



FIJI HEALTH ACCOUNTS



2007-2008

Foreword

It is with great pleasure that I present the Ministry of Health's National Health Accounts [NHA] for the financial years 2007 – 2008.

This is the second round of NHA by the Ministry of Health as the first NHA Report was completed for 2005. This project was made feasible through an Asian Development Bank [ADB] and World Health Organization [WHO] technical assistance programme to three pilot countries: Fiji, Federated States of Micronesia and Vanuatu.

The project faced many challenges, one of which was the twelve month timeline given for this project. Added to this was the fact that the project team with the exception of one individual, who participated in the first round of NHA, comprises totally new players. However, the lack of experience and capacity in the team was made up by the perseverance and determination shown by the members to be able to achieve this goal.

The Ministry of Health is indebted to all those individuals, donor agencies, companies, non-governmental organizations and other Government agencies that have contributed towards making this report possible.

Using NHA as a monitoring and evaluation tool the Ministry of Health aims at having evidence based decision making in the effective and efficient allocation of health resources.

The desired outcome is the development of appropriate health policies to provide the necessary framework for improved performance of Fiji's health system.

'Health is wealth' are indeed words of wisdom for us all and I invite everyone to read this report in that context with a mind to actively participate in the contribution of the next volume of NHA.



Dr Salanieta Saketa
Permanent Secretary for Health

Table of Contents

Foreword.....	2
Table of Contents.....	3
Acknowledgements.....	5
List of Tables	6
List of Figures	6
Abbreviations	7
Highlights	8
1. Background	10
1.1. About this Report.....	10
1.2. Structure of the Health Sector and the Flow of Funds	11
1.3. Revision Process.....	13
2. Total Health Expenditure (THE)	15
2.1. Trends in THE	15
2.2. Health Expenditure in Relation to GDP	15
2.3. Health Expenditure per Person.....	16
3. Financing of Health Expenditures	18
3.1. General Trends.....	18
3.2. Government Financing.....	19
3.3. Private Financing.....	19
3.4. External Donor Financing.....	21
4. Health Expenditures by Function.....	22
4.1. Recurrent Expenditures	22
4.1.1. Inpatient and Outpatient Care Services	22
4.1.2. Distribution of Medicines and Medical Goods to Outpatients.....	22
4.1.3. Prevention and Primary Health Care Services	23
4.2. Capital Expenditures	24
4.3. Pharmaceutical Expenditures	27
5. Health Expenditure by Providers	28
5.1. Total Expenditures	28
5.2. Hospital Spending	29
5.2.1. Hospital Spending by Source of Financing.....	29

5.2.2.	Non-Hospital Spending	30
6.	Government Health Expenditure by Providers and Functions	33
6.1.	Government Health Expenditure	33
6.2.	Government Health Expenditure by Providers	34
6.3.	Government Health Expenditure by Functions	37
7.	International Comparisons	40
7.1.	Comparability of Fiji Health Accounts Estimates	40
7.2.	Total Spending and Sources of Healthcare Financing	40
7.3.	Composition of Spending by Function and Providers	43
8.	Technical Notes	48
8.1.	General	48
8.2.	Definitions	49
8.2.1.	Total Health Expenditure (THE)	49
8.2.2.	Financing Sources	49
8.2.3.	Financing Agents	50
8.2.4.	Providers	50
8.2.5.	Functions	50
8.3.	Data sources	51
8.3.1.	General	51
8.3.2.	Central Government	51
8.3.3.	Private Sector Spending	52
8.4.	Methods used	52
8.4.1.	Government Spending	52
8.4.2.	Fees Paid To Government Health Care Institutions	53
8.4.3.	Private Health Care Institutions	53
8.4.4.	Sales of Medicines from Pharmacies	53
8.4.5.	Employer Medical Benefits	54
8.4.6.	Private Health Insurance Expenditures	54
8.4.7.	Other Miscellaneous Items of Household Expenditure	54
9.	References	55
10.	Appendix Fiji NHA Tables	56

Acknowledgements

The development of Fiji Health Accounts based on the System of Health Accounts has only been possible with the support of countless individuals and agencies. Without being exhaustive, I wish to express my sincere thanks to several, who have made significant contributions. For the overall development and compilation of the accounts, I would mention the support and guidance in particular of Dr. Ravi P Rannan-Eliya of the Institute for Health Policy, Sri Lanka and Professor Sandra Hopkins of Curtin University.

I would also like to thank the Fiji NHA Committee representatives, including Laite Cavu, Dr Shareen Ali, Sisa Otealagi and Saras Lal (Ministry of Health Fiji), Wayne Irava and Nola Vanualailai (Fiji School of Medicine), Sangeshni Preetika and Thompson Yuen (Ministry of National Planning), and Lice Radrodoro (Fiji Islands Bureau of Statistics).

I also thank many individuals and organisations in both the public and private sector that have cooperated in providing data when requested including insurance companies, hospitals, private health clinics, health centres, nursing stations, laboratories, ambulance companies, private sector companies including donor organisations, non-governmental organisations, banks and other statutory bodies.

I also wish to thank the agencies that have funded components of this work, including World Health Organization, Asian Development Bank, and the Ministry of Health Fiji.

The collection of data was jointly carried out by the Fiji NHA Committee and analysis was done by CHIPSR at FSMed. The construction of Tables and Figures were done by Idrish Khan and Nola Vanualailai respectively. The writing of this publication was done by the Fiji NHA Committee representatives. The cover design was by Mrs Saras Lal.

Idrish Khan
Fiji NHA Coordinator

List of Tables

Table 2-1 Trends in Total Health Expenditure	15
Table 2-2 THE, GDP, Annual Growth Rates and Share of Health on GDP, 2007 to 2008.....	16
Table 2-3 THE, Current and Constant Prices and Annual Growth Rates, 2007 to 2008	17
Table 3-1 Health Expenditure by Financing Source, 2007 to 2008	19
Table 3-2 Private Health Expenditure by Financing Agent, 2007 to 2008	21
Table 4-1 Total Health Expenditure by Function (FJDm), 2007 to 2008.....	25
Table 4-2 Share of Health Expenditure by Function (%), 2007 to 2008	25
Table 4-3 Shares of Health Expenditure for each Function by Source of Finance (%), 2007 to 2008	26
Table 5-1 Total Health Expenditure by Provider, 2007 to 2008.....	32
Table 5-2 Total Health Expenditure at Hospitals by Financing Agent (FJDm), 2007 to 2008	32
Table 6-1 Government Health Expenditures by Providers (FJDm), 2003 to 2008	35
Table 6-2 Government Health Expenditures by Functions (FJDm), 2003 to 2008	39
Table 7-1 HealthEconomicIndicators for Selected Asia-Pacific Territories.....	42
Table 7-2 THE by Financing Agent for Selected Asia-Pacific Territories(%)	43
Table 7-3 Current Health Expenditure (CHE) by Function for Selected Asia-Pacific Territories (%)	45
Table 7-4 CHE by Provider for Selected Asia-Pacific Territories (%).....	47

List of Figures

Figure 1-1 The Flow of funds in the FIJI Ministry of Health Care System, 2008.....	12
Figure 2-1 Total Health Expenditure in Constant Prices, 2007 to 2008.....	15
Figure 2-4 Per capita Health Expenditure and per capita GDP, (FJD) 2007-2008	17
Figure 3-1 Share of Public, Private and Donors funding per THE and GDP(%), 2007 to 2008	18
Figure 3-3 Private Health Expenditure by Financing Agent (%), 2007-2008.....	20
Figure 4-1 Breakdown of Spending (%), 2007 to 2008	23
Figure 4-2 Total Health Expenditure by Functions (%), 2007	24
Figure 4-3 Total Health Expenditure by Functions (%), 2008	24
Figure 5-1 Total Health Expenditure by Provider (%), 2008	28
Figure 5-2 Total Health Expenditure by Provider (%), 2007-2008	30
Figure 5-3 Total Health Expenditure at Hospitals by Financing Agents (%), 2007-2008	31
Figure 6-1 Government Health Expenditure as a Percentage of Total Government Expenditure	33
Figure 6-2 Government Health Expenditure as a Percentage of GDP.....	34
Figure 6-4 Government Health Expenditure by Providers.....	36
Figure 6-5 Government Health Expenditure by Functions	38
Figure 7-1 Per Capita Health Expenditure vs Per Capita GDP for Selected Asia-Pacific Countries	41
Figure 7-2 Total Health Expenditure By Financing Agent For Selected Asia-Pacific Countries (%)	42
Figure 7-5 Current Health Expenditure by Function for Selected Asia-Pacific Territories(%)	44
Figure 7-7 CHE by Provider for Selected Asia-Pacific Territories (%)	46

Abbreviations

A & E	Accident and Emergency
ADB	Asian Development Bank
APNHAN	Asia-Pacific National Health Accounts Network
CHE	Current Health Expenditure
FIBOS	Fiji Islands Bureau of Statistics
FIRCA	Fiji Islands Revenue and Customs Authority
FJHA	Fiji Health Accounts
FPS	Fiji Pharmaceutical Services
FSMed	Fiji School of Medicine
FSN	Fiji School of Nursing
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIES	Households Income and Expenditure Surveys
JICA	Japan International Cooperation Agency
KOICA	Korea International Cooperation Agency
MoH	Ministry of Health
NHA	National Health Accounts
OECD	Organisation of Economic Cooperation and Development
OOP	Out-of-Pocket
RBF	Reserve Bank of Fiji
SHA	System of Health Accounts
TGHE	Total Government Health Expenditure
THE	Total Health Expenditure
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Highlights

Total Health Expenditure (THE) in Fiji was FJD205.8 million in 2008 (Table2-1), with per capita spending of FJD\$246(Table2-3).

From 2007 to 2008, total health expenditure did not significantly change, increasing in nominal terms by 1% and declining3% in real terms. Over the same period, GDP grew in nominal terms at 4.2%. Consequently, total health spending as a ratio of GDP decreased slightly from 4.4% to 4.2% (Table 2-2).

Public funds dominated total health finance in 2008, contributing 70% of the total health expenditure. Private funds contribute 25% and the remainder comprises external donor funds of 6%. External donor funds increased from 3% in 2007 to 6% in 2008 (Table 3-1 & 3-2).

The private funds contribution to total health expenditure in 2008is channeled either directly from households (63% of private health expenditure) or through private insurance (29% of private health expenditure).

In terms of health functions, the largest part of health spending is for curative care. This was 75% of the total health expenditure in 2008 (Table 4-2). Of the curative care expenditure, 49% was spent on inpatient care and 25% was spent on outpatient care.

The next three largest shares of health spending were paid for health administration and health insurance (8%), medical goods dispensed to outpatients(6%) and prevention and public health services (5%) of THE in 2008 (Table 4-2).

Health providers that accounted for most expenditures in 2008 were hospitals at 63%, providers of ambulatory health care at 12%, and retailers involved in sale and distribution of medical goods at 6% (Table 5-1).

In 2008, 80% of hospital expenditures were financed by public sources, 10% by households and 5% by private insurance (Table 5-2).

Health expenditure in Fiji remains largely Government funded and channeled through the Ministry of Health. Over the period 2003 to 2008, hospitals have been the major recipient of government health spending. Health administration remains a significant item of government spending on health, averaging 7% over the period 2003 to 2008. Provision and administration of public health programmes decreased over the period from 5% in 2003 to 4% in 2008 (Table 6-1).

Total expenditure on health in Fiji at 4.4% of GDP in 2007 is comparable to spending levels in other middle income economies in the region (Table 7-1). It is higher than health spending in Thailand at 3.5% of GDP, the same as that in Malaysia at 4.2% but lower than in China at 4.7%.

Out-of-pocket expenditure in Fiji of 15% of THE is the same as that in Mongolia (15%), Japan (15%) and New Zealand (14%). Only the Federated States of Micronesia has a lower proportion of out-of-pocket expenditure than these countries at 7%.

The share of spending that is for inpatient care in Fiji (49% in 2008) is higher than other countries in the Asia-Pacific region apart from Mongolia (56%). The average share of spending on inpatient care in the region is 34%. The share of expenditure on outpatient care in Fiji (25% in 2008) is lower than the average for all countries of 29%.

In line with the relatively high proportion of expenditure on inpatient care in Fiji (Table 7-3), there is a high share of expenditure on hospitals of 63%. The only countries with higher shares are Thailand (72%) and Mongolia (64%).

1. Background

1.1. About this Report

This publication reports on health expenditure in Fiji for 2007 and 2008, by sources of funding and areas of expenditure. The system of reporting used is based on the System of Health Accounts (OECD 2000), which is endorsed by the World Health Organization (WHO) for international reporting of health expenditures. By careful classification of health expenditure which falls within the prescribed health care boundary, health accounts are able to provide consistent and comparable health expenditure ratios which can be used for comparisons across country and time.

Health expenditure for Fiji is estimated using the Organisation of Economic Cooperation and Development (OECD) core framework of Health Accounts which address 4 basic questions:

- Where does the funding come from? (funding sources)
- Which entities or organizations manage or coordinate the funds? (financing agents)
- Where does the funding go to? (health providers)
- What kinds of health services are performed and what types of goods are purchased?
(health functions)

International comparisons of expenditure are made with a selection of territories in the Asia-Pacific region, drawing on the work of Asia-Pacific National Health Accounts Network (APNHAN), WHO and OECD.

The technical notes in the final chapter provide details on how the estimates were produced. These cover definitions, data sources and methods used. The appendix then presents more detailed estimates and statistical tables. These include selected tables for the years 2007 and 2008.

