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**PART I : SECTION (I) — GENERAL**  
**Government Notifications**

**THE NATIONAL POLICY ON HEALTH INFORMATION OF SRI LANKA**

THE Cabinet approval for the National Policy on Health Information of Sri Lanka was granted and will be effective from the 3rd of January, 2017. This policy and strategic plan shall satisfy the need for a Health Information System which shall assist in the decision making process to achieve an efficient and trustworthy healthcare service in Sri Lanka. The intended proposals of this policy and strategic plan shall support to achieve the objectives set out in the National Health Policy and facilitate the provision of information to relevant sectors of the Health Information System in an efficient and trustworthy manner, through its implementation.

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Colombo 10,  
15th June 2017.

**Preamble**

The National Policy on Health Information implemented in compliance with all valid laws of Sri Lanka, shall facilitate the health information management and development of institutions providing healthcare facilities and shall contribute to overall health promotion, parallel to health goals, through the monitoring of activities of institutions responsible for health information generation, supply, analysis and use and by providing guidance, identifying gaps in the information systems and facilitating corrective measures.

**NATIONAL POLICY ON HEALTH INFORMATION OF SRI LANKA - 2017**

**Ministry of Health**

**Sri Lanka**

The Cabinet approval for the National Policy on Health Information of Sri Lanka was granted on 3rd of January 2017.



## THE NATIONAL POLICY ON HEALTH INFORMATION

### Ministry of Health, Nutrition and Indigenous Medicine

#### Background

Health information constitutes all data or information that are generated, captured, transmitted, stored, processed, analyzed and disseminated in either on paper or on electronic format, pertaining to health or healthcare service. Thus, the term encompasses data and information related to preventive health services, curative health services, health administration and research. Healthcare is an information intensive service where it is utilized for care related decisions spanning from diagnosis, treatment and outcome assessment to administrative decisions, planning and monitoring. Therefore, a ubiquitous system that provides comprehensive, accurate, reliable, relevant, accessible, timely and cost effective health information is paramount for evidence-based decisions. Moreover, the ever increasing demand for healthcare, the demand for equitable distribution of care and the increasing demand for higher quality of care has made the Health Information System (HIS) one of the “building blocks” of any health system.

The government of Sri Lanka is committed to provide universal access to essential health care that would benefit its people through preventive and curative state healthcare services. Though most care services are allopathic, there is also a contribution from indigenous forms of medicine. Further, private healthcare organizations, predominantly curative, have also been increasingly involved in the provision of healthcare.

The national HIS of Sri Lanka is a very comprehensive, component-based information system that has gradually developed for about a century. It is an integral and integrated component of the health service delivery framework. This has immensely contributed to making the Sri Lankan healthcare system on par with the best in the world.

The national HIS mainly consists of the information inputs obtained from the state health service. The present sub-systems of the national HIS include curative/hospital information systems, preventive health information systems, population census, civil and vital registration system and routine population based health surveys. These sub-systems capture data relating to mortality and morbidity, disease outbreaks, social determinants of health (such as nutrition, environment, and oral health), population growth, births, marriages, healthcare access, healthcare coverage, human resources for health, quality of services, health financing and other health related data.

The state HIS is predominantly paper based and manual from point of data capture, at point of service, to data transfer to the regional and central levels. Data is analyzed at regional and national levels using computer based analytical tools and manual methods.

Health information is disseminated mainly through national, regional, institutional and program specific publications. The main national publication is the Annual Health Bulletin of Sri Lanka. Most of the publications are paper based. Presently, limited amount of health information is made available through the official website of the Ministry of Health, Nutrition and Indigenous Medicine and websites of respective health institutions.

Whereas, the larger private healthcare institutions have institutional HISs, the majority of the medium and small scale operations are observed to lack neither the interest nor the capacity to maintain health records. Therefore, the majority of private sector health data with an exception of data on immunization, notifiable diseases and maternal mortality, are not reported to the state. There is no formal system to capture health information generated at point of care of General Practitioners.

## Rationale for Health Information Policy

The HIS survey conducted by Ministry of Health, Nutrition and Indigenous Medicine in August, 2009, using the WHO - Health Matrix Network (HMN) tool, highlighted some broad areas of concern. The critical areas of deficiency included components related to “Resources” (i.e. policy, planning, HIS institutions, human resources, financing and infrastructure) and “Data Management”. Situational analysis of data sources revealed that the vital statistics, population based surveys and health & disease records were ranked “adequate” whilst health service records and resource records were ranked “present but not adequate” when compared to the HMN gold standard. Detailed health information related issues and gaps were elucidated during the policy formulation.

## Major concerns

The major problems related to the national HIS in Sri Lanka are the lack of clear policies on health information management, compartmentalization of the information governance mechanism, inadequate coordination among existing information systems, limited data sharing, moderate use of information for decision making and insufficient automation leading to relatively modest quality of health information. Moreover, the national HIS has not evolved sufficiently to cater for changing information needs. Thus, a much desired “information culture” within the health sector is not yet achieved.

There are also no clearly defined regional, institutional or programme based focal points for health information management in all areas. Notably, some disciplines have developed information systems to cater to their needs, although, there are no proper mechanisms for integration with the national HIS. Moreover, the lack of integration has led to the repeated capture of the same data elements from different groups, posing an undue burden on the data collection process. Most data collection forms have not undergone timely revisions.

The public health programmes in Sri Lanka operate under designated directorates with a certain degree of autonomy. Many of the information systems belonging to public health programmes were therefore, developed independently and have remained as such even in their implementation. This invariably poses a considerable deterrent to information sharing.

Moreover, the hospital information system in operation has not been revised for more than 20 years. Hence, it is not capable of generating all the required information to fulfill the present day needs; for instance, the hospital system does not capture detailed out-patient data and does not allow life-long continuity of patient records. Although some private sector healthcare institutions generate and are willing to share their information, there is no proper mechanism for integration with the national HIS. There also remains certain information gaps such as data in relation to occupational health, environmental health, injuries, indigenous curative care, M&E data and hospital management information. Further, little emphasis is made on geographically referenced health and health related data – GIS. The digital outputs of medical laboratories and radiological machines are not optimally utilized by linking them to respective information systems.

It is observed that the curative and preventive care information systems together capture a large number of data at the grass-root level. Yet, in general, the existing data is inadequately utilized in formulating policies, preparing plans, and making management and clinical decisions. One key contributor to this the dearth of timely information and the relative rigidity in information retrieval, processing and presentation, is the highly inaccessible paper records and registries. A further contributor to this is the lack of an “information culture” where evidence based decisions are encouraged and considered as the norm.

