



HEALTH INFORMATION SYSTEM STRATEGIC PLAN

2022-2025

JUNE 2022

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LIST OF ACRONYMS AND ABBREVIATIONS

ATF	Accounting, Treasury and Financial Reporting Rules
CHAG	Christian Health Association of Ghana
CHIM	Centre for Health Information Management
DHIMS	District Health Information Management System
DHS	Demographic and Health Survey
DP	Development Partner
EMONC	Emergency Maternal Obstetric and Neonatal Care
EMRS	Electronic Medical Records System
FDA	Food and Drugs Authority
GhILMIS	Ghana Integrated Logistics Management Information System
GHS	Ghana Health Service
GLSS	Ghana Living Standards Survey
GSS	Ghana Statistical Service
HeFRA	Health Facilities Regulatory Agency
HIS	Health Information System
HISSP	Health Information Systems Strategic Plan
HR	Human Resource
HRIS	Human Resource Information System
HSMTDP	Health Sector Medium Term Development Plan
IALC	Inter-Agency Leadership Committee
ICT	Information and Communications Technology
IME	Information Monitoring and Evaluation
IT	Information Technology
LMIS	Logistics Management Information System
M&E	Monitoring and Evaluation
MICS	Multiple Indicator Cluster Survey
MIS	Malaria Indicator Survey
MOH	Ministry of Health
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NITA	National Information Technology Agency
NMCP	National Malaria Control Programme
PI	Performance Indicators
PPME	Policy Planning Monitoring and Evaluation
RSIM	Research Statistics and Information Management
SARA	Service Availability and Readiness Assessment
SDGs	Sustainable Development Goals
SCORE	Survey, Count, Optimize, Review and Enable
SWOT	Strengths, Weaknesses, Opportunities and Threats

TWG	Technical Working Group
UHC	Universal Health Coverage
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organisation

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EXECUTIVE SUMMARY



The Health Sector recognises the need for quality information as an essential part of the health planning, management, and policy development processes. However, investments for creating the enabling environment, building infrastructure and capacity for health information management remain limited and uncoordinated. Absence of interoperability standards has also resulted in limited interoperability between diverse agency electronic systems, leading to very little information sharing among agencies; thus, negatively affecting informed decision-making. Therefore, this strategic plan seeks to set out the governance systems, the implementation and integration plans that will facilitate improved collection, analysis, access, and use of comprehensive quality health data across all the agencies of the Ministry of Health and other stakeholders.

The proposed structure of the health information system includes transmitting health data generated from services delivery, regulatory, purchasing (health financing) and training institutions in the health sector to a national level database. A dashboard will be created for the Ministry of Health to track key performance indicators of the health sector for decision-making.

The governance structure of the Health Information System will comprise Minister for Health, Inter-Agency Leadership Committee; Policy, Planning, Monitoring and Evaluation; Research, Statistics, and Information Management; Information, Monitoring, and Evaluation-Technical Working Group.

Monitoring and evaluation of the implementation of this Health Information Strategic Plan will be conducted through the existing system, procedures, and mechanisms. Thus, it will be integrated into the monitoring of the implementation of the 2022-2025 Health Sector Medium-Term Development Plan (HSMTDP). The implementation duration of the HSSP will take effect from 2022 to 2025 and it is estimated to cost about GHC30 million.

It is our expectation that the implementation of this strategy will facilitate real time data capturing, analysis, and utilization for decision-making towards improving health outcomes of the population and reporting to global requests promptly. I therefore implore all stakeholders to work collectively to see to the realisation of the objectives of this strategy.


KWAKU AGYEMAN-MANU (MP)
MINISTER FOR HEALTH

CHAPTER ONE: INTRODUCTION

1.0 BACKGROUND

The health sector in Ghana has the goal of increasing access to quality essential health care and population-based services for all. There is a strong recognition of the need for quality information as an essential part of the health planning, management, and policy development processes. With the focus on performance, establishing an integrated and a functioning health information system is seen as a priority. However, investments for creating the enabling environment, building infrastructure and capacity for health information management remain limited and uncoordinated. This is compounded by continuing emphasis on programmes and projects. The consequences of these are that decision making, planning and measurements in the health sector are not adequately informed by available evidence.

1.1 SITUATIONAL ANALYSIS

Policy Context

In developing the National Health Information System Strategic Plan (HISSP), several documents were taken into consideration. These included the National Health Policy (January 2020), Ghana's Roadmap for attaining Universal Health Coverage (2020-2030), the Health Sector Medium-Term Development Plan (HSMTDP 2022-2025), Strategic Plans of the various agencies and programmes, among others.

Health Sector Medium-Term Development Plan (HSMTDP) 2022-2025

The HSMTDP for the Health Sector that will span 2022-2025 has the following key strategic objectives:

1. Universal access to a better, efficiently managed, high-quality primary health system.
2. Reduce avoidable maternal, adolescent and child deaths and disabilities
3. Increase access to responsive clinical and public health emergency services

The HISSP will be used to facilitate the generation of indicators to monitor the implementation of the HSMTDP and other on-going programmes.

Organisation of Health Services in Ghana

The Ghana health sector is pluralistic, comprising public, private and quasi-government health providers. Health services are organized at the Primary, Secondary and Tertiary Levels and administratively operate at the National, Regional, District and Sub-district levels, as shown in Figure 1 below.

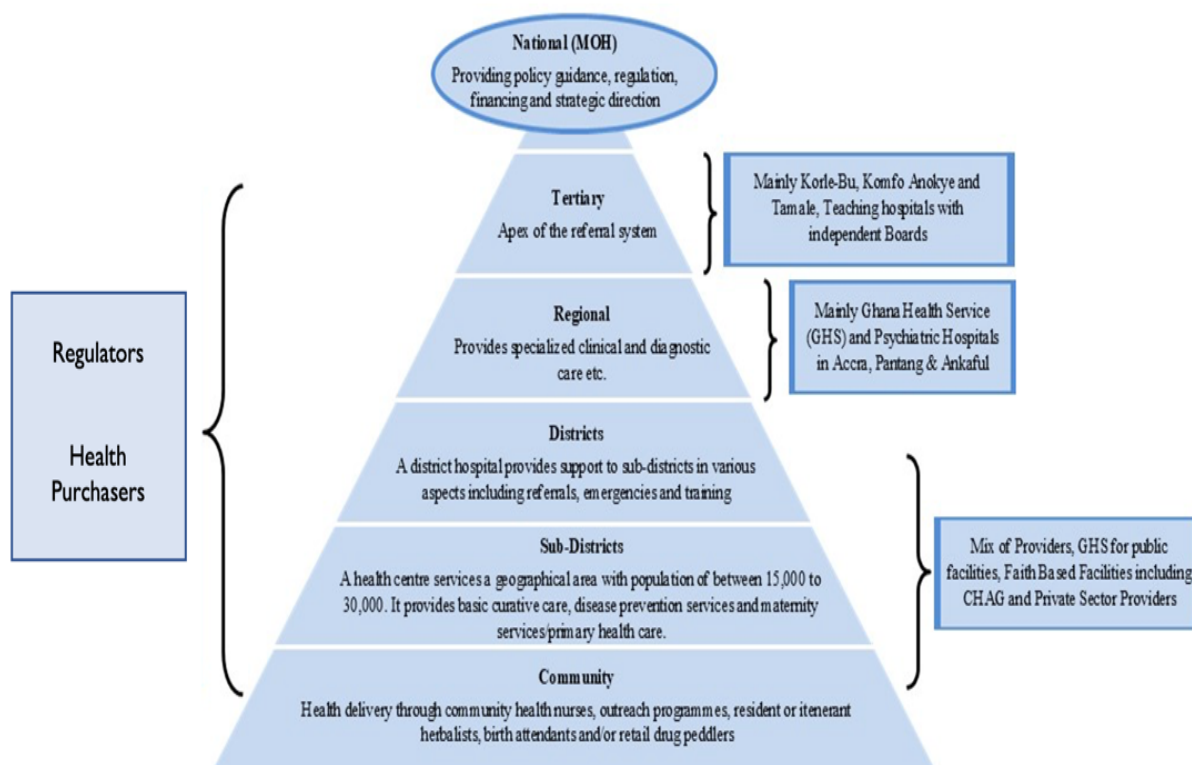


Figure 1: Health services provision architecture of Ghana

Service delivery is supported by agencies that provide training, regulation, purchasing of health services and research services. The routine administrative health service data collection is skewed towards health care delivery. Although training of health care professionals, regulation, health financing, research and other non-service delivery activities generate a lot of data, very little of these go into the indicators that are used to monitor the health service performance.

Health Information System

To be able to monitor progress towards achieving the health-related Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC) targets, the country's health information system needs to draw upon multiple data sources such as population-based surveys, civil registration, and vital statistics. Other sources may include, census, public health surveillance, health facility and community systems data which may be derived from administrative and non-health sector data sources. The WHO SCORE assessment tool¹ provides the framework around which the health information system for Ghana can be looked at.

¹ Score to reach your Health Goals: A technical package to strengthen country health data for Universal Health Coverage and Health related SDGs.

- S: Survey populations and health risks to know what makes people sick or at risk
- C: Count births, deaths and causes of death to know who is born and what people die from
- O: Optimize health service data to ensure equitable, quality services for all
- R: Review progress and performance to make informed decisions

Routine Administrative Health Service Data

Routine administrative health service data includes the information on inputs needed to offer the service and the data on the services that are being offered. There are multiple health data platforms in the health sector. However, these platforms have limited interoperability features.

