MOH/S/RAN/224.22(AR)-e

MINISTRY OF HEALTH
MALAYSIA

MALAYSIA
NATIONAL HEALTH ACCOUNTS
HEALTH EXPENDITURE REPORT
2006 - 2020

MOH/S/RAN/224.22(AR)-e

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NATIONAL HEALTH ACCOUNTS

HEALTH EXPENDITURE REPORT
2006-2020

MALAYSIA NATIONAL HEALTH ACCOUNTS SECTION
PLANNING DIVISION
MINISTRY OF HEALTH
MALAYSIA
2022

Published by
Malaysia National Health Accounts (MNHA) Section,
Planning Division,
Ministry of Health,
Level 6, Block E6,
Complex E, Precinct 1,
Federal Government Administrative Centre,
62590 Putrajaya, Malaysia.

Website: www.moh.gov.my
Email: mnha@moh.gov.my
ISSN 1985-711

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First published: 2022

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Printed in Malaysia

MESSAGE FROM THE SECRETARY-GENERAL MINISTRY OF HEALTH, MALAYSIA

National Health Accounts (NHA) provides systematic, comprehensive and consistent monitoring of expenditure flows in a country's health system. NHA manuals and classification systems offer guidance and framework for many countries worldwide. NHA captures information on expenditure flows that reflects the main sources, providers and functions of health care financing. Over the years, various adaptations emerged to suit respective countries' health systems and policy requirements. The Malaysia National Health Accounts (MNHA) section has successfully produced multiple national health expenditure time series reports while continually evolving to meet the demands of policymakers and adapting to changes in international guidelines.

Effective resource prioritization and allocation require well documented information on financing resources, health care providers and health care services. The latest Malaysia National Health Account (MNHA) Health Expenditure Report 2006-2020 has successfully traced and analyzed all of the resources that flow through Malaysia's health system across time and across all sources of financing.

The current pandemic era has had an impact on health financing in all countries around the world, and Malaysia is no different. I take this opportunity to acknowledge MNHA's efforts to produce COVID-19 health expenditure estimation subaccounts, based on NHA basic principles using MNHA and System Health Accounts (SHA) 2011 classification, as well as the guidelines developed by the World Health Organization (WHO).

I sincerely thank all agencies and stakeholders for providing relevant data. I appreciate all advice and input from the MNHA Steering Committee and MNHA Technical Advisory Committee. To the MNHA team, thank you for your dedication and relentless effort in the development and production of this report. Keep up the good work!

Datuk Harjeet Singh a/l Hardev Singh
Secretary-General
Ministry of Health, Malaysia

MESSAGE FROM THE DIRECTOR-GENERAL OF HEALTH MALAYSIA

Health expenditure in Malaysia has exhibited steady growth over the years. It is predicted to continue escalating owing to our growing ageing population and increasing prevalence of communicable and non-communicable diseases. Growing demand for quality care and the introduction of various new health technologies may also influence health spending. Since 2020, the unprecedented COVID-19 pandemic has further aggravated this situation and impacted the health and economic sectors. As of May 2022, COVID-19 has affected more than 4.5 million Malaysians, with over 35 thousand deaths. General government expenditure surged to address this global public health crisis and its socio-economic impacts.

The Malaysia National Health Account (MNHA) report provides macro-level estimations based on national and international frameworks and guidelines. This edition also includes COVID-19 health expenditure estimations as the World Health Organization (WHO) recommended. The publication will enable policymakers to visualize the pandemic response and serve as a guide to determine the capacity needed to sustain Universal Health Coverage (UHC) and eventually prioritize resources for various recovery activities.

The findings of this report showed that in 2020, Malaysia's total expenditure on health (TEH) was estimated at RM67 billion or 4.7% of Gross Domestic Product (GDP). Public sources of financing remained higher than private, with a total public sector health expenditure of 54.6% or RM36.6 billion. Despite showing a mild increment over the past 15 years, out-of-pocket (OOP) is the second highest funding source at 35%. The highest health expenditure was for hospitals at RM35.9 billion or 54% of TEH. Meanwhile, health expenditure for curative care services was the highest at RM42.8 billion or 64% of TEH. Overall, the COVID-19 health expenditure estimation for 2020 was RM2.2 billion or 3.2% of TEH, of which the Ministry of Health was the primary source of financing.

On behalf of the Ministry of Health, I sincerely appreciate all public and private stakeholders for providing the necessary data and unwavering strong support for MNHA's work. Last but not least, I applaud Planning Division, especially the MNHA team, for their continued determination to produce this evidence-based report.

Tan Sri Dato' Seri Dr. Noor Hisham bin Abdullah
Director-General of Health Malaysia

ACKNOWLEDGEMENT

The MNHA team expresses its gratitude to Dr. Rozita Halina binti Tun Hussein, Director of Planning Division, for her technical guidance, assistance, and encouragement throughout the development of this report.

We wish to acknowledge the crucial role of the MNHA Steering Committee members, co-chaired by the Secretary-General, Ministry of Health Malaysia and the Director-General of Health Malaysia, for their guidance and endorsement of all the data in this report. A special thanks go to the MNHA Technical Advisory Committee members and the External Editors for their dedication and genuine interest in improving this report.

The significant contributions from many public and private agencies who provided useful data considerably aided the development and production of this report. The MNHA team would like to take this opportunity to express their heartfelt gratitude to all these agencies for their cooperation and support.

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LIST OF ABBREVIATIONS

AADK	*Agensi Anti Dadah Kebangsaan* (National Anti-Drug Agency)
AG	Accountant General
AGD	Accountant General's Department of Malaysia
BNM	*Bank Negara Malaysia* (Central Bank of Malaysia)
CHE	Current Health Expenditure
COICOPS	Classification of Individual Consumption by Purpose
CORPS	Corporations
DOSH	Department of Occupational Safety and Health
DOSM	Department of Statistics Malaysia
EPF	Employees Provident Fund
EMRS	Emergency Medical Rescue Services
EPU	Economic Planning Unit
FOMCA	Federation of Malaysia Consumers Association
FOMEMA	Foreign Worker's Medical Examination Monitoring Agency
FT	Federal Territory
GDP	Gross Domestic Product
GHED	Global Health Expenditure Database
HC	ICHA code for functions of health services
HC.R	ICHA code for health-related services
HER	Health Expenditure Report
HES	Household Expenditure Survey
HIES	Household Income and Expenditure Survey
HF	ICHA code for sources of financing for health services
HP	ICHA code for providers of health services
HQ	Headquarters
ICHA	International Classification for Health Accounts
IJN	*Institut Jantung Negara* (National Heart Institute)
IMF	International Monetary Fund
ISN	*Institut Sukan Negara* (National Sports Institute)
IT	Information Technology
JAKOA	*Jabatan Kemajuan Orang Asli* (Department of Orang Asli Development)
JBA	*Jabatan Bekalan Air* (Water Supply Department)
JHAQ	Joint Health Accounts Questionnaire
JKM	*Jabatan Kebajikan Masyarakat* (Social Welfare Department)

JPA	*Jabatan Perkhidmatan Awam* (Public Service Department)
KL	Kuala Lumpur
KN	*Kerajaan negeri* (State government)
KWAP	*Kumpulan Wang Persaraan*
KWC	*Kumpulan Wang* COVID-19
KWSP	*Kumpulan Wang Simpanan Pekerja* (Employees Provident Fund)
LA/PBT	Local authorities (*Pihak berkuasa tempatan*)
LPPKN	*Lembaga Penduduk dan Pembangunan Keluarga Negara* (National Population and Family Development Board)
LTH	*Lembaga Tabung Haji* (Pilgrims Fund Board)
MAIN	*Majlis Agama Islam Negeri* (Zakat Collection Centre)
MCO	Managed Care Organisation
MF	MNHA code for functions of health care
MKN	*Majlis Keselamatan Negara Malaysia* (Malaysian National Security Council)
MNHA	Malaysia National Health Accounts
MOD	Ministry of Defence
MOF	Ministry of Finance
MOH	Ministry of Health
MOE	Ministry of Education
MOSTI	Ministry of Science Technology and Innovation
MP	MNHA code for providers of health care
MR	MNHA code for health-related functions
MS	MNHA code for sources of financing
NADMA	National Disaster Management Agency (*Agensi Pengurusan Bencana Negara*)
NCU	National Currency Unit
NGO/ NPISH	Non-Governmental Organization/Non-profit institutions serving households
NHA	National Health Accounts
NIOSH	National Institute of Occupational Safety and Health
NRI	Non-residual items
OECD	Organisation for Economic Co-operation and Development
OFA	Other federal agencies
OOP	Out-of-pocket
PC	Primary Care
PHC	Primary Health Care
PPE	Personal protective equipment

PSD	Public Service Department
PSE	Public Sector Expenditure
PSHE	Public Sector Health Expenditure
RI	Residual items
RM	*Ringgit Malaysia* (Malaysia Currency)
RMK	*Rancangan Malaysia*
ROW	Rest of the world
SHA	System of Health Accounts
SHA 1.0	System of Health Accounts, Version 1.0 (published in 2000)
SHA 2011	System of Health Accounts, 2011 Edition
SOCSO	Social Security Organisation
SOP	Standard Operating Procedure
SSB	State statutory body
TCM	Traditional and Complementary Medicine
TEH	Total Expenditure on Health
UKAS	*Unit Kerjasama Awam Swasta* (Public Private Partnership Unit)
UN	United Nations
UNDP	United Nations Development Programme
WHO	World Health Organization
WB	World Bank

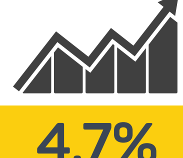
EXECUTIVE SUMMARY 2020

Malaysia is an upper middle-income country with a healthcare system that delivers a comprehensive range of services through a combination of public and private healthcare providers

- MNHA Framework is based on the SHA 1.0 classification with some minor modifications to suit local policy needs
- Macro level health expenditure information
- 15 years of National Health Expenditure data (2006-2020)

TEH as % of GDP

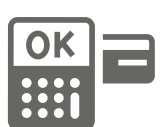
Total Expenditure on Health (TEH) as percentage of Gross Domestic Product (GDP)



4.7%

CHE as % of GDP

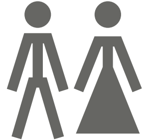
Current Health Expenditure (CHE) as percentage of GDP



4.1%

TEH Per Capita

Per capita expenditure on health



RM 2,057

Public Source of Financing

as % of TEH

54.6%

MOH Expenditure

as % of TEH

46.1%

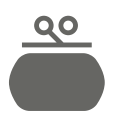
Private Source of Financing

as % of TEH

45.4%

OOP Expenditure

as % of TEH



34.5%

Curative Care services

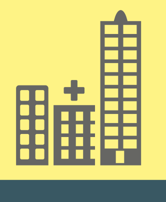
expenditure as % of TEH

63.8%

Primary Care

as % of TEH

18.5%



Sub account

Primary Health Care

as % of TEH

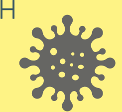
22.4%

Sub account

COVID-19 Health Expenditure

Estimation as % of TEH

3.2%



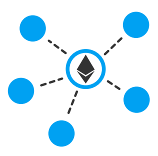
Sub account

REPORT INFORMATION

MNHA HER (2006-2020) contains fifteen years of national health expenditure data from 2006 to 2020, estimated using standardised and internationally acceptable National Health Accounts (NHA) methodology. The Malaysia National Health Accounts Health Expenditure Report 2006-2020 has a total of eleven chapters.

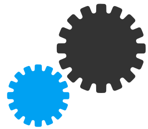
CHAPTER 1: BACKGROUND

Provides a comprehensive background of MNHA's establishment and subsequent productions of annual series of MNHA Health Expenditure Reports.



CHAPTER 2: MALAYSIA NATIONAL HEALTH ACCOUNTS (MNHA) SUMMARY OF FRAMEWORK

Explains the MNHA Framework which is based on the SHA 1.0 classifications. It further unravels the three main entities of the framework: Sources of financing (MS), Providers of health care (MP) & Functions of health care (MF).



CHAPTER 3: METHODOLOGY OF DATA COLLECTION AND ANALYSIS

Explains the general methodology that includes data collection, analysis and data processing techniques used for various agencies.

CHAPTER 4: TOTAL EXPENDITURE ON HEALTH

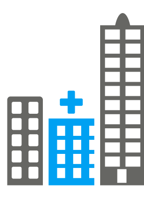
Encompasses Total Expenditure on Health (TEH) trends from year 2006 to 2020 as percentage of Gross Domestic Product (GDP), Per capita health expenditures for the same time period and stable disaggregation of health expenditure.

CHAPTER 5: HEALTH EXPENDITURE BY SOURCES OF FINANCING

Shows data on the major categories of the sources of financing, namely the public and private sectors, which are separately cross tabulated with the dimensions of providers and functions of health care. Also contains Public Sector Health Expenditure (PSHE).

CHAPTER 6: HEALTH EXPENDITURE TO PROVIDERS OF HEALTH CARE

Provides data on the Total Expenditure on Health to providers of health care. This chapter includes cross-tabulation data of sources with hospital and sources with ambulatory care. There is also a section regarding Primary Care (PC) and Primary Health Care (PHC) expenditure.

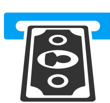


CHAPTER 7: HEALTH EXPENDITURE FOR FUNCTIONS OF HEALTH CARE

Provides data on the Total Expenditure on Health for functions of health care. Data on separate cross-tabulation of curative care function, expenditures for public health programmes (including health promotion and prevention) and expenditures for health education and training by sources of financing are also presented in this chapter.

CHAPTER 8: MOH HEALTH EXPENDITURE

Shows Ministry of Health's (MOH) expenditures as share of TEH and as percentage of GDP. Also contains data on separate cross-tabulations between MOH hospital expenditure with MOH as a source of financing and functions of health care.

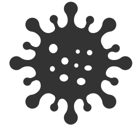


CHAPTER 9: OUT-OF-POCKET HEALTH EXPENDITURE

Shows OOP as a share of total and private sector expenditures, as percentage of GDP, as well as cross-tabulation of OOP to providers and to functions of health care.

CHAPTER 10: INTERNATIONAL NHA DATA

Contains international comparisons of Malaysia's NHA data with NHA data from neighbouring and regional countries as well as some developed countries obtained from GHED.



CHAPTER 11: COVID-19 HEALTH EXPENDITURE ESTIMATION

Provides estimation of COVID-19 health expenditure to gauge the impact of COVID-19 pandemic on health spending in 2020.

Colour Scheme for Charts/Figures:

- Public sectors (blue)
- Private sectors (red)
- Private & public sectors (purple)

CHAPTER 1

BACKGROUND

National Health Accounts (NHA) are systems that track and quantify the flow of health expenditure throughout the health system. This tool can provide a better understanding of the financial dimensions within any country's health system because it is based on standardised definitions and accounting methods. The origins of NHA development began with a study to compile comparable health services expenditure of six countries in the 1960s. The importance of health accounts is evident with the increasing number of countries participating in tracking the flow of health expenditures.

In Malaysia, discussions on initiating the NHA in Malaysia began as early as 1999. Upon securing the funds from the United Nations Development Programme (UNDP) in 2001, the Ministry of Health (MOH) Malaysia, in a concerted effort with the Economic Planning Unit (EPU) of the Prime Minister's Office, launched the "Malaysia National Health Accounts (MNHA) Project". The project's outcome was a report on the MNHA Classification System (MNHA Framework) and the first MNHA Health Expenditure Report (HER). The completion of the MNHA project put forth the benefits of having a health account as an evidence-based tool in making health policy decisions, leading to the establishment of the MNHA Section under the Planning & Development Division of MOH.

After its institutionalisation, the MNHA Section, under the guidance of an international consultant, proceeded to further standardise the methodology used. Following this, health expenditure time series reports were published annually. From 2022 onwards, MNHA will be publishing National Health Expenditure time series data based on the duration of the 3 most recent *Rancangan Malaysia* (RMK) cycles. This year's report will consist of data covering the years for RMK-9, RMK-10 & RMK-11 (2006-2020). The chapters in this publication encompassed health expenditures by sources of financing, expenditures to providers of health care, and expenditures for functions of health care analysed based on the MNHA Framework. In addition to this, a chapter containing international NHA data extracted from the Global Health Expenditure Database (GHED) is included. An additional chapter on COVID-19 health expenditure estimations is also part of this year's report.

We would like to inform the readers regarding the colour scheme used in the charts of this report. All public sectors are highlighted in blue, while private sectors are red. Purple is used for the combination of both private and public sectors. Components on tables may not add to the total of 100% due to rounding up. **Due to the methodology in which NHA data are produced, the data in the most current report replaces all annual data stated in previous publications.** It is reminded that most of the data are in nominal *Ringgit Malaysia* (RM) values unless indicated otherwise.

CHAPTER 2

MALAYSIA NATIONAL HEALTH ACCOUNTS (MNHA): SUMMARY OF FRAMEWORK

National Health Accounts (NHA) is a tool composed of a standard set of tables to capture the public and private sectors health expenditure flow within a country over a specified period. Information such as input, output and resource use obtained from this tool is essential to examine the performance of any health system. Identical set of rules and methodology needs to be used to ensure information from NHA is comprehensive, consistent, comparable and timely.

2.1 THE MNHA CLASSIFICATION

The MNHA Framework is based on international NHA classifications with minor modifications to suit local policy needs (Appendix Tables A2.1, A2.2, and A2.3). The data in all chapters (except Chapter 10) are based strictly on the MNHA Framework. The framework classifies all expenditures into three main entities:

- Sources of financing (MS)
- Providers of health care (MP)
- Functions of health care (MF)

Sources of financing are defined as entities that directly incur the expenditure and hence control and finance the amount of such expenditure. It includes the public sector expenditure encompassing the federal government, state government, local authorities, social security funds and other public entities, and the private sector consisting of private health insurance, managed care organisations, out-of-pocket expenditure, non-profit institutions and corporations.

Providers of health care are defined as entities that produce and provide health care goods and services. These include categories of hospitals, nursing and residential care facility providers, ambulatory health care providers, retail sale and medical goods providers, public health programme providers and general health administration.

Functions of health care are categorised as core functions of health care and health-related functions. Functions of health care include services of curative care, rehabilitative care, long-term nursing care, ancillary services, out-patient medical goods, public health services, health administration and health insurance. Health-related functions include capital formation, education & training of health personnel and research & development in health.

2.2 OVERVIEW OF TOTAL EXPENDITURE ON HEALTH (TEH)

In the MNHA Framework, TEH comprises expenditures from both public and private sources, which consist of both ‘health expenditures’ and all ‘health-related expenditures’ components. ‘Health expenditures’ as defined in the MNHA Framework consist of all expenditures or outlays of medical care, prevention, promotion, rehabilitation, community health activities and health administration and regulation with the predominant objective to improve health. Core function classifications reflect these under the codes MF1-MF7. ‘Health-related expenditures’ classification under the codes MR1, 2, 3 and 9 include expenditures of ‘capital formation of health care provider institutions’, ‘education and training of health personnel’, ‘research and development in health’ and ‘all other health-related expenditures. For easier understanding, components that make up TEH according to MNHA Framework are illustrated in Figure 2.1.

FIGURE 2.1: Total Expenditure on Health in MNHA Framework

Code	Core Functions
MF1	Services of curative care
MF2	Services of rehabilitative care
MF3	Services of long-term nursing care
MF4	Ancillary services to health care
MF5	Medical goods dispensed to out-patients
MF6	Prevention and public health services
MF7	Health programme administration and health insurance
Code	**Health-Related Functions**
MR1	Capital formation of health care provider institutions
MR2	Education and training of health personnel
MR3	Research and development in health
MR9	All other health-related expenditures

2.3 OVERVIEW OF CURRENT HEALTH EXPENDITURE (CHE)

To address the need for methodological consistency when comparing health expenditure across different countries, the World Health Organization (WHO), Eurostat and related international organisations of the Organisation for Economic Co-operation and Development (OECD) produced a manual known as "A System of Health Accounts". The latest edition of this manual is known as the SHA 2011. It is essential to understand the differences when comparing data based on MNHA Framework to data based on SHA 2011 framework. As described earlier, the MNHA Framework captures and reports health spending as total expenditure on health (TEH), whereas current health expenditure (CHE) is used when reporting on SHA 2011. Health spending based on CHE is a lower value as it excludes capital spending, education & training and research & development. Since 2017, both OECD and WHO countries have used CHE for international reporting and inter-country comparisons of national health expenditures. Components that make up CHE, according to SHA 2011, are illustrated in Figure 2.2.

FIGURE 2.2: Current Health Expenditure in SHA 2011 Framework

Code	Core Functions
HC.1	Services of curative care
HC.2	Services of rehabilitative care
HC.3	Services of long-term nursing care
HC.4	Ancillary services to health care
HC.5	Medical goods dispensed to out-patients
HC.6	Prevention and public health services
HC.7	Health programme administration and health insurance

CHAPTER 3

METHODOLOGY OF DATA COLLECTION AND ANALYSIS

3.1 GENERAL METHODOLOGY

A general understanding of the methodology in NHA estimation provides a better appreciation of the data. The previous MNHA HER produced data from 1997 to 2019, and the current report contains data from 2006 to 2020. Data in this report over the same period may show some variations compared to the previous reports. Changes in the time series data may reflect the incorporation of recent developments with previous data from various censuses and surveys (when using secondary data); may reflect genuine structural changes; may be caused by variations in responses from multiple data sources at each cycle of estimation; or access to new data that is used to replace previous estimations. These variations are an acceptable phenomenon under NHA. Complete lists of the data sources are documented at every cycle of analysis (Appendix Table A1.1, A1.2). It is difficult to obtain a near 100% response rate from all data sources. Any improvements in data responses will minimise estimations of non-responders and reflects better true data.

3.2 DATA COLLECTION AND ANALYSIS

The method of data collection and analysis used in this report conforms to the method used in the previous cycle, whereby detailed definitions of what constitutes health expenditure, institutional entities and types of disaggregation were drawn up based on inputs from several documents, committee meetings, and consultative advice from the internal and external MOH sources. Both primary and secondary data were used in this analysis (Appendix Table A1.1 and A1.2). Agencies from public and private sources provide primary data in several formats. These data were obtained through multiple MNHA surveys. The secondary data were retrieved from various data sources, reports, bulletins and other documents.

All data were analysed separately by identified group of agencies. Upon verification, data were entered into various dummy time series spreadsheets. Verification of data is important as it affects the quality of final outputs. The data sets from each agency were processed differently depending on the availability and completeness. Data classification for each agency was carried out based on the tri-axial MNHA dimensions of sources, providers and functions. The MNHA Framework enables health expenditure to disaggregate to the lowest possible code. Any data gaps in each of these disaggregated data from each agency were subjected to imputation methods recommended by NHA experts. These imputation techniques may vary from agency to agency.

The final analysis data of each agency were coded according to the MNHA Framework. State codes were also assigned to every set of analyses. All stages of analyses were highly technical, involved several methods tailored to specific agencies and required a good understanding of the MNHA Framework. The data entry and analysis processes were carried out using Microsoft Excel and Stata statistical software. After initial data preparation, analysis, and coding, measures were taken to ensure data quality. Several additional verification methods are put in place before producing the final database. These involve validation of total estimates and a combination of codes for each data source prior to merging to produce the final database. Data from each agency were then collated. Subsequently, NHA data extraction is carried out to populate various tables and figures easily understood by policymakers and other stakeholders.

Considering to continually improving NHA estimations and reporting, MNHA reviewed and refined its methodology in several phases. During the first round of refinement, analyses to standardise hospital reporting were applied. In short, this led to the inclusion of all costs incurred for ancillary services such as pharmacy charges (drugs and non-durable products), surgical costs, laboratory tests and radiological investigations as curative care expenditures whenever they are delivered as part of a curative care service package. As defined in NHA, hospital care embodies all services provided by a hospital to patients. Under this, analysis of all public and private hospitals was disaggregated and reported as expenditure for in-patient, out-patient and daycare services only. On the other hand, expenditures incurred at standalone laboratories and radiological investigations are reported under another function code. This is strictly in keeping to definitions of functions codes under MNHA Framework for curative care services and provider of health care boundary for standalone ambulatory health care centres.

Further refinement was carried out to address concerns of double counting. When producing a country's health account, it is essential to recognise the equal importance of each dimension of the NHA. Focusing on collecting data from one dimension tends to underestimate expenditure as health spending from other entities via different NHA dimensions is not captured. It is essential to quantify all health expenditures from various information sources along all NHA dimensions. However, estimations of expenditure along more than one dimension increase the likelihood of double counting. In the Malaysian context, estimated total health expenditure for all public hospitals is obtained from the respective data sources who are also providers of health care services. In addition, surveys were done to collect health spending by various public and private sector employers/companies that also capture claims or reimbursements. It is significant to note that claims and reimbursement encompass expenditures for public hospitals' curative care services. Therefore, after carefully scrutinising all details, the refined methodology is a downward revision to health care expenditures, resulting from the removal of various agencies' reimbursements when it involves claims for treatment received at public MOH and non-MOH hospitals and clinics. Corresponding to this, all claims or reimbursement at these providers are grouped as in-patient, out-patient and daycare services. This enables MNHA to maintain detailed accounting of health spending that is mutually exclusive and standardised.

All subsequent reporting of MNHA maintained the above-explained refinement. Peer review workshops are conducted annually to examine, discuss and verify the validity and reliability of the final data outputs of each agency. This involves validation of all codes and total estimation used for each data source prior to merging into a final database. This report only highlights some selected findings, which may be helpful in the health policy development and health planning of the country. Further detailed data extractions with cross-tabulations are usually produced based on policymaker's and stakeholder's requests.

3.3 DATA PROCESSING OF VARIOUS AGENCIES

The methods used for data processing vary according to the availability, completion and source of data as follows:

3.3.1 Public Sector

3.3.1.1 Ministry of Health (MOH)

Health expenditure data of the MOH were obtained from the Accountant-General's Department of Malaysia (AGD), under the Ministry of Finance (MOF). The Accountant-General (AG) raw database for the MOH is the primary source of data whereby

expenditure data is entered as a line item. All health expenditures are disaggregated into the tri-axial coding system under the dimensions of sources of financing, providers and functions of health care based on the MNHA Framework, omitting double counting. Assigning of MNHA codes is based on examining available data and additional details captured via MNHA surveys.

3.3.1.2 Ministry of Education (MOE)

Health expenditure under the MOE includes two main functions. Firstly, provision of health care services by university hospitals for the general population and outpatient medical clinics meant for students and the university community. Second, health expenditure from this agency is on health-related training and research expenditure. Other than these institutions, data on the cost of training health professionals are also obtained from various private training colleges, Public Service Department (PSD) and other agencies.

3.3.1.3 Other Federal Agencies (including Statutory Bodies)

The agencies under "other federal agencies" currently consist of seventeen public agencies, which include the National Anti-Drug Agency, Prison Department, Malaysia Civil Defence Force, Pension Department of Public Service Department (KWAP), National Heart Institute of Malaysia, Social Welfare Department of Malaysia, Department of Orang Asli Development, National Population and Family Development Board Malaysia, National Institute of Occupational Safety and Health Malaysia (NIOSH), Department of Occupational Safety and Health Malaysia (DOSH), National Sports Institute of Malaysia, Ministry of Finance (MOF), Ministry of Science, Technology and Innovation (MOSTI), federal statutory bodies, higher education institutes, Pilgrims Fund Board, National Disaster Management Agency (NADMA), *Majlis Keselamatan Negara* (MKN), Emergency Medical Rescue Services (EMRS) and HQ donations. The expenditure on health of other federal agencies (including statutory bodies) was captured through MNHA survey questionnaires. Data from this survey also assist in estimating and disaggregating expenditure along with the providers and functions of health care dimensions for agencies with incomplete or no data. Expenditures under this group are mainly for curative care services, retail sales and medical goods, and research.

3.3.1.4 Local Authorities

Health expenditure data of the local authorities encompass 155 agencies of local/municipal governments in Malaysia. Health expenditure data captured from this entity includes expenditure on services provided to the general public and expenditure that covers health care services provided for staff.

3.3.1.5 (General) State Government

This consists of health expenditure by all thirteen state governments and three Federal Territories, which include Kuala Lumpur, Putrajaya and Labuan. Most state expenditure is analysed based on services provided to the general community, mainly for preventive care such as environmental health covering water treatment and reimbursements expenditure for state government employees, mainly for curative care.

3.3.1.6 Ministry of Defence (MOD)

The MOD provides health services through its Army Hospitals and Armed Forces Medical and Dental Centres *(Rumah Sakit Angkatan Tentera dan Pusat Pergigian Angkatan Tentera)*. Details on MOD health expenditure are captured through MNHA annual survey and are mainly for curative care services.

3.3.1.7 Social Security Funds

There are two major organisations providing social security funds; the Employees Provident Fund (EPF) and the Social Security Organisation (SOCSO), both of which are mandated by the government. MNHA annual survey captures total health expenditure by state for both of these organisations. Further breakdown to disaggregate expenditure to providers and functions are based on previous field surveys that collected details based on samplings of the medical bill claims.

3.3.1.8 Other State Agencies (including Statutory Bodies)

Other state agencies consist of statutory bodies and Zakat Collection Centre (MAIN). MNHA survey for MAIN captures data on curative care reimbursement, retail sales & medical goods reimbursement and various other services provided to the community. MNHA survey for statutory bodies is carried out to collect health expenditure data which includes total health expenditure, data for provider and function dimensions. Information on the number of employees obtained from Public Service Department (JPA) and disaggregated proportions of provider and function is used to estimate the health expenditure of statutory bodies with incomplete or no data.

3.3.2 Private Sector

3.3.2.1 Household Out-of-Pocket (OOP) Health Expenditure

Internationally, there are several methods to estimate household out-of-pocket (OOP) health expenditure. MNHA uses the Integrative approach to estimate OOP expenditure. The integrative approach involves examining expenditure flows from the perspective of all agents in the system. This approach comprises several different health expenditures flows in the system from different perspectives: (i) from the source of financing or consumption [example: Household Expenditure Survey (HES) or Household Income and Expenditure Survey (HIES)] and (ii) from the provider side (example: private hospital and clinic survey). This combination approach is the best method and is highly recommended by NHA international standards.

3.3.2.1.1 Integrative Approach

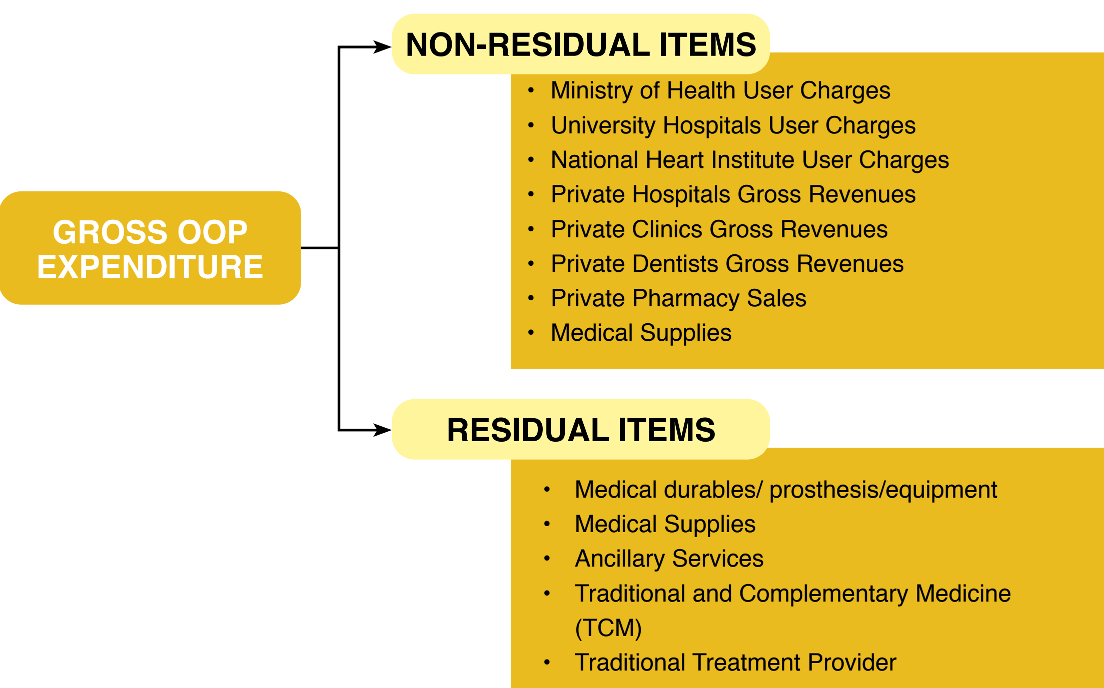
In the integrative approach, the gross of direct spending from the consumption, provision and financing perspective is estimated after deduction of the third-party source of financing payer reimbursements. This deduction is made to avoid double counting and overestimation of the OOP expenditure. The integrative approach under the MNHA Framework uses the formula below to derive the estimated OOP expenditure:

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

3.3.2.1.2 OOP Data Sources

(a) **Gross OOP Expenditure**

The gross OOP expenditure is the net reconciliation of various datasets using the consumption and provider approaches. It consists of two groups, namely Residual Items (RI) and Non-Residual Items (NRI), as shown below.



(b) **Third-Party Payer Reimbursement**

The third-party payer reimbursements are the finances claimed from the various agencies such as private insurance enterprises, private corporations, Employees Provident Fund (EPF), Social Security Organisation (SOCSO), and federal and state statutory agencies by the OOP payee after the OOP payment is made. Each item in the gross spending and third-party payer data can be obtained from several data sources (Appendix Table A1.1 and A1.2). The group above is subsequently reassigned to the below categories after considering data captured from IQVIA (pharmaceuticals, supplies and TCM).

3.3.2.1.3 Deduction of Third-Party Payers

The summation of all gross revenues is considered as OOP and non-OOP health expenditure. The non-OOP health expenditure has to be deducted as the refundable payments (private insurance, private corporations, SOCSO, EPF and statutory bodies) to estimate the net OOP expenditure. This deduction is made to avoid double counting and overestimation of the OOP expenditure.

3.3.2.1.4 Training Expenditure Estimation

The data were obtained from public universities, private universities and training institutions conducting training in the field of health. Data from each respondent are assigned MP, MF and state codes. Data gaps are addressed using the linear interpolation method. Data on health personnel in-service training expenditure is currently not included due to the resource intensiveness needed to capture or extract this expenditure, which is embedded in other expenditures, such as expenditure for administration at each hospital and health department.

3.3.2.2 Private Corporations/Private Companies

The labour force within the private sector may gain medical benefits through the private employer medical benefits scheme. The average per capita health expenditure was calculated based on the various industrial surveys conducted by the Department of Statistic Malaysia (DOSM) and excluded group health insurance purchases for employees.

3.3.2.3 Private Health Insurance

The health expenditure of private health insurance was calculated based on the Medical Health Insurance data from the Central Bank of Malaysia. The data includes individual and grouped insurance data. The proportions for providers and functions of health care were obtained via the MNHA survey of insurance companies.

3.3.2.4 Non-Governmental Organisations (NGOs)

Non-Governmental Organisations (NGOs) are also involved in health-related activities. Health expenditure incurred by the NGOs was obtained through the MNHA survey of these organisations. The survey also enables this expenditure's disaggregation to providers and functions of health care.

3.3.2.5 Managed Care Organisations (MCOs)

Under the MNHA analysis, only data related to health administration of health insurance was obtained from MCO.

3.3.2.6 Rest of the world (ROW)

Rest of the world (ROW) are arrangements involving or managed by institutional units that are resident abroad who not only purchase but may also provide health care goods and services on behalf of residents. It includes health-related activities.

3.4 MNHA ESTIMATION OF CONSTANT VALUE

Current or nominal value of health expenditure refers to expenditures reported for a particular year, unadjusted for inflation. Constant value estimates indicate what expenditure would have been when anchored to a particular year value, such as 2018 values applied to all years. As a result, expenditures in different years can be compared on a *Ringgit*-for-*Ringgit* basis, using this as a measure of changes in the volume of health goods and services. When making health expenditure comparisons over a time series, it is more meaningful to use constant values rather than current or nominal values.

In health expenditure estimations under NHA, the constant value is usually estimated using GDP deflator. The GDP deflator measures the level of prices of all-new, domestically produced, final goods and services in an economy. It is a price index that measures price inflation or deflation. GDP deflator can be calculated using the above formula. GDP current and GDP constant time series data is published every year by the Department of Statistics Malaysia (DOSM).

The constant value estimation requires a two-step method whereby the first step involves the estimation of a set of GDP deflators. Based on advice from NHA experts, the splicing method on series in different base years from 2000 to 2010 can be used to get a series of GDP deflators, as shown in Table 3.4a. The second step involves the application of this estimated GDP deflator to nominal values for the estimation of constant values.

$$\text{GDP Deflator} = \frac{\text{GDP Current}}{\text{GDP Constant}} \times 100$$

TABLE 3.4a: Example of Splicing Method with Different Base Year

Year	2005	2006	2007	2008	2009	2010	2011
Deflators Base Year 2005	100	104	109	120	113	118	
Deflators Base Year 2010						100	105
GDP Deflator Base Year 2010 (Splicing Method)	**85**	**88**	**92**	**102**	**96**	**100**	**105**

Note: Derived values in italics

Example of splicing method using base year 2010 to derive at new GDP deflator for year 2009:

= (100/118) x 113
= 96

For year 2008:

= (100/118) x 120
= 102

Constant value estimates can be obtained by calculating GDP deflator base year 2016 from the derived values of GDP deflator base year 2010, which then can be applied to the nominal value of health expenditure. As a result, the nominal value increases when expressed as a constant value at a particular base year.

This estimation can be demonstrated using the 2016 base year and a set of GDP deflator values, as shown in Table 3.4b.

