

Government of the Republic Of Fiji

MINISTRY *Of* Health
Shaping Fiji's Health

HEALTH INFORMATION POLICY **2011**





Message from the Minister of Health

It gives me great pleasure to provide my thoughts on this subject as it is universally acknowledged that information is critical especially in the health sector.

The Ministry of Health is data rich but information poor. With that in mind we have made a commitment to bring about reforms to the health information sector that will enable the Ministry of Health to be more effective, efficient and responsive in the delivery of its core business activities.

Towards this commitment, the development of this Health Information Policy and the development of a 5-year Health Information Strategic Plan are being undertaken.

This policy sets out the Ministry's aim to integrate and harness the various components of the Health Information System [HIS] for the purpose of improved health planning. This strategic step is a timely one and earmarks 2011 as the platform to raise the level of delivery of healthcare to a new level.

I call upon all stakeholders to take note of this policy and diligently apply it as we continue to shape Fiji's health for the better.

A handwritten signature in black ink, appearing to read 'Neil Sharma'.

Dr Neil Sharma
Minister for Health



Foreword by Permanent Secretary

The development of this Health Information Policy has been long overdue and I am therefore very pleased that the Ministry of Health has been able to achieve this milestone.

It has been recognised that our Health Information Unit had been struggling to perform effectively because of the many inadequacies existing in the system. To address these inadequacies, the Ministry of Health has put in place some measures, the first of which is the Health Information Policy.

This document now provides the necessary framework for the relevant components of the Health Information System [HIS] to work in collaboration as we intend to provide timely and quality information for the purposes of improving health planning and also allowing for better decision making at senior management executive level.

Dr Salanieta Saketa
Permanent Secretary for Health

Acknowledgments

The MoH wishes to acknowledge and extend sincere gratitude to the following institutions and organizations for their cooperation and valuable support towards the writing of this policy document: especially the World Health Organization (WHO) for providing technical expertise towards developing this Health Information (HI) Policy in close coordination with the HI Policy Core Group and other key informants¹, the Global Fund to Fight AIDS, Tuberculosis and Malaria for providing the funding under its Round 8 & 9 consolidated support towards strengthening of Health System.

¹ See Annexure 1 for terms of reference and membership of the HI Policy Core Group and list of key informants

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Abbreviations

AIDS	Acquired Immuno-Deficiency Syndrome
AusAID	Australian Agency for International Development
BDM	Births, Deaths and Marriages
CD	Communicable Diseases
DHS	Demographic Household Survey
DIP	Director Information and Planning
EDP	Electronic Data Processing
EUS	Employment and Unemployment Survey
FBoS	Fiji Bureau of Statistics
FHSIP	Fiji Health Sector Improvement Programme
FNRERC	Fiji National Research and Ethics Review Committee
FCGP	Fiji Council of General Practitioners
FCCD	Fiji Centre for Communicable Diseases
GIS	Geographic Information System
GWE	Government Wage Earner
HIS	Health Information System
HICG	Health Information Core Group
HMN	Health Metrics Network
HR	Human Resources
HRIS	Human Resource Information System
FMIS	Financial Management Information System
HIU	Health Information Unit
ICD	International Classification of Diseases
ICT	Information & Communication Technology
IT	Information Technology
ITC	Information Technology Commission
JICA	Japan International Cooperation Agency
LIS	Laboratory Information System
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MoH	Ministry of Health
NHA	National Health Accounts
NHEC	National Health Executive Committee
NHIC	National Health Information Committee
NHIO	National Health Information Officer
NHRC	National Health Research Committee
NMDS	National Minimum Data Set
NCD	Non Communicable Diseases
NGO	Non Governmental Organization
NTP	National T.B. Program
NIMS	Nutrition Information Management System
PATIS	Patient Information System
PHIS	Public Health Information System
PRISM	Performance of Routine Information System Management
RG	Registrar General
WHO	World Health Organisation
WHO-FIC	WHO Family of International Classifications

1. INTRODUCTION

1.1 Health Information System and Health Context

For the Government of Fiji, timely and reliable health information is necessary for improving the healthcare of individuals and is essential in enabling evidence-based decision making and tracking performance towards attainment of its human development aims ascribed to the Millennium Development Goals (MDGs), as well as the Ministry of Health Strategic Plan (2011-2015) and other related strategic plans. A functional Health Information System (HIS) is critical for effective service delivery and overall governance and stewardship of the health sector. Use of reliable and good quality data from a robust HIS leads to improving health systems performance, quality of health care, achieving universal access, increasing service delivery, reducing burden, increasing efficiency, and improving cost-effectiveness.

Health information in Fiji comprises population growth, births, marriages, mortality and morbidity, disease outbreaks, social determinants of health (such as nutrition, environment, and oral health), access, coverage and quality of services, financing, human resources for health, and other health data. Various tools and data collection methods are available including vital registration and census systems, surveys (household, facility and regional), routine facility-based data collection systems, patient monitoring and medical records, disease surveillance and research. Fiji is pursuing HIS strengthening in order to have a well functioning health system and delivery of better quality health services resulting in better individual health outcomes. The various HIS stakeholders; i.e. patients, communities, service providers, programme managers, policy-makers, non-governmental organisations (NGOs), bi- and multilateral cooperating partners like AusAID, Global Fund, WHO, JICA and other global agencies and organizations, all need information in order to measure overall performance, impact of their own respective programs and activities and the quality of services provided. Health Information therefore serves as the basis for planning, implementation, and monitoring & evaluation of all components required to improve disease-specific and general service delivery systems.

1.2 Rationale and Purpose for Health Information Policy

A primary goal of policies, plans, and strategies is to provide access to equitable services that best meet the population's priority or needs. To achieve this goal, emphasis is placed on the need to strengthen accountability by developing evidence-based annual operational plans consistent with relevant strategic plans. Planning and oversight of implementation are key management processes that must be supported by reliable, timely, and well-defined information, if it is to be effective. It is essential that annual planning processes align with the priorities identified in national policies, plans, and strategies. The processes should also effectively and objectively target health inequalities and be supported by evidence obtained from a comprehensive needs assessment of the local population along with a balanced set of performance indicators that systematically measure service outcomes and impacts. In this way, government of Fiji funding decisions and rational support from donors will promote equity as a whole and create implementation incentives.

To meet the above requirements, health financing and human resources information should be integrated with service activity, clinical and population health data. This composite information, together with information derived from ongoing research and evaluation in the local, regional, and national contexts, should form an evidence base in health service planning and implementation processes.

Good planning and effective implementation is clearly supported by high quality information derived from appropriate needs assessments, including information that reflects the present and projected population structure, local determinants of health, health status, health inequalities, deprivation, remoteness, priority needs, and the quality of service provision.

The Ministry of Health (MoH) has conducted several assessments and situation analyses of the HIS in Fiji, in the last few years, with the help of AusAID funded FHSIP, Health Metrics Network (HMN), JICA, and other partners. In 2008, HMN conducted an in-depth assessment of the HIS in Fiji² and together with the HIS Situation Analysis³ done in the beginning of 2011, the findings and recommendations of the assessments point to the need for:

- Better integration and harmonization of the various HIS components,
- Enhanced capacity building and investments to improve the depth and quality of collected information as well as to strengthen institutional capacity for information analysis and usage, and
- Policy and standard operational procedure guidance to support the development and effective functioning of HIS.

The HIS of Fiji is a multi-sectoral national asset of Fiji, which relates to information from the various MoH routine data collections and vertical programmes and units as well as that from other institutions such as the Fiji Bureau of Statistics (FBoS) and the Registrar General's (RG) Office. The national HIS should also be aligned with the forthcoming eGov platform, consistent with the ICT sector-wide strategic plan, and coordinated with the Ministries of Finance and Planning, the Public Service Commission, and other relevant agencies.

The development of this Health Information (HI) Policy is therefore in response to the findings and recommendations of various studies and consultative discussions⁴ held over several years, but in particular the HMN report of 2009. The HIS Policy detailed in this document outlines the vision, high-level objectives and policy measures that will be used to guide the health sector in addressing policy-relevant health information requirements and activities of the Republic of Fiji.