Presently, the Provincial Department of Health Services (PDHS) as the governing body responsible for the health services of a given province under the devolution of power in 1989, does not comprehensively receive health information of the health institutions (curative and preventive) within the province. Further, the Regional Department of Health Services (RDHS) within a PDHS will only receive health information pertaining to the institutions under its preview (curative and preventive), whereas the institutions governed centrally (Line Ministry Institutions) though located within the territory of the RDHS, will directly report to Line Ministry institutions. This deficiency in the information flow has hampered the evidence based decision making process at PDHS and RDHS levels.

Personally identifiable health information requires a high degree of confidentiality. Presently, ethical considerations in information handling, information use, information sharing and information use in research is not adequately covered. The present focus on information security, both physical and virtual also remain minimal.

Automation of health information systems is slow and less coordinated. In this regard, the high initial cost of ICT infrastructure remains a pressing issue. The required skills and knowledge related to ICT among general health staff also remains inadequate. Furthermore, there is little emphasis on planned capacity building, identification of new cadres and recruitment, for information management and ICT, also remain low.

### **Recent developments**

The manual and paper based national HIS is fast becoming obsolete. The need for modernizing the HIS according to contemporary needs is vital; giving emphasis on suitable and selective automation of the manual information systems in a cost-effective and sustainable manner.

### ***eHealth, automation and innovation***

WHO describes eHealth as “the transfer of health resources and health care by electronic means”. In general eHealth is the application of information and communication technologies (ICT - all electronic forms) to all or any aspect of health. It includes such applications relating to care delivery (patient management and health service management), public health (preventive and promotive), medical education and health related research.

In realizing a plethora of potential benefits of adopting eHealth, the government of Sri Lanka has spearheaded the process of incorporating ICT applications in the health sector. In line with this, the Ministry of Health, Nutrition and Indigenous Medicine of Sri Lanka has formed the National eHealth Steering Committee (NeHSC) – a national level body for eHealth governance. This initiative is well supported by WHO on the report on Building Foundations for eHealth “National foundation actions form the basis of eHealth in countries”.

Under the guidance of NeHSC, the National eHealth Guidelines & Standards (NeGS) are drafted. The guidelines are set for aspects of the Architectural Model for the National Health Information System, ICT Management, Networking and Connectivity, Communication Interface, Ethics, Privacy, Confidentiality and Security of Information and Data standards. NeGS presently forms the basis for all eHealth initiatives in the state health sector.

### ***Present eHealth initiatives***

Notable improvements in the state HIS have taken place in the recent past. The Ministry of Health, Nutrition and Indigenous Medicine in collaboration with the Postgraduate Institute of Medicine (PGIM) has created a unique and especially skilled work force for health information management; viz. doctors trained in Biomedical Informatics, who have been instrumental in spearheading the recent innovations.

Further to these developments, the electronic version of the Indoor Morbidity and Mortality Report (IMMR) is successfully replacing its manual counterpart. Thus, the morbidity and mortality data collection process and resulting compilation of annual health statistics will be fully automated within the next 3 years.

An electronic patient management system for OPD patients is tested in several medium scale hospitals, whilst, a fuller version for in-ward patients is also being developed and tested; the current key focus being registration of all patients and capturing the discharge diagnosis. Steps are taken to establish Computer Maintenance Units (CMU) in selected institutions to ensure the sustainability of these information systems. Presently, births are electronically captured in a majority of labour rooms through WEBIIS. Furthermore, continued constructive discussions are being held to streamline the data collection processes of Maternal and Child Health and immunization. A unique identifier viz. the Personal Health Number (PHN) is presently being pilot tested. This identifier will pave the way for continuity of care and life-long health records, leading to the capture of number of patients as opposed to episodes.

A HRM system to handle the complicated appointments, transfers and promotions of doctors is functional. Modification of a similar system to handle other staff categories is in the pipeline.

The MSD has implemented a system for medical supplies management from central level, through RMSDs to health institutions.

### **This Policy**

This National Policy on Health Information falls in line with and supports objectives set out in the National Health Policy. The present effort of formulating this Policy was initiated by the timely action of the relevant authorities for “Health Information System Modernization”, with the primary view of overcoming the identified information related issues and achieving the stipulated national health goals.

It is also aimed at defining the direction for systematically converting appropriate areas of HIS to an electronic information system in future and encourage innovations. The outcome of this is the use of reliable and good quality information through a resilient HIS, leading to improved health systems performance, quality of health care, universal access, increased service delivery, reduced burden, increased efficiency, and improved cost-effectiveness. Moreover, the policy will facilitate the informed decision making process.

### **The policy process**

The results of the Health Matrix Network (HMN) survey in August, 2009, was instrumental in getting the initial direction to the policy process. The policy formulation process was further based on a comprehensive situation analysis done through a series of focused group discussions involving relevant high level stakeholders, representing the major Health Information sub-systems. These discussions were held from mid-August, 2012 to February, 2013. The key analysts were the Health Information Unit and the Policy Development & Analysis Unit.

The draft version was discussed extensively with a wider forum which included officials at the highest level of the Ministry of Health, Nutrition and Indigenous Medicine and Indigenous Medicine, Department of Census and Statistics, Registrar Generals Department, World Health Organization, World Bank and other funding agencies and NGOs. The development of the final version and public scrutiny which followed, led to the overall consensus prior to Cabinet approval.

### **Guiding principles**

The Health Information Policy is to be implemented abiding by the following guiding principles;

1. Citizen centric approach
2. Good governance and transparency
3. Upholding national values of free healthcare, right to health, universal health coverage, equity and social justice
4. Encouraging multiple stakeholder involvement, collaboration and partnerships for information dissemination and sharing
5. Evidence based decision making and accountability
6. Ensuring privacy and confidentiality of healthcare recipients
7. Sensitivity towards cultural diversity and social norms
8. Systems-approach to health information with a focus on interoperability
9. Minimal data redundancy in data capture
10. Conformity to technology relevance, simplicity, cost-effectiveness and judicious & efficient use of information resources
11. Sustainability of information system

In keeping with above principles the policy vision, mission, objectives and the key policy areas with statements for implementation are as follows:

## Vision

A Health Information System (HIS) which augments an effective, efficient, equitable, economical and quality healthcare service; while ensuring privacy and confidentiality of care recipients.

