MALAYSIA
NATIONAL HEALTH ACCOUNTS

OUT-OF-POCKET (OOP) SUB-ACCOUNT (1997 – 2009)

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PREFACE

Out-of-pocket (OOP) expenditure for health care services and products are often discussed and debated both at national and international levels. One of the main reasons for this interest, especially amongst stakeholders and policy makers, is the potential negative effects of this mode of spending on the economic status of individuals, households and the nation. There is enough evidence to show that large OOP spending can result in catastrophic financial burden on households leading to poverty, and if large enough, eventually lead to poor economic status of a nation. This is especially of importance when nations in the low and lower-middle-income countries are saddled in this situation.

Information on OOP spending takes high priority as Malaysia reviews her national health system and strives towards the echelon of developed nation. Thus, the OOP sub-account is produced for the first time as a new sub-set of Malaysia National Health Accounts (MNHA) data. It contains the OOP expenditure over a time period from 1997 to 2009. The aim of this sub-account is to provide financial data beyond the standard reporting under the MNHA framework. Internationally acceptable NHA methodology was used in the estimation of OOP expenditure to derive at comparable 1997 to 2009 time series data of high quality. Chapter 2 explains the methodology used in this document.

Although comparisons are best made after adjustments for inflation, preferably using the recommended GDP deflator, most of the data in this document are in nominal Ringgit Malaysia (RM), values unless indicated otherwise. Identified tables and figures are used to display the final outputs and the values of **some totals may not add to the exact amount due to rounding up**.

Dr. Ravindra P Rannan-Eliya of the Institute of Health Policy in Sri Lanka who has been instrumental in the institutionalization of NHA in this country was the consultant for the production of this OOP sub-account. The World Health Organization (WHO) Regional Office was the main financial supporter for the activity. The MNHA Unit wishes to express our extended gratitude to the financier, consultant and all those who assisted to materialize this OOP sub-account.

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ABBREVIATIONS

AG	Accountant General
BNM	*Bank Negara Malaysia* (Central Bank of Malaysia)
DOS	Department of Statistics
EPF	Employees Provident Fund
FOMEMA	Foreign Worker's Medical Examination Monitoring Agency
GDP	Gross Domestic Product
HF	ICHA code for sources of funding for health services
IJN	*Institut Jantung Negara* (National Heart Institute)
IMS	Intercontinental Medical Supply
IPTA	*Institut Pengajian Tinggi Awam* (Institute of Higher Learning)
IPTS	*Institut Pengajian Tinggi Swasta* (Private of Institutions of Higher Learning)
MNHA	Malaysia National Health Accounts
MOH	Ministry of Health
MS	MNHA Code for Sources of Financing
NHA	National Health Accounts
OECD	Organization for Economic Co-operation and Development
OOP	Out-of-pocket
OTC	Over-the-counter
RM	Ringgit Malaysia (Malaysia Currency)
SHA	System of Health Accounts
SOCSO	Social Security Organization
TCM	Traditional Complementary Medicines
TEH	Total Expenditure on Health
WHO	World Health Organisation
SHA PG	System of Health Account Producer's Guide
WHOSIS	WHO Statistical Information System
WHS	World Health Statistics

Background

Out-of-pocket (OOP) health expenditure or private household OOP health expenditure simply means the spending made by individuals for own or another individual, who could be a family or a household member, for the purchases of health care services or products. Sometimes this expenditure would be financial re-imbursements due to benefits from employment, insurance or other means, which is strictly not the true OOP spending. OOP is defined in two reference documents used by MNHA reporting as below:

(i) OOP definition (WHO/SHA PG Guide) – HF.2.3

It is the direct outlays of those households, including gratuities and payments in kind, made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances and other goods and services, whose primary intent is to contribute to the restoration or to the enhancement of the health status of individuals or population groups. It includes household payments to public services, non-profit institutions and non-governmental organization. It includes reimbursable cost sharing, deductibles, co-payments and fee-for-service, but excludes payments made by companies that deliver medical and paramedical benefits, whether required by law or not, to their employees. It excludes payments for overseas treatment.

(ii) OOP definition (MNHA Framework): - MS 2.4

The definition of a household for the MNHA is that used by the Department of Statistics (DOS), Malaysia. Private household expenditures in this category include:

- OOP; payments borne directly by a patient without the benefit of insurance. This includes any cost-sharing and informal payments to health care providers, pharmacies and traditional healers
- Cost-sharing; provision of health insurance or third-party payments that requires the individual who is covered to pay part of the cost of health care received. This is distinct from the payment of a private insurance premium (MS2.2), a contribution to public and private social insurance (MS1.2 and MS2.1), or a tax which is paid whether health care is received or not. Cost-sharing can be in the form of co-payments, co-insurance or deductibles.
- Co-payment; cost-sharing in the form of a fixed amount to be paid for a service
- Co-payment; cost-sharing in the form of a set proportion of the cost of a service
- Deductibles; cost-sharing in the form of a fixed amount which must be paid for a service before any payment of benefits can take place

CHAPTER 2

Methodology

The various methodologies used in the estimation of OOP health expenditure often results in variations in the data. Most researchers and health accountants select their methodology based on feasibility and availability of raw data. In 2010, WHO produced a document titled "Estimating out-of-pocket spending for national health accounts" by Dr. Ravindra P Rannan-Eliya which identifies four potential approaches, along with their respective strengths and weakness, to estimate OOP expenditure. The four approaches are as follows:

- Financing side perspective: estimations using data from the financing sources eg. private health insurance schemes, household surveys
- Provider side perspective: estimations using data from the providers eg. industry survey of hospitals and pharmacies, administrative data of providers, tax claims of physicians, etc.
- Consumption side perspective: estimations using data obtained on the consumption of services eg. composition of household spending on particular goods or services, survey data on the distribution of providers providing a particular services to household
- Integrative approach: combination of first two or three approaches with necessary adjustments

Currently, the integrative approach is the best recommended approach under NHA. However, it is also the most challenging and many countries are unable to report their OOP data by this method. The data produced in this document under the MNHA framework uses this integrative approach with data from multiple sources.

In the integrative approach, the gross level of direct spending from the consumption, provision and financing perspectives is estimated after deduction of the third-party sources of funding or the financial re-imbursements. This deduction is done to avoid double counting and over estimation of the OOP expenditure. Also, under the MNHA framework, unlike the SHA framework, the OOP spending is inclusive of spending for health related education and training as well as expenditure for traditional medical care. The integrative approach under the MNHA framework uses the formula as follows to derive at the estimated OOP expenditure:

OOP Expenditure = (Gross OOP Expenditure – Third Party Payer Reimbursement) + OOP Expenditure for Education & Training

The gross OOP expenditure is the net reconciliation of various datasets using the consumption and provider approach which includes the following spending:

- Ministry of Health user charges
- University Hospitals user charges
- National Heart Institute user charges
- Private hospitals gross revenues
- Private clinics gross revenues
- Private dentists gross revenues
- Private pharmacy sales
- Medical supplies
- Medical durables / prosthesis / equipment
- Ancillary services
- Traditional Medicine
- Traditional Treatment Provider

The third party payer re-imbursements are the finances claimed from the various agencies by the OOP payee after the OOP payment is made and includes the following sources:

- Private insurance enterprises
- Private corporations
- Employee Provident Fund (EPF)
- Social Security Organization (SOCSO)
- Federal agencies
- FOMEMA

All public and private institutions that provide health education & training *(Institut Pengajian Tinggi Awam,* IPTA *and Institut Pengajian Tinggi Swasta,* IPTS*)* are required to register under the Ministry of Higher Education. The OOP revenue for the provision of health education & training at these institutions are retrieved for expenditure summation to the OOP formula in order to obtain the final OOP expenditure. The same formula is also used to disaggregate the OOP expenditure into the dimensions of provider and function under the MNHA framework.

Each item in the OOP formula is estimated separately using various relevant methodologies before pooling for application into the formula. Some of the various sources of primary data for estimation of each item include the following:

i. DOS Surveys (aggregated data):
   a. Household Expenditure Survey
   b. Private Medical Professional & Industrial Survey (medical clinics, dental clinics, hospitals)
   c. Private non-medical Professional & Industrial Survey (services, construction, agriculture, manufacturing, etc.)
   d. Labour Force Survey
   e. Population Survey
   f. Economic Indicators (GDP, GDP deflators, etc)

ii. MNHA private hospital survey
iii. MNHA IJN hospital survey
iv. MNHA corporations survey
v. IMS database (aggregated data)
vi. Accountant General (AG) MOH user charges
vii. FOMEMA collection database (aggregated data)

The final outputs for each item of the OOP formula are linked to a master OOP spreadsheet to provide the time series data. Data gap analysis for both the individual item as well as the items in the master OOP spreadsheet include imputation methods of interpolation and extrapolation based on the best recommendations stated in the various National Health Accounts reference documents. These methods are standardized across the time series so that it is comparable.

General Findings

Currently the MNHA has a database of national health expenditure for a thirteen year period spanning from 1997 to 2009. This data shows that the total health expenditure has increased from RM8,045 million or 2.85% GDP in 1997 to RM33,691 million or 4.96% GDP in 2009 (Figure 3.1 and Table 3.1). In 2009 the public share was 2.71% GDP whereas the private share was 2.25% GDP (Figure 3.2 and Table 3.2). Throughout 1997 to 2009, although both the public and private sector expenditures have been on the upward trend, the public share has remained higher than the private share of expenditure.