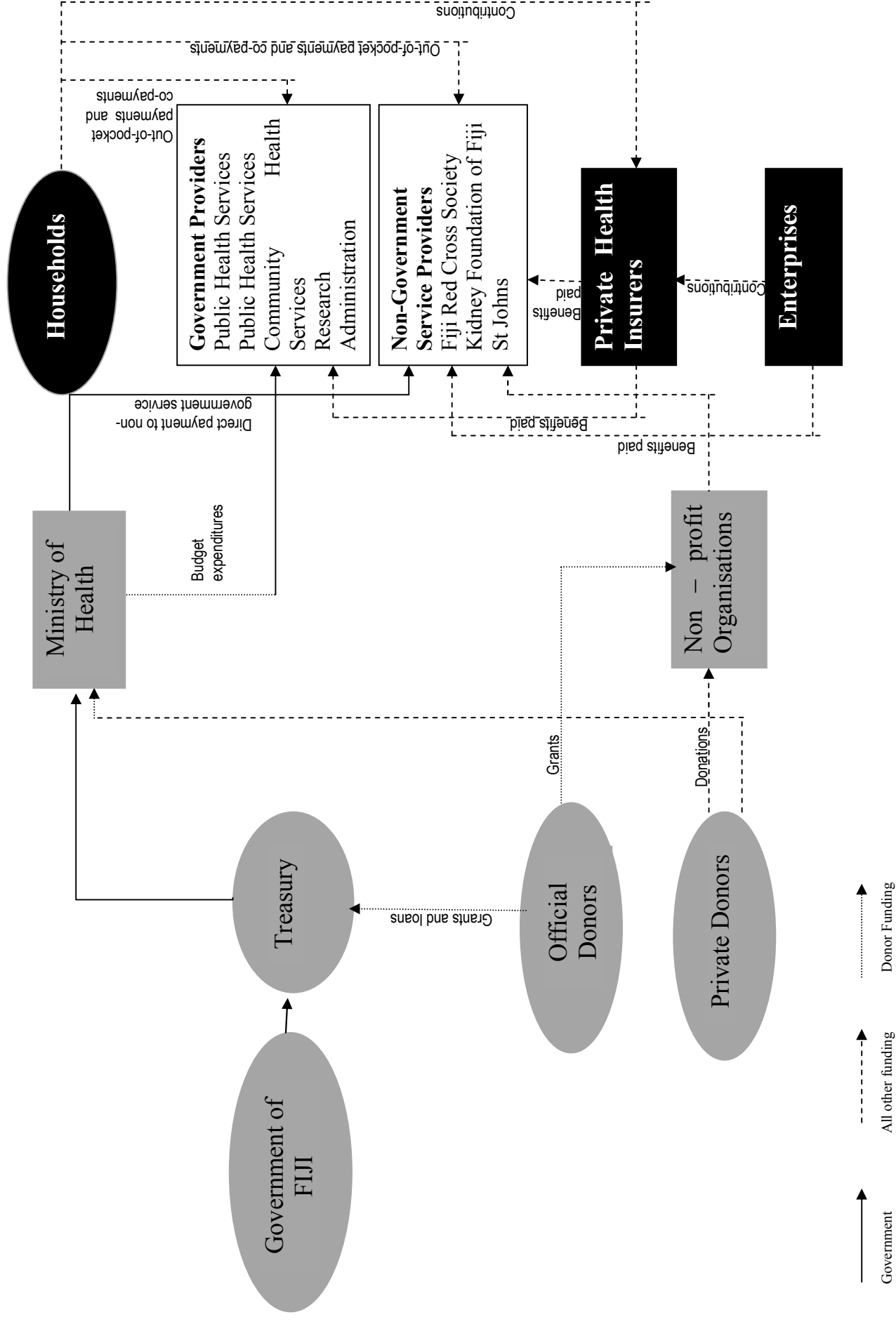
1.2. Structure of the Health Sector and the Flow of Funds

Funding for the public health sector in Fiji is predominantly financed from general taxation revenue, with a small percentage funded by households and private organizations and the donor community. The Ministry of Health (MoH) is the agency responsible for the management and administration of health funding allocated from the Government annual budget including funding from donors that is channeled through Treasury (see Figure 1-1).

Public sector healthcare services are universally accessible and almost wholly free of charge. These services are provided in Public Hospitals (Divisional, Sub-Divisional and Specialty Hospitals), Health Centres and Nursing Stations. Public outpatient services are provided mostly by hospital outpatient departments, but supplemented by a range of both public and private ambulatory facilities and services. Most inpatient provision is by the public sector hospitals. While primary healthcare and public health services are provided at Health Centres and Nursing Stations, secondary and tertiary healthcare services are provided at Public Hospitals. These public hospitals also function as teaching hospitals for students from educational institutions such as the Fiji School of Medicine (FSMed) and the Fiji School of Nursing (FSN).

Household out-of-pocket (OOP) expenditure accounts for most of the funding for the private sector and this is supplemented by limited payment arrangements through employer-provided medical insurance and to a much smaller degree by self-purchased health insurance. Some financing also comes from non-profit institutions.

Figure 1-1 The Flow of funds in the FIJI Ministry of Health Care System, 2008



Private sector provision consists mainly of outpatient services and the sale of medicines by retail pharmacies. There are limited private sector inpatient services which are provided by two private hospitals. Few companies in the country directly provide medical services to their workers, although these are mostly outpatient services. Most private providers are paid on a fee-for-service basis directly by households while some doctors employed by the MoH are granted permission to do locum practice. This has been an effective staff retention strategy used by the MoH to retain specialist doctors. Very few ambulatory care physicians dispense medicines; medicines are normally obtained from pharmacies. There is a small amount of financing of medicines from private health insurance and employer medical benefit schemes.

1.3. Revision Process

The statistics presented here are current as of July 2010. In the process of extracting data for Government health expenditure for 2007-2008, a review was also made of data from 2003 as this was already available on the EPICOR system. The sole reason for this was for comparative purposes. Although data for 2009 was also available this was not reviewed because it had not been audited.

Data sources from the private sector for 2007 were obtained through surveys and Annual Reports for verification purposes. The survey template was later modified and tailored specifically for General Practitioners, Retail Pharmacies and other health providers such as Dental Practitioners, Optometrists, Acupuncturists and Chiropractors. Other important sources were the Fiji Inland Revenue & Customs Authority (FIRCA) and the Reserve Bank of Fiji (RBF); the latter having to do with medical insurance.

There are a number of areas which have been highlighted in this round of NHA for improvements in the next round. First the NHA team will work more closely with the Fiji Island Bureau of Statistics (FIBOS) to have more health expenditure related questions included in Household Income and Expenditure Surveys (HIES) in the future. This will decrease the reliance of the NHA team on conducting surveys themselves. A more

comprehensive survey of traditional healers is required for future rounds of NHA to ensure that the population size can be reliably estimated and the expenditure on traditional healers, both cash and in-kind, is captured.

2. Total Health Expenditure (THE)

2.1. Trends in THE

In 2007, \$204.31m was recorded for total expenditure on health (THE) goods and services including capital formation in Fiji (Table 2-1). In 2008 there was an increase of \$1.52m or 0.74% in nominal terms and a decline of \$6.64m or -3.46% in real terms.

Figure 2-1 Total Health Expenditure in Constant Prices, 2007 to 2008

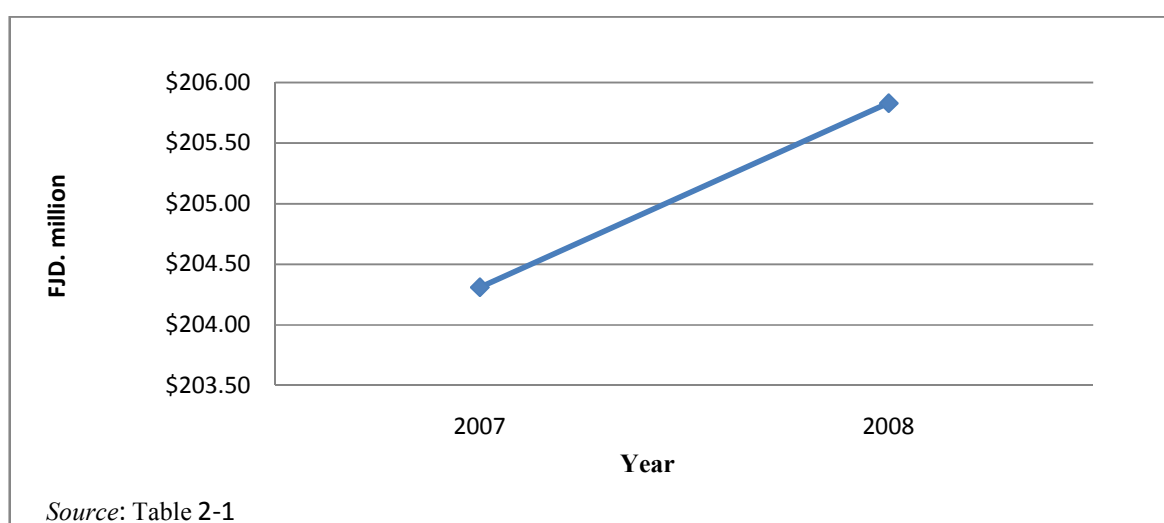


Table 2-1 Trends in Total Health Expenditure

Year	Amount (\$FJDm)		Growth Rate over Previous Year (%)	
	Current	Constant(a)	Current	Constant
2007	204.31	192.12	0	0
2008	205.83	185.47	0.74%	-3.46%

Note: Constant prices are calculated using the implicit GDP deflator (2005=100).

2.2. Health Expenditure in Relation to GDP

The ratio of Fiji's health expenditure to GDP (health to GDP ratio) indicates the proportion of overall economic activity contributed by the health sector. Table 2-2 reflects that while both total health expenditure and GDP have increased in nominal terms from 2007 to 2008, health

spending as a ratio of GDP has declined by a marginal 0.15%. Between the years 2007 to 2008, Fiji experienced relatively slow economic growth performance exacerbated by a combination of natural disasters, the fuel and food crises of 2008 and a global economic slowdown.

Table 2-2 THE, GDP, Annual Growth Rates and Share of Health on GDP, 2007 to 2008

Year	Total Health Expenditure		GDP		Ratio of Health Expenditure to GDP (%)
	Amount (\$FJDm)	Nominal Growth Rate (%)	Amount (\$FJDm)	Nominal Growth Rate (%)	
2007	204.31		4,664.10	2.62%	4.38%
2008	205.83	0.74%	4,861.30	4.23%	4.23%

2.3. Health Expenditure per Person

By convention, as the population grows, health expenditure should also increase at a similar rate, leaving the health expenditure to GDP ratio constant over time. It is prudent to also examine health expenditure on a per capita basis so as to remove the influence of changes in the overall size of the population from the analysis.

The estimated health expenditure per capita in 2007 was \$246 or US\$151 (Table 2-3). In 2008, there was a decrease in the total health expenditure in real terms by 3.46% from 2007, which may have contributed to the decrease in per capita health expenditure by 4.03% in real growth terms for the same period (Table 2-1). The decrease in these two growth rates is due to a decrease in THE and growth in the overall size of the Fijian population. Figure 2-3 shows the per capita health expenditures and per capita GDP for 2007 and 2008.

Figure 2-2 Per capita Health Expenditure and per capita GDP, (FJD) 2007-2008

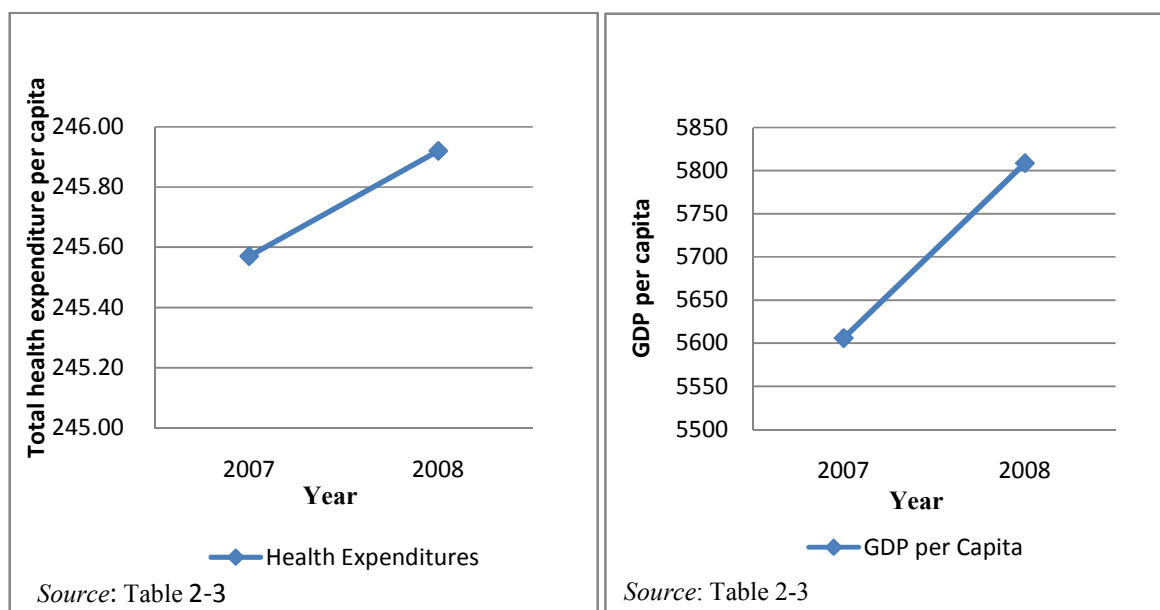


Table 2-3 THE, Current and Constant Prices and Annual Growth Rates, 2007 to 2008

Year	Total Health Expenditure per Capita				GDP per Capita		
	Current (FJD)	Constant(a) (FJD)	Current (b) (USD)	Real Growth Rate (%)	Current (FJD)	Constant (FJD)	Current (USD)
2007	246	231	151	-	5,606	5,271	3,445
2008	246	222	158	-4.03%	5,808	5,233	3,738

(a) Constant THE/Capita is derived by Current THE/GDP Deflator of the same Year divided by Population.

GDP Deflator = GDP Current/GDP Constant for the Same Year

(b) USD Conversion: 2007 - USD\$1=FJD\$1.62 and 2008 - USD\$1=FJD\$1.55

3. Financing of Health Expenditures

3.1. General Trends

In 2007, Government financing of health expenditure was \$145.38m (71.16% of THE), compared with \$51.99m from private sources (25.45% of THE) (Table 3-1). In 2008, Government financing of health expenditure was \$143.16m (69.55% of THE), a slight decrease of 1.6% from 2007. In 2008, private sources of \$50.45m (24.51% of THE) decreased by 0.94%.

While it is apparent that the relative shares of public and private financing have decreased from 2007 to 2008 what has been of particular interest is, over this same period donor funding has almost doubled from \$6.9m (3.40% of THE) in 2007 to \$12.2m (5.94% of THE) in 2008; a 2.54% increase in the share of THE.

Public sector financing of health was 3.12% while private sector financing was 1.11% of GDP in 2007. However, in 2008, the public sector financing of health reduced to 2.94% and the private sector financing to 1.04% of GDP (Table 3-1).

Figure 3-1 Share of Public, Private and Donors funding per THE and GDP(%), 2007 to 2008

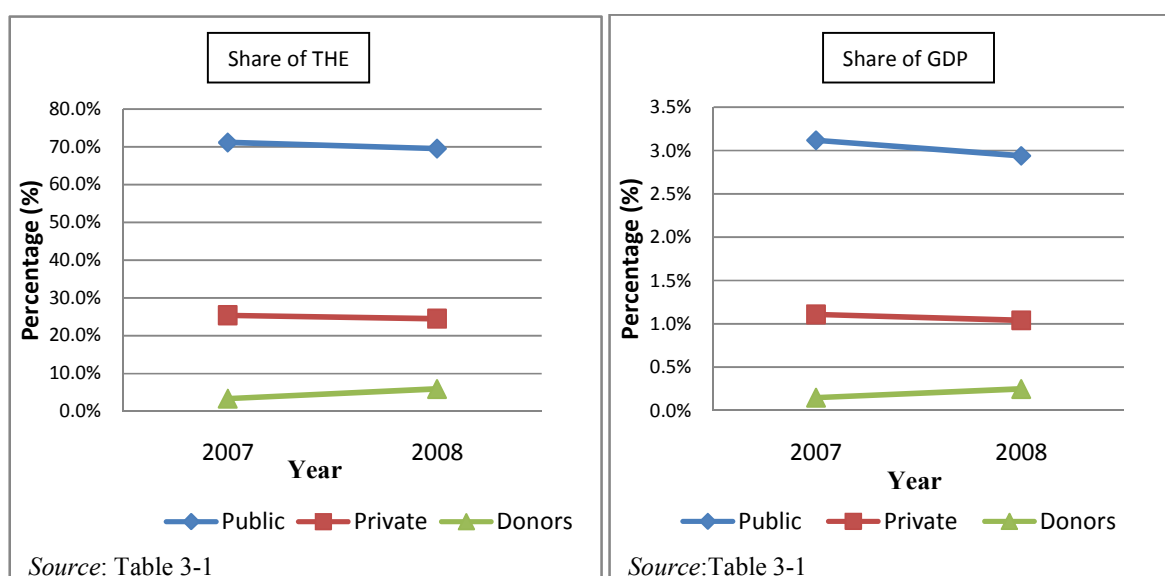


Table 3-1 Health Expenditure by Financing Source, 2007 to 2008

THE (\$FJDm)				Share of THE				THE as a Share of GDP			
FS.1 FS.2 FS.3				FS.1 FS.2 FS.3				FS.1 FS.2 FS.3			
Year	Public	Private	Donors	Public	Private	Donors	Total	Public	Private	Donors	Total
2007	145.38	51.99	6.94	71.16%	25.45%	3.40%	100.00%	3.12%	1.11%	0.15%	4.38%
2008	143.16	50.44	12.22	69.55%	24.51%	5.94%	100.00%	2.94%	1.04%	0.25%	4.23%

3.2. Government Financing

Table 3-1 shows that the Government share of total health financing has decreased from 71.16% in 2007 to 69.55% in 2008. Government has recognized the need to increase health expenditure to at least 5% of GDP. It has therefore endorsed a proposal to see the health budget increased by 0.05% per year for the next 5 to 7 years to reach the desired target.