TABLE 3.4b: Example of Calculating Total Expenditure on Health in Constant Value Base Year 2016

	2009	2010	2011	2012	2013	2014	2015	2016
GDP Deflator Base Year 2010 (Splicing Method)	96	100	105	106	107	108	109	111
TEH Nominal (RM Million)		32,000	35,000	39,000	41,000	46,000	49,000	51,000
TEH Constant (RM Million)		**35,520**	**37,000**	**40,840**	**42,533**	**47,278**	**49,899**	**51,000**

Monetary values expressed in current values can be converted to constant values base year 2016 using the formula:-

$$V_{cox} = V_{curx} * (D_i / D_x)$$

Where:-

- V_{cox} is the value expressed in constant values for the year for which constant prices are to be calculated (Year x)
- V_{curx} is the value expressed in the current values applying in Year x
- D refers to the GDP deflator applying in Years x and i, with i being the base year

For example, using the above formula to calculate TEH 2015 in constant value:-

- V_{curx} = RM49,000
- D_i = 111
- D_x = 109

Then:

V_{cox} = RM49,000 X (111/109)
= RM49,899

Thus the value to be used, expressed as constant values at the base year 2016, is RM49,899 rather than the current value of RM49,000.

CHAPTER 4

4.1 TOTAL EXPENDITURE ON HEALTH (TEH)

The total expenditure on health (TEH) is the sum of aggregate public and private health expenditure in a given year, calculated in Ringgit Malaysia. TEH mentioned in this report is based on the MNHA Framework, which consists of core functions and health-related functions, as shown in Figure 2.1. In 2020, Malaysia spent RM67,022 million on health.

TEH for Malaysia between 2006 till 2020 shows a gradually increasing trend, as illustrated in Table 4.1 and Figure 4.1.

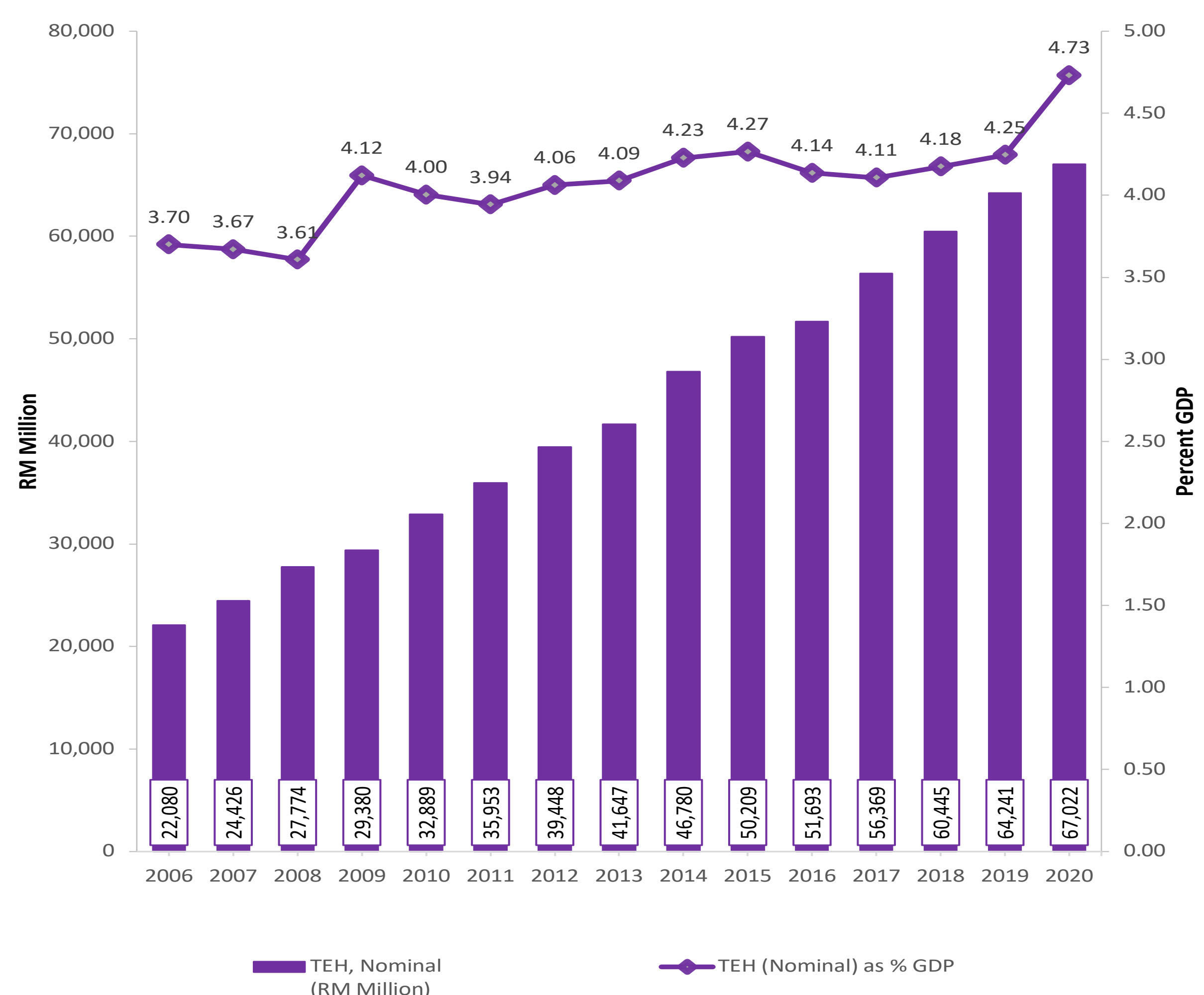
Meanwhile, TEH as a share of Gross Domestic Product (GDP) for the same period ranged from 3.61 percent to 4.73 percent. In 2020, there was an increase in TEH as a percentage of GDP due to a drop in GDP value and a rise in TEH value for 2020.

TABLE 4.1: Total Expenditure on Health, 2006-2020 (RM Million & Percent GDP)

Year	TEH, Nominal (RM Million)	TEH, Constant (RM Millon)*	Total GDP, Nominal (RM Million)**	MNHA Derived GDP Deflator	TEH (Nominal) as % GDP
2006	22,080	28,979	596,784	81	3.70
2007	24,426	30,588	665,340	85	3.67
2008	27,774	31,592	769,340	93	3.61
2009	29,380	35,489	712,857	88	4.12
2010	32,889	38,045	821,434	92	4.00
2011	35,953	39,453	911,733	97	3.94
2012	39,448	42,860	971,252	98	4.06
2013	41,647	45,171	1,018,614	98	4.09
2014	46,780	49,516	1,106,443	100	4.23
2015	50,209	52,926	1,176,941	100	4.27
2016	51,693	53,602	1,249,698	102	4.14
2017	56,693	56,321	1,372,310	105	4.11
2018	60,445	60,019	1,447,760	106	4.18
2019	64,241	63,741	1,513,157	106	4.25
2020	67,022	67,022	1,416,605	105	4.73

*Note: *Constant values estimated using MNHA derived GDP deflators*
*Source: **Department of Statistics Malaysia (DOSM)*

FIGURE 4.1: Trend for Total Expenditure on Health, 2006-2020 (RM Million & Percent GDP)



4.2 PER CAPITA HEALTH EXPENDITURE

In nominal value, per capita expenditure on health ranged from RM823 in 2006 to RM2,057 in 2020. In comparison, per capita health expenditure as constant values ranged from RM1,080 in 2006 to RM2,057 in 2020 (Table 4.2 and Figure 4.2).

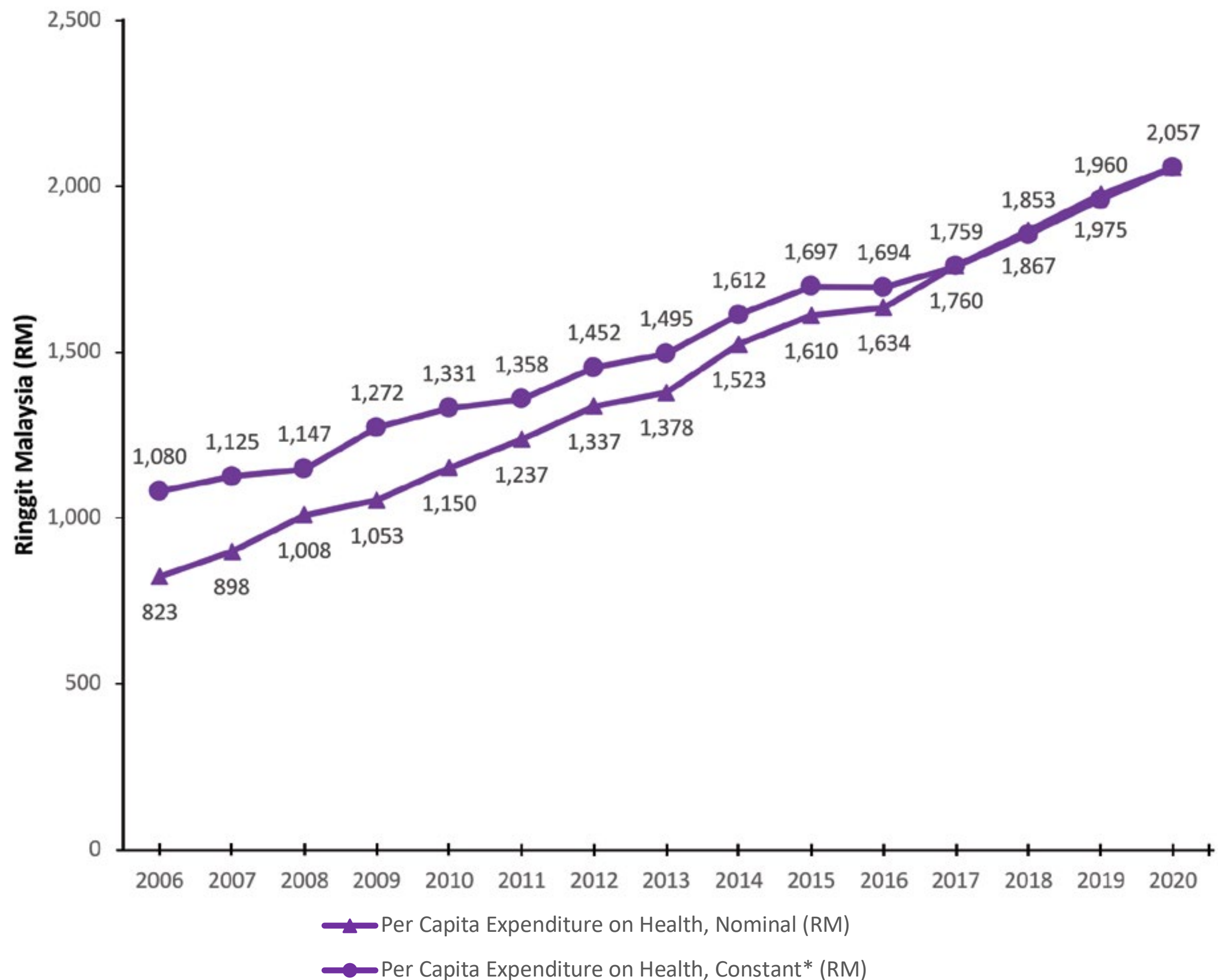
TABLE 4.2: Per Capita Expenditure on Health, 2006-2020 (Nominal & Constant, RM)

Year	TEH, Nominal (RM Million)	TEH, Constant* (RM Million)	Per Capita Expenditure on Health, Nominal (RM)	Per Capita Expenditure on Health, Constant* (RM)	Total Population**
2006	22,080	28,979	823	1,080	26,831,400
2007	24,426	30,588	898	1,125	27,186,000
2008	27,774	31,592	1,008	1,147	27,540,300
2009	29,380	35,489	1,053	1,272	27,895,100
2010	32,889	38,045	1,150	1,331	28,588,800
2011	35,953	39,453	1,237	1,358	29,062,100
2012	39,448	42,860	1,337	1,452	29,509,900
2013	41,647	45,171	1,378	1,495	30,213,800
2014	46,780	49,516	1,523	1,612	30,708,600
2015	50,209	52,926	1,610	1,697	31,186,100
2016	51,693	53,602	1,634	1,694	31,633,500
2017	56,369	56,321	1,760	1,759	32,022,600
2018	60,445	60,019	1,867	1,853	32,382,300
2019	64,241	63,741	1,975	1,960	32,523,000
2020	67,022	67,022	2,057	2,057	32,584,000

**Note: Constant values estimated using MNHA derived GDP deflators*

***Source: Department of Statistics Malaysia (DOSM)*

FIGURE 4.2: Per Capita Expenditure on Health, 2006-2020 (Nominal & Constant, RM)



*Note: *Constant values estimated using MNHA derived GDP deflators*

4.3 HEALTH EXPENDITURE BY STATES

Health expenditure by state allocation is assigned based on the facilities where the financial resources were used to purchase various types of health care services and products. In the event that this is not possible, it will be allocated based on the location of the agencies that represent the facilities. The sequence of states in the figures and tables below is based on the state population size in 2020 as the reference year.

There are thirteen states and three Federal Territories, namely Kuala Lumpur, Labuan and Putrajaya. The state population census is reported by the Department of Statistics Malaysia. In 2020, Selangor had both the largest population of about 6.5 million people and the highest expenditure on health of RM11,085 million, as shown in Table 4.3 and Figure 4.3.

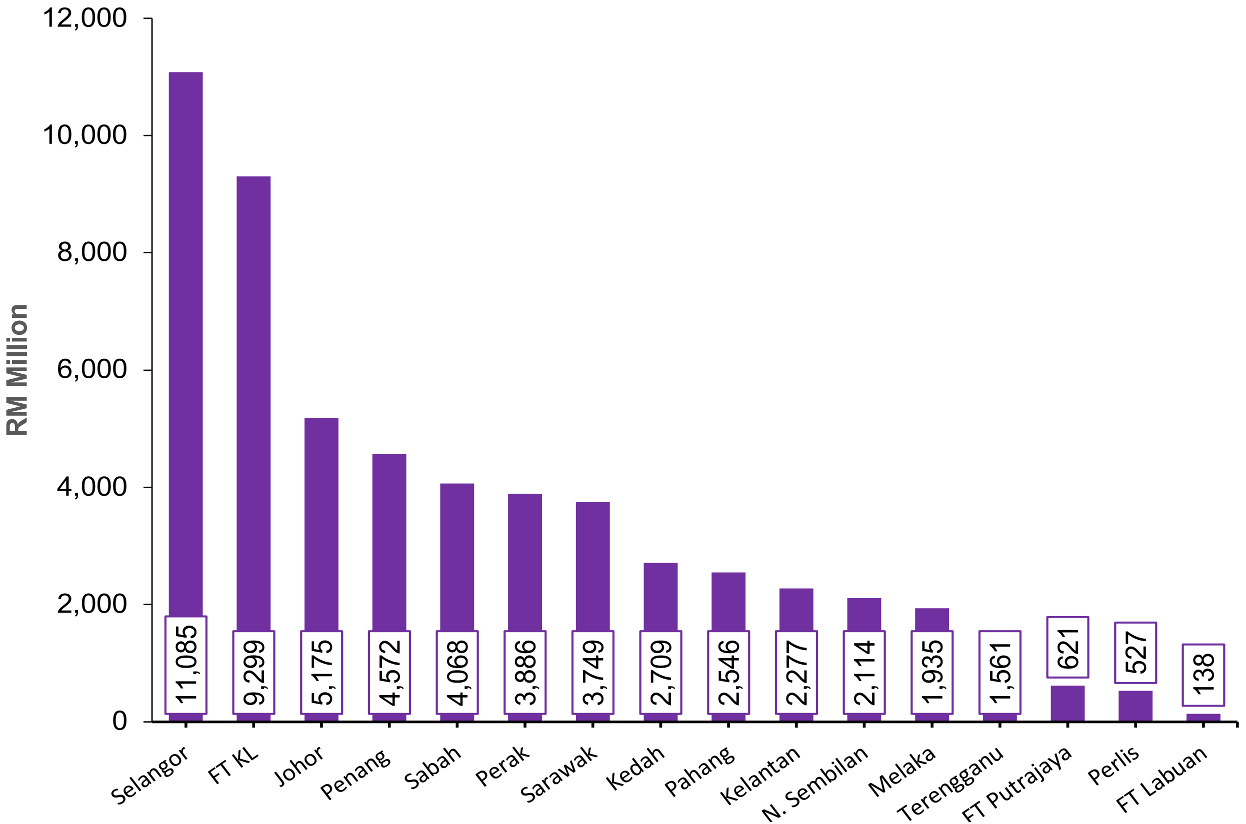
TABLE 4.3: State Population and Health Expenditure, 2020

State	Population*	Expenditure (RM Million)
Selangor	6,524,600	11,085
FT KL	1,766,000	9,299
Johor	3,773,500	5,175
Penang	1,770,400	4,572
Sabah	3,882,800	4,068
Perak	2,507,900	3,886
Sarawak	2,813,100	3,749
Kedah	2,182,600	2,709
Pahang	1,676,800	2,546
Kelantan	1,904,900	2,277
N. Sembilan	1,127,100	2,114
Melaka	931,800	1,935
Terengganu	1,258,500	1,561
FT Putrajaya	109,900	621
Perlis	254,700	527
FT Labuan	99,400	138
National**	-	10,762
Total	**32,584,000**	**67,022**

**Source: Department of Statistics Malaysia (DOSM)*

***Note: Unable to allocate by states*

FIGURE 4.3: Health Expenditure by States, 2020 (RM Million)

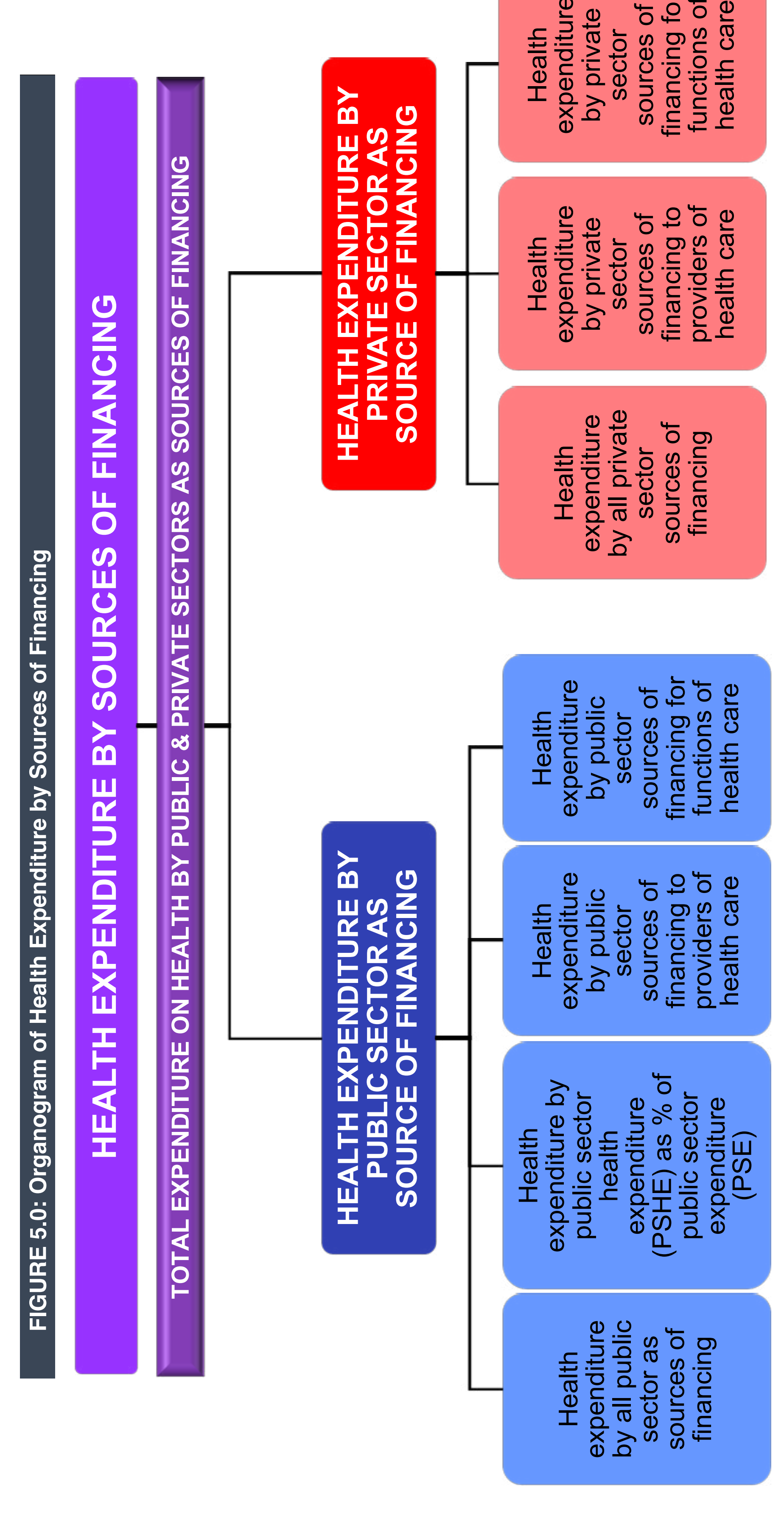


CHAPTER 5

HEALTH EXPENDITURE BY SOURCES OF FINANCING

Sources of financing for health care services and products include multiple public and private sector agencies. The public sector sources of financing are the federal government, state government, local authorities, social security funds and all other public entities. As for the private sector, sources of financing include private insurance enterprises, managed care organisations (MCO), private household out-of-pocket (OOP), non-profit institutions, private corporations and the rest of the world. The share of both sectors to the TEH can be identified for each year in the time series. This chapter contains three main sections, namely health expenditure by all sources of financing and also specific public sector and private sector health expenditures in Section 5.2 and Section 5.3, respectively. An overview of health expenditure by sources of financing is shown in Figure 5.0.

FIGURE 5.0: Organogram of Health Expenditure by Sources of Financing



5.1 HEALTH EXPENDITURE BY PUBLIC AND PRIVATE SECTOR SOURCES OF FINANCING

Among the various sources of financing, the Ministry of Health (MOH) had the highest expenditure amounting to RM30,883 million or 46% share of TEH (Table 5.1a and Figure 5.1a) in 2020. This is followed by private household out-of-pocket (OOP) spending (RM23,150 million or 35%) and private insurance (RM4,948 million or 7%). Other federal agencies, including federal statutory bodies, spent RM2,533 million or 4%, whereas the Ministry of Education (MOE) spent RM1,603 million or 2% and all corporations (other than health insurance) spent RM1,044 million or 2% of the share of TEH.

The time series data trend also shows that there are changes of trend in sources of financing from 2006 onwards. Private insurance expenditure was the third highest source of financing until 2020. Since 2006, other federal agencies (including statutory bodies) was the fourth highest source of financing except in 2015, when all corporations (other than health insurance) overtook other federal agencies (including statutory bodies) (Table 5.1b and Table 5.1c).

In 2020, the public and private sectors health expenditures were RM36,612 million (55%) and RM30,409 million (45%), respectively (Table 5.1d and Figure 5.1d). A similar pattern is noted throughout the time series from 2006 to 2020, where the public sector share of health expenditure remained higher than the private sector share. Both public and private sectors spending generally showed an increasing trend throughout the time series.

TABLE 5.1a: Total Expenditure on Health by Sources of Financing, 2020

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Ministry of Health (MOH)	30,883	46.08
MS2.4	Private household out-of-pocket expenditures (OOP)	23,150	34.54
MS2.2	Private insurance enterprises (other than social insurance)	4,948	7.38
MS1.1.1.9	Other federal agencies (including statutory bodies)	2,533	3.78
MS1.1.1.2	Ministry of Education (MOE)	1,603	2.39
MS2.6	All corporations (other than health insurance)	1,044	1.56
MS2.3	Private MCOs and other similar entities	975	1.46
MS1.1.2.2	Other state agencies (including statutory bodies)	504	0.75
MS1.2.2	Social Security Organisation (SOCSO)	409	0.61
MS1.1.3	Local authorities (LA)	266	0.40
MS2.5	Non-profit institutions serving households (NPISH)	210	0.31
MS1.1.2.1	(General) State government	201	0.30
MS1.1.1.3	Ministry of Defence (MOD)	135	0.20
MS9	Rest of the world (ROW)	82	0.12
MS1.2.1	Employees Provident Fund (EPF)	79	0.12
Total		**67,022**	**100.00**

FIGURE 5.1a: Total Expenditure on Health by Sources of Financing, 2020

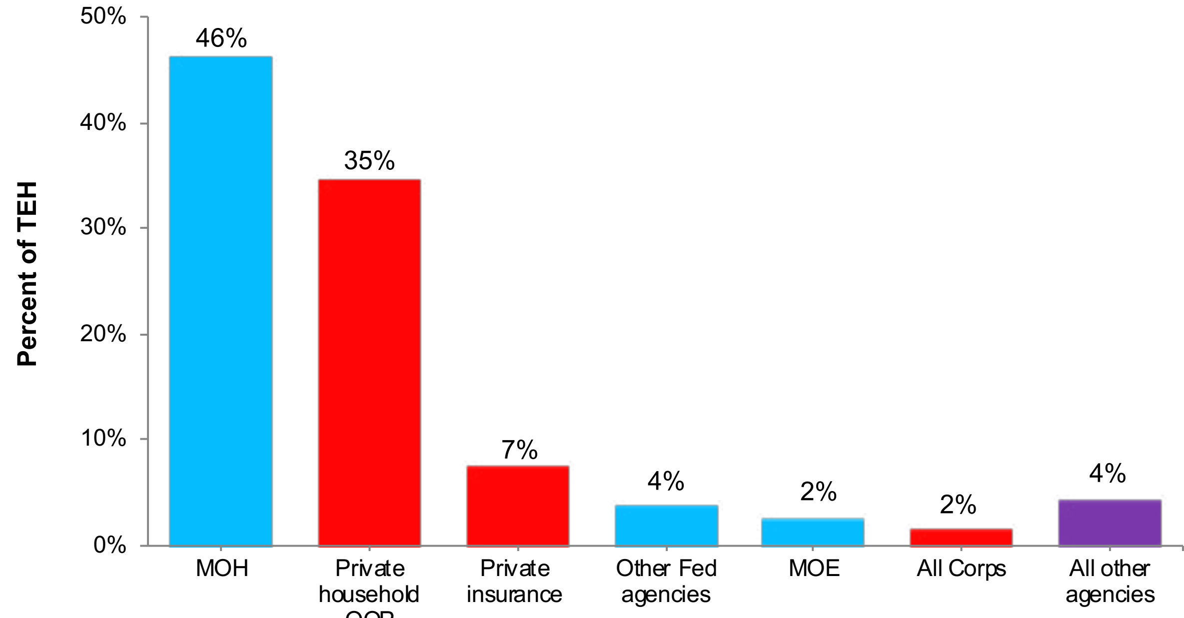


TABLE 5.1b: Total Expenditure on Health by Sources of Financing, 2006-2020 (RM Million)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	10,655	11,036	12,813	14,431	15,945	16,496	18,239	19,038	21,782	22,671	22,226	24,716	26,501	28,858	30,883
MS1.1.1.2	Ministry of Education (MOE)	720	859	999	1,039	1,243	1,245	1,311	1,261	1,376	1,333	1,306	1,280	1,349	1,608	1,603
MS1.1.1.3	Ministry of Defence (MOD)	96	109	136	133	127	140	172	175	186	169	154	132	103	150	135
MS1.1.1.9	Other federal agencies (including statutory bodies)	819	1,049	1,405	1,541	1,537	1,813	1,678	1,677	1,805	1,886	2,021	2,076	2,121	2,245	2,533
MS1.1.2.1	(General) State government	77	88	94	84	90	90	105	78	86	90	97	111	150	124	201
MS1.1.2.2	Other state agencies (including statutory bodies)	71	75	86	90	111	129	137	189	212	346	385	392	467	502	504
MS1.1.3	Local authorities (LA)	42	419	113	238	108	142	150	188	164	178	138	154	194	249	266
MS1.2.1	Employees Provident Fund (EPF)	46	51	49	38	34	39	38	42	46	52	56	58	67	83	79
MS1.2.2	Social Security Organisation (SOCSO)	105	117	88	102	136	157	176	219	264	261	310	329	410	394	409
MS2.2	Private insurance enterprises (other than social insurance)	1,246	1,413	1,709	1,991	2,273	2,614	2,774	2,916	3,203	3,623	3,846	4,085	4,313	4,875	4,948
MS2.3	Private MCOs and other similar entities	138	151	167	179	201	243	302	287	437	621	824	871	914	963	975
MS2.4	Private household out-of-pocket expenditures (OOP)	7,141	7,919	9,084	8,478	9,917	11,466	12,649	13,933	15,373	16,903	18,536	20,357	22,035	23,115	23,150
MS2.5	Non-profit institutions serving households (NPISH)	160	186	214	234	269	312	363	78	40	69	87	92	92	90	210
MS2.6	All corporations (other than health insurance)	765	951	816	801	899	1,064	1,352	1,564	1,803	2,001	1,703	1,710	1,723	982	1,044
MS9	Rest of the world (ROW)		1	1	2	1	3	2	3	4	5	4	5	5	4	82
Total		**22,080**	**24,426**	**27,774**	**29,380**	**32,889**	**35,953**	**39,448**	**41,647**	**46,780**	**50,209**	**51,693**	**56,369**	**60,445**	**64,241**	**67,022**

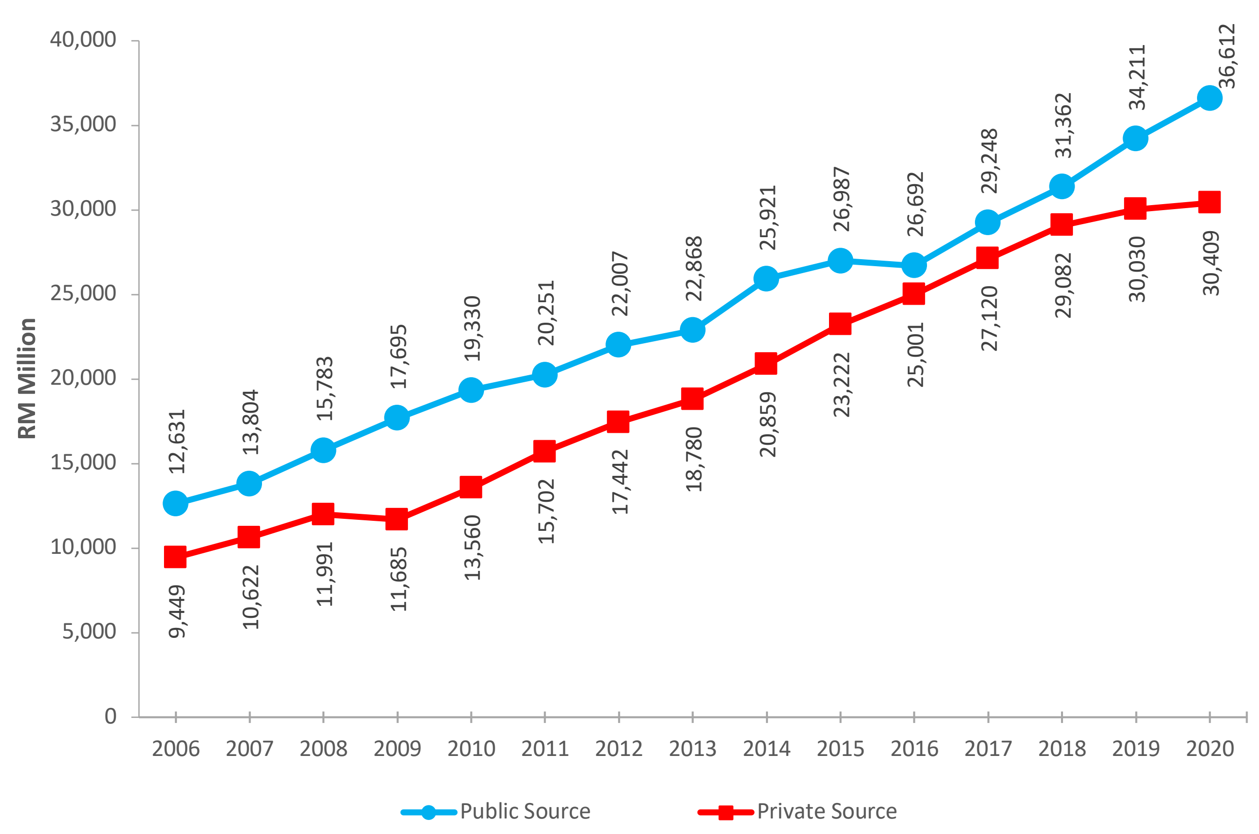
TABLE 5.1c: Total Expenditure on Health by Sources of Financing, 2006-2020 (Percent, %)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	48.26	45.18	46.13	49.12	48.48	45.88	46.24	45.71	46.56	45.15	43.00	43.85	43.84	44.92	46.08
MS1.1.1.2	Ministry of Education (MOE)	3.26	3.52	3.60	3.53	3.78	3.46	3.32	3.03	2.94	2.66	2.53	2.27	2.23	2.50	2.39
MS1.1.1.3	Ministry of Defence (MOD)	0.44	0.45	0.49	0.45	0.39	0.39	0.44	0.42	0.40	0.34	0.30	0.23	0.17	0.23	0.20
MS1.1.1.9	Other federal agencies (including statutory bodies)	3.71	4.30	5.06	5.25	4.67	5.04	4.25	4.03	3.86	3.76	3.91	3.68	3.51	3.49	3.78
MS1.1.2.1	(General) State government	0.35	0.36	0.34	0.29	0.27	0.25	0.27	0.19	0.18	0.18	0.19	0.20	0.25	0.19	0.30
MS1.1.2.2	Other state agencies (including statutory bodies)	0.32	0.31	0.31	0.31	0.34	0.36	0.35	0.45	0.45	0.69	0.74	0.69	0.77	0.78	0.75
MS1.1.3	Local authorities (LA)	0.19	1.71	0.41	0.81	0.33	0.39	0.38	0.45	0.35	0.36	0.27	0.27	0.32	0.39	0.40
MS1.2.1	Employees Provident Fund (EPF)	0.21	0.21	0.18	0.13	0.10	0.11	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.13	0.12
MS1.2.2	Social Security Organisation (SOCSO)	0.48	0.48	0.32	0.35	0.41	0.44	0.45	0.53	0.57	0.52	0.60	0.58	0.68	0.61	0.61
MS2.2	Private insurance enterprises (other than social insurance)	5.64	5.78	6.15	6.78	6.91	7.27	7.03	7.00	6.85	7.22	7.44	7.25	7.14	7.59	7.38
MS2.3	Private MCOs and other similar entities	0.63	0.62	0.60	0.61	0.61	0.68	0.77	0.69	0.93	1.24	1.59	1.55	1.51	1.50	1.46
MS2.4	Private household out-of-pocket expenditures (OOP)	32.34	32.42	32.71	28.86	30.15	31.89	32.06	33.45	32.86	33.67	35.86	36.11	36.45	35.98	34.54
MS2.5	Non-profit institutions serving households (NPISH)	0.73	0.76	0.77	0.80	0.82	0.87	0.92	0.19	0.08	0.14	0.17	0.16	0.15	0.14	0.31
MS2.6	All corporations (other than health insurance)	3.46	3.89	2.94	2.73	2.73	2.96	3.43	3.75	3.85	3.99	3.29	3.03	2.85	1.53	1.56
MS9	Rest of the world (ROW)	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.12
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

TABLE 5.1d: Total Expenditure on Health by Public & Private Sectors Sources of Financing, 2006-2020

Year	Public Source		Private Source		TEH (Nominal, RM Million)
	Health Expenditure (Nominal, RM Million)	Health Expenditure as Percentage of TEH (%)	Health Expenditure (Nominal, RM Million)	Health Expenditure as Percentage of TEH (%)	
2006	12,631	57.20	9,449	42.80	22,080
2007	13,804	56.51	10,622	43.49	24,426
2008	15,783	56.83	11,991	43.17	27,774
2009	17,695	60.23	11,685	39.77	29,380
2010	19,330	58.77	13,560	41.23	32,889
2011	20,251	56.33	15,702	43.67	35,953
2012	22,007	55.79	17,442	44.21	39,448
2013	22,868	54.91	18,780	45.09	41,647
2014	25,921	55.41	20,859	44.59	46,780
2015	26,987	53.75	23,222	46.25	50,209
2016	26,692	51.64	25,001	48.36	51,693
2017	29,248	51.89	27,120	48.11	56,369
2018	31,362	51.89	29,082	48.11	60,445
2019	34,211	53.25	30,030	46.75	64,241
2020	36,612	54.63	30,409	45.37	67,022

FIGURE 5.1d: Total Expenditure on Health by Sources of Financing (Public vs. Private), 2006-2020



5.2 HEALTH EXPENDITURE BY PUBLIC SECTOR SOURCES OF FINANCING

This section describes public sector health expenditure according to MNHA classification of sources of financing for the year 2020, followed by time series data for 2006-2020 in RM Million and percentage.

5.2.1 Health Expenditure by All Public Sector Sources of Financing

In 2020, an analysis of the public sector sources of financing showed that MOH spent RM30,883 million (84%), making it the largest financier in this sector. This was followed by other federal agencies (including statutory bodies) with RM2,533 million (7%), MOE RM1,603 million (4%), other state agencies (including statutory bodies) RM504 million (1%), SOCSO RM409 million (1%), and other public sector agencies with each agency spending less than RM300 million but in total amounting to RM681 million (2%) (Table 5.2.1a and Figure 5.2.1).

The time series expenditure data shows that MOH as the largest financier in the public sector, had progressively increased its spending from RM10,655 million in 2006 to RM30,883 million in 2020 (Table 5.2.1b). This MOH expenditure attributed between 80 to 85% share of public sector expenditure (Table 5.2.1c). This is followed by other federal agencies (including statutory bodies), MOE, other state agencies (including state statutory bodies) and SOCSO. These sources of financing in total contributed to an average share of 15% of the total public sector expenditure throughout this time series.