The private share of expenditure is a composite of expenditures by several sources of financing for health care services and products ranging from private insurance and managed care enterprises, household OOP expenditure, non-profit institutions serving households, corporations and others. The MNHA 1997 - 2009 time series data shows that the household OOP expenditure remains the largest single source of funding throughout this period contributing to about 30-40% of the total health expenditure or average of 76% private sector expenditure (Figure 3.3). The OOP expenditure from 1997 to 2009 has increased from RM2,576 million to RM11,986 million which is an increase from 0.91% GDP to 1.76% GDP (Figure 3.4). This equates to a nearly four-fold increase in per capita OOP health spending in absolute value from RM118 in 1997 to RM430 in 2009 or from 38USD to 138USD over the same time period (Figure 3.5 and Figure 3.6).

FIGURE 3.1 : Total Health Expenditure as Percentage of GDP, 1997-2009

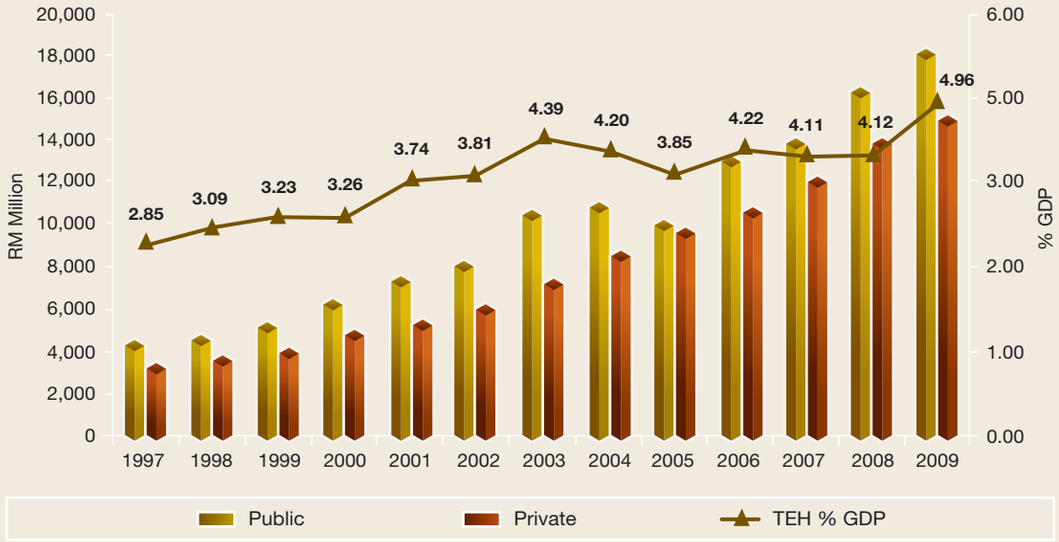


TABLE 3.1 : Total Health Expenditure as Percentage of GDP, 1997-2009

Year	Public Sector Expenditure (RM Million)	Private Sector Expenditure (RM Million)	Total Expenditure (RM Million)	Total GDP (RM Million)	Total Expenditure as % GDP
1997	4,540	3,504	8,045	281,795	2.85%
1998	4,879	3,873	8,751	283,243	3.09%
1999	5,424	4,288	9,711	300,764	3.23%
2000	6,479	5,156	11,635	356,401	3.26%
2001	7,669	5,513	13,182	352,579	3.74%
2002	8,310	6,278	14,588	383,213	3.81%
2003	10,856	7,543	18,399	418,769	4.39%
2004	11,092	8,820	19,912	474,048	4.20%
2005	10,227	9,904	20,131	522,445	3.85%
2006	13,216	11,012	24,227	574,441	4.22%
2007	14,098	12,291	26,389	642,049	4.11%
2008	16,524	14,077	30,601	742,470	4.12%
2009	18,401	15,291	33,691	679,938	4.96%

FIGURE 3.2 : Public and Private Share as Per cent GDP, 1997-2009

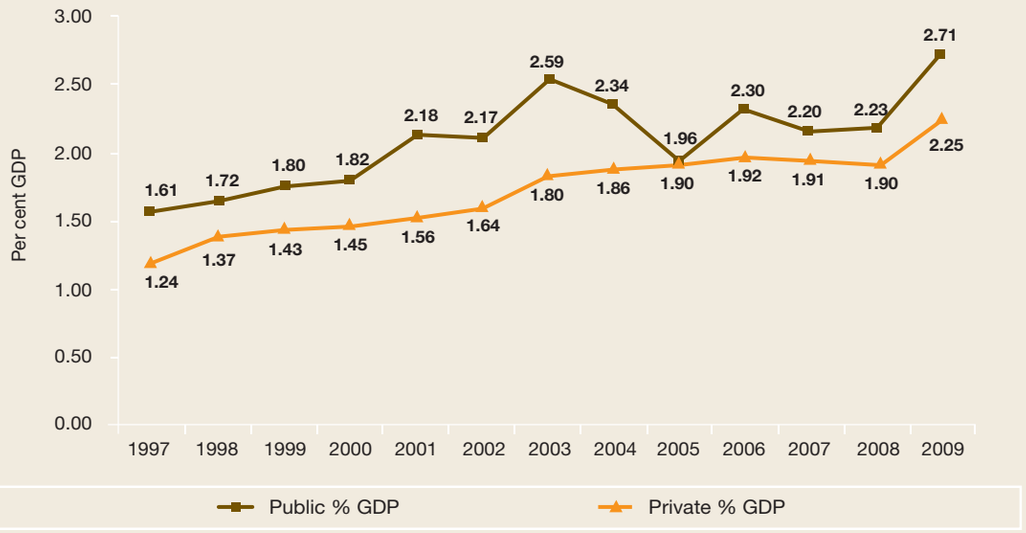


TABLE 3.2 : Public and Private Share of Total Health Expenditure and Per cent GDP , 1997-2009

Year	Public Sector Expenditure (RM Million)	Private Sector Expenditure (RM Million)	Total GDP (RM Million)	Public Expenditure as % GDP	Private Expenditure as % GDP
1997	4,540	3,504	281,795	1.61%	1.24%
1998	4,879	3,873	283,243	1.72%	1.37%
1999	5,424	4,288	300,764	1.80%	1.43%
2000	6,479	5,156	356,401	1.82%	1.45%
2001	7,669	5,513	352,579	2.18%	1.56%
2002	8,310	6,278	383,213	2.17%	1.64%
2003	10,856	7,543	418,769	2.59%	1.80%
2004	11,092	8,820	474,048	2.34%	1.86%
2005	10,227	9,904	522,445	1.96%	1.90%
2006	13,216	11,012	574,441	2.30%	1.92%
2007	14,098	12,291	642,049	2.20%	1.91%
2008	16,524	14,077	742,470	2.23%	1.90%
2009	18,401	15,291	679,938	2.71%	2.25%

FIGURE 3.3 : OOP Share of Total and Private Sector Expenditure as Per cent GDP, 1997-2009

