> <li><input type="checkbox"/> Stakeholders meeting to discuss formation of the platform</li> <li><input type="checkbox"/> Formation of a coordinating committee on training and regulation</li> <li><input type="checkbox"/> Regularize annual meetings to review emerging issues</li> </ul>		National Govt	2.00	1.00			3.00

**OUTCOME 5: STRENGTHENED HUMAN RESOURCE PLANNING AND MANAGEMENT IN HRH**

Strategies	Indicators	Activity	Target/Time	Responsibility	Annual Budget (Kshs)				Total Budget (Kshs)	
					2013/14	2014/15	2015/16	2016/17		2017/18
<b>Strategic Objective 5.1 A strong and decentralized HR planning and management</b>										
Develop decentralized structures for HRH functions including reporting lines at the National and County levels	A report on structures and reporting line.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Review the existing structures</li> <li><input type="checkbox"/> Conduct stakeholder workshop</li> <li><input type="checkbox"/> Disseminate</li> </ul>	Decentralized HRH function established by December 2014	National & County Govts	3.50	2.00				5.50
Develop a regular HR planning and budgeting tools in line with Government review cycle	HRH planning and budgeting tools	<ul style="list-style-type: none"> <li><input type="checkbox"/> Conduct workshop to review the existing tools</li> <li><input type="checkbox"/> Disseminate the tools to all stakeholders</li> </ul>	HR planning and budgeting tools institutionalized by June 2017	National & County Govts	0.50	0.50	0.50			2.00
Develop professional code of conduct for HR	Ethics and integrity module	<ul style="list-style-type: none"> <li><input type="checkbox"/> Review the current ethics and integrity modules and practices</li> <li><input type="checkbox"/> Scale up and implement as part of induction for HRH workforce</li> </ul>	Professional code of conduct for HR developed and in use by Dec. 2015	National & County Govts	3.50	2.50				6.00
Development of guidelines for management of career progression of the health workforce	Guidelines for management of career progression developed	<ul style="list-style-type: none"> <li><input type="checkbox"/> Draft guidelines for Management of career progression workforce</li> <li><input type="checkbox"/> Integration of feedback into the document.</li> <li><input type="checkbox"/> Validation workshop of the guidelines</li> <li><input type="checkbox"/> Approval for use</li> <li><input type="checkbox"/> Dissemination</li> </ul>	Guidelines for management of career progression developed by December 2015	National	0	0	0			0
Adoption of current existing national HRH policies and guidelines for implementation by the counties including schemes of service and HRH norms and standards amongst others	HRH policies and guidelines adopted by 47 counties	<ul style="list-style-type: none"> <li><input type="checkbox"/> Disseminate and implement at county level</li> </ul>	HRH policies and guidelines adopted by 47 counties by December 2015	County Govt	0.16	0.16				0.32



Review and Development of additional HRH policies and guidelines that address county HRH needs e.g. schemes of services that do not recognize cadres (to be lead by national government	Updated HRH policies and guidelines to address County HRH needs	<input type="checkbox"/> Review and develop additional HRH policies and guidelines. <input type="checkbox"/> Disseminate policies and guidelines to the Counties	Updated HRH policies and guidelines disseminated and implemented by December 2015	National and County Govts	0.16	0.16	0.16	0.16	0.32
Strengthen county administrative services capacity for health workforce management through training and orientation of existing HRH policies and guidelines amongst others	Strengthened county administrative services capacity	<input type="checkbox"/> Train and orientate county health workforce management	County Health Management trained by December 2014	National and County Govt	1.00	0.50	0.50	2.00	
Establish HRH coordination structures at county level for linkages of partners, public, private and faith based sector for HRH planning and management	HRH coordination structures established at the county	<input type="checkbox"/> Sensitization the county management on inter governmental coordination, Facilitate formation of HRH Interagency Coordination Committee, <input type="checkbox"/> Develop terms of reference and Technical Work Groups and implement at county level	Established functional HRH ICC at the counties by April 2015	County Govt	0.80	0.80	0.80	4.0	
Strengthen the utilization of HRH data (from human resource information system) for county leadership decision making	HRH data from HRIS utilize by county leadership for decision making	<input type="checkbox"/> Sensitize and train the county leadership on HRH data, demand and use	All counties accessing and utilizing HRH data for decision making by December 2015.	County Govt					
<b>Strategic Objective 5.2 : Develop HRH Communication strategy</b>									
Establish a HRH communication strategy within the health workforce including HRH service charter, frequently asked questions, HRH standard Operating Procedures, helpdesk amongst others	HRH communication strategy	<input type="checkbox"/> Develop community strategy <input type="checkbox"/> Disseminate	Communication strategy developed and implemented By June 2016	National& County Govts	2.00	2.00	1.50	5.50	