TABLE 5.2.1a: Health Expenditure by Public Sector Sources of Financing, 2020

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Ministry of Health (MOH)	30,883	84.35
MS1.1.1.9	Other federal agencies (including statutory bodies)	2,533	6.92
MS1.1.1.2	Ministry of Education (MOE)	1,603	4.38
MS1.1.2.2	Other state agencies (including statutory bodies)	504	1.38
MS1.2.2	Social Security Organisation (SOCSO)	409	1.12
MS1.1.3	Local authorities (LA)	266	0.73
MS1.1.2.1	(General) State government	201	0.55
MS1.1.1.3	Ministry of Defence (MOD)	135	0.37
MS1.2.1	Employees Provident Fund (EPF)	79	0.22
Total		**36,612**	**100.00**

FIGURE 5.2.1: Health Expenditure by Public Sector Sources of Financing, 2020

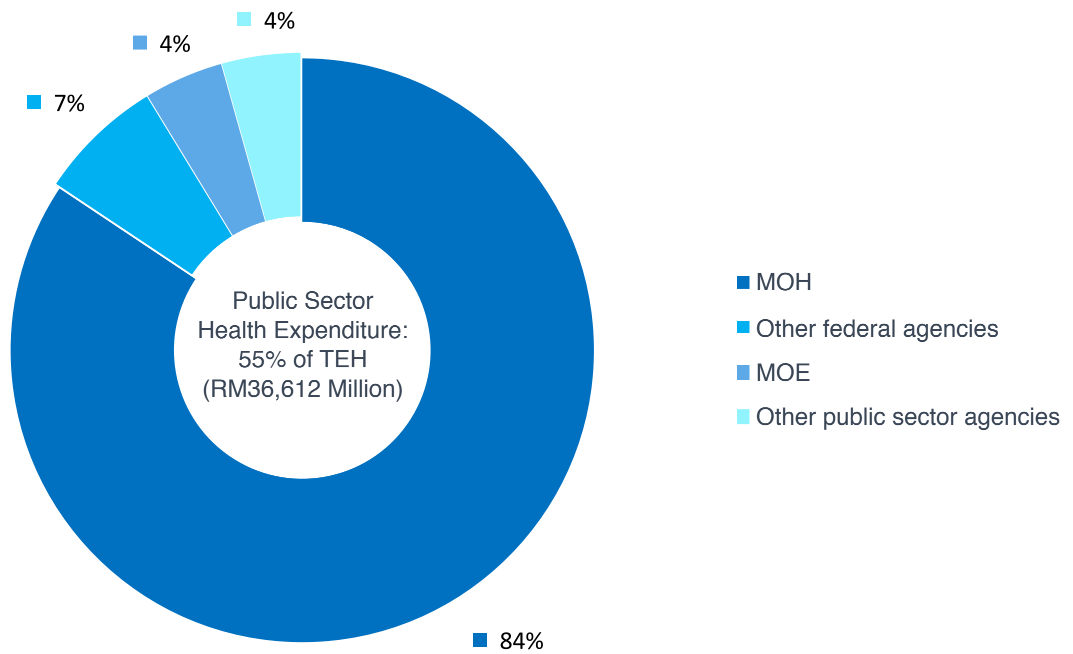


TABLE 5.2.1b: Health Expenditure by Public Sector Sources of Financing, 2006-2020 (RM Million)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	10,655	11,036	12,813	14,431	15,945	16,496	18,239	19,038	21,782	22,671	22,226	24,716	26,501	28,858	30,883
MS1.1.1.2	Ministry of Education (MOE)	720	859	999	1,039	1,243	1,245	1,311	1,261	1,376	1,333	1,306	1,280	1,349	1,608	1,603
MS1.1.1.3	Ministry of Defence (MOD)	96	109	136	133	127	140	172	175	186	169	154	132	103	150	135
MS1.1.1.9	Other federal agencies (including statutory bodies)	819	1,049	1,405	1,541	1,537	1,813	1,678	1,677	1,805	1,886	2,021	2,076	2,121	2,245	2,533
MS1.1.2.1	(General) State government	77	88	94	84	90	90	105	78	86	90	97	111	150	124	201
MS1.1.2.2	Other state agencies (including statutory bodies)	71	75	86	90	111	129	137	189	212	346	385	392	467	502	504
MS1.1.3	Local authorities (LA)	42	419	113	238	108	142	150	188	164	178	138	154	194	249	266
MS1.2.1	Employee Provident Funds (EPF)	46	51	49	38	34	39	38	42	46	52	56	58	67	83	79
MS1.2.2	Social Security Organisation (SOCSO)	105	117	88	102	136	157	176	219	264	261	310	329	410	394	409
Total		**12,631**	**13,804**	**15,783**	**17,695**	**19,330**	**20,251**	**22,007**	**22,868**	**25,921**	**26,987**	**26,692**	**29,248**	**31,362**	**34,211**	**36,612**

TABLE 5.2.1c: Health Expenditure by Public Sector Sources of Financing, 2006-2020 (Percent, %)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	84.36	79.94	81.18	81.55	82.49	81.46	82.88	83.25	84.03	84.01	83.27	84.50	84.50	84.35	84.35
MS1.1.1.2	Ministry of Education (MOE)	5.70	6.22	6.33	5.87	6.43	6.15	5.96	5.51	5.31	4.94	4.89	4.38	4.30	4.70	4.38
MS1.1.1.3	Ministry of Defence (MOD)	0.76	0.79	0.86	0.75	0.66	0.69	0.78	0.77	0.72	0.63	0.58	0.45	0.33	0.44	0.37
MS1.1.1.9	Other federal agencies (including statutory bodies)	6.48	7.60	8.90	8.71	7.95	8.95	7.63	7.33	6.96	6.99	7.57	7.10	6.76	6.56	6.92
MS1.1.2.1	(General) State government	0.61	0.64	0.60	0.47	0.47	0.45	0.48	0.34	0.33	0.33	0.36	0.38	0.48	0.36	0.55
MS1.1.2.2	Other state agencies (including statutory bodies)	0.57	0.55	0.54	0.51	0.57	0.64	0.62	0.83	0.82	1.28	1.44	1.34	1.49	1.47	1.38
MS1.1.3	Local authorities (LA)	0.34	3.03	0.72	1.34	0.56	0.70	0.68	0.82	0.63	0.66	0.52	0.53	0.62	0.73	0.73
MS1.2.1	Employee Provident Funds (EPF)	0.36	0.37	0.31	0.21	0.17	0.19	0.17	0.18	0.18	0.19	0.21	0.20	0.21	0.24	0.22
MS1.2.2	Social Security Organisation (SOCSO)	0.83	0.85	0.56	0.58	0.70	0.78	0.80	0.96	1.02	0.97	1.16	1.12	1.31	1.15	1.12
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

5.2.2 Public Sector Health Expenditure (PSHE) as Percentage of Public Sector Expenditure (PSE)

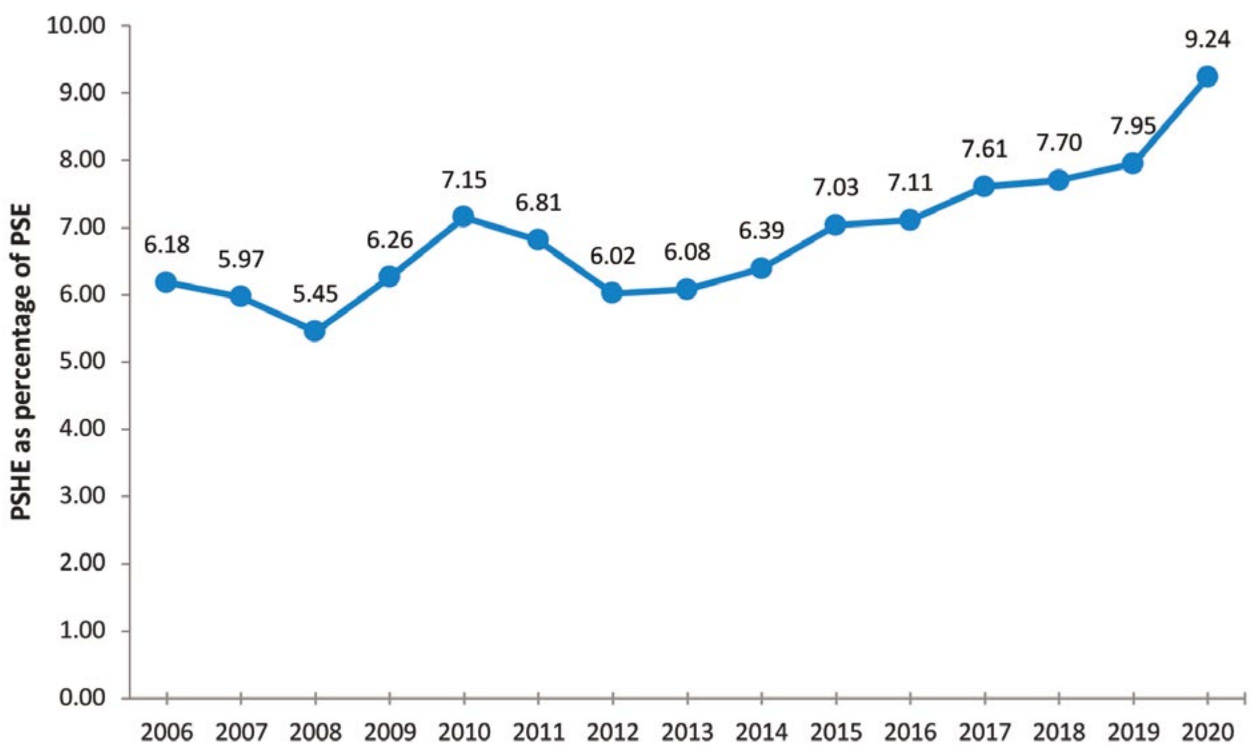
Public Sector Health Expenditure (PSHE) includes expenditure by all public sector sources of financing, namely federal government, state government, local authorities, social security funds and all other public entities. PSHE as a percentage of Public Sector Expenditure (PSE) has increased from RM12,631 million (6%) in 2006 to RM36,612 million (9%) in 2020 (Table 5.2.2 and Figure 5.2.2).

TABLE 5.2.2: Trend for Public Sector Health Expenditure (PSHE), 2006-2020 (RM Million, Percent PSE)

Year	Public Sector Health Expenditure (PSHE) (RM Million)	Public Sector Expenditure (PSE)* (RM Million)	PSHE as % PSE
2006	12,631	204,255	6.18
2007	13,804	231,359	5.97
2008	15,783	289,394	5.45
2009	17,695	282,794	6.26
2010	19,330	270,171	7.15
2011	20,251	297,382	6.81
2012	22,007	365,600	6.02
2013	22,868	376,374	6.08
2014	25,921	405,788	6.39
2015	26,987	383,727	7.03
2016	26,692	375,488	7.11
2017	29,248	384,576	7.61
2018	31,362	407,330	7.70
2019	34,211	430,529	7.95
2020	36,612	396,410	9.24

*Source: *Treasury Malaysia website Fiscal Outlook 2021, Section 6: Consolidated Public Sector*

FIGURE 5.2.2: Trend for Public Sector Health Expenditure (PSHE) as Percentage of Public Sector Expenditure (PSE), 2006-2020



5.2.3 Health Expenditure by Public Sector Sources of Financing to Providers of Health Care

Cross-tabulations of public sector sources of financing to providers of health care services and products respond to the question of where this public source of funds was spent or who provided the services and products.

In 2020, all hospitals (inclusive of general hospitals, psychiatric hospitals and speciality hospitals) consumed RM20,793 million (57%), followed by providers of ambulatory health care at RM6,578 million (18%) and general health administration and insurance at RM4,484 million (12%) (Table 5.2.3a and Figure 5.2.3). MOH was a major contributor to expenditure for the provision and administration of public health programmes.

The 2006-2020 time series shows a similar pattern in the share of various providers that consumed public sector sources of financing. All providers showed a steady increase in expenditure over the period (Table 5.2.3b and Table 5.2.3c). From 2006 to 2020, expenditure by all hospitals and providers of ambulatory health care, which were among the higher spending groups, exhibited steeper increments in spending compared to other providers.

TABLE 5.2.3a: Public Sector Health Expenditure to Providers of Health Care, 2020

MNHA Code	Providers of Health Care	RM Million	Percent
MP1	All hospitals	20,793	56.79
MP3	Providers of ambulatory health care	6,578	17.97
MP6	General health administration and insurance	4,484	12.25
MP8	Institutions providing health-related services	2,491	6.80
MP5	Provision and administration of public health programmes	1,869	5.11
MP4	Retail sale and other providers of medical goods	261	0.71
MP7	Other industries (rest of the Malaysian economy)	131	0.36
MP2	Nursing and residential care facilities	4	0.01
MP9	Rest of the world (ROW)	1	<0.01
Total		**36,612**	**100.00**

FIGURE 5.2.3: Public Sector Health Expenditure to Providers of Health Care, 2020

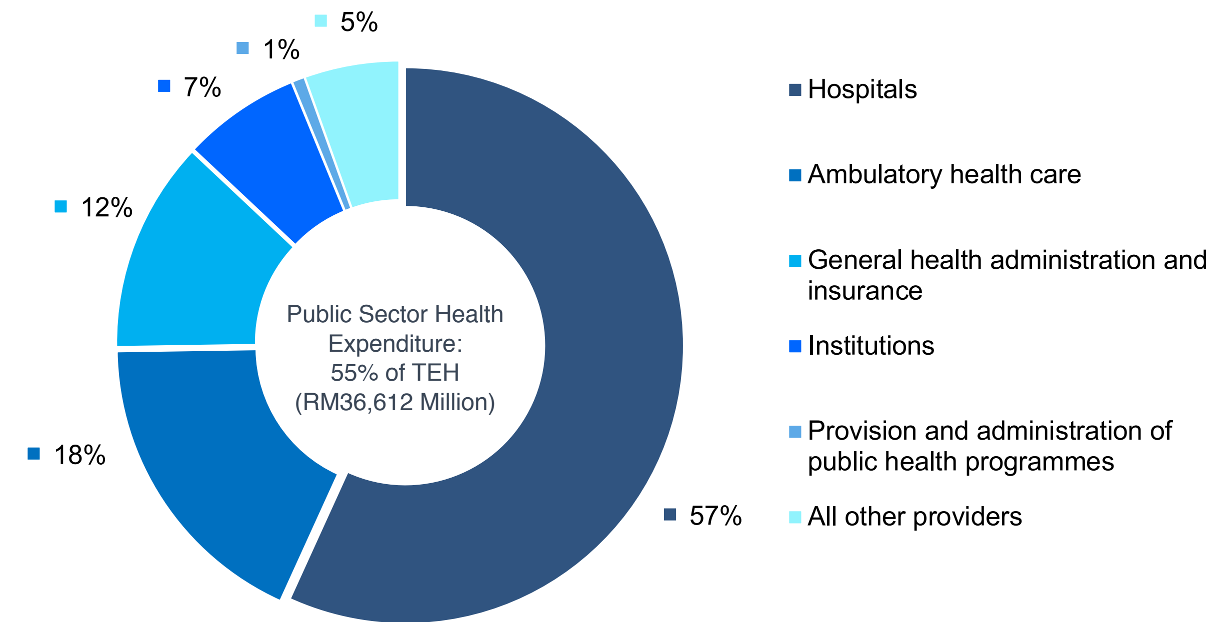


TABLE 5.2.3b: Public Sector Health Expenditure to Providers of Health Care, 2006-2020 (RM Million)

MNHA Code	Providers of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MP1	All hospitals	7,180	7,707	8,992	9,262	10,290	11,357	13,350	13,706	15,762	16,402	16,615	17,674	18,916	20,311	20,793
MP2	Nursing and residential care facilities	1	1	1	1	2	2	2	1	1	1	1	1	1	1	4
MP3	Providers of ambulatory health care	1,818	1,926	2,212	2,173	2,494	2,745	3,191	3,554	4,186	4,380	4,550	4,961	5,518	6,160	6,578
MP4	Retail sale and other providers of medical goods	70	86	94	128	134	135	168	202	220	332	338	357	239	228	261
MP5	Provision and administration of public health programmes	757	1,052	922	1,170	988	1,125	1,449	1,163	1,427	1,411	1,597	1,535	1,315	1,679	2,491
MP6	General health administration and insurance	1,932	2,018	2,310	3,470	3,978	3,207	2,332	2,753	2,692	2,902	1,966	3,264	3,618	4,126	4,484
MP7	Other industries (rest of the Malaysian economy)	95	105	105	104	121	118	137	271	198	138	158	148	149	144	131
MP8	Institutions providing health-related services	776	908	1,143	1,385	1,322	1,562	1,376	1,216	1,435	1,416	1,465	1,308	1,606	1,562	1,869
MP9	Rest of the world (ROW)	1	1	4	3	1	1	1	1	1	4	2	1	1	1	1
Total		**12,631**	**13,804**	**15,783**	**17,695**	**19,330**	**20,251**	**22,007**	**22,868**	**25,921**	**26,987**	**26,692**	**29,248**	**31,362**	**34,211**	**36,612**

TABLE 5.2.3c: Public Sector Health Expenditure to Providers of Health Care, 2006-2020 (Percent, %)

MNHA Code	Providers of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MP1	All Hospitals	56.85	55.83	56.97	52.34	53.24	56.08	60.66	59.94	60.81	60.78	62.24	60.43	60.31	59.37	56.79
MP2	Nursing and residential care facilities	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
MP3	Providers of ambulatory health care	14.39	13.95	14.01	12.28	12.90	13.55	14.50	15.54	16.15	16.23	17.05	16.96	17.60	18.01	17.97
MP4	Retail sale and other providers of medical goods	0.56	0.62	0.59	0.73	0.69	0.67	0.76	0.88	0.85	1.23	1.27	1.22	0.76	0.67	0.71
MP5	Provision and administration of public health programmes	6.00	7.62	5.84	6.61	5.11	5.56	6.59	5.09	5.50	5.23	5.98	5.25	4.19	4.91	6.80
MP6	General health administration and insurance	15.29	14.62	14.64	19.61	20.58	15.83	10.60	12.04	10.38	10.75	7.37	11.16	11.54	12.06	12.25
MP7	Other industries (rest of the Malaysian economy)	0.75	0.76	0.67	0.59	0.63	0.58	0.62	1.19	0.76	0.51	0.59	0.51	0.48	0.42	0.36
MP8	Institutions providing health-related services	6.14	6.58	7.24	7.82	6.84	7.71	6.25	5.32	5.53	5.25	5.49	4.47	5.12	4.56	5.11
MP9	Rest of the world (ROW)	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.00
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

5.2.4 Health Expenditure by Public Sector Sources of Financing for Functions of Health Care

In this section, the type of services and products spent by public sector source of financing is cross-tabulated to functions of health care.

In 2020, the public sector source of financing was primarily spent on curative care, amounting to RM22,108 million (60%), followed by public health services (including prevention and health promotion) at RM4,439 million (12%) and health programme administration and health insurance at RM4,070 million (11%). The total spending by the public sector for capital formation was RM3,900 million (11%) and RM1,498 million (4%) for the education and training of health personnel. The total expenditure for all other functions of health care services and products was RM598 million or 2% (Table 5.2.4a and Figure 5.2.4).

The 2006-2020 time series shows the services of curative care, health programme administration & health insurance and public health services (including health promotion and prevention) dominating the top three shares of public sector expenditure by function for the last five years. This was followed by spending for capital formation and education and training of health personnel. The expenditure for education and training of health personnel had also increased by about 2-fold over the same period. Ancillary services to health care increased by 1.5-fold, from RM163 million in 2006 to RM244 million in 2020 (Table 5.2.4b and Table 5.2.4c).

TABLE 5.2.4a: Public Sector Health Expenditure for Functions of Health Care, 2020

MNHA Code	Functions of Health Care	RM Million	Percent
MF1	Services of curative care	22,108	60.38
MF6	Public health services (including health promotion and prevention)	4,439	12.13
MF7	Health programme administration and health insurance	4,070	11.12
MR1	Capital formation of health care provider institutions	3,900	10.65
MR2	Education and training of health personnel	1,498	4.09
MF4	Ancillary services to health care	244	0.67
MF5	Medical goods dispensed to out-patients	235	0.64
MR3	Research and development in health	116	0.32
MF3	Services of long-term nursing care	3	<0.01
Total		**36,612**	**100.00**

FIGURE 5.2.4: Public Sector Health Expenditure for Functions of Health Care, 2020

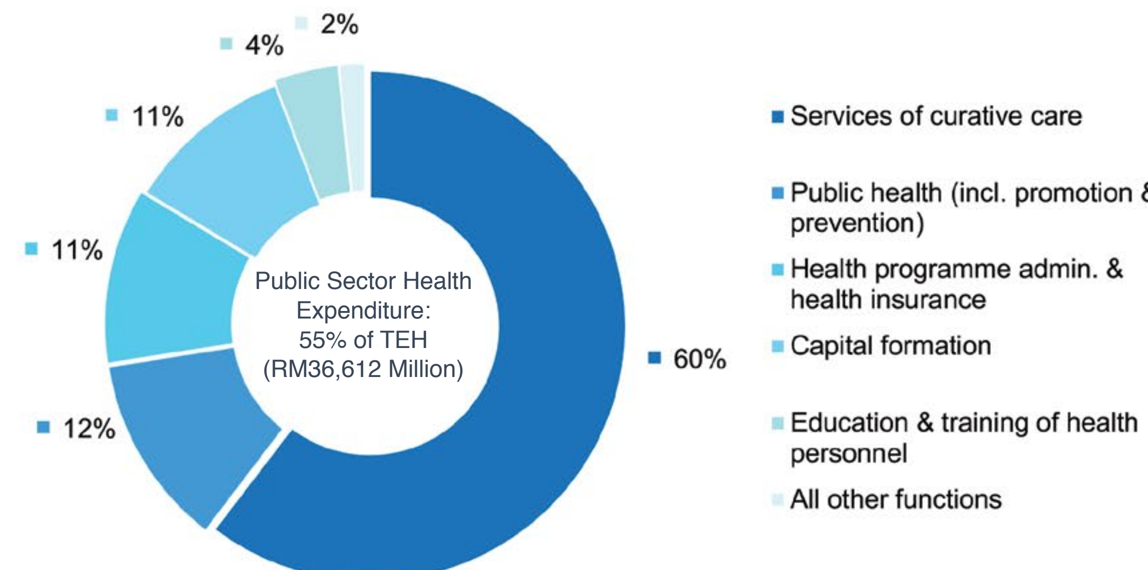


TABLE 5.2.4b: Public Sector Health Expenditure for Functions of Health Care, 2006-2020 (RM Million)

MNHA Code	Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MF1	Services of curative care	8,195	8,735	10,154	10,519	11,015	12,950	15,021	15,013	17,719	18,662	19,063	20,691	22,346	23,078	22,108
MF3	Services of long-term nursing care	0	1	0	0	1	1	1	0	1	1	0	0	1	1	3
MF4	Ancillary services to health care	163	139	191	192	206	224	228	310	268	276	260	284	287	243	244
MF5	Medical goods dispensed to out-patients	51	66	71	93	109	107	138	169	183	289	285	307	188	176	116
MF6	Public health services (including health promotion and prevention)	635	917	801	902	874	996	1,201	1,961	1,838	1,928	2,028	2,163	2,358	3,280	4,439
MF7	Health programme administration and health insurance	1,536	1,588	1,789	1,927	1,904	2,165	1,916	2,242	2,936	2,903	2,110	3,067	2,866	3,783	4,070
MR1	Capital formation of health care provider institutions	1,357	1,531	1,723	2,745	3,848	2,179	2,038	1,817	1,488	1,454	1,430	1,375	1,653	1,966	3,900
MR2	Education and training of health personnel	659	775	1,002	1,268	1,329	1,584	1,407	1,288	1,430	1,415	1,466	1,308	1,607	1,548	1,498
MR3	Research and development in health	34	53	52	49	44	46	56	67	58	59	51	52	57	137	235
Total		**12,631**	**13,804**	**15,783**	**17,695**	**19,330**	**20,251**	**22,007**	**22,868**	**25,921**	**26,987**	**26,692**	**29,248**	**31,362**	**34,211**	**36,612**

TABLE 5.2.4c: Public Sector Health Expenditure for Functions of Health Care, 2006-2020 (Percent, %)

MNHA Code	Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MF1	Services of curative care	64.88	63.28	64.34	59.44	56.98	63.95	68.26	65.65	68.36	69.15	71.42	70.74	71.25	67.46	60.38
MF3	Services of long-term nursing care	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
MF4	Ancillary services to health care	1.29	1.01	1.21	1.08	1.07	1.10	1.03	1.35	1.03	1.02	0.97	0.97	0.91	0.71	0.67
MF5	Medical goods dispensed to out-patients	0.41	0.48	0.45	0.52	0.56	0.53	0.63	0.74	0.70	1.07	1.07	1.05	0.60	0.51	0.32
MF6	Public health services (including health promotion and prevention)	5.03	6.65	5.07	5.10	4.52	4.92	5.46	8.58	7.09	7.14	7.60	7.40	7.52	9.59	12.13
MF7	Health programme administration and health insurance	12.16	11.50	11.34	10.89	9.85	10.69	8.71	9.81	11.33	10.76	7.90	10.49	9.14	11.06	11.12
MR1	Capital formation of health care provider institutions	10.74	11.09	10.92	15.51	19.91	10.76	9.26	7.94	5.74	5.39	5.36	4.70	5.27	5.75	10.65
MR2	Education and training of health personnel	5.22	5.61	6.35	7.16	6.88	7.82	6.40	5.63	5.52	5.24	5.49	4.47	5.12	4.53	4.09
MR3	Research and development in health	0.27	0.38	0.33	0.28	0.23	0.23	0.26	0.29	0.23	0.22	0.19	0.18	0.18	0.40	0.64
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

5.3 HEALTH EXPENDITURE BY PRIVATE SECTOR SOURCES OF FINANCING

This section describes health expenditure by private sector sources of financing, starting with the description of private sector health expenditure according to MNHA classification of sources of financing for the year 2020, followed by times series data of 2006-2020 in RM Million and percent.

5.3.1 Health Expenditure by All Private Sector Sources of Financing

In 2020, analysis showed that the highest source of financing in the private sector was private household OOP expenditure amounting to RM23,150 million (76%) (Table 5.3.1a and Figure 5.3.1). The subsequent highest spending was private insurance enterprises (other than social insurance) which included personal, family and company insurance policies, at RM4,948 million (16%). All corporations (other than health insurance) contributed RM1,044 million or 3% of private sector health expenditure. This expenditure by all corporations was exclusive of group or company purchases of employee insurance, which were reported under private insurance enterprises expenditure. The remaining agencies in the private sector contributed RM1,267 million or 4% of health expenditure in this sector.

The private sector expenditure data for the 2006-2020 time series shows that private household OOP expenditure gradually increased from RM7,141 million in 2006 to RM23,150 million in 2020 and remained the largest share of private sector health expenditure (72% to 77%) (Table 5.3.1b and Table 5.3.1c). Expenditure by private insurance enterprises increased from 13% to 16% share of private sector health expenditure. Meanwhile, all corporations' shares decreased from 8% to 3% from 2006 to 2020, although in terms of RM value, the expenditure on health by all corporations had increased 1.4-fold.

TABLE 5.3.1a: Health Expenditure by Private Sector Sources of Financing, 2020

MNHA Code	Sources of Financing	RM Million	Percent
MS2.4	Private household out-of-pocket expenditure (OOP)	23,150	76.13
MS2.2	Private insurance enterprises (other than social insurance)	4,948	16.27
MS2.6	All corporations (other than health insurance)	1,044	3.43
MS2.3	Private MCOs and other similar entities	975	3.21
MS2.5	Non-profit institutions serving households (NPISH)	210	0.69
MS9	Rest of the world (ROW)	82	0.27
Total		**30,409**	**100.00**

FIGURE 5.3.1: Health Expenditure by Private Sector Sources of Financing, 2020

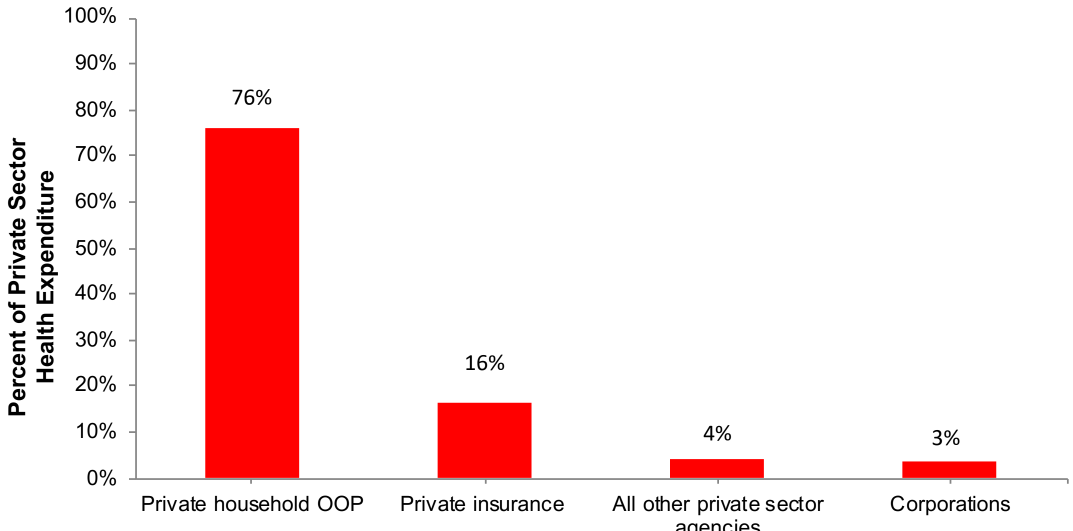


TABLE 5.3.1b: Health Expenditure by Private Sector Sources of Financing, 2006-2020 (RM Million)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS2.2	Private insurance enterprises (other than social insurance)	1,246	1,413	1,709	1,991	2,273	2,614	2,774	2,916	3,203	3,623	3,846	4,085	4,313	4,875	4,948
MS2.3	Private MCOs and other similar entities	138	151	167	179	201	243	302	287	437	621	824	871	914	963	975
MS2.4	Private household out-of-pocket expenditure (OOP)	7,141	7,919	9,084	8,478	9,917	11,466	12,649	13,933	15,373	16,903	18,536	20,357	22,035	23,115	23,150
MS2.5	Non-profit institutions serving households (NPISH)	160	186	214	234	269	312	363	78	40	69	87	92	92	90	210
MS2.6	All corporations (other than health insurance)	765	951	816	801	899	1,064	1,352	1,564	1,803	2,001	1,703	1,710	1,723	982	1,044
MS9	Rest of the world (ROW)	0	1	1	2	1	3	2	3	4	5	4	5	5	4	82
Total		**9,449**	**10,622**	**11,991**	**11,685**	**13,560**	**15,702**	**17,442**	**18,780**	**20,859**	**23,222**	**25,001**	**27,120**	**29,082**	**30,030**	**30,409**

TABLE 5.3.1c: Health Expenditure by Private Sector Sources of Financing, 2006-2020 (Percent, %)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS2.2	Private insurance enterprises (other than social insurance)	13.19	13.30	14.25	17.04	16.76	16.65	15.91	15.53	15.36	15.60	15.38	15.06	14.83	16.23	16.27
MS2.3	Private MCOs and other similar entities	1.46	1.42	1.39	1.53	1.48	1.55	1.73	1.53	2.10	2.67	3.29	3.21	3.14	3.21	3.21
MS2.4	Private household out-of-pocket expenditure (OOP)	75.57	74.56	75.76	72.56	73.14	73.02	72.52	74.19	73.70	72.79	74.14	75.06	75.77	76.98	76.13
MS2.5	Non-profit institutions serving households (NPISH)	1.70	1.76	1.78	2.00	1.98	1.99	2.08	0.41	0.19	0.30	0.35	0.34	0.32	0.30	0.69
MS2.6	All corporations (other than health insurance)	8.09	8.95	6.80	6.85	6.63	6.78	7.75	8.33	8.64	8.62	6.81	6.30	5.92	3.27	3.43
MS9	Rest of the world (ROW)	0.00	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.27
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

5.3.2 Health Expenditure by Private Sector Sources of Financing to Providers of Health Care

The cross-tabulations of private sector sources of financing to providers of health care services and products respond to the question of where the private source of funds is spent or who provides services and products.

In 2020, all hospitals consumed RM15,134 million (50%) of the private sources of funds, followed by providers of ambulatory health care at RM7,259 million (24%) and providers of retail sales and other providers of medical goods at RM4,014 million (13%). The remaining private sector sources of financing amounting to RM4,003 million (13%) were spent on other providers of health care (Table 5.3.2a and Figure 5.3.2).

The 2006-2020 time series data shows that all hospitals and providers of ambulatory health care accounted for an average of 73% of the private sector source of financing spending (Table 5.3.2b and Table 5.3.2c). The expenditure by all hospitals increased from RM4,005 million in 2006 to RM15,134 million in 2020, and expenditure by providers of ambulatory health care increased from RM3,151 million in 2006 to RM7,259 million in 2020. The data also shows that health expenditure at institutions providing health-related services, which mainly comprises teaching and training institutions in relation to health, shows a 1.6-fold increase from 2006 to 2020. In terms of RM value, this expenditure increased by 5-fold from RM313 million in 2006 to RM1,592 million in 2020.

TABLE 5.3.2a: Private Sector Health Expenditure to Providers of Health Care, 2020

MNHA Code	Providers of Health Care	RM Million	Percent
MP1	All hospitals	15,134	49.77
MP3	Providers of ambulatory health care	7,259	23.87
MP4	Retail sale and other providers of medical goods	4,014	13.20
MP6	General health administration and insurance	1,806	5.94
MP8	Institutions providing health-related services	1,592	5.24
MP7	Other industries (rest of the Malaysian economy)	190	0.62
MP5	Provision and administration of public health programmes	406	1.34
MP9	Rest of the world (ROW)	6	0.02
MP2	Nursing and residential care facilities	3	0.01
Total		**30,409**	**100.00**

FIGURE 5.3.2: Private Sector Health Expenditure to Providers of Health Care, 2020

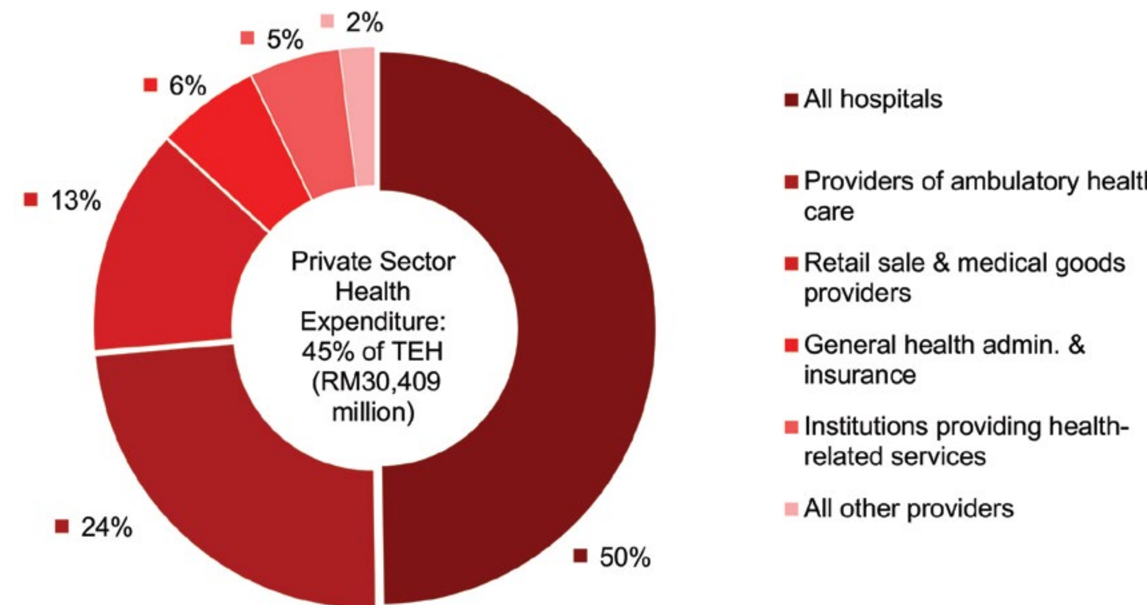


TABLE 5.3.2b: Private Sector Health Expenditure to Providers of Health Care, 2006-2020 (RM Million)

MNHA Code	Providers of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MP1	All hospitals	4,005	4,509	5,722	5,843	6,553	7,278	7,697	8,256	9,030	10,401	11,379	12,723	13,772	15,292	15,134
MP2	Nursing and residential care facilities	11	14	4	5	12	14	18	1	1	1	4	1	3	0	3
MP3	Providers of ambulatory health care	3,151	3,516	3,456	2,603	3,145	3,906	4,582	5,201	6,125	6,415	6,733	7,270	7,525	7,775	7,259
MP4	Retail sale and other providers of medical goods	985	1,143	1,255	1,375	1,486	1,774	1,961	2,172	2,701	3,061	3,287	3,494	4,322	3,900	4,014
MP5	Provision and administration of public health programmes	7	12	17	7	8	11	17	3	3	23	30	19	19	4	406
MP6	General health administration and insurance	852	909	1,011	1,088	1,256	1,467	1,629	1,343	1,312	1,511	1,642	1,624	1,510	1,357	1,806
MP7	Other industries (rest of the Malaysian economy)	110	148	157	170	203	269	293	338	358	408	443	467	454	192	190
MP8	Institutions providing health-related services	313	353	361	590	822	880	1,160	1,460	1,320	1,388	1,471	1,505	1,461	1,500	1,592
MP9	Rest of the world (ROW)	15	19	8	4	75	101	85	6	10	13	11	19	15	8	6
Total		**9,449**	**10,622**	**11,991**	**11,685**	**13,560**	**15,702**	**17,442**	**18,780**	**20,859**	**23,222**	**25,001**	**27,120**	**29,082**	**30,030**	**30,409**

TABLE 5.3.2c: Private Sector Health Expenditure to Providers of Health Care, 2006-2020 (Percent, %)

MNHA Code	Providers of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MP1	All hospitals	42.39	42.45	47.72	50.01	48.33	46.35	44.13	43.96	43.29	44.79	45.52	46.91	47.35	50.92	49.77
MP2	Nursing and residential care facilities	0.12	0.13	0.04	0.04	0.09	0.09	0.10	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01
MP3	Providers of ambulatory health care	33.35	33.10	28.83	22.28	23.19	24.87	26.27	27.70	29.36	27.63	26.93	26.81	25.88	25.89	23.87
MP4	Retail sale and other providers of medical goods	10.42	10.76	10.47	11.77	10.96	11.30	11.24	11.57	12.95	13.18	13.15	12.88	14.86	12.99	13.20
MP5	Provision and administration of public health programmes	0.07	0.11	0.14	0.06	0.06	0.07	0.10	0.01	0.01	0.10	0.12	0.07	0.07	0.01	1.34
MP6	General health administration and insurance	9.02	8.56	8.43	9.31	9.26	9.35	9.34	7.15	6.29	6.51	6.57	5.99	5.19	4.52	5.94
MP7	Other industries (rest of the Malay-sian economy)	1.16	1.39	1.31	1.46	1.50	1.72	1.68	1.80	1.72	1.76	1.77	1.72	1.56	0.64	0.62
MP8	Institutions providing health-related services	3.31	3.32	3.01	5.05	6.06	5.61	6.65	7.78	6.33	5.98	5.89	5.55	5.02	5.00	5.24
MP9	Rest of the world (ROW)	0.16	0.18	0.07	0.03	0.55	0.65	0.49	0.03	0.05	0.06	0.05	0.07	0.05	0.03	0.02
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

5.3.3 Health Expenditure by Private Sector Sources of Financing for Functions of Health Care

Cross-tabulations of private sector sources of financing to functions of health care respond to the question as to what is purchased or the type of services and products consumed with this source of financing.