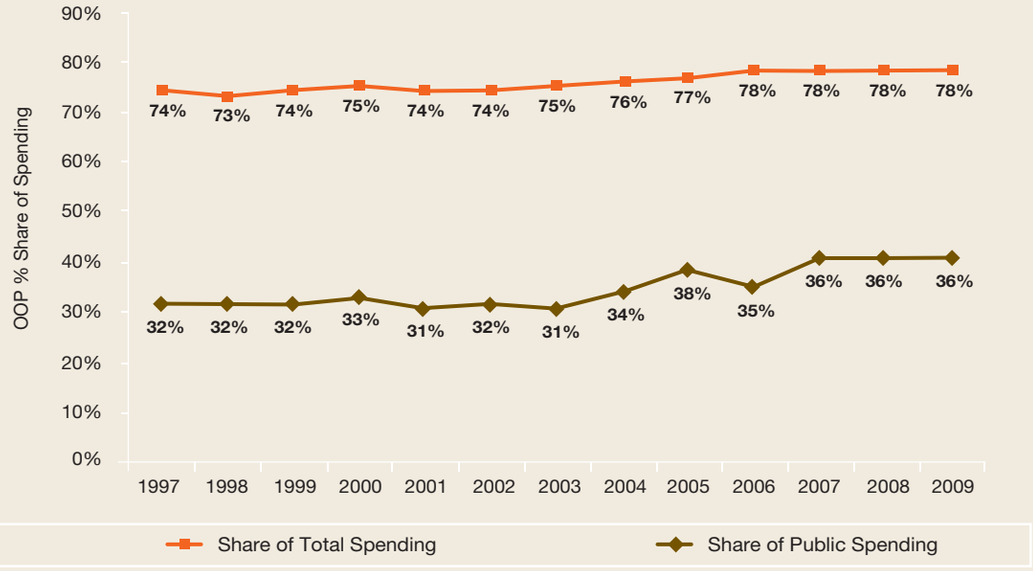


FIGURE 3.4 : OOP Expenditure and OOP as Per cent GDP, 1997-2009

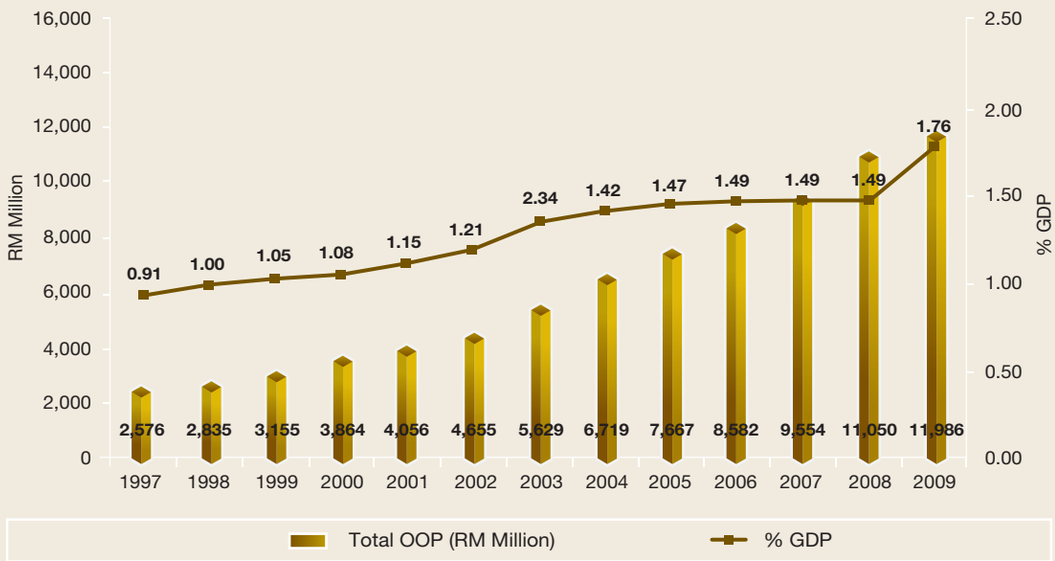


FIGURE 3.5 : Per Capita Total Health and Per Capita OOP Expenditure, 1997-2009 (RM, Ringgit Malaysia)

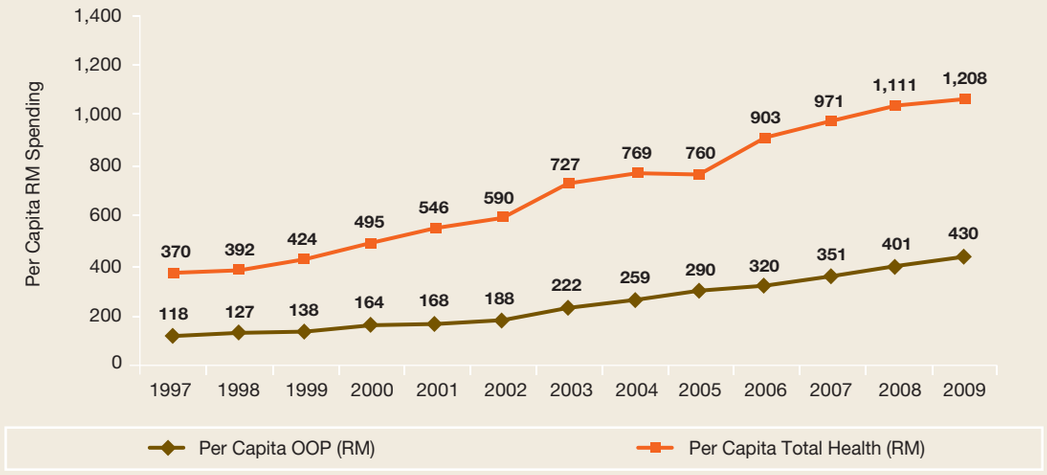
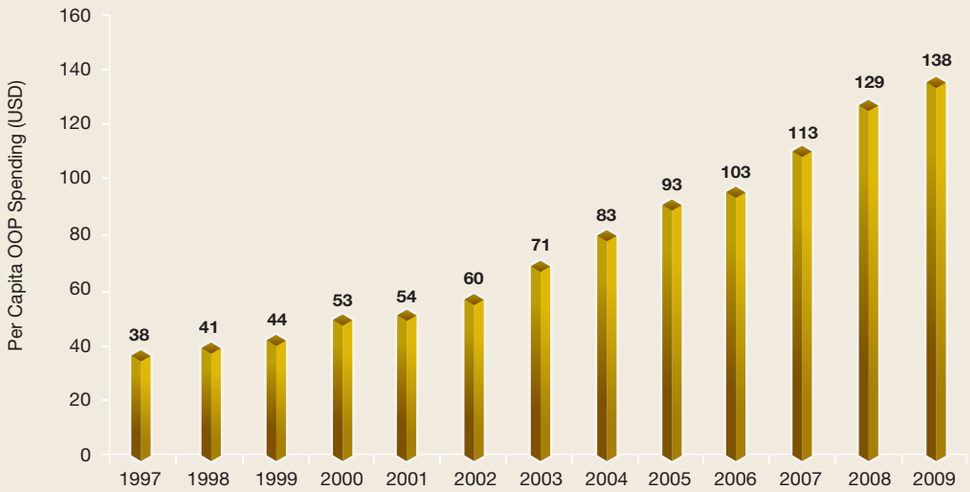


FIGURE 3.6 : Per Capita OOP Health Expenditure, 1997-2009 (USD)



*Note: ** Exchange rate at RM3.1175=USD1 (BNM website in Sept 2011)*

CHAPTER 4

OOP Expenditure By Providers

Health providers are defined as entities that produce and provide health care goods and services, which benefit individuals or population groups. The data under this section responds to the question as to where the money is spent or who provides the health care goods and services with the OOP spending.

In 2009, the OOP spending was RM4,989 million or 42% at all hospitals (Figure 4.1). This was followed by RM4,446 million or 37% spending at ambulatory care providers which includes providers of medical practitioner and dental clinics, family planning centers, dialysis centers, diagnostic laboratories, substance abuse centers and many other free standing ambulatory providers from both the public and private sectors including traditional medicine providers. In the same year RM2,195 million or 18% was spent for retail and other medical goods which includes pharmacies, providers of optical glasses and other vision products, providers of hearing aids, and medical appliances.

The 1997 to 2009 time series data also show a similar pattern to 2009 in the proportions of OOP spending at the various providers (Table 4.1A and Table 4.1B). The time series data shows that the OOP spending at hospitals are mainly at the private hospitals with an increasing trend over the time period (Figure 4.2 and Table 4.2). The OOP spending at the ambulatory care providers are mainly contributed by expenditures at the private medical practitioner clinics which also shows an increasing trend over the time period (Figure 4.3).

FIGURE 4.1 : OOP Expenditure by Providers of Health Services, 2009 (Per cent, %)

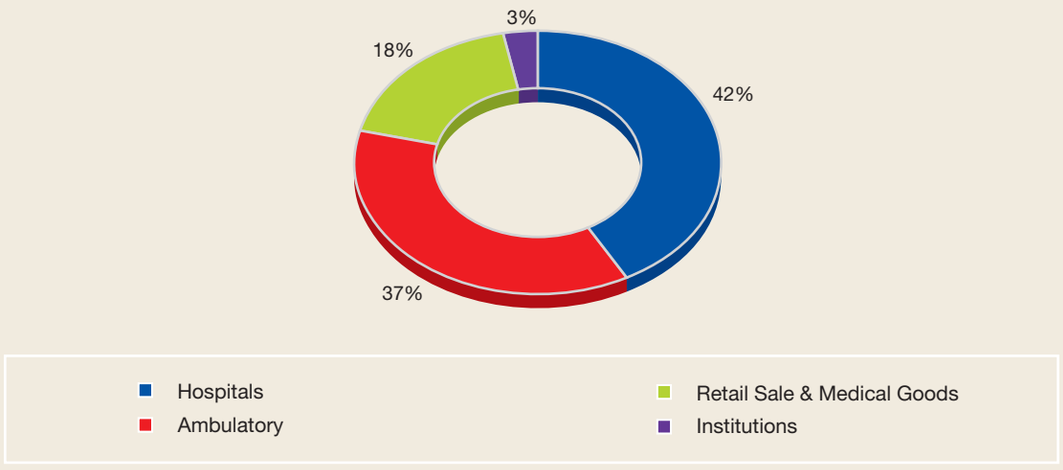


FIGURE 4.2 : OOP Expenditure at Public and Private Hospitals 1997-2009, (RM Million)