**OUTCOME 6: ADEQUATE FINANCIAL RESOURCES MOBILIZED TO SUPPORT INVESTMENTS IN HRH**

Strategies	Indicators	Activity	Target	Responsible	Annual Budget (Million Kshs)				Total Budget (Kshs)	
					2013/14	2014/15	2015/16	2016/17		2017/18
<b>Strategic Objective 6.1: Increase investment options for HRH</b>										
Review current practices and explore investment options	Reviewed investment options report	<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop terms of reference</li> <li><input type="checkbox"/> Hire a consultant</li> <li><input type="checkbox"/> Get a report from the consultant</li> <li><input type="checkbox"/> Share the report with the stakeholders</li> <li><input type="checkbox"/> Disseminate</li> </ul>	investment options in place by June 2015	National & County Govts	3.50	3.50	1.50			8.50
Develop and disseminate harmonized resource mobilization strategy for HRH production	HRH Resource mobilization plan developed and disseminated	<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop a county specific resource mobilization strategies</li> <li><input type="checkbox"/> Develop a sensitization program for the counties</li> <li><input type="checkbox"/> Disseminate the strategies</li> </ul>	HRH Resource mobilization plan in place by Dec. 2016	National & County Govts	1.50	1.50	1.50	1.0		5.50
Develop a framework for private sector training institutions to access public sector institutions for internships and clinical placement	A functional framework in place.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Conduct baseline on private training institutions access to public institutions</li> <li><input type="checkbox"/> Develop the framework to improve access to public facilities</li> <li><input type="checkbox"/> Disseminate the framework</li> </ul>	A functional framework in place by Dec. 2014	National & County Govts, Private Training Institutions	4.00	1.00	1.00	1.00	1.00	7.00
Establish a high level multi - sectoral investment stakeholders forums	Two forums held per year	<ul style="list-style-type: none"> <li><input type="checkbox"/> Establish TORs for the stakeholders</li> <li><input type="checkbox"/> Schedule quarterly meetings</li> <li><input type="checkbox"/> Hold 8 forums</li> <li><input type="checkbox"/> Follow up</li> </ul>	8 forums held by Dec. 2017	National & County Govts	1.00	1.00	1.00	1.00	1.00	5.00
Establish HRH public private partnership (PPP) framework for National and County level with well defined instruments of engagement	HRH PPP framework established	<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop HRH PPP framework for the national and county levels</li> <li><input type="checkbox"/> Disseminate the framework</li> </ul>	HRH PPP framework established by Dec. 2016	National & County Govts	2.00	2.00	2.00	1.00		7.00
<b>Strategic Objective 6.2 :Reduced costs of HRH systems and processes</b>										
Develop a HRH cost reduction strategy to minimize wastage and to improve efficiency	HRH cost reduction strategy developed	<ul style="list-style-type: none"> <li><input type="checkbox"/> Identify HR cost centre's</li> <li><input type="checkbox"/> Devise cost reduction / efficiency improvement strategy</li> <li><input type="checkbox"/> Disseminate</li> </ul>	HRH cost reduction strategy in place by Dec. 2016	National & County Govts	2.50	2.50	2.50	2.50		10.00
<b>Total</b>										<b>2,473.72</b>

## CHAPTER 7: IMPLEMENTATION PLAN

The implementation of this strategy falls under the leadership of the Principal Secretary Ministry of Health and Chief Officers of Health in the Counties in collaboration with Directorate of Public Service Management, Public Service Commission and County Public Service Boards and the Inter-Agency Coordination Committee of HRH at the National and County Levels. The implementation of this strategy will be guided by the indicators and targets set out in results framework. Annual action plans will be developed to guide the implementation of the strategy within the planning period.