## Mission

To provide quality and timely health information for evidence based decision making through establishment of a ubiquitous, integrated, resilient, dynamic, cost-effective and sustainable Health Information System.

## Policy Objectives

The broad objectives of this policy are;

1. To ensure 50% of all health institutions generate, disseminate and use timely and quality health information to support organisational management and development.
2. To make available comprehensive systems for personalized and community based health information management for shared and continuous care of care recipients who receive care at 50% of all Base Hospitals, District General Hospitals, Provincial General Hospitals and Teaching Hospitals.
3. To ensure optimal data/information sharing and access to, health information in relation to all sharable data in health information systems, while ensuring ethical considerations and confidentiality of care recipients.
4. To encourage suitable innovations related to health information management and eHealth in all information processes; while ensuring interoperability of information systems.
5. To ensure security and integrity of all health data/information.
6. To ensure sustainability of all health information systems.

This policy gives direction in five areas related to HIS to achieve the above policy objectives.

1. Health Information Related Resources
  2. Indicators and Data Elements
  3. Data and Information Management
  4. Data/Information Security, Client Privacy, Confidentiality and Ethics
- eHealth and Innovations

## Policy Statements

### 1. *Health Information Related Resources*

- 1.1. Information processes<sup>1</sup>, procedures, infrastructure, and human resources shall be appropriately adopted for data management to improve efficiency.
- 1.2. Health information related organizational, institutional and individual human resource capacity building shall be facilitated.
- 1.3. Continuous annual resource allocation and financing shall be ensured for sustainability of Health Information System.

### 2. *Indicators and Data Elements*

- 2.1 Health data collection and related information processes shall be aligned with information needs and indicators at all levels.
- 2.2 Health and health related data elements/information from state and non-state sectors shall be integrated into the national health information system.

<sup>1</sup> **Information processes** include the following processes: collecting, organising, analysing, storing and retrieving, transmitting and receiving, processing and displaying of data/information.



### 3. *Data and Information Management*

- 3.1 Health information governance<sup>2</sup> structure shall be strengthened.
- 3.2 Continuity of care for healthcare recipients shall be ensured through a life- long health record.
- 3.3 Proper retention, archiving and disposal of health data/information shall be ensured.
- 3.4 Sharing of data and information within and outside the health sector shall be promoted.
- 3.5 Responsibility for data and information quality at national and sub-national levels shall be assigned to the respective authorities.
- 3.6 Optimal and wide use of health data/information shall be ensured through appropriate data processing, improved efficiency and quality of health information reporting and improved accessibility of health information by all stakeholders.

### 4. *Data/Information Security, Client Privacy, Confidentiality and Ethics*

- 4.1 Ethical and fair information practices shall be incorporated into information management ensuring client privacy and confidentiality.
- 4.2 Data and information security shall be ensured for client data protection.

### 5. *eHealth and Innovations*

- 5.1 eHealth governance structure shall be strengthened.
- 5.2 Information and Communication Technology solutions and innovations shall be appropriately adopted to improve the quality, efficiency, patient safety, and cost effectiveness of health information systems.
- 5.3 Interoperability of the various sub-components of national health information shall be ensured through standardisation, to facilitate seamless data exchange.
- 5.4 Health data/information storage shall be facilitated to minimize health data/information loss.
- 5.5 Health data/information storage shall be facilitated to minimize health data/information loss and ensure data/information security.
- 5.6 Continuous annual resource allocation and financing shall be ensured for sustainability of eHealth systems.

### **Implementation of the Policy**

This policy will act as the overarching document guiding the health care delivery organizations to take action to manage and improve their health information accordingly.

The Directorate of Health Information of the Management Development and Planning Unit of the Ministry of Health, Nutrition and Indigenous Medicine will be the focal point for implementation of this policy.

This Directorate is responsible to oversee and guide to ensure that respective agencies responsible for health information generation, dissemination, analysis and use are doing so in a way that contributes to overall health improvement, in line with the health goals. This Directorate will also be responsible to identify information system gaps from time to time through appropriate mechanisms of internal or external evaluations and facilitate to rectify such. This policy is reinforced by the 'National Health Information Strategic Plan' (**Annexure1**), which shall support the implementation of the policy giving the necessary guidance for formulation of necessary action plans.

### **Monitoring and evaluation of policy**

The Directorate of Health Information of the Management Development and Planning Unit of the Ministry of Health, Nutrition and Indigenous Medicine will be responsible to periodically review and revise this Policy and the Strategic plan.

This Directorate of Health Information shall establish a monitoring & evaluation system to review the implementation of this policy. This M&E plan shall consist of Key Performance Indicators (**Annexure2**) to monitor the successful accomplishment of the board objectives of this policy.

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<sup>2</sup>**Health information governance** is the set of multi-disciplinary structures, policies, procedures, processes and controls implemented to manage information at an enterprise level.

## Related policies

This policy shall comply with all relevant health and health related policies of the government of Sri Lanka.

This policy shall comply with all relevant information acts of the government of Sri Lanka regarding information collection, retention, dissemination, archiving and disposal.

This policy shall comply with all relevant information acts of the government of Sri Lanka, on national languages.

This policy shall comply with existing governments laws/regulations related to privacy and confidentiality.

This policy shall comply with existing governments laws/regulations related to electronic transactions and computer crimes.

This policy shall comply with existing governments laws/regulations related to intellectual property rights.

This policy shall establish uniformity and standardization of all state websites through implementation of web standards and guidelines prescribed by Information Communication Technology Agency (ICTA) of Sri Lanka.