1.3 Methodology and Process Followed

The following steps were embarked upon in developing this policy; conducting a situation analysis based on the Performance of Routine Information System Management (PRISM) tool, updating recommendations of the comprehensive HMN review, review of literature and documents; solicitation of ideas and input from a technical group comprising various stakeholders; development of framework and submission to HI Policy Core Group, conducting a broad-based stakeholder workshop for input and agreement; drafting a policy document in light of stakeholders' inputs; conducting a stakeholders' debriefing meeting; development of the final version of the policy; submission for approval of the NHIC and NHEC and subsequent Cabinet approval. This elaborate process enabled broad-based and intensive interaction, participation and debate that helped in building consensus on the policy measures. It provided a platform for staff and affiliates of MoH, bi- and multi-lateral cooperating partners, NGOs, other line ministries and government agencies, to shape the content and direction of this policy.

² HMN Assessment Report 2009

³ The HIS in Annexure 2 of this document (Situation Analysis)

⁴ Refer to Section 5: References

2. HIS VISION AND POLICY OBJECTIVES

2.1 Vision

A reliable HIS providing timely and high quality information to policy makers, planners, programme managers, service providers and the general public

2.2 Mission

To provide an evidence-based high quality HIS to ensure that the health status of all citizens of Fiji is improved, that the coverage and quality of health services increased, health services are effective and efficient, management and policy decisions are rational, quality information is available and accessible, and that information is efficiently collected, stored, and managed and correctly analyzed, interpreted and used.

2.3 Policy Objectives

- To strengthen the HIS through improved quality and management of information
- To instil responsibility for data quality at local, divisional and national levels
- To ensure data quality through use and application of tools and procedures for data collection and data management that are consistent with international practice
- To promote, train, and supervise wide use of health information and evidence-based decision making at all levels through data stewardship (e.g., data sharing, access, and use agreements; data ownership clarified)
- To foster interoperability of the various components of health information
- To facilitate individual and institutional capacity building with standard operating procedures and resource mobilization for health information and HIS management
- To ensure client data protection and confidentiality is strictly maintained
- To improve health information reporting and feedback mechanisms in Fiji

2.4 Guiding Policy Principles

- Country ownership and stakeholder involvement
- Linking of health, civil registration and vital statistics
- A systems approach to health information
- Adherence to international standards of health information as well as national values of universal coverage, equity, quality and social justice
- Health consumer/client focus
- Collaboration, partnerships, user involvement

- Judicious & efficient use of resources
- Better health system performance
- Transparency
- Public accountability
- Safeguarding privacy and ensuring confidentiality
- Keeping technology simple and relevant
- Shared learning
- Inclusiveness of all sections of society

3. POLICY MEASURES

3.1 Resources

In order to create an environment for addressing the resource-related challenges confronting HIS in the country, the MoH shall;

1. Restructure and maintain a functional Health Information Unit (HIU) at headquarters and in divisional settings, to provide sector-wide HIS leadership and coordination.
2. Broaden the mandate of the HIU to become a department which integrates all information in the MoH and is responsible for routine health information, research, sentinel surveillance, monitoring & evaluation and timely reporting.
3. Through active recruitment and appropriate incentives for retention, ensure the availability of adequately qualified HIS staff, and tools that support their function.
4. Ensure access to training and development courses in health information management, statistics, and informatics for all relevant health care professionals.
5. Ensure adequate information technology resources and effective policy support is available.

3.2 Data Sources

In order to address the policy relevant aspects related to HIS data sources, the MoH shall;

1. Develop and populate a minimum set of Health Core Indicators,⁵ together with metadata, for tracking health sector performance and review them every 5 years. This will cover all levels of health care, service delivery and support systems in both private and public sectors, and in addition to the MoH cover the FBoS and RG, to serve as the basis of Fiji's health information and statistics.
2. Ensure that health data collected be aligned to indicators and that all data is able to be disaggregated by age, gender, ethnicity (where available), urban/rural and by divisions. The ethnicity factor is important to look at disease burden amongst different sectors/ethnicities in communities, especially outbreaks and attitudes, knowledge, behaviour and practices that are prevalent among certain societies due to cultural components. Therefore although this data will be collected, it will be coded and used only for health planning and management and other specified purposes⁶ and not to promote discrimination.
3. Integrate the HIS data structure and work flows by mapping data and metadata requirements; data stewardship roles and responsibilities at different levels; standard operating procedures regarding what and how data is to be collected, stored and managed; quality assurance and quality controls including data validation and verification; and reporting frequencies for diverse indicators and the mechanisms for providing feedback and follow up.

⁵ Health Core Indicators –as defined in the MoH Strategic Plan 2011 - 2015

⁶ The I-Taukei Ministry to be consulted for legal advice on ensuring that this information is not used to discriminate between ethnic groups

4. Establish and maintain health information governance for HIS-related inter-ministerial and inter-agency collaboration, harmonisation, oversight, change and risk management, and joint implementation efforts and information exchange to improve information quality, timeliness and availability. Such collaboration involves the FBoS (for census and surveys), the R G's office (for Vital Registration services), and the Ministries of Information, Finance, Planning and other relevant government ministries.
5. Conduct periodic population-based surveys, in collaboration with other relevant ministries. These include (but are not limited to) Demographic Household Surveys (DHS) and other surveys such as National Health Accounts (NHA), Non-Communicable and Communicable Disease (NCD and CD) surveys conducted at specified time intervals (for example, 2-4 years) and over a longer time period (for example, 20 years) to enable timely resource mobilisation, capacity building, effective execution of trend comparisons and analysis. These surveys must address the core indicators for health that are being monitored.
6. Incorporate private sector and NGO health data into the appropriate routine systems of the HIS and obligate the private/NGO institutions to timely and complete reporting, in accordance with the Public Health Act and other legal requirements.
7. Establish a public-private partnership technical working group to foster the above.
8. Strengthen the active and passive surveillance systems for regular monitoring of notifiable diseases. Use of information from routine data collections will be fully leveraged in these efforts.
9. Mandate divisional health administrators from hospitals and public health institutions to be accountable for delivering timely and quality health information complete with quality assurance and quality control procedures.
10. Ensure that health facility listings with service availability mappings for diverse diseases are combined into a single register or inventory, using standardised facility codes and accurate GIS coordinates.
11. Maintain ICD morbidity and mortality coding in compliance with the WHO Family of International Classifications (WHO-FIC) standards.
12. Strengthen national and facility level capacities to conduct, analyse and coordinate research; adopt and/or adapt existing ethical and scientific international standards to inform and direct researchers with regard to clinical trials and adherence to ethical and scientific standards.
13. Require all health-related research to be approved by the Fiji National Research and Ethics Review Committee (FNRERC) for adherence to ethical standards, and the National Health Research Committee (NHRC) to advise on the technical soundness of health research conducted in the country. This will enable better coordination and management of health research, among institutions and universities conducting research (including university ethics committees), the Ministry of Education Research Department and other institutions that have a health research agenda. The FNRERC and NHRC should meet regularly as stipulated for this purpose.
14. Require all research related to health outputs to be disseminated to key stakeholders and the MoH in the form of a complete written report. This will increase linkages between research, policy and programme development and implementation.

3.3 Data Management

In order to appropriately address data management issues, the MoH shall;

1. Adopt a national Unique Identifier Code for all individuals receiving health care services⁷.
2. Develop and maintain a data dictionary, metadata and national minimum data sets to support collection of all health data and implement a health indicator management system⁸. These documents should be provided to all users and collectors of health information in the Ministry of Health.
3. Based on the system concepts and data flow, develop a data procedures document for the routine HIS. The document will detail responsibilities for each step of the data collection and reporting process, outline data validation checks and procedures, and set out data collection and reporting deadlines, as well as non-adherence enforcement mechanisms and penalties.
4. Ensure adequate staff training in data management procedures and practices, strengthened by routine and thorough data quality checks.
5. Ensure all HIS sub-systems (including, but not limited to, PATIS, PHIS, HRIS, FMIS, LIS, Drug Inventory and NIMS) are standards-based to promote interoperability and can support a national health observatory or dashboard.
6. Ensure all HIS sub systems, including data collection tools and applications, meet local user requirements as well as those at divisional and national levels.
7. Ensure that any changes to requirements for data collection, tools or reporting methods are vetted by National Health Information Committee (NHIC) and the National Health Executive Committee (NHEC) before implementation.