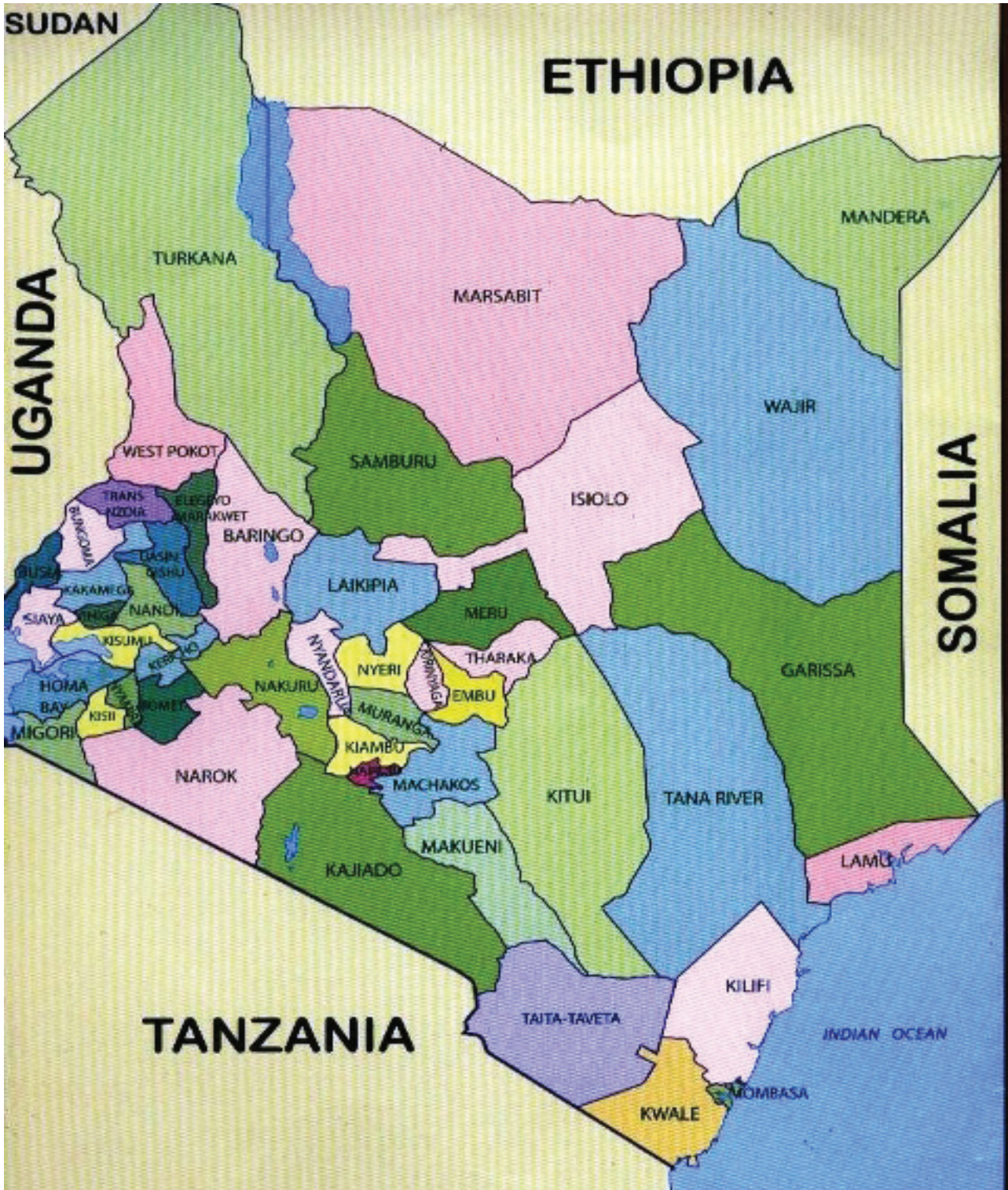
Successful implementation of this HRH Strategy requires substantial resources and commitment of all stakeholders. The strategy aims at attracting funding agencies to join forces with government at the various levels to put in support for the optimum management and development of the health workforce in a well coordinated manner. Potential sources of funding for human resources for health management and development during the plan period 2014-2018 are as follows:

1. National Government
2. County Governments
3. Development partners and other external sources of funding
3. National Health Insurance Fund (NHIF)
5. Private Sector through Public-Private Partnerships
6. Faith-Based Organizations (CHAK, Kenya Conference of Catholic Bishops, Muslim Council, Hindu Council, etc)
7. Foundations
8. Individual businesspersons.



