

REPUBLIC OF KENYA



MINISTRY OF HEALTH

**HEALTH SECTOR STRATEGIC PLAN**

**FOR**

**HEALTH INFORMATION SYSTEM**

**2014-2018**

MINISTRY OF HEALTH  
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## FOREWORD

Since 2003 various studies have been undertaken to assess Health Information System (HIS). The findings of the assessments outlined areas that required immediate attention to strengthen HIS in the country. One of the priority areas identified was the need to develop a comprehensive Strategic Plan for HIS to guide the implementation of its activities.

This Strategic Plan (2014-2018) is the first to be developed by HIS after devolution and is intended to respond to the aspirations of policy framework 2014-2030, Health Sector Strategic Plan 2014-2018, Health Sector M&E Framework, and Vision 2030. It was developed through an inclusive, participatory and consultative approach intended to ensure ownership, commitment and leadership by the key stakeholders. This document is indeed a great milestone for taking HIS ahead in the health sector to enable it provide better data to inform evidence-based decision making, better policy framework and better health.

The Plan provides a roadmap and strategic direction on key priorities in line with the Health Sector Strategic Plan and articulates the agreed vision, mission, mandate and core values of HIS. It also sets strategic objectives, strategies, activities, time frame, resource requirements and assigned responsibilities for achieving expected outputs in the next five years. It is envisaged that the implementation of the activities outlined in the Strategic Plan will require a total of Kshs 1.9 billion (US \$ 25.3 Million).

The successful implementation of this Strategic Plan is expected to provide a basis for quality information that can be used at all levels of the health system for planning, managing, monitoring and evaluation of desired outputs. The Ministries of Health in partnership with key stakeholders will provide leadership and finance the implementation of this Plan to build one universal Health Information System for the health sector.

In conclusion, we appeal to our development partners and all stakeholders to support the implementation of the Strategic Plan through collaboration and partnership to enable us achieve the strategic goal of this Plan: **“Establish a functional, robust, effective and efficient Health Information System”**.

**Dr Nicholas Muraguri,**

**Principal Secretary**

## **ACKNOWLEDGEMENT**

This Health Information System (HIS) strategic plan was developed through a comprehensive consultation process, intensive health sector Health Information System assessments and detailed information gathering. The process was driven by the HIS Technical Working Group (HIS TWG) in liaison with Professional Training Consultant (PTC).

We would like to acknowledge the efforts of all those institutions and individuals who participated and contributed in the development of this document. These include government ministries and Agencies, Development partners, UN Agencies, faith based organization, NGOs, and private sector.

We acknowledge the Director of Medical Services leadership and stewardship, the HIS Technical Working Group (HIS TWG) members for the coordination, technical input and commitment during the process of developing the Strategic plan. We wish to thank all heads of departments and divisions, programme managers, Government parastatals (KEMRI, NHIF, KEMSA), the Provincial Directors, District Directors and Health Management Teams for their participation and invaluable inputs during the process of development.

We also extend our gratitude to Ministry of Planning and Vision 2030 (KNBS), Ministry of Immigration and registration of persons (Vital Registration), Ministry of Home affairs and National heritage (National Archives), Implementing partners (CHAK, KEC, SUPKEM, AfriAfya, AMREF, Aga Khan Health Services, Aga Khan Foundation, APHIAs, KNADS, FHI, NACC, JHPIEGO, Professional bodies (Kenya Medical Practitioners and Dentist Board, Nursing Council, Kenya Laboratory Board), training institutions (Kenyatta University, KMTC) for their participation and practical inputs in the development process.

We are particularly grateful to USAID AfyaInfo project for supporting the revision of the strategic plan, the Health Metrics Network (HMN) Secretariat and Department for International Development (DFID) through Essential Health Services (EHS), in providing technical and financial support in the development of this strategic plan. We also appreciate the role of development partners especially World Health Organisation (WHO), DANIDA, and USAID.

Finally we wish thank all those who contributed directly or indirectly to the development of this five year strategic plan.

**Dr Jackson Kioko,**

**Director of Medical services**

## ACRONYMS

AOP	Annual Operational Plan
AWP	Annual Work Plan
CBOS	Community Based Organizations
CHEWs	Community Health Extension Workers
CHIS	County Health Information System
COK	Constitution of Kenya
Div-HIS	Division of Health Information Systems
DPHK	Development Partners in Health, Kenya
EHR	Electronic Health Record
EHRs	Electronic Health Records System
FBOs	Faith Based Organizations
FTP	File Transfer Protocol
GoK	Government of Kenya
HENNET	Health NGOs Network
HIS	Health Information System
HMN	Health Metrics Networks
HRIT	Health Records and Information Technicians
ICD	International Classification of Diseases
ICT	Information Communication Technology
KDHS	Kenya Demographic Health Survey
KHPF	Kenya Health Policy Framework
KES	Kenyan Shilling
KNBS	Kenya National Bureau of Statistics
MOH	Ministry of Health
MTEF	Medium Term Expenditure Framework
NGO	Non Governmental Organization
SOPs	Standard Operating Procedures
SWAP	Sector Wide Approach
TWG	Technical Working Group
WHO	World Health Organization

## **EXECUTIVE SUMMARY**

In order to position the Health Information System as a key pillar for strengthening the national health system, it is essential to set the strategic direction for ensuring the NHIS functions efficiently and effectively and supports the realization of devolved healthcare service delivery in the country. This Strategic Plan seeks to do exactly that and, importantly also, provides a common platform for guiding partners and stakeholders in the implementation of NHIS strategic priorities over a five year period. This strategy aims at promoting systems approach in addressing the challenges facing the health information sub-sector hence the realization of the NHIS vision “*Quality Health Information for use by all*”.

The first Health Information System Strategic Plan was meant to be implemented during the period 2009-2014. However, due to the imperatives of new changes in the operating environment, the review of the Health Information Strategic Plan became necessary. The Health Sector Strategic Plan 2012-2017, the umbrella document that pronounces all health sector strategic objectives including those on health information system, was reviewed in 2012. This was done in order to align the priorities of the health sector to the requirements of the Constitution of Kenya (COK) 2010, Kenya Vision 2030 and Kenya Health Policy Framework 2014-2030. In the same spirit, the review of the Health Information Strategic Plan was necessary to exert the necessary strategic thrusts for a devolved HIS, and to re-prioritize in light of emerging health sector priorities for health information.

In addition, various assessments have identified weaknesses in the existing information system including lack of guidelines and policy, inadequate capacities of NHIS staff, inadequate infrastructure, lack of integration, poor quality of data, poor coordination, leadership and governance among others. The aforementioned changes and challenges in the operating environment have created the necessity for the health information system partners and stakeholders to re-examine their mandates and priorities with a view to focusing on producing quality information for use by all within the context of emerging trends and standards.

The strategic plan review adopted a comprehensive and consultative approach to ensure that the plan was aligned to national, institutional and legal guidelines, provisions and requirements in place. The methodological approach used incorporated in-depth analysis of various key documents which included;

HIS assessment reports, health sector strategic plans and policies, constitutional requirements on health and health information; regulatory and legal frameworks in place and other key plans relevant to the review process. This provided deep insights and information on key areas and aspects which required review and alignment to the changes in the HIS environment.

This strategic plan is an attempt by health information stakeholders and partners in Kenya to develop a plan that will provide the health sector with a roadmap to fulfill its mission and attain its vision. This is also key in establishing health information as a key pillar of the health system. This Strategic plan outlines strategies which will be executed in the next five years (2014— 2018). The plan defines NHIS role amongst its partners and stakeholders at the National and County Levels. It sets out nine (9) strategic directions which will drive the HIS outcomes and efficiencies. The strategic directions identified are:

1. To improve data management at national and county levels
2. To mobilize and increase resources for sustainable NHIS
3. To enhance staffing levels , capacity and skills of NHIS staff
4. To strengthen governance, partnership, collaboration and stakeholder participation at national and county level
5. To adopt and promote use of ICT in the health sector
6. To Improve National Vital Registration System
7. To strengthen Monitoring and Evaluation of the health sector
8. To create an enabling legal and regulatory framework for NHIS
9. To promote use of research for policy and advocacy
10. To develop the capacity of counties to take on more HIS responsibilities

To implement these strategies, NHIS will remain committed to its core values of integrity, innovativeness, sound ethics, professionalism and accountability. A detailed implementation plan and performance management framework has been developed to facilitate and track the implementation process. This strategy is estimated to cost KES 10 billion (USD 119 Million) for the period 2014-2018.

The timely execution of the proposed strategies and activities will require commitment and participation of all stakeholders and partners.



## **1. INTRODUCTION AND BACKGROUND**

### **1.1 Introduction**

The overall policy guidance for the health sector is provided by the Constitution of Kenya 2010 (COK), Kenya Vision 2030, Kenya Health Policy Framework (KHPF, 2014-2030) and the Kenya Health Sector Strategic Plan (KHSSP) 2014-2018. The Kenya Health Information System Policy (2016-2030) implements the strategic directions outlined in these key documents. One of the key challenges in the health sector identified in First Medium Term Plan (MTP) of the Kenya Vision 2030 is a weak health information system. Various assessments including the Needs Assessment Report for NHIS (2004) and the Kenya Health Metrics Network Assessment Report (2008) identified weaknesses in the existing information system including lack of guidelines and policy, inadequate capacities of NHIS staff, inadequate infrastructure, lack of integration, poor quality of data, poor information sharing mechanisms, many parallel information systems, poor coordination, leadership and governance among others.

The HIS Strategic Plan was developed taking into account devolution as enshrined in the Constitution of Kenya (2010) with emphasis on defining and institutionalizing the concurrent functions of the HIS at National and County levels. The strategic plan aims at positioning HIS as a key pillar in monitoring progress towards the attainment of the health sector policy goals and strategic directions. HIS is critical for effective service delivery and overall governance and stewardship of the health sector in light of devolution.

The strategic plan further aims to implement the provisions and mandate of Constitution of Kenya (2010) with respect to right to information, privacy and confidentiality and the goals of Vision 2030 in which revitalizing the efficacy of the health information system is a flagship project.

### **1.2 Background of HIS in Kenya**

Before independence, there was no formal structure to collect, collate, analyze and disseminate health information. In 1972, a committee that included representatives from the Ministry of Health, World Health Organization, the Central Bureau of Statistics (now Kenya National Bureau of Statistics) and the Attorney General Chambers was formed. The task of the HIS committee was to design a health information system for Kenya.