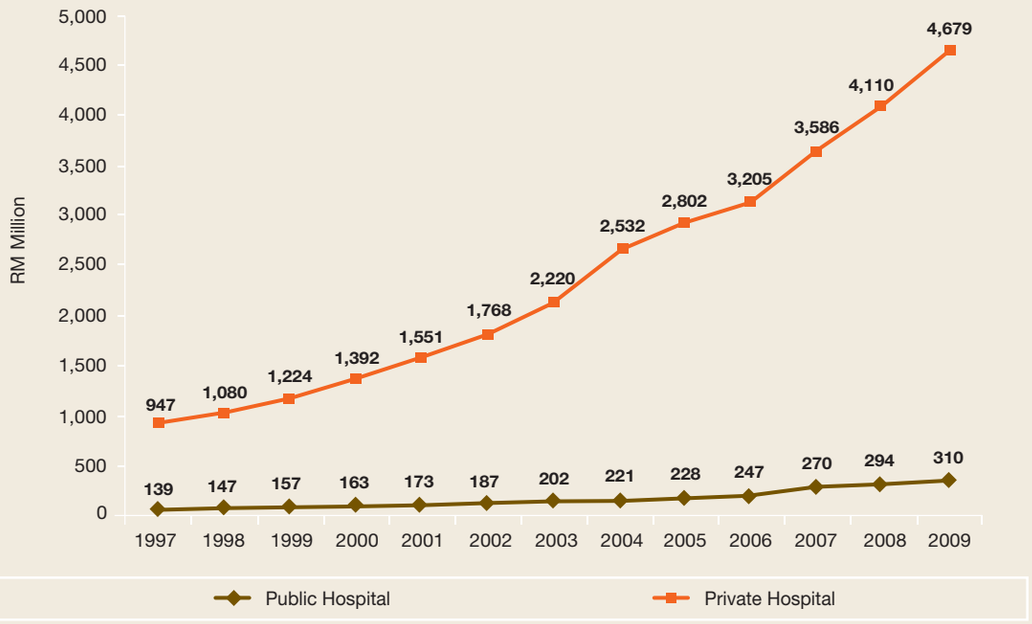


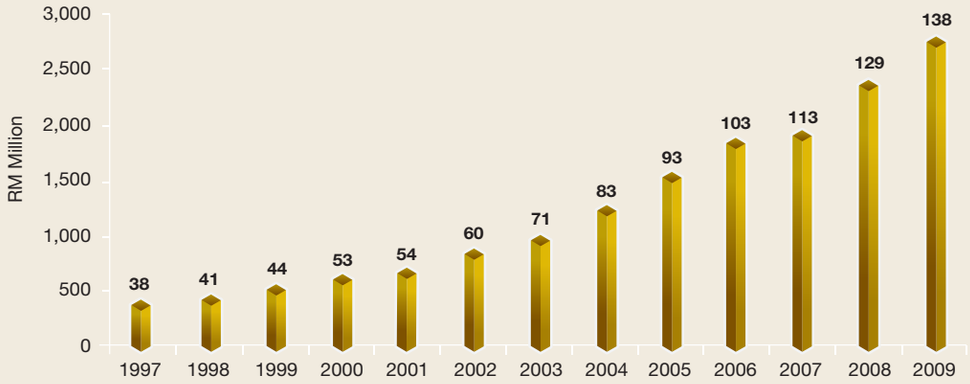
TABLE 4.1A : OOP Expenditure by Providers of Health Services, 1997-2009 (RM Million)													
Providers of Health services	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Hospitals	1,086	1,227	1,381	1,555	1,724	1,955	2,422	2,754	3,031	3,452	3,856	4,404	4,989
Providers of ambulatory health care	963	1,036	1,147	1,448	1,497	1,715	1,996	2,438	2,942	3,268	3,560	4,180	4,446
Retail sale and other providers of medical goods	487	521	568	792	757	892	1,093	1,395	1,540	1,681	1,909	2,171	2,194
Institutions providing health related services	40	52	58	69	78	94	118	132	154	180	229	294	357
Total	**2,576**	**2,835**	**3,155**	**3,864**	**4,056**	**4,655**	**5,629**	**6,719**	**7,667**	**8,582**	**9,554**	**11,050**	**11,986**

TABLE 4.1B : OOP Expenditure by Providers of Health Services, 1997-2009 (Per cent, %)													
Providers of Health services	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Hospitals	42%	43%	44%	40%	42%	42%	43%	41%	40%	40%	40%	40%	42%
Ambulatory	37%	37%	36%	37%	37%	37%	35%	36%	38%	38%	37%	38%	37%
Retail sale & medical goods	19%	18%	18%	20%	19%	19%	19%	21%	20%	20%	20%	20%	18%
Institutions	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

TABLE 4.2 : OOP Expenditure at Public and Private Hospitals, 1997-2009

Provider	Provider of Health Care Services				
	Public Hospital		Private Hospital		All Hospitals
Year	RM Million	Per cent	RM Million	Per cent	RM Million
1997	139	13%	947	87%	1,086
1998	147	12%	1,080	88%	1,227
1999	157	11%	1,224	89%	1,381
2000	163	10%	1,392	90%	1,555
2001	173	10%	1,551	90%	1,724
2002	187	10%	1,768	90%	1,955
2003	202	8%	2,220	92%	2,422
2004	221	8%	2,532	92%	2,754
2005	228	8%	2,802	92%	3,031
2006	247	7%	3,205	93%	3,452
2007	270	7%	3,586	93%	3,856
2008	294	7%	4,110	93%	4,404
2009	310	6%	4,679	94%	4,989

FIGURE 4.3 : OOP Expenditure at Private Medical Practitioner Clinics 1997-2009, (RM Million)



CHAPTER 5

OOP Expenditure By Functions

The data under this section responds to the question on the type of health care services and products that are purchased with the OOP spending. The 1997 to 2009 time series data shows that both the OOP spending for curative care and non-curative care has been on the upward trend with curative care expenditure increasing at a slightly faster rate than non-curative care (Figure 5.1 and Table 5.1).

OOP CURATIVE CARE EXPENDITURE

The System of Health Accounts (SHA) 2000 defines curative care as the care when the principal intent is to relief of illness or injury, to reduce the severity of an illness or injury or to protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function.

The SHA framework further classifies the curative care into modes of production which includes medical as well as dental inpatient care, outpatient care, daycare and home care services. In general the OOP spending for home care services in this country are mainly for social reasons with the delivery of medical care occurring at the premises of the providers of health care services. Curative care expenditure trend for the remaining 3 modes of production (in-patient, out-patient and daycare) over the time period shows that the share of OOP spending for out-patient care is about twice that for in-patient and increasing at the highest rate in absolute value when compared to the other two modes of production (Figure 5.2 and Table 5.2). This out-patient expenditure includes spending at both public and private standalone out-patient primary care clinics and out-patient specialist clinics either in a hospital setting or standalone facility.

FIGURE 5.1 : OOP Expenditure By Functions of Health Services, 1997-2009, (RM Million)

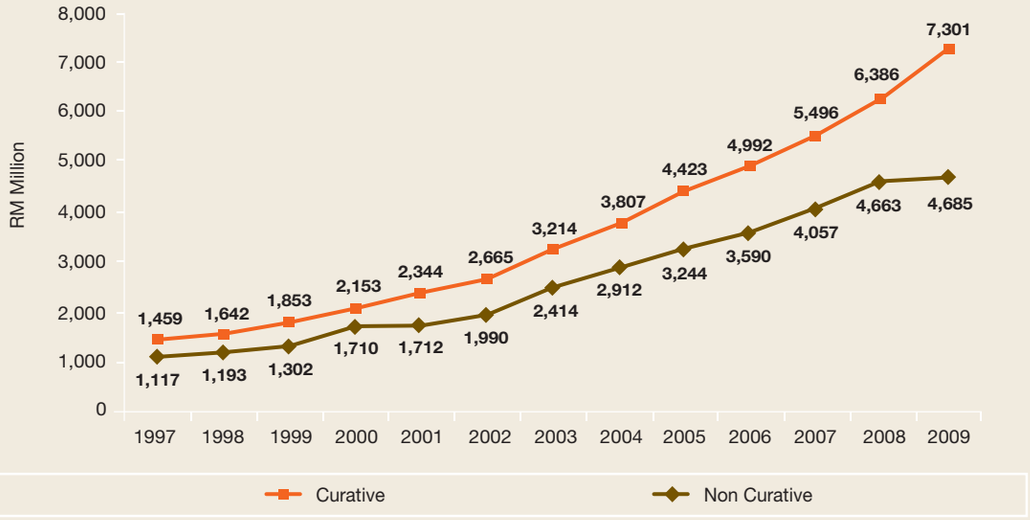


TABLE 5.1 : OOP Expenditure by Functions of Health Services, 1997-2009

	Curative Care		Non curative Care		Total OOP
Year	**RM Million**	**Per cent**	**RM Million**	**Per cent**	**RM Million**
1997	1,459	57%	1,117	43%	2,576
1998	1,642	58%	1,193	42%	2,835
1999	1,853	59%	1,302	41%	3,155
2000	2,153	56%	1,710	44%	3,864
2001	2,344	58%	1,712	42%	4,056
2002	2,665	57%	1,990	43%	4,655
2003	3,214	57%	2,414	43%	5,629
2004	3,807	57%	2,912	43%	6,719
2005	4,423	58%	3,244	42%	7,667
2006	4,992	58%	3,590	42%	8,582
2007	5,496	58%	4,057	42%	9,554
2008	6,386	58%	4,663	42%	11,050
2009	7,301	61%	4,685	39%	11,986

FIGURE 5.2 : OOP Expenditure For Curative Care Services, 1997-2009 (RM Million)