# APPENDICES

## APPENDIX 1: KENYA COUNTIES MAP



## APPENDIX 2: POPULATION BY COUNTIES

### 1. Baringo County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	591,227	609,910	42,387,216
2 Male	296,998	306,383	21,070,003
3 Female	294,230	303,527	21,317,213

### 2. Bomet County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	770,678	795,031	42,387,216
2 Male	382,821	394,918	21,070,003
3 Female	387,857	400,113	21,317,213

### 3. Bungoma County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	1,735,638	1,790,484	42,387,216
2 Male	846,671	873,426	21,070,003
3 Female	888,967	917,058	21,317,213

### 4. Busia County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	519,409	535,822	42,387,216
2 Male	246,974	254,778	21,070,003
3 Female	272,435	281,044	21,317,213

### 5. Elgeyo Marakwet

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	393,751	406,194	42,387,216
2 Male	195,534	201,713	21,070,003
3 Female	198,218	204,481	21,317,213

### 6. Embu County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	549,352	566,712	42,387,216
2 Male	270,629	279,181	21,070,003
3 Female	278,723	287,531	21,317,213

### 7. Garissa County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	663,060	684,012	42,387,216
2 Male	356,442	367,705	21,070,003
3 Female	306,618	316,307	21,317,213

### 8. Homa Bay County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	1,025,668	1,058,079	42,387,216
2 Male	492,143	507,695	21,070,003
3 Female	533,525	550,385	21,317,213

### 9. Isiolo County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	152,493	157,312	42,387,216
2 Male	78,425	80,903	21,070,003
3 Female	74,068	76,409	21,317,213

### 10. Kajiado County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	731,436	754,550	42,387,216
2 Male	367,304	378,911	21,070,003
3 Female	364,133	375,639	21,317,213

### 11. Kakamega County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	1,767,262	1,823,108	42,387,216
2 Male	852,411	879,348	21,070,003
3 Female	914,851	943,760	21,317,213

### 12. Kericho County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	807,023	832,525	42,387,216
2 Male	406,503	419,348	21,070,003
3 Female	400,521	413,177	21,317,213

### 13. Kiambu County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	1,727,494	1,782,083	42,387,216
2 Male	854,135	881,126	21,070,003
3 Female	873,359	900,957	21,317,213

### 14. Kilifi County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	1,180,978	1,218,297	42,387,216
2 Male	569,906	587,915	21,070,003
3 Female	611,072	630,382	21,317,213

### 15. Kirinyaga County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	561,954	579,712	42,387,216
2 Male	277,362	286,127	21,070,003
3 Female	284,592	293,585	21,317,213

### 16. Kisii County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1 Total	1,226,257	1,265,007	42,387,216
2 Male	585,803	604,314	21,070,003
3 Female	640,454	660,692	21,317,213

### 17. Kisumu County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,031,112	1,063,695
2	Male	505,239	521,204
3	Female	525,873	542,490

### 18. Kitui County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,077,723	1,111,780
2	Male	512,180	528,364
3	Female	565,544	583,415

### 19. Kwale County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	691,656	713,512
2	Male	336,284	346,910
3	Female	355,372	366,602

### 20. Laikipia County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	424,857	438,282
2	Male	211,376	218,056
3	Female	213,480	220,226

### 21. Lamu County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	108,058	111,472
2	Male	56,450	58,234
3	Female	51,607	53,238

### 22. Machakos County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,169,112	1,206,055
2	Male	578,008	596,273
3	Female	591,104	609,783