A pilot project was designed and tested in three locations – Mombasa, which represented an urban district, Kwale, which represented a peri-urban district, and Kitui, which represented a rural district. The pilot project was completed in 1976 and the suggestions and recommendations were adopted. One major recommendation was to merge two sections, the Research and Evaluation Section of the Division of Family Health and Vital and Health Statistics Section of the Division of Communicable Diseases Control into one entity namely the Health Information System Division. Another recommendation was to develop a system of code numbers for the data collection and reporting forms (the prefix MED to MOH) to get rid of the colonial connotation that would identify all forms in the Ministry of Health.

In 1982, another committee of professionals was formed to investigate on the accuracy and efficiency of all health data collection forms. The committee recommended that the forms were working well. In 1984, the national policy on, “District Focus for Rural Development”, was initiated. In response to NHIS new development, the Ministry of Health decentralized its reporting activities by establishing Health Information System offices in all counties where health data from all health facilities would be processed and analyzed for use before it is transmitted to the next level.

### 1.3 HIS reforms

The Kenya government has been committed to providing health of the highest standards for all her citizens since independence. The government's main objectives for the development of health services have been to strengthen and carry out effective measures for the prevention, eradication and control of diseases and to provide adequate and effective diagnostic, therapeutic and rehabilitative services for the whole population. As a result, major health sector reforms have taken place within the health sector since independence in an attempt to ensure highest health standards possible for her citizens. The following are some of the major reforms that have taken place in the health sector for which the HIS continues to play a key role:

- In 1994, the MOH and other stakeholders in the health sector spearheaded the development of Kenya Health Policy framework (1994-2010). The Policy framework outlined areas which required immediate attention including the provision of integrated data collection and reporting tools, improvement of data flow mechanisms, support districts in supportive supervision, provide clear policy guidelines on HIS and improve feedback mechanisms at all levels. In 2003, key reforms were undertaken with the introduction of performance-based monitoring in the public sector. Based on the comprehensive health information assessment report (2004), the sector identified core indicators for performance monitoring leading to the revision, integration and harmonization of the minimum data sets (data collection and reporting tools) and core indicators for performance monitoring. One of the strategic objectives of KHSSP11 (2005-2010) was to strengthen monitoring and evaluation (Health Information System) in the Health Sector under the clarion call of "reversing the trends". The implementation of the above sector strategic plan was through Annual Operational Plans (AOPs) which were to be monitored through an established framework on set targets. AOPs gave rise to annual performance reviews and annual reports.
- Prior to 2008, information transmission and data management were manual with minimal automation (Kwale and CLARION models). In 2008, File Transfer Protocol (FTP) which was using the excel spreadsheets was introduced. Districts were able to transfer information to the national server in an easier and more efficient manner. At this time, different softwares (over 70) were in use in the health sector and an assessment was conducted with a view of coming up with an integrated software. This led to the adoption of the District Health Information Software (DHIS), which was web-based and was to be used for aggregate data management. At the same time, there existed several lists of health facilities kept by different departments hence need to

harmonize and integrate them. This gave rise to development of web-based software to manage health facilities called the Master Facility List (MFL).

## **2. Strategic Plan review and formulation process**

This HIS Strategic Plan was developed through an inclusive approach and a methodology intended to ensure ownership, commitment and leadership by the key stakeholders in the HIS space in Kenya. This is informed by the recognition that a properly-organized health information system is a prerequisite for efficient administration of health services and hence the need to adopt a participatory and consultative approach in formulating the Strategic Plan.

To ensure that Strategic Plan was comprehensive and inclusive, desk and literature reviews were carried out as well as consultations with diverse stakeholders. The key methodological steps which were undertaken included:

- Review of the key document, plans, strategies and policies on HIS and the health sector
- Confirmation of the vision, mission and core values
- SWOT analysis to confirm the relevant internal and external factors that impact on the HIS sector at national and sub-national levels.
- Identification of key challenges which HIS sector will need to specifically respond to
- Identification of key priority areas for HIS Preparation of Action Plans for each priority area

The key documents which were reviewed included; HIS assessment reports, health sector strategic plans and policies, constitutional requirements on health and health information; regulatory and legal frameworks in place and other key plans relevant to the review process. This provided deep insights and information on key areas and aspects which required review and alignment to the changes in the HIS environment.

### 3. Vision, Mission, Core Values and strategic objectives

#### 3.1. Vision, Mission and core values

##### **Vision**

*Quality health information for use by all*

##### **Mission**

*To provide high-quality health information to be used by all for improved national health outcomes.*

##### **Core Values**

- a) **Integrity:** This should underpin the actions of all who deal with health information
- b) **Innovativeness:** An environment of continuous process improvement should be cultivated among health information professionals
- c) **Ethical:** All health workers handling confidential information in their area of work should ensure privacy and confidentiality. They should not divulge or allow access of personal health information to unauthorized persons
- d) **Professionalism:**—The health information profession should uphold the highest standards of professionalism through continuous professional development.
- e) **Accountability:** Health information professionals should be held personally accountable and responsible for their actions including errors of omission and commission.

### **3.2. Strategic Goal**

The HIS Strategic Plan aims to strengthen information generation, validation, analysis, dissemination and utilization for evidence- based decision making at national and county levels.

### **3.3 Strategic Objectives**

A fundamental outstanding and on-going concern in HIS in line with the First Medium Plan 2008-2012 of Vision 2030, is “Weak Health Information System” in the health sector. This Strategic Plan thus adopts, as its overall strategic thrust, the establishment of a functional, robust, effective, efficient and integrated Health Information System at the national and county levels. The HIS Strategic Plan aims to achieve the following 8 objectives:

1. To Improve Data Management at National and County levels
2. To mobilize and increase resources for sustainable NHIS
3. To enhance staffing levels , capacity and skills of NHIS staff
4. To strengthen Legal and Regulatory framework, Governance, Partnership, Collaboration and stakeholder participation at national and county level,
5. To adopt and promote use of ICT in the Health sector
6. To support the strengthening of National Vital Registration System
7. To strengthen monitoring and evaluation in the Health sector
8. To promote use of research for policy and advocacy

A comprehensive performance management framework is provided as part of this document to monitor and evaluate the implementation of these strategic objectives.

#### 4. Assessing the HIS operating environment

##### 4.1 Strengths, Weaknesses, Opportunities, Threats (SWOT) of the HIS sector

This SWOT analysis identifies the internal strengths and weaknesses as well as external opportunities and threats that face Kenya's HIS.

**Table 4.1 SWOT Analysis of HIS**

<b>[Internal ] Strengths</b>	<b>[Internal] weaknesses</b>
<ul style="list-style-type: none"> <li>• Existence of vital registration system</li> <li>• Regular periodic population based surveys such as KDHS (every 5 years), census (every 10 years)</li> <li>• A NHIS structure, Architecture and reporting system in place</li> <li>• Technical personnel available</li> <li>• Existing Training curriculum for health records and information staff.</li> <li>• Counties and sub-counties are proactive on NHIS activities</li> <li>• Availability of SOPS, manuals and guidelines for data management</li> <li>• Availability of computers at national, counties, sub-counties and hospitals</li> <li>• Access to connectivity available</li> <li>• Minimum data set available and core health sector indicators defined</li> <li>• Establishment of a national coordinating structure available</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of clear policy guidelines and legal framework for NHIS</li> <li>• Low reporting rate below 80%</li> <li>• Inadequate NHIS personnel</li> <li>• Inadequate finances</li> <li>• Unclear funding mechanism</li> <li>• Lack of/inadequate M&amp;E skills at all levels</li> <li>• Inadequate provision of data collection tools at facility levels</li> <li>• Lack of centralized data base at all levels</li> <li>• Lack of mechanisms for enforcing use of standardized data tools</li> <li>• Inadequate working and storage space</li> <li>• Inadequate supply of equipment such computers and printers at all levels.</li> <li>• Inadequate Facilitative supervision</li> <li>• Weak feedback mechanism and poor dissemination at all levels</li> <li>• Poor coordination of NHIS Activities</li> <li>• Weak linkages and data sharing</li> <li>• Inadequate skills development for NHIS Staff.</li> </ul>

<ul style="list-style-type: none"> <li>• Health Information Policy in place</li> <li>• Availability of harmonized</li> <li>• Data Collection Tools at all levels</li> <li>• Mandatory Provision for a NHIS in the Health Bill</li> <li>• The Kenya Constitution 2010-Information is a right</li> <li>• Vision 2030-NHIS is a flagship project</li> <li>• The Kenya Health Policy Framework 2012-2030-NHIS is a priority area</li> <li>• In the Devolved System of Governance-Health Information is a concurrent function</li> <li>• Kenya Health strategic plan 2012-2017-NHIS has a critical investment area</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of incorporation of NHIS component in the various training curricula</li> <li>• Lack of clear linkage between Health Records and information professionals and NHIS which is a system.</li> <li>• Low staff morale.</li> <li>• Competing priorities at implementation, policy and strategy levels</li> </ul>
<p><b>External opportunities</b></p>	<p><b>External threats</b></p>
<ul style="list-style-type: none"> <li>• Collaboration and networking with other stakeholders</li> <li>• Capacities built on various vertical programmes would help to roll out a better NHIS</li> <li>• Recognition and support of NHIS by key stakeholders in the Health Sector</li> <li>• Development of a national ICT policy</li> <li>• Development of E- health policy and strategy</li> <li>• Implementation of the NHIS policy</li> <li>• Training of NHIS staff in various institutions e.g. Degree at KU</li> <li>• Implementation of the community health information system</li> <li>• The Kenya Constitution 2010-Information is a right</li> <li>• Vision 2030-NHIS is a flagship project</li> </ul>	<ul style="list-style-type: none"> <li>• High staff turnover</li> <li>• Poor scheme of services leading to non-retention of qualified staff</li> <li>• Donor driven programmes and projects establishing parallel data management systems.</li> <li>• Inconsistency in political good will</li> <li>• Keeping pace with ICT development</li> <li>• Global economic melt down</li> <li>• Corruption</li> <li>• Freeze on Employment</li> <li>• Natural and manmade calamities</li> <li>• Over dependence on development Partners/Donor support</li> </ul>



- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>• Devolution</li><li>• The Kenya Health Policy Framework 2012-2030-NHIS is a priority area</li><li>• In the Devolved System of Governance-Health Information is a concurrent function</li><li>• Kenya Health strategic plan 2012-2017-NHIS has a critical investment area</li><li>• Technological advancements</li><li>• Strong legal and regulatory frameworks</li></ul> |  |
|---|--|

## 5. Current challenges confronting the HIS

The following are the major challenges facing the HIS in the country:

- Inadequate number of qualified personnel to carry out health information system functions
- Inadequate capacity and skills in ICT, M&E and analysis
- Deployment of skilled personnel
- Lack of reporting tools at service delivery sites
- Lack of ICT infrastructure at lower levels
- Devolution-County readiness to implement devolved NHIS functions
- Lack of institutional capacity at county level - organizational structures, plans, clear roles and responsibilities, inadequate supervision, redeployment and resources; (offices, ICT infrastructure, etc).
- Weak legal and regulatory framework governing NHIS

## 6. Strategies to support Strategic Plan implementation

This chapter summarizes the key activities required to achieve the nine strategic objectives set out in the Plan.