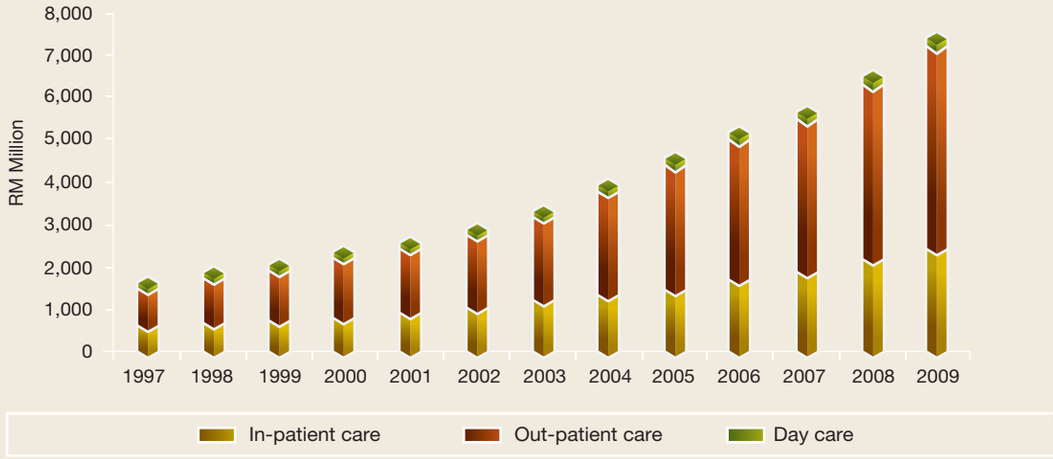


TABLE 5.2 : OOP Expenditure for Curative Care, 1997-2009 (RM Million)

Year	In-patient Care	Out-patient Care	Day care	Total Curative
1997	479	941	38	1,459
1998	535	1,063	44	1,642
1999	600	1,203	50	1,853
2000	678	1,418	57	2,153
2001	753	1,528	63	2,344
2002	852	1,741	72	2,665
2003	1,054	2,072	88	3,214
2004	1,178	2,532	98	3,807
2005	1,309	3,004	110	4,423
2006	1,483	3,381	128	4,992
2007	1,672	3,680	144	5,496
2008	1,906	4,297	183	6,386
2009	2,222	4,891	188	7,301

OOP NON-CURATIVE CARE EXPENDITURE

The non-curative care expenditure over the 1997 to 2009 time period consumes an average of 42% of the total OOP spending. This expenditure includes spending for all other patient care services such as for purchases of medical goods, standalone pharmacy and laboratory services, ancillary services and others. Also, unlike the SHA framework, the MNHA framework includes health expenditures for TCM as well as training which are also reported as non-curative expenditure under the functional classification.

In 2009, the expenditure for medical goods dispensed to out-patients amounted to RM3,672 million or 78% of the non-curative OOP spending followed by RM408 million or 9% for ancillary services, RM 370 million or 8% for education and training of health care providers and the remaining RM235 million or 5% for other functions of health care services (Figure 5.3). The 1997 to 2009 time series data also show a similar trend with still a substantial amount in nominal value but a slightly downward trend in the share of the spending for medical goods (Table 5.3A and Table 5.3B).

OOP Medical Goods Expenditure

The medical goods captured under this expenditure include pharmaceuticals and non-pharmaceuticals that are purchased or rented by consumers on an out-patient basis from various pharmacies and other medical suppliers. In addition this expenditure also includes spending for traditional and other alternative medicines (TCM). If any of these goods are purchased or rented as part of in-patient care, then it would be excluded under this category but instead captured under curative care expenditure.

The 1997 to 2009 time series data shows a steady increase in the OOP spending for pharmaceuticals, non-pharmaceuticals and TCM (Figure 5.4). However, the data shows that non-pharmaceutical share of the total medical goods has almost doubled over the time period (Table 5.4A and Table 5.4B). These non-pharmaceuticals comprise of durables and non-durables. The durables include prescribed glasses and vision products, hearing aids, orthopaedic prosthetics and appliances, and other purchases from pharmacies and medical suppliers. The non-durables include bandages, gloves, catheters, condoms and other purchases from pharmacies. Both the pharmaceuticals and non-pharmaceuticals exclude similar items purchased from sundry or household provision shops and super-marts. Over the time period both the durables and non-durables show an increasing trend with non-durables taking a larger share and rate of increase in the OOP spending for non-pharmaceuticals (Figure 5.5A and Table 5.5).

The pharmaceuticals include the prescription drugs and over-the-counter (OTC) products. Over the time period although both shows an increasing trend, with prescription drugs taking a larger share of the spending, the rate of increase in spending for OTC is much higher than the prescription pharmaceuticals (Figure 5.5B and Table 5.5).

FIGURE 5.3 : OOP Expenditure For Non-Curative Care Services, 2009 (Per cent, %)

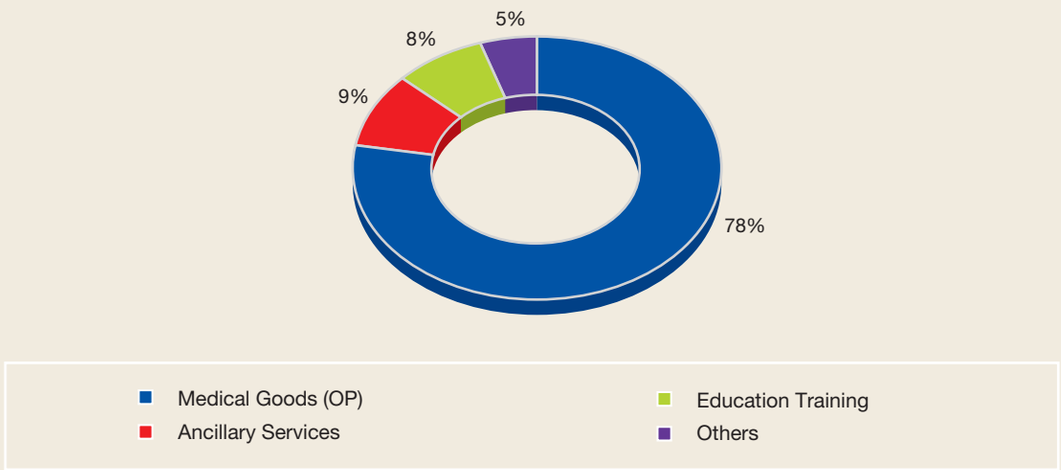
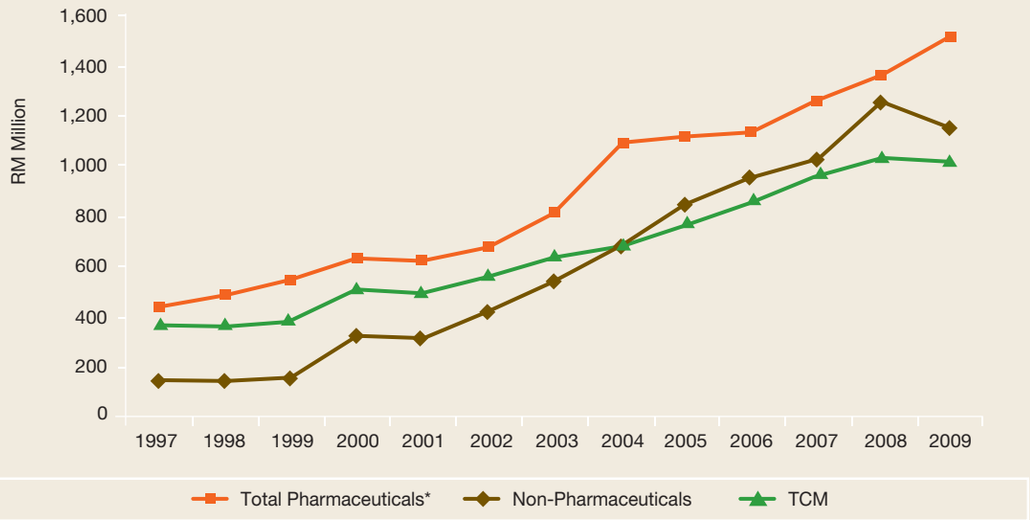


FIGURE 5.4 : OOP Expenditure For Medical Goods, 1997-2009 (RM Million)



*Note: * This category of pharmaceuticals excludes that delivered as part of curative care*

TABLE 5.3A : OOP Expenditure for Non-Curative Care, 1997-2009 (RM Million)													
Non-Curative Function	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Medical goods dispensed to out-patients	969	1,018	1,104	1,456	1,431	1,652	1,981	2,381	2,646	2,913	3,277	3,735	3,672
Ancillary services to health care	58	66	75	112	121	151	201	242	293	325	358	419	408
Education & training of health personnel	41	53	60	72	81	97	121	135	157	183	234	300	370
Others	49	56	63	72	80	91	111	154	148	169	187	209	235
Total	**1,117**	**1,193**	**1,302**	**1,710**	**1,712**	**1,990**	**2,414**	**2,912**	**3,244**	**3,590**	**4,057**	**4,663**	**4,685**