In 2020, the private sector source of financing spent the most on services of curative care, amounting to RM20,652 million (68%), followed by medical goods dispensed to out-patients at RM4,644 million (15%). Health programme administration and health insurance expenditure were RM1,803 million (6%), and education and training of health personnel RM1,607 million (5%). Capital formation of health care provider institutions RM1,080 million (4%) and public health services (including health promotion and prevention) RM551 million (2%). The remaining functions of health care constitute less than 1% of health expenditure by private sector sources of financing (Table 5.3.3a and Figure 5.3.3).

The 2006-2020 time series shows expenditures for services of curative care and medical goods dispensed to out-patients are 77% to 85% (Table 5.3.3b and Table 5.3.3c). Although expenditure on education and training remained below 8% share of this spending over this period, it increased by 5-fold from RM311 million in 2006 to RM1,607 million in 2020.

TABLE 5.3.3a: Private Sector Health Expenditure for Functions of Health Care, 2020

MNHA Code	Functions of Health Care	RM Million	Percent
MF1	Services of curative care	20,652	67.91
MF5	Medical goods dispensed to out-patients	4,644	15.27
MF7	Health programme administration and health insurance	1,803	5.93
MR2	Education and training of health personnel	1,607	5.29
MR1	Capital formation of health care provider institutions	1,080	3.55
MF6	Public health services (including health promotion and prevention)	551	1.81
MF4	Ancillary services to health care	58	0.19
MR3	Research and development in health	11	0.04
MF3	Services of long-term nursing care	3	0.01
Total		**30,409**	**100.00**

FIGURE 5.3.3: Private Sector Health Expenditure for Functions of Health Care, 2020

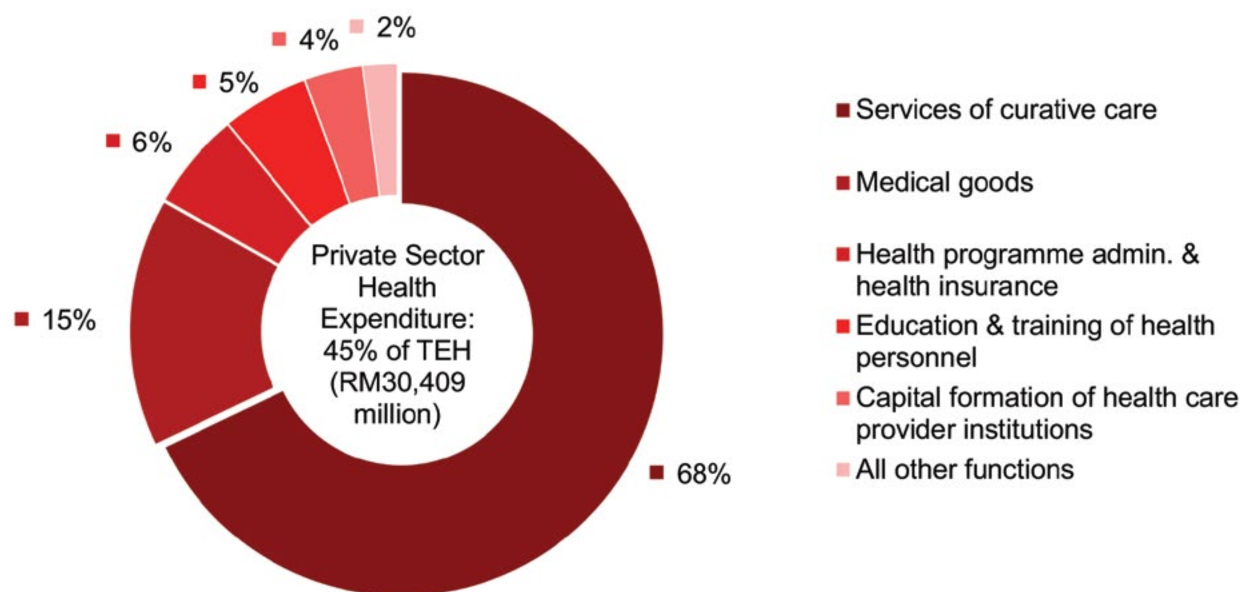


TABLE 5.3.3b: Private Sector Health Expenditure for Functions of Health Care, 2006-2020 (RM Million)

MNHA Code	Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MF1	Services of curative care	6,536	7,332	8,417	7,739	8,928	10,288	11,151	12,179	13,686	15,105	16,419	18,156	19,331	21,191	20,652
MF2	Services of rehabilitative care	1	0	0	1	1	1	0								
MF3	Services of long-term nursing care	11	14	4	5	12	14	18	1	1	1	4	1	3	0	3
MF4	Ancillary services to health care	37	42	48	43	58	72	86	97	112	78	40	44	44	108	58
MF5	Medical goods dispensed to out-patients	1,201	1,387	1,556	1,666	1,818	2,135	2,339	2,561	3,115	3,644	3,965	4,216	5,058	4,642	4,644
MF6	Public health services (including health promotion and prevention)	390	488	441	413	474	582	724	843	933	1,068	965	968	969	499	551
MF7	Health programme administration and health insurance	852	909	1,011	1,088	1,256	1,468	1,629	1,343	1,312	1,511	1,642	1,624	1,510	1,357	1,803
MR1	Capital formation of health care provider institutions	102	94	154	130	183	251	317	272	343	387	460	568	604	678	1,080
MR2	Education and training of health personnel	311	351	359	590	820	879	1,153	1,461	1,328	1,398	1,484	1,526	1,524	1,542	1,607
MR3	Research and development in health	7	5	2	9	11	12	25	23	28	31	24	18	38	12	11
Total		**9,449**	**10,622**	**11,991**	**11,685**	**13,560**	**15,702**	**17,442**	**18,780**	**20,859**	**23,222**	**25,001**	**27,120**	**29,082**	**30,030**	**30,409**

TABLE 5.3.3c: Private Sector Health Expenditure for Functions of Health Care, 2006-2020 (Percent, %)

MNHA Code	Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MF1	Services of curative care	69.17	69.03	70.19	66.23	65.84	65.52	63.93	64.85	65.61	65.04	65.67	66.95	66.47	70.57	67.91
MF2	Services of rehabilitative care	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MF3	Services of long-term nursing care	0.12	0.13	0.04	0.04	0.09	0.09	0.10	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01
MF4	Ancillary services to health care	0.39	0.39	0.40	0.37	0.42	0.46	0.49	0.52	0.54	0.34	0.16	0.16	0.15	0.36	0.19
MF5	Medical goods dispensed to out-patients	12.71	13.06	12.97	14.26	13.41	13.60	13.41	13.64	14.94	15.69	15.86	15.54	17.39	15.46	15.27
MF6	Public health services (including health promotion and prevention)	4.13	4.60	3.68	3.54	3.50	3.70	4.15	4.49	4.47	4.60	3.86	3.57	3.33	1.66	1.81
MF7	Health programme administration and health insurance	9.02	8.56	8.43	9.31	9.26	9.35	9.34	7.15	6.29	6.51	6.57	5.99	5.19	4.52	5.93
MR1	Capital formation of health care provider institutions	1.08	0.89	1.28	1.12	1.35	1.60	1.82	1.45	1.65	1.66	1.84	2.09	2.08	2.26	3.55
MR2	Education and training of health personnel	3.29	3.31	2.99	5.05	6.05	5.60	6.61	7.78	6.37	6.02	5.93	5.63	5.24	5.13	5.29
MR3	Research and development in health	0.08	0.04	0.02	0.08	0.08	0.08	0.14	0.12	0.14	0.13	0.10	0.07	0.13	0.04	0.04
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

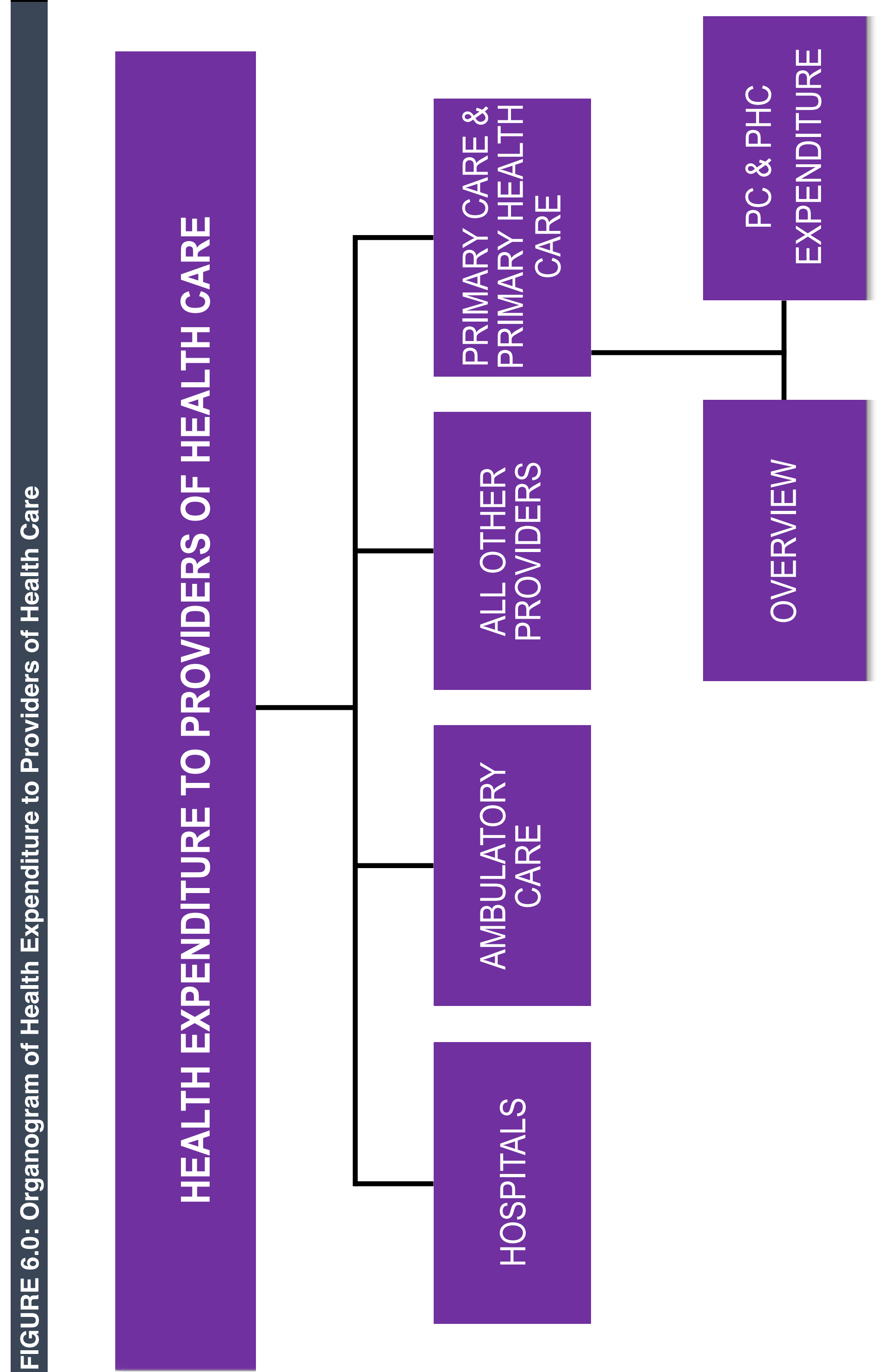
CHAPTER 6

HEALTH EXPENDITURE TO PROVIDERS OF HEALTH CARE

The providers of health care services and products include all hospitals (i.e. health care facilities under MP1 code of MNHA Framework, which include general hospitals, psychiatric hospitals and speciality hospitals), nursing and residential care facility providers, providers of ambulatory health care, retail sale and other providers of medical goods, and provision and administration of public health programme providers.

This chapter contains four sections. Section 6.1 describes health expenditure to all providers of health care as classified in MNHA Framework. Health expenditure to providers of all hospitals and providers of ambulatory care services are reported in Sections 6.2 and 6.3, respectively. Section 6.4 explains further regarding Primary Care (PC) and Primary Health Care (PHC) expenditure. The overview of health expenditure to providers of health care is shown in Figure 6.0.

FIGURE 6.0: Organogram of Health Expenditure to Providers of Health Care



6.1 HEALTH EXPENDITURE TO ALL PROVIDERS OF HEALTH CARE

In 2020, the analysis of providers of health care showed that all hospitals consumed RM35,927 million or 54% of TEH (Table 6.1a and Figure 6.1). This was followed by providers of ambulatory health care at RM13,837 million (21%), general health administration and insurance providers at RM6,290 million (9%), and retail sale and other providers of medical goods at RM4,275 million (6%). The remaining providers of health care services and products amounted to RM6,693 million or 10% of the TEH.

The 2006-2020 time series data also shows a similar pattern with the same top two providers (all hospitals and providers of ambulatory health care) contributing to an average of 73% share of TEH throughout the same period. The third-highest expenditure from 2006 to 2020 was contributed by expenditure to general health administration and insurance providers, followed by expenditure to retail sale and other providers of medical goods, as shown in Table 6.1b and Table 6.1c. The expenditures of the top two providers increased in absolute RM value by 3-fold over the same period. Spending at retail sale and other providers of medical goods and at provision and administration of public health programmes showed a 4-fold increase in absolute RM value.

TABLE 6.1a: Total Expenditure on Health to Providers of Health Care, 2020

MNHA Code	Providers of Health Care	RM Million	Percent
MP1	All hospitals	35,927	53.60
MP3	Providers of ambulatory health care	13,837	20.65
MP6	General health administration and insurance	6,290	9.38
MP4	Retail sale and other providers of medical goods	4,275	6.38
MP8	Institutions providing health-related services	3,461	5.16
MP5	Provision and administration of public health programmes	2,898	4.32
MP7	Other industries (rest of the Malaysian economy)	321	0.48
MP9	Rest of the world (ROW)	6	0.01
MP2	Nursing and residential care facilities	7	0.01
Total		**67,022**	**100.00**

FIGURE 6.1: Total Expenditure on Health to Providers of Health Care, 2020

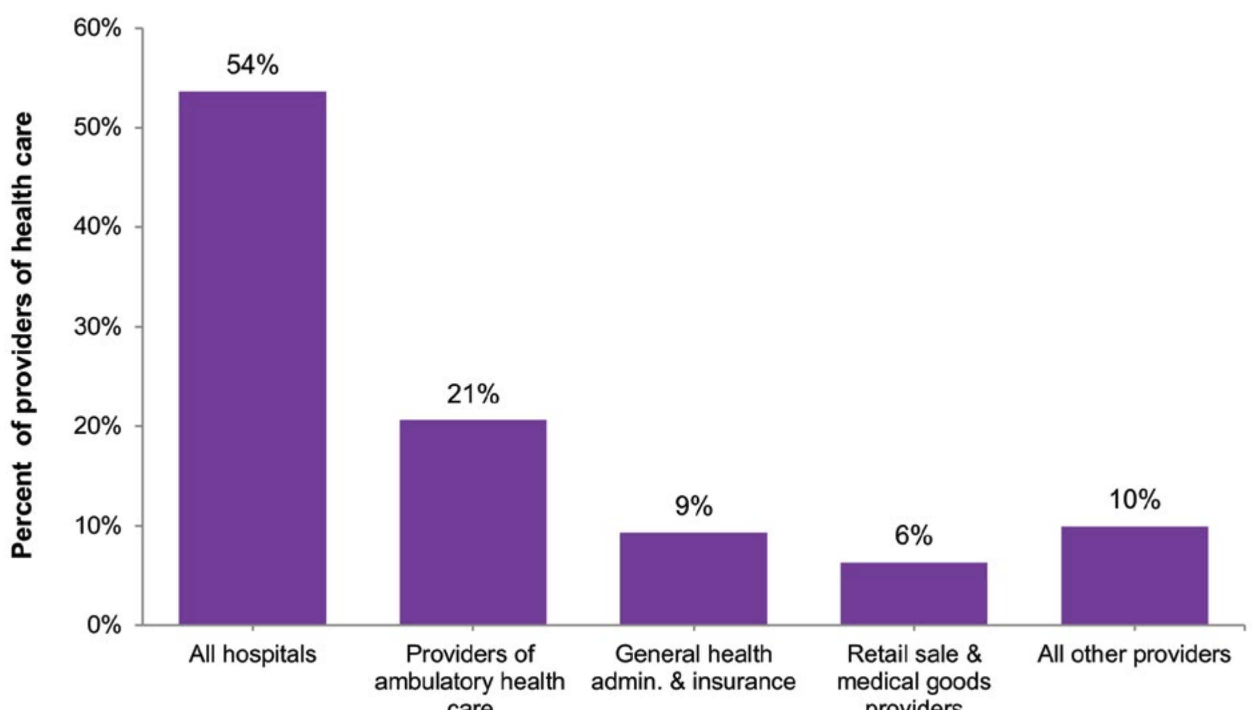


TABLE 6.1b: Total Expenditure on Health to Providers of Health Care, 2006-2020 (RM Million)

MNHA Code	Providers of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MP1	All hospitals	11,186	12,216	14,714	15,106	16,844	18,635	21,047	21,962	24,793	26,803	27,994	30,397	32,688	35,603	35,927
MP2	Nursing and residential care facilities	12	15	6	6	13	16	20	2	2	2	5	2	5	1	7
MP3	Providers of ambulatory health care	4,969	5,442	5,668	4,776	5,639	6,650	7,773	8,756	10,311	10,796	11,284	12,231	13,043	13,935	13,837
MP4	Retail sale and other providers of medical goods	1,055	1,229	1,349	1,504	1,621	1,909	2,129	2,374	2,921	3,393	3,625	3,851	4,561	4,128	4,275
MP5	Provision and administration of public health programmes	764	1,064	939	1,176	996	1,136	1,467	1,166	1,429	1,435	1,628	1,553	1,335	1,683	2,898
MP6	General health administration and insurance	2,784	2,927	3,321	4,558	5,233	4,674	3,961	4,096	4,003	4,413	3,608	4,888	5,128	5,483	6,290
MP7	Other industries (rest of the Malaysian economy)	205	253	262	274	324	388	430	609	556	547	601	615	603	337	321
MP8	Institutions providing health-related services	1,089	1,261	1,504	1,975	2,144	2,442	2,536	2,676	2,754	2,804	2,936	2,813	3,067	3,062	3,461
MP9	Rest of the world (ROW)	17	20	12	6	75	102	86	7	11	17	13	20	16	9	6
Total		**22,080**	**24,426**	**27,774**	**29,380**	**32,889**	**35,953**	**39,448**	**41,647**	**46,780**	**50,209**	**51,693**	**56,369**	**60,445**	**64,241**	**67,022**

TABLE 6.1c: Total Expenditure on Health to Providers of Health Care, 2006-2020 (Percent, %)

MNHA Code	Providers of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MP1	All hospitals	50.66	50.01	52.98	51.41	51.21	51.83	53.35	52.73	53.00	53.38	54.15	53.93	54.08	55.42	53.60
MP2	Nursing and residential care facilities	0.06	0.06	0.02	0.02	0.04	0.04	0.05	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01
MP3	Providers of ambulatory health care	22.51	22.28	20.41	16.25	17.15	18.50	19.70	21.02	22.04	21.50	21.83	21.70	21.58	21.69	20.65
MP4	Retail sale and other providers of medical goods	4.78	5.03	4.86	5.12	4.93	5.31	5.40	5.70	6.24	6.76	7.01	6.83	7.55	6.43	6.38
MP5	Provision and administration of public health programmes	3.46	4.36	3.38	4.00	3.03	3.16	3.72	2.80	3.06	2.86	3.15	2.76	2.21	2.62	4.32
MP6	General health administration and insurance	12.61	11.98	11.96	15.51	15.91	13.00	10.04	9.84	8.56	8.79	6.98	8.67	8.48	8.54	9.38
MP7	Other industries (rest of the Malaysian economy)	0.93	1.03	0.94	0.93	0.98	1.08	1.09	1.46	1.19	1.09	1.16	1.09	1.00	0.52	0.48
MP8	Institutions providing health-related services	4.93	5.16	5.41	6.72	6.52	6.79	6.43	6.42	5.89	5.58	5.68	4.99	5.07	4.77	5.16
MP9	Rest of the world (ROW)	0.08	0.08	0.04	0.02	0.23	0.28	0.22	0.02	0.02	0.03	0.03	0.03	0.03	0.01	0.01
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

6.2 HEALTH EXPENDITURE TO PROVIDERS OF HEALTH CARE - HOSPITALS

The cross-tabulations of expenditure at all hospitals and sources of financing respond to the question as to who or which agencies finance health care services provided at all hospitals in the country.

In 2020, RM35,927 million or 54% of TEH was spent at all hospitals. MOH as the highest source of financing was RM17,989 million (50%), followed by private household OOP at RM10,918 million (30%), private insurance enterprises (other than social insurance) at RM4,017 million (11%), Ministry of Education (MOE) at RM1,529 million (4%) and other federal agencies (including statutory bodies) at RM600 million (2%) (Table 6.2a and Figure 6.2). The remaining expenditure from various sources at all hospitals amounted to RM874 million (2%).

The 2006-2020 time series expenditure by the top two sources of financing at all hospitals, MOH and private household OOP amounted to an average of 81%, as shown in Table 6.2b and Table 6.2c. The remaining sources of financing spent an average of 19%.

TABLE 6.2a: Health Expenditure at All Hospitals by Sources of Financing, 2020

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Ministry of Health (MOH)	17,989	50.07
MS2.4	Private household out-of-pocket expenditures (OOP)	10,918	30.39
MS2.2	Private insurance enterprises (other than social insurance)	4,017	11.18
MS1.1.1.2	Ministry of Education (MOE)	1,529	4.26
MS1.1.1.9	Other federal agencies (including statutory bodies)	600	1.67
MS2.6	All corporations (other than health insurance)	174	0.48
MS1.2.2	Social Security Organisation (SOCSO)	301	0.84
MS1.1.2.2	Other state agencies (including statutory bodies)	151	0.42
MS1.1.1.3	Ministry of Defence (MOD)	95	0.27
MS1.2.1	Employees Provident Fund (EPF)	65	0.18
MS1.1.2.1	(General) State government	23	0.06
MS1.1.3	Local authorities (LA)	40	0.11
MS2.5	Non-profit institutions serving households (NPISH)	20	0.06
MS9	Rest of the world (ROW)	5	0.01
Total		**35,927**	**100.00**

FIGURE 6.2: Health Expenditure at All Hospitals by Sources of Financing, 2020

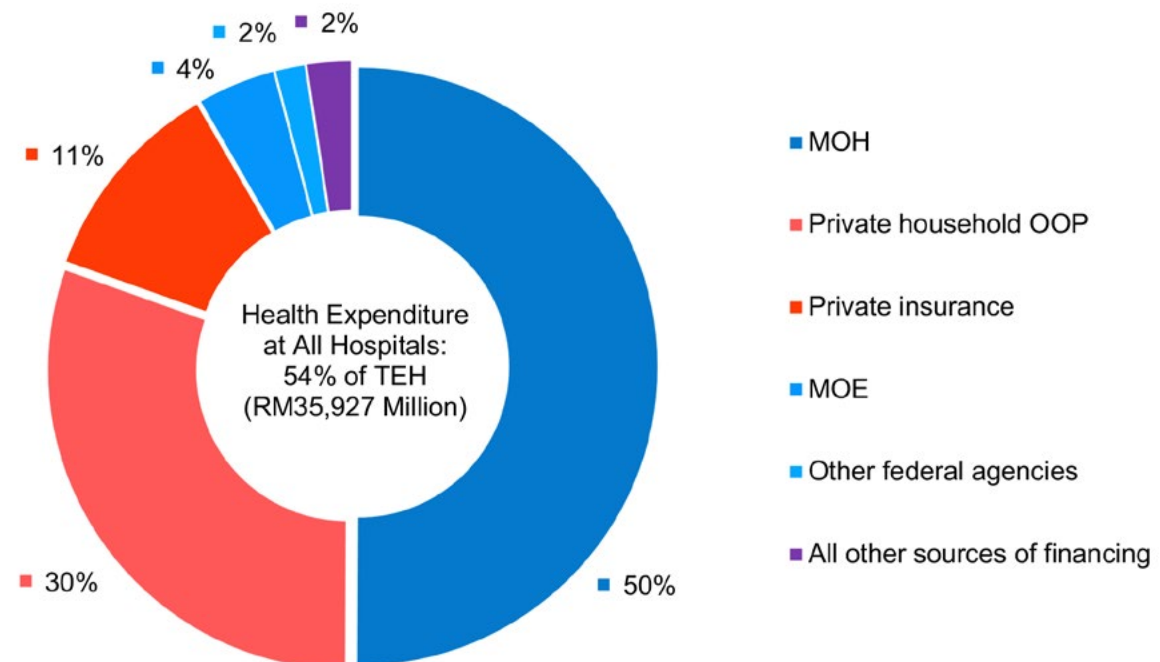


TABLE 6.2b: Health Expenditure at All Hospitals by Sources of Financing, 2006-2020 (RM Million)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	6,028	6,358	7,343	7,677	8,453	9,462	11,331	11,683	13,610	14,205	14,290	15,373	16,467	17,498	17,989
MS1.1.1.2	Ministry of Education (MOE)	705	842	978	1,019	1,220	1,221	1,285	1,232	1,346	1,312	1,284	1,254	1,321	1,578	1,529
MS1.1.1.3	Ministry of Defence (MOD)	50	57	71	79	76	83	102	105	110	115	104	84	65	104	95
MS1.1.1.9	Other federal agencies (including statutory bodies)	287	337	499	363	394	420	449	489	506	553	593	610	645	690	600
MS1.1.2.1	(General) State government	10	13	12	12	13	15	19	18	21	17	19	19	28	18	23
MS1.1.2.2	Other state agencies (including statutory bodies)	5	7	7	8	10	10	13	10	12	36	138	129	142	155	151
MS1.1.3	Local authorities (LA)	3	5	6	15	19	20	16	13	22	21	23	31	35	37	40
MS1.2.1	Employees Provident Fund (EPF)	38	42	40	31	28	32	31	35	38	43	47	48	55	68	65
MS1.2.2	Social Security Organisation (SOCSO)	54	46	35	57	79	93	104	120	98	100	117	125	158	162	301
MS2.2	Private insurance enterprises (other than social insurance)	657	800	996	1,228	1,322	1,474	1,583	1,878	2,373	2,761	3,032	3,311	3,681	4,395	4,017
MS2.4	Private household out-of-pocket expenditures (OOP)	3,187	3,519	4,575	4,460	5,068	5,618	5,866	6,070	6,342	7,289	8,078	9,150	9,822	10,733	10,918
MS2.5	Non-profit institutions serving households (NPISH)	8	9	19	39	27	29	31	44	12	13	1	1	2	2	20
MS2.6	All corporations (other than health insurance)	154	180	132	117	137	158	216	264	303	338	268	261	267	162	174
MS9	Rest of the world (ROW)															5
Total		**11,186**	**12,216**	**14,714**	**15,106**	**16,844**	**18,635**	**21,047**	**21,962**	**24,793**	**26,803**	**27,994**	**30,397**	**32,688**	**35,603**	**35,927**

TABLE 6.2c: Health Expenditure at All Hospitals by Sources of Financing, 2006-2020 (Percent, %)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	53.89	52.05	49.91	50.82	50.18	50.78	53.84	53.20	54.90	53.00	51.05	50.57	50.38	49.15	50.07
MS1.1.1.2	Ministry of Education (MOE)	6.30	6.89	6.65	6.75	7.24	6.55	6.10	5.61	5.43	4.90	4.59	4.12	4.04	4.43	4.26
MS1.1.1.3	Ministry of Defence (MOD)	0.45	0.46	0.48	0.52	0.45	0.45	0.49	0.48	0.44	0.43	0.37	0.28	0.20	0.29	0.27
MS1.1.1.9	Other federal agencies (including statutory bodies)	2.57	2.76	3.39	2.40	2.34	2.25	2.13	2.23	2.04	2.06	2.12	2.01	1.97	1.94	1.67
MS1.1.2.1	(General) State government	0.09	0.11	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.06	0.07	0.06	0.09	0.05	0.06
MS1.1.2.2	Other state agencies (including statutory bodies)	0.05	0.06	0.05	0.06	0.06	0.05	0.06	0.05	0.05	0.13	0.49	0.42	0.43	0.44	0.42
MS1.1.3	Local authorities (LA)	0.03	0.04	0.04	0.10	0.11	0.11	0.08	0.06	0.09	0.08	0.08	0.10	0.11	0.10	0.11
MS1.2.1	Employees Provident Fund (EPF)	0.34	0.35	0.27	0.21	0.17	0.17	0.15	0.16	0.15	0.16	0.17	0.16	0.17	0.19	0.18
MS1.2.2	Social Security Organisation (SOCSO)	0.49	0.38	0.24	0.38	0.47	0.50	0.49	0.54	0.40	0.37	0.42	0.41	0.48	0.45	0.84
MS2.2	Private insurance enterprises (other than social insurance)	5.87	6.55	6.77	8.13	7.85	7.91	7.52	8.55	9.57	10.30	10.83	10.89	11.26	12.35	11.18
MS2.4	Private household out-of-pocket expenditures (OOP)	28.49	28.81	31.09	29.52	30.09	30.15	27.87	27.64	25.58	27.19	28.86	30.10	30.05	30.15	30.39
MS2.5	Non-profit institutions serving households (NPISH)	0.07	0.08	0.13	0.26	0.16	0.15	0.15	0.20	0.05	0.05	0.00	0.00	0.01	0.00	0.06
MS2.6	All corporations (other than health insurance)	1.38	1.48	0.90	0.77	0.82	0.85	1.03	1.20	1.22	1.26	0.96	0.86	0.82	0.45	0.48
MS9	Rest of the world (ROW)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

6.3 HEALTH EXPENDITURE TO PROVIDERS OF HEALTH CARE – PROVIDERS OF AMBULATORY HEALTH CARE

Providers of ambulatory health care services are the next largest provider of health care after all hospitals. Ambulatory health care comprises a wide range of providers such as medical clinics, dental clinics, family planning centres, substance abuse centres, dialysis centres, medical and diagnostic centres, ambulance providers and many other outpatient providers who provide inpatient services. Both MNHA and SHA 1.0 Frameworks include providers of Traditional and Complementary Medicine under this category.

In 2020, providers of ambulatory health care consumed RM13,837 million (21%) of TEH. Of this amount, RM7,259 million (52%) was funded by private sector source of financing, which consists of private household out-of-pocket expenditures, all corporations (other than health insurance), private insurance enterprises (other than social insurance), non-profit organisations serving households and private MCO & other similar entities. The remaining RM6,578 million (48%) by public sector source of financing (Table 6.3a and Figure 6.3).

The 2006-2020 time series data shows that the expenditure in absolute RM value for ambulatory care services increased by 4-fold in the public sector and 2-fold in the private sector (Table 6.3b).

TABLE 6.3a: Health Expenditure to Providers of Ambulatory Health Care by Sources of Financing, 2020

MNHA Code	Sources of Financing	RM Million	Percent
MS2.4	Private household out-of-pocket expenditures (OOP)	6,799	49.14
MS1.1	Public sector excluding social security funds	6,535	47.23
MS2.6	All Corporations (other than health insurance)	260	1.88
MS2.2	Private insurance enterprises (other than social insurance)	129	0.93
MS2.5	Non-profit institutions serving households (NPISH)	70	0.50
MS1.2	Social security funds	43	0.31
MS2.3	Private MCO and other similar entities	1	0.01
Total		**13,837**	**100.00**

FIGURE 6.3: Health Expenditure to Providers of Ambulatory Health Care (Non-Hospital Setting) by Sources of Financing, 2020

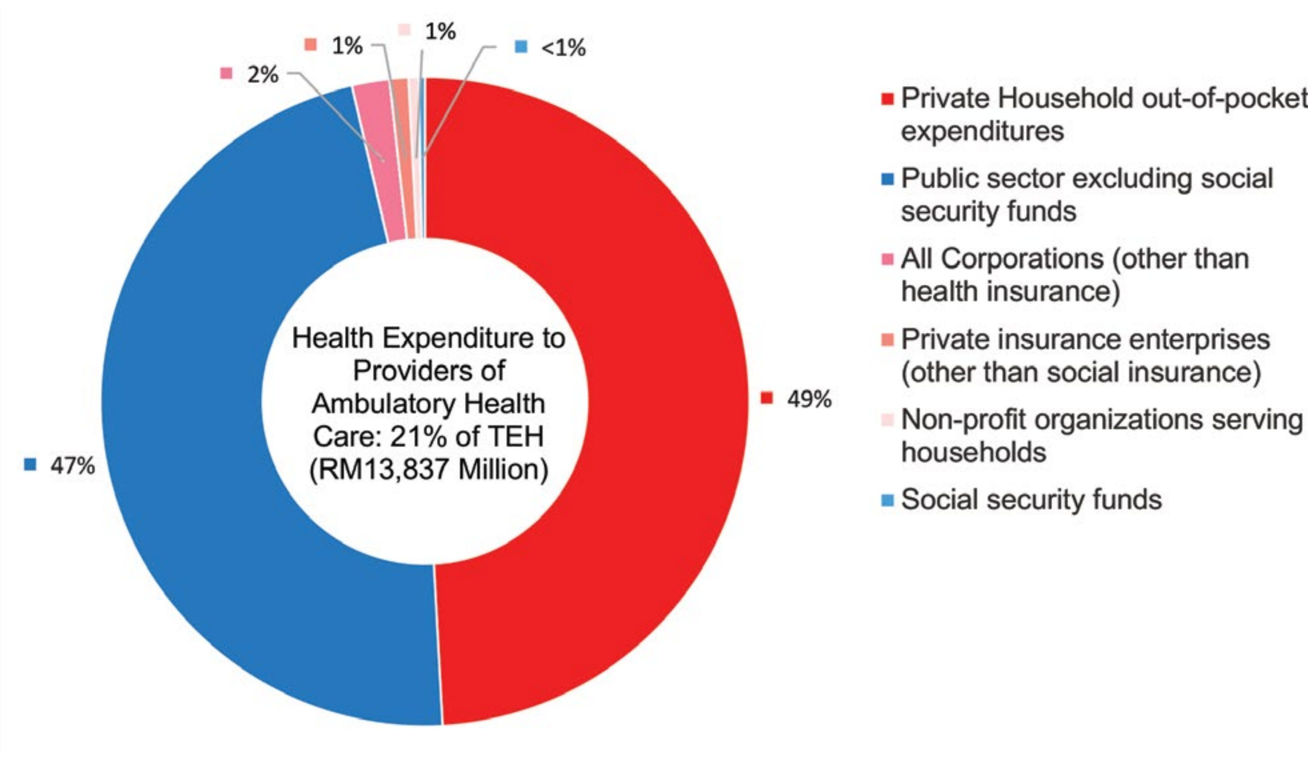


TABLE 6.3b: Health Expenditure to Providers of Ambulatory Health Care by Sources of Financing, 2006-2020 (RM Million)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1	Public sector excluding social security funds	1,802	1,895	2,188	2,163	2,483	2,732	3,180	3,544	4,118	4,306	4,457	4,862	5,380	6,016	6,535
MS1.2	Social security funds	16	32	23	10	11	13	11	11	68	74	93	99	138	144	43
Subtotal Public Sector		**1,818**	**1,926**	**2,212**	**2,173**	**2,494**	**2,745**	**3,191**	**3,554**	**4,186**	**4,380**	**4,550**	**4,961**	**5,518**	**6,160**	**6,578**
MS2.2	Private insurance enterprises (other than social insurance)	1	1	34	25	34	60	75	85	67	97	125	136	154	150	129
MS2.3	Private MCO and other similar entities															1
MS2.4	Private household out-of-pocket expenditures (OOP)	2,709	2,984	2,967	2,168	2,671	3,339	3,815	4,276	5,101	5,250	5,769	6,290	6,511	7,062	6,799
MS2.5	Non-profit institutions serving households (NPISH)	19	12	22	25	16	19	21	21	18	20	22	45	41	66	70
MS2.6	All Corporations (other than health insurance)	423	519	434	385	424	488	672	819	939	1,048	818	799	819	497	260
Subtotal Private Sector		**3,151**	**3,516**	**3,456**	**2,603**	**3,145**	**3,906**	**4,582**	**5,201**	**6,125**	**6,415**	**6,733**	**7,270**	**7,525**	**7,775**	**7,259**
Total		**4,969**	**5,442**	**5,668**	**4,776**	**5,639**	**6,650**	**7,773**	**8,756**	**10,311**	**10,796**	**11,284**	**12,231**	**13,043**	**13,935**	**13,837**

TABLE 6.3c: Health Expenditure to Providers of Ambulatory Health Care by Sources of Financing, 2006-2020 (Percent, %)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1	Public sector excluding social security funds	36.26	34.82	38.61	45.29	44.03	41.07	40.91	40.47	39.94	39.89	39.50	39.75	41.25	43.17	47.23
MS1.2	Social security funds	0.33	0.58	0.41	0.21	0.20	0.19	0.14	0.12	0.66	0.69	0.83	0.81	1.06	1.03	0.31
Subtotal Public Sector		**36.59**	**35.40**	**39.02**	**45.49**	**44.23**	**41.27**	**41.05**	**40.59**	**40.60**	**40.57**	**40.33**	**40.56**	**42.31**	**44.21**	**47.54**
MS2.2	Private insurance enterprises (other than social insurance)	0.02	0.02	0.59	0.52	0.60	0.90	0.96	0.97	0.65	0.90	1.11	1.12	1.18	1.08	0.93
MS2.3	Private MCO and other similar entities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
MS2.4	Private household out-of-pocket expenditures (OOP)	54.51	54.84	52.34	45.41	47.37	50.21	49.08	48.83	49.47	48.63	51.12	51.42	49.92	50.68	49.14
MS2.5	Non-profit institutions serving households (NPISH)	0.38	0.21	0.39	0.52	0.28	0.28	0.26	0.24	0.17	0.19	0.19	0.37	0.32	0.47	0.50
MS2.6	All Corporations (other than health insurance)	8.51	9.53	7.65	8.06	7.52	7.34	8.64	9.36	9.11	9.71	7.25	6.53	6.28	3.56	1.88
Subtotal Private Sector		**63.41**	**64.60**	**60.98**	**54.51**	**55.77**	**58.73**	**58.95**	**59.41**	**59.40**	**59.43**	**59.67**	**59.44**	**57.69**	**55.79**	**52.46**
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

6.4 PRIMARY CARE (PC) AND PRIMARY HEALTH CARE (PHC) EXPENDITURE

6.4.1 Overview of Primary Care (PC) and Primary Health Care (PHC)

“Primary health care” (PHC) is an overall approach which encompasses the three aspects: multi-sectoral policy and action to address the broader determinants of health; empowering individuals, families and communities, and meeting people’s essential health needs throughout their lives. PHC seeks to address the broader determinants of health, such as community-level disease-prevention efforts, and to empower individuals, families and communities to get involved in their health. As such, PHC goes beyond providing health care services to individuals.