**Table 6.1: Breakdown of key activities needed to achieve the strategic objectives**

<b>Strategic objective 1: To improve Data Management at National and County levels</b>	
Strategies	<ul style="list-style-type: none"> <li>• Develop guidelines for strategic and operational planning for use at county level</li> <li>• Develop data management processes, procedures</li> <li>• Establish linkages for the existing sub-systems</li> <li>• Develop minimum data sets (data collection and reporting tools) and indicators</li> <li>• Develop standards, guidelines, SOPS and health information architecture</li> <li>• Enhance the capacity and skills of health staff on data management</li> <li>• Develop and disseminate guidelines for reporting at all levels</li> <li>•</li> </ul>
<b>Strategic objective 2: To mobilize and increase resources for a sustainable HIS at all levels</b>	
Strategies	<ul style="list-style-type: none"> <li>• Increase allocation of GOK funds for implementing HIS interventions</li> </ul>

	<ul style="list-style-type: none"> <li>• Develop and implement a comprehensive system for tracking budget</li> <li>• Establish partnership, collaboration and coordination structures at national and county levels</li> <li>• Ensure adequate resources; financial, infrastructure and ICT related resources to support the NHIS</li> <li>• Enhance transport for NHIS operations</li> <li>• Improve general office supplies and equipment</li> </ul>
<p><b>Strategic objective 3: To enhance staffing levels, capacity and skills of HIS workers</b></p>	
Strategies	<ul style="list-style-type: none"> <li>• Undertake human resource assessment to identify required skill requirements for HIS at national and county level</li> <li>• Develop a staffing plan for HIS</li> <li>• Support staff to attend focused pre and in-service training programs for health professionals in NHIS</li> <li>• Develop a mentorship program for HIS personnel</li> <li>• Organize “best practice tours” in areas with the best performance within and outside Kenya (Virtual tours)</li> <li>• Build capacity for the required human resources for the national and county level</li> <li>•</li> </ul>
<p><b>Strategic objective 4: To strengthen Legal and Regulatory framework, Governance, Partnership, Collaboration and stakeholder participation at national and county level</b></p>	
Strategies	<ul style="list-style-type: none"> <li>• Establishment of intra and inter sectoral linkages</li> <li>• Establish effective governance structures at national level</li> <li>• Establish joint monitoring and evaluation structures of the strategic plan</li> <li>• Establish a stakeholders forum for information sharing</li> <li>• Strengthen HIS coordination structures at national and county levels</li> <li>• Establish collaborative mechanisms between the two levels of government</li> <li>• Develop appropriate regulations for NHIS</li> <li>• Periodic review of HIS regulations</li> </ul>

**Strategic objective 5: To adopt and promote the use of ICT in HIS**

- |            |   |
|------------|---|
| Strategies | <ul style="list-style-type: none"><li>• Develop an NHIS architecture</li><li>• Procure hardware and software to support data management</li><li>• Develop the relevant standards and guidelines for application in ICT</li><li>• Adopt appropriate and relevant technologies</li><li>• Ensure system maintenance and sustainability</li><li>• Develop effective data governance, data security and backup structure</li></ul> |
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**Strategic objective 6 : To strengthen National Vital Registration System**

- |            |  |
|------------|--|
| Strategies | <ul style="list-style-type: none"><li>• Enhance Civil Registration awareness campaigns and social mobilization</li><li>• Increase coverage of births registration</li><li>• Enhance Capacity building (for coders, certifiers and registration agents)</li><li>• Review and develop a Vital Registration Information Systems (VRIS)</li><li>• Build Capacity of registrars on use of the software database system developed</li><li>• Develop capacity for use of ICT to improve CRVS</li><li>• Monitor implementation of the system</li></ul> |
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**Strategic objective 7 : To strengthen the use of HIS in monitoring and evaluation in the health sector**

- |            |  |
|------------|--|
| Strategies | <ul style="list-style-type: none"><li>• Develop and disseminate information products</li><li>• Strengthen Effective marketing of HIS products</li><li>• Building capacities of the managers and staff to use information for evidence-based decision-making</li><li>• Develop mechanism to enhance data collection, reporting and use</li><li>• Develop a performance monitoring framework for use at the national and county levels</li><li>• Advocate for use of health information in decision-making at all levels</li><li>• Document best practices and innovations</li><li>• Determine the mandate and objectives of governance of the two levels of governance in information generation and use</li><li>• Develop mechanisms for performance monitoring and evaluation in the two levels of government</li></ul> |
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Strategic objective 8: To promote the use of research for policy and advocacy

Strategies	<ul style="list-style-type: none"><li>• Establish a coordination structure for health research</li><li>• Develop a regulatory framework for research</li><li>• Build capacity for operational research among health professionals</li><li>• Mobilize resources for health research</li><li>• Protect intellectual property rights of research innovations in health</li><li>• Promote application of research results to improve health interventions</li></ul>

## **7. Implementing the HIS Strategic Plan**

The HIS Strategic Plan will be implemented in a phased approach spread over five years from 2014-2018. The first phase will involve laying a firm foundation for the strategic plan by putting the fundamentals in place. NHIS will ensure that the strategy is built on a strong and sustainable base that supports and anchors the implementation of various identified activities within the strategy.

In the second phase, efforts will be focused on strengthening the base already established in phase one. In this phase, NHIS will lay more emphasis in strengthening all the components and divisions of HIS with a special focus on the gaps, needs and priorities. Special attention will be put on developing institutional capacity (infrastructural and technical) for the NHIS at both the national and county levels. Within phase two, reflection on progress will be undertaken with a lot of emphasis placed on the feedback from the public, clients, providers, stakeholders and partners to facilitate continuous learning and improvement of the HIS at the national and county levels.

Phase three will mainly focus on consolidation and solidification of the gains and experiences from the previous phases in order to establish a sustainable approach in HIS and service delivery within the two tiers of governance (national and county levels). The gains will be documented and necessary changes/adjustment in the strategy adopted.

Each of the phases is not very unique as it involves overlap of activities with some of the activities running throughout the life of the strategy. The strategy will be implemented by using work-plans formulated yearly by the implementation teams/committees at national and county levels of governance.

## 8.1 Implementation Phases

		Phase 3: consolidating changes and improvement
	Phase 2: striving for excellence	Achieving excellence will involve: <ul style="list-style-type: none"> <li>▪ Adopting evidence-based approaches</li> <li>▪ Feedback and past experience utilization</li> <li>▪ Monitoring and accountability</li> <li>▪ Building technical and infrastructural capacities</li> <li>▪ Review and adjustment of previous outcomes</li> <li>▪ Establishing sustainable resource mobilization</li> <li>▪ Enhancing research and continuous learning</li> <li>▪ Redefining stakeholder and partnership networks</li> <li>▪ Documenting, sharing and scaling best practices</li> <li>▪ Adopting innovative and results-based approaches</li> </ul>
Phase 1: putting fundamentals in place	Strengthening and enriching the activities will involve: <ul style="list-style-type: none"> <li>▪ Midterm reviews</li> <li>▪ Organizing and coordinating activities</li> <li>▪ Effective resource mobilization</li> <li>▪ Standardization and benchmarking on quality</li> <li>▪ Developing strong partnership and stakeholders networks</li> <li>▪ Strong advocacy and policy formulation</li> <li>▪ Showcasing and sharing best practices</li> <li>▪ Continued capacity building</li> <li>▪ Creativity and innovation</li> <li>▪ Performance appraisals and management</li> </ul>	
Strategic plan basis includes: <ul style="list-style-type: none"> <li>▪ Enrolling the strategy</li> <li>▪ Training and service delivery needs assessment</li> <li>▪ Detailed infrastructure development design and plan</li> <li>▪ Detailed plan for technical capacity development</li> <li>▪ Resource acquisition, mobilization and utilization plan</li> <li>▪ Design for implementation and monitoring plan</li> <li>▪ Developing an awareness plan</li> <li>▪ Training and capacity building</li> </ul>		



Ongoing strengthening of the HIS

## 8.2 Strategic Implementation Matrix

The Strategic Plan 2014 – 2018 Implementation Matrix is presented below. For ease of presentation, an implementation framework for each strategic objective is provided but should be viewed as integrated components. The matrix consists of:-

- Strategic objective
- Key result area
- Strategies to support the strategic objective
- Main activities for the respective strategies
- Implementation timeframe Projected costs

The Implementation Matrix is a critical management tool for mobilization, allocation and utilization of resources, monitoring progress as well as evaluating results/outputs and impact of the National Health Information System.

It is important to note that detailed Annual Work Plans (AWPs) are to be developed for each year of the plan as initial and subsequent operationalization of the Strategic Plan processes.

In addition to the Implementation Matrix as well as AWPs, there will be a comprehensive Monitoring and Evaluation System to be developed to facilitate efficient and effective monitoring and evaluation of Strategic Plan implementation including feedback reporting mechanism, documentation and information dissemination.