## The National Health Information Strategic Plan Ministry of Health, Nutrition and Indigenous Medicine

### Annexure 1

#### Abbreviations

Add. Sec. (MS)	-	Additional Secretary (Medical Services)
BH	-	Base Hospital
CMU	-	Computer Maintenance Units
Cons. HI	-	Consultant in Health Information
D/HI	-	Director/Health Information
D/OD	-	Director Organizational Development
D/P	-	Director/Planning
D/PHSD	-	Director/Private Health Sector Development
DCS	-	Department of Census and Statistics
DDG(P)	-	Deputy Director General (Planning)
DGH	-	District General Hospital
DGHS	-	Director General of Health Services
GIS	-	Geographical Information System
HIS	-	Health Information System
HIU	-	Health Information Unit
ICT	-	Information and Communication Technologies
M&E	-	Monitoring and Evaluation
MO/DS-HI	-	Medical Officer/Dental Surgeon - Health Information
MRR	-	Medical Record Room



NeGS	-	National eHealth Guidelines & Standards
NeHSC	-	National eHealth Steering Committee
NHISC	-	National Health Information Steering Committee
NHSL	-	National Hospital of Sri Lanka
PDHS	-	Provincial Director of Health Services
PGH	-	Provincial General Hospital
PHN	-	Personal Health Number
RDHS	-	Regional Department of Health Services
RGD	-	Registrar Generals Department
SH	-	Secretary Health
TH	-	Teaching Hospital
UADS	-	Use Agreements for Data/Information Sharing
WGIE	-	Working Group on Innovations and eHealth
WGIPR	-	Working Group on Information Process Re-engineering
WHO	-	World Health Organization

Policy Area 1: Health Information Related Resources			
<b>Policy Directive 1.1: Information processes, procedures, infrastructure, and human resources shall be appropriately adopted for data management to improve efficiency.</b>			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>1.1.1 Information Processes and Procedures</b> Ensure Health Information process modernization and continuous improvement.	1.1.1.1 Establish a national level permanent technical group headed by D/HI for information process management (Working Group on Information Process Re-engineering – WGIPR) under the National Health Information Steering Committee (NHISC).	3 months	NHISC, D/HI
	1.1.1.2 Periodically evaluate information processes, identify gaps and make recommendations for improvement and bridging of gaps, re-structure and incorporation of technology as appropriate.	6 months for initial evaluation and continuous activity there after	WGIPR under NHISC
	1.1.1.3 Establish new information processes to fulfil identified under 1.1.1.2 new requirements.	24 months	WGIPR under NHISC

<sup>1</sup> Time frame for implementation of each Key Action Area/Implementation Guideline is calculated from the effective date of this policy.

<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>1.1.2 ICT Infra-structure, ICT Devices and Software</b> Ensure optimal and appropriate utilization of ICT resources in information system automations.	1.1.2.1 Acquire ICT devices for automation purposes and ICT infrastructure in accordance with the NeGS.	Continuous activity	All DDGs
	1.1.2.2 Establish and/or maintain or utilise, central level server facilities at national, sub-national and/or institutional level for health data repositories and health software as appropriate and in accordance with NeGS.	24 months	SH, DDG(P), D/HI
	1.1.2.3 Provide internet connectivity for official usage to relevant units as a utility in accordance with the NeGS.	24 months	DGHS, D/HI
	1.1.2.4 Establish a mechanism for onsite maintenance and troubleshooting for electronic hardware and computer networks through Computer Maintenance Units.	12 months	DGHS, DDG(P), D/HI
	1.1.2.5 Incorporate ICT as per the NeGS in infrastructure development projects in the healthcare sector.	Continuous activity	SH, All DDGs
<b>Policy Directive 1.2 :</b> Health information related organizational, institutional and individual human resource capacity building shall be facilitated.			
<i>Strategies</i>	<i>Key Action Areas</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>1.2.1 Human Resource</b> The human resources required for health information management shall be strengthened.	1.2.1.1 Periodically review and revise as appropriate cadres for health information management and ICT.	Continuous activity	DDG(P), D/P, D/HI
	1.2.1.2 Improve ICT skills, attitudes and practises of existing health staff, including of those in private healthcare institutions, to be optimally utilized in the health information process.	Continuous activity	DGHS, DDG(P), D/HI
	1.2.1.3 Provide continuous professional development and relevant training for health information management and ICT staff.	Continuous activity	DDG(P), D/HI
	1.2.1.4 Provide training for relevant health staff and medical students on morbidity and mortality record keeping and coding.	Continuous activity	DDG(P), DDG(MS), D/HI, DD/MSU

**Policy Directive 1.3 :** Continuous annual resource allocation and financing shall be ensured for sustainability of Health Information System.

<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>1.3.1 Sustainable Health Information System</b> All modernization efforts of the Health Information System shall focus on sustainability.	1.3.1.1 Identify budget lines for health information system for implementation of strategies described in this strategic plan.	12 months	SH, DGHS
<b>1.3.2 Resource Mobilisation</b> Facilitate resource mobilization for health information and Health Information System management.	1.3.2.1 Develop and implement pragmatically phased information system modernization action plans at national and sub-national levels with parallel infrastructure development and human resource capacity building.	12 months	SH, DGHS, All Provincial SHs, All PDHS
	1.3.2.1 Incorporate technological advancements through systematic decommissioning and cost effective replacements.	Continuous activity	DGHS, All PDHS, WGIPR under NHISC, D/HI

## Policy Area 2: Indicators and Data Elements

**Policy Directive 2.1 :** Health data collection and related information processes shall be aligned with information needs and indicators at all levels.

<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>2.1.1 Indicators</b> Identify a minimum set of indicators at national, sub-national and institutional levels.	2.1.1.1 Identify information needs including monitoring and evaluation (M&E) frameworks at national, sub-national and institutional levels.	6 months for initial evaluation	DDG(P), D/HI
	2.1.1.2 Define a minimum set of indicators to satisfy the identified information needs including minimum sets of data elements required. These are recommended to be on par with internationally accepted indicators whenever applicable.	12 months	DDG(P), D/OD, D/HI
	2.1.1.3 Periodically review the indicators as a part of process improvement.	Continuous activity	DDG(P), D/HI, WGIPR under NHISC