3.3. Private Financing

Table 3-2 shows household out-of-pocket expenditure as the main source of funds for the private sector. Household out-of-pocket expenditure averaged 62.62% of private financing for 2007-2008. This was followed by private health insurance which reduced from 33.60% in 2007 to 29.34% in 2008. The contribution from non-governmental organizations (NGOs) as a share of private financing increased significantly from 2.41% in 2007 to 4.91% in 2008. A small share of private financing is by health care providers themselves, from their own resources. Health expenditure for these providers decreased from \$FJ 1.7m in 2007 (3.60%) to \$FJ 1.25m in 2008 (2.54%).

Figure 3-2 Private Health Expenditure by Financing Agent (%), 2007-2008

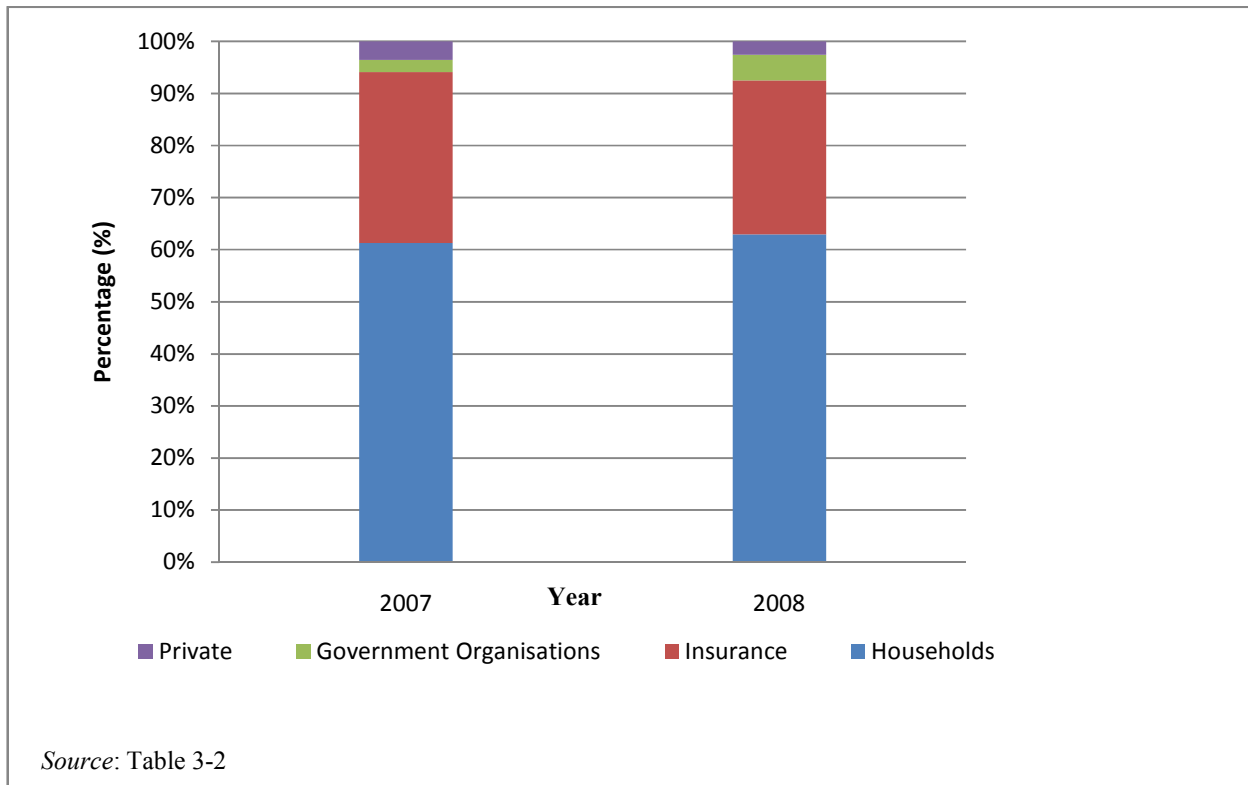


Table 3-2 Private Health Expenditure by Financing Agent, 2007 to 2008

	HF.2.2		HF.2.3		HF.2.4		HF.2.5			
	Insurance		Households		Non-Government Organizations		Private		Total Private Spending	
Year	Amount ^b	Share	Amount	Share	Amount	Share	Amount	Share	Amount	Ratio ^a
2007	17.47	33.60%	31.62	62.68%	1.16	2.41%	1.74	3.60%	51.99	25.45%
2008	14.80	29.34%	31.97	62.55%	2.42	4.91%	1.25	2.54%	50.44	24.51%

(a) Ratio of Total Private Spending to THE

(b) All amounts are in \$FJDm

3.4. External Donor Financing

External donors in Fiji largely comprise official multilateral or UN agencies, such as the WHO, UNDP, UNICEF, and GFATM, and official bilateral agencies from countries such as Japan, Korea, China and Australia. Much smaller flows of external financing are also contributed by non-governmental and other private organizations.

Health sector financing from external donors in Fiji consists mostly of grants and to a lesser extent of loans, and is channeled in two ways. Funds from most major donors, such as WHO and JICA, are passed through the Treasury, while the rest is sent directly to the project or institution that administers the funds. Financing from donors that is channeled to the Ministry of Health either through the Treasury or directly are all classified as donor funds.

External donor financing reported in the FJHA estimates consists of amounts that have been channeled through both Treasury and other sources. These have increased from 3.40% of THE in 2007 to 5.94% in 2008 (Table 3-1). These are mainly the funds coming from agencies such as AusAID, WHO, UNFPA and UNICEF.

4. Health Expenditures by Function

4.1. Recurrent Expenditures

The Fiji Health Accounts (FJHA) systematically classifies the purposes or functional uses of health expenditures (Table 4-1). Total health expenditure (THE) in Fiji consists of both recurrent and capital expenditures. Recurrent expenditures are used for a range of functional purposes, whilst capital expenditures are used to invest in new capital infrastructure and equipment.

4.1.1. Inpatient and Outpatient Care Services

The largest part of health spending by function is for curative care (i.e., the combination of inpatient and outpatient care services). This was 74.37% of THE in 2007, and increased slightly to 74.50% in 2008 (Table 4-2). Curative care expenditure in 2007 consists of 25.70% outpatient and 48.67% inpatient. Similarly, in 2008, 25.27% of the curative care was outpatient care and 49.23% was inpatient care. During the period under review, the percentage share of inpatient care has slightly increased by 0.56% while the outpatient share has decreased by 0.43% from 2007 to 2008.

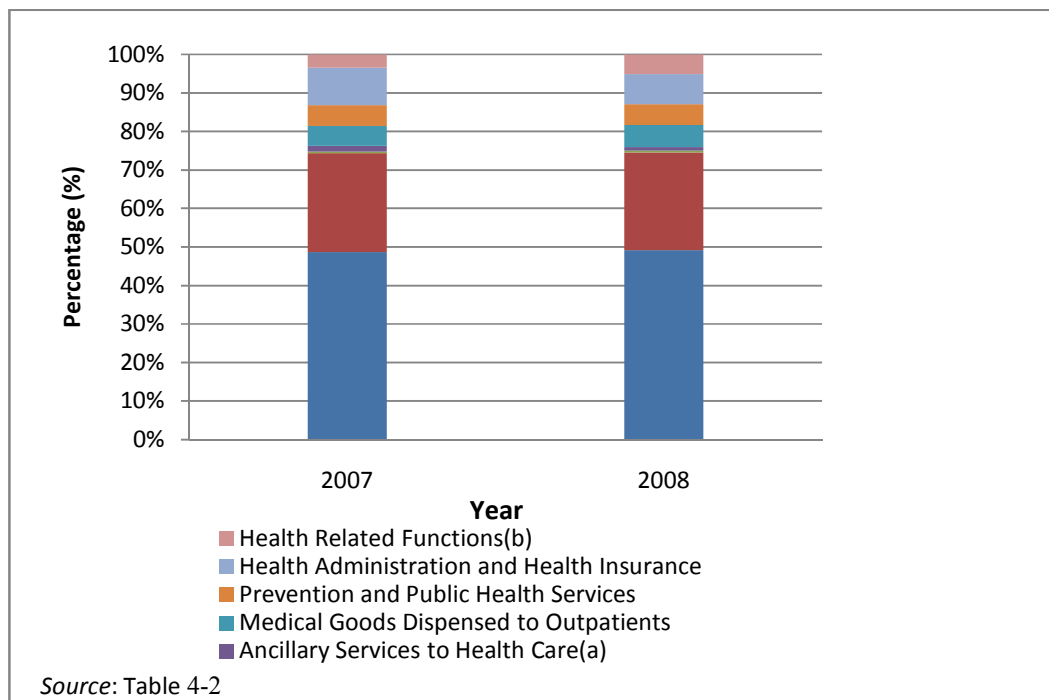
Inpatient care is mainly financed by the public sector, which accounted for 79.66% in 2007 and 76.54% in 2008 (Table 4-3). Outpatient care was also mainly financed by the public sector with public shares of 79.99% in 2007 and 81.44% in 2008.

4.1.2. Distribution of Medicines and Medical Goods to Outpatients

The second major component of health spending by function is on medical goods dispensed to outpatients, which was 5.73% of THE in 2008 (Table 4-2). This category mainly comprises sales of medicines and other medical goods from pharmacies and other retailers, but also includes medicines and other medical goods provided to outpatients in the public sector.

Overall, 93.30% of the expenditures incurred to supply medicines and other medical goods to outpatients were privately financed in 2008 (Table 4-3), and mostly by household out-of-pocket spending.

Figure 4-1 Breakdown of Spending (%), 2007 to 2008



4.1.3. Prevention and Primary Health Care Services

Prevention and primary health care services expenditure decreased slightly as a share of THE from 5.42% in 2007 to 5.35% in 2008 (Table 4-2). The decline in the share of preventive care in THE, was solely due to a decline in the reduction of the national public health budget. The public sector share of preventive and primary health care service expenditure declined from 51.45% to 47.31% from 2007 to 2008 (Table 4-3).

4.2. Capital Expenditures

Expenditure for capital formation goes largely to building and improving hospitals, and purchasing plant and equipment. Its overall level has fluctuated, but has typically been in the range of 3.46%– 5.06% of THE (Table 4-2). Most capital expenditure in the health sector on infrastructure projects is funded by the government and by donor funds that are channeled through the Treasury.

Figure 4-2 Total Health Expenditure by Functions (%), 2007

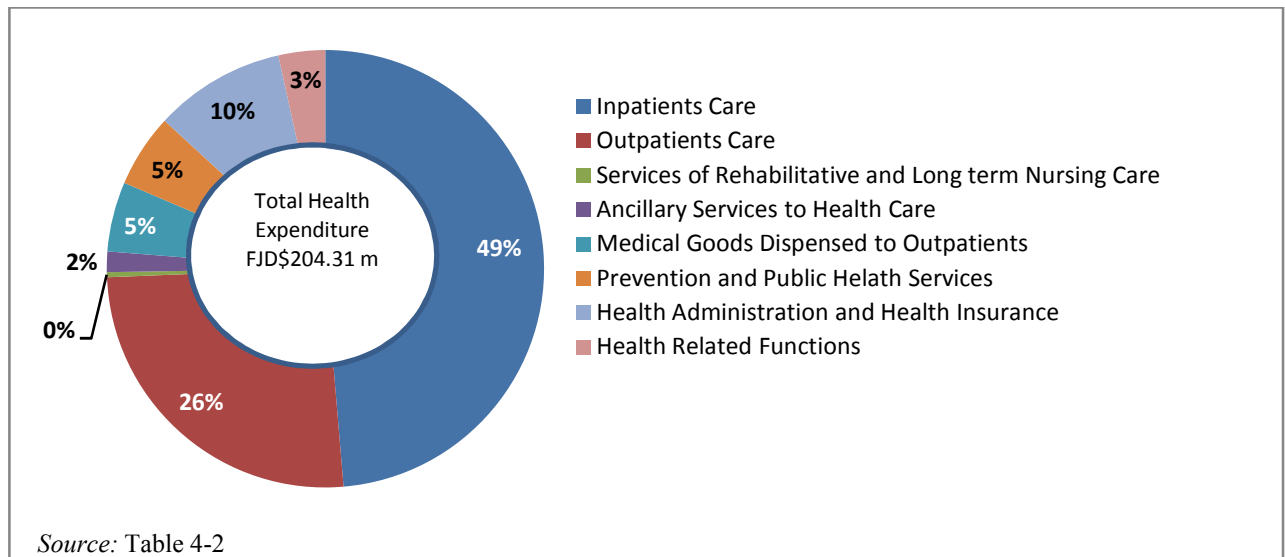


Figure 4-3 Total Health Expenditure by Functions (%), 2008

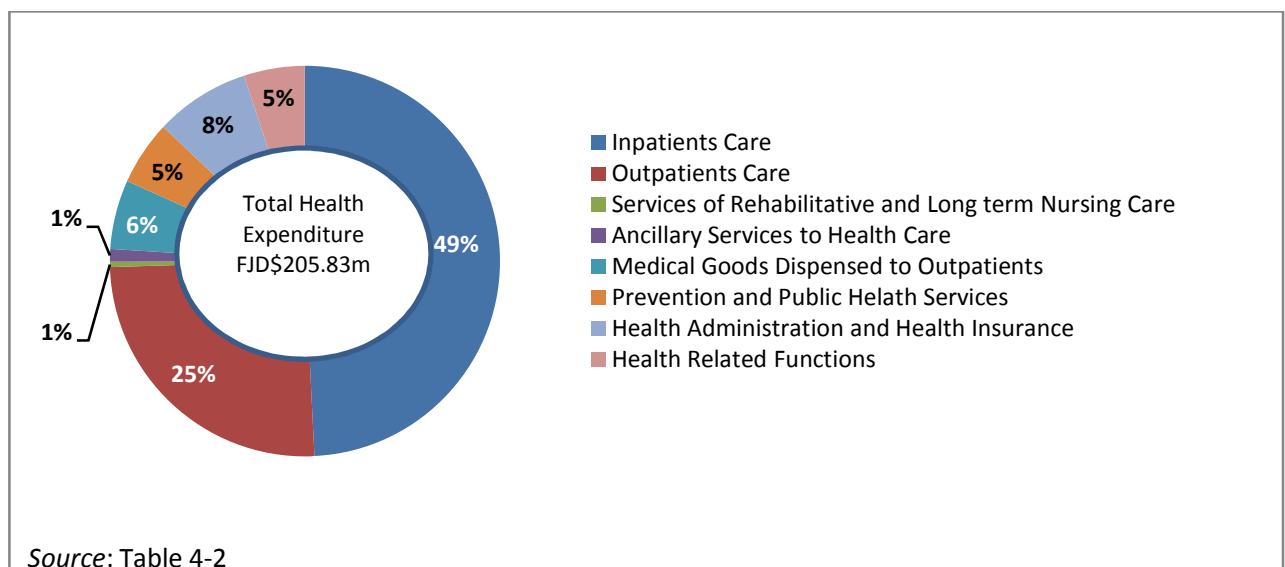


Table 4-1 Total Health Expenditure by Function (FJDm), 2007 to 2008

	HC.1.1	HC.1.3	HC.2 + HC.3	HC.4	HC.5	HC.6	HC.7	HCR
	Inpatient Care	Outpatient Care ^(a)	Services of Rehabilitative and Long Term Nursing Care	Ancillary Services to Health Care ^(b)	Medical Goods Dispensed to Outpatients	Preventi on and Public Health Services	Health Administra tion and Health Insurance	Health Related Function ns ^(c)
Year								Total
2007	99.44	52.50	0.76	3.11	10.57	11.07	19.80	7.07
2008	101.33	52.00	0.96	2.11	11.80	11.02	16.21	10.41
								204.3 1 205. 83