### 23. Makueni County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	941,312	971,058
2	Male	458,361	472,845
3	Female	482,951	498,213

### 24. Mandera County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,091,608	1,126,103
2	Male	595,891	614,721
3	Female	495,718	511,382

### 25. Marsabit County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,443,374	1,488,984
2	Male	713,711	736,264
3	Female	729,662	752,720

### 26. Meru

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,443,374	1,488,984
2	Male	713,711	736,264
3	Female	729,662	752,720

### 27. Migori County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	976,051	1,006,894
2	Male	472,883	487,826
3	Female	503,168	519,068

### 28. Mombasa County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	999,676	1,031,266
2	Male	518,184	534,558
3	Female	481,492	496,708

### 29. Muranga County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,003,093	1,034,791
2	Male	487,258	502,656
3	Female	515,835	532,136

### 30. Nairobi

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	3,339,848	3,445,387
2	Male	1,708,283	1,762,265
3	Female	1,631,564	1,683,122

### 31. Nakuru County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	1,706,256	1,760,174
2	Male	856,235	883,292
3	Female	850,021	876,882

### 32. Nandi County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	801,304	826,625
2	Male	400,658	413,319
3	Female	400,646	413,307

### 33. Narok County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	905,548	934,163
2	Male	456,569	470,996
3	Female	448,979	463,167

### 34. Nyamira County

INDICATOR	2011	2012	Kenya 2012
<b>POPULATION 1</b>			
1	Total	636,659	656,777
2	Male	305,476	315,129
3	Female	331,183	341,648



### 35. Nyandarua County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	634,548	654,599	42,387,216
2	Male	310,911	320,736	21,070,003
3	Female	323,637	333,864	21,317,213

### 36. Nyeri County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	738,083	761,407	42,387,216
2	Male	361,535	372,959	21,070,003
3	Female	376,549	388,448	21,317,213

### 37. Samburu County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	238,324	245,855	42,387,216
2	Male	119,198	122,964	21,070,003
3	Female	119,126	122,891	21,317,213

### 38. Siaya County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	896,379	924,704	42,387,216
2	Male	424,245	437,651	21,070,003
3	Female	472,134	487,053	21,317,213

### 39. Taita Taveta County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	302,932	312,504	42,387,216
2	Male	154,664	159,552	21,070,003
3	Female	148,267	152,953	21,317,213

### 40. Tana River County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	255,487	263,561	42,387,216
2	Male	127,547	131,578	21,070,003
3	Female	127,940	131,983	21,317,213

### 41. Tharaka Nithi

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	388,784	401,069	42,387,216
2	Male	189,907	195,908	21,070,003
3	Female	198,876	205,161	21,317,213

### 42. Trans Nzoia

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	871,320	898,854	42,387,216
2	Male	433,312	447,005	21,070,003
3	Female	438,008	451,849	21,317,213

### 43. Turkana County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	910,314	939,080	42,387,216
2	Male	473,642	488,609	21,070,003
3	Female	436,673	450,471	21,317,213

### 44. Uasin Gishu

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	951,584	981,654	42,387,216
2	Male	477,819	492,918	21,070,003
3	Female	473,765	488,736	21,317,213

### 45. Vihiga County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	590,228	608,879	42,387,216
2	Male	279,582	288,417	21,070,003
3	Female	310,646	320,462	21,317,213

### 46. Wajir County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	704,437	726,697	42,387,216
2	Male	387,119	399,352	21,070,003
3	Female	317,317	327,345	21,317,213

### 47. West Pokot County

INDICATOR	2011	2012	Kenya 2012	
<b>POPULATION 1</b>				
1	Total	545,604	562,845	42,387,216
2	Male	271,187	279,756	21,070,003
3	Female	274,417	283,089	21,317,213

Source: Kenya County Poster-Fact Sheets



# APPENDIX 3: KENYA HRH COMMITMENTS

*Human resources for universal health coverage: a template for eliciting commitments.*

## Annex 1 - Submission form for HRH commitment pathways

Name of your institution or country:

MINISTRY OF HEALTH - KENYA

What constituency do you represent? (Highlight or circle the one that applies)