TABLE 5.3B : OOP Expenditure for Non-Curative Care, 1997-2009 (Per cent)													
Non-Curative Function	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Medical goods dispensed to out-patients	87%	85%	85%	85%	84%	83%	82%	82%	82%	81%	81%	80%	78%
Ancillary services to health care	5%	6%	6%	7%	7%	8%	8%	8%	9%	9%	9%	9%	9%
Education & training of health personnel	4%	4%	5%	4%	5%	5%	5%	5%	5%	5%	6%	6%	8%
Others	4%	5%	5%	4%	5%	5%	5%	5%	5%	5%	5%	4%	5%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

TABLE 5.4A : OOP Expenditure for Medical Goods, 1997-2009 (RM Million)													
Medical Goods to Out-patient	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Total Pharmaceuticals*	442	490	545	625	619	680	815	996	1,024	1,111	1,260	1,385	1,514
Non-Pharmaceuticals	151	151	160	325	313	414	537	697	850	951	1,064	1,251	1,150
TCM	376	377	399	506	499	559	629	687	772	851	953	1,099	1,008
Total Medical Goods	**969**	**1,018**	**1,104**	**1,456**	**1,431**	**1,652**	**1,981**	**2,381**	**2,646**	**2,913**	**3,277**	**3,735**	**3,672**

TABLE 5.4B : OOP Expenditure for Medical Goods, 1997-2009 (Per cent)													
Medical Goods to Out-patient	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Total Pharmaceuticals*	46%	48%	49%	43%	43%	41%	41%	42%	39%	38%	38%	37%	41%
Non-Pharmaceuticals	16%	15%	15%	22%	22%	25%	27%	29%	32%	33%	32%	33%	31%
TCM	39%	37%	36%	35%	35%	34%	32%	29%	29%	29%	29%	29%	27%
Total Medical Goods	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

*Note: * This category of pharmaceuticals excludes that delivered as part of curative care*

FIGURE 5.5A : OOP Expenditure For Non-Pharmaceuticals, 1997-2009 (RM Million)

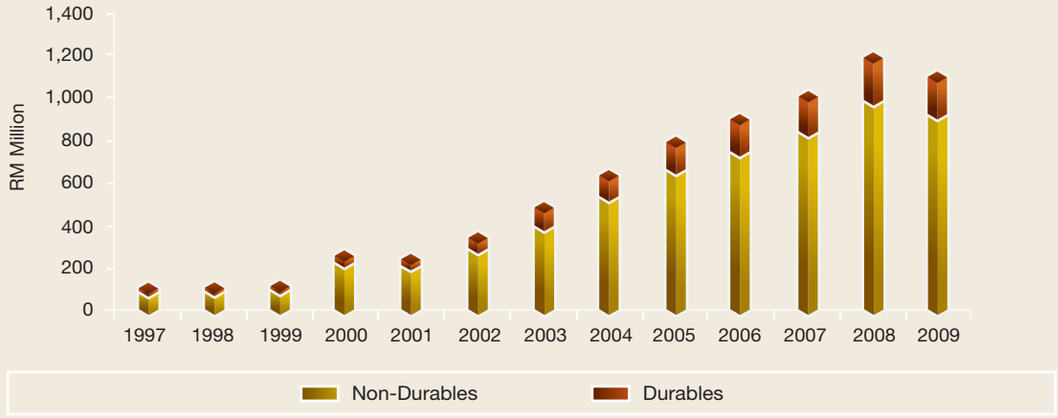
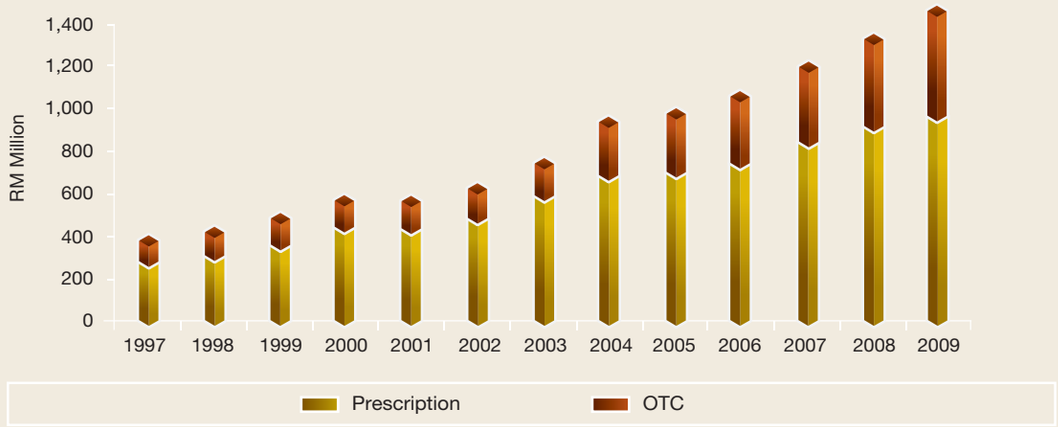


FIGURE 5.5B : OOP Expenditure For Pharmaceuticals*, 1997-2009 (RM Million)



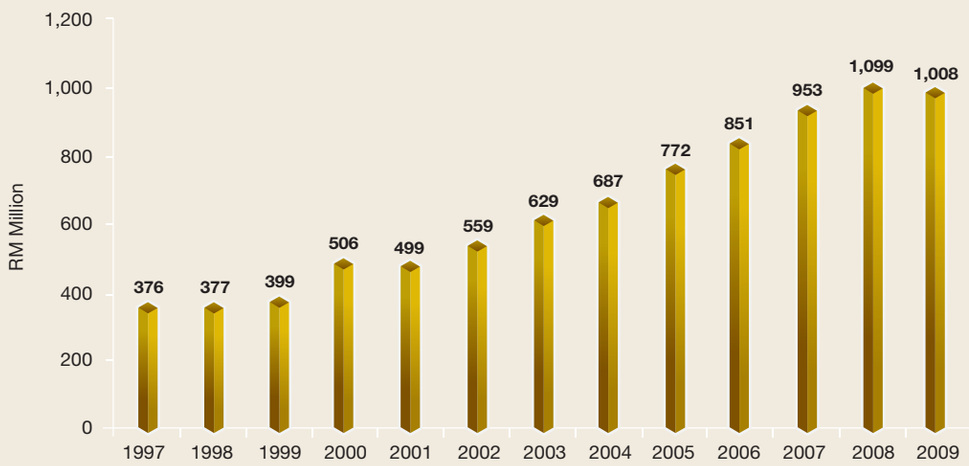
*Note: * This category of pharmaceuticals excludes that delivered as part of curative care*

TABLE 5.5 : OOP Expenditure for Medical Goods excluding TCM, 1997-2009 (RM Million)

Year	Non pharmaceuticals		Pharmaceuticals*		Total
	Non-Durables	Durables	Prescription	OTC	
1997	116	35	311	130	593
1998	118	32	347	144	641
1999	126	34	390	154	705
2000	256	68	472	153	949
2001	246	67	461	157	932
2002	326	88	514	166	1,093
2003	425	112	626	189	1,353
2004	568	129	709	287	1,693
2005	691	159	722	302	1,874
2006	775	176	766	345	2,062
2007	868	197	869	390	2,324
2008	1022	229	944	441	2,636
2009	941	209	991	523	2,664

*Note: * This category of pharmaceuticals excludes that delivered as part of curative care*

FIGURE 5.6 : OOP Expenditure For TCM, 1997-2009 (RM Million)

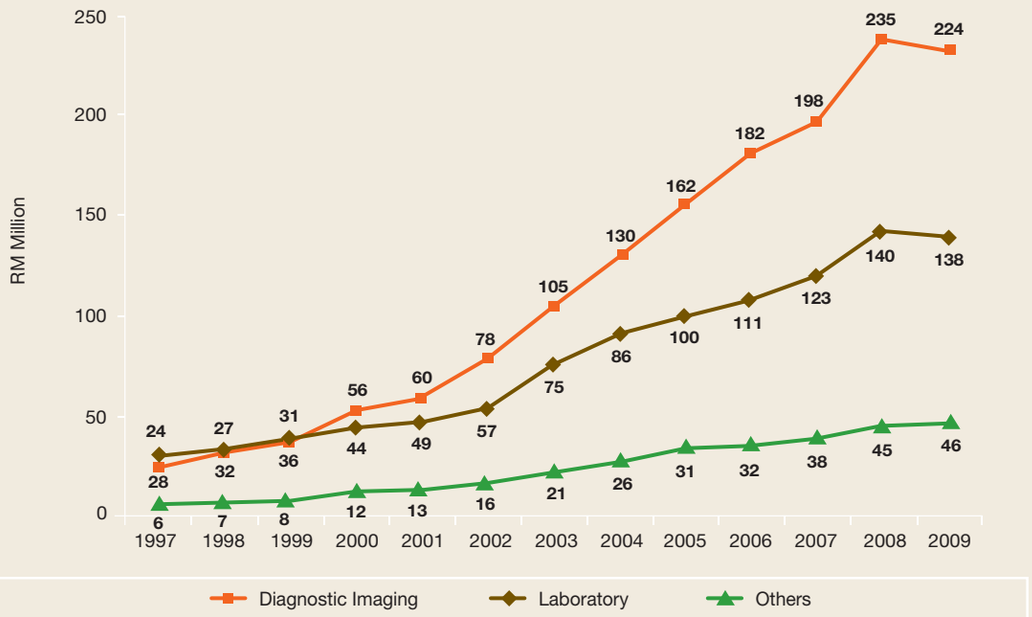


OOP Ancillary Services Expenditure

This category comprise of services provided by paramedicals or medical technical personnel with or without the direct supervision of a medical doctor. It includes services at the laboratories, diagnostic imaging centers, patient transport, retrieval or rescue services and other miscellaneous ancillary services. This category includes the standalone facilities and are excluded if form part of direct hospital services.