(a) Outpatient Curative Care includes Traditional Healers

(b) Ancillary services to health care include provision of laboratory and imaging services, as well as patient transport

(c) Health Related Function includes capital expenditures of health care provider institutions, training & education of health personnel and research, development in health and environmental health

Table 4-2 Share of Health Expenditure by Function (%), 2007 to 2008

	HC.1.1	HC.1.3	HC.2 + HC.3	HC.4	HC.5	HC.6	HC.7	HCR
	Inpatient Care	Outpatient Care ^(a)	Services of Rehabilitative and Long Term Nursing Care	Ancillary Services to Health Care ^(b)	Medical Goods Dispensed to Outpatients	Prevent ion and Public Health Services	Health Administra tion and Health Insurance	Health Related Function ns ^(c)
Year								Total
2007	48.67%	25.70%	0.37%	1.52%	5.17%	5.42%	9.69%	3.46%
2008	49.23%	25.27%	0.46%	1.03%	5.73%	5.35%	7.87%	5.06%
								100.0 0% 100.0 0%

(a) Outpatient Curative Care includes Traditional Healers

(b) Ancillary services to health care include provision of laboratory and imaging services, as well as patient transport

(c) Health Related Function includes capital expenditures of health care provider institutions, training & education of health personnel and research, development in health and environmental health

Table 4-3 Shares of Health Expenditure for each Function by Source of Finance (%), 2007 to 2008

HC.1.1		HC.1.3		HC.2 + HC.3		HC.4		HC.5		HC.6		HC.7		HCR	

(a) Outpatient Curative Care includes Traditional Healers

(b) Ancillary services to health care include provision of laboratory and imaging services, as well as patient transport

(c) Health Related Function includes capital expenditures of health care provider institutions, training & education of health personnel and research, development in health and environmental health

4.3. Pharmaceutical Expenditures

The category of expenditures reported by the FJHA as “Medical goods dispensed to outpatients” includes expenditures on providing medicines to outpatients, as well as expenditures on providing other medical goods, such as eye-glasses or wheelchairs to patients. Most of these reported expenditures involve purchases by households at pharmacies and other retail outlets. In the government sector, they include mostly spending on providing medicines distributed at outpatient dispensaries, and some other medical goods and supplies distributed from outpatient facilities. They should not be interpreted as being equivalent only to expenditures for medicines.

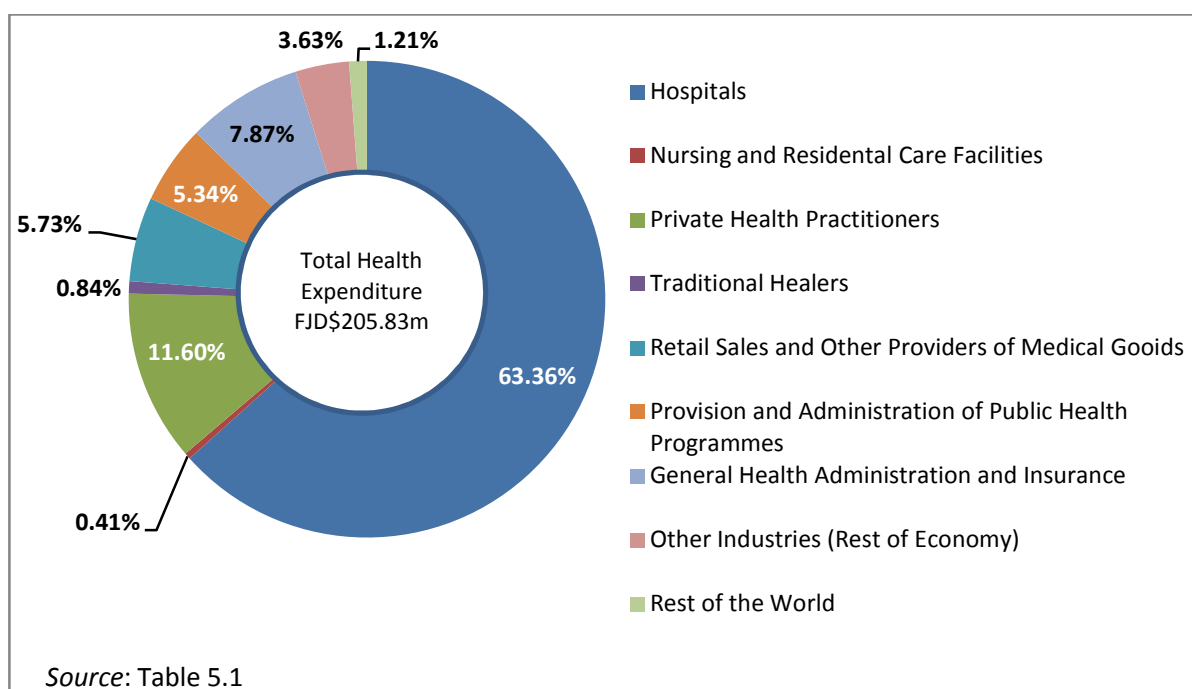
Furthermore, it is important to note that the expenditure on medicines included in this category only accounts for a portion of overall expenditures on medicines in Fiji’s health sector because under the SHA guidelines, expenditure on pharmaceuticals during an inpatient episode of care are categorized as inpatient expenditure.

5. Health Expenditure by Providers

5.1. Total Expenditures

The Fiji Health Accounts (FJHA) systematically classifies all expenditures by the institutions or providers where they are incurred (Figure 5-1). Three major categories of providers accounted for most expenditures in 2008: hospitals (63.36%), providers of ambulatory health care (12.44%), and retailers involved in sale and distribution of medical goods (5.73%). Ambulatory care providers are mainly the clinics of private physicians, dentists, optometrists, acupuncturists and private ancillary services. Traditional Healers also form part of ambulatory care providers. Retail distributors are predominantly private pharmacies.

Figure 5-1 Total Health Expenditure by Provider (%), 2008



General health administration and insurance also accounted for a large amount of Total Health Expenditure (THE) and was 10.08% in 2007 and 7.87% in 2008 (Table 5-1). A possible reason for this decrease is that many of the government administration expenditures that were carried out centrally prior to 2008 were devolved in 2008 to provider level. At the provider level, it is difficult to separate administration expenses from other health activities.

Expenditures at hospitals are the largest spending component, but this share slightly increased from 62.65% in 2007 to 63.36% in 2008 (Figure 5-1 and Table 5-1). The share of health expenditure at ambulatory care providers increased from 12.02% in 2007 to 12.44% in 2008. There were also increases in the share of spending at pharmacies from 5.18% in 2007 to 5.73% in 2008 (Table 5-1).

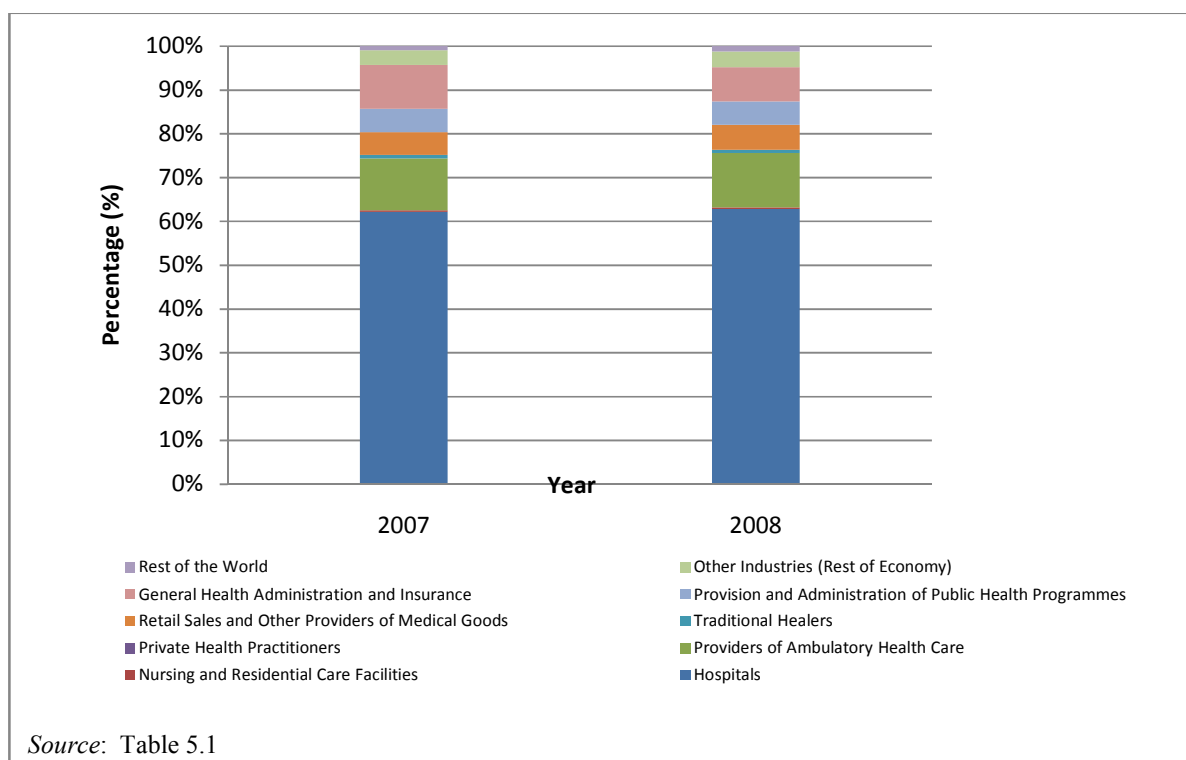
5.2. Hospital Spending

5.2.1. Hospital Spending by Source of Financing

Hospital expenditures are mostly financed by public sources. However, public sector financing decreased from 84.76% in 2007 to 80.62% of the total health expenditure at hospitals in 2008 (Table 5-2 and Figure 5-2). Simultaneously, private sector financing increased from 14.62% in 2007 to 15.17% in 2008, largely owing to increased activity at private hospitals, which are exclusively financed by the private sector. Overall, household health expenditures have increased from 9.62% in 2007 to 9.92% in 2008.

A large increase in donor funding in 2008 was mainly due to Korea International Cooperation Agency (KOICA) investing funds for the capital construction works at the Labasa Hospital Accident & Emergency (A&E) Unit. This is also apparent in Table 4 2-3 where there is an increase in 2008 in privately funded health-related expenditure. This is also apparent in Table 4-3 where there is an increase in 2008 in privately funded health-related expenditure.

Figure 5-2 Total Health Expenditure by Provider (%), 2007-2008



5.2.2. Non-Hospital Spending

Most non-hospital spending occurs at ambulatory providers, such as physician clinics and pharmacies. Providers of Ambulatory Health Care have shown an increase in the share of THE from 12.02% in 2007 to 12.44% in 2008 (Table 5-1). This equates to an overall increase in Providers of Ambulatory Health Care expenditures by 4.27% from 2007 to 2008 and suggests that more of the population is opting to use private health clinics. There were also increases in prices for drugs and medicines at retail pharmacies. Spending on curative services also increased in hospitals from 62.65% in 2007 to 63.36% in 2008 (Table 5-1).

Of the remaining non-hospital spending, the largest components are spending by agencies involved in provision and administration of Public Health Programmes, which are almost exclusively MOH funded and provided (5.34% in 2008 – Table 5-1), and those involved in General Health Administration and Insurance (7.87% in 2008 – Table 5-1). Spending by agencies providing public health services is in line with the overall slow increase in spending on public and preventive health services by the

government. Government departments account for the largest part of those agencies providing General Health Administration.