⁷ This refers to the forthcoming National Identification Number

⁸ For example, the WHO Indicator and Measurement Registry (IMR) <http://apps.who.int/gho/indicatorregistry>

3.4 Information Products

In order to address the problems identified in relation with information products, the MoH shall;

1. Require that all health facilities report in a timely manner and in a uniform format, according to a specified timeframe.
2. Given required resources, submit completed reports of major surveys at least 6-12 months after completion of data collection.
3. Produce monthly feedback reports and quarterly analysis reports (disaggregated by age, gender, ethnicity, urban/rural and by divisions) no later than one month after the end of the reporting period, and publish the annual report for each year no later than 31st March of the following year.
4. Require all non-MoH institutions and organisations conducting health surveys and research to submit survey reports to MoH within 6-12 months of collection of data.
5. Comply with all relevant information acts of the Government of Fiji regarding retention, archiving and disposal.

3.5 Information Dissemination and Use

In order to improve information dissemination and use, the MoH shall;

1. Use existing Balanced Scorecards in all four divisions, as a quarterly performance review tool.
2. Require all planning submissions to indicate HIS-based evidence for proposed activities.
3. Incorporate the use of health information to set and monitor goals and targets that will inform needs for the training of field and MoH staff.
4. Institutionalise knowledge management through establishment of a searchable repository of all survey, research and statistical reports and consolidate HIS-relevant data from health areas and programmes.
5. Vet the data used and the information developed during survey, research and other reports and require approval from the NHRC before publication or dissemination. Only data used for advancement of knowledge and making recommendations for policy and service provision will be approved.
6. Ensure that confidentiality, security and privacy of data is maintained.
7. Require that all research proposals and submissions to the NHRC and the FNRERC include monitoring and evaluation and information dissemination components. Information dissemination to mandatorily include MoH.
8. Require that, for all health research approved by the FNRERC and NHRC, reports be submitted to the NHRC 6-12 months after completion of the research and presented to the stakeholders, including the MoH.
9. Ensure that quarterly and annual HIS reports are written to meet the needs of the intended audience.
10. Ensure that all requests for data follow protocol⁹ and seek approval before release of data.
11. Comply with the MoH Media Policy.
12. Ensure that all health information users, both internal MoH and external, submit their completed reports to the MoH offices within 6 -12 months of completion of project or post utilization of this health information.

⁹ See Annexure 5: Schematic for Proposed Information Dissemination and Release Protocol

3.6 Individual Client Confidentiality

In order to ensure protection of individual privacy, security and confidentiality, MoH affirms that;

1. All information collected is covered by the Official Secrets Act and other relevant Acts of the Government of Fiji regarding client confidentiality.
2. Confidentiality does not apply to aggregated statistics in the public domain. It does, however apply to raw data that alone or in combination can be used to identify an individual. Access to raw data for purposes other than client care has to be requested through application to the NHRC and the FNRERC, stating the purpose, methodology and other requirements in line with stipulations governing research studies.

4. POLICY IMPLEMENTATION STRATEGIES

4.1 Strategies for Operationalisation of the Policy

In order to operationalise the key aspects of this policy, the MoH shall;

1. Develop guidelines to implement this policy in accordance with the forthcoming 2011-2015 HIS Strategic Plan which shall be harmonised with the 2011-2015 MoH Strategic Plan and any subsequent strategic plans.
2. Ensure that Annual Corporate Plans reflect HI Policy implementation.
3. Align this policy with the policies and strategic plans of other relevant ministries and institutions (including, but not limited to, ITC, FBoS, RG, Finance, Planning).
4. Develop and maintain indicators to monitor the progress of HI Policy implementation and evaluate them on an annual basis.

4.2 Policy Roles and Responsibilities

1. The MoH, through the Director Information and Planning, will provide the policy and technical oversight for implementation of this policy, including developing annual budget submissions and operational plans.
2. The FBoS will provide the leadership for the health-related aspects of the census and other surveys within its mandate.
3. The RG, through the Births, Marriages and Births Registry, will provide the policy and technical leadership for vital registration services.
4. The Divisional Health Information Units will serve as intermediaries for data collection, supervision and quality assurance, capacity building, analysis and dissemination of data and information for their respective areas.
5. Health care workers at health facilities will continue to be the frontline for data capture, quality control and data use.
6. Community health workers will be incorporated in data collection, use and reporting activities for community impact.
7. Civil society and private sector health care providers shall also be committed to data collection and submission.

4.3 Financing the Policy

To ensure this policy is implemented, the MoH shall;

1. Ensure that core and recurrent financial resources are available for the sustainable implementation of the HI Policy.
2. Ensure that the policy is supported by sufficient budgetary allocations¹⁰. Although resources from international bilateral and multilateral development partners may be a component of the financing arrangements, the MoH must work towards being independent of such resources to ensure sustainability.

4.4 Revision of Policy

1. The HI Policy will be regularly reviewed and updated as required, to reflect global best practices, in particular evidence from Fiji.
2. This review will be undertaken every five years, in conjunction with the review of the National Health Strategic Plan.
3. The Director Information and Planning will be responsible for the review and modifications if any.

4.5 Non Adherence to Policy

1. Any proven breaches of the HI Policy will be dealt with under the provision of the Public Service Commission (PSC) Code of Conduct.
2. For any misuse of health information by those outside the ambit of the PSC Code of Conduct, the breach will be referred to the Fiji Attorney General's office. Penalties and punishment will be commensurate with the nature and extent of both the breach and the harm it caused.

¹⁰ Approximately 7-10% of annual health budget would ensure adequate resources go to support the information quality, use, and culture of improved evidence-based decision-making at all levels of health system.

5. REFERENCES

The following documents were consulted while writing the HIS Policy for Fiji:

1. Situation Analysis Report, WHO March 2011
2. Fiji Health Information System : Review and Assessment , WHO-HMN /MoH October 2009
3. National Management Information Systems Policy [MoHSW, Republic of Liberia June 2009]
4. Health Information Systems (WHO, June 2008)
5. Strengthening Health Systems to Improve Health Outcomes (WHO, 2007)
6. Assessing the National Health Information System - An Assessment Tool VERSION 4.00 (WHO-HMN)
7. Fiji Health Information System: Review and Assessment (WHO-HMN assessment October 2009)
8. Divisional Hospital Medical Records Department Policy and Procedure Manual ver. 1.2 [Fiji Ministry of Health, August 2001]
9. PRISM: Performance of Routine Information System Management, version 3.1 (Measure Evaluation Project, USAID, March 2010)
10. The Ministry of Health Strategic Plan 2011-2015 (MoH Fiji, February 2010)
11. Fiji Health Information System : Review and assessment (MoH, October 2009)
12. Ministry of Health, Women , Social Welfare and Poverty Alleviation Annual Report (2008)
13. Ministry of Health Annual Report (2009)
14. Strategic Health Indicators (MoH Fiji, September 2005)
15. Framework and standards for Health Information Systems (WHO, 2008)
16. Draft Belize HIS Policy [WHO HMN, 2010]
17. Draft Benin HIS Policy [WHO HMN, 2010]
18. Draft Swaziland HIS Policy[WHO HMN, 2010]
19. Draft Paraguay HIS Policy [WHO HMN, 2010]
20. Draft Ghana HIS Policy[WHO HMN 2010]
21. Draft Lesotho HIS Policy [WHO HMN 2010]
22. Fiji Health Accounts 2007-2008

Annexure 1: MEMBERS of the HEALTH INFORMATION POLICY CORE GROUP

From: The Permanent Secretary for Health
2011

Date: February 18,

To: As per Distribution

Subject : HEALTH INFORMATION POLICY CORE GROUP.

The Health Information Unit under the Global Fund Grant (Rounds 8 & 9) is supposed to deliver the Fiji Health Information Policy and Strategic Plan. A Situation Analysis for health information in Fiji is currently being done by the Health Information Technical Advisor (WHO Sponsored) and the report will be the basis of the health Information policy.

A workshop for the Situational Analysis is scheduled for the 22nd February 2011 and this will be the foundation of the Health Information Policy.

To ensure that the Health Information Policy captures Health Information in Fiji a core group needs to be formed to ensure that the policy is inclusive of all key stake holders (within MoH and its partners).