The 1997 to 2009 time series OOP expenditure for ancillary services shows a seven-fold increase from RM58 million or 5% in 1997 to RM408 million or 9% in 2009 (Table 5.3A and Table 5.3B). The OOP spending for diagnostic services has increased by nine-fold from RM24 million in 1997 to RM224 million in 2009 (Figure 5.7). This spending also includes the charges for routine chest X-ray that are carried out for domestic maids as part of the pre-employment requirements. The spending for laboratory services has increased by five-fold from RM28 million in 1997 to RM138 million in 2009. The OOP spending for transport and other ancillary services has remained below RM50 million over the time period.

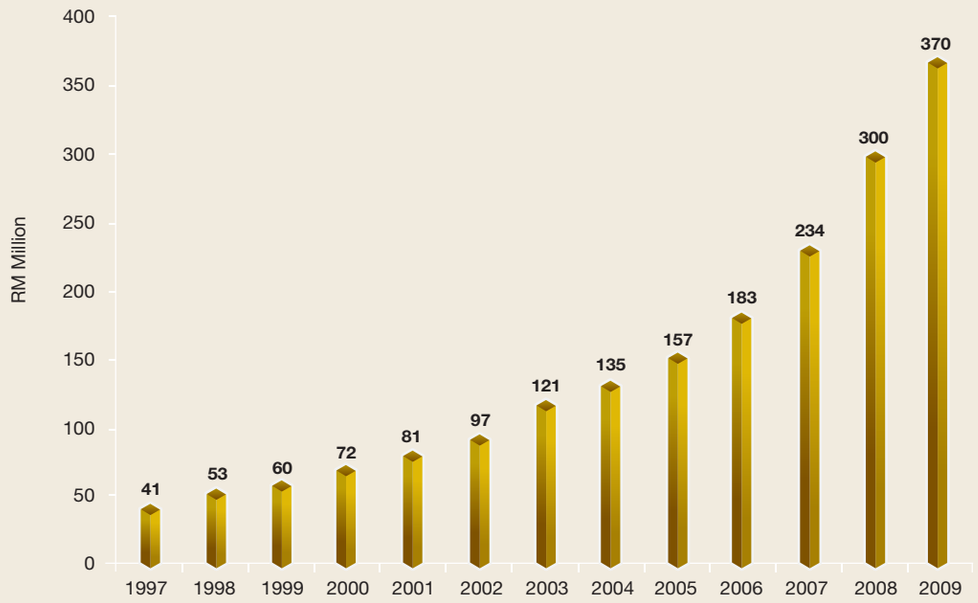
FIGURE 5.7 : OOP Expenditure For Ancillary Services, 1997-2009 (RM Million)



OOP Health Education and Training Expenditure

This expenditure includes the OOP spending for training to the professional and allied health care providers. It includes expenditure for both the basic as well as the post-basic training by these providers at either public or private institutions. The 1997 to 2009 time series data shows that the spending for health education and training has increased by nine-fold from RM41 million in 1997 to RM370 million in 2009 (Figure 5.8).

FIGURE 5.8 : OOP Expenditure For Education & Training, 1997-2009 (RM Million)



OOP Expenditure By States

The OOP sub-account framework follows the revised MNHA time series report whereby the state allocation is done based on the facility at which the OOP spending is used to purchase the various types of health care services and products. This state allocation was done for the smallest possible OOP spending and then rolled up to produce the total state OOP expenditure. Further improvements and refinements in the methodology are expected in the future. The arrangements of the state in the Figures and Tables below are based on the size of the state population in the year 2009 as the reference year.

There are a total of thirteen states and three additional Federal Territories, namely Kuala Lumpur, Labuan and Putrajaya. The expenditure for Kuala Lumpur and Labuan are reported separately whereas Putrajaya is included under the state of Selangor in line with state population census reporting as the Department of Statistics Malaysia.

In 2009, both the total and OOP expenditure trend amongst the states indicate some possible linkages between income and health spending (Figure 6.1 & Table 6.1). The expected more affluent states of Kuala Lumpur, Selangor, Johore and Penang have the higher total and OOP expenditures. The per capita OOP expenditure in the same year range from RM86 in Sabah to RM1,340 in Kuala Lumpur (Figure 6.2 & Table 6.2). The median OOP spending of RM315 per capita is about one third of the median government spending of RM902 per capita in the various states. The trend also shows higher government spending in the states with lower than median OOP spending.

FIGURE 6.1 : Total & OOP Expenditure By States, 2009 (RM Million)

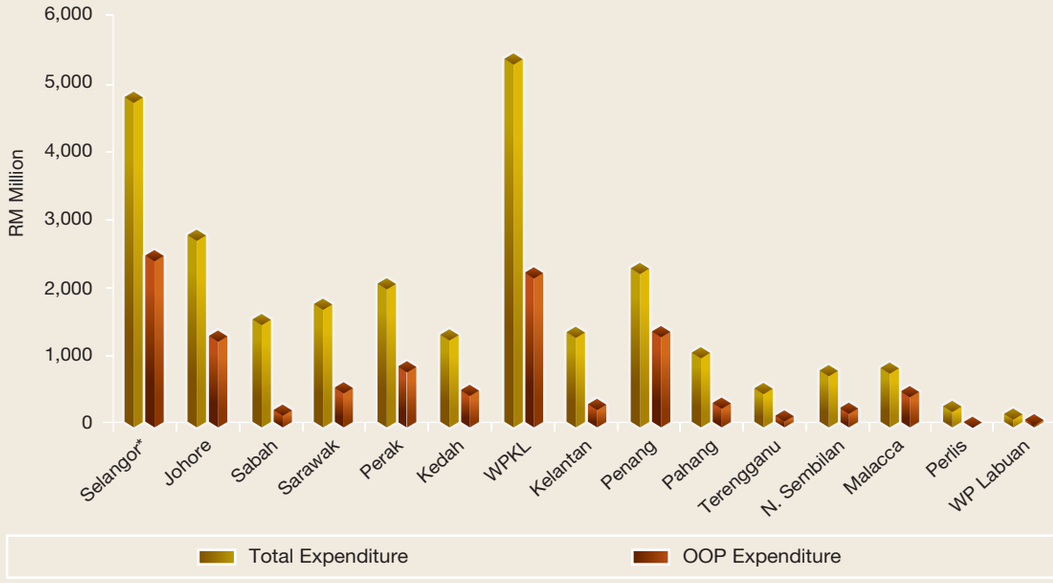


TABLE 6.1: Total and OOP Health Expenditure By States, 2009

State	Expenditure (RM Million)	
	Total	OOP
Selangor*	4,972	2,617
Johore	2,908	1430
Sabah	1,602	272
Sarawak	1,837	582
Perak	2,191	945
Kedah	1,410	572
WP KL	5,468	2282
Kelantan	1,431	326
P. Pinang	2,377	1476
Pahang	1,134	367
Terengganu	654	133
N. Sembilan	918	315
Malacca	930	512
Perlis	230	59
WP Labuan	146	98
Federal	5,484	
Total	**33,691**	**11,986**

*Note: * This includes WP Putrajaya*

FIGURE 6.2 : Government and OOP Per Capita Spending By States, 2009 (RM, Ringgit Malaysia)

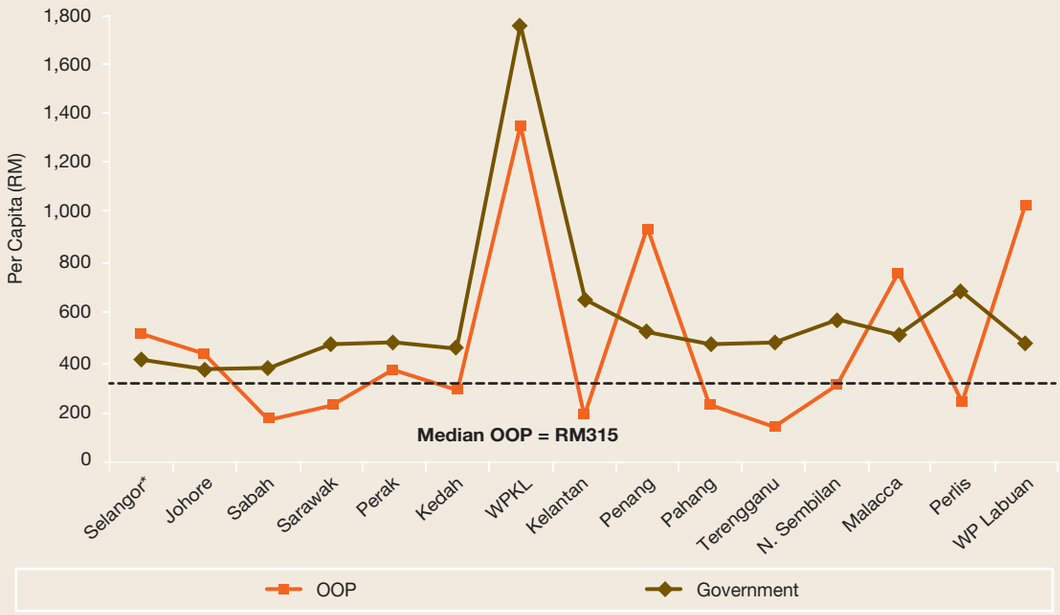


TABLE 6.2: Government and OOP Per Capita Expenditure By States, 2009

State	Population (Thousand)**	Per capita (RM)	
		Government	OOP
Selangor*	5,034	406	520
Johore	3,269	376	437
Sabah	3,184	381	86
Sarawak	2,471	476	235
Perak	2,428	483	389
Kedah	1,943	404	295
WP KL	1,703	1,757	1,340
Kelantan	1,639	651	199
P. Pinang	1,580	524	934
Pahang	1,517	472	242
Terengganu	1,036	474	129
N. Sembilan	1,000	572	315
Malacca	762	516	672
Perlis	237	695	249
WP Labuan	94	487	1,039
Total	**27,895**	**Median = 902**	**Median = 315**