“Primary care” is a subset of PHC and refers to essential, first-contact care provided in a community setting. Primary care (PC) is often regarded as the gatekeeper and a key provider process in the health care system. It is the first point of contact, easily accessible at the time of need, providing continuous, comprehensive and coordinated care. Thus, enabling health care to be delivered as close as possible to where people live and work.

There is no standardised measurable operational definition neither for PHC nor PC. The System of Health Accounts (SHA 2011) also does not propose a readymade classification for these services. Based on the WHO consultation with the PHC experts, it was suggested to use available national health accounts health care functions to overcome the obstacles of generating expenditure estimates for PHC and PC.

Several discussions and meetings with relevant stakeholders were held to construct a methodology to map available health care function codes in MNHA Framework to reflect the PC and PHC services in Malaysia. These discussions involved the National Health Financing Section of Planning Division, the Family Health Development Division of Ministry of Health and the MNHA team. Subsequently, the agreed definitions and boundaries were presented and endorsed by the MNHA Technical Advisory Committee and MNHA Steering Committee. The PC definitions were based on the first point of contact of services, while PHC includes PC and all the expenditure on health promotion and prevention activities (MF6) (Table 6.4a).

<table>
<tr><th colspan="6">TABLE 6.4a: PC and PHC based on MNHA Codes</th></tr>
<tr><th colspan="2">Providers</th><th colspan="2">Functions</th><th rowspan="11">Primary Health Care (PHC)</th><th rowspan="10">Primary Care (PC)</th></tr>
<tr><th>MNHA Code</th><th>Description</th><th>MNHA Code</th><th>Description</th></tr>
<tr><td>MP1.1a</td><td>Hospitals (MOH)</td><td>MF1.3.1</td><td>Basic medical and diagnostic services</td></tr>
<tr><td>MP1.1b</td><td>Hospitals (public non-MOH)</td><td>MF1.3.1</td><td>Basic medical and diagnostic services</td></tr>
<tr><td rowspan="4">MP3.1</td><td rowspan="4">Medical practitioner clinics</td><td>MF1.3.1</td><td>Basic medical and diagnostic services</td></tr>
<tr><td>MF1.4</td><td>Services of curative home care</td></tr>
<tr><td>MF6.1</td><td>Maternal and child health, family planning and counselling</td></tr>
<tr><td>MF6.2.1</td><td>Medical school health services</td></tr>
<tr><td>MP3.2</td><td>Dentist practitioners clinics</td><td>MF6.2.2</td><td>Dental school health services</td></tr>
<tr><td>MP1 & MP3</td><td>Hospitals & ambulatory care</td><td>MF1.3.2</td><td>Dental outpatient curative care</td></tr>
<tr><td>MP</td><td>All providers</td><td>MF6</td><td>Prevention and public health services</td></tr>
</table>

6.4.2 Primary Care (PC) and Primary Health Care (PHC) Expenditure

In 2020, the PC expenditure was RM12,400 million (19%) of the TEH (Figure 6.4a), while PHC expenditure which encompasses a broader boundary, was RM15,005 million (22%) of the TEH (Figure 6.4b). MOH spent RM7,230 million, or 23% of the MOH expenditure (Figure 6.4c), on PHC.

FIGURE 6.4a: Primary Care Expenditure as Percentage of Total Expenditure on Health, 2020

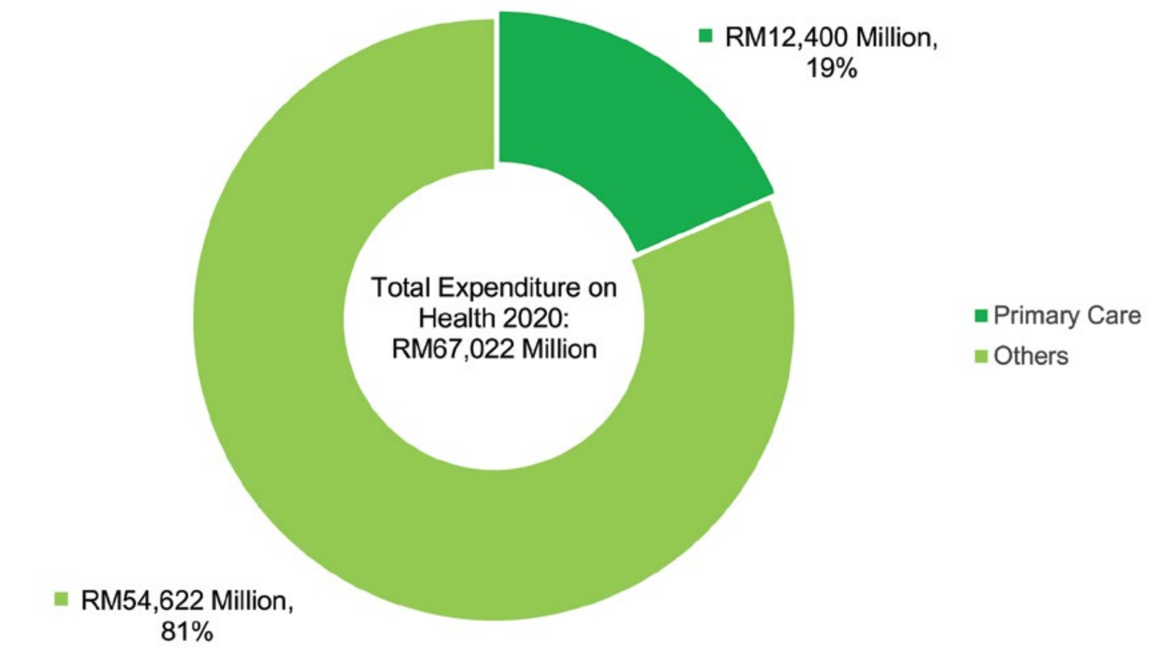


FIGURE 6.4b: Primary Health Care Expenditure as Percentage of Total Expenditure on Health, 2020

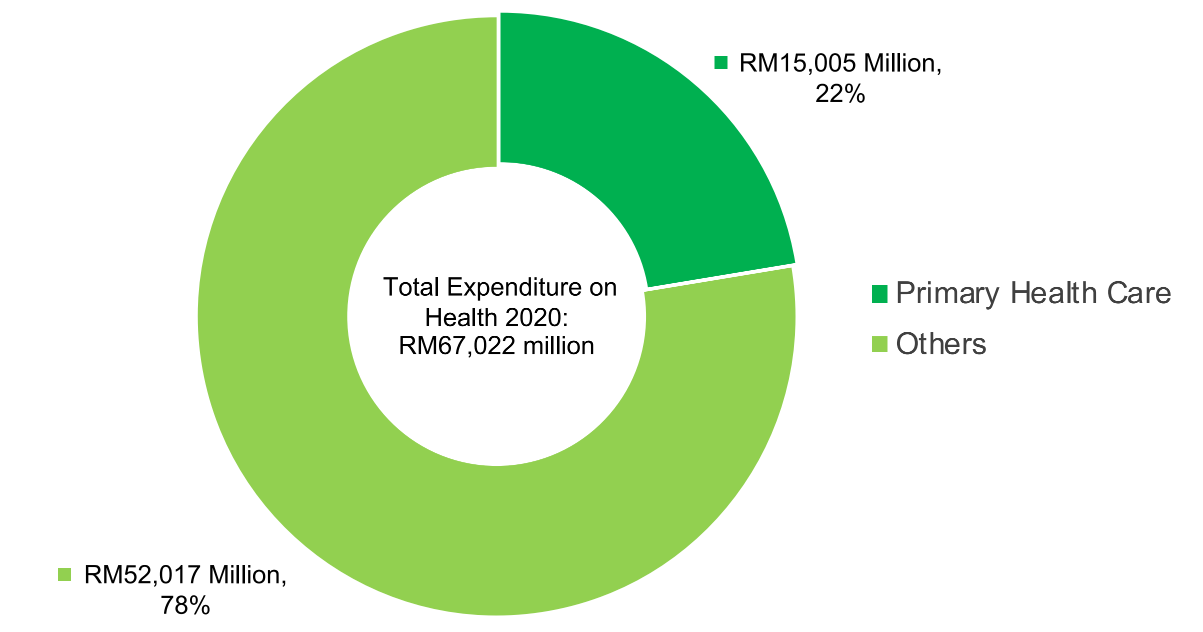
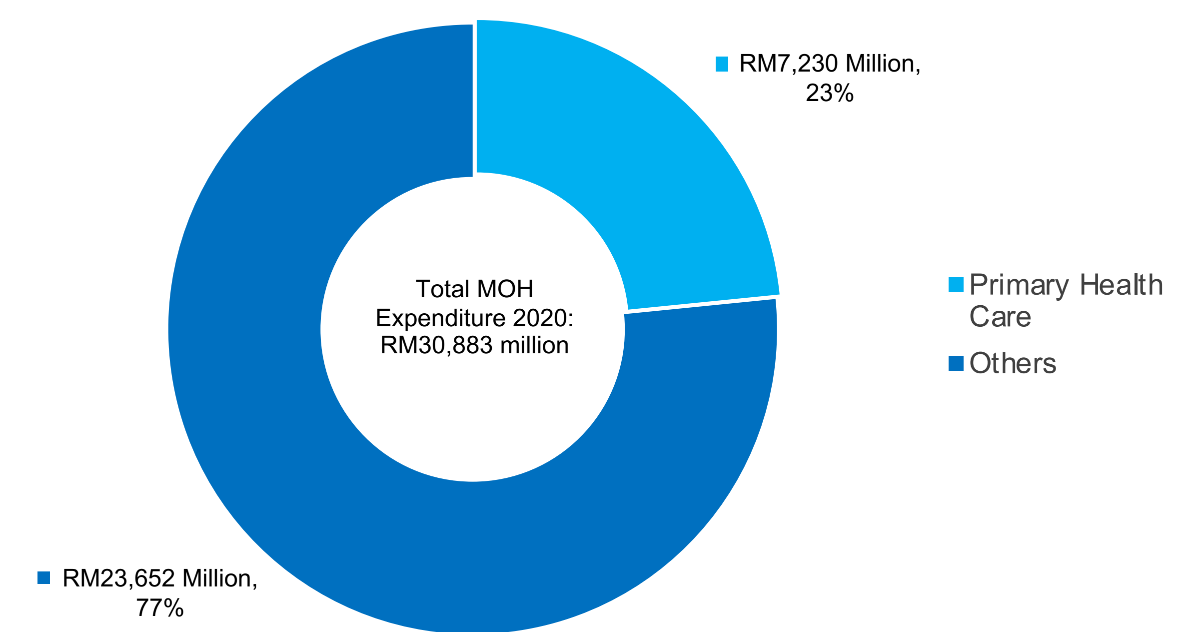


FIGURE 6.4c: Primary Health Care Expenditure as Percentage of MOH Expenditure, 2020



CHAPTER 7

HEALTH EXPENDITURE FOR FUNCTIONS OF HEALTH CARE

This chapter describes the types of services purchased with the financial resources. Health expenditure for functions of health care is categorised into two, namely the 'core functions of health care' (MF) and 'health-related functions' (MR).

This chapter has four sections. Section 7.1 describes health expenditure according to MNHA classification of all functions of health care for 2020, followed by time series data for 2006-2020 in RM Million and percentage. Section 7.2 explains services of curative care expenditure, Section 7.3 is regarding public health services (including health promotion and prevention) expenditure and Section 7.4 describes expenditure for health education and training.

7.1 HEALTH EXPENDITURE FOR ALL FUNCTIONS OF HEALTH CARE

In 2020, the expenditure for services of curative care amounted to RM42,760 million (64%) of TEH (Table 7.1a and Figure 7.1). This was followed by health programme administration and health insurance at RM5,873 million (9%), public health services (including health promotion and prevention) at RM4,990 million (7%), capital formation of health care provider institutions at RM4,980 million (7%) and medical goods dispensed to out-patients at RM4,760 million (7%). A total of RM3,105 million (5%) was spent for education and training of health personnel, and the remaining RM553 million (1%) was spent on all the other functions.

Despite a decrease in the curative care expenditure for the year 2020, there were significant increases seen in expenditure for capital formation, public health services, health programme administration & health insurance, research & development in health and education & training of health personnel.

The 2006-2020 time series data (Table 7.1b and Table 7.1c) shows that the majority of the health expenditure was contributed by spending for curative care services, which gradually increased in value until 2019. Also persistently in the top 4 functions for those 15 years was spending for health programme administration & health insurance. Other expenditures that were also included in the top 4 functions were for capital formation (2006-2011), education & training of health personnel (2009-2013), public health services (2013-2020) and medical goods dispensed to outpatients (2006-2008 and 2014-2019).

TABLE 7.1a: Total Expenditure on Health for Functions of Health Care, 2020

MNHA Code	Functions of Health Care	RM Million	Percent
MF1	Services of curative care	42,760	63.80
MF7	Health programme administration & health insurance	5,873	8.76
MF6	Public health services, including health promotion & prevention	4,990	7.45
MR1	Capital formation of health care provider institutions	4,980	7.43
MF5	Medical goods dispensed to out-patients	4,760	7.10
MR2	Education & training of health personnel	3,105	4.63
MF4	Ancillary services to health care	301	0.45
MR3	Research & development in health	246	0.37
MF3	Services of long-term nursing care	6	0.01
Total		**67,022**	**100.00**

FIGURE 7.1: Total Expenditure on Health for Functions of Health Care, 2020

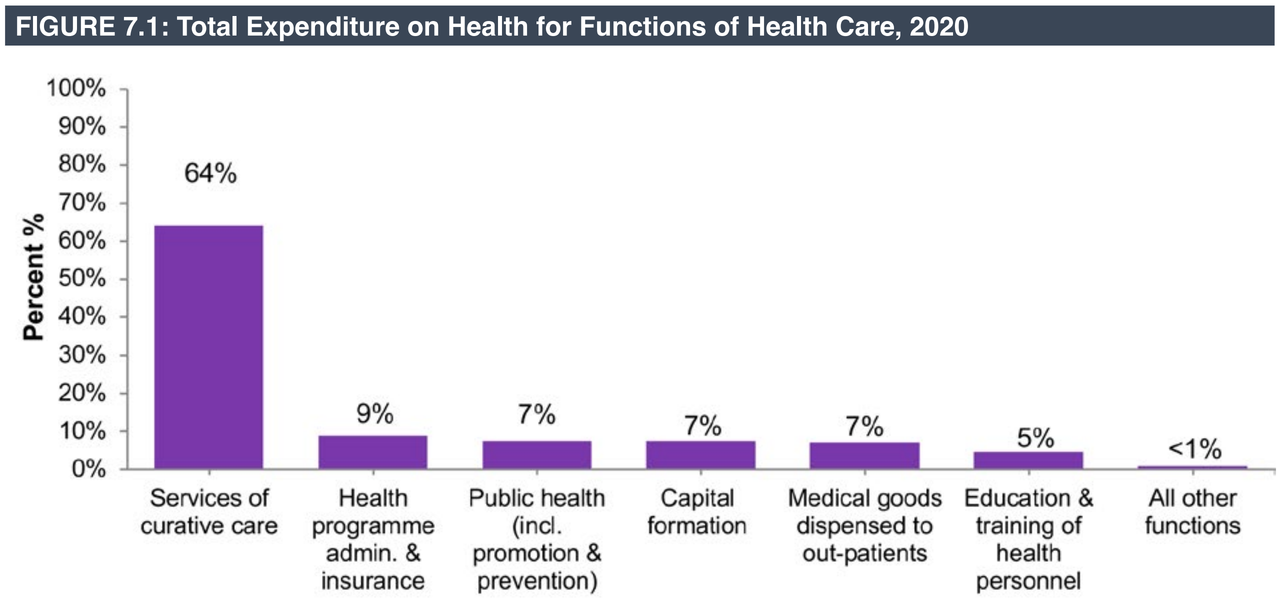


TABLE 7.1b: Total Expenditure on Health for Functions of Health Care, 2006-2020 (RM Million)

MNHA Code	Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MF1	Services of curative care	14,731	16,067	18,571	18,258	19,943	23,238	26,172	27,191	31,405	33,766	35,481	38,847	41,677	44,268	42,760
MF2	Services of rehabilitative care	1	0	0	1	1	1	0								
MF3	Services of long-term nursing care	12	14	5	5	12	15	19	1	2	1	4	1	4	1	6
MF4	Ancillary services to health care	201	180	238	235	264	296	314	407	380	354	300	328	331	351	301
MF5	Medical goods dispensed to out-patients	1,252	1,453	1,626	1,759	1,926	2,242	2,477	2,730	3,298	3,933	4,250	4,523	5,247	4,818	4,760
MF6	Public health services (including health promotion and prevention)	1,025	1,406	1,242	1,316	1,348	1,577	1,925	2,804	2,771	2,996	2,992	3,131	3,327	3,779	4,990
MF7	Health programme administration and health insurance	2,388	2,497	2,800	3,015	3,160	3,632	3,545	3,586	4,248	4,414	3,751	4,691	4,376	5,140	5,873
MR1	Capital formation of health care provider institutions	1,459	1,625	1,877	2,875	4,031	2,430	2,355	2,089	1,831	1,841	1,890	1,943	2,257	2,644	4,980
MR2	Education and training of health personnel	971	1,126	1,360	1,858	2,149	2,463	2,560	2,749	2,758	2,814	2,950	2,834	3,131	3,090	3,105
MR3	Research and development in health	42	57	54	58	55	58	81	90	87	90	74	70	95	150	246
MR9	All other health-related expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		**22,080**	**24,426**	**27,774**	**29,380**	**32,889**	**35,953**	**39,448**	**41,647**	**46,780**	**50,209**	**51,693**	**56,369**	**60,445**	**64,241**	**67,022**

TABLE 7.1c: Total Expenditure on Health for Functions of Health Care, 2006-2020 (Percent, %)

MNHA Code	Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MF1	Services of curative care	66.72	65.78	66.87	62.14	60.64	64.63	66.35	65.29	67.13	67.25	68.64	68.92	68.95	68.91	63.80
MF2	Services of rehabilitative care	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MF3	Services of long-term nursing care	0.05	0.06	0.02	0.02	0.04	0.04	0.05	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01
MF4	Ancillary services to health care	0.91	0.74	0.86	0.80	0.80	0.82	0.80	0.98	0.81	0.71	0.58	0.58	0.55	0.55	0.45
MF5	Medical goods dispensed to out-patients	5.67	5.95	5.86	5.99	5.86	6.24	6.28	6.56	7.05	7.83	8.22	8.02	8.68	7.50	7.10
MF6	Public health services (including health promotion and prevention)	4.64	5.76	4.47	4.48	4.10	4.39	4.88	6.73	5.92	5.97	5.79	5.55	5.50	5.88	7.45
MF7	Health programme administration and health insurance	10.81	10.22	10.08	10.26	9.61	10.10	8.99	8.61	9.08	8.79	7.26	8.32	7.24	8.00	8.76
MR1	Capital formation of health care provider institutions	6.61	6.65	6.76	9.79	12.26	6.76	5.97	5.02	3.92	3.67	3.66	3.45	3.73	4.12	7.43
MR2	Education and training of health personnel	4.40	4.61	4.90	6.32	6.53	6.85	6.49	6.60	5.90	5.60	5.71	5.03	5.18	4.81	4.63
MR3	Research and development in health	0.19	0.24	0.19	0.20	0.17	0.16	0.21	0.22	0.19	0.18	0.14	0.12	0.16	0.23	0.37
MR9	All other health-related expenditures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

7.2 HEALTH EXPENDITURE FOR FUNCTIONS OF HEALTH CARE - CURATIVE CARE BY SOURCES OF FINANCING

Services of curative care include medical, paramedical and allied health services, which could be either allopathic or TCM services and is inclusive of dental care services. It could be provided either at hospital or non-hospital setting. The non-hospital setting includes medical or dental clinics.

In 2020, a total of RM42,760 million (64%) of TEH was for services of curative care, as shown in Table 7.2a and Figure 7.2. The source of financing for services of curative care was RM22,108 million (52%) from the public sector and the remaining RM20,652 million (48%) from the private sector. For the services of curative care expenditure in hospitals, the public sector spent 43%, and the private sector spent 34%. The remaining expenditure was spent at non-hospital settings. For 2020, there was a drop in spending at hospitals while spending at non-hospital settings increased.

The 2006-2020 time series data shows that the public sector share remains higher than the private sector share as a source of financing throughout the 15 years. (Table 7.2b and 7.2c).

TABLE 7.2a: Health Expenditure for Curative Care by Sources of Financing, 2020

Source	Provider	RM Million	Percent
Public Source	Hospital	18,497	43.26
	Non-Hospital	3,611	8.44
	Sub-Total	**22,108**	**51.70**
Private Source	Hospital	14,325	33.50
	Non-Hospital	6,327	14.80
	Sub-Total	**20,652**	**48.30**
Total		**42,760**	**100.00**

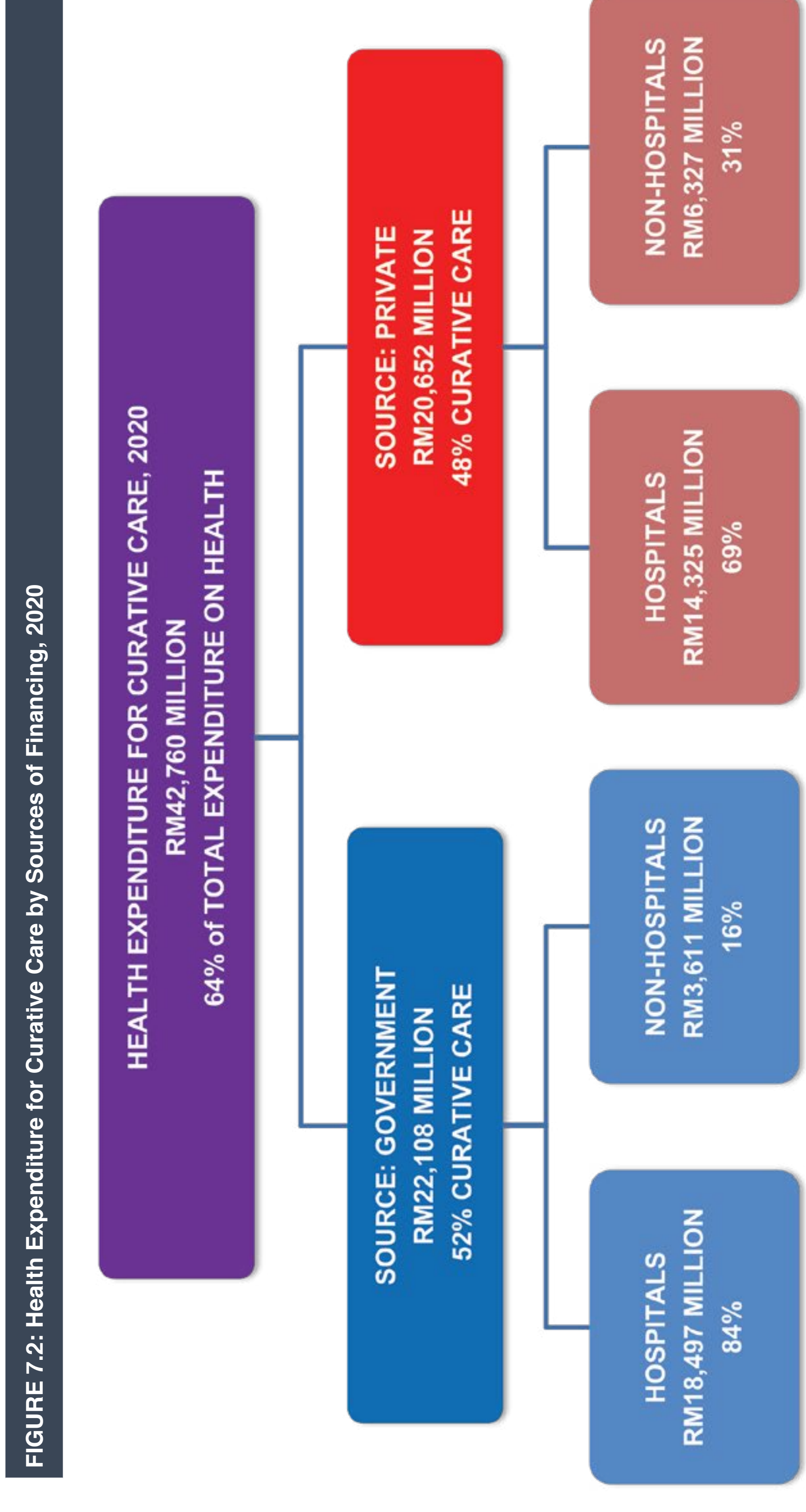


FIGURE 7.2: Health Expenditure for Curative Care by Sources of Financing, 2020

TABLE 7.2b: Health Expenditure for Curative Care by Sources of Financing, 2006-2020 (RM Million)

Source	Provider	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Public Source	Hospital	6,922	7,402	8,600	8,886	9,211	10,873	12,651	13,011	15,240	15,832	16,034	17,328	18,596	19,633	18,497
	Non-Hospital	1,272	1,332	1,554	1,633	1,804	2,077	2,370	2,001	2,479	2,830	3,029	3,362	3,750	3,444	3,611
	Sub-Total	**8,195**	**8,735**	**10,154**	**10,519**	**11,015**	**12,950**	**15,021**	**15,013**	**17,719**	**18,662**	**19,063**	**20,691**	**22,346**	**23,078**	**22,108**
Private Source	Hospital	3,898	4,411	5,568	5,704	6,362	7,018	7,363	7,961	8,652	9,975	10,885	12,117	13,069	14,563	14,325
	Non-Hospital	2,639	2,920	2,849	2,035	2,566	3,271	3,788	4,218	5,034	5,129	5,534	6,039	6,262	6,628	6,327
	Sub-Total	**6,536**	**7,332**	**8,417**	**7,739**	**8,928**	**10,288**	**11,151**	**12,179**	**13,686**	**15,105**	**16,419**	**18,156**	**19,331**	**21,191**	**20,652**
	Total	**14,731**	**16,067**	**18,571**	**18,258**	**19,943**	**23,238**	**26,172**	**27,191**	**31,405**	**33,766**	**35,481**	**38,847**	**41,677**	**44,268**	**42,760**

TABLE 7.2c: Health Expenditure for Curative Care by Sources of Financing, 2006-2020 (Percent, %)

Source	Provider	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Public Source	Hospital	46.99	46.07	46.31	48.67	46.19	46.79	48.34	47.85	48.53	46.89	45.19	44.61	44.62	44.35	43.26
	Non-Hospital	8.64	8.29	8.37	8.94	9.04	8.94	9.06	7.36	7.89	8.38	8.54	8.66	9.00	7.78	8.44
	Sub-Total	**55.63**	**54.37**	**54.68**	**57.61**	**55.23**	**55.73**	**57.39**	**55.21**	**56.42**	**55.27**	**53.73**	**53.26**	**53.62**	**52.13**	**51.70**
Private Source	Hospital	26.46	27.46	29.98	31.24	31.90	30.20	28.13	29.28	27.55	29.54	30.68	31.19	31.36	32.90	33.50
	Non-Hospital	17.91	18.18	15.34	11.14	12.87	14.07	14.47	15.51	16.03	15.19	15.60	15.55	15.03	14.97	14.80
	Sub-Total	**44.37**	**45.63**	**45.32**	**42.39**	**44.77**	**44.27**	**42.61**	**44.79**	**43.58**	**44.73**	**46.27**	**46.74**	**46.38**	**47.87**	**48.30**
	Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

7.3 HEALTH EXPENDITURE FOR FUNCTIONS OF HEALTH CARE – PUBLIC HEALTH SERVICES (INCLUDING HEALTH PROMOTION AND PREVENTION) BY SOURCES OF FINANCING

This section refers to expenditure for services designed to enhance the health status of the population in the form of structured public health services, including promotive and preventive programmes. This excludes the expenditure of similar services delivered on an individual basis which is captured as part of services of curative care.

In 2020, a total of RM4,990 million (7%) of TEH was spent for public health programmes. Of this, RM4,439 million (89%) was by the public sector sources of financing. MOH was the highest financier of public health services, spending RM3,577 million or 72% of the total expenditure on public health services (Table 7.3a). About 81% of public sector health expenditure on public health services was by MOH, as shown in Figure 7.3. The second-highest financier for public health services was other federal agencies (including statutory bodies) that spent RM576 million (12%), followed by all corporations (other than health insurance), amounting to RM504 million (10%).

The 2006-2020 time series data shows MOH as the largest source of financing for this function, with a 7-fold increase in absolute RM value over the past 15 years. However, the highest increase as a source of financing was seen from other federal agencies (including statutory bodies), with a 12-fold increase in absolute RM value, over the same period (Table 7.3b and 7.3c).

TABLE 7.3a: Health Expenditure for Public Health Services (including Health Promotion and Prevention) by Sources of Financing, 2020

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Ministry of Health (MOH)	3,577	71.68
MS1.1.1.9	Other federal agencies (including statutory bodies)	576	11.53
MS2.6	All corporations (other than health insurance)	504	10.10
MS1.1.2.1	(General) State government	82	1.64
MS1.1.1.2	Ministry of Education (MOE)	75	1.51
MS1.1.2.2	Other state agencies (including statutory bodies)	65	1.30
MS1.1.3	Local authorities (LA)	57	1.13
MS2.5	Non-profit institutions serving households (NPISH)	16	0.31
MS2.4	Private household out-of-pocket expenditures (OOP)	12	0.25
MS2.2	Private insurance enterprises (other than social insurance)	11	0.22
MS1.2.2	Social Security Organisation (SOCSO)	8	0.16
MS9	Rest of the world (ROW)	5	0.11
MS2.3	Private MCOs and other similar entities	2	0.06
Total		**4,990**	**100.00**

FIGURE 7.3: Health Expenditure for Public Health Services (including Health Promotion and Prevention) by Sources of Financing, 2020

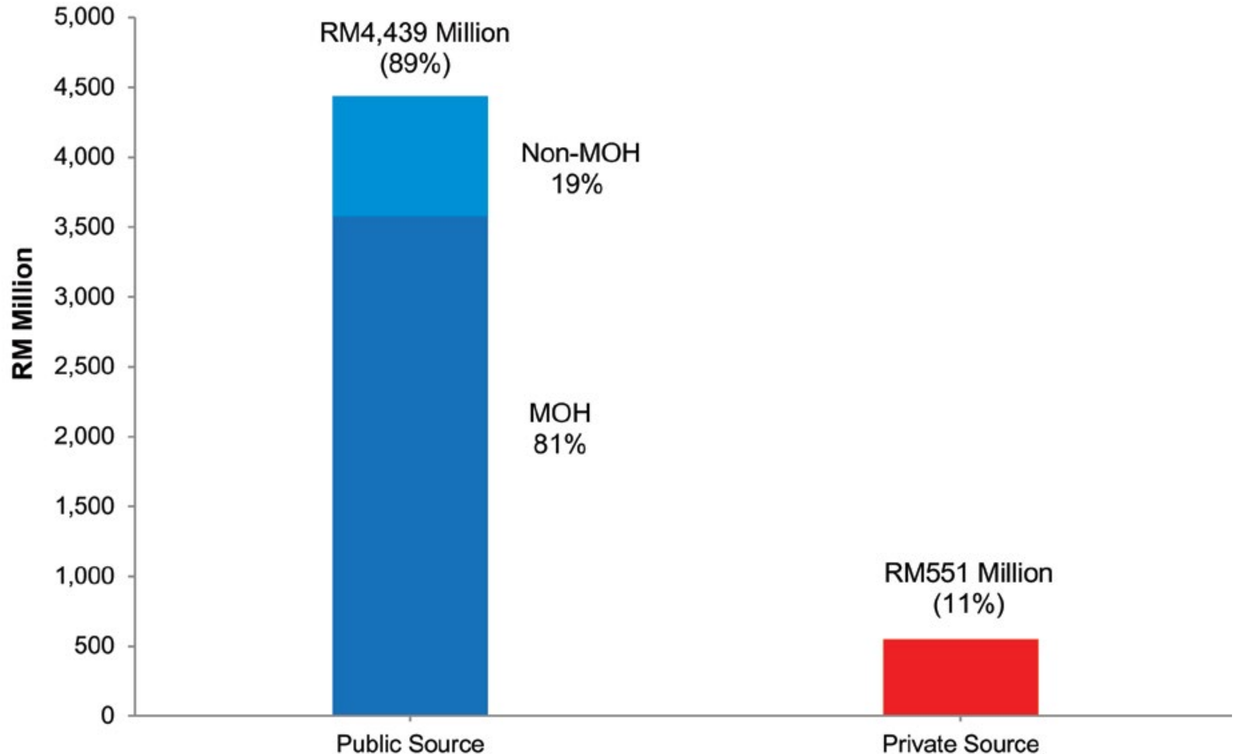


TABLE 7.3b: Health Expenditure for Public Health Services (including Health Promotion and Prevention) by Sources of Financing, 2006-2020 (RM Million)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	496	495	603	628	673	752	898	1,634	1,541	1,653	1,777	1,902	2,118	3,010	3,577
MS1.1.1.2	Ministry of Education (MOE)															75
MS1.1.1.9	Other federal agencies (including statutory bodies)	48	55	56	67	74	94	118	128	121	140	128	141	129	146	576
MS1.1.2.1	(General) State government	56	65	69	56	60	54	64	25	31	31	35	27	30	22	82
MS1.1.2.2	Other state agencies (including statutory bodies)	9	6	6	13	26	30	34	66	78	43	52	50	50	55	65
MS1.1.3	Local authorities (LA)	21	291	65	138	40	62	83	72	44	52	26	36	30	47	57
MS1.2.2	Social Security Organisation (SOCSO)	5	5	1	1	2	4	5	35	23	9	11	8	0	0	8
MS2.2	Private insurance enterprises (other than social insurance)															11
MS2.3	Private MCOs and other similar entities															3
MS2.4	Private household out-of-pocket expenditures (OOP)	11	10	10	8	9	8	10	10	8	6	6	6	8	7	12
MS2.5	Non-profit institutions serving households (NPISH)	7	11	16	6	7	10	16	1	1	21	28	17	18	2	16
MS2.6	All corporations (other than health insurance)	373	467	415	399	458	563	698	832	924	1,040	930	945	943	490	504
MS9	Rest of the world (ROW)		1	0	0	0	0									5
Total		**1,025**	**1,406**	**1,242**	**1,316**	**1,348**	**1,577**	**1,925**	**2,804**	**2,771**	**2,996**	**2,992**	**3,131**	**3,327**	**3,779**	**4,990**

TABLE 7.3c: Health Expenditure for Public Health Services (including Health Promotion and Prevention) by Sources of Financing, 2006-2020 (Percent, %)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Ministry of Health (MOH)	48.39	35.18	48.56	47.72	49.93	47.71	46.66	58.27	55.59	55.18	59.37	60.75	63.66	79.64	71.68
MS1.1.1.2	Ministry of Education (MOE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.51
MS1.1.1.9	Other federal agencies (including statutory bodies)	4.67	3.91	4.52	5.08	5.47	5.95	6.11	4.57	4.38	4.68	4.26	4.50	3.89	3.87	11.53
MS1.1.2.1	(General) State government	5.45	4.65	5.59	4.22	4.45	3.41	3.30	0.90	1.13	1.03	1.16	0.85	0.91	0.58	1.65
MS1.1.2.2	Other state agencies (including statutory bodies)	0.91	0.42	0.49	0.98	1.90	1.89	1.75	2.35	2.81	1.43	1.72	1.59	1.51	1.46	1.30
MS1.1.3	Local authorities (LA)	2.03	20.70	5.24	10.50	2.97	3.90	4.29	2.58	1.59	1.75	0.87	1.15	0.90	1.25	1.13
MS1.2.2	Social Security Organisation (SOCSO)	0.48	0.39	0.09	0.08	0.12	0.26	0.27	1.26	0.83	0.29	0.38	0.26	-	-	0.16
MS2.2	Private insurance enterprises (other than social insurance)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22
MS2.3	Private MCOs and other similar entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06
MS2.4	Private household out-of-pocket expenditures (OOP)	1.04	0.71	0.78	0.62	0.64	0.50	0.52	0.35	0.27	0.21	0.20	0.18	0.24	0.20	0.25
MS2.5	Non-profit institutions serving households (NPISH)	0.69	0.80	1.31	0.46	0.55	0.65	0.81	0.04	0.04	0.72	0.95	0.55	0.54	0.05	0.31
MS2.6	All corporations (other than health insurance)	36.33	33.19	33.40	30.34	33.98	35.71	36.28	29.67	33.35	34.71	31.10	30.18	28.34	12.95	10.10
MS9	Rest of the world (ROW)	-	0.04	0.02	0.00	0.00	0.00	-	-	-	-	-	-	-	-	0.11
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

7.4 HEALTH EXPENDITURE FOR FUNCTIONS OF HEALTH CARE - HEALTH EDUCATION AND TRAINING BY SOURCES OF FINANCING

This section describes expenditure for all health & health-related education and training of personnel. Although MNHA Framework includes this expenditure under the TEH, the SHA 1.0 framework excludes this because of the shortfalls involved in making assumptions and the difficulties in capturing this expenditure. Furthermore, personnel who undergo health and health-related education and training may not continue to provide services in the health sector.