Health Service Data

Routine health care data in Ghana is collected, collated, and analysed epidemiologically. The current practice is that all health facilities both private and public report on all services provided according to the agreed summarized format for reporting on specific services, programmes, and projects as shown in figure 2.

The District Health Information Management System (DHIMS2) platform is a web-based system that is used to facilitate the management of health care data from the districts. Facilities are to report through the Districts/Municipals/Sub-Metropolitan/Metropolitan Health Directorates in which they are located. The challenge with this arrangement has been the difficulty in getting the Teaching Hospitals, Quasi-government facilities and some private hospitals to align to this epidemiological (person, place, and time) reporting as they do not see their facilities as being part of the district health system. This leads to incompleteness in service delivery reports in districts with these facilities thereby affecting health planning and response to critical health events in these districts, municipalities, and metropolises.

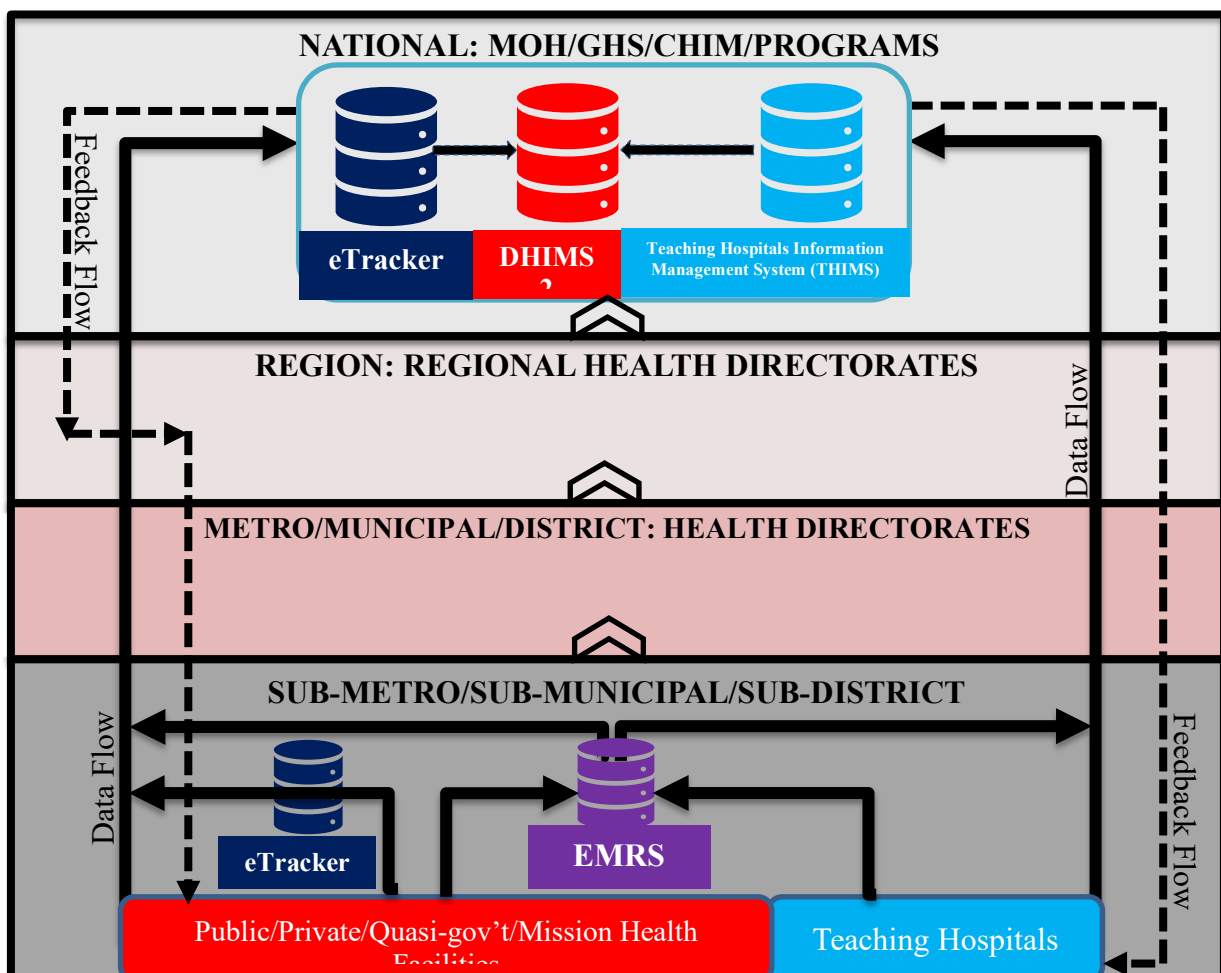


Figure 2 Data Flow in the Health Sector. Source: NMCP Monitoring and Evaluation plan

Public and private facilities use either manual or electronic means to register and document the services that they offer to clients. There is an increasing use of electronic Medical Records by facilities to manage patients' health care data. For all facilities aligning to the epidemiological approach to reporting on health care data collected either from electronic medical records or from manual registers, data are summarized, verified, and signed off by in-charges. Most facilities validate their data before entering into DHIMS2. However, facilities without capacity and access to computers and/or internet submit their data manually to the sub-district for verification and data entry into the DHIMS2. Districts collate quarterly activity reports of sub-districts/facilities and submit to regions. Regions collate quarterly activity reports from districts and submit to National level.

The Human Resource Information System (HRIS)

This system is managed by the Human Resource Division of the Ghana Health Service. It is used to input individual employee's data to facilitate promotions, transfers, and other human resource functions. An e-portal for recruitment has been deployed by the Ministry of Health (MOH) to ensure transparency and equity in the distribution of new staff. In addition, there exist, a workforce information management system for Ghana. The Public Service Commission also maintains an electronic platform of health workers that facilitate human resource management in the public sector.

The Logistics Management Information System (LMIS)

The Ghana integrated Logistics Management Information System (GhILMIS) is designed to collect, record, and report critical supply chain data. Consequently, it provides decision-makers throughout the supply chain with accurate, timely, and appropriate data that include quantities, time, condition, and cost.

National Health Insurance Information Systems

The National Health Insurance Authority (NHIA) was established by an act of Parliament, the National Health Insurance Act 2003 (Act 650, now amended Act 852 of 2012), to regulate both public and private health insurance schemes in the country. The NHIA also manages the National Health Insurance Scheme (NHIS). By these mandates, the Authority generates membership data for both subscribers and service providers. It also manages claims data generated by service providers. These data provide useful indicators for tracking performance of the schemes and supporting decision making in the health sector.

Regulatory Agencies Information Systems

Several regulatory agencies in the country also produce and maintain population-based data in health sector. They regulate health professionals, food and drugs, health service delivery environment and health insurance industry. The regulatory agencies generate data on both public and private health facilities in the country through execution of their mandates.

Civil Registration and Vital Statistics

The Births and Deaths Registry was established by Act 301 of 1965, within the Ministry of Local Government and Rural Development to develop and manage the births and death registration system in Ghana. Registration of Births and Deaths Act 1027 of 2020 defines the functions of the Births and Deaths Registry. Its core business is to provide accurate and reliable information on all births and deaths occurring within Ghana for socio-economic development of the country through their registration and certification.

The Health Sector through the health facilities in the districts collaborate with the Births and Deaths Registry to ensure that all births and deaths occurring in health facilities are registered. Data on registration of births that occurs within health facilities are shared with the district offices of Births and Deaths Registry where these births occurred. Registration of deaths that occur within a health facility are initiated by doctors providing the relatives of the deceased with medical certificate of cause of death as mandated by law. This is presented to the Births and Deaths Registry for the registration of the dead. There are a lot of work currently ongoing to institutionalize and strengthen the relationship between the health sector and the Births and Deaths Registry to facilitate registration of births and deaths.

Population and Housing Census

The Ghana Statistical Service (GSS) by the Statistical Service Act, 2019 (Act 1003) is the central statistics producing and coordinating institution for the National Statistical System. Their role is to strengthen the production of quality, relevant, accurate and timely statistical information for the purpose of national development². The Ghana Statistical Service is responsible for conducting the Population and Housing Census that is organized every ten years, the results of the Census and its projections over the intercensal years provide data for generating population-based health indicators.

Population-based Surveys

The GSS in collaboration with the Ministry of Health supported by Measure Evaluation conducts community-based surveys like the Demographic and Health Surveys (DHS) every five years and with support from UNICEF, conducts the Multiple Indicator Cluster Survey (MICS) every three years. These two surveys generate key population-based maternal, child health, nutrition, communicable diseases, and non-communicable diseases indicators that facilitate decision-making in the health sector. The GSS engages the Health Sector when developing the tools that are used in these surveys. There are other population-based surveys conducted by the Ghana Statistical Services like the Ghana Living Standard Survey (GLSS), Maternal Health Survey (MHS) and Malaria Indicator Survey (MIS) that also provide some useful health indicators for monitoring and evaluating the health sector.

Facility Surveys

² Ghana Statistical Services. (statsghana.gov.gh)

Facility surveys are occasionally organized to assess the infrastructure, human resource, and service quality in health facilities. The most recent facility survey conducted was the Emergency Maternal, Obstetric and Neonatal Care (EMONC) Survey completed in 2019. Service Availability and Readiness Assessment (SARA) has never been conducted nationally in Ghana. Client satisfaction surveys are conducted sporadically by hospitals. There will be the need to institutionalize facility surveys as part of the overall quality improvement processes and ensure that all facilities conduct a required number of client satisfaction surveys in a year. Tracer medicines availability surveys are also conducted by Facilities Drug and Therapeutic Committees and reported in the DHIMS2; however, data completeness needs to be improved.