<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>2.1.2 Data Elements, Data Standards and Meta-data</b> Ensure uniformity of data elements and their interpretations.	2.1.2.1 Periodically revise existing data collection forms and data elements of national significance, to maintain relevance, by the relevant national body in consultation with the WGIPR. The revised formats must encourage and support future automation where appropriate.	Continuous activity	All DDGs, D/HI, WGIPR under NHISC
	2.1.2.2 Define and periodically revise data standards, data definitions (develop and maintain a data dictionary) and meta-data <sup>2</sup> at the national level.	6 months for initial activity and Continuous	D/HI, WGIPR under NHISC
<b>2.1.3 Information Processes</b> Align information processes to capture defined data sets required as specified by the users.	2.1.3.1 Improve or establish information processes to align with identified minimum sets of data elements.	18 months	D/HI, WG
	2.1.3.2 Facilitate and coordinate changing requirements of data collection, data collection tools/forms or reporting methods.	Continuous activity	Relevant national programme/unit, WGIPR under NHISC
<b>Policy Directive 2.2 :</b> Health and health related data elements/information from state and non-state sectors shall be integrated into the national health information system.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>2.2.1 State and Non-state Health Data/Information</b> Incorporate health data/information from all relevant state and non-state agencies into the Health Information System.	2.2.1.1 Identify a minimum set of health related data elements that state and non-state agencies (including private sector healthcare) shall send to national HIS.	6 months	D/PHSD, DDG(P), D/HI, WGIPR under NHISC
	2.2.1.2 Establish a mechanism that reports health related data elements from state (other than health) and non-state agencies (including private sector healthcare).	18 months	DGHS, D/HI, D/PHSD, WGIPR under NHISC
<b>2.2.2 Disease Surveillance</b> Strengthen the surveillance systems for regular monitoring of selected diseases.	2.2.2.1 Strengthen surveillance mechanisms for selected diseases.	12 months	Relevant national programme/unit, WGIPR under NHISC
<b>2.2.3 National Census and National Surveys</b> Strengthen the mechanism to extract health data from national census.	2.2.3.1 Identify and extract health related data elements from national census.	12 months	DGHS, DCS, D/HI, WGIPR under NHISC
	2.2.3.2 Identify and incorporate health related data elements to periodic population-based surveys, in collaboration with other relevant ministries.	12 months	DDG(P), D/HI, All Directors of related national programmes

<sup>2</sup> **Metadata** is defined as the data providing information about one or more aspects of the data, such as; means of creation of the data, purpose of the data, time and date of creation, creator or author of the data, location on a computer network where the data were created and standards used.

<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>2.2.4 Health Research</b> Strengthen the mechanism to capture health data from health related research.	2.2.4.1 Facilitate research on relevant health related scopes.	Continuous activity	DGHS, DDG(ET&R)
	2.2.4.2 Establish mechanism to capture information from published research.	12 months	DDG(ET&R)
<b>2.2.5 National Health Accounts and Healthcare Costing</b> Strengthen the mechanism to capture health expenditure and health care costing data.	2.2.5.1 Strengthen the focal point for national health accounts and costing at the central level.	6 months	DGHS, Add. Sec. (MS)
	2.2.5.2 Establish an information process to routinely capture healthcare costing information. This process shall have defined cost centres and identified human resources to capture data.	12 months	DGHS, Add. Sec. (MS)
<b>Policy Area 3: Data and Information Management</b>			
<b>Policy Directive 3.1</b> :Health information governance <sup>3</sup> structure shall be strengthened.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>3.1.1 Health Information Governance</b> Health information governance structure & mechanisms shall be strengthened within the state health sector with identified national and sub-national focal points.	3.1.1.1 Coordinate and facilitate intra-sectoral and inter-sectoral health information related activities.	Continuous activity	NHISC
	3.1.1.2 Empower the Health Information Unit (HIU) of the Ministry of Health, Nutrition and Indigenous Medicine as the national focal point on health information management to provide sector-wide Health Information System leadership in order to facilitate the implementation of this National Policy on Health Information.	12 months	DGHS
	3.1.1.3 Establish health information management units as designated focal points on health information management at the provincial level, RDHS level, relevant national directorates, specialized campaigns and at institutional level in NHSL, Special Hospitals, THs, PGHs, DGHs and BHs.	24 months	Cons. HI or MO/ DS-HI
	3.1.1.4 Upgrade Medical Record Rooms (MRR) in all hospitals.	24 months	DDGHS(P), D/HI

<sup>3</sup>Health information governance is the set of multi-disciplinary structures, policies, procedures, processes and controls implemented to manage information at an enterprise level.

<b>Policy Directive 3.2:</b> Continuity of care for healthcare recipients shall be ensured through a life-long health record.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>3.2.1 Unique Health Identifier</b> Issue a unique health identifier “Personal Health Number (PHN)” to all health clients.	3.2.1.1 Establish a mechanism to issue a unique identifier to all health clients to ensure continuity of care (life-long health record). This identifier shall be given at the first point of contact with healthcare for each health client.	12 months	DDG(P), D/HI, All PDHS, All Heads of Institutions
<b>3.2.2 Use of PHN</b> Encourage the use of PHN in each episode by healthcare recipients.	3.2.2.1 Establish a mechanism to make aware the public on the benefits of producing the Personal Health Number (PHN) in healthcare encounters.	Continuous activity	DGHS, DDG(P)
<b>Policy Directive 3.3:</b> Proper retention, archiving and disposal of health data/information shall be ensured.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame*</i>	<i>Responsibility</i>
<b>3.3.1 Data Storage and Backup</b> Ensure secure and adequate data storage and backup facilities are provided in all health information subsystems and processes.	3.3.1.1 Improve the storage capacities and storage methods of all Medical Record Rooms for paper based records through implementation of quality management techniques <sup>4</sup> .	24 months	DDGHS(P), D/HI
<b>3.3.2 Data/information Archiving and Disposal</b> Ensure data/information archiving and disposal be done in accordance with the relevant prevailing laws and departmental regulations.	3.3.2.1 Comply with all relevant information acts of the Government of Sri Lanka regarding information retention, archiving and disposal.	Continuous activity	DGHS

<sup>4</sup> **Quality management** ensures that an organization, product or service is consistent. It has four main components: quality planning, quality control, quality assurance and quality improvement.



**Policy Directive 3.4:** Sharing of data and information within and outside the health sector shall be promoted.

<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>3.4.1 Data/Information Hub</b> Data redundancy <sup>5</sup> in health information systems shall be minimized.	3.4.1.1 Establish a central level health data repository with identified, reusable health related data/information to minimise data redundancy in data collection and storage.	12 months	DGHS
	3.4.1.2 Establish a mechanism to share reusable health related data/information.	12 months	WGIPR under NHISC, D/HI
<b>3.4.2 Data/Information Sharing</b> Encourage and facilitate intra and inter sectoral data and information sharing.	3.4.2.1 Define a Data/Information Matrix <sup>6</sup> for all data, data sets and information. Define elements of Master Patient Index <sup>7</sup> for individually identifiable health client data.	6 months	WGIPR under NHISC, D/HI
	3.4.2.2 Establish guidelines and regulations for data/information sharing by intra and inter sectoral Use Agreements for Data/Information Sharing (UADS). <sup>8</sup>	18 months	WGIPR under NHISC, D/HI

<sup>5</sup> **Data redundancy** is a condition created within a database or data storage system in which the same piece of data is held in two separate places. Wasteful data redundancy generally occurs when a given piece of data does not have to be repeated, but ends up being duplicated due to inefficiency or process complexity.