<b>National Government</b>	Professional association	Not-for-profit NGO/ civil society	Private for-profit sector
Development partner	International/ multilateral agency	Academia/ research institution	Other (please specify)

Contact person (please indicate the name, e-mail and phone number of the focal point in your institution / country for communications on HRH commitments)

Name: <b>Mr. James Macharia</b> <b>Cabinet Secretary</b>	E-mail <b>cabsecretary@health.go.ke</b>	Phone Number <b>+254 2248551</b>
---	--	-------------------------------------

What human resources for health (HRH) -related actions and pathways can your country/ institution commit to? (Please include responsible organization, targets and expected completion dates)

The Health Sector Strategic focus in Kenya is guided by the overall Vision 2030 that aims to transform Kenya into a globally competitive and prosperous country with a high quality of life by 2030'. Its actions are grounded in the principles of the Constitution of Kenya 2010, specifically aiming to attain the right to health, and to decentralize health services management through a devolved system of Governance. This strategic focus has been defined in the Kenya Health Policy, which has elaborated the long term policy directions the Country intends to achieve in pursuit of the imperatives of the Vision 2030, the 2010 constitution and global commitments.

The Kenya Health Policy 2012 - 2030 demonstrates the health sector's commitment, under government stewardship, to ensuring that the Country attains the highest possible standards of health, in a manner responsive to the needs of the population. The policy aims to achieve this goal through supporting provision of *equitable, affordable and quality health and related services at the highest attainable standards to all Kenyans.*

28<sup>th</sup> October 2013

1

The Health Sector refers to all the Health and related sector actions needed to attain the Health Goals in Kenya. It is not restricted to the actions of the Health Ministry, but includes all actions in other related sectors that have an impact on health. It will guide both County and National Governments on the operational priorities they need to focus on in Health.

The Kenyan Government acknowledges that Health workers are one of the core building blocks of a health system. Global evidence points to a direct correlation between the size of a country's health workforce and its health outcomes. Kenya's health care system faces critical human resources for health demands which are similar to the health systems in many African countries. Recognizing that human resource demands are an integral part of the challenges confronting the National Health System, the National Human Resources for Health (HRH) Strategic Plan is one of the steps the government in collaboration with partners is taking to strengthen the HRH in order to deliver services more efficiently. There are myriad of challenges facing the Kenya's human resources for health which includes severe shortages of essential cadres, persistent inability to attract and retain health workers, poor and uneven remuneration among cadres, poor working conditions, inadequate or lack of essential tools and medical and non-medical supplies, the unequal distribution of staff, and diminishing productivity among the health workforce, etc.

To this end, Kenya through its Ministry of Health proclaims its commitment at the 3<sup>rd</sup> Global HRH Conference to:

1. Devolve the Human Resource for Health Interagency Coordinating Committee (HRH-ICC) to 47 Counties to oversee the implementation of HRH strategies in the Counties with linkage to existing national coordinating mechanism by 2015.

Target:

- Devolution of HRH-ICC to Counties by 2015
- Establishing a mechanism for linkage between National HRH-ICC and County HRH-ICC by 2015

**Responsible:** Ministry of Health/ County Governments.

2. Recruit at least 12,000 health workers per year by 2017 for health care delivery at facility level to support facility and community level health services.

28<sup>th</sup> October 2013

2

**Target:**

- Recruit 12,000 health workers comprising at least (Nurses, Clinical Officers, Doctors, Laboratory technologists, Health records Officers, Nutritionists, Radiologists) per year to 2017

**Responsible:** Ministry of Health/ County Government

3. Recruit at least 40,000 community health extension workers (CHEWS) by 2017 to support community level health services and the one million community health worker campaign

**Target:**

- Recruit 40,000 community health extension workers (CHEWS) by 2017
- Advocacy to Counties to establish community health services within each county by 2017
- Establishment and functioning of community health units from 2,511 in June 2012 to 9,294 by 2017
- Establish a mechanism for Community Health insurance through National Hospital Insurance Fund (NHIF) as a modality for motivating the work as per the Kenyan context by 2015.