This core group is expected to review the Situation Analysis Report and assist the Technical Advisor in the formulation of the Health information Policy.

The Core Group is

1. Deputy Secretary Public Health: Dr Josefa Koroivueta
2. Director Health Information & Planning : Mr. Sisalo Otealagi
3. Divisional Medical Officer Eastern: Dr Dave Whippy
4. Communicable Disease National Advisor: Dr Mike Kama
5. Family Health National advisor: Dr Frances Bingwor
6. Epidemiologist : Dr Sheetalpreet Singh
7. Sub Divisional Medical Officer Rewa: Dr Susana Nakalevu
8. Head of Statistic Unit: Ruci Vuadreu
9. IST National Coordinator : Mrs. Talatoka Tamani
10. Bureau of Statistics : Mrs. Lice Radrodro
11. Dean College of Medicine, Nursing and Health Science : Professor Ian Rouse
12. WHO Technical Advisor Health Information: Ms Bindu Varghese
13. National Health Information Officer: Mrs. Milika Narogo

The Key Informants List:

#	Name	Title
1	Lolohea Baro	Registrar General, Ministry of Justice
2	John R. Brown	Supt. Radiology Western Division
3	Margaret Cornelius	FHSIP Project
4	Ticia Gerber	WHO Consultant, HI policy
5	Samuela Korovou	DMO North
6	Simon S. Kumar	PATIS System Officer
7	Joan Y S. Lal	NA, Oral Health
8	Mark Landry	WHO Technical Officer, Western Pacific Regional Office
9	Joana Lesoma	Assistant Statistician
10	Shivnay Naidu	A/Director Information and Planning
11	Susana M. Naikalevu	SDMO Rewa
12	Devina Nand	Special Advisor to the Ministry of Health on Research, NCD
13	Ezekiel Nukuro	WHO Technical Officer, South Pacific Office
14	Tevita S. Qoriniasi	(Acting) DMO East
15	Merewalesi Raikoti	Fiji Bureau of Statistics
16	Prem Singh	Mataika House – Fiji Communicable Diseases Centre
17	Litia R. Tuinakelo	NA, NIMS
18	Isimeli N. Tukana	NA, NCD
19	Sue Walker	WHO Consultant, Queensland University of Technology
20	Silina R. Waqa	Director Nursing Services

Annexure 2: SITUATION ANALYSIS

Fiji's Health Information (HI) Policy has been informed by a 2009 Health Metrics Network assessment of the country's HIS strengths, weaknesses, opportunities and threats as well as an HIS situation analysis performed in January/February 2011. Policy relevant situation analysis results for Fiji are detailed below.

1. HIS Resources

- 1.1 A lack of policy and planning frameworks to date has been identified as a major weakness inhibiting Fiji's HIS development.
- 1.2 The country also has no current legislation to provide for a health information framework and address issues such as vital registration, notifiable diseases, confidentiality, and the fundamental principles of official statistics, within the HIS context.
- 1.3 Fiji's institutional arrangements were found to be fragmented and therefore a challenge to comprehensively addressing HIS requirements and monitoring the performance of sub-systems. Therefore, a representative national committee in charge of coordination and collaboration of the HIS activities, the National Health Information Committee (NHIC), was formed in 2005 and revived in 2010. NHIC continues strength-building efforts to carry out its mission.
- 1.4 Moving towards a broader HIS mandate, the composition and mandate of the MoH unit responsible for HIS (the Health Statistics Unit) will require expansion and inclusion of specific set of health information skills and adequate funding.
- 1.5 With regard to infrastructure, both the HMN assessment in 2009¹¹ and the HI Situation Analysis of 2011¹² found it to be reasonably adequate. Computers are available at the respective national and regional offices in Fiji. However, telephones, radio telephones in remote island locations and other basic communication technologies are not available to users at all levels. IT maintenance and support requires strengthening.

2. HIS Indicators

- 2.1 Fiji does not currently possess a data collection tool which identifies and compiles core development indicators across sectors. These include the health-related MDG indicators. Data reporting must be more consistent and complete.
- 2.2 The health related indicators are not clearly defined in the PHIS data collecting tool and an effective mechanism for enforcement is lacking.
 - 2.3 For purposes of health sector planning, programme management and performance tracking however, the indicators in the PHIS are however, regarded as insufficient.

¹¹ Fiji Health Information System: Review and Assessment (WHO HMN, October 2009)

¹² Health Information Situation Analysis, (WHO March 2011)

3. Data Sources

3.1 Census

Fiji's 2007 census currently provides the only reliable and robust estimates on mortality. Although the FBoS produces annual population projections by age and sex for sub-national areas, they are not disseminated or published, and are therefore not readily available for HIS purposes. Similarly, the census projections are rarely used for the estimation of coverage and for planning of health services delivery.

3.2 Vital statistics

The Fiji Bureau of Statistics Office (FBoS) has the overall responsibility for census taking in Fiji as it is responsible for conducting the decennial population census (most recent in 2007) and is also responsible for the production of the Vital Statistics Report, the last of which is the 14th report produced in 2003. In 1996, all Births, Deaths and Marriages records from 1900 were computerized. Information for the Vital Statistics report was then directly downloaded from the BDM System which is currently maintained by the Information Technology Centre (ITC). There are four hospitals directly linked to the BDM online system. They are; CWM, Lautoka, Nadi and Levuka. However, paper-based birth notifications continue to come from hospitals not linked to the BDM system

3.3 Population-based surveys

No Demographic Survey or Demographic and Health Survey have ever been carried out in Fiji. A number of ad hoc surveys and censuses have been conducted by the Bureau. The major census includes Population and Housing. FBoS also conducts various types of surveys which are conducted more regularly depending on resource availability. Some of the latest surveys include the 2002-03 HIES report and the Employment and Unemployment Survey [EUS] 2004-2005.

3.4 Health and disease records (including disease surveillance systems)

Cases can effectively be reported using existing formats for all key epidemic-prone diseases and diseases targeted for eradication in Fiji.

The country has adequate capacity to diagnose and record cases of notifiable diseases, and to analyse this data for outbreak responses. Plans also exist for extending the coverage of disease surveillance to all other conditions of public health importance. However, a small number of public health risks are properly mapped. Similarly, surveillance data is not being disseminated and fed back regularly through published weekly, monthly or quarterly bulletins. Instead, reporting is done on ad hoc basis and often with overlaps due to separate notification reports required by different public health programmes.

3.5 Research

The MoH acknowledges that health research is critical in providing evidence based health interventions. However, research has not yet been effectively utilized in policy development, planning and programme implementation. Currently this unit does not have any manpower in the MoH. Research is crucial in the enhancement and creation of new knowledge and development of proper tools for decision making. All health related research proposals are submitted via the Fiji National Research Ethics Review Committee (FNRERC) and National Health Research Committee (NHRC) which meet every month. 2007 saw the launching of a Health Research (HR) Guide for Fiji which will serve as a tool for HR in their pursuit for quality research and evidence based policy decisions. A review of research proposals for the past 3 years (2005 – 2007) noted that very little research work was done on HIS as most research proposals have been directed towards clinical issues. Overall, there are inadequate institutional arrangements for coordination and management of health research in the country.

3.6 Health service records

The existing health services based information system is able to bring together data from all public and private facilities. However, private institutions do not feel obliged to forward data to the MoH. Supervision and feedback is weak and there is no mechanism that would enable effective verification, completeness and consistency of data submitted by facilities. Completeness and reliability remain challenges to a quality health record data collection.

3.7 Administrative records

MoH currently has no single database of health facilities with a coding system that would permit integrated data management. Further, managers in the regions do not routinely evaluate access to services by linking information about the location of health facilities to population distribution patterns. A limitation in this regard is lack of reliable resources for maintaining and updating this database once it has been created.

4. Human resources

Fiji requires suitably qualified HIS professionals. Fiji's chief Epidemiologist post has been left vacant since 2005 and the position was only filled again in February 2009. In the 2007 MoH structure when the assessment was carried out the following HIU positions existed; 1 Manager IT, 1 Senior System Analyst, 1 Senior Statistician, 1 Statistician, 2 Assistant Statistician, 7 Clerical Officers and 1 Government Wage Earner (GWE). The Clerical Officers' posts were later upgraded to Statistical Officers and at present HIU has an IT Manager. The Manager HI position has been filled since August 2010. Meanwhile, 3 Divisional HI officers and 2 statistician positions have been created and filled by the Global Fund. These positions supported by the Global Fund have a limited life, and need to be institutionalised.