<sup>6</sup> **Data/information matrix** shall identify the data/information creators, define and assign data /information stewards, define the level of sensitivity, specify the maximum level of accesses through authorization and approval for sharing and publication, and identify officers for authorization and approval, for all data, data sets and information.

<sup>7</sup> **Master Patient Index (MPI)** is an electronic database that holds information on every patient registered at a healthcare organisation. The MPI stores information like PHN, patient name, date of birth, gender, race, place of residence, GS division, email, phone, registering institution, date and time of record creation & alteration and other content and shall relate to the patient's medical history.

<sup>8</sup> **Use Agreements for Data/Information Sharing (UADS)** shall apply to but not limited to data/information sharing among Directorates, Special Programs, Campaigns and Institutions. Information sharing and reporting mechanisms to central level, PDHS and RDHS shall be established or strengthened as appropriate. Inter sectoral information sharing shall include but not limited to sharing with Registrar General's Department, Department of Census and Statistics, Department of Education and Department of Police. These agreement shall also define sharing of data/information with foreign governments and international agencies.

<b>Policy Directive 3.5:</b> Responsibility for data and information quality at national and sub-national levels shall be assigned to the respective authorities.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>3.5.1 Data/information Quality</b> Ensure timeliness and quality of data and information.	3.5.1.1 Establish in-built mechanisms to ensure data quality at point of capture as far as possible.	24 months	WGIPR under NHISC
	3.5.1.2 Make health administrators of provincial and regional health institutions, special programmes and campaigns, hospitals, public health institutions and private health sector accountable for delivering timely and quality health information.	Continuous activity	SH, DGHS, Provincial SHs
	3.5.1.3 Incorporate routine and thorough quality assurance and quality control procedures (including monitoring and feedback mechanisms) to all information processes.	24 months	DGHS, D/HI
<b>Policy Directive 3.6:</b> Optimal and wide use of health data/information shall be ensured through appropriate data processing, improved efficiency and quality of health information reporting and improved accessibility of health information by all stakeholders.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>3.6.1 Health Information Bulletins and Statistical Reports</b> Ensure that high quality, quarterly and annual Health Information reports are prepared to meet the needs of the intended audience at international, national and sub-national levels.	3.6.1.1 Publish at minimum an annual statistical report at provincial, regional, specialised units, programs & campaigns and line ministry institution levels of Ministry of Health, Nutrition and Indigenous Medicine, no later than end of first quarter of the following year.	Continuous activity	Relevant Directorates
	3.6.1.2 Produce periodic feedback reports and periodic analysis reports to satisfy end user needs through a defined feedback channel.	Continuous activity	DDG(P), D/HI, Relevant Directorates
	3.6.1.3 Institutionalize knowledge management through establishment of a searchable repository of surveys, researches and statistical reports. This shall include consolidation of HIS-relevant data from other health areas and programs.	Continuous activity	DGHS, D/HI, Relevant Directorates
	3.6.1.4 Ensure results of health surveys and research conducted by institutions other than the Ministry of Health, Nutrition and Indigenous Medicine be collected within a reasonable time frame.	Continuous activity	D/HI

<b>3.6.2 Geographical Information System (GIS) Health Layer</b> Ensure integration of geographically referenced data to data from HIS to visualize trends and relationships over space and time.	3.6.2.1 Establish and maintain geographically referenced health data/information at national, sub-national, program and institutional levels, based on health-base maps <sup>9</sup> .	24 months	DGHS, DDG(P), D/ HI, All PDHS, All Heads of Institutions
	3.6.2.2 Device a mechanism to maintain and routinely update the GIS Health Layer <sup>10</sup> .	24 months	D/ HI
<b>3.6.3 Use of Media</b> Optimally utilize the available media for effective health information dissemination to all health clients.	3.6.3.1 Continue current methods and media of health information dissemination which are proven beneficial in the context.	Continuous activity	DGHS
	3.6.3.2 Establish a national health observatory <sup>11</sup> or dashboard for internal and external users to reflect the health status and service delivery.	36 months	D/ HI, DDG(P)
	3.6.3.3 Establish guidelines for government and private media to provide health information to the public as their social responsibility.	18 months	DGHS, D/ HEB
	3.6.3.4 Establish and timely update a citizen centric Health Web Portal.	12 months	DDG(P), D/ HI
<b>3.6.4 Culture for Information</b> Promote evidence based decision making and accountability at all levels through data stewardship and creation of an organization culture for information within the health sector.	3.6.4.1 Establish guidelines to make it mandatory that all planning and training submissions to indicate HIS-based evidence for proposed activities at all levels.	24 months	DGHS
	3.6.4.2 Establish guidelines to incorporate health information to set and monitor performance goals and targets at all levels.	24 months	DGHS

<sup>9</sup> **Health-base maps** of geographically referenced health service data such as hospitals, clinics, facilities etc. shall be maintained centrally by the HIU of the Ministry of Health, Nutrition and Indigenous Medicine.

<sup>10</sup> **GIS Health Layer** is a centrally maintained layer of geographically referenced health/disease data/information of national significance.

<sup>11</sup> **Health observatory** is a gateway to health-related statistics of the country and is analogous to the Global Health Observatory (GHO) of the World Health Organisation. The aim of this portal is to provide easy access to national, sub-national, institutional and programme based data and statistics with a focus on comparability to monitor situations and trends.

<b>Policy Area 4: Data/Information Security, Client Privacy, Confidentiality and Ethics</b>			
<b>Policy Directive 4.1:</b> Ethical and fair information practices shall be incorporated into information management ensuring client privacy and confidentiality.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>4.1.1 Fair information Practices</b> Implement fair information practices in relation to all health data/information as appropriate.	4.1.1.1 Establish guidelines for the collection of individually identifiable data/information to possess qualities of relevance, integrity, a written purpose, the capacity for correction and consent of the individual.	24 months	DGHS, DDG(ET&R), DDG(P)
	4.1.1.2 Establish guidelines and integral mechanisms in health information sub-systems to ensure controlled access to individually identifiable data/information and health data/information. The access control shall be role based and decided on need to know and need to do basis.	24 months	D/HI, DDG(P)
	4.1.1.3 Educate health staff on concepts of client privacy, confidentiality and fair information practices.	Continuous activity	DDG(P)
<b>4.1.2 Anonymity and Pseudo-anonymity</b> Ensure principles of anonymity and pseudo-anonymity are preserved at all times in manual and electronic health information systems.	4.1.2.1 Design and use a unique Personal Health Number (PHN) for health clients identification, preserving healthcare recipient's privacy and confidentiality.	12 months	D/HI, DDG(P)
	4.1.2.2 Educate health staff on concepts of anonymity and pseudo-anonymity.	Continuous activity	DGHS, DDG(P), D/HI