Figure 5-3 Total Health Expenditure at Hospitals by Financing Agents (%), 2007-2008

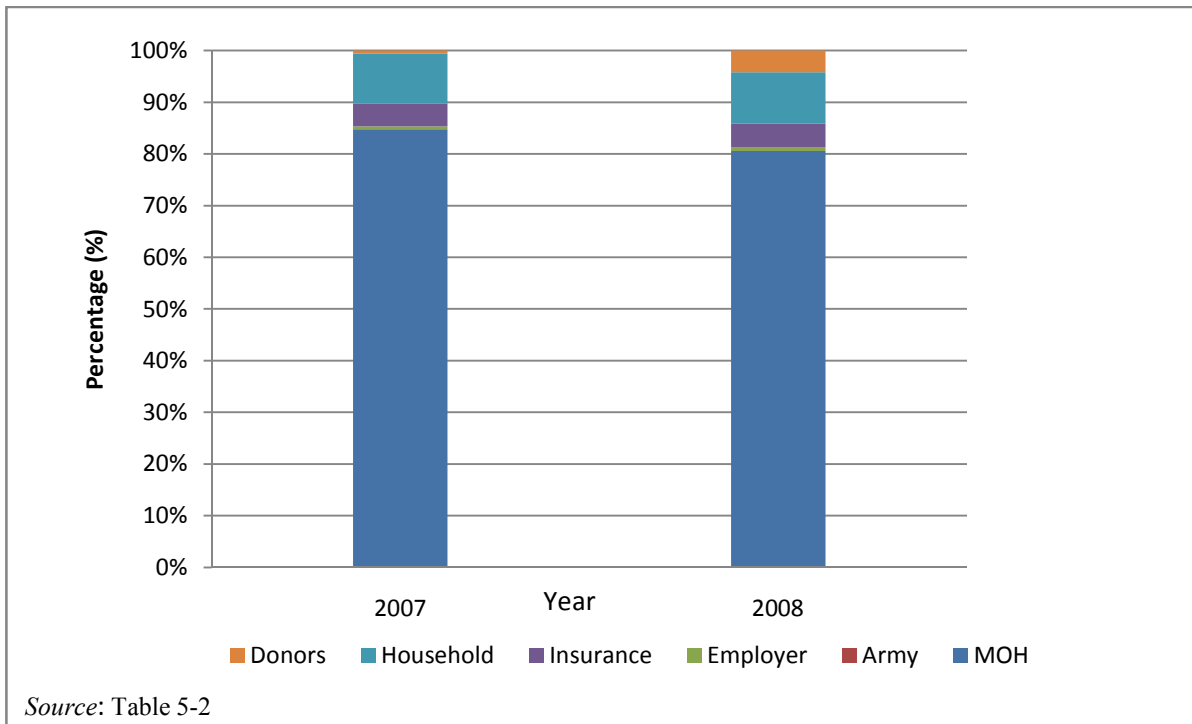


Table 5-1 Total Health Expenditure by Provider, 2007 to 2008

HP.1		HP.2		HP.3		HP.3.4		HP.4		HP.5		HP.6		HP.7		HP.9	
Year	Hospitals Amount (FJDm)	Residential Care Facilities		Providers of Ambulatory Health Care		Traditional Healers		Retail Sales and Other Providers of Medical Goods		Provision and Administration of Public Health Programmes		General Health Administration and Insurance		Other Industries (Rest of Economy)		Rest of the World	
		Share (%)	Amount (FJDm)	Share (%)	Amount (FJDm)	Share (%)	Amount (FJDm)	Share (%)	Amount (FJDm)	Share (%)	Amount (FJDm)	Share (%)	Amount (FJDm)	Share (%)	Amount (FJDm)	Share (%)	Total
2007	128.01	62.65	0.72	0.35	24.55	12.02	1.61	0.79	10.58	5.18	11.05	5.41	20.60	10.08	6.96	3.41	185
2008	130.42	63.36	0.85	0.41	25.60	12.44	1.72	0.84	11.84	5.73	11.00	5.34	16.21	7.87	7.48	3.63	248
																	100.00
																	100.00

Table 5-2 Total Health Expenditure at Hospitals by Financing Agent (FJDm), 2007 to 2008

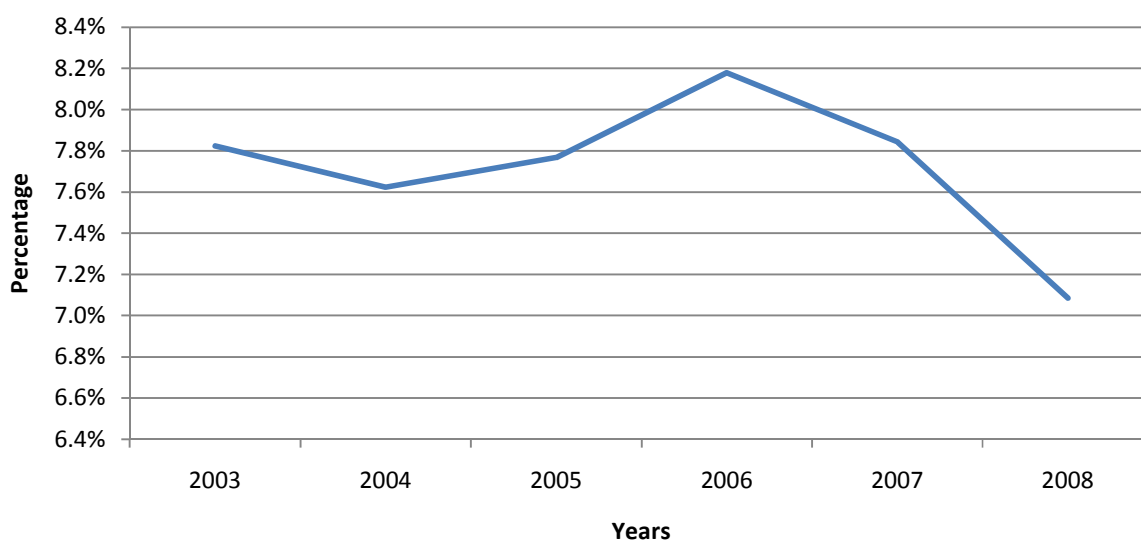
Year	HF.1		HF.2		HF.2.2		HF.2.3		HF.2.5		HF.3	
	Public		Private		Private Insurance		Private household out-of-pocket expenditure		Corporations (other than health insurance)		Share of the World (Donors)	
Year	General Government	Share	Private	Share	Private Insurance	Share	Private household out-of-pocket expenditure	Share	Corporations (other than health insurance)	Share	Rest of the World (Donors)	Total
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
2007	108.50	84.76%	18.72	14.62%	5.62	4.39%	12.32	9.62%	0.77	0.61%	0.79	128.01
2008	105.14	80.62%	19.76	15.17%	6.05	4.64%	12.94	9.92%	0.79	0.61%	5.49	130.41

6. Government Health Expenditure by Providers and Functions

6.1. Government Health Expenditure

Health expenditure in Fiji remains largely Government funded and channeled through the Ministry of Health (MoH) which is the government's arm for administering health care services in the country. As the largest source for health funds, the Government's role in health care financing is important and is the focus of this chapter. Chapter 6 looks at government spending on health. We are able to provide figures for 2003-2008 for government expenditure due to the availability of data in the Ministry of Health's EPICOR data base.

Figure 6-1 Government Health Expenditure as a Percentage of Total Government Expenditure

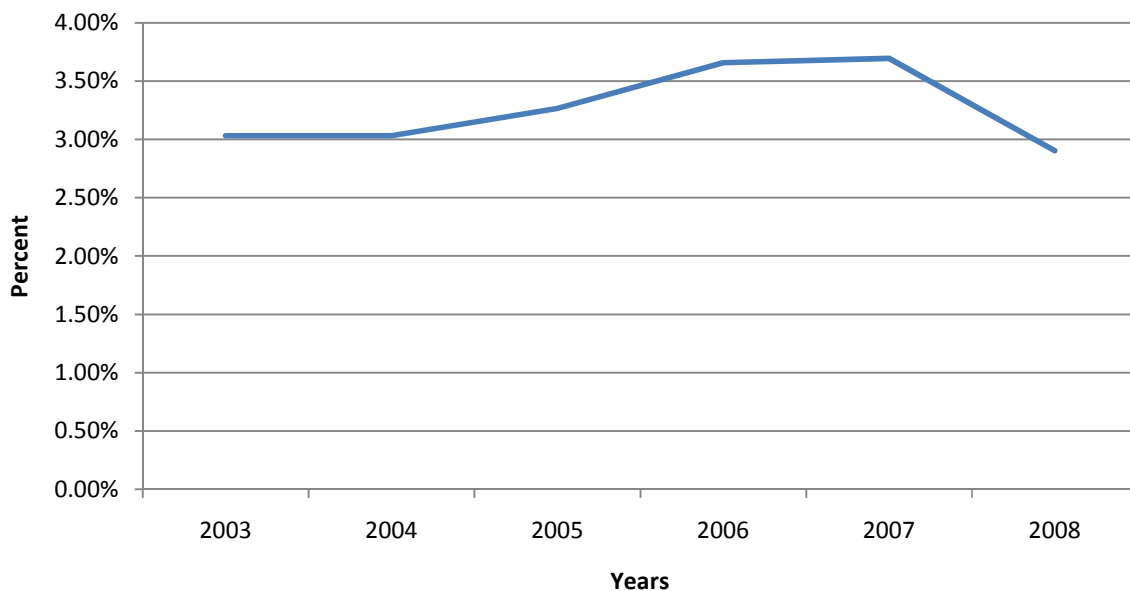


Government health expenditure as a percentage of total government spending has remained relatively constant and averaged 7.7% percent over the period 2003 to 2008 (Figure 6-1). Government health spending was \$FJD 84 million in 2003, \$FJD111 million in 2006, and \$FJD102 million in 2008. The increase and decrease is largely driven by fluctuations in government revenues (thus affecting the government fiscal position) over those years. The growth rate of government spending has averaged

4% per year over the period 2003 to 2008. The largest growth rate was 18% in 2006 and the lowest was -5% in 2008. However Total Government Health Expenditure (TGHE) has increased by 20% from the year 2003 to 2008.

As a percentage of GDP, government health expenditure has averaged 3.3% over the period 2003 to 2008. The percentage has remained relatively constant and without any significant increase over the last 8 years.

Figure 6-2 Government Health Expenditure as a Percentage of GDP



6.2. Government Health Expenditure by Providers

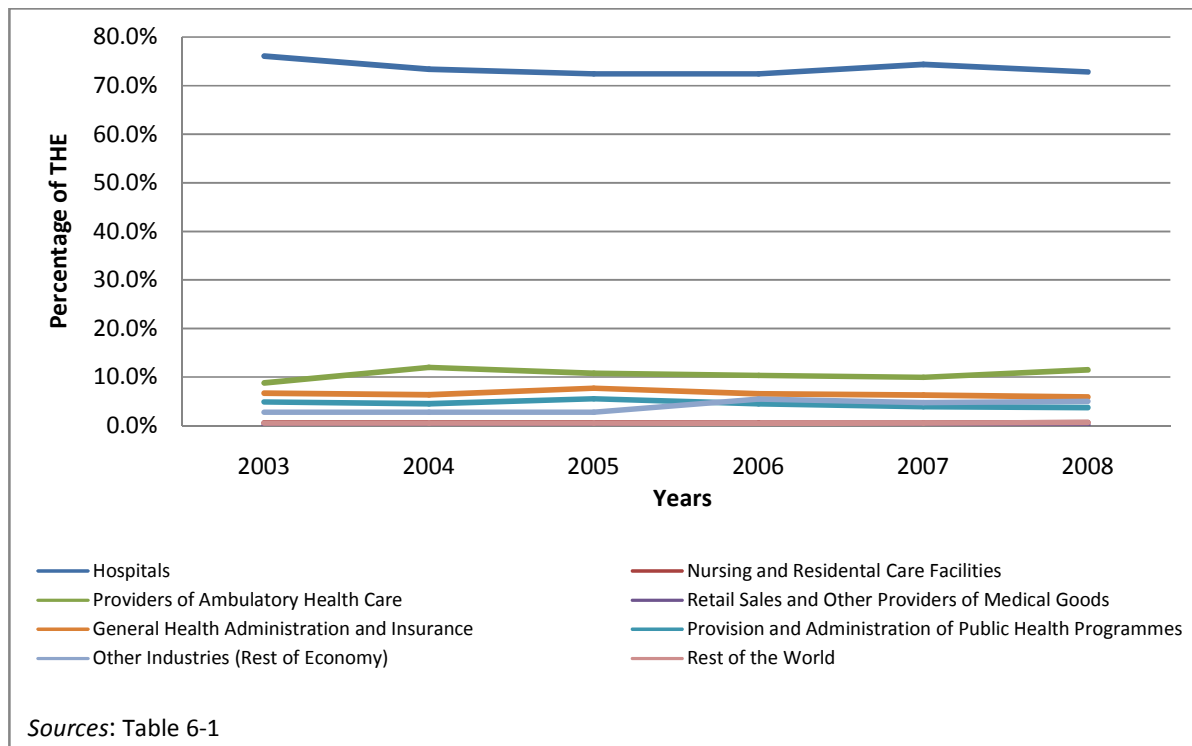
Government health providers in Fiji exist at different levels that are determined by the complexity of the health services they provide. In order of increasing complexity the range of government health providers are as follows: divisional hospitals, sub-divisional hospitals, health centres, primary health care and health promotion centres, and nursing stations. This list is by no means comprehensive. However these providers constitute the major recipients of government health funds. Table 6-1 shows the distribution of government health expenditures among the public health providers.

Table 6-1 Government Health Expenditures by Providers (FIDm), 2003 to 2008

HP.1		HP.2		HP.3		HP.4		HP.5		HP.6		HP.7		HP.9		
Year	Hospitals		Nursing and Residential Care Facilities		Providers of Ambulatory Health Care		Retail Sales and Other Providers of Medical Goods		Provision and Administration of Public Health Programmes		General Health Administration and Insurance		Other Industries (Rest of Economy) (a)		Rest of the World	
	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)
2003	84.4	76.0%	.59	0.5%	9.7	8.7%	.002	0.0%	5.3	4.8%	7.4	6.6%	3.0	2.7%	.54	0.5%
2004	89.0	73.4%	.67	0.6%	14.5	12.0%	.001	0.0%	5.4	4.5%	7.7	6.4%	3.3	2.8%	.61	0.5%
2005	94.6	72.4%	.68	0.5%	14.0	10.7%	.001	0.0%	7.2	5.5%	10.0	7.7%	3.6	2.7%	.66	0.5%
2006	111.5	72.4%	.71	0.5%	15.9	10.3%	.008	0.0%	6.8	4.4%	10.1	6.5%	8.3	5.4%	.65	0.4%
2007	108.9	74.3%	.72	0.5%	14.6	9.9%	.005	0.0%	5.7	3.9%	9.1	6.2%	6.9	4.7%	.69	0.5%
2008	103.0	72.8%	.85	0.6%	16.2	11.5%	.032	0.0%	5.2	3.7%	8.3	5.9%	7.1	5.0%	.86	0.6%

Over the period 2003 to 2008, hospitals have averaged 73.5% of government health expenditure and for the last 8 years remain the major recipient of government health spending. This expenditure as a share of government spending has declined slightly (from 76% in 2003 to 73% in 2008) albeit the dollar value has increased from \$FJD 84,000 in 2003 to \$FJD 103, 000 in 2008. In 2008, divisional hospitals accounted for 65% and sub-divisional hospitals for 35% of total hospital expenditure. As a percentage of TGHE, this equates to approximately 47% and 25% respectively.

Figure 6-3 Government Health Expenditure by Providers



The remaining government health funds are distributed to providers of ambulatory care (average 10.5%), health administration (average 6.5%), public health programs (average 4.5%), other industries (average 3.9%), nursing and residential care facilities (average 0.5%), and rest of the world (average 0.5%). Upgrading of Health Facilities like Health Centres with modern equipment has been accompanied by a reduction in expenditure on hospitals and an increase in expenditure on Ambulatory services.

Health administration remains a significant expenditure item of Government spending on health, averaging 6.5% over the period 2003 to 2008. Administration expenses peaked in the years 2005 and 2006 and this may be a consequence of the government's health reforms. Approximately 70% of TGHE is for salary and wages which is distributed across all providers.

Provision and administration of public health programmes has decreased over the period 2003 (4.82%) to 2008 (3.67%). Despite the plans and initiatives to revamp funding for preventive health and health promotion, the health expenditure on these activities remains minimal. The rest of the world expenditure represents the government contribution to overseas evacuations for health treatment.

6.3. Government Health Expenditure by Functions

Table 6-2 shows the distribution of government health expenditures by function. The two main functions on which majority of the expenses are generated is in-patient (average of 54% of TGHE) and out-patient (average of 29% of TGHE) services over the period 2003 to 2008. Both in-patient and out-patient services have remained relatively constant in terms of expenses as a share of TGHE. All in-patient expenses are generated only at hospitals, while out-patient expenditures are spread out across the spectrum of government health service providers.

The next largest share of health expenditure is health administration which on average accounts for 6.5% of THE. Since 2005 its share as a percentage of TGHE has shown a decreasing trend and possibly highlights the government's initiative to reduce administration costs across public sector services. Prevention and public health services averages 4.5% over the time period 2003-2008. Health related functions include training and staff development as well as costs associated with training institutions such as the Fiji School of Nursing (FSN) and the Fiji School of Medicine (FSMed).