Health Sector Data Governance Structure

The MOH is responsible for coordinating and reporting on health data in Ghana. It depends on its agencies to facilitate the collection and collation of these data. Currently, the organizational unit responsible for managing health care data in the Health Sector is the Centre for Health Information Management (CHIM), which is currently a Unit under the Information Monitoring and Evaluation (IME) Department of the Policy, Planning, Monitoring and Evaluation (PPME) Division of the Ghana Health Service (GHS). The head of CHIM reports to the Deputy Director of the IME department who in turn reports to the Director of PPME of GHS. The Director, PPME of GHS reports to the Director-General of the Ghana Health Service.

The CHIM was created by the MOH and was under the Research, Statistics, and Information Management (RSIM) Directorate, to manage health data for the Ministry. With the Health Reforms and the passage of Act 525 that led to the creation of service implementing agencies of the Ministry of Health, CHIM was placed under GHS. The CHIM's mandate in managing the health sector data was, however, not changed. The arrangement as it currently stands has created some governance challenges that have affected completeness of health service data reporting by the other service agencies of the MOH other than the GHS.

The CHIM is responsible for managing the DHIMS2, including access control management to the system. Direct access to the DHIMS2 data repository is limited to staff of the MOH and its agencies. In case a partner organisation requires data, a request is made to the Director-General of the GHS who then authorizes the Director of PPME DIRECTORATE to facilitate the provision of the data. The data is provided by CHIM staff in an electronic format. Regarding the system governance, there are quarterly, half-yearly and annual reviews which uses data generated from DHIMS2. On a yearly basis, national requirements and data needs are revised and changes made accordingly in the national DHIMS2 configuration.

The Ministry of Health has not established formal links to sources of information outside the health sector. There are regular and irregular communications between MOH, GHS, donors, academia and GSS. There is also no inter-agency coordinating mechanism for health information. To provide the needed oversight and engender a sense of ownership of data in the health sector, the Information Monitoring and Evaluation (IME) technical working group with membership from selected service agencies have been formed and tasked with providing

technical oversight for CHIM. However, it is not functioning optimally due to logistical and administrative challenges.

Functions of the IME Technical Working Group

- Set standards for information management.
- Develop and/or adapt Health Sector Indicators.
- Set standards for information management equipment and software.
- Coordinate systems for data and information management.
- Coordinate the development and modification of data management tools.
- Facilitate the procurement and distribution of data management tools.
- Review and recommend standards for roles, responsibilities and access levels for health data and information for approval

The Head of IME of the Ministry of Health is the Chairman of the working group. The Deputy Director IME of Ghana Health Service performs coordination functions for the group. The Head of CHIM is the secretary for the group. The IME working group through its Chair reports to Inter-Agency Leadership Committee (IALC) made up of all the heads of agencies of the Ministry of Health. Despite these arrangements, there are still resistance from some agencies in adhering to the epidemiological reporting arrangement through CHIM.

National Health Information System Assessment

The most recent assessment of the National Health Information system is the World Health Organisation's (WHO) SCORE assessment conducted in 2019. The assessment covers five components of the Health Information System, and these are:

- S-Surveys,
- C-Counts of Births and Deaths,
- O-Optimizing health service data,
- R-Review progress and performance,
- E-Enable data use for policy and action.

The tool used for the score assessment consists of a technical package of five essential interventions as indicated above. The key elements are meant to assess and strengthen country health data and information systems to enable governments to track progress towards the health-related SDGs and national and subnational priorities. The assessment shows that Ghana's Health Information System had sixty-six percent of key indicators needed to assess the achievement of the SDGs in the National Health Information System. On the five key SCORE assessment, Ghana was assessed as having a well-developed capacity with regards to

surveys with the only weakness being the lack of data on facility surveys. It had limited capacity with regards to counts of birth, deaths, and the causes of deaths. With regards to optimizing health service data the National Health Information was assessed as having moderate capacity. On systems for reviewing progress and performance it was assessed as having sustainable capacity. Finally, it was assessed as having a well-developed capacity for enabling data use for policy and action.

Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of Current Status of Ghana’s Health Information Management

Table 1 summarizes the situational analysis of health information management system in the country. Despite the several weakness and threats of the current health information system, there are strengths and opportunities that can be leveraged to improve development of a robust health information system for the health sector to facilitate timely and informed decision making.

Table 1: Situational analysis of health information system of Ghana

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Health information systems exist in all agencies which allows agency-specific data collection (service and non-service), agency-level data management and data use. • Governance structures exist at the national level and within some agencies to coordinate data management • Availability of software in various agencies and health facilities to facilitate data management. • Some agencies have a well-defined and structured data scheme • Multiple guidelines available to solve health management challenges • Higher demand for data and use • Technical capacity exists within CHIM to provide technical backstopping to all • Availability of a platform that can serve as a repository (DHIMS2). • IT capacity available at institutional level to manage ICT infrastructure and deployment of health information applications. • M&E capacity available at institutional level to collect and manage data. 	<ul style="list-style-type: none"> • Weak integration and alignment • Poor data dissemination • Low confidence in data generated by other agencies • Coordinating structures for IME not functioning as expected (e.g., meetings) • Inconsistent data structures across agencies (e.g., relating to identity codes of facilities) • Inadequate data to support policy implementation • Large proportion of data is manually processed • Weak structures for collecting non-service data • Data security requirements not fully met • Limited access to data • Weak monitoring of plan implementation • Poor data quality • Inadequate resources for HIS (HR, Finance, logistics, etc.) • Lack of interoperability of data systems. • Unwillingness of other agencies to share some health data.

<ul style="list-style-type: none"> • Institutionalized performance review processes in place at all levels 	<ul style="list-style-type: none"> • Inadequate fora for sharing evidence for decision-making. • Low collaboration between MOH agencies for data management. • Inadequate technical and human resources at CHIM to support national Health Information Management System. • Use of improvised software for health data management at regulatory institutions, training institutions and some service providing institutions • Inadequate management support for health information capacity building (both technical and human resource). • Limited review of the performance of the Health Information Management System • Incomplete data for sector performance review. • Weak feedback mechanism. • Lack of a National Health Information System Policy
<p>OPPORTUNITIES</p>	<p>THREATS</p>
<ul style="list-style-type: none"> • Standards exist for data security (Data Protection Agency, Cyber Security Authority) • Standard exist for interoperability National Information Technology Agency (NITA) • Local IT vendors available to provide health information systems solutions • Goodwill exists among Development Partners to support health information in the sector • International standards exist which may be adapted • Expertise exists especially in the Universities and research institutions to support the generation of evidence for policy formulation 	<ul style="list-style-type: none"> • Vendors systems with stored data stationed abroad • Inadequate budgetary allocation may affect smooth operation of various committees • Over-reliance on development partners for budgetary support may be detrimental in sustaining oversight activities • Different standards by international agencies may affect standardization • Agenda of Development Partners and international agencies may influence implementation arrangements (integration vs vertical) and emphasis on how existing data may support policy • Rapid development in ICT.

<ul style="list-style-type: none"> • Increased realisation of importance of non-service data by international agencies and the need to create space to collect and manage non-service data • Technology exists to support data sharing and dissemination. • Public and private sector institutions offer health information management programmes. • Political commitment to digitization • Increased coverage of Internet services. • Availability of software of other data generators (e.g., BDR, RSC, Police, GSS etc.) outside the health system 	<ul style="list-style-type: none"> • Weak, inequitable, unreliable, and expensive internet services • Staff attrition due to better remuneration and service conditions in the private sector
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1.2 Rationale

The Health Information Management in Ghana is bedevilled with governance challenges and weak coordination. As revealed by the SWOT analysis above, lack of uniform standards for health information practices has resulted in uncontrolled proliferation and duplication of software systems. The absence of sector-specific interoperability standards has also resulted in limited interoperability between diverse agency electronic systems, leading to very little information sharing among agencies; thus, negatively affecting informed decision-making.

The need for private sector contribution to data and data management in the health sector cannot be overemphasised. Furthermore, the resources necessary for information management in the health sector (skilled human resource, finance, technical and physical infrastructure, laws, and policies etc.) have not evolved in parallel to cope with increased demand for data management, information dissemination and use in the health sector. The development of this strategic plan is to provide the framework and plan to address some of these identified weaknesses in the Health Information System of Ghana.

1.3 Purpose of strategic plan

The purpose of this health information system strategic plan is to provide directions for Health Information Management in the health sector. At a high level, this plan seeks to set out the governance systems, the implementation and integration plan that will facilitate the improved collection, analysis, access and use of comprehensive quality health data across all the agencies of the Ministry of Health and other stakeholders.

1.4 Scope

This strategy covers management of all data collected in the health sector. These include routine administrative health service data as well as those from community and facility surveys.

The strategy will also cover service and non-service data from both public and private health sector and other MDAs relevant to health. With regards to Civil Registration and Vital Statistics, the document will be limited to the role that the law on registration of Births and Deaths allows for the health sector. That role of the health sector with regards to Civil Registration as covered in this document is in line with the WHO guiding principles and good practices on the role of the health sector. The strategy covers the health sector contribution to the health population surveys conducted by the Ghana Statistical Service and supported by other partners.

1.5 Guiding principles

The development of this strategic plan is guided by the fundamental principle of facilitating access to comprehensive quality health data for decision-making by all stakeholders in the health sector. The specific principles being:

1. Transparency
2. Accountability for performance
3. Effectiveness
4. Efficiency
5. Excellence
6. Quality
7. Multi-stakeholder involvement

1.6 Structure for National Health Information System

The proposed structure of the health information system is shown in Figure 3. Health data generated from services delivery, regulatory, purchasing (health financing) and training institutions in the health sector will be transmitted to a national level database (DHIS2) for generating evidence for decision making. The national database and dashboard will be managed by the Ministry of Health for tracking performance of key health sector indicators and decision-making. CHIM will manage the service delivery data and all the other agencies will manage their own health information systems.