<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>4.1.3 Empower healthcare recipients</b> Empower healthcare recipients to exercise their right to confidentiality.	4.1.3.1 Educate healthcare recipients on concepts of privacy, confidentiality, fair information practices, anonymity and pseudo-anonymity.	Continuous activity	DGHS
<b>Policy Directive 4.2:</b> Data and information security shall be ensured for client data protection.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>4.2.1 Information Security</b> Client data/information shall be handled, stored or destroyed while protecting against unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction.	4.2.1.1 Handle, store and destroy physical records containing health related information according to the relevant acts and regulations of the government to ensure data/information security.	Continuous activity	DGHS
	4.2.1.2 Store physical records in suitable storage areas with restricted access to such premises.	Continuous activity	DGHS
	4.2.1.3 Make aware staff who are handling physical records on concepts of data/information security.	Continuous activity	DGHS
<b>Policy Area 5: eHealth<sup>12</sup> and Innovations</b>			
<b>Policy Directive 5.1:</b> eHealth and innovations governance structure shall be strengthened.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>5.1.1 eHealth and Innovations Governance</b> The eHealth and innovations governance structure and mechanism shall be strengthened.	5.1.1.1 Coordinate and facilitate eHealth and innovations related to health information.	Continuous activity	National eHealth Steering Committee(NeHSC) under NHISC
	5.1.1.2 Formalize and implement the National eHealth Guidelines and Standards (NeGS).	Continuous activity	D/HI
	5.1.1.3 Periodically review and update the NeGS according to the needs and technological advancements.	Continuous activity	D/HI
	5.1.1.4 Formulate guidelines for acquisition, maintenance and decommissioning of software and eHealth systems.	24 months	D/HI, DDG(P)

<sup>12</sup> eHealth is defined by world Health Organization as the transfer of health resources and health care by electronic means.

<b>Policy Directive 5.2:</b> Information and Communication Technology solutions and innovations shall be appropriately adopted to improve the quality, efficiency, patient safety, and cost effectiveness health information systems.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>5.2.1 Applicability of Technology</b> Appropriate adaptation of eHealth and innovations shall be ensured.	5.2.1.1 Establish and function a national level technical committee (Working Group on Innovations and eHealth - WGIE) under the NHISC to evaluate the feasibility, appropriateness, cost-effectiveness and sustainability of proposed innovations, automations and eHealth systems.	6 months	NHISC, D/HI
	5.2.1.2 Develop and implement a pragmatically phased action plan considering available technology, infrastructure, finances and human resource capacity.	12 months	DDGHS(P)
	5.2.1.3 Establish guidelines for piloting of eHealth systems and innovations.	6 months	D/HI
<b>Policy Directive 5.3:</b> Interoperability of the various sub-components of national health information shall be ensured through standardization, to facilitate seamless data exchange.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>5.3.1 Interoperability of Information Sub-systems</b> Facilitate and promote interoperability of information sub-systems.	5.3.1.1 Adopt the architectural model for health information systems specified in the NeGS to ensure interoperability between information sub-systems.	Continuous activity	DGHS
	5.3.1.2 Adopt the latest version of the NeGS recommendations for hardware and software requirements on all information systems automations.	Continuous activity	DGHS
	5.3.1.3 Adopt the latest semantic and syntactic standards set in the latest version of NeGS.	Continuous activity	DGHS
<b>Policy Directive 5.4:</b> Health data/information storage shall be facilitated to minimize health data/information loss and ensure data/information security.			
<i>Strategies</i>	<i>Key Action Areas/Implementation Guidelines</i>	<i>Time Frame<sup>1</sup></i>	<i>Responsibility</i>
<b>5.4.1 Electronic data storage</b> Integrity of the electronic data shall be ensured.	5.4.1.1 Store and backup electronic health related data/information in accordance with the latest version of NeGS.	Continuous activity	DGHS
	5.4.1.2 Ensure the physical and virtual security of all electronic health related data/information of acquired storage facilities in accordance with the guidelines set in latest version of NeGS.	Continuous activity	DGHS



<b>Policy Directive 5.5:</b> eHealth related infrastructure and human resource capacity building shall be facilitated.			
eHealth related infrastructure and human resource capacity building shall be in line with strategies 1.1.2 and 1.2.1			
<b>Policy Directive 5.6:</b> Continuous annual resource allocation and financing shall be ensured for sustainability of eHealth systems.			
eHealth related resource allocation and financing shall be in line with strategies 1.3.1 and 1.3.2			

## The National Policy on Health Information - Key Performance Indicators

### Ministry of Health, Nutrition and Indigenous Medicine

#### Annexure2

#### Key Performance Indicators

Broad Policy Objectives	Key Performance Indicators	Definitions	Frequency	Data source
1. To ensure 50% of all health institutions generate, disseminate and use timely and quality health information to support organisational management and development.	Percentage of government health institutions which have a functional HMIS <sup>1</sup> in position.	Percentage of government health institutions which have a functional HMIS in position out of total government health institutions of Sri Lanka.	Annual	Health facility/ eHealth survey
	Percentage of government health institutions which publish timely and quality <sup>2</sup> annual health bulletins.	Percentage of government health institutions which publish timely and quality annual health bulletins out of total government health institutions of Sri Lanka.	Annual	Annual health bulletins published
	Percentage of registered private health institutions which have a functional HMIS <sup>3</sup> in position.	Percentage of registered private health institutions which have a functional HMIS in position out of total registered private health institutions of Sri Lanka	Annual	Health facility/ eHealth survey

<sup>1</sup> A Health Management Information System (HMIS) is a tool which helps to gather, aggregate, analyze and present health management information. A functional HMIS in a government health institution, shall at minimum, be able to provide the necessary information for performance appraisal at the monthly Health Directors Meeting of the Ministry.

<sup>2</sup> The Annual Health Bulletins shall be published and made available, no later than the end of the following quarter and shall have qualities of accuracy, completeness, relevance, consistency across data sources, reliability, appropriate presentation and accessibility.