**STRATEGIC PLAN IMPLEMENTATION MATRIX (2014-2018)**

**Strategic Objective 1: To improve Data Management at National and County levels**

Key Results/output area	Strategies	Main Activities	Timeframe (Implementation period)				Budget	
			2014/15	2015/16	2016/17	2017/18	Kshs	US\$
Effective and efficient data quality management	Develop guidelines for strategic and operational planning for use at county level	Develop and disseminate guidelines to all counties					7,541,000	88,718
	develop data management processes, procedures	Develop and disseminate data management processes and procedures					16,020,417	188,475
	Establish linkages for the existing sub-systems	Establish linkages for the existing sub-systems					15,833,448	186,276
	Develop minimum data sets (data collection)	Review and define health sector core indicators					16,280,448	191,535

	and reporting tools) and indicators	Revise and disseminate data collection, collation, analysis and reporting tools					31,178,448	366,805
		Conduct orientation training for health care workers on use of revised integrated NHIS M&E tools					14,898,448	175,276
		Print data collection forms					235,656,000	2,772,424
	Develop standards, guidelines, SOPS and health information architecture	Design and develop a robust EHR architecture					710,000	8,353
		Develop an Electronic Health Records System (EHRS)					1,604,000	24,165
		Develop EHR standards for data management					3,056,000	35,953

		Develop EHR /DHIS Metadata dictionary					1,299,000	15,282
	Enhance the capacity and skills of health staff on data management	Build Capacity of health staff in data management					17,250,448	202,946
		Build capacity in skills and knowledge on data management to health records and information personnel					380,160,000	4,472,471
	Develop and disseminate guidelines for reporting at all levels	Develop guidelines					1,649,600	19,407
		Develop and disseminate reporting systems for effective monitoring					312,000	3,671

**Strategic objective 2: To mobilize and increase resources for a sustainable NHIS**

Key Output/Results	Strategies	Main Activities	Timeframe (Implementation period)				Budget		
			2014 /15	2015 /16	2016 /17	2017 /18	Kshs	US\$	
Adequate and sustainable funds and resources	Increase allocation of GOK funds for implementing NHIS interventions	Lobby for more GOK funds					25,000	294	
		Lobby for at least 10% funds from donor/partners funding for every project in the health sector towards M&E and NHIS					1,300,000	15,294	
	Develop and implement a comprehensive M&E framework	Design and implement a comprehensive M&E framework					260,000	3,059	
	Establish partnership, collaboration and coordination structures at national and county levels	Establish HIS partnership structures at national and county levels					8,600,000	101,176	
		Establish coordination structures at county level					4,800,000	56,471	
		Establish a coordination structures at national level					21,200,000	249,412	
		Establish effective forums and communication mechanisms					1,435,000	16,882	
	Ensure adequate resources; financial, infrastructure and ICT related resources to support the NHIS	Increase allocation towards ICT an infrastructure for NHIS					1,000,000	11,765	
		Equip NHIS with adequate infrastructures and equipment					131,600,000	1,548,235	

		Increase advocacy for donor and partner support					5,000,000	58,824	
	Enhance transport for NHIS operations	Provision of transport (vehicles and motorcycles) at all levels					49,800,000	585,882	
	Improve general office supplies and equipment	Renovate the office buildings in selected sites.					10,282,000	120,965	
		Equip one resource centre at the national and County level					12,800,000	150,588	
		Procure office supplies at all levels					2,748,000	32,329	

**Strategic Objective 3: To enhance staffing levels, capacity and skills of HIS workers**

Key Results/output area	Strategies	Main Activities	Timeframe (Implementation period)				Budget	
			2014/15	2015/16	2016/17	2017/18	Kshs	US\$
Improved HIS staff capacity, retention and motivation	Develop and disseminate focused pre and in-service training program for health professionals	Mainstream in-service and pre-service training of health workers					225,000	2,647
		Review curricula for health records professionals					225,000	2,647
	Strengthen human resource capacity at all levels by undertaking focused practical training program on HIS	Orientate all lecturers/ Trainers on curricula					840,000	9,882
		Develop and disseminate training manual in information management for health workers					156,000	1,835
		Train managers on information management and use					17,025,000	200,294
		Train Health care workers on data management and use					16,800,000	197,647
		On Job Training on data					1,350,000	15,882

	management for health workers						
Employ, deploy and retain appropriate health records and information personnel at all levels	Review, Develop and implement norms and standard for staffing at various levels of NHIS					450,000	5,294
	Develop a retention scheme of service for Health Records and Information Officers					450,000	5,294
	Employ and deploy 750 health records and information technicians					1,800,000,000	21,176,471
	Employ and deploy 750 health records and information Officers					187,500,000	2,205,882
	Employ and deploy 200 Health records and information degree/masters holders					4,800,000,000	56,470,588
Employing and deploying NHIS staff appropriately	Employ and deploy 20 ICT officers in all in every county to give technical					1,128,000,000	13,270,588

	support						
	Employ and deploy 10 statistical officers for national and county levels					240,000,000	2,823,529
Enhance NHIS staff career development	Sponsor NHIS staff for short term courses in-post (statistical software, Planning, M&E, GIS, )					90,000,000	1,058,824
	Train Health records and information officers and clinicians on use of ICD 10					42,000,000	494,118
	Support long term trainings for NHIS (Medical demography, Epidemiology, Medical statistics, Informatics, Health Records and Information Management)					100,000,000	1,176,471



Organize “best practice tours” in areas within Kenya and outside with the best performance	Conduct exchange programmes (in-country)					33,600,000	395,294
	Conduct exchange programme in the region (AFRO)					10,000,000	117,647
Build capacity for the required human resources for the national and county levels	Assessment and identification of staffing needs ,gaps and mix					38,092,000	448,141
	Capacity building on use of health information for enhanced leadership and governance					72,300,000	850,588

**Strategic Objective 4: To strengthen governance, partnership, collaboration and stakeholder participation at national and county levels**

Key Outputs/ Results	Strategies	Main Activities	Timeframe (Implementation period)				Budget	
			2014/15	2015/16	2016/17	2017/18	Kshs	US\$
Effective partnership, governance and stakeholder structures	Establishment of intra and inter sectoral linkages	Develop and disseminate guidelines for effective communication at national and county levels					156,000	1,835
		Hold quarterly NHIS and TWG Coordination meetings					10,365,000	121,941
		Establish HIS partnership structures at national and county levels					672,000	7,906
		Coordinate and link with other statistical constituencies					360,000	4,235
	Establish effective governance structures at national and county levels	Conduct Quarterly NHIS coordinating committee meetings at all levels					600,000	7,059
		Conduct quarterly TWG regular meetings					360,000	4,235

Establish joint monitoring and evaluation structures of the strategic plan	Conduct Mid and End Term evaluation of NHIS strategic plan					806,400	0.752
Establish a stakeholders forum for information sharing	Conduct quarterly or regular stakeholders meeting both at national and county levels					10,600,000	141,333
Develop NHIS coordination structures with responsibilities	Conduct regular stakeholders and partners mapping					403,200	5,376
Promote a unified National Health Information System	Conduct joint NHIS systems and documents review at all levels					200,000	2,667
Establish collaborative mechanisms between the two levels of government	Create effective governance, management and leadership structures					45,896,800	539,962
	Develop appropriate policies and regulations for effective governance and collaborations					6,690,000	78,706

Develop appropriate regulations for NHIS	Develop and disseminate guidelines for regulating institutional and personal access and use of data				1,772,000	20,847
	Develop and disseminate professional standards for HIS practitioners				1,772,000	22,729
	Establish functional committees to ensure legal and regulatory compliance				312,000	4,160
	Develop and disseminate appropriate guidelines for handling Retention, Ownership, De-identification, and other sanctions of medical Records				2,016,000	26,880
	Develop and disseminate procedures to regulate disposal of information materials, tools and information products with specified				1,772,000	23,627

	timeframes						
Periodic review of NHIS regulations	Alignment of multiple stakeholders and partners towards a common reporting mechanism and objective					1,040,000	13,867
	Reviewing the policies, strategic plans and regulations to align to the health information policy					900,000	12,000

**Strategic Objective 5: To adopt and promote the use of ICT in the HIS**

Key Output	Strategies	Main Activities	Timeframe (Implementation period)				Kshs	US\$
			2014 /15	2015 /16	2016 /17	2017 /18		
Increased use of ICT	Develop NHIS architecture	Develop NHIS schema					1,010,000	11,882
		Establish and support a service desk both at National and county levels					21,540,000	253,412
	Procure hardware and software to support data management	Procure computer hardware and its accessories and printers for data management					60,005,000	705,941
		Procure PDAs and Laptops for data management					11,780,000	138,588
	Develop the relevant standards and guidelines for application in ICT	Train managers at national, county and sub-county levels on use of PDAs					13,440,000	158,118
		Develop and enforce ICT policy for NHIS					1,794,000	21,106
		Disseminate the ICT standards and guidelines to the county and sub-county levels					13,440,000	158,118
	Adopt appropriate and relevant technologies	Develop a user friendly integrated, web-based database that can link multiple data sources and ensure controlled access by users.					3,516,000	41,365
	Ensure system maintenance and sustainability	Support maintenance of hard and software, including in-house capacity					21,532,000	253,318
	Develop effective data governance, data security and backup structure	Establish remote site for data backup					150,000	1,765
		Procure backup devices					500,000	5,882
		Build capacity for good data governance					10,080,000	118,588
		Develop data security measures					100,000	1,176
		Capacity building in ICT					10,080,000	118,588

**Strategic Direction 6:** To support strengthening of National Vital Registration System

Key output/result	Strategies	Main activities	Timeframe (Implementation period)				Kshs	USD
			2014/2015	2015/2016	2016/2017	2017/2018		
	Enhance Civil Registration awareness campaigns and social mobilization	Conduct social mobilization campaigns at national, County and Sub County levels to					10928000	128,565
	Increase coverage of births registration	Registration of births in all MCH units					10,800,000	127,059
		Sensitize community through media					5,000,000	58,824
	Enhance Capacity building (for coders, certifiers and registration agents)	Capacity Building of registrars and registration agents on vital registration					4,704,000	55,341
		Orientate 10,000 registration agents on births and deaths					20,000,000	235,294
		Train VR staff on short course					1,500,000	17,647
		Train 800 clinicians on certification of causes of deaths					44,800,000	527,059
		Train 480 coders in classification and cause of death reporting					26,880,000	316,235
	Review and develop a Vital Registration Information Systems (VRIS)	Data Conversion					7,250,000	85,294
		Design and develop a robust vital registration information system at all levels					7,064,000	83,106
		Establish the software system in all counties					4,680,000	55,059
		Ensure functionality of the CVRS system through capacity building for effective governance					14,920,000	175,529
	Build Capacity of registrars on use of the software database system developed	Train registrars on use of the software database system					3,136,000	36,894
	Develop capacity for use of ICT to improve CRVS	Train CR system ICT					505,000	5,941
	Monitor implementation of the system	Monitoring of the system and its performance					4,340,000	51,059