Ancillary services to health care and services of rehabilitative and long term nursing care make up the remaining expenditure by function of government health spending.

Figure 6-4 Government Health Expenditure by Functions

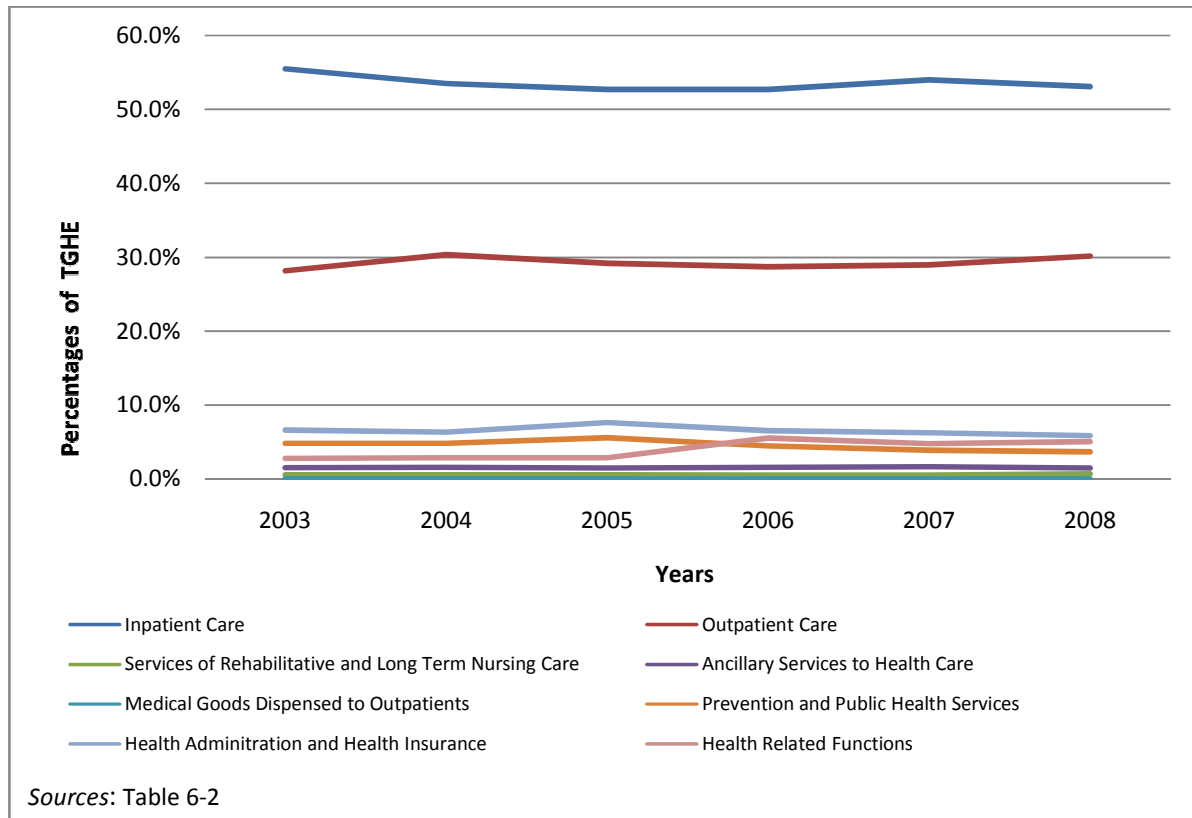


Table 6-2 Government Health Expenditures by Functions (FJDM), 2003 to 2008

HC.1.1																	HC.1.3				HC.2 + HC.3				HC.4				HC.5				HC.6				HC.7				HCR			
Year	Inpatient Care				Outpatient Care				Services of Rehabilitative and Long Term Nursing Care				Ancillary Services to Health Care(a)				Medical Goods Dispensed to Outpatients				Prevention and Public Health Services				Health Administration and Health Insurance				Health Related Functions(b)				Total											
	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)	Amount (FJD)	Share (%)																
2003	61.6	55.50%	31.2	28.10%	0.6	0.60%	1.7	1.50%	0	0.00%	5.3	4.80%	7.4	6.60%	3.1	2.80%	111																											
2004	64.9	53.50%	36.8	30.30%	0.7	0.60%	1.9	1.60%	0	0.00%	5.8	4.80%	7.7	6.40%	3.5	2.90%	121.3																											
2005	68.9	52.70%	38.1	29.10%	0.7	0.60%	2	1.50%	0	0.00%	7.3	5.60%	10	7.70%	3.8	2.90%	130.8																											
2006	81.1	52.70%	44.2	28.70%	0.8	0.50%	2.4	1.50%	0	0.00%	6.9	4.50%	10.1	6.50%	8.5	5.50%	154																											
2007	79.1	54.00%	42.4	28.90%	0.8	0.50%	2.4	1.60%	0	0.00%	5.7	3.90%	9.1	6.20%	7	4.80%	146.5																											
2008	75.2	53.10%	42.6	30.10%	1	0.70%	2.1	1.50%	0	0.00%	5.2	3.70%	8.3	5.90%	7.2	5.10%	141.6																											

(a) Ancillary services to health care include provision of laboratory and imaging services, as well as patient transport

(b) Health Related Function includes Training & Education and Research and Development

7. International Comparisons

7.1. Comparability of Fiji Health Accounts Estimates

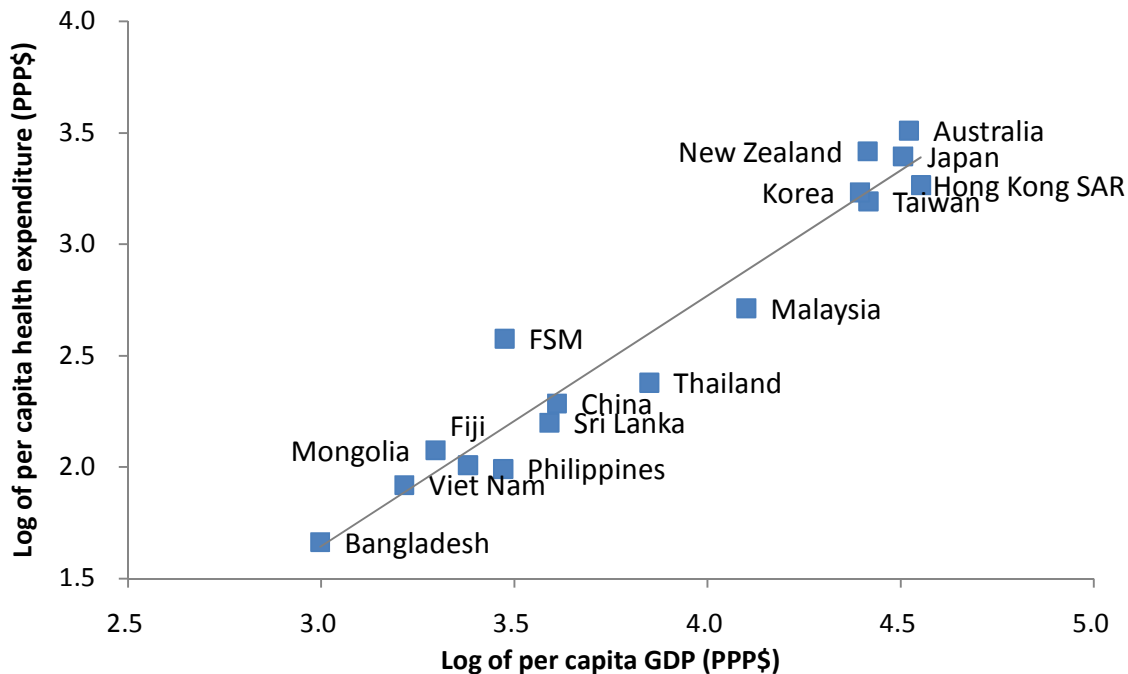
The Fiji health Accounts framework is designed to be consistent with the OECD SHA standards, and so the FJHA expenditure estimates are directly comparable with other SHA-based estimates of spending in other countries. This section uses such data to compare health spending in Fiji with other countries. In all the tables and figures, Fiji and other territories are arranged in order of increasing per capita GDP so as to further aid comparisons.

7.2. Total Spending and Sources of Healthcare Financing

Total expenditure on health in Fiji at 4.2% of GDP in 2007 is comparable to spending levels in other middle income economies in the region (Table 7-1). It is higher than health spending in Thailand (3.5%) the same as that in Malaysia (4.2%) but lower than in China (4.7%). In general, levels of aggregate health spending in countries are closely related to income levels, with spending per capita increasing with income levels. Figure 7-1 shows how the relationship between spending per capita and per capita GDP is quite consistent and linear between countries at different income levels in Asia. The figure also indicates that spending in Fiji is actually slightly less than might be predicted for its income level.

In general, the share of public financing in total financing increases with increasing income (Table 7-2). Public financing is generally held to include both government financing and social insurance. Social insurance is a government mandated scheme for organizing health coverage. Fiji does not have a social insurance scheme. The 72% public share in Fiji is much higher than in poorer Asian countries, such as Bangladesh (26%), similar to the share of countries at similar stages of development such as Thailand (64%) but at the same time less than in some of the more developed economies such as Japan (79%) and New Zealand (80%). The public share of financing in Fiji is greater than the high income countries of Australia (68%) and Korea (55%).

Figure 7-1 Per Capita Health Expenditure vs Per Capita GDP for Selected Asia-Pacific Countries



The sources of public financing differ between countries, with some countries such as China and Korea relying significantly on social insurance in addition to general government financing, which is essentially from taxation (Figure 7.2). Malaysia and Hong Kong have relatively low levels of public financing, well developed private health insurance markets and relatively high out-of-pocket payments. Out-of-pocket expenditure in Fiji (16%) is about the same as that in Mongolia (15%), Japan (15%) and New Zealand (14%). Only Federated States of Micronesia (FSM) has a lower proportion of out-of-pocket expenditure than these countries at 7% (Figure 7.3).

Figure 7-2 Total Health Expenditure By Financing Agent For Selected Asia-Pacific Countries (%)

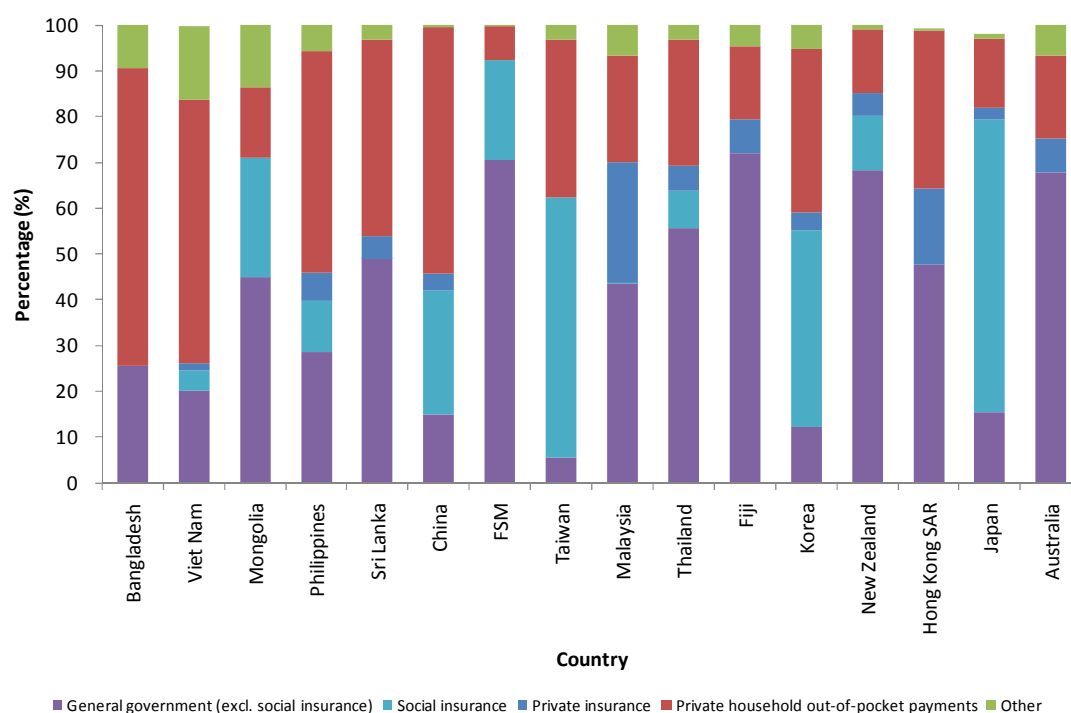


Table 7-1 HealthEconomicIndicators for Selected Asia-Pacific Territories

Territory	Year	GDP per Capita (US\$)	GDP per Capita (PPP\$)	THE (US\$ million)	Per capita Health Expenditure (US\$)	Per capita Health Expenditure (PPP\$)	Health Expenditure (%GDP)
Bangladesh	2004	376	994	2,598	17	46	4.6
Viet Nam	2002	440	1,641	1,768	22	83	5
Mongolia	2002	520	1,976	74	30	119	6.6
Philippines	2005	1,169	2,959	3,282	39	98	3.3
Sri Lanka	2006	1,422	3,895	1,134	57	158	4.2
China	2005	1,715	4,076	105,682	81	193	4.7
FSM*	2006	2,197	2,985	30	277	376	12.6
Thailand	2005	2,800	7,069	6,168	98	239	3.5
Fiji	2007	3,628	2,399	130	155	102	4.2
Malaysia	2006	5,989	12,589	6,495	249	516	4.2
Taiwan	2005	15,714	26,068	21,260	939	1,557	6
Korea	2007	20,014	24,801	66,015	1,362	1,710	6.8
New Zealand	2006	25,898	25,945	10,644	2,544	2,608	9.9
Hong Kong SAR	2005	26,092	35,678	9,202	1,351	1,840	5.2
Japan	2006	34,253	32,040	352,505	2,759	2,477	8.2
Australia	2006	34,997	33,196	68,845	3,326	3,234	9.4

*FSM – Federated States of Micronesia

Table 7-2 THE by Financing Agent for Selected Asia-Pacific Territories(%)

Territory	Total Health Expenditure (US\$ million)	HF.1.1	HF1.2	HF.2.1 + HF.2.2	HF.2.3	Other	Total Health Expenditure
		General Government (excl. social insurance)	Social Insurance	Private Insurance	Private Household Out-of-Pocket Payments		
Bangladesh	2,598	25.6	-	-	65	9.5	100
Viet Nam	1,768	20.1	4.4	1.6	57.6	16.1	100
Mongolia	74	45	26.1	-	15.3	13.6	100
Philippines	3,282	28.7	11	6.3	48.4	5.5	100
Sri Lanka	1,134	48.9	0.1	4.9	43	3.1	100
China	105,682	15	26.9	3.7	53.9	0.5	100
FSM*	30	70.3	22	-	7.3	0.3	100
Taiwan	21,260	5.5	56.7	-	34.5	3.2	100
Malaysia	6,495	43.4	0.4	26.2	23.2	6.7	100
Thailand	6,168	55.7	8	5.6	27.6	3.1	100
Fiji	130	71.9	0	7.5	15.8	4.9	100
Korea	66,015	12.3	42.7	4.1	35.7	5.2	100
New Zealand	10,644	68.2	11.9	5	14	1	100
Hong Kong SAR	9,202	47.7	-	16.5	34.5	0.5	99.2
Japan	352,505	15.4	64	2.6	15.1	1	98.1
Australia	68,845	67.7	-	7.5	18.2	6.6	100

*FSM – Federated States of Micronesia

Years of data are indicated in Table 7-1

7.3. Composition of Spending by Function and Providers

Figure 7-3 (Current health expenditure by function for selected Asia-Pacific countries and territories %). and Table 7-3 provide details of the distribution of spending by functions in Fiji compared with other regional economies. The share of spending that is for inpatient care in Fiji (51%) is higher than all other countries apart from Mongolia (56%). The share of spending on inpatient care ranges from 58% in Mongolia to 24% in Japan with an average across all countries of 34%. The share of expenditure on outpatient care in Fiji (27%) is lower than the average for all countries of 29%.