**Responsible:** Ministry of Health/ County Government

4. Increase spending in the Health Sector on HRH beyond staff salary and allowances by 2017.

**Targets:**

- Increase efficiency and effectiveness in use of available resources in health care delivery including HRH by 2017.
- Allocate HRH budgets beyond employees emoluments towards employee welfare, employee relations, reward and recognition, work climate improvement, occupation health and safety by 2017.
- Improve efficiency in HR processes for example recruitment, HR records management amongst others by reducing

28<sup>th</sup> October 2013

3

the turnaround time and utilisation of ICI for cost effectiveness by 2017.

- Prepare guidelines and tools to help the County Governments budget and plan for health service delivery and commensurate HRH establishment by 2015.
- Take stock of the assets available in each county including HRH as a critical step in resource rationalisation for efficient and effective service delivery by 2014.

**Responsible:** Ministry of Health/ County Government/ Treasury.

5. Promote Public Private Partnership for Health Financing and establish mechanism for mutual benefits for a better health workforce and quality service delivery.

**Target:**

- Promote investment in health care by private sector with Counties in terms of infrastructure, ICT solutions and financing of HRH development for example through Afya Elimu fund and other initiatives by 2017.
- Adopt a multi-sectoral participatory approach for delivery of health interventions in attaining the best possible health outcomes between the public sector (beyond the health sector), private and private-not-for-profit sector, faith based organisations at County and National level by 2016
- Strengthen linkages with development partners in supporting government efforts towards funding initiatives towards improved service delivery, availability of health workers at facility level, and ongoing reforms in the health sector by 2017.
- Promote the National Health Insurance through increase effectiveness of National hospital insurance fund (NHIF) as a social health financing mechanism by 2015.
- Develop innovative and equitable financing strategies that enhance universal health coverage and access to healthcare by 2017

- **Responsible:** Ministry of Health

28<sup>th</sup> October 2013

4

[Empty box for text input]

How will you monitor progress towards achievement of your commitment pathways (What indicators will you track? What data sources will you use)?

- Indicator 1:** Existence of a functional County coordinating mechanism for the HRH in the 47 Counties
- Indicator 2:** Number of health workers recruited per year disaggregated by cadre.
- Indicator 3:** Number of CHEWs recruited by 2017
- Indicator 4:** Increase in spending in the Health Sector on HRH beyond staff salary and allowances.
- Indicator 5:** Public Private Partnership for Health Financing initiatives established that improve on the health workforce and quality of service delivery.

Would you or a representative of your country/ institution be available to announce your HRH commitment pathways at the Third Global Forum on Human Resources for Health in Recife, Brazil, on 10-13 November 2013?

(Yes/No)

Would you accept being contacted by the GHWA or WHO Secretariat after the Third Global Forum to follow up on the implementation of the HRH actions that you commit to?

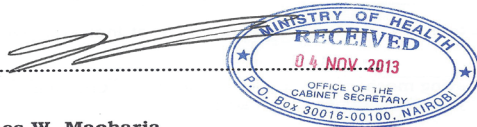
(Yes/ No)

Draft 28<sup>th</sup> October 2013

5

For any necessary clarifications, further information about HRH commitment pathways, to request the submission form in word format, and to submit your commitments please write to: [globalforum2013@who.int](mailto:globalforum2013@who.int) with "commitments" in the subject line. Please submit your commitments before 10 November 2013 (earlier submissions are encouraged to facilitate inclusion in the Forum programme)

Signed:.....



**Mr. James W. Macharia**  
Cabinet Secretary  
Ministry of Health  
KENYA

Date:..... 4/11/13

Draft 28<sup>th</sup> October 2013

6

## Health Sector Human Resources Strategy 2014 – 2018

Published by: Ministry of Health

Afya House

Cathedral Road

PO Box 30016 00100

Nairobi, Kenya

Email: [ps@health.go.ke](mailto:ps@health.go.ke)

<http://www.health.go.ke>



**USAID**  
FROM THE AMERICAN PEOPLE



**World Health  
Organization**

**HUMAN  
RESOURCES for  
HEALTH**

**Capacity  
Bridge**

TOWARD KENYA'S SUSTAINABLE HEALTH WORKFORCE



**IntraHealth**  
INTERNATIONAL  
Because Health Workers Save Lives.