**Strategic Objective 7: To strengthen monitoring and evaluation of the health sector**

Key output/result	Strategies	Main activities	Time Frame (Implementation Period)				Budget	
			2014/15	2015/16	2016/17	2017/18	Kshs	USD
Improved data quality and information use	Develop and disseminate information products	Develop and share report outline					234,000	2,753
		Develop information products for different audiences					8,400,000	98,824
		Upload the information to a web-portal					-	-
		Develop the health information innovations					13,440,000	158,118
		Participate in the National health congress					2,080,000	24,471
	Strengthen Effective marketing of NHIS products	Produce IEC materials on NHIS					1,500,000	17,647
		Develop annual performance health reports					14,220,000	167,294
		Develop quarterly bulletins					16,240,000	191,059
	Building capacities of the managers and staff to use information for evidence-	Train NHIS and CHIS information officers on data mining, analysis, interpretation, presentations and use					20,160,000	316,235



based decision-making	Train managers and registrars on data analysis, mining and use					13,160,000	154,824
	Establish and maintain data coding and Master Health facility guidelines					225,000	2,647
	Establish and Support TWGs in quarterly reviews.					25,200,000	296,471
	Participate in quarterly County Review Meetings					25,200,000	296,471
Develop a performance monitoring framework for use at the national and county levels	Establish Joint Monitoring and Evaluation mechanisms and framework					23,967,000	281,965
	Develop NHIS standards , guidelines and procedures					2,016,000	23,718
	Establish linkages of NHIS with data sources					675,000	7,941

Advocate for use of health information in decision-making at all levels	Develop and disseminate criteria for Selection of annual themes					2,460,000	23,647
Document best practices and innovations	Develop and disseminate guidelines for assessing best practices and innovations					6,150,000	72,353
	Develop and disseminate guidelines for quality audits and assessment					146,080	146,080
	Hold forums for sharing and disseminating best practices					35,850,000	421,765
	Print and share best practices					36,400,000	428,235
Determine the mandate and objectives of the two levels of governance in information generation and use	Establish coordination committees drawn from counties to oversee devolution of HIS functions					7,500,000	88,235
Develop mechanisms for performance monitoring and	Develop appropriate performance objectives, standards and targets					1,698,000	19,976

evaluation in the two levels of government	Develop and disseminate training curriculum for facilitative supervision for use at county level					26,320,000	309,647
	Develop and disseminate requisite norms and standards for service delivery					450,000	5,294
	Develop and disseminate criteria for benchmarking of county performance on HIS objectives					2,460,000	23,647

**Strategic Objective 8: To promote the use of research for policy and advocacy**

Key Output/Result	Strategies	Main Activities	Timeframe (Implementation period)				Kshs	US\$
			2014 /15	2015 /16	2016 /17	2017 /18		
Enhanced use of research for policy and advocacy	Establish a coordination structure for Health research	Develop and disseminate the research policy to stakeholders and Counties					990,000	11,647
		Develop forums for discussing research work					1,300,000	15,294
	Develop a regulatory framework for research	Develop a Regulatory framework for NHIS research					320,000	3,765
	Build capacity for operational research among health professionals	Train health workers on research policy and approaches					6,930,000	81,529
	Mobilize resources for Health research	Establish functional stakeholders forums for mobilizing resources to research					200000	2353
		Establish functional research coordination committee at the national and county level					600,000	7,059
	Protect intellectual property rights of research innovations in health	Develop a NHIS research policy					2,600,000	30,588
	Promote application of research results to improve health interventions	Establish biannual forums to share innovation and best practices					5,200,000	61,176



## 8. Monitoring and Evaluation Framework

Monitoring and Evaluation (M&E) activities are a critical component for successful implementation of this Strategic Plan. The overall purpose of Monitoring and Evaluation (M&E) is to track inputs, activities (processes), outputs and ultimate outcome (impact) of this Strategic Plan's implementation. It is a process of ensuring that resources are spent as planned within the framework of the Strategic Plan projections and Annual Work Plans (AWPS) budgets. It also ensures that activities take place as planned within the stated time frames in order to realize stated strategic objectives. The M&E framework will assist in:

- Tracking the implementation of planned activities to ensure they are on schedule.
- Providing a basis for making adjustments and taking corrective action when and where necessary
- Communicating regular progress to HIS stakeholders
- Ensuring that allocated resources are utilized efficiently and effectively
- Ensuring that inputs are ready on time

This Strategic Plan will be executed and monitored primarily through:

- Detailed AWP's at both national and county level HIS
- Short-term operational plans possibly at unit, various Inter Agency Coordinating Committees (ICCs) , Technical Working Groups (TWGs) etc
- Appropriate data collection tools/instruments at all levels Monthly, Quarterly and Annual Reviews
- Feedback reporting mechanisms including reporting formats, reports writing, documentation and dissemination processes

Monitoring and Evaluation of financial and other resources will constitute part of the M&E system to ensure that all the resources are utilized according to approved work plans and budgets, and in accordance with the approved financial management guidelines and regulations to ensure accountability.

## **Interim, Mid-term and End of Period evaluation**

### **i) Internal progress reports**

Internally, regular reports will be compiled by the key units responsible for implementing the recommended strategies. The internal progress reports will be generated regularly. The reports will be timed to be compatible with quarterly meetings of the departments/divisions. The heads of department/divisions will review the progress reports and serve as the overall internal monitor for the implementation of the strategy in the institutions where the strategy will be implemented. The reports will be summarized for reporting to the coordinating committee on regular basis. The progress reports will describe the various actions/activities taken in the process of implementing the strategy and achievement realized over the period of implementation such as benefits, performance measurements, progress made, changes, challenges and costs incurred.

### **ii) Annual report**

Annually, a report detailing the various activities and achievements undertaken in the implementation of the strategy will be compiled and submitted to the various stakeholders and partners for discussion and recommendations. HIS be involved in determining annual progress, changes, required adjustments, experiences, performance measures and other elements significant to the implementation and success of the strategy. The reports will be done annually for each year; 2014-2018.

### **iii) End of Strategic Plan Period review**

An independent committee involving representatives from HIS and other key stakeholders will undertake a review and appraisal of the strategy in relation to the planned performance and outputs and provide feedback on the progress to the relevant committee and stakeholders. The review will be done at the end of the period covered by the strategy. The report will provide credible, reliable and timely information for evidence-based decision making and further improvement/adjustment in the consecutive HIS Strategic Plan.

## 9. Strategic Plan Performance Monitoring Matrix

Strategic Objective1: To improve Data Management at National and County levels

Key Results/output area	Strategies	Main Activities	Performance indicators	Target				Data source	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
Effective and efficient data quality management	Develop guidelines for strategic and operational planning for use at county level	Develop and disseminate guidelines	Proportion of counties using guidelines					Annual reports	Annually	Ministry of Health (NHIS)
	Develop data management processes, procedures	Develop and disseminate data management processes and procedures	Proportion of counties using new procedure manual	24	11			Annual reports	Annually	Ministry of Health (NHIS)
	Establish linkages for the existing sub-systems	Establish linkages for the existing sub-systems	Percentage increase in number of users of interlinked systems	40%	50%	60%	70%	Annual reports	Annually	NHIS, TWG
	Develop minimum data sets (data collection and reporting tools) and indicators	Review and disseminate health sector core indicators	Proportion of counties using reviewed health sector indicators			47		Annual reports	Annually	NHIS, TWG
		Revise and disseminate data collection, collation, analysis and reporting tools	Proportion of counties using revised data collection, collation and analysis tools			47		Annual reports	Annually	NHIS



	Conduct orientation training for health care workers on use of revised integrated NHIS M&E tools	Proportion of health workers trained on NHIS M&E tools	200	200	200	200	Quarterly reports	Quarterly	NHIS
	Print data collection forms	Proportion of targeted forms printed and distributed			70,200	63,800	Annual report	Annually	Ministry of Health (NHIS)
		Proportion of counties with adequate data collection forms	47	47	47	47			
Develop standards, guidelines, SOPS and health information architecture	Design and develop a robust EHR architecture	EHR architecture in place and functional		1			Annual reports	Annually	NHIS
	Develop an Electronic Health Records System (EHR)	EHR system developed and customized		1			Annual reports	Annually	NHIS and CHIS
	Develop and disseminate EHR standards for data management	Proportion of counties using EHR standards	47				Quarterly reports	Quarterly	NHIS and CHIS
	Develop and disseminate EHR /DHIS Metadata dictionary	Proportion of counties with EHR Metadata dictionary	47				Quarterly reports	Quarterly	NHIS

	Maintenance and enhancement of DHIS system	Proportion of DHIS users satisfied	100%	100%	100%	100%	Satisfaction survey report	Annually	NHIS
Enhance the capacity and skills of health staff on data management	Build Capacity of health staff in data management	Proportion of targeted staff trained	50	50	50	50	Annual reports	Annually	NHIS and CHIS
	Build capacity for health records and information personnel	Proportion of HRIOs trained	70	70	60	50	Annual reports	Annually	NHIS and CHIS
Develop and disseminate guidelines for reporting at all levels	Develop guidelines	Proportion of counties using the guidelines	47	47	47	47	Annual report	Annually	HIS
	Develop and disseminate reporting systems for effective monitoring	Proportion of counties adopting new reporting formats	47	47	47	47	Annual report	Annually	HIS

Strategic Objective 2: To mobilize and increase Resources for a sustainable NHIS

Key Output/Results	Strategies	Main Activities	Verifiable Indicators	Target				Data source	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
Adequate and sustainable funds and resources	Increase allocation of GOK funds for implementing NHIS interventions	Lobby for more GOK funds	Percentage increase in health expenditure allocated to NHIS/M&E	20 %	30 %	40 %	50 %	Annual reports	Annually	Principal Secretary/Chief Officer
		Lobby for at least 10% funds from donor/ partners funding for every project in the health sector towards M&E and NHIS	Percentage increase in health expenditure allocated to NHIS/M&E	20 %	30 %	40 %	50 %	Annual reports	Annually	Principal Secretary/Chief Officer
	Develop and implement a comprehensive M&E framework	Design and implement a comprehensive M&E framework	A comprehensive M&E frameworks in place	1				Annual reports	Annually	Principal Secretary/Chief Officer
	Establish partnership, collaboration and coordination structures at national and county levels	Establish HIS partnership structures at national and county levels	Proportion of counties with functional fora	47	47	47	47	Annual report	Annually	Principal Secretary/Chief Officer
		Establish coordination structures at county level	Proportion of counties with functional HIS coordination structures	47				Annual reports	Annually	Principal Secretary/Chief Officer
		Establish a coordination structures at national level	A functional coordination committee in place	1				Annual reports	Annually	Principal Secretary/Chief Officer