The share of pharmaceuticals dispensed outside of hospitals in Fiji (5.1%) is similar to Thailand (4.4%) and Malaysia (4.2%). The share in Fiji is significantly less than in Bangladesh (51.3) and Viet Nam,

(42.8) However, it must be noted that the share reflects both prescribing practices of doctors and the organisation of health care facilities. Fijian citizens can attend hospital outpatients' clinics and receive their prescriptions for free or at a nominal cost from the hospital pharmacy. There is a wide dispersion in the share of health expenditure accounted for by prevention and public health; ranging from 15.7 % in Bangladesh to 1.7% in Australia. The share in Fiji at 5.7% is close to the average for all countries of 6.9%.

Figure 7-3 Current Health Expenditure by Function for Selected Asia-Pacific Territories(%)

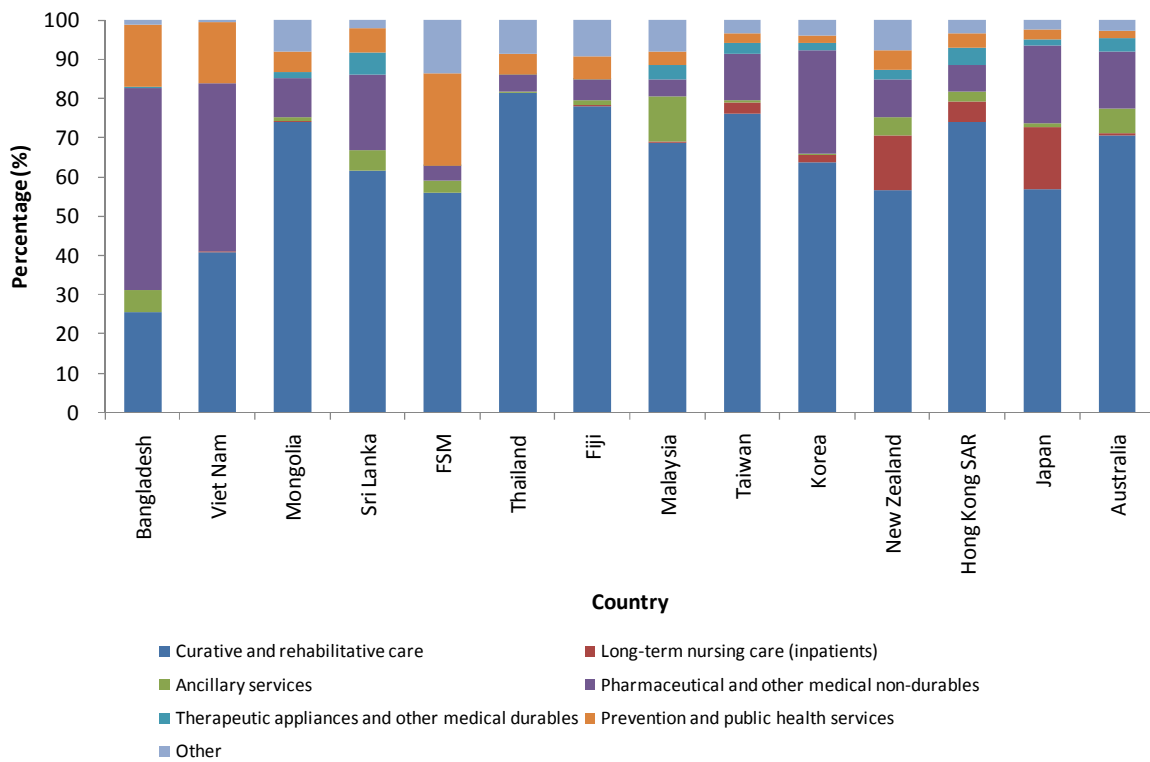


Table 7-3 Current Health Expenditure (CHE) by Function for Selected Asia-Pacific Territories (%)

Territory	Current Expenditure on Health Care (US\$ million)	HC.1 + HC.2	HC.1.1;2.1 + HC.1.2;2.2	HC.1.3;2.3 + HC.1.4;2.4	HC.3	HC.4	HC.5.1	HC.5.2	HC.6	Other (a)	Total
		Curative and Rehabilitative Care	In-Patient, Rehabilitative and Day Care	Out-Patient Curative, Rehabilitative and Home Care	Long-Term Nursing Care (Inpatients)	Ancillary Services	Pharmaceutical and Other Medical Non-Durables	Therapeutic Appliances and Other Medical Durables	Prevention and Public Health Services		
Bangladesh	2,234	25.5	25.5	0	-	5.8	51.3	0.4	15.7	1.2	99.9
Viet Nam	1,768	40.9	26.9	14	0.2	-	42.8	-	15.5	0.7	100
Mongolia	70	74.1	56	18.1	0.2	1	9.7	1.7	5.1	8.3	100
Sri Lanka	1,010	61.7	38	23.7	-	5.1	19.3	5.6	6.2	2.1	100
FSM*	28	55.9	na	na	0	3.1	3.7	0.2	23.5	13.6	100
Thailand	5,926	81.3	37.3	44	-	0.4	4.4	0.1	5	8.9	100
Fiji	125	77.9	51	26.9	0.37	1.3	5.1	0.3	5.7	9.4	100
Malaysia	6,178	68.8	32.4	36.4	0.1	11.7	4.2	3.7	3.5	8.1	100
Taiwan	20,427	76.0	25	51	2.9	0.8	11.6	2.7	2.7	3.3	100
Korea	61,932	63.8	28	35.8	1.8	0.3	26.3	1.9	2	4	100
New Zealand	10,644	56.7	28.6	28.1	14	4.6	9.6	2.5	4.9	7.6	100
Hong Kong SAR	8,848	73.9	35.7	38.2	5.3	2.6	6.8	4.4	3.5	3.5	100
Japan	345,822	56.8	24.2	32.6	16	0.7	20	1.7	2.4	2.4	100
Australia	64,862	70.6	37	33.6	0.5	6.2	14.6	3.5	1.7	2.9	100

(a) Capital Excluded from Other

*FSM - Federated States of Micronesia

Years of data are indicated in Table 7-1

Figure 7-4 (Current health expenditure by provider for selected Asia-Pacific countries and territories %) and Table 7-4 provide details of the distribution of spending by providers in Fiji compared with other regional economies. In line with the relatively high proportion of expenditure on inpatient care in Fiji (Table 7-3), there is a high share of expenditure on hospitals of 63.7%. The only countries with higher shares are Thailand (72%) and Mongolia (64%). Providers of ambulatory care (HP.3), which are generally private practices, have a low share of total spending in Fiji of 12.3%. Thailand (9.5%) and Mongolia (6.3%) also have lower shares of expenditure on providers of ambulatory services.

Figure 7-4 CHE by Provider for Selected Asia-Pacific Territories (%)

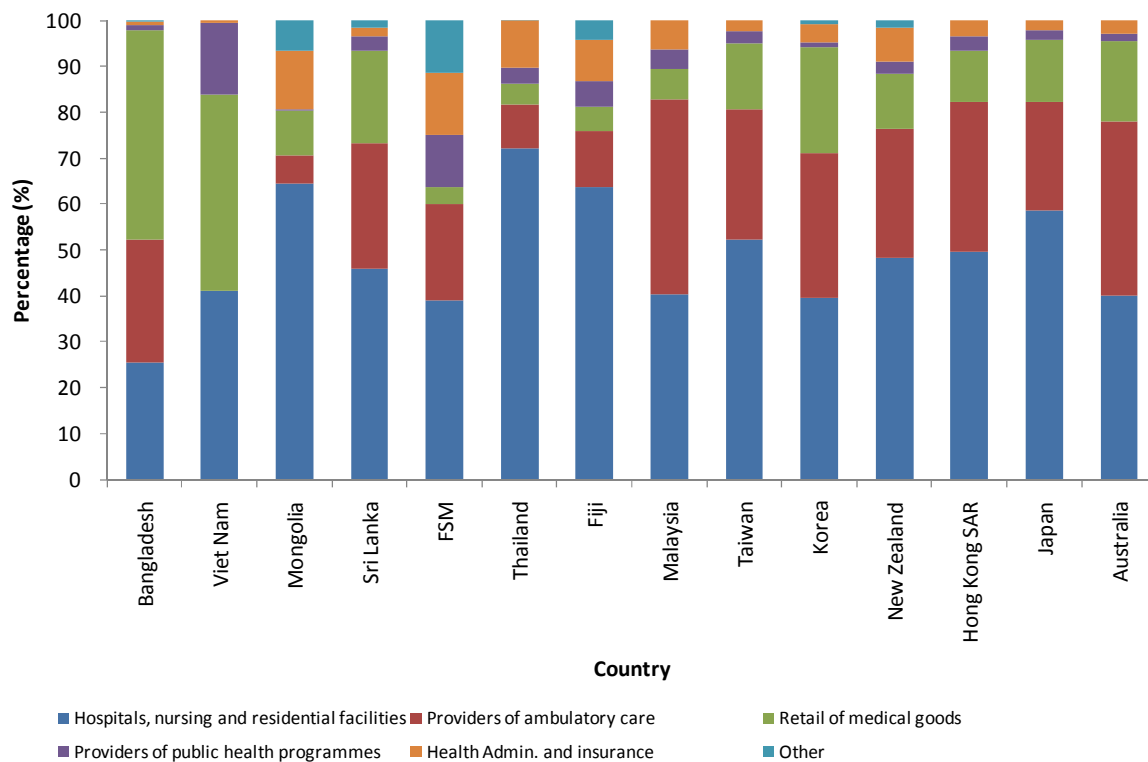


Table 7-4 CHE by Provider for Selected Asia-Pacific Territories (%)

Territory	Current Expenditure on Health Care (US\$ million)	HP.1 + HP.2	HP.3	HP.4	HP.5	HP.6	HP.7 + HP.9	Total
		Hospitals, Nursing and Residential Facilities	Providers of Ambulatory Care	Retail of Medical Goods	Providers of Public Health Programmes	Health Admin. and Insurance	Other	
Bangladesh	2,234	25.5	26.8	45.7	1	0.8	0.2	100
Viet Nam	1,768	41.1	-	42.8	15.5	0.7	-	100
Mongolia	70	64.4	6.3	9.7	0.3	12.6	6.7	100
Sri Lanka	1,010	45.9	27.3	20.2	3.2	1.9	1.6	100
FSM*	28	39.1	20.8	3.9	11.3	13.6	11.3	100
Thailand	5,926	72.3	9.5	4.4	3.6	10.1	0.1	100
Fiji	125	63.7	12.3	5.2	5.5	9	4.4	100
Malaysia	6,178	40.3	42.6	6.5	4.2	6.4	0	100
Taiwan	20,427	52.2	28.4	14.3	2.7	2.4	-	100
Korea	61,932	39.6	31.6	22.9	1.2	4	0.8	100
New Zealand	10,644	48.2	28.1	12	2.6	7.6	1.5	100
Hong Kong SAR	8,848	49.5	32.7	11.2	3.1	3.5	-	100
Japan	345,822	58.7	23.6	13.6	2	2	-	100
Australia	64,862	40.1	38	17.3	1.7	2.9	0	100

*FSM – Federated States of Micronesia

Years of data are indicated in Table 7-1

8. Technical Notes

8.1. General

The Ministry of Health is now able to report national health expenditures using a systematic approach. Thanks to an ADB/WHO funded pilot project on implementing National Health Accounts (NHA), and the Fiji Health Accounts team 2010, the Fiji Health Accounts (FJHA) framework was developed. The FJHA framework was originally designed to be compliant with the OECD System of Health Accounts (SHA), which is the approach endorsed by WHO for international reporting of health expenditure statistics. This framework will form the basis for all future NHA reporting and overtime be continuously revised and updated to ensure compliance with international standards.

The FJHA framework in consistency with the SHA approach classifies health spending according to sources of financing, financing schemes or agents, providers, and functions. In the future the FJHA framework can also be extended to classify expenditures by district and by disease. The FJHA classifications is based on the relevant SHA classifications but is appropriately modified to ensure relevance and applicability to Fiji. For example, the classification of providers explicitly categorizes the distinctive types of public health providers in Fiji by taking into account the hospital classifications used by the Ministry of Health (Divisional hospitals, sub-divisional hospitals, and health centres). Because the FJHA framework and its classifications are defined parallel to elements of the SHA framework, the Ministry is able to report health expenditures in Fiji simultaneously using both the national FJHA framework and according to the OECD SHA framework.

8.2. Definitions

8.2.1. Total Health Expenditure (THE)

The FJHA definition of health expenditure is fully consistent and comparable with that in the OECD SHA standard which defines the term ‘health expenditure’ as expenditure on health goods (medications, aids and appliances), health services (medical treatments and diagnosis), related health services (e.g. education, research) and health-related investment (capital formation or capital expenditure).

THE as currently estimated and reported in the FJHA estimates are underestimated, as certain categories of spending are not currently measured in full. Reason for this underestimation is the lack of comprehensive data sources and poor survey responses principally by the private sector. However these expenditures would be less than 5% of total health spending. Overtime, improvements in data sources and survey methods will reduce the underreporting.

8.2.2. Financing Sources

Financing sources are entities, organizations, and individuals from which financial resources for healthcare are elicited from. These financing sources provide money to financing agents to be pooled and distributed. In the FJHA, financing sources are classified into three categories:

Public Source: Fiji Government via the Ministry of Finance

Private Sources: Households that pay directly out-of-pocket for healthcare goods and services; Employers, who directly finance or reimburse healthcare services for their employees; Non-profit institutions serving households.

Rest of the world: Donor organizations and other foreign governments.

8.2.3. Financing Agents

These are institutions that pool health resources collected from different sources, as well as entities (households and firms). In the FJHA, financing agents are classified into three major categories:

<i>Public agents:</i>	Government owned institutions that are governed under the Ministry of Health (MoH)
<i>Private agents:</i>	Private institutions and entities such as Non-governmental organizations, households, private insurance enterprises
<i>Rest of the world:</i>	Donor organizations and other foreign governments.