In 2020, a total of RM3,105 million or about 5% of TEH was spent on health education and training of health personnel. A total of RM1,498 million (48%) of this amount was funded by public sector sources of financing (Table 7.4a). The MOH spent about 24% of public sector health expenditure on health education and training, as shown in Figure 7.4.

The 2006-2020 time series data shows that both public sector and private sector sources of financing have an increasing trend in expenditure for this function (Table 7.4b and Table 7.4c). Among the public sources of financing, MOH shows a 1.3-fold increase and non-MOH a 2.9-fold increase in spending for health education and training throughout the 15 years, while private sources of financing show a 5-fold increase in absolute RM value.

TABLE 7.4a: Health Expenditure for Health Education and Training by Sources of Financing, 2020

MNHA Code	Sources of Financing	RM Million	Percent
MS1.1.1.1	Public source (MOH)	356	11.47
MS1 (others)	Public source (non-MOH)	1,142	36.77
MS2 + MS9	Private source*	1,607	51.76
Total		**3,105**	**100.00**

*Note: *Data include expenditure under 'Rest of the world'*

FIGURE 7.4: Health Expenditure for Health Education and Training by Sources of Financing, 2020

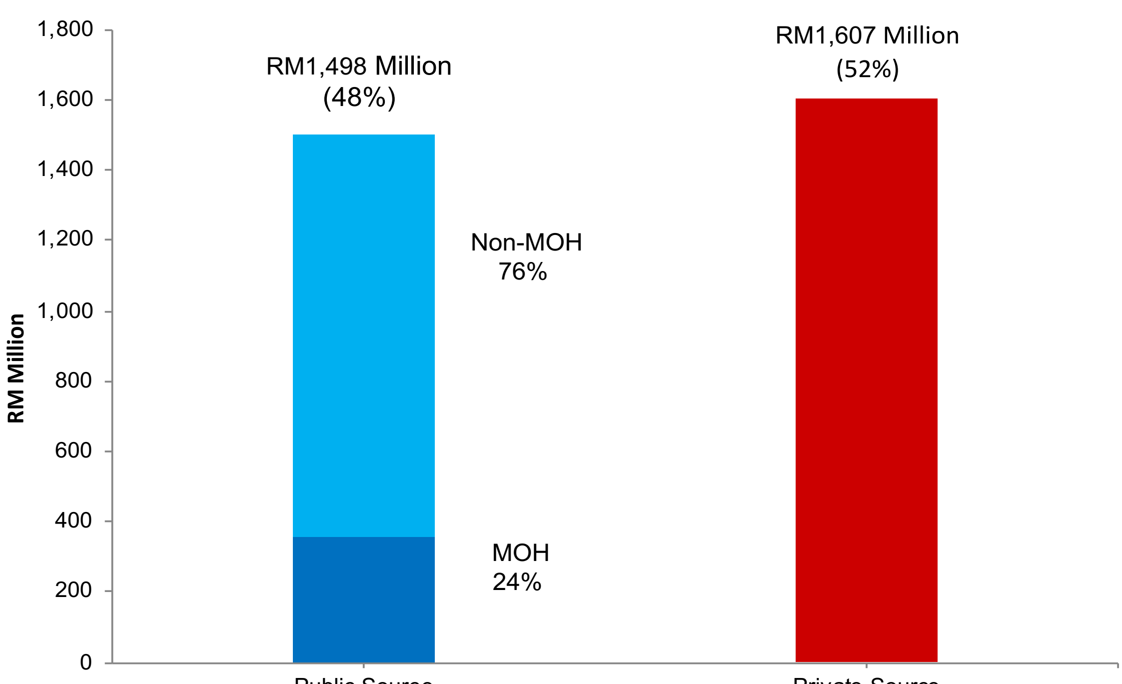


TABLE 7.4b: Health Expenditure for Health Education and Training by Sources of Financing, 2006-2020 (RM Million)

MNHA Code	Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Public source (MOH)	270	275	310	325	340	380	377	407	438	446	428	244	380	370	356
MS1 (others)	Public source (non-MOH)	389	500	691	943	989	1,204	1,030	881	992	969	1,039	1,064	1,227	1,178	1,142
MS2 + MS9	Private source*	311	351	359	590	820	879	1,153	1,461	1,328	1,398	1,484	1,526	1,524	1,542	1,607
Total		**971**	**1,126**	**1,360**	**1,858**	**2,149**	**2,463**	**2,560**	**2,749**	**2,758**	**2,814**	**2,950**	**2,834**	**3,131**	**3,090**	**3,105**

Note: *Data include expenditure under ‘Rest of the world’

TABLE 7.4c: Health Expenditure for Health Education and Training by Sources of Financing, 2006-2020 (Percent, %)

MNHA Code	Source of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MS1.1.1.1	Public source (MOH)	27.84	24.42	22.81	17.48	15.84	15.44	14.74	14.81	15.89	15.86	14.50	8.62	12.13	11.98	11.47
MS1 (others)	Public source (non-MOH)	40.09	44.37	50.83	50.76	46.02	48.87	40.23	32.04	35.95	34.45	35.21	37.53	39.20	38.13	36.77
MS2 + MS9	Private source*	32.07	31.21	26.36	31.76	38.14	35.69	45.03	53.15	48.16	49.69	50.29	53.85	48.68	49.89	51.76
Total		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Note: *Data include expenditure under ‘Rest of the world’

CHAPTER 8

MOH HEALTH EXPENDITURE

There are differences in reporting MOH expenditures using the MNHA Framework and the government treasury accounting system used by MOH Accounts Division (AG database). This chapter aims to provide some information on MOH expenditure as a share of total expenditure on health and national GDP and enlighten the differences in expenditure reporting of MOH hospitals as the provider of health care services and MOH source of financing at MOH hospitals using the MNHA Framework.

The first section in this chapter describes the proportion of MOH expenditure from TEH and MOH health expenditure as a percentage of national GDP using the MNHA Framework. The second section aims to explain some differences in NHA reporting of expenditure at hospitals based on the two dimensions of the MNHA Framework; sources of financing and functions of health care.

8.1 MOH HEALTH EXPENDITURE – MOH SHARE OF TOTAL EXPENDITURE ON HEALTH AND NATIONAL GDP

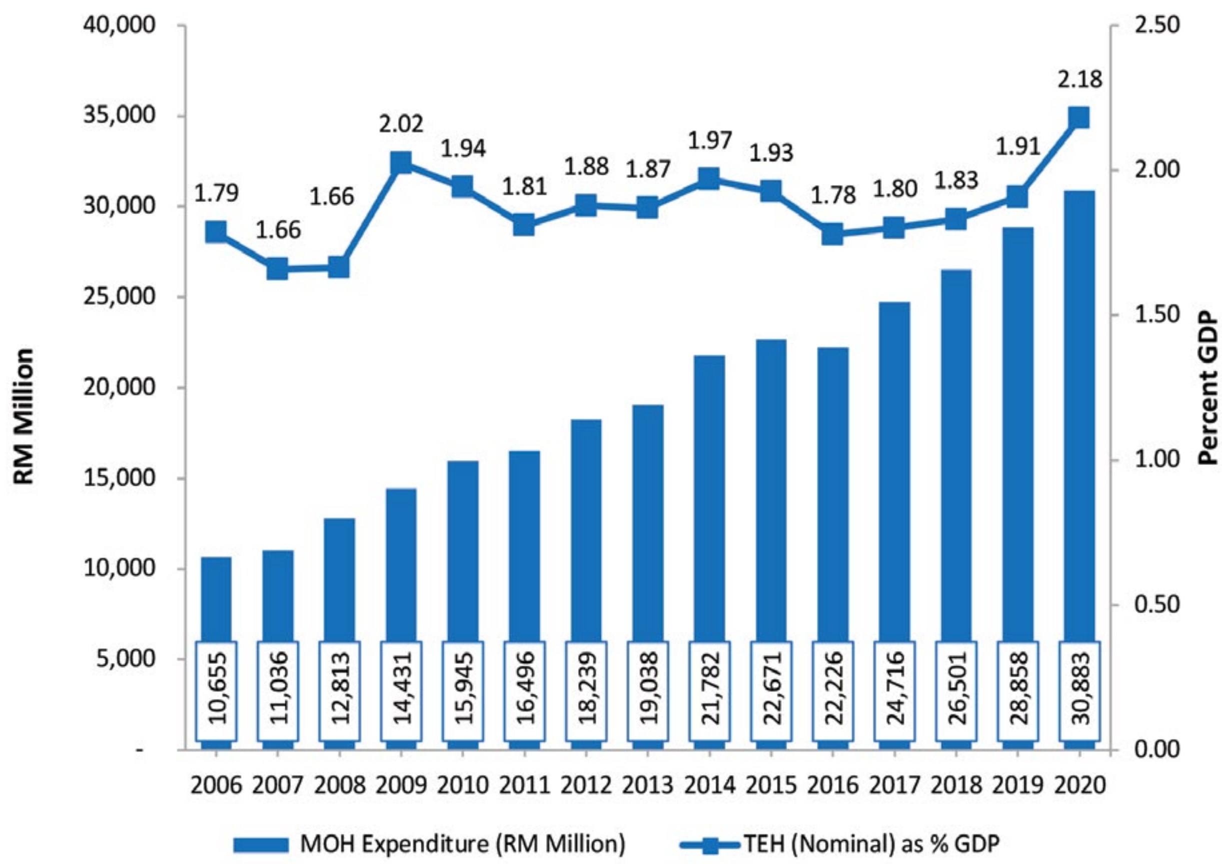
MOH health expenditure reported in this section describes what MOH, as a 'source of financing', spends on health care. Expenditure of MOH as a 'source of financing' differs from what is reported in the government treasury accounting system based on AG data as total MOH expenditure (inclusive of operating and development expenditures) for a particular year. The MNHA Framework allows tracking of reimbursements by various agencies (e.g. EPF, SOCSO, private health insurance, state government including statutory bodies, etc.), which are then deducted from total MOH expenditure to reflect the actual MOH expenditure at the health care providers level, thus leaving MOH expenditure as 'source of financing' to be of slightly lower value under the MNHA Framework. (this is due to the effect of 'addressing double counting' as explained in Chapter 3).

Using the MNHA Framework in 2020, a total amount of RM30,883 million (46%) of TEH was spent by MOH. In relation to GDP, MOH health expenditure took up 2.18% of the national GDP in the same year. The 2006-2020 time series MOH expenditure data, in general, shows an increasing pattern of expenditure except for 2016. MOH expenditure throughout the same period dominated the TEH, ranging between 43% and 48% of the TEH. In 2006, MOH spent RM10,655 million (48%) of TEH, while in the year 2020, this agency spent RM30,883 million (46%) of TEH. In relation to GDP, MOH expenditure in 2006 is equivalent to 1.79% of the national GDP, while in 2020, it is 2.18% of the national GDP (Table 8.1 and Figure 8.1).

TABLE 8.1: MOH Share of Total Expenditure on Health and Percent GDP, 2006-2020

Year	TEH, Nominal (RM Million)	MOH Expenditure (RM Million)	MOH Expenditure as % TEH	TEH (Nominal) as % GDP	MOH Expenditure as % of GDP
2006	22,080	10,655	48.26	3.70	1.79
2007	24,426	11,036	45.18	3.67	1.66
2008	27,774	12,813	46.13	3.61	1.66
2009	29,380	14,431	49.12	4.12	2.02
2010	32,889	15,945	48.48	4.00	1.94
2011	35,953	16,496	45.88	3.94	1.81
2012	39,448	18,239	46.24	4.06	1.88
2013	41,647	19,038	45.71	4.09	1.87
2014	46,780	21,782	46.56	4.23	1.97
2015	50,209	22,671	45.15	4.27	1.93
2016	51,693	22,226	43.00	4.14	1.78
2017	56,369	24,716	43.85	4.11	1.80
2018	60,445	26,501	43.80	4.18	1.83
2019	64,241	28,858	44.90	4.25	1.91
2020	67,022	30,883	46.10	4.73	2.18

FIGURE 8.1: MOH Expenditure on Health and Percent GDP, 2006-2020



8.2 MOH HEALTH EXPENDITURE - MOH HOSPITAL

All programmes, projects and services under the purview of MOH, inclusive of health care services provided at all MOH hospitals, come from federal government consolidated funds. As the provider of health care services, MOH hospitals take up the largest percentage of the total MOH allocated funds. The development funds spent at MOH hospital were assigned as non-curative care expenditures, mainly for hospital facility development and renovation. Using the MNHA Framework, the operating fund spent at MOH hospitals was assigned as curative care expenditure for patient care services disaggregated based on functional classification and categorised as an in-patient, out-patient and daycare, and this was described under Section 3.2 of this report.

8.2.1 MOH Health Expenditure - MOH Hospital, Sources of Financing

In 2020, both the public and private sector sources of financing at MOH hospitals totalled to RM18,785 million. Various financiers were tracked through MOH hospitals accounting systems, and sources of financing codes were assigned for payments made through private household out-of-pocket, private health insurance and other types of sources of financing. As a result, of the RM18,785 million spent, RM17,989 million (96%) was MOH's source of financing. A small amount of RM796 million (4%) was accounted for by other financiers such as private household OOP (RM349 million), Social Security Organisation or SOCSO (RM254 million), other state agencies (including statutory bodies) (RM80 million), private insurance enterprises (other than social insurance) (RM38 million) and the remaining non-MOH expenditure at RM75 million (Table 8.2.1a).

The 2006-2020 time series expenditure on sources of financing shows a similar trend with MOH as the highest financier followed by non-MOH (Table 8.2.1b and Figure 8.2.1). The time series data on MOH as the source of financing shows that the expenditure increased by 3-fold in absolute RM value, with an average of 97% of the total health expenditure at MOH Hospitals (Table 8.2.1c).

TABLE 8.2.1a: Health Expenditure at MOH Hospitals by Sources of Financing, 2020*

	MNHA Code	Sources of Financing	RM Million	Percent
Ministry of Health (MOH)	**MS1.1.1.1**	**Ministry of Health (MOH)**	**17,989**	**95.76**
Non-Ministry of Health (non-MOH)	MS2.4	Private household out-of-pocket expenditures (OOP)	349	1.86
	MS1.1.2.2	Other state agencies (including statutory bodies)	80	0.43
	MS2.2	Private insurance enterprises (other than social insurance)	38	0.20
	MS1.2.2	Social Security Organisation (SOCSO)	254	1.35
	MS2.6	All corporations (other than health insurance)	35	0.19
	MS2.5	Non-profit institutions serving households (NPISH)	20	0.11
	MS1.2.1	Employees Provident Fund (EPF)	1	0.01
	MS1.1.1.9	Other federal agencies (including statutory bodies)	9	0.05
	MS1.1.2.1	(General) State government	3	0.01
	MS9	Rest of the world (ROW)	5	0.02
	MS1.1.3	Local authorities (LA)	2	0.01
	Non-MOH Sub-total		**796**	**4.24**
Total			**18,785**	**100.00**

Note: *MOH Hospital Provider codes include MP1.1a, MP1.2a and MP1.3a

FIGURE 8.2.1: Health Expenditure at MOH Hospitals by Sources of Financing, 2006-2020 (RM Million)

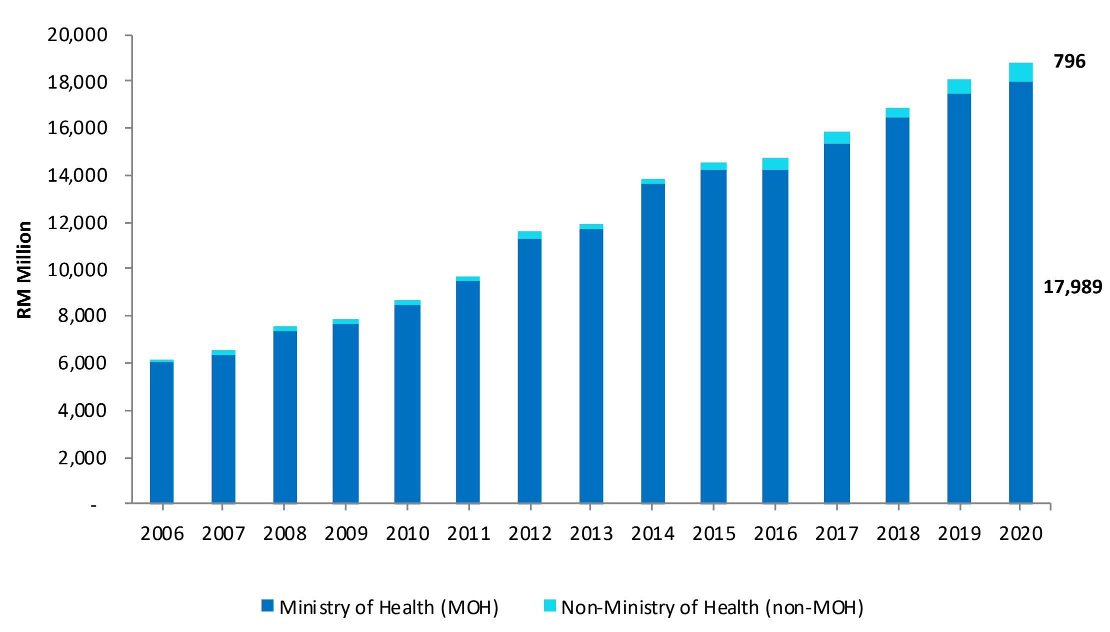


TABLE 8.2.1b: Health Expenditure at MOH Hospitals by Sources of Financing, 2006-2020 (RM Million)

Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Ministry of Health (MOH)	6,028	6,358	7,343	7,677	8,453	9,462	11,331	11,683	13,610	14,205	14,290	15,373	16,467	17,498	17,989
Non-Ministry of Health (non-MOH)	156	174	187	225	262	276	236	273	235	314	442	454	448	541	796
Total	**6,184**	**6,532**	**7,531**	**7,903**	**8,715**	**9,739**	**11,567**	**11,956**	**13,845**	**14,519**	**14,732**	**15,827**	**16,915**	**18,039**	**18,785**

TABLE 8.2.1c: Health Expenditure at MOH Hospitals by Sources of Financing, 2006-2020 (Percent, %)

Sources of Financing	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Ministry of Health (MOH)	97.48	97.33	97.51	97.15	96.99	97.16	97.96	97.72	98.30	97.84	97.00	97.13	97.35	97.00	95.76
Non-Ministry of Health (non-MOH)	2.52	2.67	2.49	2.85	3.01	2.84	2.04	2.28	1.70	2.16	3.00	2.87	2.65	3.00	4.24
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

8.2.2 MOH Health Expenditure - MOH Hospital, Functions of Curative Care

This section provides further information on patient care services at MOH hospitals. Functions of curative care services provided in MOH hospitals are further categorised as in-patient curative care, out-patient curative care and day cases of curative care. Under the MNHA Framework, these types of services were inclusive of allopathic as well as some traditional and complementary health care services.

In 2020, RM18,785 million was spent at MOH hospitals. Of this amount, RM16,700 million (89%) was for curative care services (Table 8.2.2a). In the same year, the expenditure for curative care services at MOH hospitals showed that RM10,723 million (64%) was spent for in-patient curative care services. This was followed by RM4,784 million (29%) for out-patient curative care services and RM1,193 million (7%) for day cases of curative care services (Figure 8.2.2).

The 2006-2020 time series data shows that in absolute RM value, the curative care services expenditure increased by 3-fold (Table 8.2.2b). The curative care services expenditure in time series shows an average of 97% spending at the MOH hospitals (Table 8.2.2c).

TABLE 8.2.2a: Health Expenditure at MOH Hospitals for Functions of Health Care, 2020

	MNHA Code	Functions of Health Care	RM Million	Percent
Curative Care	MF1.1	In-patient curative care	10,723	57.08
	MF1.3	Out-patient curative care	4,784	25.47
	MF1.2	Day cases of curative care	1,193	6.35
		Sub-total (curative care)	**16,700**	**88.90**
Non-Curative Care	MF6.3.9	Other preventive programmes for communicable diseases	1	0.01
	MR1	Capital formation of health care provider institutions	2,084	11.09
		Sub-total (non-curative care)	**2,085**	**11.10**
Total			**18,785**	**100.00**

FIGURE 8.2.2: Health Expenditure at MOH Hospitals for Curative Care Functions of Health Care, 2020

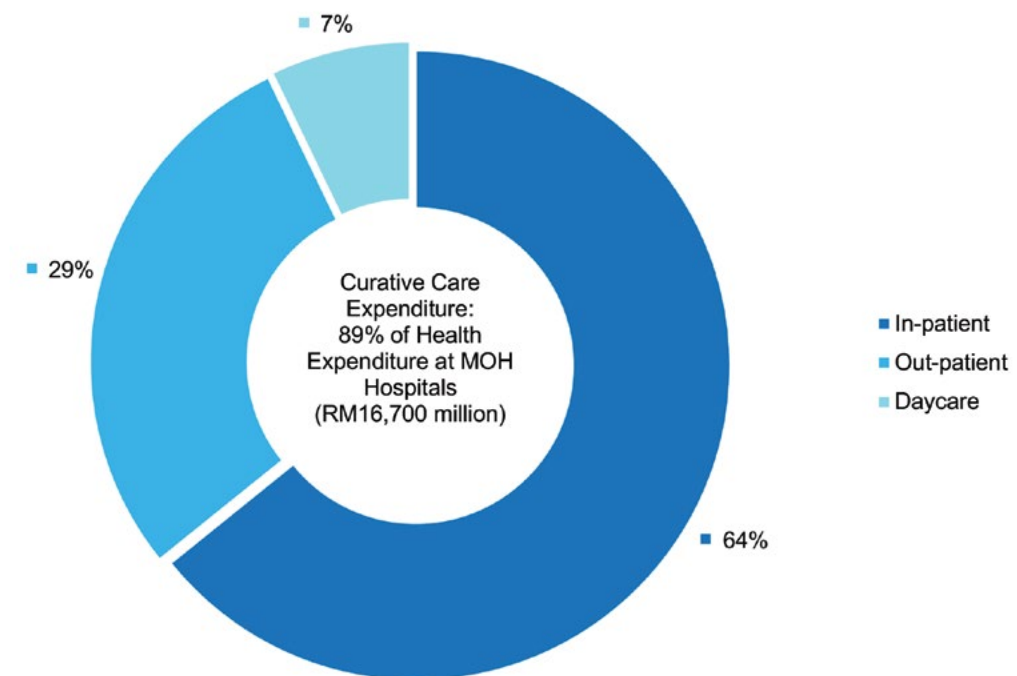


TABLE 8.2.2b: Health Expenditure at MOH Hospitals for Functions of Health Care, 2006-2020 (RM Million)

Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Curative Care	6,008	6,318	7,427	7,781	8,097	9,643	11,302	11,590	13,576	14,228	14,417	15,716	16,842	17,749	16,700
Non-Curative Care	176	214	103	122	618	96	265	366	269	291	315	111	73	290	2,085
Total	**6,184**	**6,532**	**7,531**	**7,903**	**8,715**	**9,739**	**11,567**	**11,956**	**13,845**	**14,519**	**14,732**	**15,827**	**16,915**	**18,039**	**18,785**

TABLE 8.2.2c: Health Expenditure at MOH Hospitals for Functions of Health Care, 2006-2020 (Percent, %)

Functions of Health Care	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Curative Care	97.15	96.73	98.63	98.45	92.91	99.02	97.71	96.94	98.06	97.99	97.86	99.30	99.57	98.39	88.90
Non-Curative Care	2.85	3.27	1.37	1.55	7.09	0.98	2.29	3.06	1.94	2.01	2.14	0.70	0.43	1.61	11.10
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

CHAPTER 9

OUT-OF-POCKET HEALTH EXPENDITURE

Many countries often obtain household out-of-pocket (OOP) health expenditures through community surveys. However, the best approach for this estimation as used in this report is through a complex method called the integrative method, whereby the gross level of direct health spending from consumption, provision and financing perspectives are collated, followed by a deduction of third-party financial reimbursements by various agencies to avoid double counting.

The data shown in this chapter includes OOP spending for TCM, health education and training. OOP health expenditure estimation through the integrative method is explained in Chapter 3. In brief, OOP health expenditure estimation uses the formula as follows:

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

9.1 OUT-OF-POCKET HEALTH EXPENDITURE – OOP SHARE OF TOTAL EXPENDITURE ON HEALTH AND NATIONAL GDP

In 2020, the OOP health expenditure amounted to RM23,150 million, equivalent to 35% of the TEH and 76% share of the private sector health expenditure (Table 9.1a). The 2006-2020 time series data shows that the household OOP health expenditure was between 29% and 36% of TEH (Figure 9.1a). It has remained the largest single source of financing in the private sector throughout the years, with an average of 74% (Table 9.1a, Figure 9.1b). The OOP health expenditure from 2006 to 2020 increased from RM7,141 million to RM23,150 million, which constitutes 1.6% of GDP (Table 9.1b and Figure 9.1c).

TABLE 9.1a: OOP Share of Total Expenditure on Health and Private Sector Health Expenditure, 2006-2020

Year	Private Sector Health Expenditure (RM Million)	Total Expenditure on Health (RM Million)	OOP Health Expenditure (RM million)	OOP Share of Total Expenditure on Health (Percent, %)	OOP Share of Private Sector Health Expenditure (Percent, %)
2006	9,449	22,080	7,141	32.34	75.57
2007	10,622	24,426	7,919	32.42	74.56
2008	11,991	27,774	9,084	32.71	75.76
2009	11,685	29,380	8,478	28.86	72.56
2010	13,560	32,889	9,917	30.15	73.14
2011	15,702	35,953	11,466	31.89	73.02
2012	17,442	39,448	12,649	32.06	72.52
2013	18,780	41,647	13,933	33.45	74.19
2014	20,859	46,780	15,373	32.86	73.70
2015	23,222	50,209	16,903	33.67	72.79
2016	25,001	51,693	18,536	35.86	74.14
2017	27,120	56,369	20,357	36.11	75.06
2018	29,082	60,445	22,035	36.45	75.77
2019	30,030	64,241	23,115	35.98	76.98
2020	30,409	67,022	23,150	34.54	76.13

FIGURE 9.1a: OOP Share of Total Expenditure on Health, 2006-2020 (Percent, %)

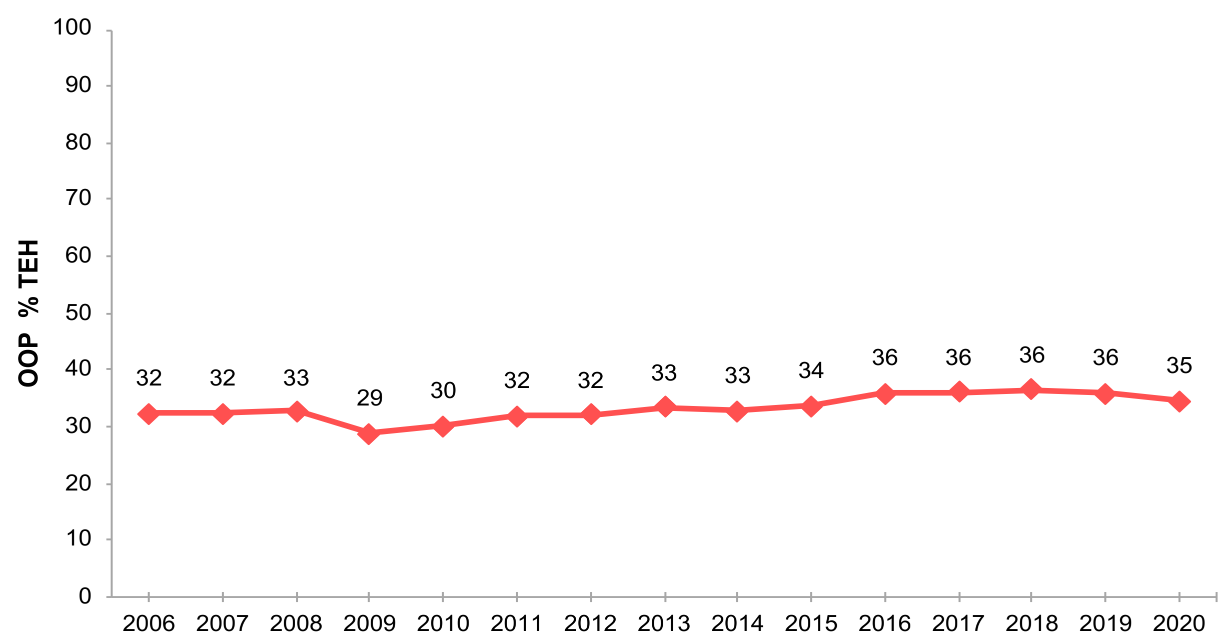


FIGURE 9.1b: OOP Share of Private Sector Health Expenditure, 2006-2020 (Percent, %)

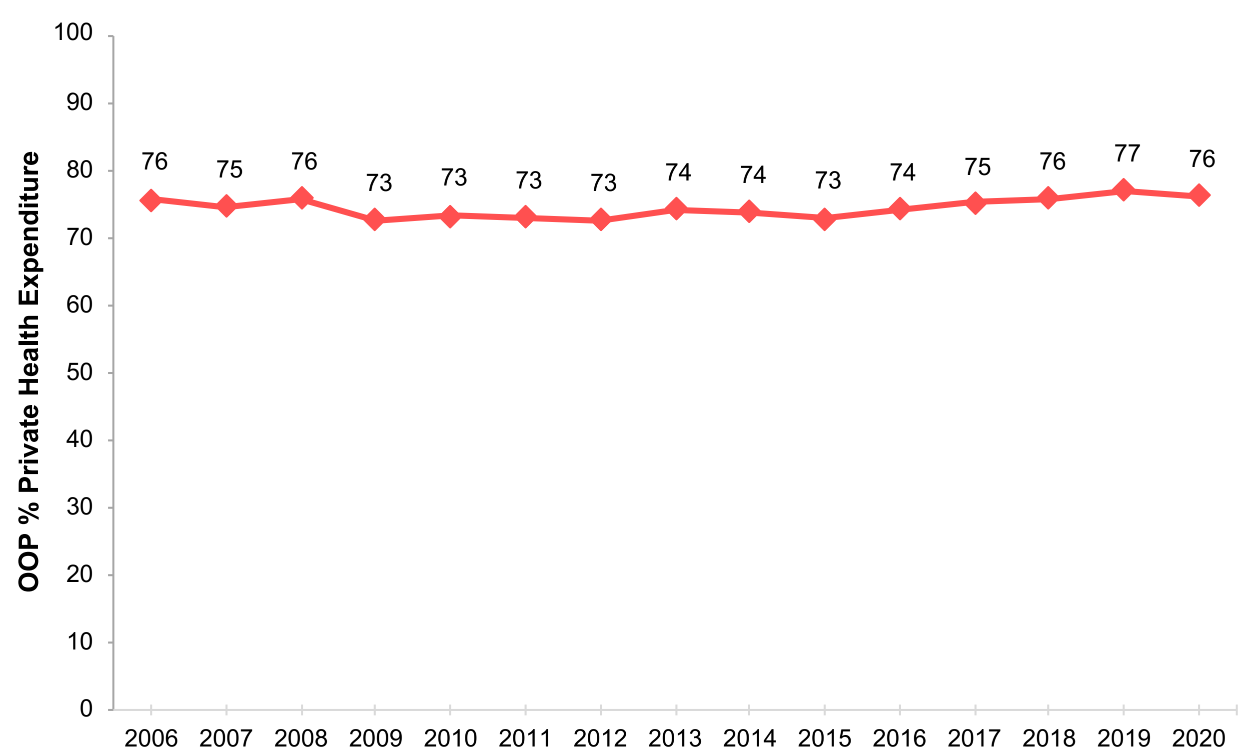
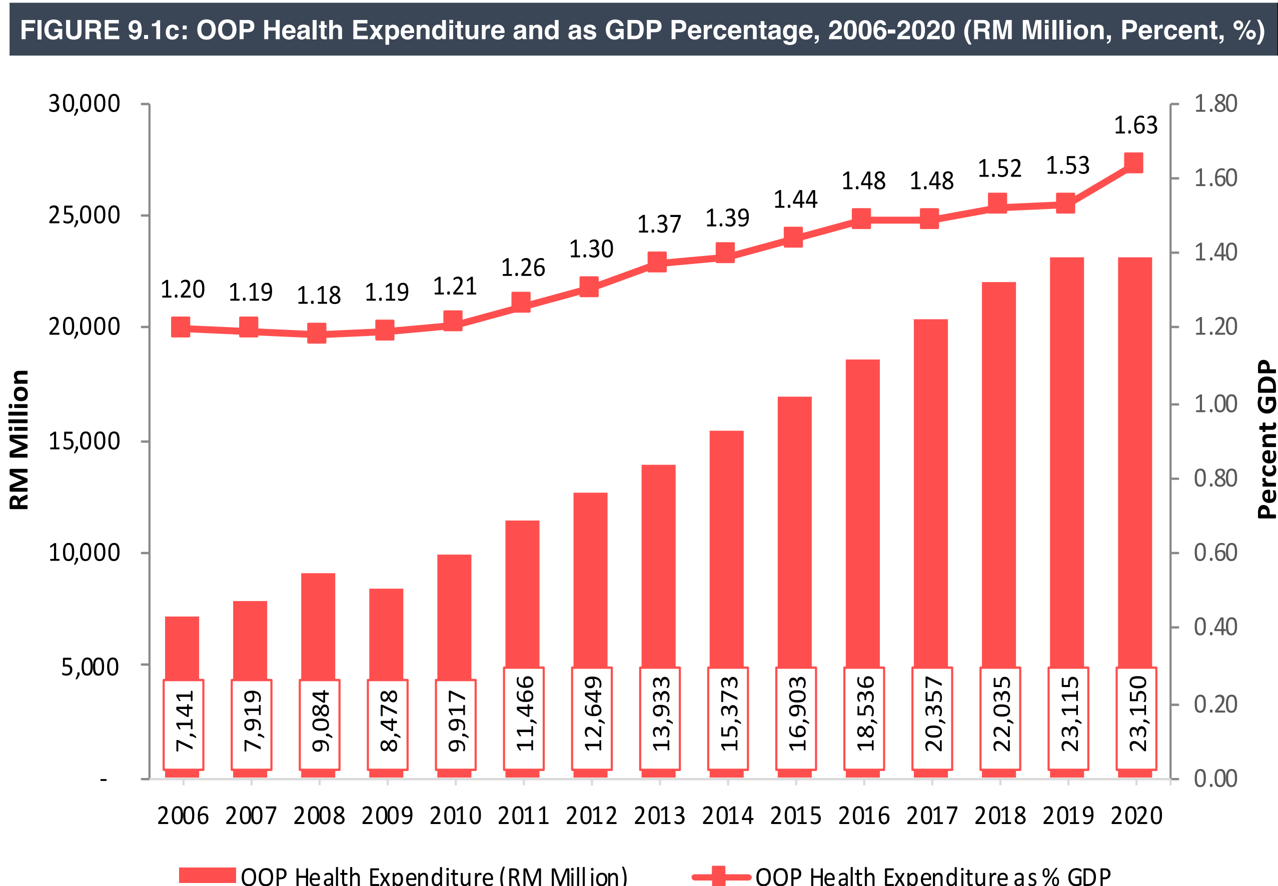


TABLE 9.1b: OOP Health Expenditure and as GDP Percentage, 2006-2020

Year	OOP Health Expenditure (RM Million)	OOP Health Expenditure as % GDP
2006	7,141	1.20
2007	7,919	1.19
2008	9,084	1.18
2009	8,478	1.19
2010	9,917	1.21
2011	11,466	1.26
2012	12,649	1.30
2013	13,933	1.37
2014	15,373	1.39
2015	16,903	1.44
2016	18,536	1.48
2017	20,357	1.48
2018	22,035	1.52
2019	23,115	1.53
2020	23,150	1.63

FIGURE 9.1c: OOP Health Expenditure and as GDP Percentage, 2006-2020 (RM Million, Percent, %)



9.2 OUT-OF-POCKET HEALTH EXPENDITURE TO PROVIDERS OF HEALTH CARE

This section cross tabulates OOP health expenditure with providers of health care. Health providers are defined as entities that produce and provide health care goods and services, which benefit individuals or population groups. These providers could be either public or private providers of health care. The bulk of public sector health care services for patients in this country have always been heavily subsidised by the government, even if the government outsources any of the services to private providers of health care. However, under the provision of public sector services, there are some components of health care services and several products like prostheses, which are purchased by patients from private providers of health care. When patients seek private sector services, they are often at liberty to purchase these services or products separately. The private providers of health care include several categories of standalone private facilities such as private hospitals, private medical clinics, providers of medical appliances, TCM providers, private dental clinics, private pharmacies and private laboratories. OOP is the mode of payment for services either in the public or private sector. Furthermore, the final amount reported under OOP health expenditure includes expenditure reported by this mode for health education and training.

Throughout the 2006-2020 time series, OOP health expenditure to providers of health care generally shows an increasing pattern, with a slight reduction in 2009, followed by a progressive increase from then onwards (Table 9.2a and Figure 9.2a). In 2020, of the total RM21,809 million of OOP health expenditure to private providers of health care, private hospitals consumed the largest share at RM10,374 million (48%), followed by private medical clinics at RM4,865 million (22%), private pharmacies at RM3,393 million (16%), private dental clinics at RM1,098 million (5%), TCM providers at RM626 million (3%), retail sale and other suppliers of medical goods and appliances at RM550 million (3%), private medical and diagnostic laboratories at RM32 million (<1%) and the balance, RM871 million (4%) comprised of other private providers of health care such as private institutions, private haemodialysis and others of ambulatory care services (Table 9.2b and Figure 9.2b).