		Establish effective forums and communication mechanisms	Number of scheduled forums held	3	3	3	3	Quarterly reports	Quarterly	Principal Secretary/Chief Officer
Ensure adequate resources; financial, infrastructure and ICT related resources to support the NHIS		Increase allocation towards ICT an infrastructure for NHIS	Percentage increase in funding towards ICT infrastructure	20%	30%	40%	50%	Quarterly reports	Quarterly	Principal Secretary/Chief Officer
		Increase advocacy for donor and partner support	Percentage increase in partner support	20 %	30 %	40 %	50 %	Annual reports	Annually	Principal Secretary/Chief Officer
Enhance transport for NHIS operations		Provision of transport (vehicles and motorcycles) at all levels	Proportion of targeted recipients with functional transport	100%	100%	100%	100%	Annual reports	Annually	Principal Secretary/Chief Officer
Improve general office supplies and equipment		Identify and renovate the office buildings in selected sites.	Proportion of targeted offices/buildings renovated	100%	100%	100%	100%	Annual reports	Annually	Principal Secretary/Chief Officer
		Equip one resource centre at the national and County level	Proportion of targeted resource centers equipped	100%	100%	100%	100%	Annual reports	Annually	Principal Secretary/Chief Officer
		Procure office supplies at all levels	Proportion of targeted offices receiving supplies	100%	100%	100%	100%	Annual reports	Annually	Principal Secretary/Chief Officer

Strategic Objective 3: To enhance staffing levels, capacity and skills of HIS workers

Key Results/output area	Strategies	Main Activities	Performance indicators	Target				Data source	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
Improved HIS staff capacity, retention and motivation	Develop and disseminate focused pre and in-service training program for health professionals	Mainstream in-service and pre-service training of health workers	Proportion of counties implementing pre-service and in-service training	47				Quarterly report	Quarterly	Principal Secretary and Chief Officers
		Review curricula for health records professionals	Proportion of targeted training institutions using revised curricula	100%	100%	100%	100%	Assessment report	Annually	Heads of Training institutions
	Strengthen human resource capacity at all levels by undertaking focused practical training program on HIS	Orientate all lecturers/ Trainers on curricula	Proportion of targeted institutions participating in orientation	100%				Annual report	Annually	Heads of training institutions
		Develop and disseminate training manual in information management for health workers	Proportion of counties receiving the training manual	100%				Annual report	Annually	Heads of training institutions
		Train managers on information management and use	Proportion of targeted managers trained	100%	100%	100%	100%	Annual report	Annually	Heads of training institutions
		Train Health care workers on data management and use	Proportion of targeted health workers trained	100%	100%	100%	100%	Bi annual	Bi-annually	Principal Secretary and Chief Officer
		On Job Training on data management for health	Proportion of targeted health workers trained	100%	100%	100%	100%	Annual reports	Annually	Chief Officer (County)

	workers								
Employ, deploy and retain appropriate health records and information personnel at all levels	Review, Develop and implement norms and standard for staffing at various levels of NHIS	Proportion of counties using HIS norms and standards	47	47	47	47	Quarterly report	Quarterly	Principal Secretary and Chief Officer
	Develop a retention scheme of service for Health Records and Information Officers	Scheme of service developed	1				Annual report	Annually	HRD,NHIS
	Employ and deploy 750 health records and information technicians	Proportion of targeted HRITs employed and deployed	150	150	170	160	Annual report	Annually	CS
	Employ and deploy 750 health records and information Officers	Proportion of targeted HRIOs employed and deployed	148	150	170	172	Annual report	Annually	CS
	Employ and deploy 200 Health records and information degree/masters holders	Proportion of targeted HRIOs (Degree/Masters holders) employed and deployed	36	44	45	45	Annual report	Annually	CS
	Employing and deploying NHIS staff appropriately	Employ and deploy 47 ICT officers in all in every county to give technical support	Proportion of targeted ICT officers employed and deployed	12	12	11	11	Annual report	Annually

	Employ and deploy 10 statistical officers for national and county levels	Proportion of targeted statistical officers employed and deployed	4	2			Annual report	Annually	CS
Enhance NHIS staff career development	Sponsor NHIS staff for short term courses (statistical software, Planning, M&E)	Proportion of targeted staff sponsored	70	70	60	70	Annual report	Annually	NHIS
	Train Health records and information officers and clinicians on ICD 10 use	Proportion of targeted health records and information officers and clinicians trained on use of ICD 10	150	150	150	200	Annual report	Annually	NHIS
	Support long term trainings for NHIS (Medical demography, Epidemiology, Medical statistics, Informatics, Health Records and Information Management)	Proportion of targeted officers supported for long-term training	10	10	10	10	Annual report	Annually	NHIS/ development partners
	Organize “best practice tours” in areas within	Conduct exchange programmes (in-country)	Proportion of counties participating in exchange programme	47	47	47	47	Bi-annual report	Bi-annually

Kenya and outside with the best performance	Conduct exchange programme in in the region	Proportion of counties participating in regional exchange programme	10	10	10	10	Exchange Visit report	Annually	NHIS
Build capacity for the required human resources for the national and county levels	Develop staffing for national and county HIS	Staffing norms in place	1				Assessment report	Annually	NHIS
	Capacity building on use of health information for enhanced leadership and governance	Proportion of targeted health workers trained	235	235	235	235	Annual report	Annually	NHIS



Strategic Objective 4: To strengthen governance, partnership, collaboration and stakeholder participation at national and county levels

Key Outputs/ Results	Strategies	Main Activities	Performance Indicators	Timeframe (Implementation period)				Data source	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
Effective partnership and stakeholder structures	Establishment of intra and inter sectoral linkages	Develop and disseminate guidelines for effective communication at national and county levels	Proportion of counties using the guidelines	47	47	47	47	Annual report	Annually	NHIS TWG and NHIS coordinating committee
		Hold quarterly NHIS and TWG Coordination meetings	Number of scheduled quarterly meetings held	4	4	4	4	Annual report	Annually	NHIS TWG and
		Establish HIS partnership structures at national and county levels	Proportion of counties with functional fora	47	47	47	47	Annual report	Annually	NHIS TWG and NHIS coordinating committee
		Coordinate and link with other statistical constituencies	Number of scheduled Meetings and linkages among the statistical constituencies	2	2	2	2	Bi-annual report	Bi-annually	NHIS TWG and NHIS coordinating committee
	Establishment of governance structures at all levels	Conduct Quarterly NHIS coordinating committee meetings at all levels	Number of scheduled quarterly meetings held	4	4	4	4	Quarterly report	Quarterly	N HIS coordinating committee
		Conduct quarterly TWG regular meetings	Number of scheduled quarterly TWG meetings held	4	4	4	4	Quarterly report	Quarterly	NHIS TWG
	Establish joint monitoring and evaluation mechanism at national and county levels	Conduct Mid and End Term evaluation of NHIS strategic plan	Number of evaluations conducted		1		1	Evaluation report	Annually	NHIS
		Establish joint monitoring and evaluation committee	A functional committee in place	1						
	Establish a stakeholders forum for information sharing	Conduct quarterly or regular stakeholders meeting both at national and county levels	Proportion of counties with functional stakeholder forums	47	47	47	47	Annual report	Annually	NHIS and CHIS coordinating committees
		Conduct regular stakeholders and partners mapping	Number of stakeholder and partner assessment done	1	1	1	1	Annual report	Annually	NHIS and CHIS coordinating committees

Promote a unified National Health Information System	Conduct joint NHIS systems and documents review at all levels	Proportion of counties using harmonized HIS systems	47	47	47	47	Quarterly report	Quarterly	NHIS and CHIS coordinating committees
Establish collaborative mechanisms between the two levels of government	Develop and disseminate guidelines for effective governance, management and leadership structures	Proportion of counties with effective governance structures	47				Assessment report	Annually	NHIS and CHIS
	Develop and disseminate appropriate policies and regulations for effective governance and collaborations	Proportion of counties using the policies and regulations	47	47	47	47	Assessment report	Annually	NHIS and CHIS
Develop appropriate regulations for NHIS	Develop and disseminate guidelines for regulating institutional and personal access and use of data	Proportion of counties using the guidelines	47	47	47	47	Annual report	Annually	HIS
	Develop and disseminate professional standards for HIS practitioners	Proportion of counties applying the standards	47	47	47	47	Annual report	Annually	HIS
	Establish a functional committees to ensure legal and regulatory compliance	Proportion of functional committees established	47				Annual report	Annually	HIS
	Develop and disseminate appropriate guidelines for handling Retention, Ownership, De-identification, and other sanctions of medical Records	Proportion of counties using the guidelines	47				Annual report	Annually	NHIS
	Develop and disseminate procedures to regulate disposal of information materials, tools and	Proportion of counties using the procedures	47	47	47	47	Annual report	Annually	NHIS

	information products with specified timeframes									
Periodic review of NHIS regulations	Alignment of multiple stakeholders and partners towards a common reporting mechanism and objective	Proportion of counties using a common stakeholder reporting mechanism	47	47	47	47	Annual report	Annually	NHIS	
	Reviewing the policies, strategic plans and regulations to align to the health information policy	Proportion of counties implementing the reviewed policies and plans	47	47	47	47	Annual report	Annually	NHIS	