5. Data Management

Data management is regarded as the weakest link in Fiji's HIS. There is an absence of written procedures to guide data management – data collection, storage, validation, quality control, analysis and presentation. Similarly, the MoH does not have a 'data warehouse' for consolidation of (routine and survey-based) data collected by its various units and programmes; and no 'data dictionary' to provide clear definitions for data items and consistent construction of indicators. Both the HMN assessment and the situation analysis done in early 2011 confirmed this in their findings.

6. Information Products

Producing useful health information products requires accurate and reliable data on a selected set of indicators. The timeliness (period between data collection and dissemination of results); periodicity (how frequently data is collected); consistency/completeness (whether data points are consistent over time), representativeness/appropriateness (whether the source data is representative of the population being measured), disaggregation (whether the indicator is available by major stratifications), and estimation method (whether sound and transparent statistical procedures were followed) all play a crucial role in ensuring quality and credibility of information products.

The 2009 HIS assessment showed that periodicity and consistency were poor for most indicators. The other aspects were adequate – except for some serious deficiencies in the statistical procedures for health system indicators. This was confirmed by the situation analysis conducted in February 2011 also.

Marking

7. Information Dissemination and Use

The 2009 Fiji HIS assessment found the analysis of data and use of information to be 'present but not adequate' at all levels. Demand for quality and timely health information in-country is generally weak. Information is usually demanded on an ad-hoc basis, and even where requests are made, the knowledge and skills required to properly interpret the provided information often inhibit effective use.

Ideally Fiji's HIS should provide evidence for informed and effective health system decisions.

Policy- and decision-makers in Fiji do occasionally use health information to evaluate performance and set health policies, but usually with clear reservations about the quality and validity of data.

Further, staff in the divisional offices and health facilities occasionally use the information in the planning process but do not often analyse their respective health statistics comparative to the national benchmarks. It is acknowledged that, if not disseminated and/or shared, health research outputs will not increase the existing stock of knowledge or contribute towards improved service delivery.

However, a good proportion of the health research work done in Fiji remains unpublished and inadequately disseminated. Consequently, key stakeholders are not adequately informed about research processes and outcomes. Poor dissemination and packaging of research outcomes also results in poor linkages between research, policy and programme development.

The MoH strives to ensure that patient confidentiality is maintained. Confidentiality is fundamental to providing the highest standard of patient care. Patients who understand that their information will remain confidential are more likely to provide the provider with complete and accurate health information, which in turn, leads to better treatment advice from the provider. The disclosure of personal health information and identifying information (i.e. information that identifies an individual or for which it is reasonably foreseeable in the circumstances that it could be utilized, either alone or with other information, to identify an individual) therefore requires strict limitations.

Annexure 3: Initial Policy Guidelines Recommendations

In order to operationalise Fiji's HI Policy, the Government shall develop Guidelines which help implement the Policy generally and in special areas such as Medical Records Management¹³. Key recommended guideline elements and principles are detailed below.

1. Resources

In order to create an environment for addressing the resource-related challenges confronting HIS in the country, the MoH shall:

1. Restructure and maintain a functional Health Information Unit (HIU) at headquarters and in divisional settings, to provide sector-wide HIS leadership and coordination.
 - i. Review and increase capacity of HIU from national down to sub-divisional level and make its work an integral part of the operations of the MoH;
 - ii. Institutionalise HIO positions at national and divisional levels. Review capacities of HIU and ensure recruitment of staff with educational backgrounds in epidemiology, biostatistics or health information management;
 - iii. Incorporate a quality assurance process into the work of the HIU, with regular feedback and reporting to divisional and lower levels for both routine and surveillance data;
 - iv. Incorporate a research element into the work of the HIU and develop procedures to support access to MoH data by researchers;
 - v. Ensure close collaboration between Mataika house, NTP, private sector data resources and other such data sources¹⁴ with the HIU; and
 - vi. Develop and implement regular publication processes, in addition to the production of the MoH annual report
2. Broaden the mandate of the HIU to become a department which integrates all information in the MoH and is responsible for routine health information, research, sentinel surveillance, monitoring & evaluation and timely reporting;
3. Through active recruitment and appropriate incentives for retention, ensure the availability of adequately qualified HIS staff, and tools that function;
 - i. Ensure HIS staff recruited and relevant experts offering support have public health, statistical, or health information backgrounds; and
 - ii. Ensure HIU has adequate IT support to maintain functioning of tools used at all levels.
4. Ensure access to training and development courses in health information management, statistics, and informatics for all relevant health care professionals.

¹³ Divisional Hospital Medical Records Department Policy and Procedure Manual ver. 1.2 [Fiji Ministry of Health, August 2001]

¹⁴ To be specified in the Section 2. Data Sources

- i. NHIO to develop an orientation package for all staff recruited to MoH to include information about the importance of data collection, staff responsibilities, how data can be accessed and used for management and decision making;
- ii. Stipulate accountability for data collection and data quality in the Position Descriptions for Staff in the MoH, hospitals and the public health system;
- iii. Ensure that all HI Staff are trained in data collection and reporting processes and quality assurance techniques;
- iv. Ensure that Managers are trained in access to, and use of, HI as a decision making tool and in methods for analysis as necessary for their roles; and
- v. Keep HI staff motivated by providing clear and progressive career path with linked incentives.

5. Ensure adequate information technology resources and effective policy support is available.

- i. Conduct an annual training needs assessment for all relevant MoH staff through questionnaire designed for this purpose;
- ii. Design an annual training plan incorporating required training in HI;
- iii. Ensure the annual training plan is in place and strictly followed ;
- iv. Provide on the job training and regular refresher courses for HIU staff within the MOH;
- v. Coordinate with medical training institutions and POHLN to include modules on HIS designed to provide instruction on responsibilities for data collection and reporting, quality assurance, analysis and access to, and use of, MoH information; and
- vi. Maintain a record of all staff accessing training and use this data to monitor and report on improvements in HI.

2. Data Sources

In order to address the policy relevant aspects related to HI data sources, the MoH shall;

1. Develop and populate a minimum set of Health Core Indicators,¹⁵ together with metadata, for tracking health sector performance and review them every 5 years. This will cover all levels of health care, service delivery and support systems in both private and public sectors and in addition to the MoH cover the FBoS and RG, to serve as the basis of Fiji's health information and statistics;
 - i. Identify and set up a core group and ensure that they have the skills necessary to review and develop the core health indicators;¹⁶
 - ii. Require the core group to be responsible for identifying the data elements and data sources for the indicators and developing procedures for reporting of the necessary elements to construct the indicators;
 - iii. Mandate the core group to annually refine and update the list of core indicators to ensure they are relevant to decision making within Fiji and reporting globally and/or on MDGs; and
 - iv. Publish the core indicator reports on a regular basis, at least annually as part of the MoH annual report.
2. Ensure that health data collected be aligned to indicators and that all data is able to be disaggregated by age, gender, ethnicity (where available), urban/rural and by divisions.
3. Integrate and standardise HI data flows

In order to address the policy relevant aspects related to HI data sources, the MoH shall:

- i. Utilise the core group above to create national minimum data sets (NMDS) which set out the requirements for data capture, reporting and stewardship for each data collection managed by the HIU. Each NMDS will include the data elements, definitions, data sources, coding formats, reporting requirements and data validation processes. The NHIO will provide a secretariat function to the core group;
- ii. Utilise the forthcoming National Identification Number as the unique identifier for patients and clients and ensure that it is recorded as part of each NMDS;
- iii. Review and where necessary, revise or develop standardised electronic and manual reporting formats, structures and processes for each NMDS, seeking to avoid duplication and reduce reporting burden. NHIO and IT manager to undertake this work and will submit the documentation regarding the formats for vetting by the NHIC. All staff responsible for provision and reporting of data to be provided with documentation and relevant training prior to deployment;
- iv. Utilise electronic means of recording and reporting where it is available; however ensure that a back up copy (on paper or other means such as CD ROM) is created. Where there is no electronic means of recording data, ensure the manual capture and reporting formats used are standardised according to the NMDS to facilitate integration of data in the HIU;
- v. Utilise the manual capture and reporting processes to capture essential data where there is failure of the electronic system. Ensure that duty statements for HI staff specify the responsibility for updating the electronic system with the manually-collected data as soon as the system is in working capacity;

¹⁵ Health Core Indicators –as defined in the MoH Strategic Plan 2011 - 2015

¹⁶ See MoH Strategic Plan (2011-2015) for list of core indicators.