Note: * This includes WP Putrajaya

** Source: Department of Statistics Malaysia

CHAPTER 7

OOP Expenditure International Comparison

The countries involved in the production of NHA tend to report their health expenditure data based on the relevance of this information to national policy makers for local consumption. This can result in unrealistic differences between countries if this framework is used for international comparisons. Therefore, ideally any international comparison should be carried out with data reported by countries using the international framework, most commonly, the System of Health Accounts (SHA) framework. As such, usually any data reported in internationally acceptable documents, websites or databases such as under World Health Organization World Health Statistics (WHS 2012), WHO Statistical Information System on country specific NHA (WHOSIS) and others use the SHA framework.

MNHA & SHA FRAMEWORK DATA COMPARISON

This section identifies the differences between Malaysia's OOP expenditure as reported in absolute value under the national level MNHA framework and the international level SHA framework. The diagrams are self-explanatory (Figure 7.1, Figure 7.2 and Table 7.0).

FIGURE 7.1 : Private Expenditure Comparison MNHA & SHA Framework, 1997-2009 (RM Million)

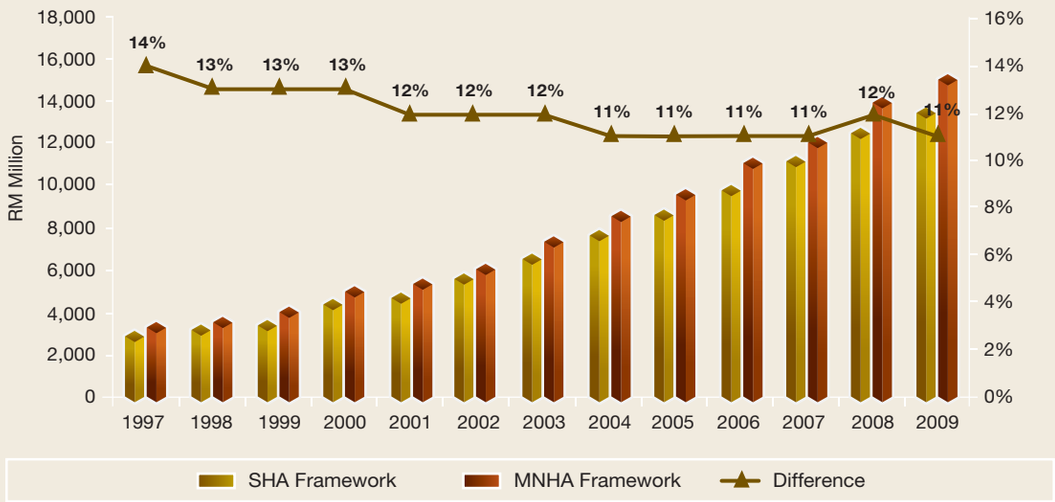


FIGURE 7.2 : OOP Expenditure Comparison MNHA & SHA Framework, 1997-2009 (RM Million)

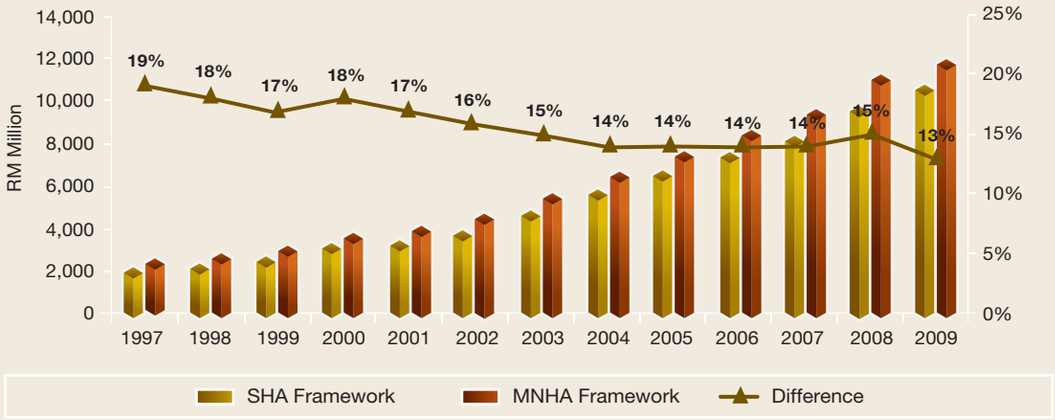


TABLE 7.0 : Expenditure Comparison MNHA & SHA Framework, 1997 - 2009 (RM Million)

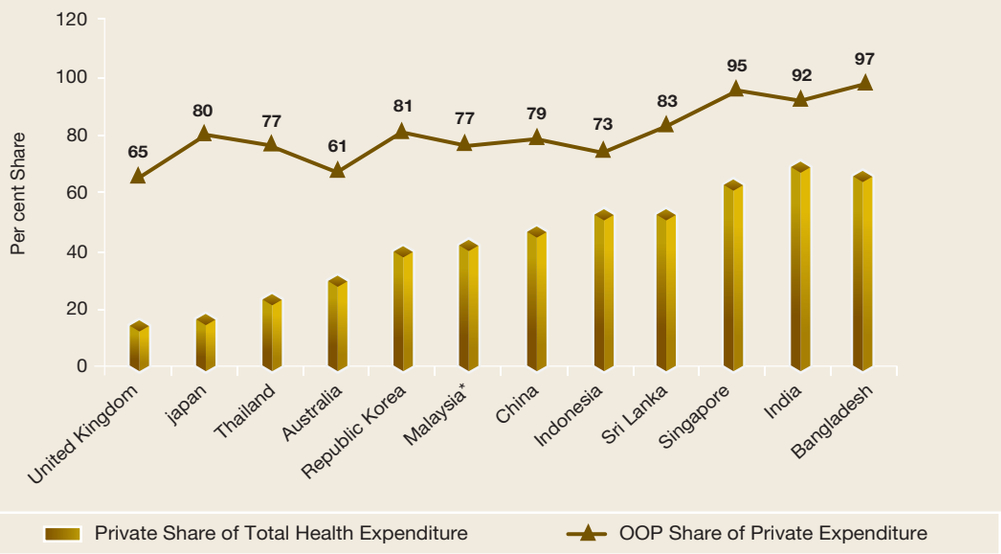
Year	SHA Framework		MNHA Framework	
	Private	OOP	Private	OOP
1997	3,073	2,158	3,504	2,576
1998	3,425	2,404	3,873	2,835
1999	3,808	2,695	4,288	3,155
2000	4,549	3,285	5,156	3,864
2001	4,906	3,476	5,513	4,056
2002	5,591	3,999	6,278	4,655
2003	6,755	4,878	7,543	5,629
2004	7,955	5,896	8,820	6,719
2005	8,925	6,737	9,904	7,667
2006	9,920	7,547	11,012	8,582
2007	11,034	8,365	12,291	9,554
2008	12,592	9,650	14,077	11,050
2009	13,809	10,607	15,291	11,986

OOP INTERNATIONAL COMPARISON

As mentioned in the earlier part of this section, ideally all international comparisons should be made using the SHA framework with standardize definitions and boundaries of expenditure for best comparability. Thus the data shown in this section contains the 2009 NHA data from WHO member countries as reported under the World Health Statistics 2012. Many countries, including Malaysia, have revised their NHA data as methodologies in the respective countries are refined over time.

The OOP share of private spending in Malaysia for the year 2009 was lower than in countries such as China, Sri Lanka, Singapore, India and Bangladesh but higher than the more developed countries such as Australia and United Kingdom (Figure 7.3). Furthermore, the private share of total health spending in these better developed countries is much lower than that in Malaysia, resulting in small OOP share of total health expenditure. Similarly, Thailand with a similar OOP share of private expenditure as Malaysia (77%) also has a much smaller private share of total health expenditure. Such comparisons are often of interest to policy makers.

FIGURE 7.3 : Private Share of Total and OOP Share of Private Expenditure International Comparison, 2009 (Per cent)



International Source: World Health Statistics 2012 (2009 Data)

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8	Total national population from DOS for 1997 – 2009
9	State population breakdown from DOS

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