The 2006-2020 time series data shows an average of 94% OOP health expenditure occurred at private providers of health care, with an increasing expenditure pattern (RM value) at various private providers. The highest increase in absolute amount is seen at private hospitals, from RM2,964 million in 2006 to RM10,374 million in 2020, a difference of RM7,410 million. Similarly, there is a 4-fold increase in spending at private pharmacies from RM755 million in 2006 to RM3,393 million in 2020. The OOP health expenditure at private medical clinics showed a fluctuating trend, with an expenditure of RM4,865 million in 2020. The time series data also shows an increasing pattern of OOP health expenditure at public providers with an average of 6% throughout the years (Table 9.2c and Table 9.2d).

TABLE 9.2a: OOP Health Expenditure to Public and Private Providers of Health Care, 2006-2020 (RM Million)

Provider Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Public Providers	358	386	450	556	586	628	691	1,013	995	1,096	1,236	1,238	1,165	1,176	1,340
Private Providers	6,782	7,534	8,635	7,922	9,331	10,838	11,957	12,920	14,378	15,807	17,300	19,119	20,870	21,939	21,809
Total	**7,141**	**7,919**	**9,084**	**8,478**	**9,917**	**11,466**	**12,649**	**13,933**	**15,373**	**16,903**	**18,536**	**20,357**	**22,035**	**23,115**	**23,150**

FIGURE 9.2a: OOP Health Expenditure to Public and Private Providers of Health Care, 2006-2020 (RM Million)

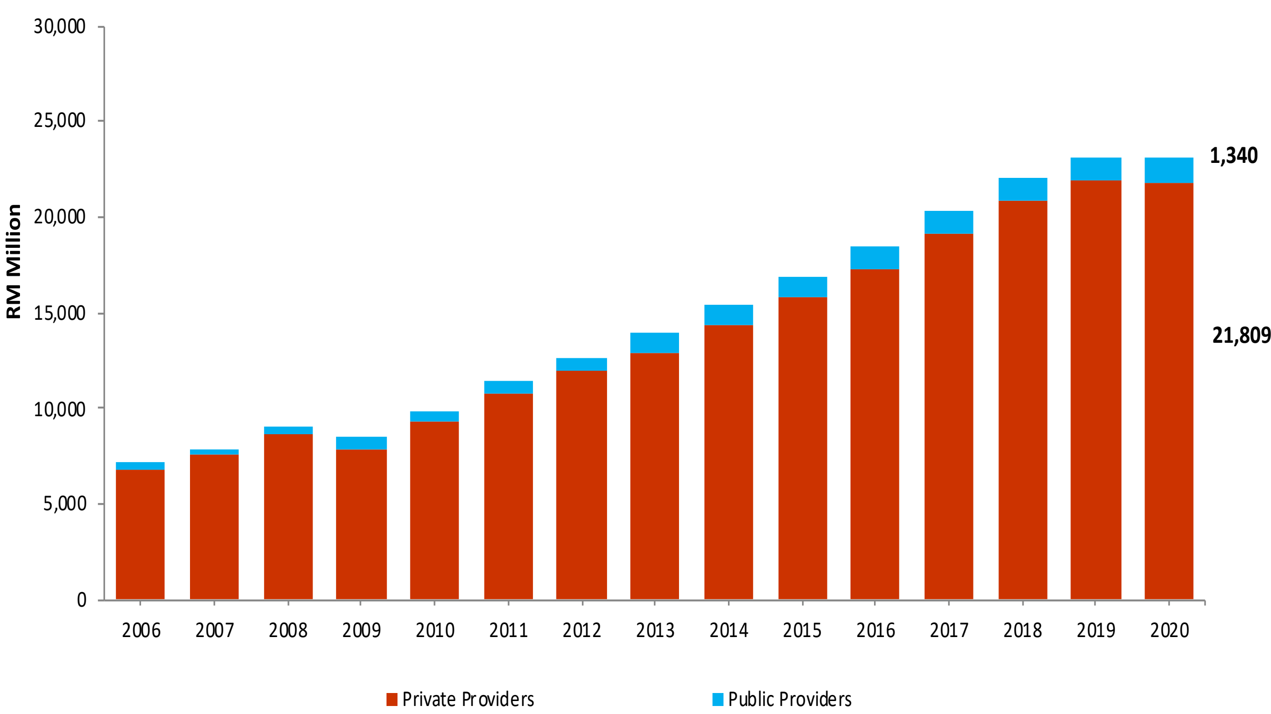


TABLE 9.2b: OOP Health Expenditure to Private Providers of Health Care, 2020 (RM Million, Percent, %)

Provider Name	RM (Million)	Percent
Private hospitals	10,374	47.56
Private medical clinics	4,865	22.31
Private pharmacies	3,393	15.56
Private dental clinics	1,098	5.03
All other private sector providers of health care	871	4.00
Traditional and Complementary Medicine (TCM) providers	626	2.87
Retail sale and other suppliers of medical goods & appliances	550	2.52
Private medical and diagnostic laboratories	32	0.15
Total	**21,809**	**100.00**

FIGURE 9.2b: OOP Health Expenditure to Private Providers of Health Care, 2020

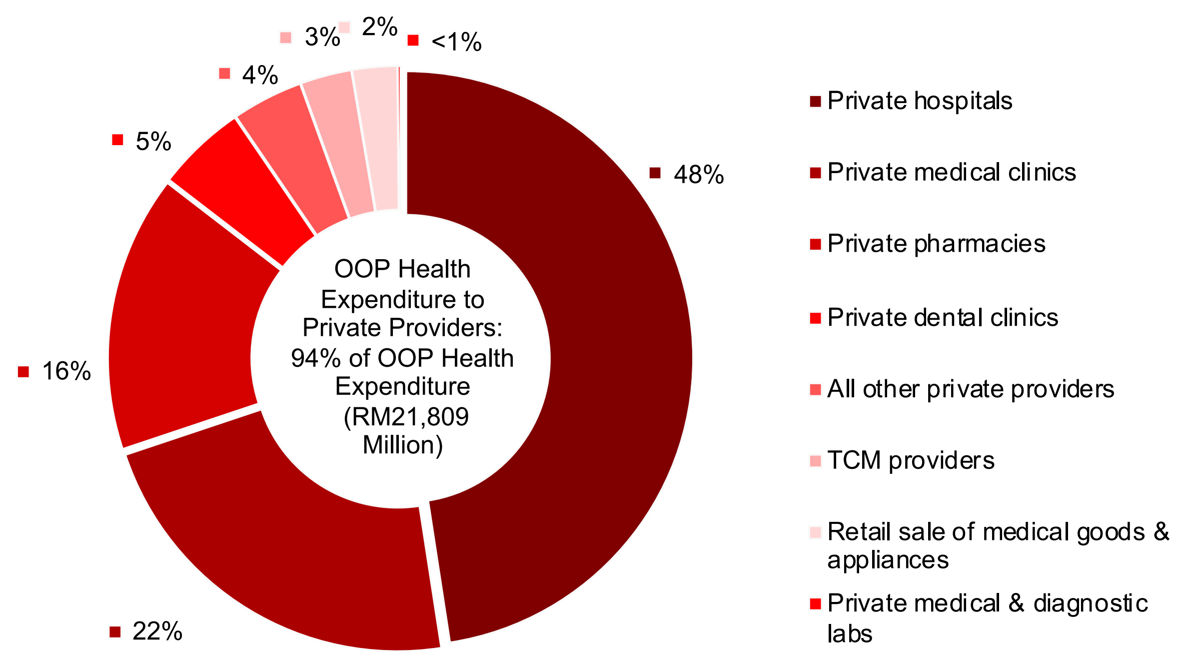


TABLE 9.2c: OOP Health Expenditure to Providers of Health Care, 2006-2020 (RM Million)

Provider Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Private hospitals	2,964	3,290	4,319	4,230	4,814	5,359	5,613	5,736	6,034	6,921	7,619	8,695	9,375	10,257	10,374
Private medical clinics	2,096	2,315	2,152	1,375	1,725	2,272	2,654	3,055	3,767	3,651	4,052	4,431	4,556	5,030	4,865
Private pharmacies	755	871	943	1,075	1,144	1,407	1,580	1,842	2,360	2,626	2,750	2,923	3,735	3,293	3,393
Private dental clinics	288	296	371	364	451	509	560	592	646	855	920	1,022	1,091	1,157	1,098
Traditional and Complementary Medicine (TCM) providers	240	277	333	319	361	394	412	424	452	534	624	658	667	667	626
Retail sale and other suppliers of medical goods & appliances	208	239	287	275	303	321	326	325	334	424	523	562	578	588	550
Private medical and diagnostic laboratories	12	14	18	17	29	43	59	78	108	72	33	35	35	35	33
All other private sector providers of health care	220	232	213	267	503	534	754	869	678	725	778	793	834	911	871
Sub-Total (Private Providers)	**6,782**	**7,534**	**8,635**	**7,922**	**9,331**	**10,838**	**11,957**	**12,920**	**14,378**	**15,807**	**17,300**	**19,119**	**20,870**	**21,939**	**21,809**
Public hospitals	223	229	255	229	254	259	253	334	309	368	459	455	447	476	544
Public medical clinics	28	32	36	38	41	45	50	44	48	60	62	59	60	65	79
Public institutions providing health-related services	108	124	159	288	291	324	388	634	638	669	716	724	657	635	713
Provision and administration of public health programmes (MOH)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Sub-Total (Public Providers)	**358**	**386**	**450**	**556**	**586**	**628**	**691**	**1,013**	**995**	**1,096**	**1,236**	**1,238**	**1,165**	**1,176**	**1,340**
Total	**7,141**	**7,919**	**9,084**	**8,478**	**9,917**	**11,466**	**12,649**	**13,933**	**15,373**	**16,903**	**18,536**	**20,357**	**22,035**	**23,115**	**23,150**

TABLE 9.2d: OOP Health Expenditure to Providers of Health Care, 2006-2020 (Percent, %)

Provider Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Private hospitals	41.51	41.54	47.55	49.90	48.54	46.74	44.38	41.17	39.25	40.94	41.11	42.71	42.55	44.37	44.81
Private medical clinics	29.35	29.23	23.69	16.21	17.40	19.82	20.98	21.93	24.50	21.60	21.86	21.77	20.68	21.76	21.02
Private pharmacies	10.57	11.00	10.38	12.68	11.54	12.27	12.49	13.22	15.35	15.54	14.84	14.36	16.95	14.25	14.66
Private dental clinics	4.03	3.73	4.08	4.30	4.55	4.44	4.43	4.25	4.20	5.06	4.96	5.02	4.95	5.01	4.74
Traditional and Complementary Medicine (TCM) providers	3.36	3.50	3.66	3.76	3.64	3.43	3.25	3.04	2.94	3.16	3.36	3.23	3.02	2.89	2.70
Retail sale and other suppliers of medical goods & appliances	2.91	3.02	3.16	3.24	3.06	2.80	2.57	2.34	2.17	2.51	2.82	2.76	2.62	2.55	2.38
Private medical and diagnostic laboratories	0.17	0.18	0.20	0.20	0.29	0.38	0.47	0.56	0.70	0.43	0.18	0.17	0.16	0.15	0.14
All other private sector providers of health care	3.08	2.93	2.34	3.15	5.07	4.65	5.96	6.23	4.41	4.29	4.20	3.89	3.79	3.94	3.76
Sub-Total (Private Providers)	**94.98**	**95.13**	**95.05**	**93.44**	**94.09**	**94.52**	**94.53**	**92.73**	**93.53**	**93.52**	**93.33**	**93.92**	**94.71**	**94.91**	**94.21**
Public hospitals	3.12	2.90	2.81	2.71	2.56	2.26	2.00	2.40	2.01	2.18	2.47	2.23	2.03	2.06	2.35
Public medical clinics	0.39	0.41	0.39	0.45	0.42	0.40	0.40	0.32	0.31	0.35	0.33	0.29	0.27	0.28	0.34
Public institutions providing health-related services	1.51	1.57	1.75	3.40	2.94	2.83	3.07	4.55	4.15	3.96	3.86	3.56	2.98	2.75	3.08
Sub-Total (Public Providers)	**5.02**	**4.87**	**4.95**	**6.56**	**5.91**	**5.48**	**5.47**	**7.27**	**6.47**	**6.48**	**6.67**	**6.08**	**5.29**	**5.09**	**5.79**
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

9.3 OUT-OF-POCKET HEALTH EXPENDITURE FOR FUNCTIONS OF HEALTH CARE

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. This includes expenditures for core functions of health care such as services of curative care, ancillary services, medical goods & appliances and others, as well as health-related functions such as capital asset purchases, education & training, research & development and others.

In 2020 the largest proportion of OOP health expenditure was RM9,876 million (43%) for out-patient care services (Figure 9.3a). This includes out-patient care services provided both in standalone medical clinics and hospital facilities. In the same year, in-patient care services were RM5,756 million (25%) of OOP health spending. This includes spending at public and private hospitals, with a greater proportion at private hospitals. The OOP health spending for pharmaceuticals, including over-the-counter and prescription drugs, was RM3,393 million (15%), health education and training was RM1,528 million (6%), medical appliances and non-durable goods was RM773 million (3%), daycare services at RM632 million (3%), TCM was RM475 million (2%), and the remaining RM716 million (3%) was for other functions.

Although the 2006-2020 time series data shows a general increase in OOP health spending for various functions, the proportions showed some variations. Over these 15 years, the OOP health spending for out-patient services increased from RM3,642 million in 2006 to RM9,876 million in 2020. There is also a rise in in-patient services from RM1,685 million in 2006 to RM5,756 million in 2020, with the proportion of this function increasing from 24% to 25% over the same period (Figure 9.3b). There is a 5-fold increase in OOP health spending for health education and training from RM284 million in 2006 to RM1,528 million in 2020 and a 4-fold increase in OOP health expenditure for pharmaceuticals from RM755 million in 2006 to RM3,393 million in 2020 (Table 9.3a and Table 9.3b).

TABLE 9.3a: OOP Health Expenditure by Functions of Health Care, 2006-2020 (RM Million)

Function Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Out-patient services	3,642	4,039	4,303	3,637	4,339	5,145	5,709	6,206	7,067	7,375	8,121	8,882	9,373	10,226	9,876
In-patient services	1,685	1,833	2,371	2,250	2,525	2,786	2,831	2,976	3,056	3,584	3,988	4,588	4,822	5,348	5,756
Pharmaceuticals	755	871	943	1,075	1,144	1,407	1,580	1,842	2,360	2,626	2,750	2,923	3,735	3,293	3,393
Health education & training	284	309	316	504	736	789	1,066	1,424	1,244	1,325	1,428	1,454	1,454	1,482	1,528
Medical appliances & non-durable goods	244	273	334	322	360	384	394	398	413	599	712	771	801	824	773
Daycare services	198	241	358	262	289	328	338	374	409	488	521	594	649	700	632
Traditional and Complementary Medicine (TCM)	180	209	253	244	275	298	310	317	335	407	489	513	513	507	475
All other functions	152	144	207	184	249	329	421	396	489	499	527	631	688	735	716
Total	**7,141**	**7,919**	**9,084**	**8,478**	**9,917**	**11,466**	**12,649**	**13,933**	**15,373**	**16,903**	**18,536**	**20,357**	**22,035**	**23,115**	**23,150**

TABLE 9.3b: OOP Health Expenditure by Functions of Health Care, 2006-2020 (Percent, %)

Function Name	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Out-patient services	51.01	51.00	47.37	42.90	43.75	44.87	45.13	44.54	45.97	43.63	43.81	43.63	42.54	44.24	42.66
In-patient services	23.60	23.15	26.10	26.54	25.46	24.29	22.38	21.36	19.88	21.20	21.51	22.54	21.88	23.14	24.86
Pharmaceuticals	10.57	11.00	10.38	12.68	11.54	12.27	12.49	13.22	15.35	15.54	14.84	14.36	16.95	14.25	14.66
Health education & training	3.98	3.90	3.48	5.95	7.42	6.89	8.43	10.22	8.09	7.84	7.70	7.14	6.60	6.41	6.60
Medical appliances & non-durable goods	3.42	3.45	3.68	3.79	3.63	3.35	3.12	2.86	2.69	3.55	3.84	3.79	3.64	3.57	3.34
Daycare services	2.77	3.05	3.94	3.09	2.91	2.86	2.68	2.69	2.66	2.89	2.81	2.92	2.94	3.03	2.73
Traditional and Complementary Medicine (TCM)	2.51	2.64	2.79	2.88	2.77	2.60	2.45	2.27	2.18	2.41	2.64	2.52	2.33	2.19	2.05
All other functions	2.13	1.82	2.27	2.17	2.51	2.87	3.33	2.84	3.18	2.95	2.84	3.10	3.12	3.18	3.09
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

FIGURE 9.3a: OOP Health Expenditure for Functions of Health Care, 2020

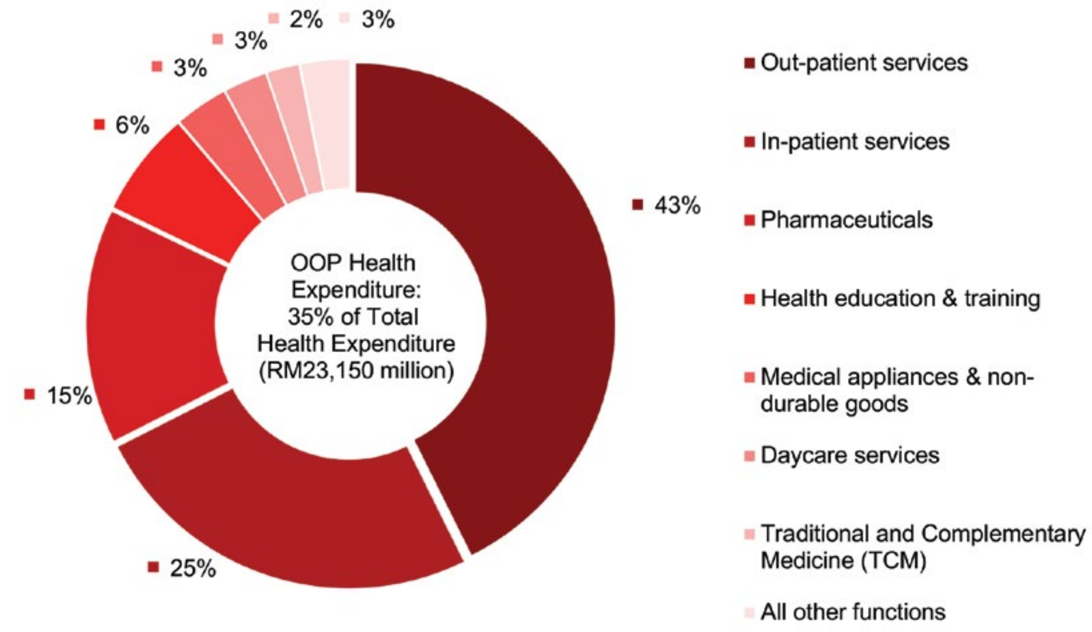
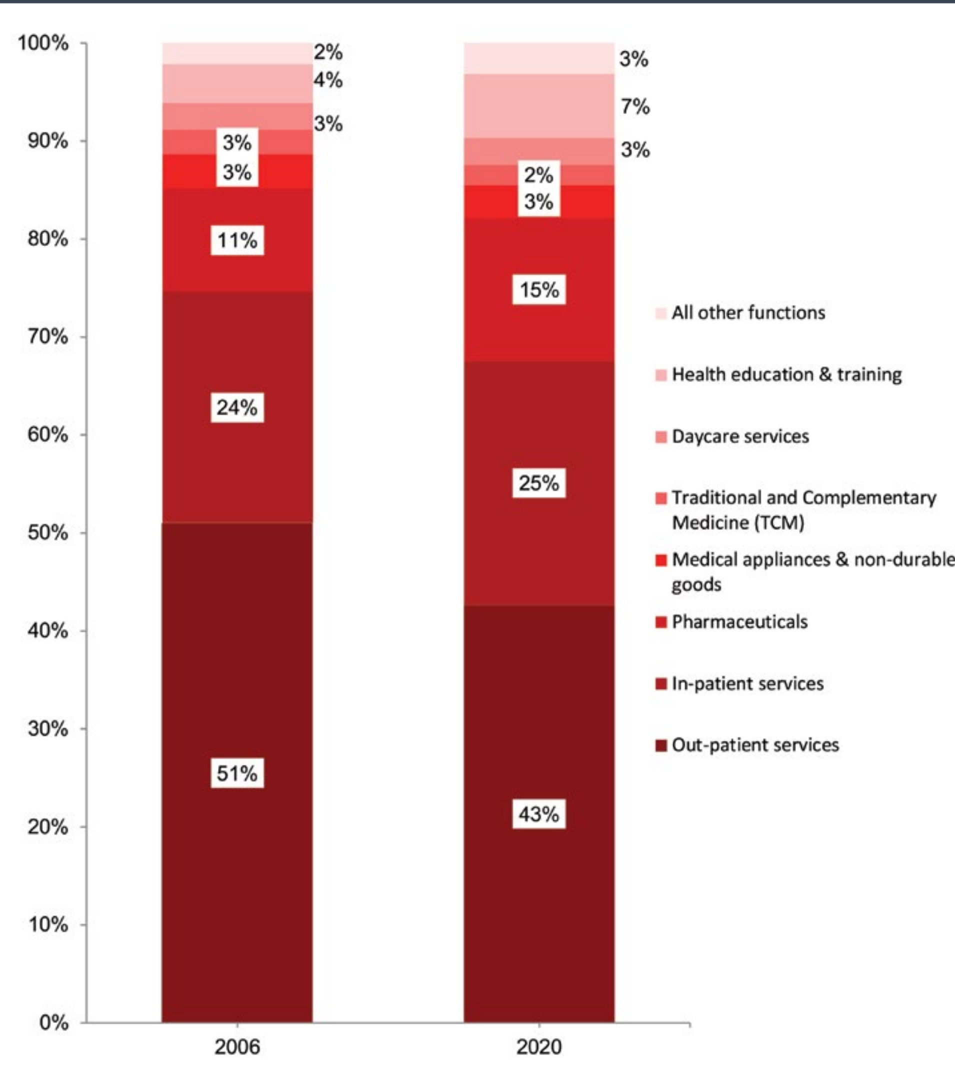


FIGURE 9.3b: OOP Health Expenditure for Functional Proportion, 2006 & 2020



CHAPTER 10

INTERNATIONAL NHA DATA

Global Health Expenditure Database (GHED) is the largest database that provides a global reference for health expenditure data for 194 World Health Organization (WHO) member countries. On an annual basis, every member country submits their national health expenditure data according to WHO request formats. WHO carries out its own country-level analysis based on the System of Health Accounts (SHA) framework. Available submitted country-specific NHA data and country-specific macro-level data from various sources, including the United Nations (UN), World Bank (WB), and International Monetary Fund (IMF) form the basis of WHO's NHA analysis.

The outputs of WHO analysis are then uploaded onto the GHED as the international health expenditure data of the member countries. These WHO estimations for member countries allow standardisation in NHA reporting and ensure better cross-country comparability. This is freely accessible via the related website. However, it is important to recognise that every member country, like Malaysia, may produce their own NHA reporting based on local needs. As such, the MNHA Framework with slightly different boundaries of definitions is more important in the Malaysian context, especially for policymakers, health planners, researchers and other interested parties.

SHA is an internationally accepted methodology for analysing financial flow in the health systems of various countries. It was first published in 2000 by Organisation for Economic Cooperation and Development (OECD) and later adopted by the WHO to inform health policy and measure health system performance. The first version of the SHA is referred to as SHA 1.0. In keeping with structural changes and further development of the health care industry during the subsequent decade, related international organisations of OECD, Eurostat, and WHO produced an updated version of the SHA, which is referred to as SHA 2011.

GHED, in WHO website, accommodates NHA data reporting based on the latest SHA 2011 framework since December 2017. It was decided that for countries which have yet to migrate to this new format of NHA reporting, WHO would carry out their own analysis based on whatever available data, either in SHA 1.0 or SHA 2011 formats. Table 10.1 shows available data in the GHED under various headers, which have further disaggregated data as listed in Appendix Table A3.1 and A3.2.

A total of nine developing and developed countries with potential policy relevance to Malaysia are selected from the WHO GHED database for country comparison. Comparisons were made based on 2019 as the latest available year when this report was produced. The countries included were United Kingdom, Republic of Korea, Poland, Vietnam, Singapore, Turkey, Thailand, Indonesia and Myanmar.

As mentioned in Section 2.3, CHE instead of TEH was used by WHO for international comparison. In 2019, based on the WHO GHED, the CHE of Malaysia was 3.8% of GDP, which was lower than other countries such as Turkey, Singapore, Vietnam, Poland, Republic of Korea and United Kingdom but higher than other regional countries such as Thailand and Indonesia (Figure 10.1).

Even though SHA 2011 does not use the terms "public" or "private" sources of financing, the GHED maintains this terminology under the

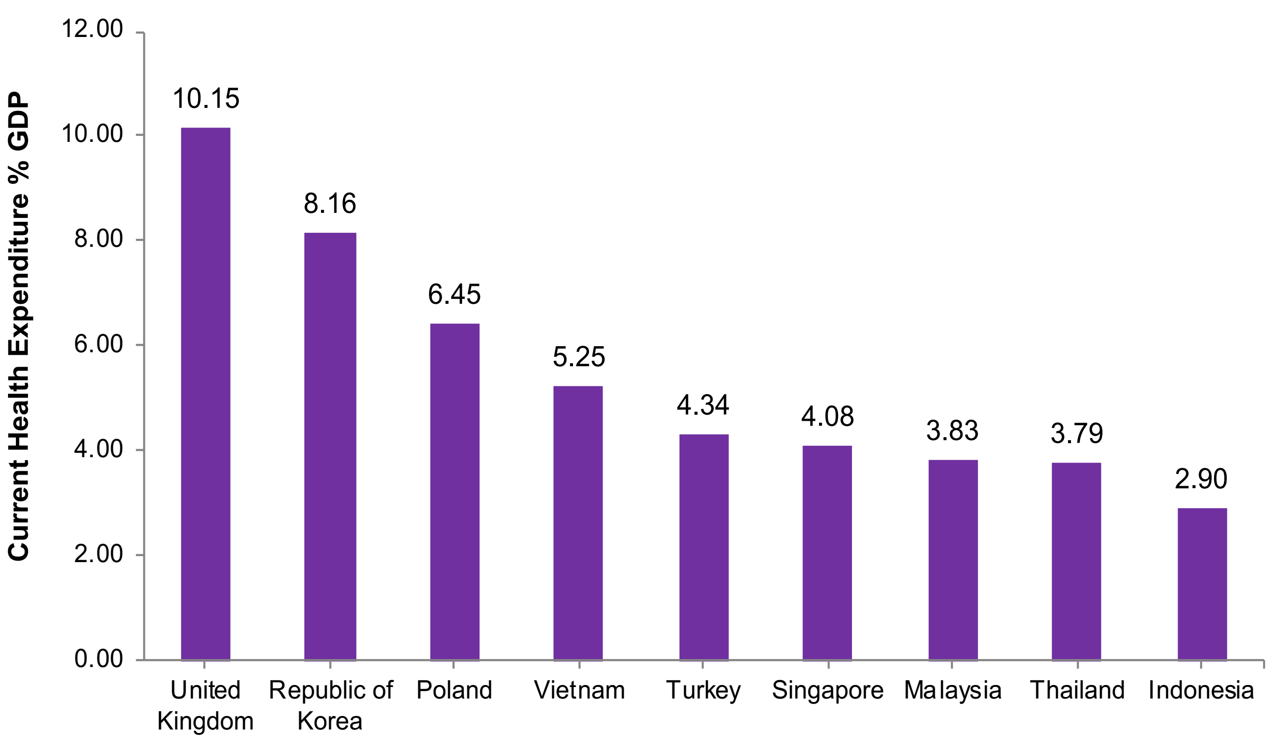
list of indicators under "domestic general government" and "domestic private" health expenditure (Appendix Table A3.1). Most developed countries have higher domestic government health expenditures than domestic private health expenditures (Figure 10.2). In terms of OOP health financing scheme, Malaysia was lower than Vietnam in 2019 (Figure 10.3).

TABLE 10.1: Available Data in GHED under Various Headers

	Main Header		Sub-Header
1	Indicators	1.1	Aggregates
		1.2	Financing Sources
		1.3	Financing Schemes
		1.4	Primary Health Care
		1.5	Immunization
		1.6	Diseases and Conditions
		1.7	Cross Clacification
		1.8	Macro
		1.9	Financing Sources Groups
2	Health Expenditure Data	2.1	Revenues
		2.2	Financing Schemes
		2.3	Health Care Functions
		2.4	Diseases and Conditions
		2.5	Age
		2.6	Capital Expenditure
3	Macro Data	3.1	Consumption
		3.2	Exchanges Rates
		3.3	Price Index
		3.4	Population

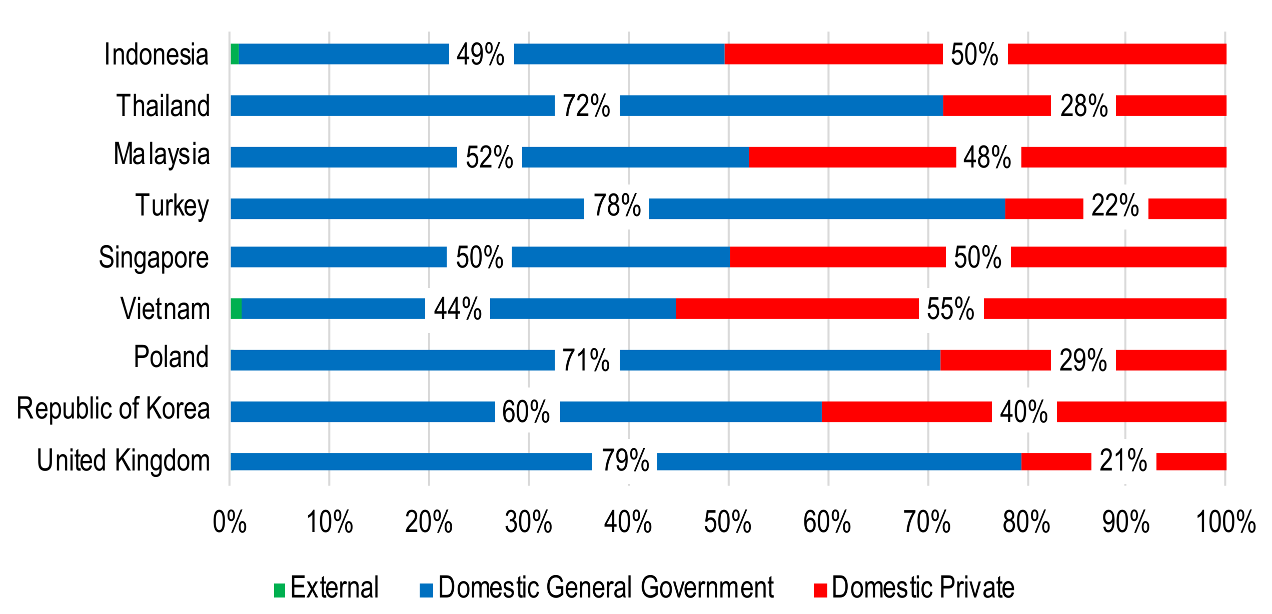
Source: Global Health Expenditure Database (GHED) WHO NHA on 17th December 2021

FIGURE 10.1: International Comparison of Current Health Expenditure as Percent GDP, 2019



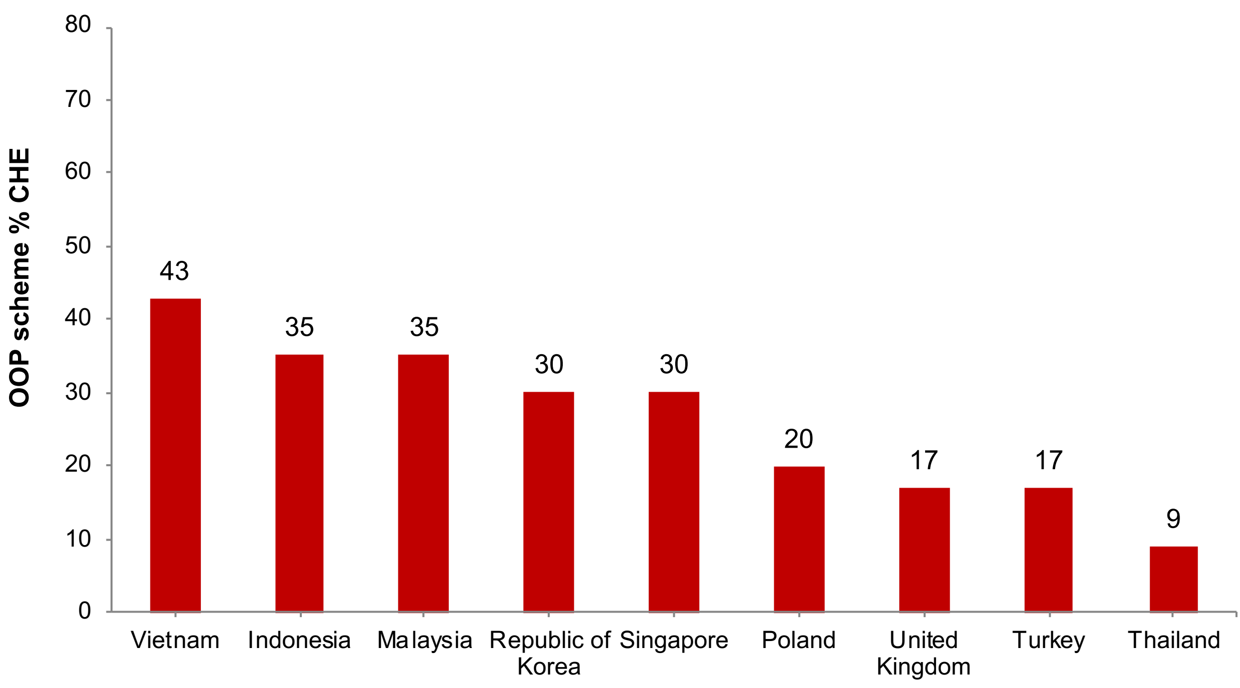
Source: Global Health Expenditure Database (GHED) WHO NHA on 17th December 2021

FIGURE 10.2: International Comparison of Domestic Government and Private Health Expenditure, 2019



Source: Global Health Expenditure Database (GHED) WHO NHA on 17th December 2021

FIGURE 10.3: International Comparison of Out-of-Pocket Health Financing Scheme as Percent of Current Health Expenditure, 2019



Source: Global Health Expenditure Database (GHED) WHO NHA on 17th December 2021

CHAPTER 11

COVID-19 HEALTH EXPENDITURE ESTIMATION

11.1 BACKGROUND OF COVID-19 HEALTH EXPENDITURE

Similar to many other countries, Malaysia was faced with challenges in combating the COVID-19 pandemic. The Ministry of Health, Malaysia spearheaded the national outbreak management, and even before the first reported case, Malaysia came up with a comprehensive preparedness plan. Among the earliest efforts taken was the enforcement of health screening at all points of entry. Other measures taken included increasing capacity for sampling at health clinics and hospitals, and ensuring adequate stockpiling of personal protective equipment (PPE) and medications needed. The first COVID-19 case in Malaysia was confirmed on January 25, 2020. Since then, Malaysia has experienced several waves of COVID-19 cases, with most cases occurring in 2021. Authorities implemented a special quarantine regime that encompassed border closures, mandatory quarantine of citizens returning from abroad, restriction of domestic movements, prohibition of mass gatherings, physical distancing, disinfection of public spaces as well as closure of retail outlets, airports and transportation hubs.

In most countries, health expenditures increased not just in absolute terms but also as shares of their gross domestic product (GDP). Hence, it is important to understand the burden of health care expenditure caused by the pandemic to enable better evidence-based future policy planning. Tracking health expenditure has long been of importance for various policy, economic and social needs. The significant impact on health care expenditure during the pandemic has highlighted the usefulness of using the National Health Accounts (NHA) to track expenditure. The fundamental accounting principles of NHA help ensure a comprehensive, internationally comparable health expenditure data can be produced. Hence, the Malaysia National Health Accounts (MNHA) section embarked to collect, analyse and produce the COVID-19 health expenditure estimates for the year 2020. This allowed for a more comprehensive reporting of health spending data.

11.2 METHODOLOGY OF COVID-19 HEALTH EXPENDITURE ESTIMATION

We used multiple sources of data for this analysis. The diagram below gives an overview of the approach used to estimate the COVID-19 health expenditure. The method used consists of three broad stages (Figure 11.2a): the planning stage, followed by the data collection stage and finally, the data analysis and validation stage.

FIGURE 11.2a: Approach to COVID-19 Health Expenditure Estimation

Planning and Launch

- Identify relevant questions
- Identify objectives
- Identify boundary for COVID-19 health expenditure

Data Collection

- Determine data sources
- Discussions with relevant stakeholders
- Identify data gaps
- Distribute templates, collect and compile data

Data Analysis and Validation

- Map data to MNHA and COVID-19 codes for each of the dimensions
- Data analysis
- Present and validate

During the planning stage, relevant questions were identified (Figure 11.2b), objectives were set and boundary was determined (Figure 11.2c). Various funding sources were identified. Steps were taken to ensure the total COVID-19 health expenditure took into account the absolute amount, which included not only cash but also in-kind expenditure related to donations.

FIGURE 11.2b: Relevant Questions Related to COVID-19 Health Expenditure Estimation

- **What were the funding sources of the COVID-19 health expenditure?**
  - ❖ Public sources
  - ❖ Private sources
  - ❖ Donors/NGOs
  - ❖ OOP
- **How much was the COVID-19 health expenditure?**
  - ❖ Absolute amount (cash and in-kind)
  - ❖ Percentage of TEH
- **Who were the providers?**
  - ❖ Clinics/Hospitals/Temporarily converted quarantine centres/Health administrators/Pharmacies/Public health labs

FIGURE 11.2c: Objectives and Boundary of COVID-19 Health Expenditure Estimation

Objective:

- ❖ To analyse and report COVID-19-related health expenditure based on MNHA framework
- ❖ To determine the funding sources, providers and functions of COVID-19-related health expenditure

Boundary of COVID-19 Health Expenditure

COVID-19 Health Expenditure comprises of all 'health expenditures' and all 'health-related expenditures' for the purpose of prevention and promotion, rehabilitation and curative care, community health activities, health administration and regulation, capital formation, research and development, as well as education and training targeted to improve health and minimise health impacts from COVID-19 pandemic.