- vi. Develop and publish guidelines that identify roles and responsibilities for data collection, quality assessment and reporting at local, divisional and national levels;
- vii. Explore web-based data collection avenues to facilitate reporting and timeliness. Any such web based technology will be developed and implemented to the lowest health care level possible, and extending the area of coverage to as much of Fiji as internet access allows;
- viii. Develop, document and implement national level procedures for mirroring of electronic data on a second server and also storing of electronic data on other media, such as CD ROM. The process of, and responsibility for restoration of data in cases of electronic failures, should be included in these procedures;
- ix. Develop, document and implement procedures at divisional and local data collection points to ensure a daily backup on CD ROM or equivalent media is done. The process of, and responsibility for restoration of data in cases of electronic failures, should be included in these procedures; and
- x. Require the NHIO to review the Medical Records Policy¹⁷ and revise if necessary to ensure that procedures for retention, archiving and destruction of records and registers are aligned to current international practice and legal requirements. This policy will be reviewed and approved by the NHIC prior to staff training at local, divisional and national levels.

4. Establish and maintain inter-agency and inter-Ministerial governance structures for HIS

The MoH shall:

- i. Collaborate with FBoS and RG on vital statistics and civil registration matters and work towards harmonisation, sharing and availability of accurate and verifiable demographic and vital events data for the population of Fiji;
- ii. Work towards increasing collaboration and cooperation between the Ministries of Information, Finance and Planning and other allied ministries to have verifiable and accurate HI and reduce duplication of effort; and
- iii. Work towards increasing collaboration and cooperation with other organisations and institutions collecting health information to share relevant data and reduce the burden of reporting requirements.

5. Conduct periodic population based surveys, in collaboration with other relevant ministries.

The MoH shall;

- i. Collaborate with FBoS and RG and other relevant organisations and ministries to determine need for, and frequency of, population-based surveys. The lead agency for these surveys will be jointly determined and processes for data sharing specified and documented. The surveys will include (but not be limited to) Demographic Household Surveys (DHS) and other surveys such as National Health Accounts (NHA), Non Communicable and Communicable Disease (NCD and CD) surveys; and
 - ii. Ensure that any relevant data produced as a result of these surveys is made available to address monitoring of core indicators, resource utilisation, capacity building, trend analysis and reporting.
6. Incorporate private sector data and NGO related health data into the appropriate routine processes of the HIS and obligate the private/NGO institutions to timely and complete reporting in accordance with the Public Health Act.

¹⁷ Fiji Ministry of Health's Divisional Hospital Medical Record Department, Policy & Procedure Manual, August 2001

The MoH shall;

- i. Determine reporting requirements and formats for submission of private sector data, including that from health care professionals and institutions (including NGOs) working in health care. Ensure the procedure indicates that all collection of data is governed by Public Health Act [Cap 111] of Fiji;
 - ii. Compile and maintain a list of all health facilities and clinics (both publicly and privately owned), service outreach points, maternity homes (both publicly and privately owned) within the national and divisional catchment areas and update this list on a quarterly basis;
 - iii. Establish a public-private partnership technical working group to foster the private sector data collection and reporting process;
 - iv. Encourage NGOs to motivate all health facilities under their umbrellas to adhere to national health information reporting standards and data quality processes;
 - v. Provide documented procedures and training where necessary to the private sector organisations, institutions and health care professionals for the reporting of relevant data according to the MoH's data submission requirements; and
 - vi. Appoint a focal person at divisional and sub-divisional levels who will be responsible for ensuring that all private sector operators are provided with the necessary tools and training opportunities to enable them to report on activities and to collate and undertake quality assessment and feedback between private sector institutions and NGOs within their catchment area.
7. Establish a public-private partnership technical working group to foster the above.
8. Implement an integrated disease notification surveillance system at all levels, with defined frequency.

The MoH shall;

- i. Review the active and passive systems of disease surveillance in the MoH. This will include consideration of national and international requirements for notifiable disease reporting, specification of timeframes for reporting, opportunities for utilisation of existing routine data collections, engagement with the private sector and processes for quality assessment of reported data;
 - ii. Develop and distribute documented procedures for notifiable disease reporting, including case definitions;
 - iii. Conduct training for local, divisional and national staff to ensure that their responsibilities are understood; and
 - iv. Develop weekly and monthly surveillance reports and a dissemination process to ensure a timely public health response to outbreaks is facilitated.
9. Accountability for timely and quality health information reporting
- The MoH shall;

- i. Designate Divisional Medical Officers and Medical Superintendants as ultimately accountable for timely reporting of data and the quality of the data collected by their staff. Data flowing up to divisional level will be consolidated at that point and vetted prior to submission to HIU;
- ii. Develop and train staff to comply with data submission procedures and timeframes;
- iii. Develop procedures and train staff in the monthly reporting of data from public health programmes (such as the Family Health, Oral health, Environmental Health, Health Promotion, Stress Management, Non-Communicable Diseases, Communicable Diseases, Food and Nutrition programmes) to the HIU within 10 working days of the end of the reference month; and

- iv. Develop monitoring tools to ensure timeliness and quality of the data submitted by the divisions to the national level.
 - a) Data collected shall be cleaned daily and the monthly compilations sent to next level within 5 calendar days by the supervisor.
 - b) Data will be analysed and sent onwards within 5 calendar days, to higher level as well as the lower level for discussions and decision making.

3. Data Management

The collection and management of data will be guided by the following underlying principles:

- i. Information is expensive to collect, store and use and must be viewed and managed as a valuable resource;
- ii. Information belongs to the Ministry as whole not to individual units and must be used as shared resource;
- iii. Analyzed, value added information is to be provided back to the data suppliers in a timely manner. Timeframe requirements will be specified;
- iv. Data will be collected only for well defined purposes. Duplicate data should not be collected and the use of personal databases and data collections discouraged;
- v. Data will be entered into electronic systems once only. This means that data will be shared as far as possible between facility, divisional and national levels within legal and ethical boundaries and IT capability;
- vi. Once data is vetted for analyses, it shall be stored, accessed, and shared in “read only” mode to ensure that original vetted data is not tampered with; and
- vii. There should not be duplication in the analysis and dissemination of data. Roles and responsibilities of personnel working in data collection, recording, analysis and dissemination should be well defined to avoid duplication of effort and to support data uniformity and usefulness.

In order to appropriately address relevant data management issues, MoH shall;

1. Mandate the requirement for the forthcoming National Identification Number to be used as the Unique Identifier Code for each patient and client accessing MoH health services. Develop procedures to ensure that this unique number is recorded on all documents, registers and electronic forms relating to health care provided to all patients and clients;
2. Develop, distribute and train staff in the use of a standard set of health care forms, registers and electronic documents;
3. Develop and issue standards that clearly describe the minimum documentation requirements, including uniquely identifying the clinician providing a health care service. Present standards to NHIC for vetting and approval;
4. Develop an orientation package or presentation to be delivered to all new clinical staff in hospitals, primary health clinics and other health care institutions;
5. Based on the minimum health¹⁸ indicator set described earlier, document the contents of the various HIS components (including MoH data dictionary, and procedures for future changes to the indicators). To support reporting on these indicators, the following are required:
 - i. Develop standard reporting formats reflecting the National Minimum Data Sets and core indicators;

¹⁸ As documented in the 5 year Ministry of Health Strategic Plan 2011-2015

- ii. Assess current HIS and subsystems to ensure that all NMDS data elements are captured as necessary;
 - iii. Develop, publish and disseminate a MoH National Health Data Dictionary (NHDD) which details data elements, definitions and other metadata for all data items in the NMDS. NHIO to develop and deliver training for data collection staff at all levels relating to these data elements;
 - iv. Implement the WHO Indicator and Measurement Registry (IMR) to support management of core indicators;
 - v. Ensure vetting of the NHDD by NHIC and NHEC prior to deployment; and
 - vi. Conduct an annual review of the NHDD and reporting formats to ensure that data continues to meet national and international reporting requirements.
6. Develop a procedure manual or repository that incorporates all HIS policies and procedures into one place so that they are accessible by all health care workers and HIS staff. This includes procedures for data capture, quality assessment, reporting, feedback, access rights and publication policies;
 7. Conduct of a review all HIS subsystems (including but not limited to PATIS, PHIS, HRIS, FMIS, LIS, Drug Inventory, NIMS) to ensure they are standards-based and prepare recommendations for NHIC and NHEC for necessary changes to promote interoperability. This should be done by the National IT Manager and NHIO. The recommendations should include requirements to integrate all HIS subsystems; and
 8. Establish a schedule for the production of routine reports and develop processes for ad hoc reporting. Routine reporting processes to be discussed with the Core Group and National Health Advisors to ensure their needs are met.