Strategic Objective 5: To adopt and promote the use of ICT in the NHIS

Key Output/Result	Strategies	Main Activities	Performance Indicators	Timeframe (Implementation period)				Data sources	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
Increased use of ICT	Develop NHIS architecture	Develop NHIS schema	NHIS schema in place	1				Annual report	Annually	NHIS systems TWG
		Establish and support a service desk both at National and county levels	Proportion of counties with Service desk	47	47	47	47	Annual report	Annually	NHIS systems TWG
	Procure hardware and software to support data management	Procure computer hardware and its accessories and printers for data management	Proportion of targeted HIS staff using functional hardware and software	100%	100%	100%	100%	Annual report	Annually	NNHIS/ICT
		Procure PDAs and Laptops for data management	Number of PDAs/Laptops procured	500	600	800	100	Annual report	Annually	NNHIS/ICT
	Develop the relevant standards and guidelines for application in ICT	Train managers at national, county and sub-county levels on use of PDAs	Number of managers trained on use of PDA and training reports	200				Annual report	Annually	
		Develop and enforce ICT policy for NHIS	NHIS ICT policy in place					Annual report	Annually	NHIS and ICT TWG
		Disseminate the ICT standards and guidelines at all levels	Proportion of counties trained on the ICT standards and guidelines	47				Annual report	Annually	NHIS and ICT TWG
	Adopt appropriate and relevant technologies	Develop a user friendly integrated, web-based database that can link multiple data sources and	Web – based data warehouse established and	1				Annual report	Annually	NHIS/ICT

Key Output/Result	Strategies	Main Activities	Performance Indicators	Timeframe (Implementation period)				Data sources	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
		ensure controlled access by users.								
	Ensure system maintenance and sustainability	Support maintenance of hard and software, including in-house capacity	Proportion of counties with functional HIS systems	47	47	47	47	Annual report	Annually	NHIS/ICT
	Develop effective data governance, data security and backup structures	Establish remote site for data backup	A remote site established		1			Annual report	Annually	NHIS/ICT/e-Government
		Procure backup devices	Proportion of targeted backup devices procured and supplied	100%	100%	100%	100%	Annual report	Annually	NHIS/ICT/e-Government
		Build capacity for good data governance	Proportion of targeted staff trained	40	40	40	30	Annual report	Annually	NHIS
		Develop and disseminate data security measures	Proportion of counties using data security measures	47	47	47	47	Annual report	Annually	NHIS/ICT
		Capacity building in ICT	Proportion of targeted staff trained	40	40	40	40	Annual report	Annually	NHIS and ICT

**Strategic Direction 6:** To support the strengthening of National Civil Registration and Vital Statistics System

Key output/result	Strategies	Main activities	Performance indicators	Target				Data source	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
Effective and efficient Civil Registration and Vital Statistics (CRVS)	Enhance Civil Registration awareness campaigns and social mobilization	Conduct social mobilization campaigns at national, County and Sub County levels to	Increase Registration Coverage of births from 60% to 95% by 2018	75%	85%	95%	-	Annual report	Annually	VR, DCR, NHIS
	Increase coverage of births registration	Registration of births in all MCH units	Increase Registration Coverage of births from 60% to 95% by 2018	75%	85%	95%	-	Annual reports	Annually	VR, DCR, NHIS
		Sensitize the community through media	Number of Aired programmes	4	4	4	4	Quarterly reports	Quarterly	VR
	Enhance Capacity building (for coders, certifiers and registration agents)	Capacity Building of registrars and registration agents on vital registration	Proportion of staff trained on Vital Registration and use of information	50	50	50	50	Annual reports	Annually	VR
		Orientate 10,000 registration agents on births and deaths	Proportion of targeted registration agents trained	2300	2300	2300	2100	Annual reports	Annually	VR, DCR, NHIS
		Train VR staff on short course	Proportion of staff trained	15	17	15	15	Annual reports	Annually	VR
		Train 800 clinicians on certification of causes of deaths	Proportion of targeted clinician trained	150	150	150	200	Annual reports	Annually	NHIS, VR
		Train 480 coders in classification and cause of death reporting	Proportion of targeted coders trained	150	150	130		Annual reports	Annually	NHIS, VR
	Review and develop, a Vital Registration Information Systems (VRIS)	Convert and disseminate data	Proportion of counties receiving converted data	47	47	47	47	Annual reports	Annually	VR
		Design and develop a robust vital registration information system	An functional VRIS in place	1				Annual reports	Annually	VR
		Establish the software system in all counties	Proportion of counties with functional VRIS	47	47	47	47	Annual reports	Annually	VR
		Ensure functionality of the CVRS system through capacity building for effective governance	Proportion functional VRIS in place	48	48	48	48	Annual reports	Annually	VR
	Capacity of registrars on use of the software database system developed	Train registrars on use of the software database system	Proportion of targeted registrars trained	50	50	50	50	Annual reports	Annually	VR
	Develop capacity for use of ICT to improve CRVS	Train CR on ICT system for CRVS	Proportion of CRD trained on ICT system	5	5	5	5	Annual reports	Annually	
Monitor implementation of the system	Develop and implement an effective monitoring system for CRVS	Proportion of counties implementing CRVS monitoring systems	47	47	47	47	Annual reports	Annually		

Strategic Objective 7: To strengthen monitoring and evaluation of the health sector

Key output/result	Strategies	Main activities	Performance indicators	Time Frame (Implementation Period)				Data source	Frequency	Responsibility
				2014/2015	2015/2016	2016/2017	2017/2018			
Improved data quality and information use	Develop and disseminate information products	Develop and share report outline	Proportion of counties receiving Report outline	47	47	47	47	Annual report	Annually	NHIS and CHIS
		Develop information products for different audiences	Number of information products shared	4	5	5	5	Annual report	Annually	NHIS and CHIS
		Upload the information to a web-portal	Number of reports and Information products shared on the web portal	4	5	5	5	Annual report	Annually	NHIS and CHIS
		Develop the health information innovations	Number of health innovations conferences held	1	1	1	1	Annual report	Annually	NHIS and CHIS
		Participate in the National health information congress	Proportion of targeted staff participating in the congress	100%	100%	100%	100%	Annual report	Annually	NHIS and CHIS
	Strengthen Effective marketing of NHIS products	Produce IEC materials for NHIS	Number of NHIS fact sheets printed and disseminated	1000	1000	1000	1000	Annual report	Annually	NHIS and CHIS
		Develop annual performance health reports	Number of performance reports produced and disseminated	1000	1000	1000	1000	Bi-annual report	Bi-annually	NHIS and CHIS
		Develop quarterly bulletins	Number of quarterly reports produced and disseminated	500	500	500	500	Annual report	Annually	NHIS and CHIS
	Building capacities of the managers and staff to use information for evidence-based decision-	Train NHIS and CHIS information officers on data mining, analysis, interpretation, presentations and use	Proportion of health records and information officers trained	200	200	200	200	Annual report	Annually	NHIS and CHIS

making	Train managers and registrars on data analysis, mining and use	Proportion of targeted managers and registrars trained	100%	100%	100%	100%	Annual report	Annually	NHIS and CHIS
	Establish and maintain data coding and Master Health facility guidelines	Proportion of counties using updated Master health facility list, MCUL and established criteria for coding	100%	100%	100%	100%	Annual report	Annually	NHIS and CHIS
	Establish and Support TWGs in quarterly reviews	Number of scheduled TWG review meetings held	4	4	4	4	Quarterly report	Quarterly	NHIS and CHIS
	Participate in quarterly County Review Meetings	Number of scheduled quarterly county meetings held	4	4	4	4	Quarterly report	Quarterly	NHIS and stakeholders
Develop a performance monitoring framework for use at the national and county levels	Establish Joint Monitoring and Evaluation mechanisms and framework	Proportion of counties using the joint M&E framework	47	47	47	47	Annual report	Annually	NHIS and CHIS
	Develop NHIS standards , guidelines and procedures	Proportion of counties using guidelines and procedures	47	47	47	47	Annual report	Annually	NHIS and CHIS
	Establish linkages of NHIS with data sources	Harmonized tool kit in place	1				Annual report	Annually	NHIS and CHIS
Advocate for use of health information in decision-making at all levels	Develop and disseminate criteria for Selection of annual themes	Proportion of counties using the criteria for selecting annual themes	47	47	47	47	Annual report	Annually	NHIS and CHIS
Document best practices and innovations	Develop and disseminate guidelines for assessing best practices and innovations	Proportion of counties assessing best practices and innovations	47	47	47	47	Annual report	Annually	NHIS and CHIS

	Develop and disseminate guidelines for quality audits and assessment	Proportion of counties performing regular data quality audits	47	47	47	47	Annual report	Annually	NHIS and CHIS
	Hold forums for sharing and disseminating best practices	Number of scheduled forums held	1	1	1	1	Annual report	Annually	NHIS
	Print and share best practices	Number of targeted report printed and shared	1000	1000	1000	1000	Annual report	Annually	NHIS
Develop mechanisms for performance monitoring and evaluation in the two levels of government	Develop appropriate performance objectives, standards and targets	Proportion of counties using developed information objectives and targets	100%	100%	100%	100%	Annual report	Annually	NHIS and CHIS
	Develop and disseminate training curriculum for facilitative supervision for use at county level	Proportion of counties with training curricula	47	47	47	47	Annual report	Annually	NHIS and CHIS
	Develop and disseminate requisite norms and standards for service delivery	Proportion of counties using established Norms and standards	47	47	47	47	Annual report	Annually	NHIS and CHIS
	Develop and disseminate criteria for benchmarking of county performance on HIS objectives	Proportion of counties using the established criteria for benchmarking	47	47	47	47	Annual report	Annually	NHIS and CHIS
	Determine the mandate and objectives of the two levels of governance in information generation and use	Establish coordination committees drawn from counties to oversee devolution of HIS functions	A functional coordination committees in place					Annual report	Annually



Strategic Objective 8: To promote the use of research for policy and advocacy

Key Output/Result	Strategies	Main Activities	Performance Indicators	Timeframe (Implementation period)					Data source	Frequency	Responsibility
				2013/2014	2014/2015	2015/2016	2016/2017	2017/2018			
Enhanced use of research for policy and advocacy	Establish a coordination structure for Health research	Develop and disseminate the research policy to stakeholders and Counties	Proportion counties using the policy	47	47	47	47	47	Annual report	Annually	NHIS
		Establish forums for discussing research findings at national and county levels	Proportion of counties holding research discussion forums	100%	100%	100%	100%	100%	Annual report	Annually	NHIS
	Develop a regulatory framework for research	Develop a Regulatory framework for NHIS research	A regulatory framework in place		1				Annual report	Annually	NHIS
	Build capacity for operational research among health professionals	Train health workers on research policy and approaches	Proportion of targeted Health workers trained	50	50	50	50	50	Annual report	Annually	NHIS and CHIS
	Mobilize resources for Health research	Establish a research coordination committees at national and county level	Proportion of functional research committee established		48				Annual report	Annually	NHIS and CHIS
		Establish a research coordination committees at national and county level	Proportion of functional research committee established	1					Bi-annual report	Bi-annually	NHIS and CHIS
	Protect intellectual property rights of research innovations in health	Develop and disseminate a NHIS research policy	Proportion of counties implementing the research policy guidelines		47				Annual report	Annually	NHIS
	Promote application of research results to improve health interventions	Establish biannual forums to share innovation and best practices	Number of scheduled forums held	2	2	2	2	2	Bi-annual report	Bi-annually	NHIS