The data collection stage started with determining data sources, followed by discussions with relevant stakeholders. These discussions assisted in developing data collection tools, identifying data gaps and enhancing existing networks with both public and private agencies. Well established networking and collaborations allowed relevant information to be captured based on the NHA salient features.

During the following stage, compiled data needed to be mapped using relevant codes before analyses. The initial work to assign relevant source, provider and function codes to the COVID-19 health expenditure was based on the MNHA and SHA frameworks. Subsequently, drawing on the Joint Health Accounts Questionnaire (JHAQ) guidelines, additional activity to further map codes to COVID-19 function codes (Table 11.2) was carried out.

After completing the mapping process, data was analysed. The first step during analysis was to avoid double counting. This was an important step as some agencies reported their COVID-19 expenditure separately from the routine health expenditure. There were a few agencies who, although able to provide their data for COVID-19 health expenditure separately, clearly stated that these expenditures were also embedded in their routine health expenditure reporting. These agencies' expenditures were excluded or not added during the building of the MNHA 2006-2020 database. However, to be able to capture and report a more complete COVID-19 health expenditure, a subaccount database was maintained. The data presented in this chapter are based on the subaccount database.

TABLE 11.2: MNHA COVID-19 Codes and Description

MNHA COVID-19 Code	Description of Activity
HC.COV.1	Spending for COVID-19 related treatment
HC.COV.2	Spending for COVID-19 testing and contact tracing
HC.COV.3	Spending for vaccination against SARS-CoV-2
HC.COV.4	Spending for COVID-19 medical goods by population or distributed to the population
HC.COV.5	Other COVID-19 related health spending n.e.c
HC.COV.5.1	Allowance/Incentives given to personnel involved in COVID-19 related measures
HC.COV.5.2	Education and training of personnel in relation to COVID-19
HC.COV.5.3	Research and development related to COVID-19
HC.COV.5.4	Governance and health system administration related to COVID-19
HC.COV.5.5	Information, education and counselling programmes related to COVID-19
HC.COV.5.6	Transportation related to COVID-19
HC.COV.6	Spending on compliance to COVID-19 public health and safety regulations
HC.COV.6.1	Quarantine expenditure
HC.COV.6.2	Spending on medical goods to adhere to COVID-19 public health and safety regulations by entities for staff
HK.COV.1	Spending on gross capital formation

11.3 ESTIMATED COVID-19 HEALTH EXPENDITURE

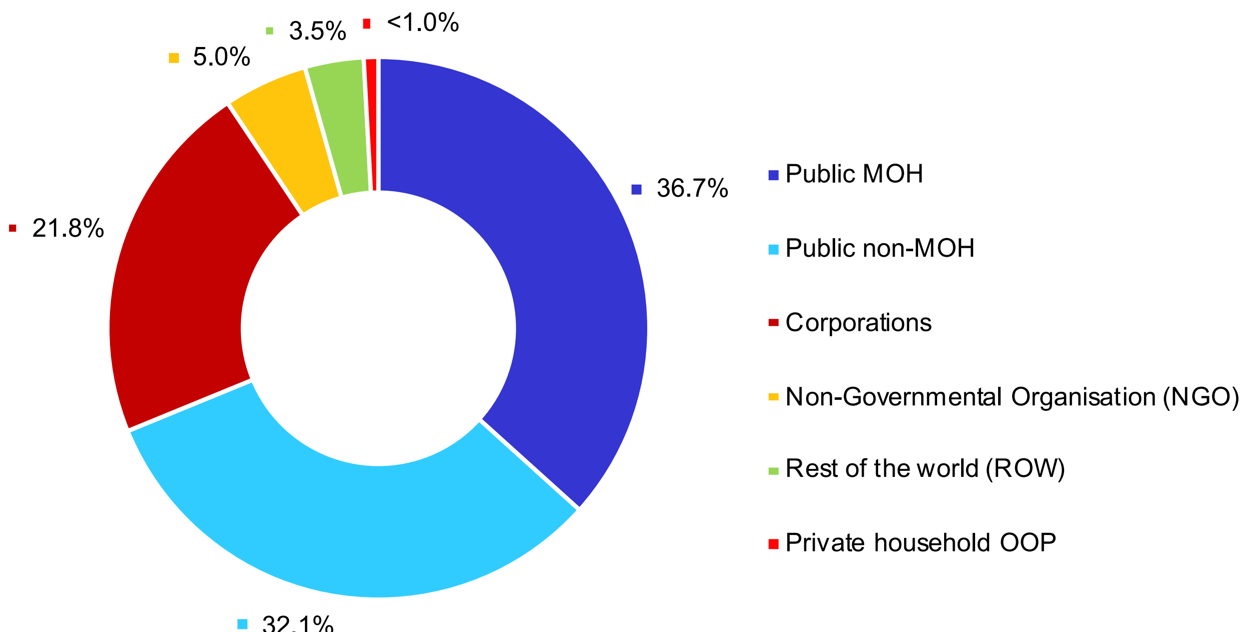
COVID-19 health expenditure estimation for the year 2020 was RM2,158 million. This total includes all cash and in-kind health expenditure for COVID-19. Among the various sources of financing, the MOH showed the highest expenditure amounting to 36.7% or RM792 million (Table 11.3a and Figure 11.3a). This is followed by public non-MOH agencies with an expenditure of RM694 million or 32.1%, all corporations (RM470 million or 21.8%), non-profit institutions (RM108 million or 5.0%), rest of the world (RM76 million or 3.5%) and private household out-of-pocket (OOP) (RM19 million or <1.0%).

Public non-MOH agencies encompassed the Ministry of Higher Education, Ministry of Defence, local authorities, state government, National Disaster Management Agency (NADMA) and various other federal agencies (OFA). NADMA was the highest contributor among the various OFA, with an expenditure of RM417 million.

TABLE 11.3a: COVID-19 Health Expenditure by Sources of Financing, 2020

Sources of Financing	RM Million	Percent
Ministry of Health (MOH)	792	36.68
Public non-MOH Agencies	694	32.14
All Corporations	470	21.79
Non-Governmental Organisation (NGO)	108	5.02
Rest of the world (ROW)	76	3.51
Private household OOP	19	0.87
Total	**2,158**	**100.00**

FIGURE 11.3a: COVID-19 Health Expenditure by Sources of Financing, 2020

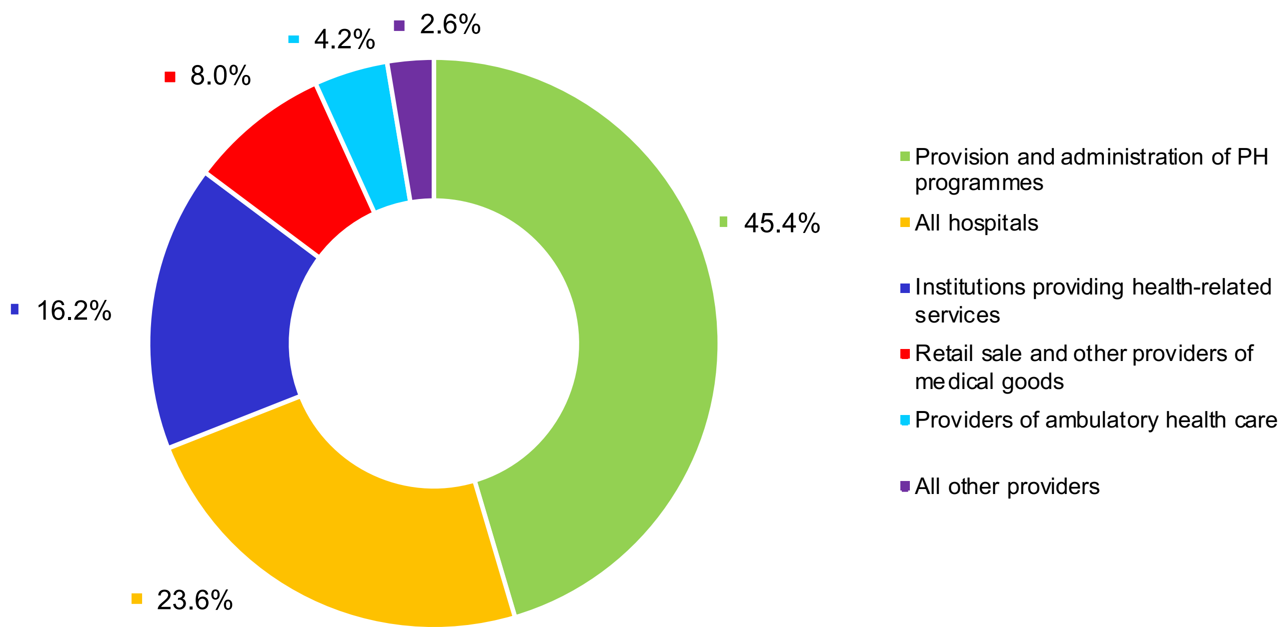


When examining from the provider perspective, COVID-19 health expenditure to providers of public health programmes consumed RM980 million or 45.4% (Table 11.3b and Figure 11.3b). Providers of public health programmes include government provision and administration of public health programmes, MOH departments at federal, state and district levels, and local authorities' public health departments. This is followed by expenditure to all hospitals at RM509 million or 23.6%. Expenditure to provision by retail sale and other providers of medical goods was RM172 million or 8%.

TABLE 11.3b: COVID-19 Health Expenditure to Providers of Health Care, 2020

Providers of Health Care	RM Million	Percent
Provision and administration of PH programmes	980	45.42
All hospitals	509	23.60
Institutions providing health-related services	350	16.20
Retail sale and other providers of medical goods	172	7.98
Providers of ambulatory health care	90	4.17
All other providers	57	2.63
Total	**2,158**	**100.00**

FIGURE 11.3b: COVID-19 Health Expenditure to Providers of Health Care, 2020

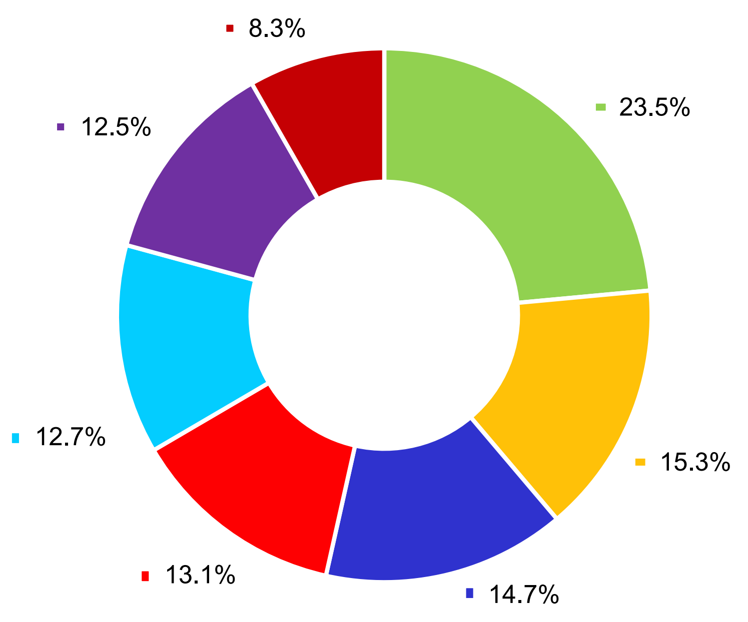


COVID-19 expenditure based on function dimension showed that the highest proportion of expenditure was for gross capital formation, which took up about RM508 million or 23.5%. Expenditure for gross capital formation encompassed money spent on purchasing ventilators and medical equipment, increasing the number of hospital beds, developing mobile tracing applications and any other information technology (IT) infrastructures. RM330 million or 15.3% was the expenditure for COVID-19 related treatment. COVID-19 expenditure on various other functions is shown in Table 11.3c and Figure 11.3c.

TABLE 11.3c: COVID-19 Health Expenditure for Functions of Health Care, 2020

Functions of Health Care	RM Million	Percent
Gross capital formation	508	23.52
Spending for COVID-19 related treatment	330	15.30
Governance and health system administration related to COVID-19	317	14.68
Quarantine expenditure	282	13.06
Spending For COVID-19 testing and contact tracing	274	12.67
Spending on medical goods to adhere to COVID-19 Standard Operating Procedure (SOP)	270	12.51
All other expenditures	178	8.26
Total	**2,158**	**100.00**

FIGURE 11.3c: COVID-19 Health Expenditure for Functions of Health Care, 2020



11.4 LIMITATIONS OF COVID-19 HEALTH EXPENDITURE ESTIMATION

Data analysed and reported are data provided by various agencies during the 2021 data collection process. The following limitations need to be remembered when working with this data. MOH COVID-19 expenditure using existing operational allocation was not available as information provided by the Accountant General Department of Malaysia did not specifically tag for COVID-19. Therefore, MOH as a source of contribution to COVID-19 health expenditure is limited to data captured via *Kumpulan Wang* COVID-19 (KWC). In addition, estimations were used to place value in data gaps among non-cash donations. The latest available Household Expenditure Survey (HES) Report was for 2019, and there were no surveys for the corporation's COVID-19 health expenditure, which led to limited estimations for COVID-19 health expenditure by OOP and corporations as a source. Thus, in this analysis, data for OOP and corporations as a source was based on donation details by these agencies to various MOH facilities only.

In conclusion, these limitations could lead to an underestimation of the COVID-19 health expenditure. This was the first attempt to estimate COVID-19 health expenditure using MNHA Framework. Further work will be carried out to refine and expand data collection.

APPENDIX TABLES

TABLE A1.1: Source of Data

Data Sources for Public Sector Estimation

PUBLIC SECTOR			
	Main Agencies	**Specific Organisation**	**Source of Data**
1	Ministry of Health (MOH)	Accountant-General's Department	MOH - AG DATA (expenditure)
			MOH - B11
			MOH - B12
		Ministry of Health (MOH)	MOH - KWC
			MOH - IT
			MOH - Donation Perolehan
			MOH - Donation JKN
2	Other Ministries	Ministry of Higher Education	MNHA Survey - MOHE
		Ministry of Defence	MNHA Survey - MOD
3	Other Federal Agencies	National Population and Family Development Board	MNHA Survey - LPPKN
		Department of Orang Asli Development	MNHA Survey - JAKOA
		Public Service Department-Pension	MNHA Survey - JPA
		Civil Defence Department	MNHA Survey - JPAM
		Prison Department of Malaysia	MNHA Survey - PENJARA
		Social Welfare Department	MNHA Survey - JKM
		Department Occupational Safety and Health	MNHA Survey - DOSH
		National Institute of Occupational Safety and Health Malaysia	MNHA Survey - NIOSH
		National Anti-Drug Agency	MNHA Survey - AADK
		Pilgrims Fund Board	MNHA Survey - LTH
		National Heart Institute	MNHA Survey - IJN
		Federal Statutory Bodies	MNHA Survey - BERKANUN (Fed)
		Public Water Supply Department (Federal)	MNHA Survey - JBA (OFA)
		National Sports Institute of Malaysia	MNHA Survey - ISN
		Employee Provident Fund - HQ	MNHA Survey - KWSP (0001)
		Employee Provident Fund - state	MNHA Survey - KWSP (0002)
		Social Security Organization - HQ	MNHA Survey - PERKESO (0001)
		Social Security Organization - state	MNHA Survey - PERKESO (0002)
		Ministry of Science Technology and Innovation	MNHA Survey - MOSTI
		Public Higher Education Institutions	MNHA Survey - TRAINING (OFA-Pu)
		Private Higher Education Institutions	MNHA Survey - TRAINING (OFA-Pr)
		Emergency Medical Rescue Services, Malaysian Fire and Rescue Department	MNHA Survey - EMRS
		National Disaster Management Agency (NADMA)	MNHA Survey - NADMA
		Majlis Keselamatan Negara (MKN)	MNHA Survey - MKN
4	State Agencies	State Government (General)	MNHA Survey - KN
		Public Water Supply Department (State)	MNHA Survey - JBA (state)
		State Statutory Body (SSB)	MNHA Survey - BERKANUN (state)
		Public Water Supply Department (State Statutory Body)	MNHA Survey - JBA (SSB)
		State Islamic Religious Council/Zakat Collection Centre	MNHA Survey - MAIN
5	Local Authorities	Local Authority - Health care Services	MNHA Survey - PBT (Perkhid)
		Local Authority - Staff	MNHA Survey - PBT (Ktgn)

TABLE A1.2: Source of Data

Data Sources for Private Sector Estimation

PRIVATE SECTOR			
	Main Agencies	**Specific Organisation**	**Source of Data**
1	Private Insurance	Central Bank of Malaysia	MNHA Survey - BNM
		Insurance Agencies	MNHA Survey - INSURAN
2	Managed Care Organization	MCO Agencies	MNHA Survey - MCO
3	Out of Pocket (Gross Spending)	MOH user charges	MOH - AG DATA (Revenue)
		IJN user charges	MNHA Survey - IJN
		MOHE user charges	MNHA Survey - KPT
		Private Hospital (MNHA)	MNHA Survey - PRIVATE HOSPITAL
		Private Hospital (DOSM)	DOSM Survey - PRIVATE HOSPITAL
		Private Clinic (Medical), DOSM	DOSM Survey - PRIVATE MEDICAL CLINIC
		Private Clinic (Dental), DOSM	DOSM Survey - PRIVATE DENTAL CLINIC
		Private Haemodialysis Centre (MNHA)	MNHA Survey - PRIVATE HEMO (0001)
		Pharmacy Division, MOH	MNHA Survey - FARMASI (0001)
		IQVIA	MNHA Survey - FARMASI (0002)
		Medical supplies HIES, DOSM	DOSM Survey - HES DATA
		Medical durables/prostheses/equipments HIES, DOSM	DOSM Survey - HES DATA
		Ancillary services HIES, DOSM	DOSM Survey - HES DATA
		Private TCM HIES, DOSM	DOSM Survey - HES DATA
		Public Higher Education Institutions	MNHA Survey - TRAINING (OOP-Pu)
		Private Higher Education Institutions	MNHA Survey - TRAINING (OOP-Pr)
4	Out-of Pocket (Third Party Deductions)	Insurance Agencies	MNHA Survey - INSURAN
		Central Bank of Malaysia	MNHA Survey - BNM
		Private Corporations	MNHA Survey - PRIVATE CORPORATION
		Employees Provident Fund	MNHA Survey - KWSP
		Social Security Organization	MNHA Survey - PERKESO
		Federal Statutory Bodies	MNHA Survey - BERKANUN (Fed)
		State Statutory Body	MNHA Survey - BERKANUN (state)
		FOMEMA/UNITAB MEDIC - OOP data	MNHA Survey - UNITABMEDIC
		GROWARISAN - OOP data	MNHA Survey - GROWARISAN
5	Non-Governmental Organization	Non-Governmental Organizations	MNHA Survey - NGO
6	Corporations	Limited and Private Limited Corporations	MNHA Survey - PRIVATE CORPORATION
		Labour Force Survey, DOSM	DOSM Survey - CORPS_DOS (0002)
		Industrial Survey, DOSM	DOSM Survey - CORPS_DOS (0001-non med)
		Private Hospital staff, DOSM	DOSM Survey - CORPS_DOS (0001-hosp)
		Private Clinic Medical, DOSM	DOSM Survey - CORPS_DOS (0001-clinic)
		Private Clinic Dental, DOSM	DOSM Survey - CORPS_DOS (0001-dental)
		Private Water Supply Department	MNHA Survey - JBA (corp)
		FOMEMA/UNITAB MEDIC	MNHA Survey - UNITABMEDIC
		GROWARISAN	MNHA Survey - GROWARISAN
		Public Higher Education Institutions	MNHA Survey - TRAINING (Corp-Pu)
		Private Higher Education Institutions	MNHA Survey - TRAINING (Corp-Pr)
		Information Technology Corporations	CORPS - IT
7	Rest of the world	International Organizations in Malaysia	MNHA Survey - Rest
8	Other National Surveys	DOSM-Population survey	General-DOS General_DOS (0001)
		DOSM-GDP & GDP Deflator	General-DOS General_DOS (0002)
		DOSM-Household Consumption	General-DOS General_DOS (0003)

TABLE A2.1: Classification of Total Expenditure on Health by Sources of Financing

MNHA Code	ICHA Code	Sources of Financing	Description
MS1	HF.1	Public Sector	Refers to MS1.1 and MS1.2 classifications
MS1.1	HF.1.1	Public sector excluding social security funds	Refers to Federal Government, state government & local authorities
MS1.2	HF.1.2	Social security funds	SOCSO & EPF
MS2	HF.2	Private sector	Refers to MS2 classification
MS2.1	HF.2.1	Private social insurance	Currently does not exist in Malaysia
MS2.2	HF.2.2	Private insurance enterprises (other than social insurance)	Private health insurance
MS2.3	HF.2.2	Private MCOs and other similar entities	Registered MCO other than private health insurance
MS2.4	HF.2.3	Private household out-of-pocket expenditures	Individual OOP spending on health
MS2.5	HF.2.4	Non-profit institutions serving households	Health-related NGOs
MS2.6	HF.2.5	All corporations (other than health insurance)	Private employers
MS9	HF.3	Rest of the world	Rest of the world

TABLE A2.2: Classification of Total Expenditure on Health to Providers of Health Care

MNHA Code	ICHA Code	Providers of Health Care	Description
MP1	HP.1	All hospitals	Public & private hospitals
MP2	HP.2	Nursing and residential care facilities	Nursing care facilities including psychiatric care facilities, residential facilities for mental health, etc.
MP3	HP.3	Providers of ambulatory healthcare	Establishments providing ambulatory health care services directly to non-hospital setting, e.g. medical practitioner clinics, dental clinics, etc.
MP4	HP.4	Retail sale and other providers of medical goods	Pharmacies & retail sale/suppliers of vision products, hearing aids, medical appliances
MP5	HP.5	Provision and administration of public health programmes	Providers of public health programmes including health prevention & promotion services (public & private)
MP6	HP.6	General health administration and insurance	Overall administration of health care (public & private) and health insurance administration. (note: for MOH it includes administration of HQ excluding public health programmes), state health dept., admin. cost for hospitals management
MP7	HP.7	Other industries (rest of the Malaysian economy)	Private occupational health care & home care, etc.
MP8	HP.7.9	Institutions providing health-related services	Health training institutions (public & private)
MP9	HP.9	Rest of the world	Non-resident providers providing health care for the final use of residents of Malaysia

TABLE A2.3: Classification of Total Expenditure on Health for Functions of Health Care

MNHA Code	ICHA Code	Functions of Health Care	Description
MF1	HC.1	Services of curative care	Curative care provider at inpatient, outpatient, daycare & homecare services
MF2	HC.2	Services of rehabilitative care	Rehabilitative care provider at inpatient, outpatient, daycare & homecare services
MF3	HC.3	Services of long-term nursing care	Long term nursing care provider at inpatient, outpatient, daycare & homecare services
MF4	HC.4	Ancillary services to health care	Stand-alone laboratory, diagnostic imaging, transport & emergency rescue, etc.
MF5	HC.5	Medical goods dispensed to out-patients	Pharmaceuticals, appliances, western medicines, TCM, etc.
MF6	HC.6	Public health services, including health promotion and prevention	Health promotion, prevention, family planning, school health services, etc.
MF7	HC.7	Health program administration and health insurance	Administration at HQ, State health dept, local authorities, SOCSO, EPF, private insurance, etc.
MR1	HC.R.1	Capital formation of health care provider institutions	Gross capital formation of domestic health care provider institutions exclude retail sale and others providers goods
MR2	HC.R.2	Education and training of health personnel	Government & private provision of education and training of health personnel, including admin., etc.
MR3	HC.R.3	Research and development in health	Research and development in relation to health care
MR9	HC.R.6	All other health-related expenditures	Category to capture all other expenditures that not classified elsewhere in MNHA

TABLE A3.1: WHO Indicators and Data - Malaysian Health Expenditure from Global Health Expenditure Database (GHED)

SHA 2011	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Current Health Expenditure (CHE) as % Gross Domestic Product (GDP)	3.1%	3.1%	3.0%	3.3%	3.2%	3.3%	3.5%	3.5%	3.7%	3.8%	3.7%	3.7%	3.7%	3.8%
Health Capital Expenditure (HK) % Gross Domestic Product (GDP)	0.2%	0.2%	0.2%	0.4%	0.5%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.2%
Current Health Expenditure (CHE) per Capita in US$	202.2	233.0	266.9	249.1	290.2	349.6	379.4	390.8	426.0	380.1	361.9	380.0	426.5	436.6
Current Health Expenditure (CHE) per Capita in PPP	572	604	620	656	658	730	806	836	926	947	942	988	1,058	1,133
General Government Health Expenditure (GGHE) as % General Government Expenditure (GGE)	6.5%	6.3%	5.9%	5.9%	6.3%	6.5%	6.5%	6.8%	7.8%	8.2%	8.3%	8.8%	8.4%	8.5%
General Government Health Expenditure (GGHE) as % Gross Domestic Product (GDP)	1.7%	1.6%	1.6%	1.8%	1.7%	1.8%	1.9%	1.9%	2.0%	2.0%	1.9%	1.9%	1.9%	2.0%
Domestic Health Expenditure (DOM) as % of Current Health Expenditure (CHE)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Domestic General Government Health Expenditure (GGHE-D) as % Current Health Expenditure (CHE)	53.9%	52.9%	53.1%	55.6%	53.1%	53.2%	53.9%	53.9%	54.7%	53.3%	51.2%	51.9%	51.3%	52.2%
Domestic Private Health Expenditure (PVT-D) as % Current Health Expenditure (CHE)	46.1%	47.1%	46.9%	44.4%	46.9%	46.8%	46.1%	46.1%	45.3%	46.7%	48.8%	48.1%	48.7%	47.8%
Voluntary Health Insurance (VHI) as % of Current Health Expenditure (CHE)	6.4%	6.6%	7.0%	8.2%	8.6%	8.5%	8.1%	8.0%	7.7%	8.1%	8.3%	8.0%	8.0%	8.5%
Out-of-pocket (OOPS) as % of Current Health Expenditure (CHE)	34.7%	35.1%	35.5%	32.2%	34.1%	34.0%	33.0%	33.7%	33.0%	33.4%	34.4%	34.2%	35.0%	34.6%
External Health Expenditure (EXT) as % of Current Health Expenditure (CHE)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Domestic General Government Health Expenditure (GGHE-D) as % General Government Expenditure (GGE)	6.5%	6.3%	5.9%	5.9%	6.3%	6.5%	6.5%	6.8%	7.8%	8.2%	8.3%	8.8%	8.4%	8.5%
Domestic General Government Health Expenditure (GGHE-D) as % Gross Domestic Product (GDP)	1.7%	1.6%	1.6%	1.8%	1.7%	1.8%	1.9%	1.9%	2.0%	2.0%	1.9%	1.9%	1.9%	2.0%
Domestic General Government Health Expenditure (GGHE-D) per Capita in US$	109	123	142	138	154	186	205	211	233	202	185	197	219	228
Domestic General Government Health Expenditure (GGHE-D) per Capita in PPP Int$	308	320	330	364	349	388	435	451	507	504	483	512	543	591
Domestic Private Health Expenditure (PVT-D) per Capita in US$	93.3	109.7	125.1	110.7	136.2	163.4	174.8	180.1	192.8	177.7	176.4	182.8	207.6	208.7
Domestic Private Health Expenditure (PVT-D) per Capita in PPP Int$	263.6	284.4	290.8	291.4	309.0	341.1	371.4	385.6	419.2	442.6	459.0	475.1	515.0	541.6
External Health Expenditure (EXT) per Capita in US$	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
External Health Expenditure (EXT) per Capita in PPP Int$	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Out-of-Pocket Expenditure (OOPS) per Capita in US$	70.2	81.8	94.9	80.2	99.0	118.9	125.3	131.6	140.8	127.0	124.6	130.0	149.2	151.0
Out-of-Pocket Expenditure (OOPS) per Capita in PPP Int$	198.5	212.2	220.4	211.0	224.6	248.2	266.3	281.6	306.0	316.4	324.1	337.9	370.2	391.7
Compulsory Financing Arrangements (CFA) as % of Current Health Expenditure (CHE)	54.1%	53.2%	53.3%	55.7%	53.2%	53.4%	54.0%	54.0%	54.8%	53.4%	51.4%	52.0%	51.4%	52.3%
Government Financing Arrangements (GFA) as % of Currrent Health Expenditure (CHE)	53.3%	52.4%	52.8%	55.1%	52.5%	52.7%	53.4%	53.3%	54.1%	52.7%	50.6%	51.2%	50.6%	51.5%
Compulsory Health Insurance (CHI) as % o Current Health Expenditure (CHE)	0.5%	0.5%	0.4%	0.4%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%	0.7%	0.6%	0.8%	0.7%
Compulsory Private Health Insurance (CHI-PVT) as % of Current Health Expenditure (CHE)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Social Health Insurance (SHI) as % of Current Health Expenditure (CHE)	0.5%	0.5%	0.4%	0.4%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%	0.7%	0.6%	0.8%	0.7%
Voluntary Financing Arrangements (VFA) as % of Current Health Expenditure (CHE)	45.9%	46.8%	46.7%	44.3%	46.8%	46.6%	46.0%	46.0%	45.2%	46.6%	48.6%	48.0%	48.6%	47.7%
Rest of the World (RoW) as % of Current Health Expenditure (CHE)		3,201.2%	1,666.6%	1,376.7%	357.1%	392.4%								

TABLE A3.2: Malaysia Current Health Expenditure by Revenues and Health Care Financing Schemes from Global Health Expenditure Database (GHED)

SHA 2011	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Current health expenditure by revenues of health care financing schemes	**19,434**	**21,398**	**24,250**	**24,350**	**26,366**	**30,649**	**34,062**	**36,290**	**41,636**	**44,938**	**46,060**	**50,832**	**54,255**	**57,786**
Transfers from government domestic revenue (allocated to health purposes)	10,365	11,206	12,794	13,425	13,853	16,162	18,194	19,343	22,525	23,674	23,295	26,050	27,437	29,769
Internal transfers and grants	10,365	11,206	12,794	13,425	13,853	16,162	18,194	19,343	22,525	23,674	23,295	26,050	27,437	29,769
Transfers distributed by government from foreign origin	-	1	0	0	0	0	-	-	-	-	-	-	-	-
Social insurance contributions	105	117	88	102	136	157	176	219	264	261	310	329	410	394
Social insurance contributions from employees	23	26	20	23	30	35	39	48	59	58	69	73	91	87
Social insurance contributions from employers	82	91	69	80	106	122	137	170	206	203	242	256	319	306
Compulsory prepayment (Other, and unspecified, than FS.3)	46	51	49	38	34	39	38	42	46	52	56	58	67	83
Voluntary prepayment	1,246	1,413	1,709	1,991	2,273	2,614	2,774	2,916	3,203	3,623	3,840	4,085	4,313	4,889
Other domestic revenues n.e.c.	7,673	8,610	9,611	8,794	10,070	11,677	12,880	13,770	15,598	17,329	18,558	20,310	22,028	22,652
Other revenues from households n.e.c.	6,750	7,516	8,618	7,839	8,995	10,425	11,253	12,218	13,759	15,014	15,857	17,393	18,983	19,979
Other revenues from corporations n.e.c.	768	914	785	727	816	952	1,278	1,478	1,802	2,247	2,617	2,829	2,957	2,585
Other revenues from NPISH n.e.c.	155	180	208	229	259	300	348	73	37	67	84	88	88	89
Current health expenditure by financing schemes	**19,434**	**21,398**	**24,250**	**24,350**	**26,366**	**30,649**	**34,062**	**36,290**	**41,636**	**44,938**	**46,060**	**50,832**	**54,255**	**57,786**
Government schemes and compulsory contributory health care financing schemes	10,515	11,375	12,931	13,565	14,023	16,358	18,408	19,604	22,835	23,986	23,661	26,437	27,914	30,245
Government schemes	10,365	11,206	12,794	13,425	13,853	16,162	18,194	19,343	22,525	23,674	23,295	26,050	27,437	29,769
Compulsory contributory health insurance schemes	105	117	88	102	136	157	176	219	264	261	310	329	410	394
Social health insurance schemes	105	117	88	102	136	157	176	219	264	261	310	329	410	394
Compulsory Medical Saving Accounts (CMSA)	46	51	49	38	34	39	38	42	46	52	56	58	67	83
Voluntary health care payment schemes	2,169	2,507	2,702	2,946	3,348	3,867	4,400	4,467	5,042	5,937	6,542	7,003	7,358	7,562
Voluntary health insurance schemes	1,384	1,564	1,876	2,169	2,473	2,857	3,076	3,202	3,640	4,353	4,645	4,957	5,228	5,872
NPISH financing schemes (including development agencies)	155	180	208	229	259	300	348	73	37	67	84	88	88	89
Enterprise financing schemes	630	763	618	548	616	709	976	1,191	1,365	1,518	1,813	1,958	2,043	1,601
Household out-of-pocket payment	6,750	7,516	8,618	7,839	8,995	10,425	11,253	12,218	13,759	15,014	15,857	17,393	18,983	19,979
Rest of the world financing schemes (non-resident)		1	0	0	0	0								

TABLE A3.3: Malaysia Current Health Expenditure for Functions of Health Care from Global Health Expenditure Database (GHED)

SHA 2011	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Current health expenditure by Health Care Functions	**19,434**	**21,398**	**24,250**	**24,350**	**26,366**	**30,649**	**34,062**	**36,290**	**41,636**	**44,938**	**46,060**	**50,832**	**54,255**	**57,786**
Curative care	14,731	16,067	18,571	18,258	19,943	23,238	26,172	27,191	31,405	33,648	35,045	38,307	41,072	43,553
Inpatient curative care	6,536	7,219	8,917	9,053	9,769	11,168	12,583	13,177	15,067	16,289	16,969	18,751	20,112	21,812
Day curative care	1,113	1,202	1,164	1,231	1,296	1,526	1,598	1,753	2,094	2,313	2,408	2,624	2,870	2,972
Outpatient curative care	7,082	7,646	8,490	7,974	8,877	10,544	11,991	12,261	14,244	15,047	15,668	16,932	18,090	18,768
General outpatient curative care	4,400	4,724	5,093	4,386	4,980	6,004	6,893	6,827	8,255	8,727	9,232	9,925	10,763	10,872
Dental outpatient curative care	322	395	413	414	498	556	595	826	875	853	910	1,023	1,124	1,214
Specialised outpatient curative care	2,360	2,526	2,984	3,174	3,399	3,984	4,503	4,608	5,114	5,467	5,526	5,984	6,204	6,682
Rehabilitative care	1	0	0	1	1	1	0	-	-	-	-	-	-	-
Long-term care (health)	12	14	5	5	12	15	19	1	2	1	4	1	4	1
Inpatient long-term care (health)	2	2	1	0	1	1	2	1	1	1	0	1	1	1
Home-based long-term care (health)	10	12	4	5	11	14	17	0	1	0	4	0	3	0
Ancillary services (non-specified by function)	201	180	238	235	264	296	314	407	380	354	300	330	335	357
Medical goods (non-specified by function)	1,252	1,453	1,626	1,759	1,926	2,242	2,477	2,730	3,298	3,901	4,216	4,525	5,255	4,880
Preventive care	851	1,187	1,010	1,077	1,059	1,224	1,535	2,375	2,304	2,511	2,706	2,904	3,133	3,860
Immunization Programmes	2	8	3	5	3	3	6	77	36	41	37	44	46	238
Governance, and health system and financing administration	2,388	2,497	2,800	3,015	3,160	3,632	3,545	3,586	4,248	4,522	3,790	4,766	4,456	5,136
Capital health expenditure	**1,459**	**1,625**	**1,877**	**2,875**	**4,031**	**2,430**	**2,355**	**2,089**	**1,831**	**1,841**	**1,890**	**1,943**	**2,257**	**2,642**
Capital Health Expenditure (Domestic Public)	1,357	1,531	1,723	2,745	3,848	2,179	2,038	1,817	1,488	1,454	1,430	1,375	1,653	1,965
Capital Health Expenditure (Domestic Private)	102	94	154	130	183	251	317	272	343	387	460	568	604	677

TABLE A3.4: Macro Data from Global Health Expenditure Database (GHED)

SHA 2011	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
CONSUMPTION														
Gross Domestic Product	625,100	696,910	806,480	746,679	833,104	924,685	985,049	1,033,090	1,122,160	1,176,940	1,249,700	1,372,310	1,447,450	1,510,690
Final consumption expenditure of Households and profit institutions serving households	280,060	317,989	364,349	368,533	400,765	443,448	488,971	535,119	588,085	635,099	684,680	760,146	831,333	903,721
General government expenditure	159,865	180,421	217,105	230,643	221,643	250,477	280,792	286,992	291,279	290,801	283,652	300,996	330,088	355,634
Exchange Rate (NCU per US$)	3.67	3.44	3.34	3.52	3.22	3.06	3.09	3.15	3.27	3.91	4.15	4.30	4.04	4.14
Purchasing Power Parity (NCU per Int$)	1.30	1.33	1.44	1.34	1.42	1.47	1.45	1.47	1.51	1.57	1.59	1.65	1.63	1.60
PRICE INDEX														
Gross domestic product - Price index (2018 = 100)	76.3	80.1	88.4	83.1	86.2	90.9	91.8	91.9	94.2	94.1	95.7	99.3	99.9	100.0
POPULATION														
POPULATION (in thousands)	26,202	26,720	27,236	27,735	28,208	28,651	29,068	29,469	29,867	30,271	30,685	31,105	31,528	31,950

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LIST OF AUTHORS AND EDITORIAL MEMBERS

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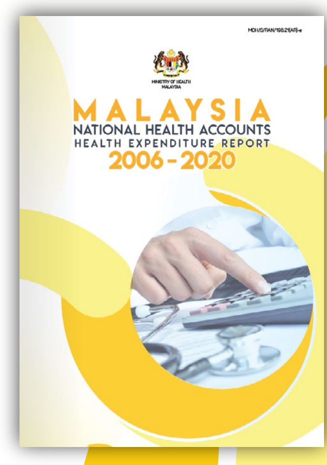
2006-2020



ISSN 1985-711X