8.2.4. Providers

Providers are the entities that produce and deliver healthcare goods, services and activities. The major provider categories used in the FJHA framework consist of:

Hospitals (both private and public) which are institutions that treat inpatients

Public Health Centres and Nursing stations

Offices of physicians, dentists and other health professionals (mostly private) which deliver care on an outpatient basis

Retail pharmacies and other providers who distribute medicines and other medical goods and supplies

Agencies involved in delivering public health programs and activities

Agencies responsible for health administration, and administration of health insurance schemes

8.2.5. Functions

Functions are the purposes for which health care expenditures are used. The FJHA classifies expenditures according to function. Only direct health expenditures and capital expenditures

are included in the definition of THE. The major functional categories used in the FJHA framework consist of:

Inpatient and Outpatient curative care

Rehabilitative and long-term nursing care

Ancillary services to health care (comprises laboratory and other diagnostic services and patient transport)

Medical goods dispensed to outpatients (comprises medicines and other goods and supplies)

Prevention and public health services (includes public health programs such as maternal and child health programs, immunization programs and health education activities)

Health administration and insurance administration

8.3. Data sources

8.3.1. General

Information is collected from both public and private sources to compile the FJHA estimates. Surveys were also conducted to augment existing data sources. The information collected is then analyzed using a variety of estimation methods in order to estimate different elements of spending and develop the final estimates that are published.

Constant price health expenditure, where reported, adjusts for the effects of inflation and provides an estimate of health expenditure if the 2005 prices were applied. The implicit GDP price deflator provided by the Fiji Bureau of Statistics (FIBoS) was used to adjust current prices.

8.3.2. Central Government

Overall spending by government ministries and departments is based on the audited actual accounts data of the Government of Fiji, as reported by the Ministry of Health's Accounting

System (EPICOR). Data on expenditures by other central agencies, including the Fiji Pharmaceutical Services (FPS), are obtained by direct contact with the relevant authority.

8.3.3. Private Sector Spending

A variety of different data sources are used to estimate private spending, with different data sources being used for specific elements of spending. Major data sources include national surveys (e.g. household income and expenditure survey) conducted by the Fiji Islands Bureau of Statistics (FIBOS), Annual reports (e.g. insurance reports) by the Reserve Bank of Fiji (RBF), surveys of the private health sector (e.g. private hospitals, general practitioners, dentists etc.) conducted by the NHA 2007/08 Committee, and data from industry sources and other secondary sources.

8.4. Methods used

8.4.1. Government Spending

Data on aggregate government spending is obtained from EPICOR for the years 2003 to 2009¹. This data (transactions by line items) enabled expenditure to be categorized by different departments and by the various ministry programs. However, for the detailed analysis of expenditures by institutions and functions, a variety of other data sources and methods are necessary. These include:

The allocation of hospital expenditures by type of hospital and by function was based on coding of the detailed data from EPICOR. In terms of distribution of expenditure by functions of inpatient and outpatient, the allocation was based on a cost study which was conducted in

¹ Although the focus of this report is for the financial years 2007 and 2008, government data for the years 2003 to 2009 were extracted since this data was readily available in the system. Once the program to extract the government data for 2007 and 2008 was developed, it was easy to simply replicate this program to all other years. It was around 2003 that the EPICOR system started. Data for the year 2009 is unaudited and following SHA guidelines this data cannot be used for NHA purposes.

1992². This was the only comprehensive cost study on inpatient and outpatient services in Fiji.

The allocation of expenditures on medicines and supplies to different institutions and regions, and functions within hospitals, is based on data collected in hospitals and recorded in the EPICOR system, and on drug distribution data provided by the Fiji Pharmaceutical Services (FPS) centre.

8.4.2. Fees Paid To Government Health Care Institutions

Collections of official fees paid to government hospitals and facilities are reported in the EPICOR accounting system. Revenue from the FPS business centre was obtained from their inventory database.

8.4.3. Private Health Care Institutions

The estimates of private entities spending are based on data obtained from surveys of private health institutions conducted by the NHA committee, supplemented with information extracted from published reports, FIBOS surveys of private providers, and aggregate data from the Fiji Inland Revenue and Customs Authority (FIRCA). Surveys were also carried out through district and zone nurses to estimate the population of traditional healers and their estimated expenditure with regards to healthcare.

8.4.4. Sales of Medicines from Pharmacies

Expenditures on the sale of medicines by retail outlets, primarily pharmacies, are based on surveys conducted by the NHA committee supplemented by aggregate data from FIRCA.

²Wong and Govind (1992) Health financing in Fiji: the role of and potential for cost recovery, HFS Technical report

8.4.5. Employer Medical Benefits

These expenditures are estimated using data from surveys of large employers in the country. The survey data provide estimates of employer direct financing of medical benefits for their employees.

8.4.6. Private Health Insurance Expenditures

Aggregates on premium income and reimbursements were taken from the Reserve Bank of Fiji Insurance Annual Reports. These reports provide data on total premium income, reimbursements and expenditure on overseas health goods and services. The allocation to different types of health care goods and services by provider and function was based on survey information provided by the major health insurance firms.

8.4.7. Other Miscellaneous Items of Household Expenditure

Payments to private practitioners are estimated from a variety of data sources. These include surveys of private doctors and the Fiji Islands Bureau of Statistics Household Income and Expenditure Survey for 2002/03 (data for the 2007/08 survey were not ready at the time of this report) and FIRCA. Various adjustments are made to these data to derive estimates consistent with all available information. Such items include household expenditures at indigenous medical practitioners, for laboratory and diagnostic services, and purchases of optical glasses and other medical durables. These data are adjusted during estimation for known biases in survey reporting. Surveys were also carried out on donors, non-governmental organizations, and traditional healers. In the case of traditional healers, national estimates were developed by extrapolating data collected from three provinces within the country.

9. References

Fernando, T. Rannan-Eliya, R. and Jayasundara, J. M. H. 2009 *Sri Lankan Health Accounts: National Health Expenditures 1990-2006*. Health Expenditure Series no. 1. Colombo, Institute for Health Policy.

OECD. 2000. *A System of Health Accounts*. Paris, France: Organisation for Economic Co-operation and Development.

World Health Organization. 2003. *Guide to producing national health accounts: with special applications for low-income and middle-income countries*. Geneva, Switzerland: World Health Organization.

10. Appendix Fiji NHA Tables

NHA Table 2: Total Expenditure on Health by Provider Industry and Source of Funding (FJD, millions), 2007

		General government	Private Sector	Private Insurance	Private household out-of-pocket expenditure	NPISH	Corporations (other than health insurance)	Rest of the world	Total
		HF.1	HF.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5	HF.3	
Hospitals	HP.1	108.50	18.72	5.62	12.32		.77	.79	128.01
Nursing & residential care	HP.2	.72							.72
Ambulatory care	HP.3	14.55	9.83	.83	8.21		.79	.17	24.55
Offices of physicians	HP.3.1	13.78	7.00	.79	5.42		.79	.17	20.95
Dentists	HP.3.2		1.17	.04	1.13				1.17
Offices of other health practitioners	HP.3.3	.23	.04		.04				.27
Traditional healers	HP.3.4		1.61		1.61				1.61
Other providers of ambulatory health care	HP.3.9	.54							.54
Retail Sale and Other Providers of Medical Goods	HP.4	.00	10.57	.09	10.31		.17		10.58
Pharmacies	HP.4.1		10.03		9.86		.17		10.03
Medical goods	HP.4.2		.54	.09	.46				.54
All other miscellaneous sale and other suppliers of pharmaceuticals& medical goods	HP.4.9	.00							.00
Public health programs	HP.5	5.61	1.23		.06	1.16		4.21	11.05
General admin & insurance	HP.6	8.83	10.10	9.79	.31			1.66	20.59
Government administration of health	HP.6.1	8.83	.31		.31			1.66	10.80
Other private insurance	HP.6.4		9.79	9.79					9.79
Other industries (rest of the economy)	HP.7	6.47	.40		.40			.09	6.96
Other internal providers of public health	HP.7.1	.02							.02
Health-related industries	HP.7.9	6.45	.40		.40			.09	6.95
Rest of World	HP.9	.69	1.14	1.14				.02	1.85
Total	Total	145.38	51.99	17.47	31.62	1.16	1.74	6.94	204.31

NHA Table 3: Total Expenditure on Health by Function of Care and Source of Funding (FJD, millions), 2007

		General government	Private Sector	Private Insurance	Private household out-of-pocket expenditure	NPIH	Corporations (other than health insurance)	Rest of the world	Total
		HF.1	HF.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5	HF.3	
Services of curative care	HC.1	121.20	29.93	7.60	20.76		1.57	.81	151.94
Inpatient	HC.1.1	79.21	19.42	6.77	11.88		.77	.81	99.44
Out-patient curative care	HC.1.3	41.99	10.51	.83	8.89		.79		52.50
Basic medical & diagnostic services	HC.1.3.1	32.36	8.48	.83	6.86		.79		40.84
Out-patient dental care	HC.1.3.2	9.64	.42		.42				10.06
Traditional medicine	HC.1.3.4		1.61		1.61				1.61
Services of rehabilitative care	HC.2	.04							.04
Services of long-term nursing care	HC.3	.72							.72
Ancillary services to health care	HC.4	2.05	.88	.53	.36			.17	3.11
Clinical laboratory	HC.4.1	1.17	.11	.06	.04			.17	1.45
Diagnostic imaging	HC.4.2	.50	.78	.46	.31				1.28
Patient transport& emergency rescue	HC.4.3	.38							.38
Medical Goods dispensed to outpatients	HC.5		10.57	.09	10.31		.17		10.57
Pharmaceuticals and other medical non-durables	HC.5.1		10.03		9.86		.17		10.03
Therapeutic appliances and medical equip. (durables)	HC.5.2		.54	.09	.46				.54
Prevention & public health services	HC.6	5.69	1.16			1.16		4.21	11.07
Maternal & child health; family planning &counseling	HC.6.1	.23							.23
Prevention of communicable diseases	HC.6.3	.82							.82
Prevention of non-communicable disease	HC.6.4	.69							.69
Occupational healthcare	HC.6.5	.02							.02
All other public health services	HC.6.9	3.94	1.16			1.16		4.21	9.32
Health administration and health insurance	HC.7	8.69	9.44	9.26	.18			1.66	19.80
Health administration and health insurance: public	HC.7.1	8.69	1.84	1.84					10.54
Health administration and health insurance: private	HC.7.2		7.60	7.42	.18			1.66	9.26
Health-related functions	HC.R	6.98						.09	7.07
Education & training of health personnel	HC.R.2	2.92						.09	3.01

NHA Table 4: Total Expenditure on Health by Function of Care and Provider Industry (FID, millions), 2008

		Hospitals	General hospitals	Mental health and substance abuse hospitals	Specialty hospitals	Nursing & residential care facilities	Nursing care facilities	Community care facilities for the elderly	Providers of ambulatory health care	Offices of physicians	Other providers of ambulatory health care	Retail sale and other providers of medical goods	administration of public health	Health administration and insurance	Other industries (rest of the economy)	Rest of the world
		HP.1	HP.1.1	HP.1.2	HP.1.3	HP.2	HP.2.1	HP.2.3	HP.3	HP.3.1	HP.3.9	HP.4	HP.5	HP.6	HP.7	HP.9
	Total	153.33	120.18	3.19	2.53	.00	.003		20.51	20.51			4.22	8.22		.19
Services of curative care	HC.1															
In-patient care	HC.1.1															
Out-patient care	HC.1.3															
Basic medical and diagnostic services	HC.1.3.1															
Out-patient dental care	HC.1.3.2															
Services of rehabilitative care	HC.2															
Services of long-term nursing care	HC.3															
Ancillary services to health care	HC.4															
Clinical laboratory	HC.4.1															
Diagnostic imaging	HC.4.2															
Patient transport and emergency rescue	HC.4.3															
Medical goods dispensed to outpatients	HC.5															
Pharmaceuticals and other medical non-durables	HC.5.1															
Therapeutic appliances and other medical durables	HC.5.2															
Prevention and public health services	HC.6															
Health administration and health insurance	HC.7															
Health related functions	HC.R															
Total		205.83	130.42	3.20	2.54	.85	.00	.85	25.60	25.57	.03	11.80	11.00	16.21	7.48	2.48

NHA Table 5: Total Expenditure on Health by Provider Industry and Source of Funding (FJD, millions), 2008

		General government	Private Sector	Private Insurance	Private household out-of-pocket expenditure	NPISH (other than social insurance)	Corporations (other than health insurance)	Rest of the world	
		Total	HF.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5	HF.3	Percentage
Hospitals	HP.1	130.42	19.79	6.05	12.94		.79	5.49	63.36%
General hospitals	HP.1.1	124.67	19.79	6.05	12.94		.79	5.49	60.57%
Mental health and substance abuse hospitals	HP.1.2	3.20							1.56%
Specialty hospitals	HP.1.3	2.54							1.23%
Nursing & residential care facilities	HP.2	.85							0.41%
Nursing care facilities	HP.2.1	.00							0.00%
Community care facilities for the elderly	HP.2.3	.85							0.41%
Providers of ambulatory health care	HP.3	25.60	9.18	1.14	7.71		.33	.19	12.44%
Offices of physicians	HP.3.1	25.57	9.18	1.14	7.71		.33	.19	12.42%
Providers of all other ambulatory health care services	HP.3.9.9	.03							0.01%
Retail sale and other providers of medical goods	HP.4	11.80	11.00	.08	10.80		.13	.77	5.73%
Provision and administration of public health programs	HP.5	11.00	2.47		.04	2.42		3.38	5.34%
Health administration and insurance	HP.6	16.21	6.73	6.52	.21			1.38	7.87%
Other industries (rest of economy)	HP.7	7.48	.27		.27			.40	3.63%
Establishments as providers of occupational health care services	HP.7.1	.04							0.02%
All other industries	HP.7.9	7.44	.27		.27			.40	3.61%
Rest of the world	HP.9	2.48	1.01	1.01				.61	1.21%
Total	Total	205.83	50.45	14.80	31.97	2.42	1.25	12.22	100.00%

NHA Table 6: Total Expenditure on Health by Function of Care and Source of Funding (FJD, millions), 2008

			Central Government	Private Sector	Private Insurance	Private household OOP	Non-profit institutions	Corporations (other than social insurance)	Rest of the World	
		Total	HF.1	HF.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5	HF.3.	
Services of curative care	HC.1	153.34	119.91	29.96	8.20	20.63		1.12	3.47	74.50%
In-patient curative care	HC.1.1	101.33	77.56	20.49	7.06	12.64		.79	3.28	49.23%
Out-patient curative care	HC.1.3	52.00	42.35	9.46	1.14	7.99		.33	.19	25.27%
Services of rehabilitative care	HC.2	.11	.11							0.05%
Services of long-term nursing care	HC.3	.85	.85							0.41%
Ancillary services to health care	HC.4	2.11	1.87	.24		.24				1.03%
Medical goods dispensed to out-patients	HC.5	11.80	.02	11.01	.08	10.80		.13	.77	5.73%
Prevention and public health services	HC.6	11.02	5.21	2.42			2.42		3.38	5.35%
Health administration and health insurance	HC.7	16.21	8.18	6.64	6.52	.12			1.38	7.87%
Health related functions	HC.R	10.41	7.01	.18		.18			3.22	5.06%
	Total	205.83	143.16	50.45	14.80	31.97	2.42	1.25	12.22	100.00%

This report presents expenditures estimates:

- **including both public and private expenditures**
- **at the aggregate or total level**
- **as a proportion of gross domestic product (GDP)**
- **on a per capita basis**
- **by source of funding, function and provider and**
- **in comparison with selected other Asia-Pacific territories**

**Ministry of Health, HQ
Dinem House 88 Amy Street Toorak Suva
P.O BOX 2223 Govt Buildings Suva FIJI
Phone : +679 3306177
Fax : +679 3306163**