4. Information Products

In order to address the problems identified in relation with information products, MoH shall;

1. Ensure all health facilities report in a timely manner:
 - i. Mechanisms for the capture, cleaning and compilation of data at local level should be developed and processes and timeframes for reporting of data to the next level produced by the NHIO. The NHIO should provide training to HIU and clinical staff relating to these requirements. All levels of the health system will conduct essential analysis of their data regularly to generate information necessary to support their core business operations and will be responsible for the quality of the data submitted to higher levels;
 - ii. Feedback on the quality of data submitted to higher levels should be provided to the source within 5 calendar days of submission. If necessary, there may be a request to resupply the data from the local level if quality issues are of concern;
 - iii. Aggregated clean data and a standard analysis report should be sent electronically by the Divisional HIO to the national level according to the following schedule:
 - a. All weekly notifiable diseases shall be reported by Monday of the following week;
 - b. All annual reports be submitted from various departments to national level by February 28 of each year;
 - c. Other data and information submission dates shall be explicitly detailed in implementation plan;
 - d. When web based data collection is in place, the timeline shall be reduced to 24 hours after collection of daily data; and
 - e. A monitoring tool to keep track of timeliness shall be used by supervisors and feedback provided to Divisional HIOs.
2. Any data not routinely collected but required for the purpose of operational research, evidence based policy or decision making or for the purpose of monitoring and evaluation be subject to vetting and approval by the NHIC prior to the request being made to data collectors at divisional and sub-divisional levels. If the data request has been approved by the NHIC, the data is to be provided in a priority manner and within the requested time frame.

5. Information Dissemination and Use

In order that MoH data is appropriately and widely disseminated and used, in accordance with existing policies and laws, the MoH shall;

1. Ensure that reports of major MoH surveys and smaller surveys such as NCS Mini Steps are completed and disseminated to relevant officers at least six months after completion of data collection;
2. Develop a mechanism to ensure that reports of surveys are submitted to, recorded and filed in the HIU in a document repository so that they are accessible for research and analysis purposes at a later date via govnet. Access to research findings to be determined according to pre aligned needs (managers/supervisors/ audits). Access to be provided through EDPs or PINs and access monitored. Reports to be generated and monitored by IT services in conjunction with HI unit;
3. Disseminate or require researchers to disseminate written reports relating to research findings for projects approved by NHRC and FNRERC. These are required within six months after completion of the research. For large scale and significant research, as identified by the NHRC, the results should be presented in a seminar to all stakeholders including Ministry of Health officers at the same time as the written reports are presented;
4. Develop scorecards or align existing scorecards to enable quarterly performance review and the rigorous process of monitoring and evaluation;
5. Develop a format for planning submissions to include ensure consideration of HIS- based evidence;
6. Redesign the research proposal format to include documentation of requirements for use of MoH data, monitoring and evaluation components associated with the research and methods for dissemination of findings;
7. Consider development of a data warehouse on *govnet*, under the auspices of the Director Information, Planning and Policy;
8. Responsibility for the management of the proposed national data warehouse will become part of the duty statement of the HIO and processes to facilitate appropriate access to data should be developed. All access to data for research purposes to be vetted by FHRC before release of information is granted;
9. Determine and document processes and procedures for access to data in the warehouse according to pre aligned needs (managers/supervisors/ audits). Access to be provided through EDPs or PINs and access monitored. Reports to be generated and monitored by IT services in conjunction with HI unit;

10. Develop a data release form¹⁹ with details on responsibilities for data security and confidentiality and penalties for breaches clearly outlined. Develop procedures to seek approval from the NHRC and/or the PS [or delegated individual] to release data;
11. Undertake statistical analyses within HIU to convert data to a form easy to use and understand and provide regular feedback to reporting organisations and institutions to encourage tangible use of the HIS;
12. Incorporate the effective use of HIS in the Service excellence awards;
13. Develop and circulate a media policy to all data users and gatherers so that strict adherence is maintained. Outline penalties for breaching the policy; and
14. Ensure submission of all data requests pertaining to research/ publication go through the NHRC for approval and, where necessary, ethical considerations to go to FNRERC for approval. The following regulations regarding data release apply:
 - i. Where Ministry of Health statistics are required by external partners or members of the public, approval must be sought from the Permanent Secretary;
 - ii. All data requests for unpublished statistics to external stakeholders must be approved by the Permanent Secretary; and
 - iii. Unpublished data requested internally for operational purposes directly related to service delivery and within the discipline of the officer requesting it, do not approval for dissemination. However, if unpublished data is being sought for addressing media issues or for presentation at meetings/ conferences involving a forum, approval must be sought from the Permanent Secretary.

¹⁹ See Annexure 5: Schematic for Proposed Information Dissemination and Release Protocol

Annexure 4: Policy Implementation Plan Recommendations

Operationalising and implementing key aspects of Fiji's HIS policy will occur over a three to five year period and in alignment with the National Health Strategic Plan, strategic plans for related health sector programs and relevant domestic and international law. HIS policy implementation progress will be measured and reported on an annual basis.

Implementation vehicles for HIS policy can include: voluntary practice changes, relevant new incentives, national legislation and regulatory measures. Fiji's National Health Information Committee (NHIC) and the National Health Executive Committee (NHEC) must ratify any proposed HIS policy measures, in addition to required parliamentary or ministerial approval. Any HIS policy created will be outlined in a consolidated and regularly updated HIS Standard Operating Procedures document. Key principles for the Initial Recommended Policy Guidelines can be located in Annexure 3 of this document.

1. Preparatory Phase

In preparation for a robust and workable HIS policy implementation, the MOH, in coordination with other relevant government agencies and stakeholders will:

- i. Outline which key HIS policy elements require: voluntary practice changes, national legislation and/or regulatory measures, public-private sector recommendations for action, new incentives or other outputs;
- ii. Identify resource, capacity or technology challenges that could impact the policy implementation timeline;
- iii. Devise an initial content outline and introduction timeline for any potential HIS legislative package or regulation; and
- iv. Develop a detailed plan for expected HIS policy implementation.

HIS policy issues identified as high-priority are:

- i. Mechanisms for inter-ministerial and inter-agency HIS collaboration;
- ii. A health core indicators set;
- iii. Introduction of a Unique Identifier Code;
- iv. Formulating a National Health Information Strategic Plan;
- v. Restructuring of the Health Information Unit and national Statistics Department;
- vi. Improved HIS staff recruitment and training;
- vii. Integrated HIS data flow design and procedures document;
- viii. HIS data warehousing and document depository;
- ix. Establishing a public-private working group to issue recommendations on private/NGO HIS data reporting;
- x. Drafting a data confidentiality policy related to HIS;
- xi. Expanding national and facility level research capacity to support HIS;
- xii. Strengthening population health surveys;
- xiii. An integrated disease notification system; and
- xiv. Consolidating health facility listings for service availability mapping.