<sup>3</sup> A Health Management Information System (HMIS) is a tool which helps to gather, aggregate, analyze and present health management information. A functional HMIS in a private health institution, shall at minimum, be able to provide the necessary information based on criteria at provided by the Directorate of Private Health Sector Development of the Ministry.

Broad Policy Objectives	Key Performance Indicators	Definitions	Frequency	Data source
2. To make available comprehensive systems for personalized and community based health information management for shared and continuous care of care-recipients who receive care at 50% of all Base Hospitals, District General Hospitals, Provincial General Hospitals and Teaching Hospitals.	Percentage of government health institutions which have a functional patient registration system <sup>4</sup> issuing a unique healthcare recipient identifier.	Percentage of government health institutions which have a functional patient registration system issuing a unique healthcare recipient identifier out of total selected health institutions <sup>5</sup> of Sri Lanka.	Annual	Health facility/ eHealth survey
	Percentage of government health institutions which generate electronic patient discharge summaries <sup>6</sup> for inward patents.	Percentage of government health institutions which generate electronic patient discharge summaries for inward patents out of total selected health institutions <sup>5</sup> of Sri Lanka.	Annual	Health facility/ eHealth survey
	Percentage of government health institutions which have a functional electronic OPD system <sup>7</sup> for patent data management.	Percentage of government health institutions which have a functional electronic OPD system for patent data management out of total selected health institutions <sup>5</sup> of Sri Lanka	Annual	Health facility/ eHealth survey

<sup>4</sup> A functional patient registration system shall be able to capture patient demographic data with an assigned Personal Health Number (PHN) for all patients who present to the healthcare institution.

<sup>5</sup> Selected health institutions are all Base Hospitals, District General Hospitals, Provincial General Hospitals and Teaching Hospitals.

<sup>6</sup> A discharge summary is a clinical report prepared by a physician or other health professional at the conclusion of a hospital stay or series of treatments. It outlines the patient's chief complaint, the diagnostic findings, the therapy administered and the patient's response to it, and recommendations on discharge.

<sup>7</sup> A functional electronic OPD system consists of at minimum, registration of patients who present to the OPD, OPD health data management, order investigations, e-prescribing and pharmacy.

Broad Policy Objectives	Key Performance Indicators	Definitions	Frequency	Data source
3. To ensure optimal data/information sharing and access to, health information in relation to all sharable data in health information systems, while ensuring ethical considerations and confidentiality of care recipients.	Percentage of government health institutions which contribute/share data to central level health data repository <sup>8</sup> and/or MPI <sup>9</sup> .	Percentage of government health institutions which contribute/share data to central level health data repository and/or MPI out of total government health institutions of Sri Lanka by 2020.	2020	Health facility/eHealth survey
	Percentage of registered private health institutions which contribute/share data to central level health data repository and/or MPI.	Percentage of registered private health institutions which contribute/share data to central level health data repository and/or MPI out of total registered private health institutions of Sri Lanka by 2020.	2020	Health facility/eHealth survey
	Percentage of government health institutions which conduct awareness programmes on ethical considerations and confidentiality of care recipients.	Percentage of government health institutions which conduct awareness programmes on ethical considerations and confidentiality of care recipients out of total government health institutions of Sri Lanka.	Annual	Health facility/eHealth survey

8 A central level health data repository is a central place in which an aggregation of selected health data is kept and maintained in an organized way, in computer storage.

9 Master Patient Index (MPI) is an electronic data base that holds information on every patient registered at a healthcare organisation. The MPI stores information like PHN, patient name, date of birth, gender, race, place of residence, GS division, email, phone, registering institution, date and time of record creation & alteration and other content and shall relate to the patient's medical history.

Broad Policy Objectives	Key Performance Indicators	Definitions	Frequency	Data source
4. To encourage suitable innovations related to health information management and eHealth in all health information processes; while ensuring interoperability of information systems.	Percentage of government health institutions which adhere to eHealth Standards and Guidelines (NeGS) in eHealth innovations <sup>10</sup> .	Percentage of government health institutions which adhere to eHealth Standards and Guidelines (NeGS) in eHealth innovations out of total government health institutions of Sri Lanka, which are currently designing, piloting or implementing such innovations.	Annual	Health facility/ eHealth survey
	Percentage of government health institutions which share discharge data with eIMMR <sup>11</sup> for aggregate statistics.	Percentage of government health institutions which share discharge data with eIMMR for aggregate statistics out of total government health institutions of Sri Lanka.	Annual	Health facility/ eHealth survey
5. To ensure security and integrity of all health data/ information.	Percentage of government health institutions which have institutional data/ information security strategies <sup>12</sup> in place.	Percentage of government health institutions which have institutional data/information security strategies in place out of total government health institutions of Sri Lanka.	Annual	Health facility/ eHealth survey
	Percentage of registered private health institutions which have institutional data/ information security strategies in place.	Percentage of registered private health institutions which have institutional data/information security strategies in place out of total registered private health institutions of Sri Lanka.	Annual	Health facility/ eHealth survey

<sup>10</sup> Health innovations include introduction of new things or methods utilizing information and communication technologies (ICT) for health. Examples include innovations in treating patients, conducting research, educating the health workforce, tracking diseases and monitoring public health.

<sup>11</sup> IMMR is the electronic indoor morbidity and mortality report.

<sup>12</sup> Institutional data/information security strategies are well defined health institution-wide strategies and responsibilities, for protecting the confidentiality, integrity, and availability of the health information assets that are accessed, managed, and/or controlled by the particular health institution. Information assets addressed shall include data, information systems, computers, network devices, as well as documents and verbally communicated information.

Broad Policy Objectives	Key Performance Indicators	Definitions	Frequency	Data source
6. To ensure sustainability of all health information systems.	Percentage of health districts which have at least one functional computer maintenance unit <sup>13</sup> .	Percentage of health districts which have at least one functional computer maintenance unit out of total number of health districts of Sri Lanka.	Annual	Health facility/ eHealth survey

<sup>13</sup> A functional computer maintenance unit shall be the centre for computer hardware, networking and software maintenance and upgrades. This unit shall ensure smooth functioning of all computer based systems and networks through; 1. hardware repair services which include; routine and scheduled system checks, hardware, network and wireless troubleshooting, full range of on-site and off-site hardware repairs for out-of-warranty hardware & urgent repairs and upgrading as required; 2. software repair services which include; operating system and software installation, virus, spyware & adware scanning, removal and disaster assessment & recovery.

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