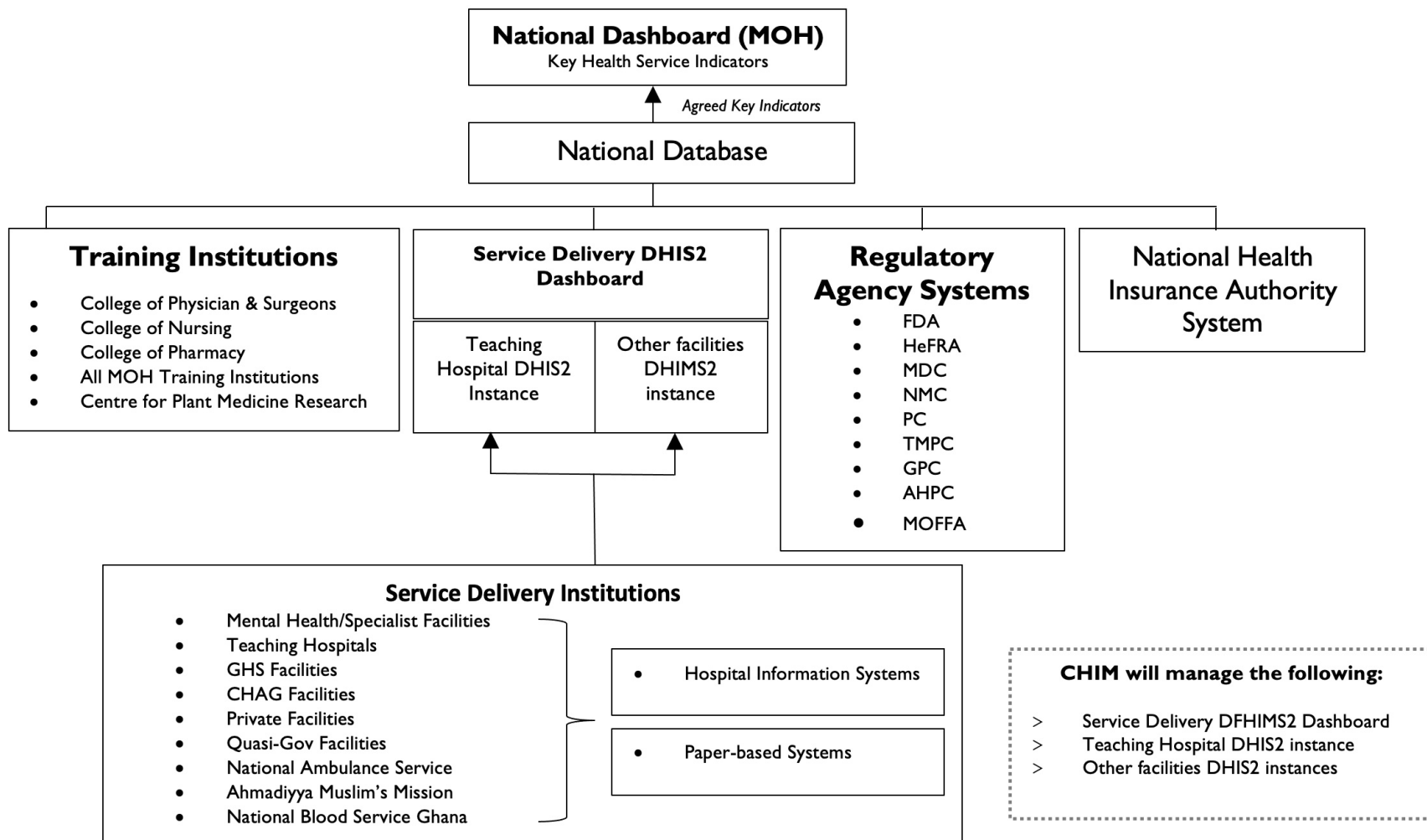


Figure 3: Proposed structure of the health information system

CHAPTER TWO: VISION, MISSION, GOAL AND OBJECTIVES

VISION

Access to quality and comprehensive health data for decision-making.

MISSION

To ensure access to accurate, relevant, timely, complete, and comprehensive health data for all to support effective decision-making for improved health outcomes.

GOAL

To institutionalize an integrated health information system that ensures availability of quality health data for decision making at all levels.

OBJECTIVES

The objectives of this Health Information System Strategic Plan (HISSP) are to:

1. Improve the environment for health information management
2. Improve data sharing, data exchange (inter-operability), dissemination and use
3. Improve capacity for managing health information at all levels
4. Ensure effective implementation of the Health Information System Strategic Plan (HISSP)

CHAPTER THREE: STRATEGIES AND ACTIVITIES

The following strategies are proposed to achieve the objectives:

OBJECTIVE ONE: IMPROVE THE ENVIRONMENT FOR HEALTH INFORMATION MANAGEMENT

STRATEGIES

- 1.1 Enhance policy and legislative environment for health information management
- 1.2 Strengthen Governance of Health Information Management Systems
- 1.3 Facilitate access to relevant data, data sharing and dissemination.
- 1.4 Expand DHIMS2 to serve as the official data repository for the service delivery data.
- 1.5 Establish a national health database and a dashboard
- 1.6 Increase available financial resources to support health information
- 1.7 Strengthen security for Information and Technology Infrastructure and data management

OBJECTIVE TWO: IMPROVE DATA SHARING, DISSEMINATION AND USE

STRATEGIES

- 2.1 Develop system-wide methodologies for the sharing of health information (policy, and strategy)
- 2.2 Build capacity for the development and maintenance of health information architecture (data capturing, storage, analysis, and use)
- 2.3 Harmonize and standardize data capturing tools among the agencies
- 2.4 Integrate the existing fragmented data information systems
- 2.5 Improve coordination for data sharing and dissemination
- 2.6 Create more fora for dissemination of research findings by service providers, academia, and other stakeholders.

OBJECTIVE THREE: IMPROVE CAPACITY FOR MANAGING HEALTH INFORMATION AT ALL LEVELS

STRATEGIES

- 3.1 Promote the use of locally developed (in-country or in-house) health information management applications.
- 3.2 Provide logistic and technical assistance to all levels.
- 3.3 Explore technical assistance from DPs to strengthen health information management at all levels.
- 3.4 Digitise data collection at all levels.

OBJECTIVE FOUR: ENSURE EFFECTIVE IMPLEMENTATION OF THE HEALTH INFORMATION SYSTEMS STRATEGIC PLAN (HISSP)

STRATEGIES

4.1 Track the implementation of the HISSP

4.2 Conduct independent evaluation of the HISSP.

4.3 Expand the coverage of private health sector service data in the national database

CHAPTER FOUR: IMPLEMENTATION PLAN FOR OPERATIONALISING THE STRATEGIES

The implementation plan, showing the strategies, key activities, lead and collaborating institutions, as well as the budget and timelines are summarized in Table 2 below. The detailed timelines and budget are shown in the Appendix.

Table 2: Implementation plan, 2022-2025

Strategy	Key Activity	Lead institution	Collaborating institution	Budget (GHC)	Timeline	
					FROM	TO
Objective 1: Improve the environment for health information management						
Enhance policy and legislative environment for health information management	Develop policy to guide health information management in the sector	MoH	Agencies, Private Providers and Partners	270,000.00	2022	2023
	Develop standards and guidelines for acquisition of new software for data management in the sector.		Agencies, Private Providers and Partners	270,000.00	2022	2023
	Develop guidelines for collection and integration of non-service data.		Agencies, Private Providers and Partners	270,000.00	2022	2023
	Develop guidelines for monitoring policy and programme implementation across the sector		Agencies, Private Providers and Partners	15,000.00	2022	2023
Strengthen Governance of Health Information Management Systems	Review Terms of Reference of the IME Working group to reflect current technical and coordination function of the IME-TWG	MoH	Agencies, Private Providers and Partners	-	2022	2023
	Create an environment for regular meeting of Heads of Agency under the IALC to consider issues regarding information management		Agencies, Private Providers and Partners	140,000.00	2022	2025
	Strengthen and expand scope of operation of CHIM to provide technical backstopping for the sector		Ghana Health Service	0.00	2022	2025

Strategy	Key Activity	Lead institution	Collaborating institution	Budget (GHC)	Timeline	
					FROM	TO
	Engage the private health sector in establishing systems and processes for monitoring and reporting on their HIS performance.		Agencies and private sector			
Facilitate access to relevant data, data sharing and dissemination.	Develop guidelines for data access and sharing with relevant stakeholders	MoH	Agencies, Private Providers and Partners	0.00	2022	2023
	Establish a methodology for dissemination of health policy, data, and other relevant documents at all levels		Agencies, Private Providers and Partners	0.00	2022	2023
Expand DHIMS2 to serve as the official data repository for service delivery data	Create composite service delivery dashboard for Tertiary/Teaching Hospital Health Information Management System (THIMS) and DHIMS 2	MoH	Teaching hospitals	0.00	2022	2023
Establish a national health database and a dashboard	Develop performance indicators (PIs) including non-service data for all agencies, and other stakeholders	MoH	Agencies, Private Providers and Partners	72,000.00	2022	2023
	Create an interface for the national health database system to receive the variables for creating the PIs from other data systems of agencies.	MoH	Agencies CHIM, Consultants, Private Providers and Partners	0.00	2022	2024
	Train Agencies in reporting into the national system	MoH	Agencies, Private Providers and Partners	960,000.00	2022	2023
Increase available financial resources to support health information	Develop a business case to advocate for adequate financial support from relevant stakeholders for health information management	MoH	Relevant agencies	0.00	2023	2024
	Advocate for more financial resources for health information management	MoH	Relevant agencies	0.00	2023	2025