2. Implementation Timeline

A high-level plan for anticipated, phased HIS policy implementation that addresses these key policy issues is as follows:

IMPLEMENTATION - YEAR 1

HIS Policy Priority	Policy Action
HIS Collaboration	Develop mechanisms for HIS-related inter-ministerial and interagency collaboration, harmonization and joint implementation efforts Formulate a National Health Information Strategic Plan
HIU and Statistics Department Restructure	Draft restructuring plans for the Health Information Unit (headquarter and divisional setting) and Statistics Department to strengthen HIS technical leadership and coordination and to better integrate health information and research Formulate recruitment incentives to increase HIS staff
Unique Identifier Code	Initiate multi-stakeholder dialogue about a unique identifier code for each person at birth
Health Core Indicators	Draft and seek comment on a minimum set of health core indicators that track public and private sector health performance
Structure for integrated and Consolidated HIS Data Flow	Design integrated HIS data flow matrix, specifying roles, responsibilities, reporting and feedback mechanisms Initiate work on a data procedures document for routine HMIS Design or select an HIS integrated software package that covers all MOH programs Devise plans to set up data warehouse for HIS relevant data from all health areas and programs and to construct a document depository to consolidate all survey, research and statistical reports
Public-Private Sector Technical Working Group	Establish public-private working group which will make recommendations on private/NGO HIS data reporting and integration of this data into routine data reporting in compliance with other relevant Fiji laws
Confidentiality Policy	Draft and seek comment on a data confidentiality policy related to HIS, in alignment with national and international law
Health Information Training and Development	Outline key elements of HIS training and development course and consider HIS distance learning partners.

IMPLEMENTATION - YEAR 2

HIS Policy Priority	Policy Action
HIS Collaboration	Implement mechanisms for HIS-related inter-ministerial and interagency collaboration, harmonization and joint implementation efforts.
HIU and Statistics Department Restructure	Implement restructuring plans for the Health Information Unit (headquarter and divisional setting) and Statistics Department Implement recruitment incentives to increase HIS staff
Unique Identifier Code	Identify the Unique Identifier Code for each person at birth that will be used and integrated into the HIS
Health Core Indicators	Finalize and begin implementing a minimum set of health core indicators tracking public and private sector health performance
Structure for integrated and Consolidated HIS Data Flow	Put integrated HIS data flow matrix into practice, mandating responsibilities, accountability and reporting Finalize data procedures document for routine HMIS Deploy an HIS integrated software package that covers all MOH programs Construct and begin operating data warehouse for HIS relevant data and document depository to consolidate all survey, research and statistical reports
Public-Private Sector Technical Working Group	Finalize public-private working group recommendations on private/NGO HIS data reporting and integration of this data into routine data reporting Initiate voluntary compliance of recommendations
Confidentiality Policy	Implement data confidentiality policy related to HIS, in alignment with national and international law
HI Training and Development	Roll-out HIS training and development course, with pilots for health care professionals and the government information technology unit
Research	Draft plan to strengthen national and facility level research capacity ethical and alignment with international ethical and scientific research standards
Integrated Disease Notification System	Formulate plan for integrated disease notification system at all levels
Population Health Surveys	Begin developing structure and content for health ministry population based health surveys
Coding and Facility Listings	Initiate planning discussion regarding proper ICD coding compliance and a single register of health facility listings and service availability mappings for diverse diseases using common facility codes and accurate GIS coordinates

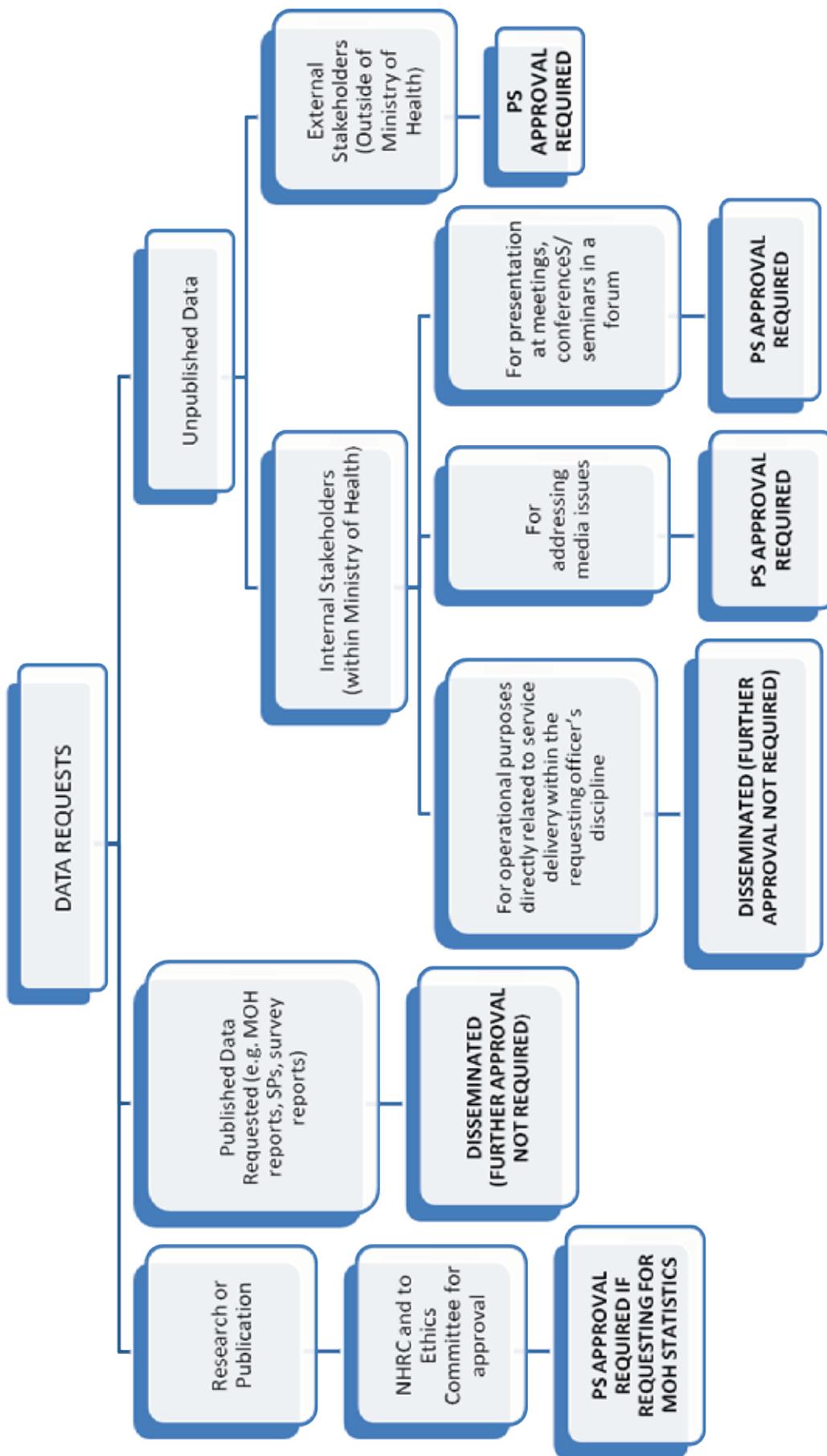
IMPLEMENTATION - YEAR 3

HIS Policy Priority	Policy Action
Unique Identifier Code	Implement a Unique Identifier Code for each person at birth that will be used and integrated into the HIS
Health Core Indicators	Align HIS relevant data to the minimum set of health core indicators tracking public and private sector health performance
Public-Private Sector Technical Working Group	Initiate mandatory compliance with recommendations on private/NGO HIS data reporting and integration of this data into routine data reporting
Research	Implement plan to strengthen national and facility level research capacity
Integrated Disease Notification System	Complete design of integrated disease notification system at all levels and begin phased system implementation in years 3 and 4
Population Health Surveys	Execute first population-based health survey
Coding and Facility Listings	Finalize single register of health facility listings and service availability mappings for diverse diseases using common facility codes and accurate GIS coordinates
Monitoring and Evaluation	Formulate and execute HIS policy monitoring and evaluation plan, employing key feedback and learning for program improvement

It is anticipated that implementation years 4 and 5 can be utilized for tasks such as:

- (1) thorough program review and evaluation;
- (2) tackling any needed modification of existing HIS policy; and
- (3) addressing policy issues which emerge as a result of on-going HIS implementation, multi-stakeholder input on compliance and evolving global dialogue, practice and law.

Annexure 5: Schematic for Proposed Information Dissemination and Release Protocol for Data Requests



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