10. Proposed Budget for implementing the HIS Strategic Plan

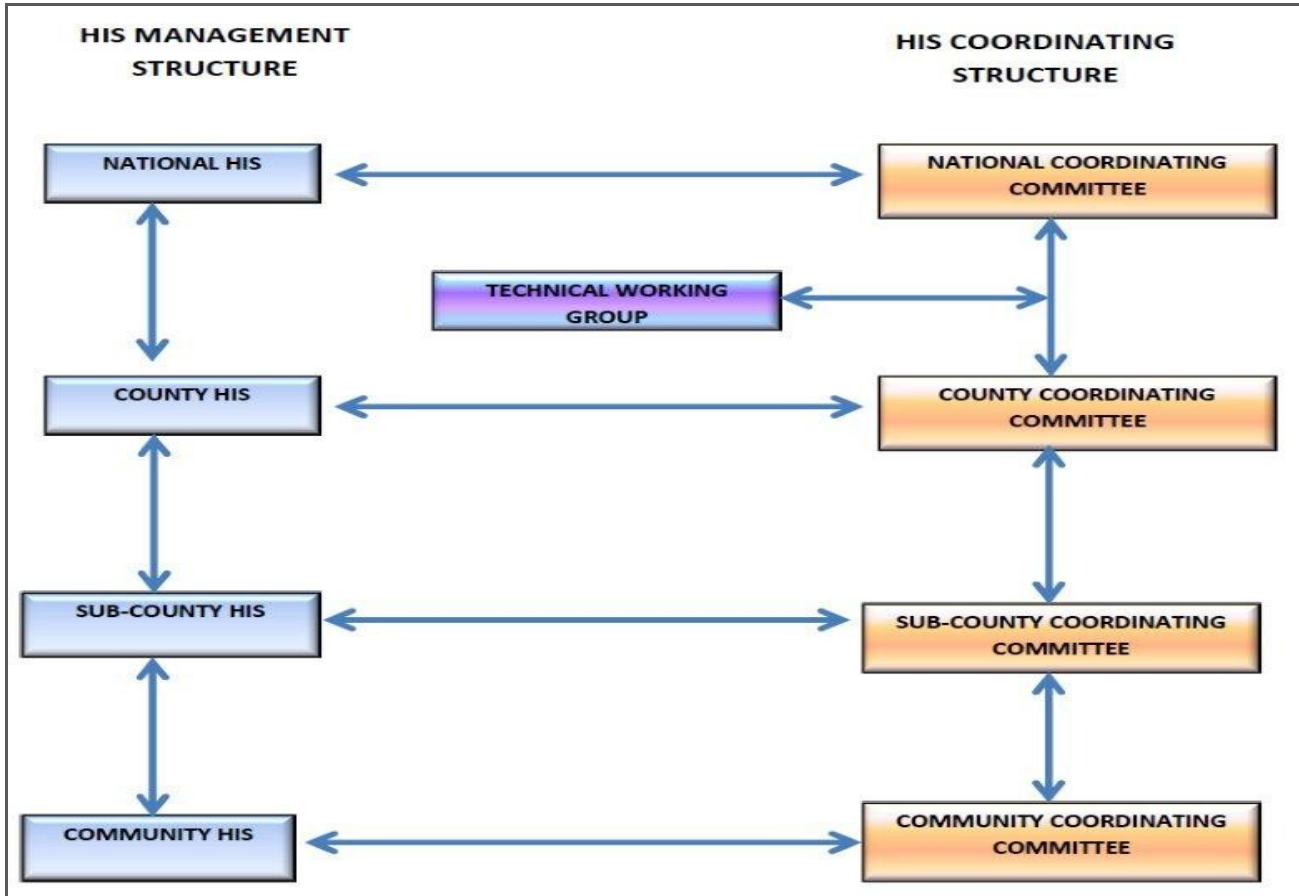
Strategic Objective	Key Activities	Amount in KSHs	Amount in USD
<b>SO 1: To improve Data Management at National and County levels</b>	Develop guidelines for strategic and operational planning for use at county level	4,395,000	51,705.88
	Develop data management processes, procedures	16,020,417	188,475.50
	Establish linkages for the existing sub-systems	15,833,448	186,275.90
	Develop minimum data sets (data collection and reporting tools) and indicators	298,013,344	3,502,981
	Develop standards, guidelines, SOPs and health information architecture	7,119,000	83,752.94
	Enhance the capacity and skills of health staff on data management	397,410,448	4,675,417
	Develop and disseminate guidelines for reporting at all levels	1,961,600	11,576.47
<b>Sub-total</b>		<b>740,753,257</b>	<b>8,700,185</b>
<b>SO 2: To mobilize and increase Resources for a sustainable NHIS</b>	Increase allocation of GOK funds for implementing NHIS interventions	1,325,000	15,588.24
	Develop and implement a comprehensive M&E framework	260,000	3,058.82
	Establish partnership, collaboration and coordination structures at national and county levels	36,055,000	424,176.50
	Ensure adequate resources; financial, infrastructure and ICT related resources to support the NHIS	138,600,000	1,630,588
	Enhance transport for NHIS operations	49,800,000	585,882
	Improve general office supplies and equipment	25,830,000	303,882.40
<b>Sub-total</b>		<b>251,870,000</b>	<b>2,963,176</b>
<b>SO 3: To enhance staffing levels, capacity and skills of NHIS workers</b>	Develop and disseminate focused pre and in-service training program for health professionals	900,000	10,588.24
	Strengthen human resource capacity at all levels by undertaking focused practical training program on HIS	36,171,000	425,541.20
	Employ, deploy and retain appropriate health records and information personnel at all levels	678750000	79,852,941
	Employing and deploying NHIS staff appropriately	136800000	16,094,118
	Enhance NHIS staff career development	232000000	1,552,941
	Organize “best practice tours” in areas within Kenya and outside with the best performance	43600000	512,941.20
	Build capacity for the required human resources for the national and county levels	110,392,000	1,298,729
<b>Sub-total</b>		<b>8,578,563,000</b>	<b>99,747,800</b>
<b>SO 4: To strengthen governance, partnership, collaboration and stakeholder participation at national and county levels</b>	Establishment of intra and inter sectoral linkages	11,553,000	135,917.60
	Establish effective governance structures at national and county levels	960,000	112,94.12
	Establish joint monitoring and evaluation structures of the strategic plan	806,400	10,752
	Establish a stakeholders forum for information sharing	10600000	141,333.30
	Develop NHIS coordination structures with responsibilities	403200	5,376
	Promote a unified National Health Information System	200000	2,666.67
	Establish collaborative mechanisms between the two levels of government	52,586,800	618,668.20

	Develop appropriate regulations for NHIS	7,644,000	121,051
	Periodic review of NHIS regulations	1940000	25,866.67
<b>Sub-total</b>		<b>86,693,400</b>	<b>1,061,631</b>
<b>SO 5: To adopt and promote the use of ICT in the NHIS</b>	Develop NHIS architecture	22,550,000	265,294.10
	Procure hardware and software to support data management	71,785,000	844,529.40
	Develop the relevant standards and guidelines for application in ICT	28,674,000	337,341.20
	Adopt appropriate and relevant technologies	3,516,000	41,364.71
	Ensure system maintenance and sustainability	21,532,000	253,317.60
	Develop effective data governance, data security and backup structure	20,910,000	246,000
<b>Sub-total</b>		<b>168,967,000</b>	<b>1,987,847</b>
<b>SO 6: To support the strengthening of National Vital Registration System</b>	Enhance Civil Registration awareness campaigns and social mobilization	10,928,000	128,565
	Increase coverage of birth registration	15,800,000	128,565
	Enhance capacity building (for coders certifiers and registration agents)	15,800,000	185,882
	Review and develop a vital Registration Information System	33,914,000	1,151,576
	Build Capacity of registrars on use of the software database system developed	3,136,000	36,894.10
	Develop capacity for use of ICT to improve CRVS	505,000	5,941.18
	Monitor implementation of the system	4,340,000	51,058.80
<b>Sub-total</b>		<b>84,423,000</b>	<b>1,688,482</b>
<b>SO 7: To strengthen monitoring and evaluation of the health sector</b>	Develop and disseminate information products	24,154,000	284,164.70
	Strengthen Effective marketing of NHIS products	15,720,000	184,941.20
	Building capacities of the managers and staff to use information for evidence-based decision-making	40,040,000	471,058.80
	Develop mechanism to enhance data collection, reporting and use	50,625,000	595,588.20
	Develop a performance monitoring framework for use at the national and county levels	26,883,000	316,270.60
	Advocate for use of health information in decision-making at all levels	2,460,000	28,941.18
	Document best practices and innovations	102,016,800	1,200,198
	Develop mechanisms for performance monitoring and evaluation in the two levels of government	30,478,000	338,588.20
	Determine the mandate and objectives of the two levels of governance in information generation and use	7,500,000	88,235.29
<b>Sub-total</b>		<b>299,876,800</b>	<b>3,507,986</b>
<b>SO 8: To promote the use of research for policy and advocacy</b>	Establish a coordination structure for Health research	2,290,000	11,647
	Develop a regulatory framework for research	320,000	3,765
	Build capacity for operational research among health professionals	14,000,000	164,706
	Mobilize resources for Health research	3050000	38,235.29
	Protect intellectual property rights of research innovations in health	2,600,000	30,588
	Promote application of research results to improve health interventions	5,200,000	61,176
<b>Sub-total</b>		<b>27,460,000</b>	<b>310,117</b>
<b>Total budget</b>		<b>10,238,606,457</b>	<b>119,967,224</b>

## 11. Management and Coordination

The HIS Strategic Plan will be executed and monitored via institutional management and coordination structures responsible for HIS at national and county level. Figure 12.1 below provides an overview of the HIS management and coordinating structures at national and county level

**Figure 12.1: Overview of HIS management and coordination structures**



Source: Draft NHIS Stakeholder Coordination Strategy (2012)