Strategy	Key Activity	Lead institution	Collaborating institution	Budget (GHC)	Timeline	
					FROM	TO
Strengthen security for ICT Infrastructure and data management	Collaborate with relevant agencies to improve data security and privacy in the health sector.	MoH	Data Protection Commission, NITA & Attorney General Office	0.00	2022	2025
Objective 2: Improve data sharing, data exchange (inter-operability), dissemination and use						
Develop system-wide methodologies for the sharing and coordination of health system information (policy and strategy)	Establish data access and sharing protocols encompassing all modalities, ethical considerations, procedures with all Agencies and other stakeholders	MoH	Agencies, Private Providers and Partners	0.00	2022	2024
	Publish all data sharing protocols, requirements and procedures on Ministry of Health (MOH) website for broader stakeholder access	MoH	Agencies, Consultants, Private Providers and Partners	0.00	2022	2025
	Liaise with agencies to develop interoperability standards for all data systems in the health sector	MoH	Agencies, Consultants, Private Providers and Partners	15,000.00	2022	2025
Build capacity for the development and maintenance of health information architecture (data capturing, storage, analysis, and use)	Liaise with relevant institutions to develop modules to train and re-train health information officers/data managers on data management	MoH	Health Training Institutions, Academia, Agencies, Consultants, Private Providers and Partners	810,000.00	2022	2025
	Establish data management exchange programmes for health professionals periodically as a peer learning exercise	MoH	Private Providers, Agencies and Partners	720,000.00	2022	2025
	Organize workshops, conferences and in-service training programmes on data management and reporting for health information officers/data managers periodically	MoH	Providers, Agencies and Partners		2023	2025
	Augment the number of health information officers at the district level to support private sector data collection.	MoH	Ghana Health Service	0.00	2022	

Strategy	Key Activity	Lead institution	Collaborating institution	Budget (GHC)	Timeline	
					FROM	TO
	Create dashboards for various health programmes and services to facilitate easy access to data by managers and enhance effective decision making	MoH	Agencies and partners	0.000	2023	2024
Harmonize and standardize data capturing tools among the agencies	Compile a set of standardized data capturing tools together with all agencies and interested partners in the sector.	MoH	Agencies and partners	0.000	2022	2023
	Organize workshops to train and disseminate the health sector data capturing tools to all data managers and other identifiable stakeholders in the sector	MoH	Agencies and partners		2023	2024
	Digitize data collection at all levels	MoH	Agencies and partners		2023	2025
Create more fora for dissemination of research findings by service providers, academia, and other stakeholders.	Organize annual health research summit or conference for researchers and policymakers and other stakeholders in the health sector to share their findings	MoH	Partners, Private Sector, Academia and Agencies	300,000.00	2022	2025
	Publish research findings on the Ministry of Health website and other social media platforms	MoH	Partners, Private Sector, Academia and Agencies	0.000	2022	2025
	Draft and disseminate policy briefs of research findings for stakeholders in the sector.	MoH	Partners, Private Sector, Academia and Agencies	9,000.00	2022	2025
Objective 3: Strengthen systems for health information management in the sector						
Promote the use of locally developed health information management applications	Develop specifications for health information management applications to be used in the health system	MoH	Agencies and partners	0.000	1 month	
	Compile a list of locally developed health information management applications that meet specifications.		Agencies, private sector, and partners	0.000	2023	2024
Provide logistic and technical assistance to all levels on health information management	Conduct needs assessment at national and agency levels to identify gaps in logistic and technical knowledge on health information management	MOH and agencies	Agencies, private sector, and partners		2 months	
	Procure needed logistics and technical assistance.		Agencies and partners			

Strategy	Key Activity	Lead institution	Collaborating institution	Budget (GHC)	Timeline	
					FROM	TO
Explore technical assistance from DPs to strengthen health information management at all levels	Engage development partners to commit to technical support for the implementation of the HISSP	MoH	Agencies and partners		2023	2024
Objective 4: Ensure effective implementation of the HIS strategic plan						
Track the implementation of the HIS plan	Develop an M&E Plan to track implementation	MoH	Relevant agencies	4,089,750.00	Annually after a year of implementation	
	Monitor the implementation of the HISSP					
	Organise stakeholder engagement on implementation progress report.		Agencies, private sector, and partners			
Evaluate HISSP implementation	Conduct independent evaluation on implementation of HISSP		Relevant agencies and Consultant			
Expand the coverage of private health sector data in the national database	Monitor the submission of data from the Private sector	HeFRA				
	Develop indicators to track private sector contribution to service data	MoH	Relevant agencies	0.00	2022	2023
	Provide data collection tools to Private Health Sector	MoH			2022	2023

CHAPTER FIVE: MANAGEMENT AND COORDINATION ARRANGEMENTS

MINISTERIAL DIRECTIVES

The development of a Health Information System Policy will be one of the initial activities to be undertaken under this health information system strategic Plan. In the absence of the policy, the Ministry of Health shall provide directives needed to create the enabling environment to facilitate the collection of quality data from all the agencies of the Ministry and Private providers.

FINANCING ARRANGEMENTS

Financing arrangement for the implementation of the Health Information System Strategic plan will be through the existing financing arrangements for all health sector activities. The Ministry of Health will be the main aggregator of all funds for the implementation and will ensure that funding for agency specific activities is transferred to the agencies for the implementation. Financing for the strategic plan will be mainly from Government of Ghana Budgetary allocation and dedicated funding from Development Partners. Agencies can also use their existing partnerships and linkages to solicit for funding from partners to implement activities captured in the Health Information System strategy that falls under their purview. Accountability of the funds provided will be done through the existing arrangements as captured in the Public Financial Management Act 2016 (Act 921) and Accounting, Treasury and Financial (ATF) reporting rules.

GOVERNANCE/ COORDINATION AT VARIOUS LEVELS

The governance structure of the Health Information System is shown in figure 4. This comprises Minister for Health, Inter-Agency Leadership Committee, Policy Planning Monitoring and Evaluation, Research Statistics Information Management, and Information Monitoring and Evaluation-Technical Working Group.

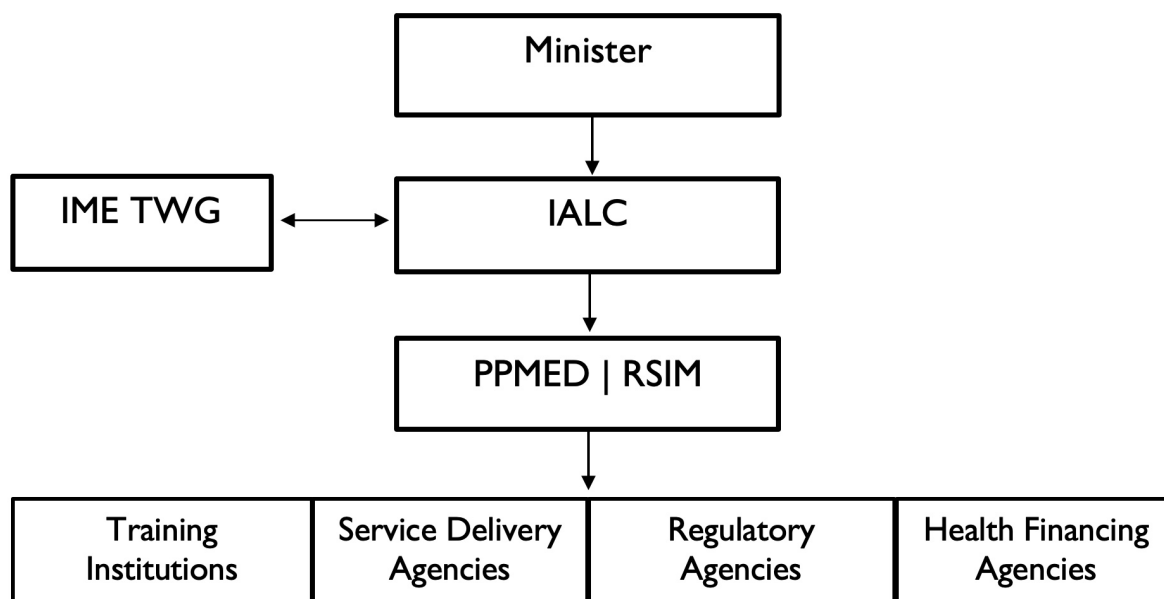


Figure 4: Framework for governing health information in the sector

Minister for Health

The Minister of Health shall be the chairperson of the Inter-Agency Leadership Committee (IALC). He/she shall have oversight responsibility over the leadership and management of the health information system for the health sector.

The Inter-Agency Leadership Committee

This is made up of the Leadership of all the agencies of the Ministry of Health. They will receive, review, and ratify recommendations for changes and improvement in the Health Information System from the IME-TWG. The IME-TWG recommendations to the IALC will be made through the Director for Policy, Planning, and Evaluation of the Ministry of Health.

PPME and RSIM of Ministry of Health

The Policy, Planning, Monitoring and Evaluation Directorate of the Ministry of Health will be responsible for coordinating the implementation of the activities in the Health Information System Strategic Plan (HISSP). The RSIM will perform technical oversight role of the management of the health information systems. To ensure effective implementation of the Plan, the existing governance structure for managing health information in the health sector needs to be modified to make it more inclusive and responsive.

IME Technical Working Group

The IME Technical Working Group will be made up of representation from the agency groups with the necessary technical expertise. The IME-TWG will play an advisory role for the Inter-Agency Leadership Committee (IALC). The IME Technical Working Group will make decisions on data collection tools that can be deployed, standards for data collection systems,

decisions on access to the data in the national system and recommendations on appropriate changes that may be made to the national health information system

Agencies of Ministry of Health

All agencies of the Ministry of Health will be expected to have monitoring and evaluation units that will ensure that the required data needed by the Ministry for monitoring and evaluation of the various programmes of the Ministry that falls under their purview are reported to the Ministry. They will also ensure that the health information systems they are using are able to send the agreed key performance indicators with the Ministry onto the national database of the Ministry of Health.

Health Facility regulatory authority through its accreditation process should ensure that all facilities accredited are reporting on their service data to the Ministry of Health through the agreed channel for reporting. The National Health Insurance Authority (NHIA) also through its credentialing process should ensure that all service providers who are credentialed are reporting on their service data to the national database.

CHAPTER SIX: MONITORING AND EVALUATION

Monitoring and Evaluation of the Health Information System Strategic Plan (HISSP)

Monitoring and Evaluation of the implementation of health information strategic plan will be conducted through the existing structures, procedures, and mechanisms. The Policy Planning Monitoring and Evaluation Directorate (PPME DIRECTORATE) of the Ministry of Health will be responsible for overall coordination of M&E activities in the Health Information System Strategic Plan (HISSP). Table 3 summaries details of the M&E plan for implementing the HISSP strategy.

Organisational arrangements for monitoring of the Health Information System Strategic Plan (HISSP)

The monitoring of the HISSP will be integrated into the monitoring for the implementation of the Health Sector Medium Term Development Plan (HSMTDP) 2022-2025. The monitoring of the implementation of the HISSP will be the prerogative of the responsible technical agencies and programmes. This will focus on monitoring inputs, activities, outputs, and outcomes. Programme monitoring will be done by Programme Managers within the agencies. The monitoring by the agencies will be in the form of quarterly, half-yearly and annual reviews and reports.

Objective of monitoring and evaluation of the HISSP

The aim of Health Sector Performance Monitoring and Evaluation for the HISSP is to track the progress of implementation of activities in the HISSP, promote learning and decision-making to ensure that the key strategic objectives are achieved within the time frame of the plan.

Monitoring framework for the Health Information System Strategic Plan (HISSP)

Goal: To institutionalize an integrated health information management system that ensures availability of quality health data for decision making at all levels.

Table 3: Monitoring and evaluation plan, 2022-2025

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
Objective 1: Improve the environment for health information management									
Strategy 1: Enhance policy and legislative environment for health information management									
Develop policy to guide health information management in the sector	Timely availability of the document	Percentage of non-service indicators in Health Sector Medium Term plan monitoring framework	Existing guidelines and SOPs		Health information system policy developed and disseminated			HIS Policy document. Meeting minutes and dissemination report	MoH
Develop standards and guidelines for acquisition of new software for data management in the sector.	Timely availability of the guidelines								
Develop guidelines for	Timely availability of the								

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
collection and integration of non-service data	guidelines								
Develop guidelines for monitoring policy and programme implementation across the sector	Timely availability of the guidelines								
Strategy 2: Strengthen Governance of Health Information Management Systems									
Review Terms of Reference of the IME Working group to reflect current thinking		Percentage of scheduled IME Working group meetings held			60	70	80	Minutes of meetings held	MoH and relevant agencies
Create an environment for regular meeting Heads of Agency		Percentage of IME meeting decisions implemented			60	70	80	Implementation reports	MoH and relevant agencies

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
under the IALC to consider issues regarding information management									
Create a standing committee of technical leads from agencies to validate data and consider other health information management issues.									
Strengthen and expand scope of operation of CHIM to provide technical backstopping for the sector									
Engage the private									

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
sector in establishing systems and processes for monitoring and reporting HIS performance									
Strategy 3: Facilitate access to relevant data, data sharing and dissemination									
Develop guidelines for data access and sharing with relevant stakeholders		Percentage of scheduled fora for dissemination of guidelines for data access and sharing held	0		40	60	80	Dissemination reports	MoH and relevant agencies
Establish a methodology for dissemination of health policy, data, and other relevant documents at all levels									
Strategy 4: Upgrade DHIMS2 to serve as the official data repository for the MOH									

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
Develop performance indicators (PIs) including non-service data for all agencies, programmes, and other stakeholders		Percentage of agencies' systems that are interfaced with DHIMS2	3 (GHS, CHAG, PRIVATE sector) out 28 agencies currently report to DHIMS2		60	80	90	Implementation report	MoH and relevant agencies
Create an interface for DHIMS2 to receive the variables for creating the PIs from other data systems of agencies.									
Strategy 5: Expand available financial resources to support health information management in the sector									
Review the health sector budget lines to include health information management		Percentage of total Health Budget that is allocated to health	0		2	5	10	Budget reports	MoH

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
for all agencies.		information management							
Develop a business case to advocate for adequate financial support from relevant stakeholders for health information management									
Objective 2: Improve data sharing, Data exchange (inter-operability), dissemination and use									
Strategy 1: Develop system-wide methodologies for the sharing and coordination of health system information (policy and strategy)									
Establish data access and sharing protocols encompassing all modalities, ethical considerations, procedures with all Agencies		Document on interoperability standards developed Percentage of agencies whose	Existing interoperability standards 0		Interoperability standards developed and disseminated 40	60	80	Guidelines/SOPs Implementation reports	MoH MoH and relevant agencies

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
and other stakeholders		data are accessible							
Publish all data sharing protocols, requirements and procedures on Ministry of Health (MOH) website for broader stakeholders									
Liaise with agencies to develop interoperability standards for all data systems in the health sector									
Strategy 2: Build capacity for the development and maintenance of health information architecture (data capturing, storage, analysis, and use)									
Liaise with relevant institutions to develop modules to train and re-		Percentage of Health Information officers trained	Not readily available	20	40	60	80	Implementation and training reports	MoH and relevant agencies

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
train health information officers/data managers on data management .		on data management Percentage of managers trained on data management	Not readily available	20	40	60	80	Implementation and training reports	MoH and relevant agencies
Establish data management exchange programmes for health professionals periodically as a peer learning exercise.									
Organize workshops, conferences and in-service training programmes on data management and reporting for health information									

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
officers/data managers periodically.									
Augment the number of health information officers at the district level to support private sector data collection.		Percentage of districts with health information officers assigned to support private sector data collection	0	20	40	60	80	Implementation and training reports	MoH and relevant agencies
Strategy 3: Harmonize and standardize data capturing tools among the agencies									
Compile a set of standardized data capturing tools together with all agencies and interested partners in the sector.		Percentage of District Health Information Officers trained on data capturing tools	Not readily available	20	40	60	80	Implementation and training reports	MoH and relevant agencies
		Percentage of agencies that have submitted full compliments of their data collection tools for harmonization	0	20	40	60	80	Implementation reports	
Organize workshops to train and									

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
disseminate the health sector data capturing tools to all data managers and other identified stakeholders in the sector									
Strategy 4: Create more fora for dissemination of research findings by service providers, academia, and other stakeholders									
Organize annual health research summit or conference for researchers and policymakers and other stakeholders in the health sector to share their findings		Number of annual health research summit or conference organised	0	1	1	1	1	Submit or conference reports	MoH and relevant agencies
		Percentage of papers published on MoH website or Ghana Health Observatory.	0	20	30	40	50	Published papers on designated websites/database	MoH
Publish research findings on									

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
the Ministry of Health website and other social medical platforms									
Draft and disseminate policy briefs of research findings for stakeholders in the sector.									

Objective 3: To Strengthen systems for health information management in the sector.

Strategy 1: Promote the use of locally developed health information management applications

Develop specifications for health information management applications to be used in the health system		Percentage of health information management systems/applications deployed that meet specification	Not readily available		20	40	60	Implementation report	MoH and relevant agencies
Compile a list of locally developed health information		Percentage of information management systems/applications	Not readily available		20	40	60	Implementation report	MoH and relevant agencies

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
management applications that meet specifications.		on deployed that were locally developed.							
Strategy 2: Provide logistic and technical assistance to all levels on health information management									
Conduct a needs assessment on national and agency levels to identify gaps in logistic and technical knowledge on health information management		Percentage of identified logistic gaps that have been filled	0	10	20	40	60	Implementation report	MoH and relevant agencies
Procure needed logistics and technical assistance.									
Strategy 3: Explore technical assistance from DPs to strengthen health information management at all levels									
Engage development partners on technical		Percentage of Health Information Management	0	20	30	54	50	Implementation report	MoH and DPs

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
support for the implementation of the HISSP		requests accepted for funding by DPs.							
Submit request for technical assistance to development partners based on agreed commitments									
Strategy 4: Digitize data collection at all levels									
Identify gaps for digitization		Percentage of activities in the roadmap implemented.	0	20	40	60	80	Implementation report	MoH and relevant agencies
Develop a roadmap for digitization.									
Objective 4: To ensure effective implementation of HISSP									
Strategy 1: Track the implementation of the HISSP									
Develop an M&E Plan to track			No existing M&E plan	M&E plan developed and				M&E plan	MoH and TWG

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
implementation		M&E plan for HISSP developed		disseminated					
Monitor the implementation of the HISSP.									
Organise stakeholder engagement on implementation progress report.		Percentage of scheduled stakeholder engagement organised	0	20	40	60	80	Stakeholder engagement reports	MoH and project implementation team
Strategy 2: Conduct independent evaluation of HISSP									
Conduct independent evaluation of HISSP		Evaluation conducted according to schedule	0			Mid-term evaluation conducted and report produced and disseminated	End-of-term evaluation conducted , and report produced and disseminated	Evaluation reports	MoH and relevant agencies
Strategy 3: Expand the coverage of private sector service performance in the national database									
Monitor the submission of data by		Percentage of registered private providers	<10	20	40	60	80	Implementation reports	MoH and relevant agencies

Key activities	Performance measure	Indicator	Baseline 2021	Target 2022	Target 2023	Target 2024	Target 2025	Means of Verification	Responsibility
the Private sector		submitting data into the national health information system							
Development of indicators to track private sector contribution to service delivery data.									
Provide data collection tools to the Private Sector									
Training of Private Sector data providers in reporting into the national system									

Evaluation of the implementation of the Health Information Strategic Plan

There will be a mid-term evaluation as well as an end line evaluation. The evaluation will employ a before and after design that will consider possible confounders. Annual reports, supervisory visits reports, training reports and other relevant implementation reports will be used for the evaluation. Trends in performance will be based on the Health Information System Strategic Plan (HISSP) baseline indicators. The regions and agencies shall be the primary units of statistical analysis for the national evaluation. The evaluation will be conducted by a team of independent in-country institutions in close collaboration with the PPME and RSIM Directorates of the Ministry of Health. The end line evaluation will be conducted six months prior to the review of the plan to generate lessons and recommendations to inform the next HISSP.

IMPLEMENTATION ARRANGEMENT

Implementation of this strategic plan will depend on four key players (shown in figure 5) playing their roles responsively. The Ministry of Health; the IME Technical Working Group, which provides technical oversight and backstopping to the development and growth of Health Information management in the health sector; the IALC which exists to consider governance issues concerning the health sector and provide overall oversight to the implementation of the HISSP; and the lead implementers of the strategic plan who are expected to initiate the implementation processes.

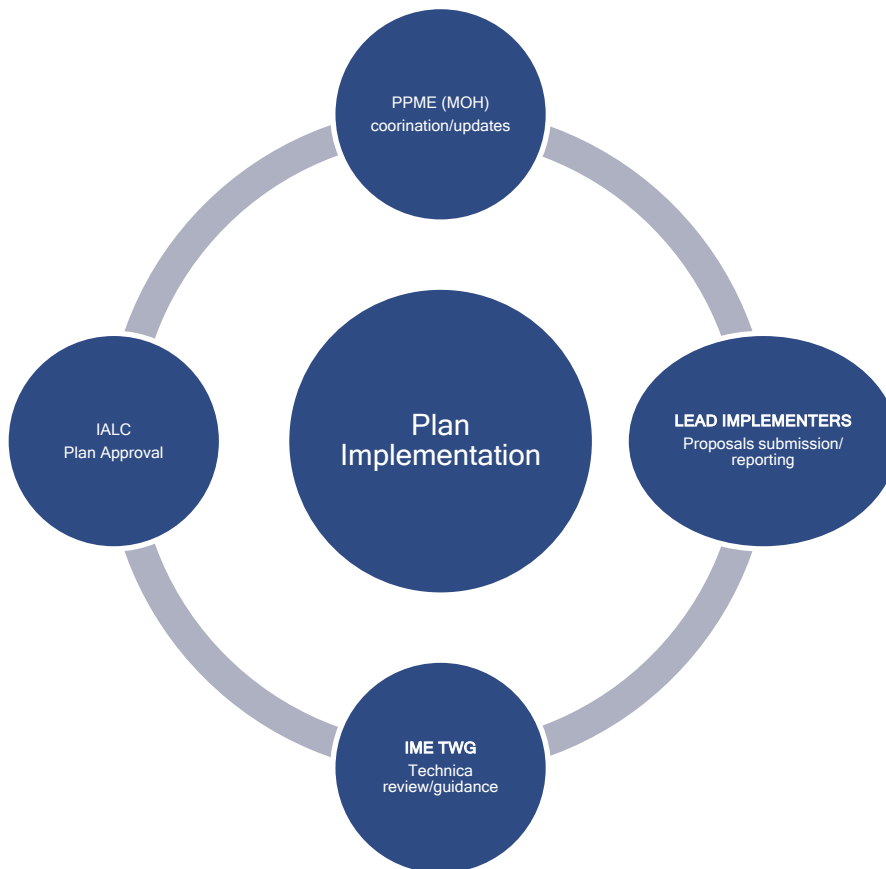


Figure 5: Conceptual framework for implementing the HISSP

MINISTRY OF HEALTH

The Ministry of Health shall coordinate the implementation of the strategic plan. As part of its remit, it shall:

- initiate processes to alert implementing agencies on planned activities that are due for implementation
- facilitate access to funding from funding partners
- monitor implementation of all plans
- inform IME technical working group regarding progress on all implementation activities
- submit regular progress reports to the Chief Director of the Ministry through the Director, PPME.
- provide regular updates to the Health Sector Working Group (HSWG) on progress of implementation
- communicate progress to all directors of the Ministry of Health
- conduct joint monitoring visits with the development partners to project sites

IMPLEMENTERS

Various aspects of the strategic plan would be implemented by varied groups and organisations. To ensure seamless implementation of the strategic plan, all lead groups and organisations would be required to submit proposals, detailing how plans and or programmes would be implemented. All proposals would be expected three months ahead of the scheduled implementation date to ensure they are taken through the needed processes for approval. The proposals shall be sent to the IME technical working group through the Ministry of Health. The proposals shall include strategies for implementation indicating estimated budget, milestones for tracking progress, duration, and coverage in terms of geography and or number of institutions. All implementing groups and organisations would also be expected to submit regular progress reports to the IME working group through the M&E Unit of the PPME Directorate, Ministry of Health.

INFORMATION, MONITORING, AND EVALUATION TECHNICAL WORKING GROUP (IME-TWG)

The IME-TWG shall provide technical guidance towards the implementation of the strategic plan. It shall therefore review all proposals submitted and recommend accordingly to the IALC for approval for implementation. In addition, the IME-TWG shall monitor implementation of the strategic plan. It shall also update the IALC regularly and provide leadership in the planning and advocacy for technical and financial support to implement the plan through stakeholder consultations and or engagement with the objective of gaining general acceptance and support for the plan. The IME-TWG shall also have the responsibility to review the strategic plan if needed.

INTER-AGENCY LEADERSHIP COMMITTEE (IALC)

The IALC shall act as the steering committee for the implementation of the strategic plan. It shall therefore consider and approve the strategic plan and its eventual implementation. The IALC shall mobilise and ensure that collectively, heads of agencies, organisations and institutions in the public and

private sector play a more responsible and meaningful role and are committed to the successful implementation of this strategic plan. It shall also consider and approve proposals for implementation and, consider and approve any revisions to the plan submitted by technical working group.

DEVELOPMENT PARTNERS (DPs)

The PPME Directorate of Ministry of Health will engage DPs regularly to review progress in terms of timely release of funds, implementation, and appropriate application of funds. The DPs should inform the IME-TWG a priori in case there are delays in release of funds.

APPENDIX

IMPLEMENTATION TIMELINES

Activities	2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Develop policy to guide health information management in the sector																
2. Develop standards and guidelines for acquisition of new software for data management in the sector.																
3. Develop guidelines for collection and integration of non-service data.																
4. Develop guidelines for monitoring policy and programme implementation across the sector																
5. Review Terms of Reference of the IME Working group to reflect technical and coordination function of the IME-TWG																
6. Create an environment for regular meeting of Heads of Agency under the IALC to consider issues regarding information management																
7. Create a standing committee of technical leads from agencies to validate data and consider other health information management issues.																
8. Strengthen and expand scope of operation of CHIM to provide technical backstopping for the sector.																

Activities	2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
9. Establish a methodology for dissemination of health policy, data, and other relevant documents at all levels																
10. Develop performance indicators (PIs) including non-service data for all agencies, programmes, and other stakeholders																
11. Review the health sector budget lines to include health information management for all agencies.																
12. Develop a business case to advocate for adequate financial support from relevant stakeholders for health information management																
13. Develop specifications for health information management applications to be used in the health system																
14. Compile a list of locally developed health information management applications that meet specifications.																
15. Conduct a needs assessment on national and agency levels to identify gaps in logistic and technical knowledge on health information management																
16. Engage development partners on technical support for the implementation of the HISSP																
17. Develop an M&E Plan to track implementation of the HISSP																
18. Monitor the submission of data by the Private sector																
19. Develop indicators to track private sector contribution to service delivery data.																

Activities	2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
20. Engage the private sector in establishing systems and processes for monitoring and reporting their HIS performance.																
21. Develop guidelines for data access and sharing with relevant stakeholders																
22. Create an interface for DHIMS2 to receive the variables for creating the PIs from other data systems of agencies.																
23. Establish data access and sharing protocols encompassing all modalities, ethical considerations, procedures with all Agencies and other stakeholders																
24. Publish all data sharing protocols, requirements and procedures on Ministry of Health (MOH) website for broader stakeholders																
25. Liaise with agencies to develop interoperability standards for all data systems in the health sector																
26. Liaise with relevant institutions to develop modules to train and re-train health information officers/data managers on data management.																
27. Organize workshops, conferences and in-service training programmes on data management and reporting for health information officers/data managers periodically.																
28. Compile a set of standardized data capturing tools together with all agencies and interested partners in the sector.																
29. Organize workshops to train the health sector data capturing tools to all data																

Activities	2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
managers and other identified stakeholders in the sector																
30. Procure needed logistics and technical assistance.																
31. Submit request for technical assistance to development partners based on agreed commitments																
32. Identify gaps for digitization																
33. Develop and implement roadmap for digitization.																
34. Monitor the implementation of the HISSP.																
35. Organise stakeholder engagement on implementation progress report.																
36. Conduct independent evaluation of HISSP																
37. Provide data collection tools to the Private Sector																
38. Training of Private Sector data providers in reporting into the national system																
39. Establish data management exchange programmes for health professionals periodically as a peer learning exercise.																
40. Augment the number of health information officers at the district level to support private sector data collection.																
41. Organize annual health research summit or conference for researchers and policymakers and other stakeholders in the health sector to share their findings																
42. Publish research findings on the Ministry of Health website and other social medical platforms																

Activities	2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
43. Draft and disseminate policy briefs of research findings to stakeholders in the sector.																

BUDGET

SN	Activity	2022	2023	2024	2025	Total (GHS)	GOG	DP	Lead	Collaborating
1.1	Develop policy to guide health information management in the sector	189,000.00				189,000.00			MOH	Agencies, Private Providers, and Partners
1.2						-			MOH	Agencies, Private Providers, and Partners
1.3	Develop standards and guidelines for acquisition of new software for data management in the sector.	270,000.00				270,000.00			MOH	Agencies, Private Providers, and Partners
1.4	Develop guidelines for collection and integration of non-service data.	270,000.00				270,000.00			MOH	Agencies, Private Providers, and Partners
1.5	Develop guidelines for monitoring policy and programme implementation across the sector	270,000.00				270,000.00			MOH	Agencies, Private Providers, and Partners
1.6	Review Terms of Reference of the IME Working group to reflect technical and coordination function of the IME-TWG	15,000.00				15,000.00			MOH	Agencies, Private Providers, and Partners

SN	Activity	2022	2023	2024	2025	Total (GHS)	GOG	DP	Lead	Collaborating
1.7	Create an environment for regular meeting of Heads of Agency under the IALC to consider issues regarding information management	140,000.00	140,000.00	140,000.00	140,000.00	560,000.00			MOH	Agencies, Private Providers, and Partners
1.8	Create a standing committee of technical leads from agencies to validate data and consider other health information management issues.	140,000.00	140,000.00	140,000.00	140,000.00	560,000.00			MOH	Agencies, Private Providers, and Partners
1.9	Strengthen and expand scope of operation of CHIM to provide technical backstopping for the sector.	-	-	-	-	-			MOH	Agencies, Private Providers, and Partners
1.10	Establish a methodology for dissemination of health policy, data, and other relevant documents at all levels	-				-			MOH	Agencies, Private Providers, and Partners
1.11	Develop performance indicators (PIs) including non-service data for all agencies, programmes and other stakeholders	72,000.00				72,000.00			MOH	Agencies, Private Providers, and Partners
1.12	Review the health sector budget lines to include health information management for all agencies.	-				-			MOH	MOF
1.13	Develop a business case to advocate for adequate financial support from relevant stakeholders for health information management	18,000.00				18,000.00			MOH	Partners
1.14	Develop specifications for health information management applications to be used in the health system	108,000.00				108,000.00			MOH	Partners, Consultants, and Agencies
1.15						-				

SN	Activity	2022	2023	2024	2025	Total (GHS)	GOG	DP	Lead	Collaborating
1.16	Compile a list of locally developed health information management applications that meet specifications.	-	-			-			MOH	Agencies, Private Providers
1.17	Conduct a needs assessment on national and agency levels to identify gaps in logistic and technical knowledge on health information management	21,000.00				21,000.00			MOH	Consultants, Agencies
1.18	Engage development partners on technical support for the implementation of the HISSP	-	-			-			MOH	Partners
1.19	Develop an M&E Plan to track implementation of the HISSP	24,000.00				24,000.00			MOH	Agencies, partners , and Private Sector
1.20	Monitor the submission of data by the Private sector	-	-	-	-	-			MOH	Agencies and Private Sector
1.21	Develop indicators to track private sector contribution to service delivery data.	36,000.00				36,000.00			MOH	Agencies and Private Sector
	SUB-TOTAL	1,573,000.00	280,000.00	280,000.00	280,000.00	2,413,000.00				
2.1	Engage the private sector in establishing systems and processes for monitoring and reporting their HIS performance.		50,000.00			50,000.00			MOH	Agencies and Private Sector
2.2	Develop guidelines for data access and sharing with relevant stakeholders		270,000.00			270,000.00			MOH	Agencies, Private Providers and Partners
2.3	Develop guidelines for data access and sharing with relevant stakeholders					-			MOH	Agencies, Private Providers and Partners
2.4	Create an interface for DHIMS2 to receive the variables for creating the PIs		-			-			MOH	Agencies CHIM, Consultants,

SN	Activity	2022	2023	2024	2025	Total (GHS)	GOG	DP	Lead	Collaborating
	from other data systems of agencies.									Private Providers and Partners
2.5	Establish data access and sharing protocols encompassing all modalities, ethical considerations, procedures with all Agencies and other stakeholders		-			-			MOH	Agencies , Consultants, Private Providers and Partners
2.6	Publish all data sharing protocols, requirements and procedures on Ministry of Health (MoH) website for broader stakeholders		-			-			MOH	Agencies, Consultants, Private Providers and Partners
2.7	Liaise with agencies to develop interoperability standards for all data systems in the health sector		15,000.00			15,000.00			MOH	Agencies, Consultants, Private Providers and Partners
2.8						-				
2.9	Liaise with relevant institutions to develop modules to train and re-train health information officers/data managers on data management.		270,000.00	270,000.00	270,000.00	810,000.00			MOH	Health Training Institutions, Academia, Agencies, Consultants, Private Providers and Partners
2.10	Organize workshops, conferences and in-service training programmes on data management and reporting for health information officers/data managers periodically.		90,000.00	90,000.00	90,000.00	270,000.00			MOH	Agencies and Private Providers
2.11	Compile a set of standardized data capturing tools together with all agencies and		30,000.00			30,000.00			MOH	Agencies, Private Providers and Partners

SN	Activity	2022	2023	2024	2025	Total (GHS)	GOG	DP	Lead	Collaborating
	interested partners in the sector.									
2.12	Organize workshops to train the health sector data capturing tools to all data managers and other identified stakeholders in the sector		70,000.00			70,000.00			MOH	Agencies and Private Providers
2.13	Procure needed logistics and technical assistance.		8,000,000.00			8,000,000.00			MOH	Agencies and Partners
2.14			84,000.00			84,000.00				
2.15	Submit request for technical assistance to development partners based on agreed commitments		-			-			MOH	Partners
2.16	Identify gaps for digitization		-			-			MOH	Agencies, Consultants, Private Providers and Partners
2.17	Develop and implement roadmap for digitization.		24,000.00			24,000.00			MOH	Agencies, Private Providers and Partners
2.18	Monitor the implementation of the HISSP.		2,500,000.00	2,500,000.00	2,500,000.00	7,500,000.00			MOH	Agencies, Private Providers and Partners
2.19	Organise stakeholder engagement on implementation progress report.		960,000.00	960,000.00	960,000.00	2,880,000.00			MOH	Agencies, Private Providers and Partners
2.20	Conduct independent evaluation of HISSP		180,000.00		180,000.00	360,000.00			MOH	Agencies, Consultants, Private Providers and

SN	Activity	2022	2023	2024	2025	Total (GHS)	GOG	DP	Lead	Collaborating
										Partners
2.21	Provide data collection tools to the Private Sector					-			MOH	Private Providers
2.22	Provide data collection tools to the Private Sector		2500000			2,500,000.00				
2.23	Train Private Sector data providers in reporting into the national system		960,000.00			960,000.00			MOH	Private Providers and CHIM
	SUB-TOTAL		16,003,000.00	3,820,000.00	4,000,000.00	23,823,000.00				
3.1	Establish data management exchange programmes for health professionals periodically as a peer learning exercise.			360,000.00	360,000.00	720,000.00			MOH	Private Providers, Agencies and Partners
3.2	Augment the number of health information officers at the district level to support private sector data collection.			-		-			MOH	Ghana Health Service
3.3	Organize annual health research summit or conference for researchers and policy makers and other stakeholders in the health sector to share their findings			150,000.00	150,000.00	300,000.00			MOH	Partners, Private Sector, Academia and Agencies
3.4	Publish research findings on the Ministry of Health website and other social medical platforms			-	-	-			MOH	Partners, Private Sector, Academia and Agencies
3.5	Draft and disseminate policy briefs of research findings to stakeholders in the sector			4,500.00	4,500.00	9,000.00			MOH	Partners, Private Sector, Academia and Agencies
	SUB-TOTAL			514,500.00	514,500.00	1,029,000.00				

SN	Activity	2022	2023	2024	2025	Total (GHS)	GOG	DP	Lead	Collaborating
	TOTAL	1,573,000.00	16,283,000.00	4,614,500.00	4,794,500.00	27,265,000.00	2,726,500.00	24,538,500.00		
4.1	Monitor and evaluate implementation of the strategy (15% of total budget)	235,950.00	2,442,450.00	692,175.00	719,175.00	4,089,750.00	408,975.00	3,680,775.00	MOH	Partners, Private Sector, Academia and Agencies
	GRAND TOTAL	1,808,950.00	18,725,450.00	5,306,675.00	5,513,675.00	31,354,750.00	3,135,475.00	28,219,275.00		